MARKETING COSTS AND THEIR INFLUENCE ON FARM-GATE AND CONSUMER PRICES

INTRODUCTION

Kenya's agricultural based economy is currently faced with challenges related to the salability of it's agricultural produce and products. These challenges are will shape investments in agriculture, returns to these investments and ultimately the country's economic growth. It is not just enough to produce, today these commodities must compete to find a market internationally, in the region and even at home. This simply means that Kenya has to shift away from it's traditional supply-driven strategies and policies to a more demand driven sector. While providing incentives to producers remains an important strategy for the sector growth, it is equally important to cater for the consumer side. Consumers who form the larger majority must be protected not only from food of poorer quality but also policies that avail food that is costlier than world prices.

The rules in the market place have changed and have become very dynamic. Consumer preferences are increasingly more complex than they were in the past. They are also the more important players in the market, getting what they want, from any supplier who is able to meet their requirements for timeliness, quality and even growing practices. There is increased competition due to the lifting of preferential treatment, lowering and harmonization of tariff barriers and the institution of new technical barriers. Farmers also are increasingly demanding a bigger role in marketing of their produce than has been traditional in the past, and in setting the legislative and regulatory environment necessary to keep them competitive in the New World marketplace.

Challenges facing the agricultural sector may be summarized as;

- Increasing, or maintaining access to both local and international markets
- Redefining marketing channels
- Post-farm costs and efficiency in marketing
- value addition to raw produce
- the financing of marketing activities

This paper uses one or two commodities to illustrate each of these issues and areas that may need intervention.

The paper begins with a discussion of marketing costs and their influence s on farm level as well as retail prices of commodities and inputs. Horticulture and fertilizer marketing are used as examples. The next section discusses issues of market access and market concentration where beef and horticulture are used to highlight this challenge. Challenges brought about by globalisation ang regionalisation are also discussed here. The following section uses coffee, dairy and pyrethrum examples to illustrate why it may be necessary to explore alternative marketing channels. The role of farmer organisations in marketing is also discussed here. Challenges in processing and value addition form the following section where dairy and cotton are used as illustrations. The later sections of the paper discuss issues on legislation and regulation and how they impact on the agricultural sector's growth.

ACKNOWLEDGEMENT

The information presented, issues raised and suggested interventions are synthesized from several studies carried out by Tegemeo and its collaborators in a just concluded project. Specifically this paper draws selected material from the following papers;

1. Argwings-Kodhek 1999, Kenya's Agricultural Sector, The Star that Does Not Shine
2. Argwings -Kodhek, G, 1999. Revitalizing the Dairy Sector In Kenya
3. Karin, F.Z. 2000, An Overview of Dairy Sector Development. Constraints and Opportunities
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8. Nyoro J. and Kamau M.2000. Kenya Horticultural Exports: Experience With Supermarkets.
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10. Wanzala M. et al, 2001. Fertilizer Markets and Agricultural Production Incentives: Insights From Kenya.
11. Kamau M. 2000. The Way Forward in Export Oriented Small-Holder Horticulture. A Background Paper Presented In A Stakeholder Consultative Meeting at Norfolk Hotel, Nairobi.
12. Kamau M. 2001. Draft Report on Regional Competitiveness in Production and Marketing of Horticultural Crops For The Domestic Market.

MARKETING COSTS AND THEIR INFLUENCE ON FARM-GATE AND CONSUMER PRICES

The prevailing situation of declining productivity, high transaction costs and other inefficiencies in the industry coupled with opening up of markets has resulted to an industry that competes rather poorly relative to other efficient producers.

Kenyan traders in agricultural produce face high transportation and other transaction costs due to poor roads and other market inefficiencies. These costs have been shown to influence the agricultural sector as they influence the difference between farmgate prices and retail prices in the final consumer market – the marketing margin. Marketing margins influence farm gate prices of farm inputs and the retail prices of farm produce. As such they are major determinants of the competitiveness of produce and products in domestic as well as international markets, access to inputs, household incomes, expenditure and access to food.

Efficiency and cost reduction in marketing of agricultural produce is of paramount importance to the success or survival of the agricultural sector. The marketing channel adopted and also external factors outside the area of influence of those involved in marketing influences the magnitude of marketing costs. The following examples – from domestic horticulture and fertilizer show the role of marketing costs and suggests potential areas of intervention.

Horticulture

Horticulture generates high incomes and high prices but also faces numerous challenges. The domestic market has been opened up to imports from all over the world that are pouring into the market. Already there are signs of panic as farmers supplying the domestic market cry foul asking for a ban on importation of onions, oranges, potatoes and other produce as imports threaten their source of livelihood. On the other hand the horticultural export industry is threatened by a loss of preferences previously enjoyed under the Lome Convention. Kenya's horticultural export industry may become un-competitive in the European market and has joined other sectors in asking that Kenya be re-classified back to a least developed country along with Tanzania and Uganda to maintain some preferential access to Europe.

The high magnitude of marketing costs are an important determinant of the competitiveness of Kenyan produce as they push the price of Kenyan products way above those of competing countries. In a bid to remain competitive, traders often choose to cut costs through a reduction of the price paid to producers. Table 1 shows marketing costs being a major component of costs in fresh produce destined for the domestic the market. In all cases farm production costs are a far smaller component of consumer costs than the marketing margin that covers transport and marketing costs.

Marketing costs are the costs incurred as goods change ownership and location along the marketing channel. They include costs of storage, transportation, local and national government levies, cess and taxes, market levies, broker charges and the high transaction costs that arise from the very nature of horticultural produce. Marketing costs in horticulture are particularly high because of the high bulk to weight ratio, the perishable nature of the produce and the strong expression of consumer preferences in the market with widely differing prices for perfect compared to slightly damaged produce.

Table 1: Distribution of Costs of Production and Delivery to Nairobi Market

Commodity	Region	Production* Costs	Transportation & Marketing Costs	[b]Total Cost
Tomatoes-crate	Gare dare	174.00	525.00	699.00
	Subukia	262.82	427.62	690.44
	Kirinyaga	291.95	420.00	711.95
Onions-net	**Tanzania**	**61.00**	**139.10**	**200.00**
	Naroosura	**98.07**	**94.87**	**192.94**
Cabbage – piece	Naromoru	2.64	5.28	7.92
	Gusishi	2.74	7.28	10.02
	Kimahuri	4.30	6.36	10.66
Potatoes – bag	Narok	233.96	428.50	662.46
	N. Kinangop	248.00	402.00	650.00
	Kibirichia	371.00	384.30	755.30
	Dundori	390.00	514.50	904.50
	S. Kinangop	420.00	402.00	822.00
Bananas-bunch	Mitunguu[a]	5.19	88.00	93.19

* Estimates from participatory budgeting exercise with focus groups

[a] Ripening bananas only

[b] Does not include price mark-up for farmers or marketing agents

Onions are of particular interest. Tanzanian onions are competing with Kenyan onions for the Kenyan market. Tanzanian farmers grow onions specifically targeting the vast Nairobi, Dar-es-salaam and Mombasa markets as well as Zanzibar, the Seychelles, Mozambique, Zambia, Zaire and the Comoro Islands. Tanzanian farmers are the low cost producers as they are highly experienced in management of the crop, and use higher levels of purchased inputs. In one major producing area (Mang'ola), over 5000 acres of onions are planted in a year which is a third (1999) of total acreage under onions in Kenya. At an average yield of 100 bags per acre, Mang'ola farmers sell approximately 4 million 14 kg nets into the market which is equivalent to the total production in Kenya (4.2 million in 1999). Even though the production period is restricted to only six to seven months in a year, these farmers are able to supply throughout the year by storing their produce for up to six months. These onions are being delivered to Nairobi's Ukulima market by fleets of large 10-12 ton trucks and are causing alarm amongst domestic onion traders and farmers who fear that they may be unable to compete.

Tanzanian onions are getting to the Nairobi market at slightly higher costs, than domestic produce so they cannot under cut those presently engaged in the business. However, these onions are readily available, production is concentrated in one area, and assembled in one market place in whatever quantities one may desire. They are well cured, and have the shape, colour and size that the market desires. Thus, despite being sold at prices similar to domestic produce, Tanzanian onions are preferred by traders.

Further scrutiny of marketing costs revealed that it costs about the same to transport onions in both countries. It costs 15 cents and 16 cents per kilometer in Kenya and Tanzania respectively to transport one 15kg net of onions. However, Tanzanian costs on transport are twice as much due to the longer distance traveled. Domestic marketing costs within Tanzania are much lower compared to those in Kenya, where market levies, county council cess and broker charges are higher (see table below).

Table 2: Distribution of Costs of Marketing Onions Within Countries

	Kenya		**Tanzania**	
	Ksh	**% of total**	**Ksh**	**% of total**
1. Marketing costs	51.89	*56.46*	19.4	*37.5*
2. Transport charge per unit	40.00	*43.5*	32.3	*62.5*
Total Marketing Costs	91.89	*100*	51.7	*100*

Table 3: Breakdown of Marketing Costs Within Countries

	Naroosura[1] - Kenya	**Mang'ola[2]-Tanzania**
	Ksh per net	**Ksh per net**
1. Broker - farm level	8.89	5.6
2. Broker - market level	13.33	5.0
3. Produce Inspection Certificate (PI)	10.00	2.5
4. Market Levy	20.00	6.3
5. Salary + allowances	6.11	13.8
6. Vehicle maintenance	17.69	9.1
7. Transportation taxes per net	0.43	2.0
8. Police toll per round trip	2.22	1.5
9. Fuel	11.1	5.9
Direct transportation costs	37.6	32.2
Transporters Margin	2.4	0.1
Total Marketing Cost	**40.00**	**32.30**

[a] Situated in Narok district, is 260Km from Nairobi (210km on tarmac & 50km on seasonal road). The seasonal part is virtually impassable during the rains. Onion is just one other activity in the area.

[b] Situated in Karatu district, Northern region of Tanzania, is 500 km from Nairobi, 213 km from Arusha (80 km on tarmac & 80 km on all weather road and 50 km on seasonal road). Onion

farming is a major economic activity in the area (approx. 5000 acres per year), hence may traders and trucks do business in the area

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Despite the gains made in Tanzania by way of lower costs, these onions arrive in Nairobi at comparable marketing costs with Kenyan onions since they are subjected to charges at the border by both the Kenyan and Tanzanian authorities, Kenyan market levies and broker charges. Market levy is the largest single component of marketing costs followed by export/import tax and broker charges.

Horticultural crops are grown across the country and region and planted at different times of the year. Market supplies and prices fluctuate, as do prices for farmers and traders. Farm level margins - the difference between production costs and farm gate prices also fluctuate reflecting supply and demand in the market. The table below indicates that during peak price periods, onion farmers in all regions make financial gains, but the sizes of margins differ. At other times of the year when minimum prices prevail, farmers in both regions make losses with the exception of low cost producers who break even at minimum prices.

Table 4: Cost Components of Wholesale Price for Onions

	Minimum Price		**Average Price**		**Maximum Price**	
	Kenya	Tanzania	Kenya	Tanzania	Kenya	Tanzania
1. Production costs	98	61	98	61	98	61
2. Farm level margin	**-28**	**-17**	**2**	**56**	**352**	**189**
3. Transport charge	40	82	40	82	40	82
4. Marketing costs	52	57	52	57	52	57
5. Buyers margin	**54**	**33**	**120**	**56**	**-167**	**-14**
6. Total to market	216	216	312	312	375	375

Onion farmers in different regions receive varying proportions of the market price ranging between as low as 15 percent to 100 percent. However, the proportion of price received was not the determinant of whether farmers made losses or gains. This was determined by farmers costs of production. Least cost producers in areas like Tanzania received relatively smaller proportions of the market price, yet they broke even or made positive profits. Farmers in areas that received a larger proportion of the market price but are high cost producers made smaller margins, or even losses (see table below).

Table 5: Farm Gate Prices as Percentage of Market Price (Onions)

	Minimum		**Maximum**		**Average**	
	%	Margin	%	Margin	%	Margin
Naroosura	32	-28	120	351	32	2
Gare Dare	37	-4	43	65	nr	Nr
Lamuria	52	-161	85	21	51	-119
Tanzania	19	-17	62	189	35	56

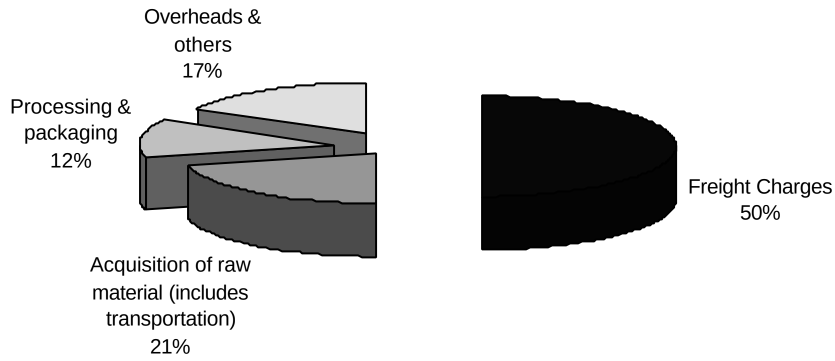
Pushing for price increases to cover production costs has been a Kenyan agricultural policy strategy for a long time. However with the opening up of markets and consumers looking for value for their money, only low cost producers connected to low cost marketing chains will get a market for their produce. Agricultural sectors and governments have little control over market prices. They can only exercise some influence over marketing costs, reductions that may ensure farmers of a market and a profit in the long run.

It is not only farmers who are being given a wake up call by the opening of markets and the globalization of competition. In the domestic horticulture industry, traders also seek high margins to compensate for the riskiness of their business. But there is global competition in marketing as well. The margins for traders selling Tanzanian onions are lower than traders selling Kenyan onions. The current trends show that high margins may be a thing of the past. With opening up of markets, there will be free movement of commodities across regions until equilibrium is reached. As a result of which only farmers and marketing agents who are able to supply at minimum costs will be able to sell in any part of Kenya or the region. Functions that add no value will be forced out.

The export oriented horticulture faces many of the same issues. Costs of delivering Kenyan products in the market are high and are not competing well with products from countries located near the markets and others which are not as near but have lower costs. High airfreight charges, local transportation costs and poor handling facilities have eroded Kenya's comparative advantage which is to be found in low land and labour costs. 50 to 75 percent of exporters costs are freight charges (Fig 1). Air freight rates in Kenya are said to be among the highest in the world. An analysis of airline costs in Kenya revealed that jet fuel and landing, handling and navigation fees constitute 46 percent of direct costs and 36 percent of total costs. There are no taxes on jet fuel in Kenya, though the Mombasa –Nairobi oil pipeline is run by a monopoly government parastatal that is alleged to charge high compared to international standards. Airport handling is in the hands of another government monopoly. Navigation is done by the Directorate of Civil Aviation, another government department.

The poor state of major trunk and rural access roads are a nightmare to both farmers and buyers. Exporters spend up to 15 percent of their costs on the direct costs of local transportation. This figure is much larger when the indirect costs of vehicle maintenance are included. The costs associated with losses by way of quality erosion due to bruising of produce and delays in delivering produce to cooling centers also are high. Exporters have had to minimize their movement on rough rural roads by reducing the number of collection points. Farmers bear the brunt of this action through increased post-harvest losses.

Fig 1: Components of Exporters' Costs



Source: Exporters

Transaction costs in export horticulture are high. They include costs incurred by exporters while searching for partners with whom to exchange. There are up front costs of screening potential partners to ascertain their capacity and trustworthiness, and very high costs if one ends up doing business with one of the many conmen who have put numerous Kenyan exporters out of business and into bankruptcy leaving growers out of pocket and unpaid for produce delivered and exported. There are also costs to exporters in the time spent bargaining to reach an agreement, actual costs of transferring the product and monitoring to ensure agreements are adhered to, losses resulting from uncertain market outlets and costs incurred in obtaining inputs that may be advanced to growers. The introduction of Maximum Residue Limits (MRSs) has pushed transaction costs even higher and resulted in a shift towards marketing arrangements that encourage intimate relationships between buyers and producers to enforce good growing practices.

Expiry of the Lome IV convention will have serious implications on the Kenyan horticultural industry. Kenya's recent classification as a lesser developed country automatically excludes her products from the privileges of tariff free access to Europe and puts a cost mark up of 9% to 15% tariff on primary and semi-processed products. The industry is already facing stiff competition from its competitors from northern, southern and western Africa and also from Israel. Hence an industry previously known for large margins has suffered big reductions in profit margins making it push for volume to sustain it's profits. The current profit margins quoted by flower exporters of 5-7% are way below the proposed tariff levels. This simply means that Kenya has to seriously address the issue of competitiveness in production and also in marketing otherwise she will soon be out of the international market for cutflowers.

Kenya is lobbying to be re-classified to a least developed country to avoid this tariff. This must not slow down our efforts to look for sustainable ways of maintaining if not increasing our competitive position in the market. This calls for more attention to the major cost elements, productivity and efficiency both at primary production and secondary/tertiary levels. Attention also should be directed towards policy interventions aimed at giving Kenyan produce a competitive edge.

There are options available to increase competitiveness, not only by addressing production costs and productivity but also costs and efficiency in marketing. Beyond addressing the technologies and the techniques used in production and marketing, Kenya also needs to address the policy structures governing the same.

Fertilizer Marketing

Liberalization of fertilizer marketing was expected to yield an increase in fertilizer use especially among farmers who were non-users or who were using less than optimal amounts. Since the government withdrew from fertilizer marketing 10 years ago, 95 percent of fertilizer consumed in Kenya is imported and distributed by the private sector. But despite this increase in private sector participation, there has not been the anticipated increment in fertilizer use by small holder farms. The marginal increase in national fertilizer use over the past decade was mainly for specialized fertilizer for use on tea and specialized flower production. The targeted small-scale, maize producing farmers are still not benefiting fully from the liberalization of fertilizer marketing.

A comparison of delivered fertilizer prices CIF – Mombasa, with retail prices in maize producing areas shows a large marketing margin. There has been suspicion that market concentration in the fertilizer trade was raising prices and extracting excess profits. However, recent works at Tegemeo revealed that there is high competition and narrow margins at all levels in the fertilizer marketing chain. Retail prices of fertilizer, like for other commodities, are determined by cif prices and the costs and efficiency of the marketing channel used to deliver fertilizer to where it is needed.

Cost build-up analysis is an accounting technique that estimates and adds up all costs and margins at various stages of the supply channel from the source up-to the final consumer. The analysis also helps to identify whether there are some stages or practices in the supply chain that are unnecessarily inflating costs which are ultimately borne by farmers. This analysis showed;

- Large differences in price paid by farmers for fertilizers marketed through different channels[1]. Fertilizers marketed through channel 3 had the highest farm-gate price (2,080), while channels 4 and 1or 2 delivered at Ksh. 1,930 and Ksh. 1,630 respectively.

[1] Channel 1 – Large importer to large wholesaler to large retailer
channel 2 – Large importer to large retailer
channel 3 – Vertically integrated importer/wholesaler to small wholesaler to small retailer
channel 4 – Large importer to large wholesaler to small wholesaler to small retailer

- Profit margins for fertilizer traders were relatively low during the survey year
- The low mark-up margin of [2]traders, shows that the high price of fertilizer is due to the high transportation costs in domestic distribution
- Traders incur a great price risk given their narrow margins
- 45 to 55 percent of the farm-gate price of fertilizer is taken up by internal distribution costs. These costs are beyond the control of fertilizer traders and include port fees, charges and taxes, transit losses and rapidly rising transport costs as the fertilizer nears production areas.
- Transit losses add fertilizer costs ranging from 38 Ksh. Per bag in a relatively short supply chain to 95 Ksh. Per bag in the longer chains. They are especially large towards the end of the marketing chain when fertilizer is being transported to smaller towns in rural areas. These losses are ultimately passed on to farmers in form of higher prices (3-5% of farm-gate price).

The study found that there are ways of reducing the farmgate cost of fertiliser, but that the potential does not result in very large savings, or very large increases in farmer profits per unit of output. The information presented in the table overleaf shows the current situation and the scenario if all of the following interventions were undertaken:

1. Elimination of port fees will result in a reduction of Ksh 64 per 50kg bag of DAP
2. Elimination of port storage will result in a cost reduction of Ksh 55 per 50kg bag
3. 20% reduction in transport costs will result in a cost reduction of Ksh57 per 50kg bag
4. The combined effect of actions 1, 2 and 3 will result in an accumulated cost reduction of Ksh176 per 50kg bag of DAP

These cost reductions are hypothesized to increase farmer's profits per bag of maize in the maize production systems studied as follows, 10.5 percent in Trans Nzoia, 17.8 percent in Lugari and 32.6 percent in Bungoma. The benefits may be higher since lower fertilizer prices may also lead to an increase in fertilizer application rates and to increases in the proportion of farmers using fertilizers in maize production.

Port charges, transport costs and transit losses are the major cost components experienced in fertilizer trade. Opportunities exist to reduce these costs by:

- removing restrictions at the port relating to unloading and loading onto trucks and transportation from port which should be liberalized.
- eliminate or significantly reduce port fees and importation related charges.
- reduce transit losses through improved efficiency.

The conclusion to this section is that helping the agricultural sector reduce costs is a more viable policy option than price support policies as a way of maintaining farmer incomes and profit margins.

[2] 5 to 6% for importers, less than one upto 7% for wholesalers, 2 to 9% for retailers.

Table 6: Farm-gate Cost Build-ups For DAP Fertilizer (April, 1999[3])

1. VERTICALLY INTEGRATED IMPORTER	Base Case	Combined Effects
Operating Costs		
Importer buying price = US FOB price in November 19983	**1050**	**1050**
Freight rates (from port of Florida November 1998))	112	112
Insurance (1% of landed cost of fertilizer)	12	12
CIF price	**1174**	**1174**
Total Port charges[4]	101	37
Other costs incurred at the port[5]	93	38
Importers Costs ex-Mombasa	1368	1249
Other importer costs[6]	309	274
Total importers costs	**1677**	**1523**
Importers actual selling price = wholesaler's buying price	1800	1646
Importers net margin	123	123
% mark-up of importer	6.8	7.5
2. SMALL-SCALE WHOLESALER		
Wholesaler's buying price	**1800**	**1646**
Operating Costs[7]	67	61
Total Wholesaler Costs	1867	1707
Wholesalers' actual selling price (from survey data)	1887	1727
Wholesalers' net margin	20	20
% mark-up of wholesaler	1.06	1.16
3. SMALL-SCALE RETAILER		
Retailer buying price	**1887**	**1727**
Operating Costs [8]	66	66
Total Retailer Costs	1953	1793
Retailer actual selling price (from survey data)	2000	1840
Retailer net margin	47	47
% mark-up of retailer	2.35	2.55
Transport to farmgate (matatu + boda-boda bicycle)	**80**	**64**
FARMGATE PRICE	**2080**	**1904**

[3] Two major importers were unable to import fertilizer creating a severe shortage in the market forcing prices to reach unprecedented levels.
[4] Includes IDF(2.75%), KBS(0.2%), KARI(1%), KPA shore handling, stevedoring and agency fees(0.8%)
[5] Includes bags, bagging, transport to Msa. Warehouse, handling charges
[6] Include local transport, transit losses, banks LC, handling costs, storage and opportunity cost of capital
[7] Include distribution costs in transport, transit losses and storage. Also opportunity cost of capital
[8] Include transit losses, re-bagging and storage

MARKET ACCESS

Kenya like many African countries relies heavily on commodity production and exports for employment and foreign exchange earnings. Fifty to ninety percent of export earnings are form agricultural commodities either raw materials, primary commodities, semi-processed and agro-industrial products. This should not be viewed as a constraint. Many developed countries have built their success from well functioning commodity sectors. The table below shows that countries that developed more exported much more commodities than Africa in the period between 1970-72 and 1998-99.

Table7: Growth in Commodity Exports Between The Period 1970-72 to 1998-99

	Value in US $ billion. Source: UNCTAD		
	1970-72	1998-99	Multiplication factor
71 ACP countries	8	16	2
The Whole of Africa	8	18	2
Sub-saharan Africa	6	13	2
Asia & Latin America	8	81	10
Brazil	2	23	11
European Union	26	260	10

1. The “Asian Dragons” moved from the same base figure as Africa in 1972
2. Brazil exported 4 times less than Africa in 1970, yet today it exports much more than the whole of Africa
3. European Union exports 15 times as much as Africa

From these gains they improved their production capacities, and used the foreign exchange resources and savings as a basis for development. But their success is not only from the free play of market forces but also due to deliberate efforts to promote exports by protection of their domestic markets, export subsidies, support to farmers with research, infrastructure and marketing support. Africa did little of this, as a result her share of world commodity exports has fallen to only to only 2.6 percent of the global total. Kenyan commodity exports have shown the same negative trends. However this has been shrinking and is expected to shrink even further with the expiry of the Lome IV convention.

Beef

Re-entry of beef originating from Kenya into the European Union has been restricted by;

- lack of documentation of disease control measures, an important factor in the EU market.
- Poorly finished stocks that cannot access premium markets, hence low prices.
- Lack of essential facilities and systems for checking chemical residue levels in beef products.
- Beef production in Kenya is said to be only 70 percent of domestic demand.

Horticulture

Table 8 shows that horticulture in its raw or processed form has become one of the most dynamic and important commodity sectors in the world today. Overall it represents an export market of over $75 billion. In the same period, Kenya earns only $ 226 million a mere 0.3% from its horticultural exports, yet it has a comparative advantage in production and value adding to fruits, vegetables and flowers.

Table 8: **Value of World Exports (US Billion)**

	1970 – 72	1998-99
1. Coffee	3.3	15.3
2. Tea	0.7	2.7
3. Horticulture (fruits & nuts)	4	41
4. Vegetables	2	30
5. Cutflowers	0.2	4.3

As noted earlier, Kenya's horticultural exports are concentrated in Europe, it leads in supplying cutflowers to the Dutch auctions and is a major supplier of green beans in addition to supplying a whole range of fruits and vegetables either fresh, frozen or in processed form. However Kenya can still explore into other market opportunities that exist.

Increases in non-tariff barriers in our major markets brings to the forefront issues of market accessibility to countries and also to certain categories of producers in exporting countries like Kenya. In horticulture, the institution of a wide and ever growing range of non-tariff barriers has barred small-scale producers (farmers & exporters) who do not have the knowledge or capital to institute necessary changes in their production systems. These requirements have favoured large exporters with large capital outlay and biases exporters towards medium and large scale farmers in order to reduce their costs of compliance and the risk of losing premium markets.

Importance of supermarkets as an outlet for fresh produce is increasing in Europe generally and particularly in the UK. Whereas fresh produce exports were previously channeled primarily through wholesale markets, supermarkets now control the largest proportion of fresh produce from Africa. Unlike other market outlets, volumes, quality and price are negotiated and fixed over a period (usually one year), thus stabilizing the market for producers and exporters. However, this market is much more demanding as individual supermarkets prescribe their own standards and are quite specific on SPS standards, chemical residue levels, quality attributes, environmental protection, worker welfare and actual volumes delivered. In addition supermarkets across Europe are ganging up behind the same principles to influence all produce marketed in the continent.

The horticultural industry led by the private sector has respond to these barriers and can be said to be ahead of many other countries that fall under the same category. The initial response was from exporter associations who developed a code of practice (COP) for their members to assist them access niche markets. The resolution by EU to hold countries and not individual exporters responsible for produce prompted the industry to favour a national COP to be enacted as law. The government has also responded by instituting upto seven institutions with the responsibility of regulating various aspects in the industry.

However the industry is still faced with challenges like;

- Costs of compliance are high with no immediate rewards. However meeting the requirements assures one of a steady market. It has been difficult for small scale farmers to perceive these benefits thus making achieving compliance an exporter's problem.
- There is lack of participation by producing countries in the setting of these standards, which raises the problem of ownership and applicability of conditions so set.
- Kenyan producers and exporters have to contend with as many standards and compliance initiatives as there are markets. Requirements for accreditation to internationally recognized bodies make attempts at harmonizing standards difficult.
- Despite Kenya's major influence in the horticulture and flower market, the dualism present in this sector (small & large scale) has resulted in divisions thus making negotiations for better terms in the EU market much more difficult than if Kenya presented a united front.
- The role of government in this issue of compliance is still not clear. One thing for sure is that the large number of institutions involved in regulation will have an implication on costs. Also, the industry has shown it's prowess in self-regulation and should not be stifled but encouraged to continue.

Kenya is also faced with other barriers in form of Tariff Escalation. Potential markets impose higher duties on processed products than they do on raw materials to protect their industries. With many of our key export commodities, including tea, coffee and pyrethrum, value adding to agricultural commodities could be the basis of an agricultural export led boom. Kenya should not remain forever an exporter of primary products.

Kenyan agricultural commodity exports either in raw form or processed are concentrated to just a few markets as shown in the table 11. Europe has remained the major destination of Kenyan exports of primary commodities. These market alignments were created during the colonial and immediate post-colonial era. This kind of market concentration has been proved to be risky by recent market developments. For example, the non-tariff barriers imposed by the European Union on foodstuffs entering its market has potential to greatly affect the Kenyan fish and horticultural industries whose main market is the EU. It is only recently that Egypt put an embargo on Kenyan tea due to conflicts under COMESA agreements in rules of origin of Egyptian exports to Kenya.

Table 9: Major Destinations of Kenyan Commodities

Commodity	Major Markets	Percentage of Total
Tea	UK, Pakistan, Egypt	83
Coffee		
Horticulture	UK, Holland, Germany	
Pyrethrum	USA, Europe	85

With the imminent expiry of preferential treatments accorded to Kenyan products, Kenya should re-think her strategy and opt for diversification into new markets.

Due to the preferential treatment accorded to Kenyan produce together with other ACP countries in international markets, the country is yet to develop a strong capacity in international trade negotiations. Capacity is needed in international marketing, trade negotiations, and in international law to ensure markets remain open to our products. Investments in timely information in this area must be made. Understanding market requirements, good analysis of trends in global markets, government support in enhancing exports e.g. concessions in export financing all need to be looked into if agriculture is to continue to be a important source of export earnings for Kenya. .

ALTERNATIVE MARKETING CHANNELS

Kenyan agricultural commodity sub-sectors are exploring alternative marketing channels different from, or in addition to, those already in place. This has been prompted by failure of farmer cooperatives and other marketing bodies to deliver good services leading to low returns to investments. Perennial liquidity problems and high transaction costs in cooperatives often resulted in late payment to farmers. Farmers have therefore resorted to selling their produce outside their cooperatives in areas where such opportunities exist. This is happening in commodity sectors like coffee, milk and pyrethrum and even tea. Changes in consumer demand (traceability, single origin, organic foods) are also necessitating marketing arrangements that allow more personalized relationships between buyers and producers such as in horticulture and coffee. Current legislation and regulations governing the marketing of agricultural produce and their products are restrictive and have played a major role in constraining exploration and development of more efficient marketing arrangements.

Pyrethrum

Kenya is the world's leader in pyrethrum production, and it commands 70 percent of the worlds market share. Other producers include Tasmania and Australia (20 percent), Tanzania (8 percent), Rwanda (5 percent), and Papua New Guinea (2 percent). Ninety seven percent of this production is by small scale farmers with less than one acre under pyrethrum. The bulk of pyrethrum and pyrethrum products produced is exported and only 3 percent of production is sold to local industries.

Table 10:

Percentage of Kenya's Production	Destination
3%	Kenya
3%	Africa
4%	Australia
5%	Asia, India, Middle East
25%	Europe
60%	USA

Farmers deliver dried flowers to the Pyrethrum Board of Kenya (PBK) through one of the following channels:

- farmer cooperative societies
- self-help groups
- Pyrethrum Board collection centres
- directly to the board
- middlemen who then deliver to the board

Self help groups are currently the major channel as farmers are moving away from the more formal cooperative societies. However in some areas like Kisii, cooperative societies are still dominant. Payment for deliveries made follow the same channel back to the farmers, with marketing costs being deducted at every stage.

These marketing arrangements are important as they determine the marketing costs, pyerthrin content and hence prices received by farmers. Most of the channels available to the majority of farmers are long and inefficient causing delays in collection of dried flowers and in payment to farmers. There is loss in pyrethrin content in addition to the high marketing costs. The pyrethrin content of deliveries is a big issue as it determines the price received. However, many farmers do not have any control over the post farm factors that affect this parameter. A few farmers with comparatively larger farms are licensed to deliver directly to the board, thereby increasing their prices. Marked differences have been observed in the pyrethrin content and prices received through the different channels as table below shows.

Table 11: Pyrethrin Content and Prices Across Regions

Production Area District/Division	Marketing Channel	Variety Planted	Pyrethrin Content	Price per Kg
Nyandarua/Engineer	PBK	p4	1.7	118
Nakuru/Kamara	SHG	p4	1.7	115
Nyandarua/Mawingu	BCC	ndege	1.5	105
Uasin Ngishu/Ainabkoi	SHG	chui	1.4	96
Nakuru/Naivasha	BCC	local	1.4	95
Nyandarua/Shamata	BCC	katumani	1.3	89
Kisii/Ibacho	FCS	nyamasibi	1.1	70
Kisii/Ramasha	FCS	nyamasibi	1.1	67
Kisii/Keumbu	FCS	nyamasibi	1.1	65

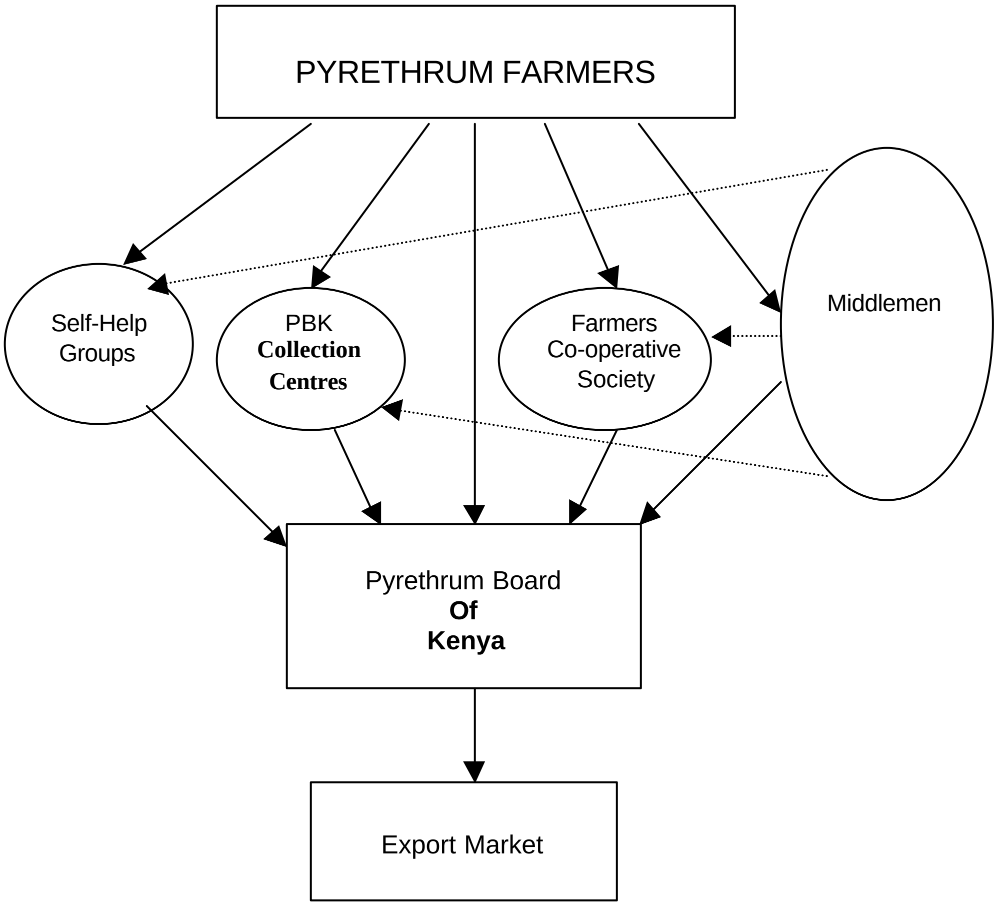
The 90's have seen the withdrawal of government in production and marketing activities in the agricultural sector. However the pyrethrum industry is the only sub-sector that is still under tight government control. Under CAP 340 of the Laws of Kenya, the Pyrethrum Board of Kenya is mandated to be the sole organ licensing farmers, purchasing and delivering of all pyrethrum, processing, sale and export of pyrethrum and its products, payment of farmers, research and regulation of imports of pyrethrum and its products. Some in the industry feel that this tight control has no place in present day economies as it stifles participation by the private sector. It does not allow the exploration and injection of efficient ways in production, marketing or processing. It also has limited the opportunities for a domestic pyrethrum based processing industry to develop. The bulk of pyrethrum extract or powder is sold to manufacturers in the USA by private treaties and is not available not only for local manufacturers but also to international companies who bitterly complain that they are unable to access pyrethrum extracts from Kenya. Kenya imports insecticides based on synthetic substitutes to natural pyrethrum, from manufacturers in other countries.

There is a question as to whether PBK should maintain it's monopoly over sales to the export market or whether other investors should be encouraged into the market. The experts in this industry are of the opinion that the boards monopoly in the export market should be maintained as it is an advantage to small scale farmers since the board can exert monopoly power in the international market, thereby maintaining high prices.

However, representation of producers and other stakeholders in the industry in the decision making body should be increased.

To enhance competition in the domestic market, removal of the board's control over production and marketing activities to allow other manufacturers accessibility to pyrethrum farmers is necessary. These alternatives provide farmers with incentives to increase production.

FIG 2: PYRETHRUM FLOWER MARKETING CHANNEL



Dairy

Dairy exhibits similar issues as arise in pyrethrum. Nairobi is the largest concentrated market for milk. Milk is brought directly to the city in 2 forms. Raw unprocessed milk is brought by farmers themselves, by middlemen who buy from farmers, by co-operatives that serve farmers. Raw milk is delivered directly to consumers homes or places of work, is sold by the same or different middlemen in informal roadside markets, or is sold through licensed milk bars. Processed milk follows similar routes from the producer with the extra possibility that the processor sets up their own buying operation in producing areas. Once processed and packaged milk is sold through a variety of retail outlets ranging from neighborhood kiosks to the large supermarket chains.

80 percent of milk consumed in Nairobi is raw milk. Packaged milk is more costly and is consumed primarily by the wealthier segments of society. Processors are concentrating their efforts on capturing a greater share of the market from hawked raw milk, initially through encouraging the Dairy Board to enforce rules prohibiting the sale of raw milk in the city, most recently through an advertising campaign focusing on hygiene and quality. But they will have a difficult time countering the personalized door to door service, easy

credit terms and small unit sales that make hawked milk so popular. Consumers are aware to a greater or lesser degree that different hawkers offer different qualities of milk, some add water, or even dangerous chemicals to prolong shelf life. At times this is reflected in prices that differ markedly over a small area. Consumers asked about this in the Kibera area recently said different degrees of adulteration were reflected in the different prices. It will be interesting to see which marketing channel will gain market share and whether there will be competition the market place, or government enforced regulation. Past efforts to enforce the current set of regulations have failed. From a social point of view employment per litre of milk marketed was 10 times higher in the hawked raw milk channel as compared to the marketing channel for processed milk.

Coffee

With the present global oversupply the coffee market is now a buyers market to the advantage of roasters who are now calling the shots in the industry. The current consumption trends allow more flexibility in developing blending formulas, making roasters less vulnerable to shortages of particular types coffee. The development of new techniques in steam-cleaning robusta coffees allows roasters to improve its quality and to substitute some of the expensive arabicas with premium-grade robustas. Roasters tend not to accept coffee for their blends from countries that cannot guarantee minimum supplies e.g. 60,000 ton per year of Arabica[9]. Kenya's current supply has fallen to a little over 50,000 tons and risks being shunned aside.

The emergence of new consumption patterns, the growing importance of single origin coffees, fair trade and organic coffees, proliferation of café's and specialty shops poses challenges not only to traditional roasters but also to producers like Kenya who are used to selling large quantities of homogenous and undifferentiated coffees. The prospects in specialty coffee in terms of quality or origin are growing. Specialty means coffees that are not traditional industrial blends either because of their high quality, limited availability in production, flavoring or packaging. Consumption of these coffees is growing with the estimated number of Americans consuming specialty coffee growing from 7 million in 1997 to 27 million in 2001. Consumption of regular coffee is stagnating.

These trends in coffee consumption have implications for how coffee is produced and sold and hence should guide formulation of policies governing the industry. The current Coffee Bill takes cognizance of some of these emerging trends. It removes the Coffee Boards marketing monopoly and opens up the market for alternative marketing arrangements. It also allows participation in futures and forward markets that can reduce price risk in a highly volatile coffee market. Producers are allowed to enter into long-term contractual arrangements, and provision is made for labeling and registration of trademarks that allows for produce to be traced to a particular producer or trader. It also gives Kenyan farmers opportunities to participate in futures markets, hedging and specialty markets e.g. organic coffees. There are also proposals that the legislation should protect the Nairobi auction by making it mandatory that a larger proportion of every producers coffee pass through it.

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[9] source

In the past, the marketing of all of Kenya's coffee has been out of farmers hands. This was the role of the Coffee Board and traders. Liberalization of coffee marketing implies that Kenya can no longer be considered as a single market unit as grower organizations have not substituted the government in organizing coffee exports jointly. The new legislation however allows farmers to participate in popularizing their coffees. Trends in coffee consumption are already showing signs that coffee production will be similar to that of wine, surrounded by mystic and marketing gimmicks. Local marketing agents on the other hand may be unable to compete with international traders who are strengthening their supply network by moving up-stream into domestic marketing and even into coffee farming.

With all these prospects and challenges, the way forward in coffee and other sub-sectors entails providing the right information to producers who can then make informed decisions. Analysis and interpretation of alternative policies will be crucial in making policy choices.

Farmer Organisations

Producer organisations in Kenyan include cooperatives, companies and self help groups. Farmer companies are rigid associations registered under the Companies Act and have been mainly involved in buying land and other assets for its shareholders. Cooperative societies are more formal and are governed by the cooperative act. Self help groups are loose associations formed by smaller number of farmers and not very rigid so that farmers can join or exit without much formality. Their regulatory mechanism is based on rules defined by the members themselves and draws heavily on the community's social capital. Cooperatives have for a long period of time been involved in commodity production and marketing activities whereas self help groups have only recently engaged in these activities.

About three million farm holdings are members of cooperatives of which 80 percent of the members have less than 2 hectares of land. Cooperatives are said to account for 50 percent of marketed production in Kenya (**IS THIS AN UPDATED FIGURE)**. Between 1963 and 1999, the number of cooperatives grew by 16 percent per annum as they were the main vehicle through which indigenisation of economic activities occurred, playing a key role in collection, transportation, processing and marketing of agricultural produce, provision of inputs, credit and information. However, these cooperatives have over time become riddled with mismanagement; leadership wrangles and splits into smaller units; lack of transparency and as a result withdrawal of members to other types of farmers associations, e.g. self-help groups.

In a liberalised agricultural sector, these cooperatives are faced with challenges as to their relevance given their inefficiencies and lack of flexibility to change to more business like entities able to provide effective services to farmers. The private sector has thus come to take on a greater role in marketing activities for the agricultural sector. There is also a strong wave in formation of alternative marketing channels to cooperatives in various commodity sectors previously serviced by cooperatives, e.g. dairy and pyrethrum. In the export horticultural sub-sector too, farmers are wary of cooperatives hence they've been joining up in smaller self help groups mainly to attract buyers for their produce. These groups have also attracted other services like extension and credit from the private sector.

Despite the dismal condition of the cooperative movement in Kenya, farmer organisations in whichever form will continue to play a key role in this sector which is dominated by small holders. With the advent of globalisation, they will play an even greater role in mobilizing the small holders who would otherwise be marginalized. Organised small holders will be well positioned to reap benefits of specialty markets, as the market is quite sympathetic to the plight of the small or poor producers. The cooperatives vis a vis self help groups are especially important since their membership is large, hence they can easily attain the critical mass required to attract the markets attention.

Factors causing the chaos witnessed in the cooperatives have been identified as; lack of preparedness; poor sequencing of reforms; inadequate reforms; removal of controls for example foreign exchange; lack of flexibility; political interference; leaders with poor integrity and diversification into non-core activities. These must be addressed if the cooperative movement is to attract producers as the preferred vessel through which to market their produce.

PROCESSING AND AGRIBUSINESS

Location

Food processing in Kenya is by far the largest component of manufacturing in Kenya, both in terms of output as well as value adding. These industries are concentrated in urban areas far removed from production areas thereby increasing transportation costs and contributing little to the development of rural areas. Location of processing facilities in production areas is the way forward as this would reduce transportation costs having removed the waste products and also meets our national objective of developing the rural areas. However this re-orientation in location of agro-industries depends on investments in rural infrastructure namely power, roads, telecommunication all which are lacking and expensive too. Insecurity in rural areas also plays an important role in influencing the location of agro-industries. In horticulture, one important pre-requisite will be farmers willingness to supply such industries with fresh/raw produce in favour of the fresh market. This may not be a problem as current trends in the market have shown that opening up of our markets to produce from outside has led to increased supplies of fresh produce into the market thereby lowering prices. Prices for fresh produce are therefore not very different with those offered by processors. Farmers are also looking for alternative outlets for their produce.

LEGISLATIVE ISSUES

Over the last 3 years government policy in the agricultural sector has focussed on changing legislation to catch up with the liberalization that has taken place in agriculture and the overall economy. The flurry of activity also reflects demands for a greater role for stakeholders, and a smaller role for government, in the running of agricultural sector institutions. The process has been slow with an anticipated 65 pieces of legislation needing amendment, and only 2 being completed per year. Most recent progress has been in tea, coffee and sugar. In tea, a sessional paper was produced in December 1999, and a new Tea Act passed in late 2000. A sessional paper on coffee was produced in February 2001, and a draft bill published in June of the same year. A Sugar Bill was published in August 2001under some pressure from impatient MP's who had submitted, and ultimately passed a motion urging the government to speed up the process. The process began almost 10 years ago and a huge backlog that includes cotton, dairy, horticulture, and pyrethrum remains to be dealt with.

Table 12: Overview of the Process

Old Role	New Role						
Licensing Producers	Registering Producers for statistical purposes	T	C	S	D		
Planting material	Planting material	T	C	S	D	C	H
Extension Services	Extension Services	T	C	S	D	C	H
Research	Research	T	C	S	D	C	
Licensing processors	Registering processors	T	C	S	D	C	H?
Licence marketers	Register Marketers	T	C		D	C	H?
Set/Collect/Use Cess/levy	Set/Collect/Use Cess/levy	T	C	S	D	C	H
Promotion	Promotion	T	C	S	D		H
State Corporations Act	Exemption from State Corporations Act	T	C		D		
Paternalism toward small-scale producers	Small-Scale Producers organization	T	C	S		?	H
Post farm Association	Post farm Association	T	C	S		?	
Set post-farm fees and charges	Set post-farm fees and charges	T	C	S			H
Training	Training	T	C	T	D		H
	Inherit old staff and obligations	T	C	T	D	?	H

T applies in Tea, C in Coffee, D in Dairy, C in Cotton and H in Horticulture

The Tea Act has been passed by parliament. The other pieces of proposed legislation are at various stages of the process, so cannot be said to be in their final form. But the table above gives some overview of the thinking in government behind the proposed legislation. The new bodies are to inherit the staff and obligations of the bodies that preceded them. This means that they

1. Undertake many functions
2. Cannot fully escape the governments desire to control

Licensing procedures are a case in point. While there is movement away from licensing every actor - growers, processors and marketers- the post colonial hangover remains. The Coffee Bill[10], and the Sugar Bill[11] talk of issuing a licence if the applicant is a 'fit and

[10] Section 20
[11] Section 15

proper person' (whatever that may be and supposedly fit and properness is not a permanent state and can change from year to year) and is 'knowledgeable, experienced and has capacity or employs such a person'. This too is subjective and subject to change. If one employee leaves the license can be withdrawn? These types of provisions do little to attract private investment into the industry.

The legislation also continues government dominance. The Minister can do almost anything and only need consult the industry boards[12]. The Boards must follow his general or specific directions, but he can do anything after consulting them, not necessarily with their approval! The relevant sections negate all the stated good intentions to increase stakeholder power, and to reduce the role of government, politics and politicians.

An interesting difference between the bills in this regard is that it is only the sugar one that explicitly states that one 'may be removed from the board' by the Minister, if they become a Member of Parliament or a councilor in a local authority. It is not at all clear why this provision exists. And only in one commodity. An earlier version of the same bill stated that such a member will be removed.

In draft form the bills are far more draconian than when they become acts. This reflects an extensive - but time consuming- iterative review exercise, primarily between the parliamentary committee on Agriculture, Lands and Natural Resources and the ministry. The parliamentary committee has been asking for submissions and dialogue with industry stakeholders and researchers that help to improve the bills and remove some of the more disturbing provisions. Perhaps this is why the Tea Act, looks better than the others that have not gone through much of this process. In the Sugar and Dairy bills there are provisions setting lower limits on the academic and experience qualifications of the respective Managing Directors.[13] It will be interesting to see if these will get through to the act. It is not clear why qualifications need to be a part of the legislation. A good board will only select a well-qualified Managing Director.

Another example of draft legislation going a bit too far is in the draft Dairy Bill. Sec 19.1 states that on becoming a producer, processor etc. one must register within one month to avoid a fine of up to Ksh 4,000. That is to say if I buy my first cow and it delivers and begins to produce milk, I better write to the dairy board quickly. Why? And why make it an offence not to. And why Ksh 4,000?

Kenya is doing a good thing by updating agricultural legislation to better reflect the times we live in. But not everything can be legislated. Some things have to be left to the discretion of the relevant boards, and some things will be overtaken by changes in technology and in the market, both of which move much faster than Kenya's legislative system. Setting legislation too tightly will put us right back where we have always been - with outdated legislation that nobody follows and nobody enforces.

[12] Sugar Sec. 31, Coffee Secs 7,13 and 45, and Dairy Sec 10
[13] Sugar Sec 10.2, Dairy Sec 8.2

Why is this being done? Several observations may be made in this regard. Institutions exist and have self-interest in continuing to exist. These institutions, and those who work there, or benefit from them, have a great incentive to change and reinvent themselves in more acceptable guises rather than disappear completely. The move toward liberalization could have, and perhaps should have been accompanied by the closure of the industry apex bodies that were in government hands. Perhaps in a liberalized industry, the stakeholders would have come up with their own new institutions that are designed to undertake the functions that truly benefit the stakeholders. Note for example that all the boards being set up are large by any standard - 15 for the Tea Board, up to 19 for the new KTDA, 18 for coffee, 12 for sugar, 17-19 for Dairy. The new boards also take over all the staff of the preexisting but now defunct institutions, as well as all the rights, obligations, liabilities and contracts including those with respect to provident fund and pension benefits. The new bodies also inherit assets. But no due diligence is being undertaken by stakeholders as to the balance between inherited assets and liabilities. Would they have been better off forming their own new organization?

The new bodies also have far more representation of smallholders than of large scale producers and the business part of the industry. Consumers feature nowhere. In coffee for example, estates produce about 40 percent of production, but only have 3 out of 11 (27 percent) of the seats on the board that are reserved for growers. Government has an equal number of representatives as the estates even after a long struggle by stakeholders to reduce government representation. If those holding 5-10 acres were include in allocating production and representation, then the under-representation of estates looks even worse. The coffee trade - MCTA that represents dealers, brokers, warehousemen, millers and commission agents, roasters and packers - share one seat. In the dairy draft, processors and breeders each get one of the 17 seats. North-Eastern province has as many representatives in the Dairy Board (1) as do processors. Provincial seats are distributed apparently according to production with Rift Valley having 3, Central and Eastern 2, and all the rest one. The thinking behind this here, but not in other commodities, is not made clear. The Pyrethrum Act has similar provisions.

So what is going on and is it a good thing for Kenyan agriculture? Will the proposed changes benefit the sector and make them grow while increasing returns to farmers and the agri-businesses involved? Increasing employment and incomes in the whole sector should be the yardstick by which any changes in the agricultural sector should be measured as Kenya focuses on reducing poverty.

It is not clear that the process of legislative change being undertaken will achieve the desired results. Employees will keep their jobs, and the government will maintain control for some time longer. But the process is not leading directly to the type of changes the sectors need. Some positive steps in the right direction have been made but given the time taken, and the way policy debate in the sector has been focussed on these pieces of legislation for such a long time, more could have been done. While Kenya waits for legislation and new bodies, the world in which the industries operate has been changing. And fast.

In coffee, for example, Thailand has come in as a new and low cost producer of large amounts of quality arabica coffee. Kenya is being shunned in the market as national production becomes low enough to make it risky for blenders to include Kenya in their blends. Kenya is losing its price premium at the same time as overall coffee prices are at record lows. The market is changing with more power in the hands of consuming nations, and the large multinational traders, roasters and retailers. With liberalization in many countries, and the trade in the hands of private traders who mix all types of grades together, Kenya has an opportunity to reestablish its price premia if it can segregate different qualities. Increasingly the specialty coffee market seems to be the market Kenya has chosen to target as its market of choice by restricting trade in cherry and maintaining the system of wet processing. In other countries specialty coffee is produced on large-scale estates owned, or contracted by international traders through marketing arrangements and pre-finance. Alternative farming practices like organic farming, e-commerce and the internet linking buyers and producers, Alternative Trade and Free Trade Guarantee Organizations are coming up, but might not be fully reflected in the legislation. Legislation cannot cover everything, but multi-year efforts to revitalize an industry through legislation should recognize emerging trends, and that trends emerge. The best that legislation can do is provide an enabling environment that allows the sector to flexibly respond and take advantage of those trends. This does not seem to be a guiding principle in the Kenyan agricultural legislation effort.

The problems of coffee - finance, indebted producers and cooperatives, dairy - low productivity, collapsing disease control and marketing systems, and competition between processed/packaged and raw milk, sugar - high costs of production, small farms, and inefficient processors- for example, cannot be solved by the legislation currently envisioned. The bodies set up can try to find ways of addressing these problems, and perhaps having more small-holder farmer representation is part of the way forward. But creating world class industries should not be delegated to farmer dominated boards. After all the boards they are replacing had farmer representation, and the more, the worse the problems were (n.b. coffee) as managers 'capture' directors through sitting and other allowances. Weak boards overseeing strong management was the biggest problem of the old bodies. The current legislation do not necessarily solve that problem.

But the new wave is an opportunity to move forward from the problems of the past. Strong, well informed boards, with slightly less overt government control is what is being created. Those boards can use the new powers at their disposal to turn their organizations into the type of bodies stakeholders would have designed. These were designed by government and stakeholders are embracing them as a step forward, rather than the last word in reforming the sectors. It will be an important role of stakeholder associations, the business community, and research organizations to shepherd them in positive directions that give more back to stakeholders than they take. Increasing representation of agribusiness, consumers and, perhaps researchers, through co-option, and reducing government influence and the role of politics are some of the unfinished business of these boards. But let this not detract from the conclusion that the Ministry of Agriculture cannot delegate all its policy making functions to stakeholder boards. There remains much work for the ministry in nurturing these efforts to move the industry forward and represent the agricultural sector to the rest of government. This calls for a more informed and sophisticated, less dictatorial interaction with the sectors than has been evident at times in the past, and a shift in the ministry away from a focus on farm production and farmers to take in the interests and needs of the whole supply chain.

REGULATORY ISSUES

In the Kenyan context, regulation is the handmaiden of legislation. All agricultural legislation sets up an organization, and lays out the rules and regulations under which the sector will operate. Infringement of the regulations is deemed an offence and is punishable by a fine or imprisonment. Enforcement and inspection is undertaken by the Kenya Police.

Regulation is undertaken for some form of public protection, or to ensure that some greater public good is not compromised by the activities of a single, or group of players. And in the emerging world of global competition where every shilling counts, the cost of regulation must not exceed its benefits. It is not clear that public sector institutions in Kenya have adopted these principles. Nor is it clear the principles underlying efforts to design or enforce regulations. New regulations are proposed in the new bills, some of which may not be for the benefit of the sector. However without knowledge of the thinking behind the new rules, it is difficult to determine whether or not the rules achieve some higher purpose than creating jobs in public agencies financed by a charge on industry participants. In a country like Kenya that does not have the best record as far as corruption is concerned, the design and enforcement of rules must take into account the potential risk of enforcers using the regulations to extract economic rents.

A new phenomena around the world that is also taking root in Kenya - outside of the public sector- is self-regulation. When industry players design their own rules and regulations, and select enforcement mechanisms and sanctions, they are likely to choose lower cost systems than those that might be imposed by a government for example. And these self enforced standards of behavior can work better than those imposed by non-participants in the market as those setting up the rules understand the industry well enough to design low-cost but effective methods to ensure the good of the group in the face of incentives by individuals to make personal benefits at the expense of the group. The main difference between more modern systems of regulation and the types of rules set up by a government and its legislature is that they may be voluntary, so individual firms commit to follow them. And those setting and enforcing the rules interact often enough that if a rule becomes cumbersome or unnecessary they can have it changed much faster that it takes to change legislation. Kenya needs to move more toward industry self regulation, and away from government legislation, if we are not to return to the situation in recent history where the agricultural (and other) sector is littered with laws, rules, and legislation that no one is following, and no one is enforcing.

Perhaps the most highly regulated agricultural industry at the moment is the seed industry. Historically Kenya, like many other countries, maintained strict controls over the importation of planting materials. Whatever material was allowed in had to undergo several years of quarantine and performance trials before they could be sold on the domestic market. This implicit discouragement of a vibrant private seed industry was justified on the grounds that the cost of having poor planting material for the main food crop, maize, for example, would be too much for the economy to bear. This justified some extra costs on Kenyan producers, and the promotion of a near monopoly producer in the Kenya Seed Company. Farmers were protected from the monopoly overcharging them, or selling low quality seed, by controlled prices and an elaborate system of inspection and standards in seed production as laid out in the very detailed Seed and Plant Varieties Act of 1991. However that act saw the National Seed Quality Control Service (NSQCS) a subsidiary of the Kenya Agricultural Research Institute (KARI) registering seed growers, seed merchants, seed processors and undertaking field inspections, permitting transport of seed, testing samples, stopping sales, and authorizing importation and export of seeds. Lack of funds rendered it incapable of undertaking all these tasks and as a result seed quality in the country, most notably for maize, wheat, grass and horticultural crops deteriorated.

The seed industry was liberalized in May 1996 to improve access by Kenyan farmers to quality planting material through investment by competing private companies in seed development, multiplication and distribution. The Kenya Plant Health Inspectorate Service was formed to, among other functions, implement standards on local and imported seed. KEPHIS replaced NSQCS and while it was authorized to charge seed companies for its inspection and certification services, it too has been unable to mobilize the human and financial resources to inspect every field of seed being multiplied by every grower, and every lot being sold by every retailer. Inadequate inspection during seed multiplication and distribution continues to compromise seed quality. At the same time there are numerous barriers to import of seed from other countries by international seed companies.

The issues in seed revolve around a regulatory framework that limits access by Kenyan farmers to the best seed that may be available in the region or around the world. This is done on the grounds that domestic agriculture must be protected from low quality seed with unstable yields or carrying diseases as yet unknown domestically. Skeptics suggest that the regulations are being enforced to protect a domestic monopoly. Planting materials being introduced into Kenya are required to undergo 3-5 years of National Performance and Advanced Yield trials. This is a long process that delays release of varieties that seed companies argue have gone through extensive testing with exhaustive documentation in other countries, including Zimbabwe and Tanzania where growing conditions are similar to parts of Kenya. They do not argue for no trails, just a faster process to allow competition and provide greater choice to Kenyan producers.

In most countries around the world, seed is an extremely competitive industry. Competition means that different companies have roadside demonstration plots, undertake their own extension and promotion work, and stringently police their seed production and distribution channels. Kenya is still trying to do this using a government agency that can never match the private seed companies for funds, or for the single minded determination to keep market share by having, and maintaining, a name for producing and selling quality seed. That cannot be done through regulation.

When we look at how the market for commodities are evolving we can get a glimpse of the systems that may be the dominant ones in the future. Regulation must be seen to add value to a commodity otherwise market players seek ways around them or ignore them. Government has a role to play because it has the moral force to bring industry players together to design and enforce a mutually beneficial and meaningful set of rules. Once industry groups are made to realize that they are competing against global competition, rather than against their Kenyan neighbor, the willingness to come together for mutual benefit will increase. In Kenya the horticulture and floriculture industries are on the cutting edge of this trend and enforce higher standards on themselves than Kenya law, or even laws in the export market countries demand, in order to maintain competitive advantage in the market.

Right from the start the export horticultural sector has been driven forward by the private sector with the government playing a minimal role. The industry interprets export market requirements on quality and implements the same in their firms. The government gives certification for produce that meets the specifications of the export market. Those not meeting these requirements loose their market. Through this self regulation the industry has been able to create a name for itself in Europe.

The real test for the industry came when governments like the UK instituted barriers to fresh produce which does not meet the stipulated Sanitary and Phyto-sanitary (SPS) requirements and acceptable chemical residue levels. The European Union also followed suit with minimum acceptable standards on foodstuffs entering their member countries. This has necessitated more stringent self-regulation in the industry, and called for dissemination of information and training to create awareness in the industry. Towards this effort the government and NGO's have provided some support, however the buck stops at the door of the private sector since they have invested heavily in the development of this industry.

The larger[14] firms pushed by their market outlets to prove compliance are determined to maintain these lucrative markets. These firms through their associations, Fresh Produce Exporters Association of Kenya (FPEAK) and The Kenya Flower Council (KFC) each initiated their own codes of practice (COP) to guide their members on good agricultural practices (GAP). Their members in turn have assured access to lucrative markets if they follow GAP by adhering to the stipulated COP. These associations have their own distinct marks, which their members earn after strictly following their COP. An association like KFC has developed different categories of marks to distinguish firms with varying levels of compliance and responsibility. Produce exported by accredited firms carry these marks of distinction as a sign to consumers that it is a superior product.

[14] The horticultural industry is characterised by dualism, where large (big) growers and exporters co-exist with small growers and exporters. The larger and bigger companies have been in the forefront in the development of a self-regulating environment.

Some exporters have been compelled by supermarkets to adopt specified COP, while others were impatient with the length of time it took the associations to develop credible COP and audit systems to compliment it. They've therefore adopted COP developed by established certifying bodies like Bureau Veritas Quality Inspectors (BVQI), and the Flower Label Program (FLP). It is not strange to see fresh produce carrying several labels of certification.

Self-regulation in an industry dominated by small scale growers has been quite challenging. For example, FPEAK's membership is drawn from vegetable, fruit and flower exporters. Many of it's members source their produce from out-growers many of who are small scale. These exporters bear the task of communicating to their out-growers GAP and ensuring that these practices are followed. This is a task full of challenges leading to long lapse of time for such exporters to get certification of compliance. For an association like KFC, communication and implementation has been easier as they draw their membership from relatively well endowed firms who are well informed. In fact they've been able to attract some supermarkets as their affiliate members which allows them closer monitoring of the tone and expectations of supermarkets, hence faster implementation of the same upstream.

Meanwhile, some (proportion not documented) of medium and small producers not contracted by exporters with FPEAK or KFC membership continue producing without any reference to any COP. There are also exporters who are either not members of any association or if they are have not instituted measures to ensure good agricultural practices (GAP). This means that in the midst of market compliant produce there's produce which is not, thus putting a risk[15] to all. The resolution by EU to hold countries and not individuals responsible for produce that does not meet specified MRLs and Sanitary and Phytosanitary (SPS) conditions prompted the industry to favour a National Code of Practice (NCOP). FPEAK and KFC recognised the futility of enforcing good agricultural practices amongst its members while non-members continued producing without any care at all. The code is therefore geared towards instilling discipline and responsibility in the industry by following the laws of the land in relation to health, environment, pesticides and social aspects. It harmonises the two COP in the industry and sets the minimum acceptable standards for any produce from Kenya destined for the export market. They propose to have in place a standing committee for enforcement, to be constituted mainly of the private sector. But the creation of this committee has hit a snag, as the government would like more public sector representation. But there is a fear that domination of the government will lead to failure in enforcement of this COP. The industry is therefore seeking legal advice for the creation of an enabling legislation which will ensure all fresh produce exports comply. Some of the proposals and issues are;

- FPEAK is to audit the vegetable sub-sector while KFC will audit flowers, KEPHIS is to be the final (external) verifier and issue certificates only to those who do comply.

[15] Produce found with unacceptable chemical residue levels for example, will be shipped back at the exporters expense and result in a possible ban of fresh produce products from Kenya.

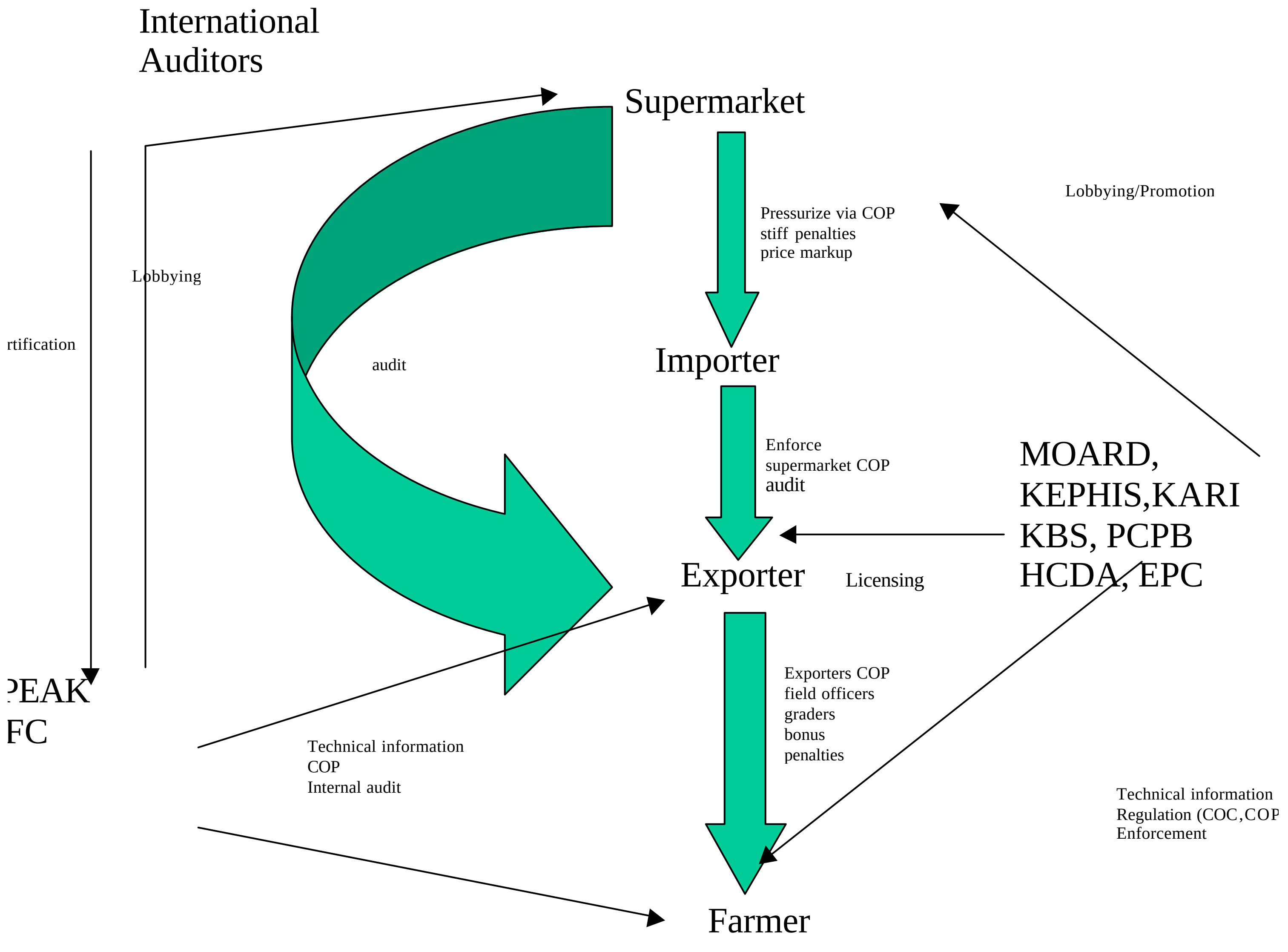
- Institutions should review their proposed roles and functions in the industry based on the NCOP and adjust these to provide relevant services. For example extension messages should be adapted towards GAP as stipulated in the NCOP

Meanwhile, producer/exporter associations like KFC have put tighter controls requiring prospective members to demonstrate their willingness to go through the full accreditation process within a stipulated timeframe.

The horticultural industry is the leader in self-regulation, which brings the question as to why it was necessary to create a much more powerful HCDA. The authority aims at expanding its roles and functions. Its also intends to try its hand in marketing. This policy is contrary to the general trend in the agricultural sector, which aims at minimizing the role of government agencies as Kenya strives for efficiency and competitiveness.

The beef industry provides the best example of lack of effective regulation limiting the potential of an industry. Kenya cannot export beef to key potential markets like the EU, even if the export quality slaughterhouse at the Kenya Meat Commission, were to be reopened. Kenya does not have disease free zones from which export beef could be gathered due to the collapse of the disease control and livestock movement control system. The regulations are on the books, but enforcement is patchy and ineffective. Kenya's borders also are wide open to animals from all the neighboring countries - Somalia, Ethiopia, Uganda and Tanzania that are the ultimate source of much of the meat consumed in Nairobi and other parts of the country. Botswana, a major exporter of beef to Europe learnt how to set up disease control measures through sending technical staff to learn from, and in Kenya in the 1970's.

Fig 3: Formulation, Monitoring & Enforcement of Standards in Kenyan Horticultural Industry



Source: Kamaur,

Another industry that is moving toward having its own rule and regulation making body is the cotton industry. The industry has been on a downward trend for the last 15 years. Liberalization only made matters worse as individual private players could not enforce behavior in the sector that ends up benefiting all players. With liberalization individual ginners competed to buy cotton from all different parts of the country and ended up mixing seed designed for western Kenya with those designed for use in the east. It became difficult to find appropriate seed for planting and the result was discouraged farmers as cotton grew tall but did not flower for example. Middlemen bought whatever seed cotton was available regardless of seed type, and in disregard of farmers who may have borrowed inputs from their cooperative society or some other ginner. Ginneries and cooperative societies stopped giving inputs on credit. Soon Kenya had no seed cotton to speak of.

5 years ago, Tegemeo undertook a study that proposed a division of roles in the industry as laid out in Table 13. The cotton sector was brought to its knees because all roles were in the hands of public agencies in line with legislation. For 25 years, from 1967 to 1991, the Cotton Board controlled the cotton industry. According to the Cotton Act {Cap.355, No 3 of 1988 Revised 1990} the successor to the Cotton Lint and Seed Marketing Act {Cap.355, Revised 1967} the board was charged with

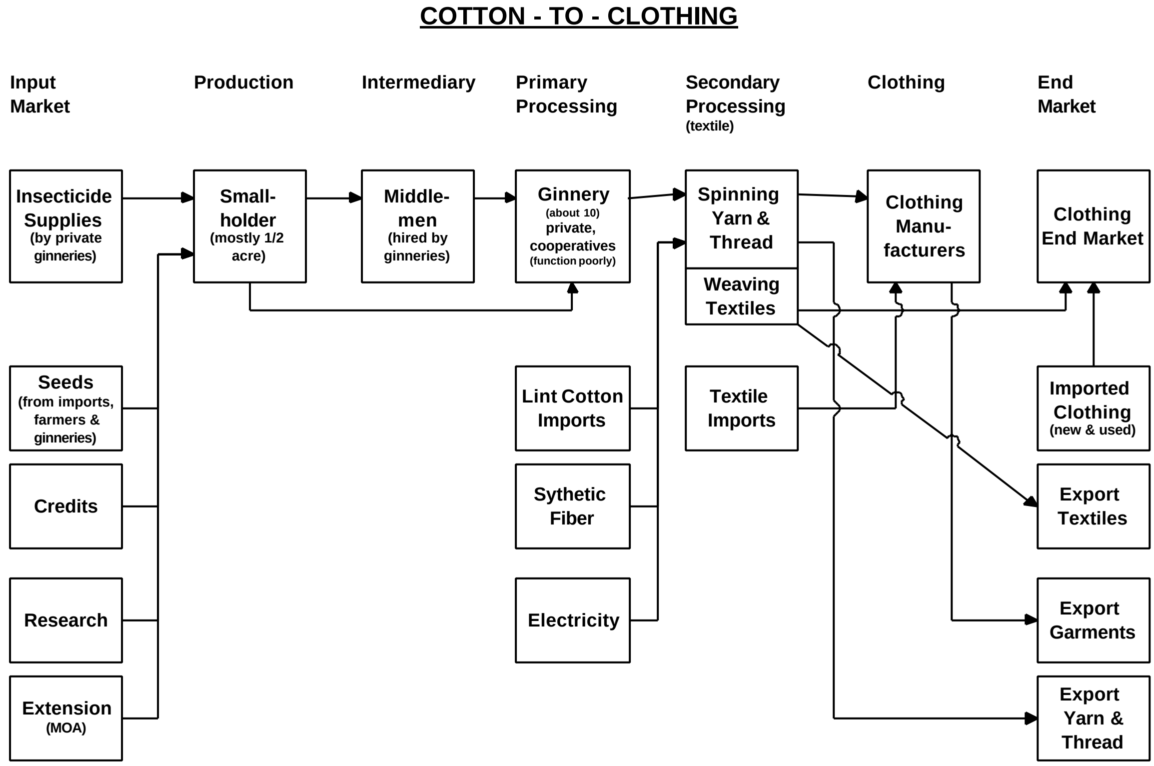
"Monitoring and regulating cotton growing and cotton ginning; licensing and controlling ginners and other persons dealing in cotton; regulating and carrying out quality control of raw cotton and cotton ginning; regulating the export and import of cotton lint or cotton seed"

Table 13:

	PUBLIC SECTOR	**PUBLIC/PRIVATE**	**PRIVATE**
Funding Research		X	
Basic Research	X		
Seed Multiplication			X
Seed Certification	X		
Seed Distribution			X
Extension		X	
Seed Cotton Marketing			X
Ginning			X

Government also has its own set of proposals in new proposed legislation that has been in the works for over 5 years. Impatient at the pace of the government effort, for the last few years cotton ginners have been meeting to set up a joint code of practice. That code specifies that they will not poach seed cotton from an area where another ginner has given credit, and they will not cross zones and thus limit the contamination of seed. They also want to set a levy on themselves to fund research and the development of new seed varieties and other activities of the poorly funded cotton research stations. Is regulating

Figure 4 The Cotton -Textile Supply Chain.



competition through the Cotton Ginners Association a good model? Is it open to abuse through ginners using their local monopoly buyer position to pay farmers low prices? Or is it the only way to bring a dying industry back on its feet?

The industry is proceeding faster than government that has had new cotton legislation on the back burner for years despite all the official enthusiasm in response to the signing of the AGOA treaty by the United States. An interesting difference between what is going on in other commodities is that no large government led parastatal is envisioned as the apex body for the industry. Perhaps this is because the reorganization efforts are being led by the private sector rather than he government, and what is left of the old Cotton Board is a staff of only 4. The industry does want government support in moving the process forward, mainly because they see the need to have the force of government behind the regulations they plan to set for themselves as the rules can only work if all players sign up, and agree to abide by them.

Change in the cotton industry is being driven by the private sector. Within government leadership actually is coming from the Ministry of Trade and Industry rather than Agriculture. Thousands of jobs have been created in newly set up factories making finished garments to take advantage of the opportunities under AGOA in particular, but by globalization in general. The experience of cotton provides important lessons for the whole of Kenya's agricultural economy. All the private investment in primary processors, spinning and weaving, and clothing manufacture cannot be held hostage to slow government processes that propose to put an industry back on its feet but actually may not. The private sector has to take the lead, and perhaps present clear positions that specify what they need from government. For too many other commodities government is proposing to the private sector what the division of roles will be. But government will never have as much incentive, and a sense of urgency as private firms will have. And private firms and capital also choose where to locate depending on the investment environment in a particular country. Relatively small firms that gin cotton in Kenya have shifted new investment into Tanzania. One investor in the export processing zone who had brought in a 200 machine clothing assembly line that employed 1,500 people when asked if he was worried about Kenya's forthcoming elections, or its inability to revive the cotton sector made a telling comment. He pointed out that he can pack his whole plant in containers and be out of Kenya in 14 to 21 days!

Conclusion

Post-farm issues in Kenya need to be looked at from the point of view of our ability to respond to what the market is demanding, and at lower and lower costs each year. And markets, whether domestic or international are increasingly demanding. But the ability of the sectors to respond often has been found wanting. In many cases the problems facing our agricultural sectors emanate from problems at the post-farm end of the marketing chain.

The paper began by looking at the domestic horticulture market - e.g. onions being sold at Nairobi's Ukulima market. Tanzanian produce is able to be competitive with Kenya produce despite the greater distances involved because of low marketing costs within Tanzania, and a product that is well cured, and has the shape, color and size that consumers are actually willing to pay a little extra for. Kenyan produce is facing competition in part because that market demand has not trickled down and changed domestic onion production despite a having a high cost marketing chain. High marketing costs within Kenya, the result of numerous market and local government charges, high transport costs and high brokerage fees need to add some value back into the commodity chain or need to be eliminated if the sector is to thrive.

The export horticulture industry faces identical challenges. High costs and demanding consumers. But in the horticultural export sector, demands for higher quality and standards have been translated back to the farm level. Those producers who cannot certify that they use good agricultural practices, for example, cannot access the market. Meeting standards, and being able to trace the source of individual shipments are leading exporters to from closer links with growers. This is a move that should receive support from government as the mistakes of one exporter or grower will punish all Kenya's exporters. The industry has appealed to government to help them enforce some minimum standards and a National Code of Practice.

The horticultural export and cotton industries are examples of a new trend in the agricultural sector - industries that have come together for their own purposes, and eventually invite government to assist them. This is in stark contrast to what is happening in other sectors where government is calling industries together to perpetuate government dominated industry umbrella bodies. The large volume of 65 pieces of agriculture related legislation waiting for its turn before parliament - on coffee, dairy, pyrethrum, dairy, horticulture and others - may not be solving the problems that players in the industry need solved. It is as if the philosophical underpinnings of agricultural legislation for the new century have not really been thought through. As a result, much of the legislation only protects jobs and gives the bodies set up legislative permission to impose a levy on the industries to run its operations. Boards dominated by representatives of smallholder farmers, with minimal representation by large scale or agribusiness interest, and overwhelming government authority and representation may not be the answer to our problems.

Agribusiness interests in Kenyan agriculture are charting a different route, even though they ultimately want government to join with them in building strong agricultural commodity sectors. Agribusiness interests include a Kiambu dairy farmer on a matatu bringing the production of her single cow to a street in Nairobi's Kibera slum. Current legislation makes her activity illegal. But she is providing an product and service that consumers want. Agribusiness interests in the same dairy sector include a few large processing firms that segment the market for their commodity product through product differentiation and large advertising campaigns. If the effort creates consumer value then this trend too is a good thing for the agricultural sector. Efforts to create branded identities are also evident in sugar, as well as in the tea and coffee markets.

The increasing power of the consumer, and the fast moving, flexible and innovative agribusiness's that ensure those needs are filled relative to the slow moving legislative and regulatory processes in Kenya provides some food for thought. Perhaps Kenya should set loose regulatory and legislative regimes on recognition that the modern world is coming up with innovations faster than the state regulators can keep up. Kenya already has numerous rules and regulations that nobody enforces or follows. Some of these rules create uncertainty and discourage investments, investments that are needed to modernize our agricultural sectors.

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