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## **A Comparative Study of Marketing Problems Faced by Small-scale Crop Farmers in Botswana and Kenya. Is There a Way out?**

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**Abstract:** Most governments in third world countries including sub Saharan Africa, tend to either neglect or fail to the avail the necessary resources to small-scale farmers to enable such farmers attain any meaningful development. The small-scale farmers contribute the biggest percentage of the national food requirement compared to large-scale farmers who produce largely for international markets. Besides, small-scale farmers contribute to the creation of employment, development of agro-based industries, improvement of social welfare and the contribution to economic advancement of most developing countries. The development of this sector depends mainly on the availability of ready markets particularly the development of the marketing mix using the original 4P's of marketing. Any business aims at offering consumers needed products that are competitive, available, well packaged and distributed according to consumer preferences. Pricing, distribution and promotion issues should also be incorporated in order to boost sales of locally produced products in preference to imported goods. With proper management and marketing improvement in this sector, most African countries could increase food production and cease to be dependent on food relief aid from donors. A comparative study approach was used to compile this study comparing the problems of small-scale farmers in Botswana and Kenya. We made use of available secondary data form publications in the two countries. This study aimed at finding out whether marketing problems faced by small-scale farmers in Botswana also affect their Kenyan counterparts and suggest possible solutions.

**Key words:** Agriculture, small-scale crop farmers, Kenya, Botswana marketing problems

### **INTRODUCTION**

**Botswana:** Botswana is a land-locked country bordering South Africa to the south, Namibia to the west, Zambia to the north and Zimbabwe to the east with an area approximately 582,000 sq. km<sup>[1]</sup> of which two thirds consists of the Kalahari Desert. The country is predominantly flat to undulating sand-filled southern Africa plateau basin extending into Namibia, South Africa and parts of Angola. Topographically, Botswana has a relatively high narrow strip of land running along the eastern border and the vast western flat semi arid and comparatively featureless portion except the inland Okavango delta<sup>[2]</sup>. A generally well-defined escarpment forming drainage between the westward internal drainage system and the eastward flowing Limpopo River system separates the two areas<sup>[3]</sup>.

The vast country is mainly desert land devoid of surface water except that which is obtained from either hand-dug wells or boreholes.

**Climate:** Botswana enjoys a sub tropical climate. The rainfall is low and erratic with annual precipitation ranging from 600 mm in the northeast to 300 mm in the southwest. The western region, which is the driest part of the country, receives less than 250 mm of rainfall. The unreliable rainfall coupled with unequal distribution is one of the major constraints to dry land farming. Generally, Botswana experiences fluctuating temperatures both during summer and winter months.

**Soils:** Most soils in Botswana are Red/Grey desert soils covering over 70% of surface area. These soils are highly leached, have little or no vegetation and are lacking in important minerals. The eastern parts are characterized by fertile chestnut/brown soils where most arable farming takes place. The alluvial soils are localized and are found along the perennial rivers e.g. Chobe and Okavango rivers, where cultivation along the rivers takes place during the flood periods.

**Population:** The population of Botswana is around 1.6 million people<sup>[4]</sup>. The country's population is currently growing at a rate of 3.4% per annum which is an increase compared to 1971 when it was 3.1% per annum which denotes a small market.

**Economy:** At independence in 1966, Botswana was rated as one of the poorest countries in Africa. The rural population depended on agriculture for livelihood with beef production as the mainstay of the economy in terms of output and exports earning<sup>[5]</sup>. The country has progressed to its present status since the discovery and the development of diamonds and Botswana became one of the largest diamond producers in the world after opening the Jwaneng mines in 1980 with three of its other urban centers being mining towns<sup>[6]</sup>.

**Kenya:** Kenya is situated in East Africa bordering Tanzania to the south, Uganda to the west, Ethiopia and Sudan to the north, Somalia to the east and the Indian Ocean to the southeast. The country has a total area of 582,646 sq. km out of which, 571,416 sq. km comprises of land including mountains, hills, rocks and forested and arid and semi-arid lands while 11,230 sq. km is covered by water. Only a small portion of the country can be described as high potential land with good soils and reliable rainfall of more than 750 mm/pa<sup>[7]</sup>. The high potential area constitutes about 17% of the total land (approx. 9,942,000 h, while the rest of the country can be described as arid and semi-arid lands, also known as ASAL region, constituting about 83% of land area (approx. 47,199,600 h). The ASAL region in Kenya covers the entire North-Eastern province, the hinterland of Coast province, southern and northern portions of Rift-Valley province and much of the shore-strip of Lake Victoria.

**Climate:** Rainfall is of prime importance in ASAL regions where there are two short rainy seasons. ASAL regions receive unreliable, erratic rainfall especially in the first few days after the onset of rainy season. A common feature in ASAL regions is badly eroded landscapes that devoid of vegetation besides being hot throughout the year except in a few elevated areas<sup>[8]</sup>.

**Soils:** Many of the soil types in ASAL region comprise of the red-yellow-gray sandy/loamy clays with little moisture retention capacity. In some ASAL areas where farming takes place, continuous shallow land tillage leads to the formation of a hard pan, which reduces water percolation and increases surface runoff and subsequent erosion.

**Vegetation:** Dwarf thorny bushes dominated by *Acacia* species and other thorny tree species with varying amounts of grass cover, characterize the vegetation in ASAL regions.

**Land tenure in ASAL regions:** With the exception of a few areas where land has been demarcated and registered, most of land in ASAL regions is communally owned. This allows communal use of the land, which in many instances leads to environmental degradation.

## AGRICULTURE

**Definition:** Agriculture has been defined as The production of plants and animals useful to man. It deals with not only the cultivation of the soil and management of crops and livestock but also the preparation of plants and animals products for use of man and disposal of surplus of these products through marketing<sup>[9]</sup>. This definition encompasses the totality of the farmers' duties, whether they are engaged in commercial or subsistence farming. Farmers aim at producing surplus for disposal in the market and the profits accruing thereby, act as the motivating factor for improved and increased production.

**Agriculture in Botswana:** Botswana has two thirds of semi arid area, mainly covered by the Kalahari Desert sands. The country is faced with the problem of over exploitation of natural resources whereby sedentary farming has replaced natural woodland and the traditional pastoral systems. The resultant clearing of land for cultivation and fuel needs has caused wind and water erosion with decreased crop yields and low income to crop and livestock farmers. Although the agricultural sector contributes about 5% of the GDP, agriculture remains an important source of food, income, employment and capital for a sizeable segment of the population<sup>[10]</sup>.

The main subsistence crops include sorghum, maize, millets, and beans and groundnuts primarily grown for immediate consumption. With farm-size averaging about 5.0 ha, the low production does not meet subsistence needs of the rural households, forcing the country to import supplementary food requirements. A number of projects have been introduced to improve crop production. At Pandamatenga in the Chobe region, the project farmers have undertaken commercial crop-farming ventures with technical assistance from the Ministry of Agriculture. The area has relatively higher annual rainfall than the rest of the country<sup>[11]</sup>. Potential irrigation areas include the Tuli block, the Melap and Nokaneng Flats in the Okavango delta. Crops grown include citrus fruits,

vegetables and potatoes. The Botswana Agricultural Marketing Board (BAMB), a parastatal body established by an Act of Parliament in 1974, handles the marketing of agricultural products.

The land tenure is traditional with the chief having authority over communal lands. Although farmers are allowed to cultivate the land, they cannot use the land as collateral or security for securing credit to develop the farm or buy farm implements to boost production. Low production in Botswana is also contributed to by the fact that people reside in villages away from the farmlands<sup>[12]</sup>.

The system of collection of farm produce in both countries is either lacking or underdeveloped. The rainy season coincides with harvest season, especially for vegetables, which makes transportation difficult due to impassable roads coupled with inadequate or nonexistent storage. Under these circumstances, farmers are forced to sell their produce at throw-away prices in order to avoid total loss in the farms where storage is either inadequate or nonexistent.

**Arable agriculture in Botswana during the colonial period: 1895-1966:** At the advent of colonialism in 1895, arable farming was not a priority of the colonial government, until around 1935 when the government took interest in arable agriculture. According to Tlou and Campbell<sup>[13]</sup> the only substantial commercial farming was in the European areas they received loans from the government to develop their farms. In an attempt to improve agricultural practices among the Batswana, the colonial government set up a department of agriculture to teach local farmers new methods of farming. The majority of farmers did not benefit from this program due to long distance they had to travel and the limited access to these extension demonstrators. Additionally many people were attracted by lucrative cash-earning jobs in the South African mines<sup>[14]</sup>. This became the main setback of the early agricultural development in Botswana.

War lands to produce food for soldiers fighting in Europe during the Second World War, was introduced but the scheme was unpopular with many farmers who viewed as a colonial imposition<sup>[15]</sup>.

The introduction of cooperative demonstration farms whereby key farmers became demonstrators proved successful. The cooperative farmer scheme was designed to identify farmers on whose plots new agricultural methods could be taught to other farmers. This scheme proved successful recording surplus in grain as shown in Table 1<sup>[16]</sup>.

**Arable agriculture from 1966-to 1990:** The government of Botswana retained the pupil farmer-master farmer

Table 1: Increase in grain yields in Botswana after implementation of Scheme

Year	1953	1954	1955	1956
Bags	1810	72393	94593	109285

\*The scheme was later changed to pupil farmer- master farmer scheme in 1956

Table 2: Progressive increase in production after implementation of ALDP

	1985	1986	1987	1988	1989
Area planted	211	243	290	367	409
Area harvested	106	122	130	301	285
Average production (000) tons	40	43.8	44	215.4	156.4
Average yield (kg ha <sup>-1</sup> )	377	359	341	716	551
Ratio of farmers to planted to harvested					

scheme after independence with few changes under<sup>[17]</sup> and more farmers participating. In 1983 the government replaced the pupil farmer master farmer scheme with Arable Lands Development Program (ALDP) targeting groups of subsistence farmers. The various packages under ALDP were designed to improve farming practices and consequently lead to higher production. On average this aim seemed to have been achieved from progressive increase in production for the ALDP farmers<sup>[18]</sup>. Farmers received packages of implements that included animal draught power (donkeys, oxen, and mules), animal drawn implements (ploughs, planters, cultivators and harrows), fencing materials and water catchment tanks (Table 2).

In 1984, the government also initiated Accelerated Rain fed Arable Program (ARAP), designed to benefit middle level farmers not covered under ALDP scheme. The government subsequently discontinued the ARAP programme on realizing that farmers depended wholly on the government for all their inputs (Table 3). This government decision lead to reduced crop output and the acreage under cultivation<sup>[19]</sup>.

Most farmers concentrated on cattle ranching with crop farming given less priority and attention that is required for optimum crop production, which is more labor intensive than cattle ranching.

## Agriculture in Kenya

**Historical background:** Agriculture is described as the back-bone of Kenya's economy contributing approximately 30% of the Gross Domestic Product (GDP) per annum and indirectly contributing about 27% of GDP through linkages with manufacturing, distribution and other related economic activities. The sector also contributes 80% of the country's employment in the rural areas, nearly 60% of total export earnings and 45% of government revenue. Approximately 75% of industrial raw materials for Agro-based industries are contributed the agricultural sector. Additionally, the sector produces all the country's food requirements except for wheat, rice sugar and edible oils.

Table 3: Planted ('000 ha) area in Botswana as the result of ARAP

Crops	85	86	87	88	89	90	91	92	93	94	95
Sorghum	125	161	210	279	266	206	NA	NA	144	NA	166
Maize	49	44	46	54	88	80	NA	NA	85	NA	86
Millet	16	18	14	13	20	12	NA	NA	15	NA	11
Beans/Pulses	15	16	16	18	30	20	NA	NA	27	NA	26
Sunflower	3	1	1	1	1	1	NA	NA	3	NA	4
Groundnuts	2	2	2	1	2	2	NA	NA	2	NA	1
Other crops	1	1	1	1	2	3	NA	NA	2	NA	4
Total	211	243	290	367	409	324	NA	NA	278	NA	298

The Ministry of Agriculture was established in 1902 to provide the people with their basic food requirements. In all rural administrative areas, agricultural offices were built next to those of District Commissioners and District Officers. The agricultural extension workers were required to liaise with chiefs in order to ensure food security. Soil conservation measures, provision of quality seeds and other inputs were given priority under such programmes as Arable Land Development (ALD) programme. Agricultural Research Stations were established to produce quality seeds and deal with pest control for a wide range of crops in order to boost crop production<sup>[20]</sup>.

Unfortunately, most of Kenya comprises of semi-arid and arid land with low and unevenly distributed rainfall. Crops grown in these areas include maize, sorghum, millet, cowpeas, pigeon peas, cotton, sunflower and other seasonal crops. Production of these crops has over the years depended on weather pattern with good yields in good rainfall years and very low or no crops in severe drought years<sup>[21]</sup>. It should be noted that small-scale farmers in Kenya received less assistance due to the fact that efforts were concentrated to large scale farming except for some input seasonal loans on cash crops like cotton, which was grown under irrigation.

## MATERIALS AND METHODS

**Research design:** A comparative study approach was used to compile this study comparing the problems of small-scale farmers in Botswana and Kenya. Use made of available secondary data and publications from the two countries. Descriptive research covering both countries' small-scale farmers with similar environmental and economic conditions was made.

**Sample selection:** Botswana being semi arid and arid region could only be compared to the ASAL regions in Kenya. The sample selected was for the agricultural farming only without life stock farmers, as the ASAL region tends to have large-scale cattle ranchers with few agricultural farmers.

**Data analysis procedures:** The data was analyzed using a number of data analysis methods relevant to a multivariate nature of this study.

## Small-scale farming

**Botswana:** Under NDP 8, Botswana embarked on research programmes in areas such as soil and water management, agricultural mechanization, irrigation, horticulture etc. aimed at developing appropriate technology for small-scale farmers. The goal was to increase productivity per unit area and reduce pressure on more land to meet the increased demand for national food requirement. This program required a total of P4.7 million<sup>[22]</sup>.

The cooperative movement also needed improvement to cater for small-scale farmers. Currently, the cooperative societies are concentrating on livestock and supply of inputs and consumer goods. Plans to incorporate other areas such as horticulture, dairying, milling, fishing, poultry etc. have been provided under NDP 8 with Botswana Agricultural Marketing Cooperative Union (BAMCU) providing the initial capital for farm inputs to cooperatives involved in the above mentioned enterprises. It is estimated that P10 million will be needed for cooperative development under NDP 8<sup>[23]</sup>.

**Irrigation:** Currently, there are 154 irrigation projects in Botswana assisted by the Irrigation Section of the Ministry of Agriculture which are providing farmers with technical know-how e.g. feasibility studies, designs, installation and technical expertise. Individuals, groups and companies operate these projects. There are 86 new small and 3 large-scale irrigation projects that will be established. In addition 26 small size dams will be constructed, while the existing dams, boreholes and wells will be rehabilitated.

Botswana is water deficient and possibilities of finding more water is diminishing. There are approximately 13,000 ha of land suitable for irrigation, (8600 ha in Maun/Okavango, 1100 ha in Chobe, 370 ha in Francistown/Shashe, 1600 ha in Tuli Block and 50 ha in Notwane). These are earmarked for development during NDP 8 where a total of P9.321 million has been set aside for irrigation development<sup>[24]</sup>.

**Arable Land Development Programme (ALDP):** The programme was started in 1981/2 aimed at assisting small-scale farmers to increase their basic food requirements of grains (sorghum, maize and millet), legumes and sunflower. The long-term objectives of this programme

were to raise the level of income in rural areas, to improve income distribution among citizens and create employment opportunities.

**Phase 1:** Aimed at strengthening the extension support programmes and management, assist in land preparation for trial/demonstration farms; provide input supply services and training, monitoring and evaluation. Phase 1 ended in 1993 with 55,000 packages distributed to nearly 40,000 small-scale farmers. Persistent drought and weak extension systems were noted as major bottlenecks during this phase.

**Phase 2:** Commenced in June 1996 aimed at strengthening extension system and transfer of technology. This includes on-farm investment packages, extension support and expanded demonstration farms. A total of P16 million would be used to fund ALDEP programs under NDP 8.

**Horticultural development:** Botswana requires approximately 57,000 metric tones of horticultural products per annum, with 20% produced locally while 80% is imported from South Africa and Zimbabwe. The main problems encountered by horticultural farmers include lack of central wholesale markets, inadequate supply of certified fruit tree seedlings, poor transfer of technology to producers, weak market information system and shortage of reliable information on local production. A total of P7.5 million have been earmarked for horticultural development.

**Extension services:** In recognition of farmers' need for information, the Ministry of Agriculture and Forestry is expected to improve facilities for its extension staff and improve Rural Training Centres (RTC's) during the current development plan. Farmers will be taught modern technology in crop production and marketing.

#### **Small-scale farming**

**Kenya:** Small-scale farmers who account for approximately 75% of total agricultural output and about 60% of gross marketed output dominate the sector<sup>[25]</sup>. The sector has been unable to realize its full potential despite its important contribution to national economy. Notably, that there has been declining production trend in the 1990's with negative impacts on social welfare and economy in general (Table 4)<sup>[26]</sup>.

The problems of small scale farmers in Kenya are likely to increase given that the Government has indicated its intention of withdrawing support hitherto given to farmers by state corporations, but the Ministry of Agriculture, Livestock Development and Marketing is

Table 4: Estimated production of selected agricultural commodities in 1990's: million bags

Crops	1993	1994	1995	1996	1997
Maize	18.87	29.12	28.33	22.80	20.60
Beans	1.25	2.82	2.42	1.96	1.60
Sorghum	0.86	1.05	0.84	0.84	0.73
Millet	0.39	0.47	0.44	0.40	0.36

divesting to mere regulatory and advisory role. Additionally it will support the private sector and environmentally sustainable agriculture<sup>[27]</sup>.

#### **DEVELOPMENT OF MARKETING MIX FOR SMALL-SCALE CROP FARMERS' PRODUCTS**

**Product:** Product development for manufactured goods is much easier to co-ordinate and pre-test unlike in agricultural products where most production variables are beyond farmers' control. The added advantage of manufactured products is that product designs can be shelved for later commercial production if the current conditions are unfavourable for launching the new product<sup>[28,29]</sup>. On the other hand, it is difficult to develop and evaluate the product development procedure for agricultural products due to unpredictable variables that farmers encounter from planting to harvesting such as land availability, poor soils, poor drainage and overgrazing. Inputs such as quality seeds, fertilizers, pesticides etc are often beyond farmers' capability. In addition, farmers may lack adequate know-how on good crop husbandry, which in turn impacts on volume and quality of crops produced. Other constraints include lack of adequate labour at various stages of crop development, lack of crop protection pesticides and crop losses due to pests and other factors. Reduction of these losses would improve food security and farmers' income. In ASAL regions of Kenya, the pests include quelea birds and armyworms weevils among others.

Post-harvest handling, storage and grading particularly for bulky and perishable horticultural products affect product quality and subsequent prices. Small-scale farmers lack capacity for product support system, including after sales service.

**Promotion:** Promotional programmes for goods and services are developed by sellers to inform customers about their products, where to obtain them and what benefits accrue from the use of the same. Small-scale farmers have less access to promotional tools particularly a way to inform the target markets about their products<sup>[30]</sup>. Farmers lack knowledge and accessibility to basic promotional elements that include advertising, personal selling, publicity/public relations and sales promotion. Advertising would require that the message is clearly

designed, the channel or media be selected, the budget is set aside for advertising and the programme is implemented in a manner that will be cost effective. Personal selling would be most effective if farmers or their workers are conversant with customer needs and have access to the market but unfortunately this is left to intermediaries who in most cases take advantage of both the farmers and consumers. Other promotional tools include shows and exhibitions aimed at educating farmers about market needs and consumers about the available products. Unfortunately, these shows have been commercialised with automobile, manufactured goods and restaurants taking the lion's share and very few people visit crop and livestock exhibition section.

Under the current crop marketing set up, most of the above-mentioned small-scale farmers rarely use promotional tools either because they are not readily available or are unaffordable. The scanty information available from government agencies, intermediaries and others is normally historical as it reaches the farmers too late for farmers to benefit from such information.

Personal selling for agricultural products is prohibitive in terms of time and expenses and most farmers just hope the market will accept what they produce.

Information needs have been identified as one of the major constraints small-scale farmers are facing in both Botswana and Kenya where reports indicated that lack of marketing information for the agricultural sector continues to pose problems.

**Price:** Price is one of the key elements in the original marketing mix (4P's). It is the only element in the mix, which generates revenue from sales of products or services. Price can be defined in many ways including travelling fares, consultation fees in a health clinic etc. From consumers' perspective, price is the bundle of benefits presented by the product or service that must be traded off against the bundle of costs associated with using it. Kotler has suggested that in setting price policy, sellers must clearly define their pricing objectives; determine or estimate customer demand for their products; estimate the cost of producing the products; analyse the

competitors' prices; select the pricing method and finally determine the price to charge for the product.

In Botswana market prices are obtained from Botswana Agricultural Marketing Board (BAMB); wholesale markets and the private sector buyers of farm products. It is evident that BAMB and these bodies have interest as consumers or intermediaries and they normally tend to give information that would make farmers continue to accept minimal prices for their produce. Small-scale farmers sell their products to intermediaries like wholesale markets milling plants and other farmers at relatively lower prices compared to retailers in business who in most cases sell directly to consumers; thus retaining a higher margin. BAMB, which would offer better prices, are said to be buyers of last resort. Failure to address pricing of farm products will continue to have negative impact on the stated government policy on food security.

In Kenya, the Maize and Cereals Produce Board (MCPB) handle most of the grains and pulses while Horticultural Crops Development Authority (HCDA) regulates the horticultural crops although a big portion is still handled by the private sector. Intermediaries in the horticultural sector make huge profits at the expense of small-scale farmers (Table 5).

**Distribution:** Perhaps the most crucial and challenging nature of crop marketing is the distribution aspect, which in most cases is given least attention<sup>[31]</sup>. Two key issues need to be addressed i.e. what is the location of customers and what channels will be used to deliver the products to the market. The decision as who will participate in delivery of products to customers is important for farmers where they may choose to sell direct to consumers or sell through intermediaries. The actual process of moving products to the market is the farmers' nightmare due to many problems encountered including:

- Poor and impassable road networks in most rural areas are during the rainy season affect transportation of farm produce to the market. For instance, 'el nino' rains nearly wiped Kenya's road network in 1997/98 and farmers incurred huge losses because farm products.

Table 5: Kenya rural market prices for selected food crops

	1944		1995		1966		1997	
	March	Sept.	March	Sept.	March	Sept.	March	Sept.
Maize	15.16	11.92	9.81	9.98	10.28	13.93	19.47	16.83
Beans	31.23	29.04	25.87	24.63	22.76	28.15	56.83	42.01
Potatoes	14.88	9.89	14.83	13.62	13.08	15.23	23.40	23.29
Sorghum	17.76	10.75	8.54	7.93	8.00	14.21	25.52	15.84
Millet	19.80	19.27	15.56	15.02	17.27	22.61	30.54	36.32

Source: CBS- MEP-Nairobi- 1998

- Uncoordinated collection of farm products during the harvesting season leads to losses of produce at collection centres.
- The storage facilities available to small-scale farmers are either nonexistent or very poor, particularly for horticultural crops whose quality deteriorates faster than grains. Farmers either hire transport to move their products to the market or sell the same to intermediaries thereby losing bargaining power to shrewd intermediaries.
- The government may intervene by establishing market centres or marketing boards through which farmers could sell their produce to protect them from exploitation by intermediaries.
- The withdrawal or shelving of direct intervention by governments has adversely affected agricultural output. For instance, two irrigation schemes in Kenya supporting over three thousand small-scale farmers collapsed with loss to farmers and the country.
- Small-scale farmers continue to play a major role in the agricultural sector. Comparatively, Kenya has a bigger population and ASAL lands, which could be put under cultivation. Botswana is putting more efforts to utilize its limited available arable lands. Farmers have better motivating factors in Botswana in terms of pre- and post harvest marketing of farm produce compared to Kenya where government has made total withdrawal.

#### **Major constraints facing small-scale farmers:**

- Poor and inadequate rural infrastructure especially rural access roads, water, marketing facilities, lack of rural electrification, poor communication etc.
- Lack of suitable and adequate credit arrangement for small-scale farmers in production and marketing of agricultural products.
- Lack of proper co-ordination of stakeholders, e.g. various government ministries, farmers' organizations, in solving problems facing small-scale farmers.
- Lack of inputs i.e. seeds, fertilizer, research information, and extension and market information is also a serious constraint encountered by small-scale farmers.
- Lack of effective regulatory control mechanism, conducive legal and policy framework to facilitate exploitation of agricultural sector potential<sup>[32]</sup>.
- Infrastructure development is lacking in both countries but that of Kenya was run down, while Botswana is building it. Botswana farmers have improved infrastructure compared to their Kenyan counterparts who are becoming more desperate. Approximately 30% of agricultural produce in Botswana is lost at pre- and post harvest stage and approximately 40% of the remaining portion is lost before reaching the consumer. The same situation applies to Kenya where the entire road network has almost been wiped out.
- Policy framework on pricing is lacking in both countries as a result of which farmers sell their produce at throwaway prices.
- Using South African wholesale prices to determine farm-gate prices in Botswana is misleading. Kenyan market statistics are collected from major towns but the information is unavailable to farmers for setting produce prices. Ministries of Agriculture in both countries have cited farmers' lack of timely and accurate information as a major marketing constraint.

#### **CONCLUSIONS**

- The means of collection of the produce in both the countries are very undeveloped. The vegetables are harvested during the rainy season when transportation is made difficult by impassable roads. Under the circumstances, farmers sell their produce at throw-away price to avoid total loss since farm storage is also nonexistent.
- Marketing information from the Ministry of Agriculture does not reach farmers on time to assist them in preparation of their products for the market. According to the Marketing Section of the Crops Production and Forestry Department, Ministry of Agriculture in Botswana, there is an acute shortage of staff and transport facilities needed to reach small-scale farmers. This problem is not unique to Botswana or Kenya but also applies to many countries in Africa.
- The cost of production is higher due to the nature of operations, lack of inputs and distance from markets among others. Cooperatives in both countries have not successfully intervened to assist farmers in adding value to their products. An atmosphere of passivity and dependence, whereby community projects are taken half-heartedly, far below the true potential, creates this unfortunate impasse. People are accustomed to depending on those in authority or donors rather than becoming active players. Perhaps this resulted from lack of involving the people in planning for projects affecting them<sup>[33]</sup>.
- Farmers lack access to promotional tools such as advertising and other media facilities as is done by their counterparts in South Africa.
- Generally, distribution network in both countries is either lacking or very poor due to poor roads, lack of telecommunication facilities, lack of energy (power) and transport facilities among others.



## RECOMMENDATION

The future trend of agriculture will continue to be dominated by small-scale farmers as more of large-scale farms are subdivided. In this regard, it is strongly recommended that the status of small-scale farming in Africa, including Botswana and Kenya be reappraised by:

- Governments redefining policy framework incorporating from all stakeholders.
- The governments providing clear marketing guidelines on farm produce to protect farmers against undue exploitation or loss by incorporating crop insurance as they do in developed countries where farmers are guaranteed minimum returns.
- The governments should also provide and revive the infrastructure including road networks, telecommunication, electricity; especially in the rural areas.
- The governments should facilitate availability of reliable and timely market information for farmers' use during crop harvest and planting forecast.
- There is also an urgent need to introduce agricultural marketing education both at tertiary and farmer levels.
- There is need to develop and promote irrigation of horticultural crops to benefit from higher yields per unit area under irrigation and reduce pressure on arable land.
- Farmers should form or revive the dormant cooperative societies to coordinate marketing of farm produce, provide farm inputs and render other marketing services.
- There is need to conduct an in-depth research covering specific marketing problems of small scale crop farmers which could also include live stock.

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