Smallholder Horticulture in ZIMBABWE

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CHARACTERISTICS OF FOUR RURAL HORTICULTURAL MARKET OUTLETS IN THE SOUTH–EASTERN LOWVELD OF ZIMBABWE

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ABSTRACT

Fortnightly surveys of fruit and vegetable marketing at four rural centres representing diverse socio-economic hinterlands of communal (Ngundu), resettlement (Matandamaviri), smallholder irrigation (Rupangwana) and semi-urban (Checheche) areas were done between September 1989 and December 1990. The three most important vegetables marketed were tomato, rape and cabbage while banana, avocado and orange were the dominant fruits. Results showed differences in the type and volume of produce, source of produce, supply and seasonal availability of produce among the marketing centres. Matandamaviri had the lowest economic activity while Rupangwana recorded the most activity. For all centres, except Matandamaviri, stallholders sometimes travelled great distance of up to 300 km in search of fruits and vegetables for sale. The most commonly cited problems included transport difficulties, unreliability and poor quality of produce, and overtrading among the stallholders due to over-supply on the market.

INTRODUCTION

The utilization of any product depends on the successful integration of three stages, namely production, delivery and sale or consumption. Failure to do so results in wastage of resources. In Zimbabwe, there is very little information on delivery and sale of produce, especially in areas remote from the main Harare market. The part played by vegetable vendors outside of Harare, for example, has received little attention despite the fact that they are an integral part of the production-sale-consumption equation. The objective of this study was to investigate the characteristics and problems of retailers of fruits and vegetables in some rural centres in the south-east lowveld of Zimbabwe and thus increase the knowledge and information on marketing of fruits and vegetables in Zimbabwe.

THE STUDY SITES AND THEIR HINTERLANDS

Four rural centres; Ngundu, Matandamaviri, Rupangwana and Checheche, 3 located in Masvingo and one (Checheche) in Manicaland provinces of Zimbabwe, were chosen

for the study. These sites cover a span of 200 kilometres along the main tarred road which traverses the south-east lowveld of Zimbabwe from the Masvingo-Beit Bridge road to Chipinge town. Agro-ecologically, the sites occur in natural regions IV and V which are characterized by low rainfall and high temperatures (Vincent and Thomas, 1960). The market centres are briefly described below.

Ngundu

Ngundu is a bustling market centre situated at the junction of the busy Masvingo-Beit Bridge road and Ngundu-Triangle-Chipinge road. It is an important bus stop and transit stop for other road users. Passengers in transit form the largest group of customers. The hinterland for Ngundu market stall also stretches over a radius of nearly 20 kilometres serving local villagers who come in for their main shopping or alight from buses as well as school children. Of all sites Ngundu has the largest volume of traffic and pool of customers.

Matandamaviri

Matandamaviri is the smallest of the market centres with the fewest stallholders. It has a relatively small, scattered rural hinterland consisting mainly of Nyahombe Resettlement Scheme for which it is the business centre. Buses and other transit vehicles seldom stop for long periods despite closeness of the market to the tarred road. Matandamaviri has no formal market stall. Some makeshift structures are usually constructed from wooden poles and grass thatching.

Rupangwana

Rupangwana is a small roadside centre with, however, a relatively thriving market in terms of the total value of produce marketed per stallholder. It owes much of its importance as a market to the nearby Rupangwana Irrigation Scheme which supplies a large proportion of the produce. It is a popular stopping place for buses whose passengers provide the main source of business for the stallholders and other retail shops. Rupangwana is at the border of Masvingo and Manicaland provinces which are demarcated by the Save River. It, therefore, serves a hinterland consisting of two provinces.

Checheche

Checheche is a regional growth point with the bulk of customers being Government and service sector employees. Checheche has the most well constructed market stall policed by Chipinge Rural Council. Like the other three markets, Checheche stallholders also sell to bus travellers.

The main occupation of the people in the immediate hinterland areas is agricultural. Arable farming dominates the agricultural activities with livestock farming being a service to arable farming by way of providing draught power. Vegetable production is high, particularly in winter. On the other hand, fruit production is limited to a few trees around the homesteads.

Trade in agricultural produce is dominated by field crops such as cotton, sunflower, sorghum and maize which are mainly marketed through the central marketing boards.

feature of urban areas mainly, has also increased over the years into almost all rural business centres.

METHODOLOGY

The study was carried out from October 1989 to September 1990. Selection of the centres was intended to cover as much as possible all the diversity of players and activities associated with fruit and vegetable marketing within the hinterlands. To expedite data collection, fortnightly visits were initiated to cover a year's activities. Five stallholders were randomly selected from each site and interviewed every fortnight by an enumerator sent out with a formal questionnaire. However, due to logistical difficulties it was not always possible to keep to this schedule nor to retain the same sample stallholders throughout the survey; hence there are some gaps in the data.

RESULTS AND DISCUSSION

Type of produce sold

The survey results showed that seven different types of fruits and nine different types of vegetables were traded in the rural markets (Table 1). Tomatoes accounted for 27% of the total gross value of all marketed produce, making them (by far) the major marketed item followed by bananas (18%). Leafy vegetables (rape, covo, cabbage), sweet potato and Irish potato, green mealies and oranges accounted for 15, 14, 7, and 6 percent respectively.

Tomato secured the highest sales in all the centres among vegetables. Rape was second except at Ngundu where it was dominated by cabbage and green maize. The relative dominance of sweet potato at Rupangwana compared to Ngundu and Matandamaviri could be explained by the centre's proximity to Chipinge, the main sweet potato source. According to the survey, some middlemen even travelled to supply stallholders with stocks. Irish potato at Matandamaviri comes from farms surrounding Masvingo town. There was little difference in fruit types among the centres.

The total value of trade at each of the centres depicts levels of demand and the availability and reliability of supply which is discussed below.

Sources of produce supply

Data presented in Table 2 suggest that there was a sharing of sources of supply between the retail centres. On one hand, Ngundu and Matandamaviri, and on the other Rupangwana and Checheche displayed a pronounced sharing of sources of produce. Sharing of supply sources between Matandamaviri and Rupangwana was limited whilst that between Checheche and Ngundu was insignificant.

Ngundu

The market was heavily dependent on supplies from large commercial farms and estates. Thirty-four percent of the produce came from Chiredzi, being mainly bananas and oranges from Hippo Valley. Other producers in Masvingo accounted for 33%, mainly tomatoes, cabbages and onions, while local gardens supplied 12% (particularly

Table 1: Average gross values (Z$) of purchased stocks per stallholder during 1989–1990. (Study period exchange rate — 1US$= Z$3, currently US$=Z$8.5)

Item	Market Centres					
	Rupangwana	Checheche	Ngundu	Matanda Maviri	Total*	
Vegetables:						
Tomato	526	376	171	150	1 223	(27.3)
Sweet potato	421	50	14	17	502	(11.2)
Rape	87	99	76	71	333	(7.5)
Cabbage	67	80	141	28	316	(7.1)
Irish potato	—	18	36	43	97	(2.3)
Onion	—	15	42	19	76	(1.8)
Okra	12	15	—	—	27	(0.6)
Shallot	—	—	15	—	15	(0.3)
Covo	—	10	—	—	10	(0.2)
Miscellaneous	6	—	12	6	24	(0.5)
Total	1 119	676	507	334	2 636	(58.8)
Fruit:						
Banana	148	389	258	19	814	(18.2)
Orange	95	56	50	22	223	(4.9)
Mango	80	86	—	26	192	(4.3)
Avocado	102	65	—	—	167	(3.7)
Apple	—	40	—	—	40	(0.9)
Guava	19	17	—	15	51	(1.1)
Naartjie	—	17	13	—	30	(0.7)
Miscellaneous	10	—	10	9	29	(0.7)
Total	454	670	331	91	1 546	(34.5)
Market Gardening Field Crops:						
Green maize	77	77	112	19	285	(6.3)
Dried beans	—	18	—	—	18	(0.4)
Total	77	95	112	19	303	(6.7)
Grand total	1 650	1 441	950	444	4 485	(100)

**Figures in brackets indicate the percentage of the total of each produce expressed as a*

Table 2: Sources of supply of fruits and vegetables to the four market centres representing different hinterlands. 1989–90

Source	Percent total value			
	Ngundu	Matanda maviri	Rupangwana	Checheche
Mkwasine smallholders	—	10	5	—
Masvingo Area	37	21	—	—
Save R. Irrig. Schemes#	—	—	47	17
Mbare Open Market	2	—	—	—
Mutare Open Market	—	—	—	36
Chipinge Open Market	—	—	33	10
Lowveld commercial farms*	34	—	—	—
Nyahombe Resettl. Scheme	—	29	—	—
Banga Irrig. Scheme	10	6	—	—
Local gardens/Orchards	12	17	—	12
Chiredzi town Retailers	—	6	4	—
Chisumbanje Area	—	—	—	11
"Deliveries"	—	—	8	—
Others/not known	5	11	3	—

 # Sum of Rupangwana, St. Joseph's, Gudo Pools, Chibuwe, Mutema, Tawona, and Chakohwa irrigation schemes.
** Mainly Hippo Valley Estates (97% Bananas and 74% Oranges)*

Matandamaviri
Local gardens or gardens particularly in the Nyahombe Resettlement Scheme contributed 46% of purchased stock consisting mainly of rape, tomatoes, green maize, mangoes and guavas. Another 21% was delivered from farms around Masvingo Town comprising mainly cabbages, onions, potatoes and tomatoes.

Rupangwana
Perhaps not surprisingly Rupangwana was dominated by supplies from the neighbouring irrigation scheme which contributed 44%; mainly tomatoes, cabbages, rape, okra and green maize during the months December to February. Tomatoes accounted for 72%, rape 13% and cabbage 9%. Chipinge and its surrounding areas were the second most important source of produce, 33%, mainly contributing sweet potatoes, green maize, bananas and avocados.

Checheche
Thirty-six percent of produce marketed at this centre came from Mutare most of which was collected by the stallholders themselves. The Save River Irrigation Schemes supplied 17% of produce. Stallholders also obtained 10% of their stock from Chipinge and its surrounding areas of Chirinda, Chikore, Rusitu Valley and Chimanimani. The remainder came from local small gardens and orchards. A general trend was that fruits with longer shelf life plus potatoes were supplied from distant sources while the perishable fruits and most vegetables were obtained from

Seasonal availability of fruit and vegetables

There were variations in seasonal availabilities of the main fruits and vegetables at the different market centres as shown by the gaps in supply displayed in Figures 1 and 2. Stallholders at Checheche and Ngundu were the most successful at maintaining a nearly full range of supplies for much of the year. At Checheche, this may have reflected the greater demands of the semi-urban consumers for a wide variety of produce that resulted in stallholders being particularly willing to travel far and wide in search of items to buy and sell. At Ngundu, the demand was higher, possibly because of the volume of passenger vehicles that pass through the area.

Figure 1: Seasonal availability of vegetables 1989–90

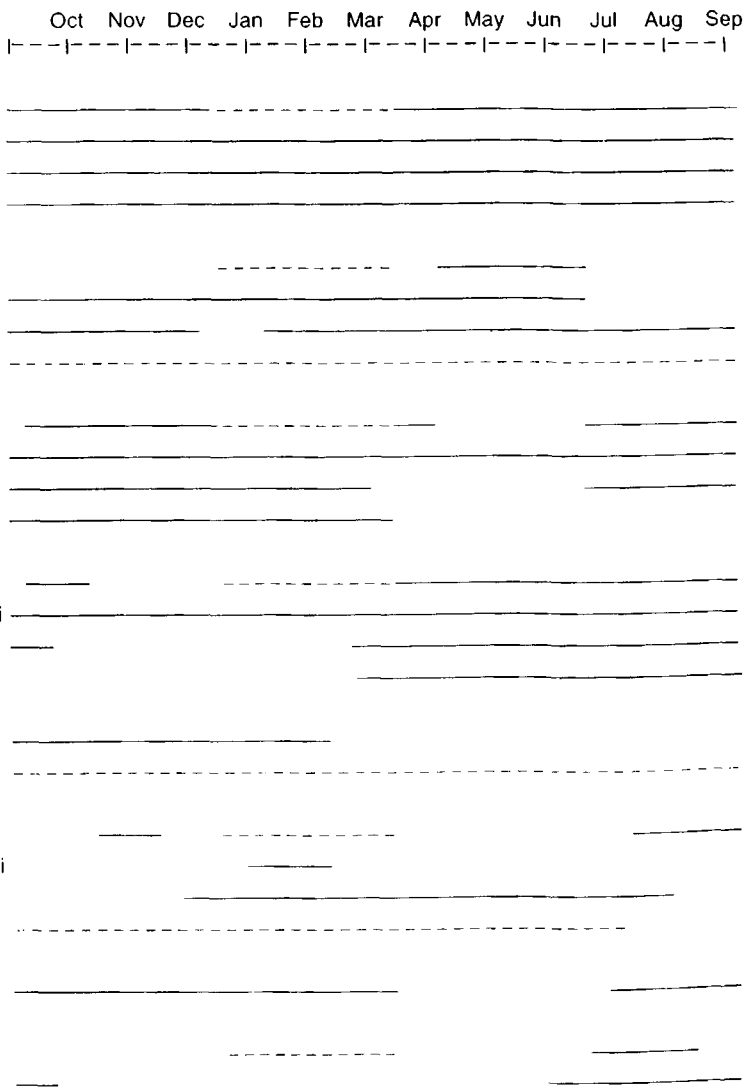


Figure 1: Seasonal availability of vegetables 1989–90 (cont.)

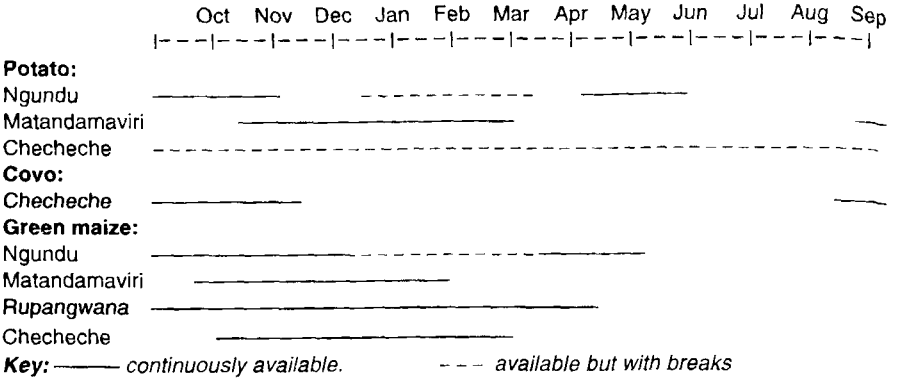
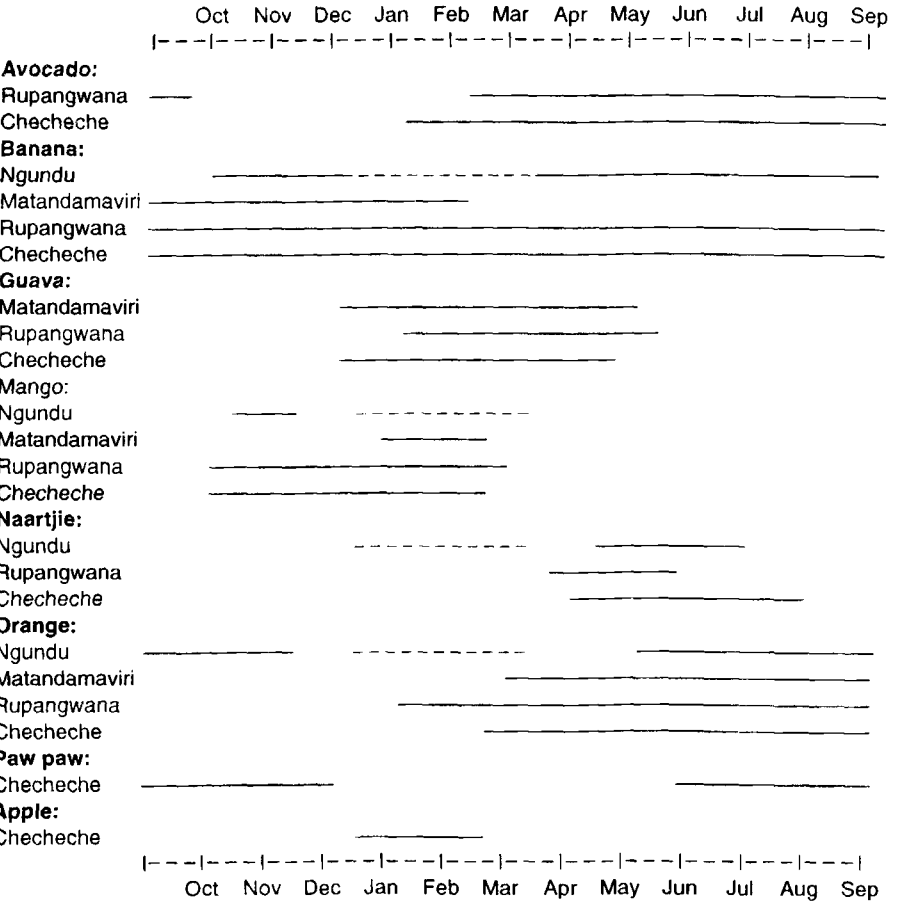


Figure 2: Seasonal availability of fruits 1989-90



Marketing problems and constraints

The primary problem highlighted in the study was spoilage of produce. Three major contributing factors to this problem were identified by stallholders as:

Poor quality of produce, which only became apparent after purchase. The stallholders attributed the problem to producers selling them fruits and vegetables which were either immature or infested with pests and diseases or over ripe. At Checheche and Ngundu, bananas were said to go bad soon after ripening.

Shortcomings in transport, were also said to be another contributing factor. Lack of reliable transport, particularly for stallholders from Checheche, led to long delays in getting the produce from farm to market. Dependence on buses which often have inadequate and/or unsuitable cargo space for horticultural commodities resulted either in failure to timely transport the produce or having some of it damaged aboard. Rough handling by transport personnel was also said to worsen matters. In many instances, stallholders often head-loaded their ordered goods for long distances from the point of purchase to the bus stop.

Over-supply to the market, was a third factor contributing to spoilage losses. This was mainly blamed on competition from unlicensed vendors who were able to undercut stallholders since they do not pay rent for market space. At Checheche and, to a lesser extent at Matandamaviri the problem was said to be year-round while in other centres it was inconsistent. Solutions suggested by the stallholders mainly pointed towards tougher policing measures though some respondents felt that it would be sufficient for the authorities to charge vendors a fee or construct market stalls for them. Another scenario reported by stallholders was that buses were not docking in the market place or not waiting long enough when docked. This disturbed the supply-demand equilibrium resulting in stallholders having to keep produce in their hands for long periods thus increasing chances of postharvest losses. Yet, another scenario was the tendency for all stallholders to stock a limited range of the same fruits and vegetables at any one point in time.

The second problem highlighted was difficulties of obtaining fruits and vegetable supplies. At Ngundu and Matandamaviri stallholders claimed to travel long distances in fruitless searches for produce. At Rupangwana and Checheche, this problem was said to be less pronounced.

Another problem was said to be inadequate provision of overnight storage at the market place which caused stallholders to ferry their produce back and forth between their homes and the centres.

CONCLUSION AND RECOMMENDATIONS

Four fruit and vegetable market centres were characterized in terms of their hinterlands, turnover, availability of produce and sources of supply. The main problems facing stallholders were highlighted as spoilage of produce, difficulties of obtaining supplies, and lack of overnight storage facilities. On spoilage of produce, there is need for an educational program for both farmers and stallholders on post-harvest handling. Such a program can be handled easily by extension and research teams on sites, giving both stallholders and farmers knowledge of the correct harvesting times and handling of commodities. There is also a need to develop suitable, low cost containers which [illegible] goods but still keep produce protected.

Price undercutting by unlicensed vendors is a matter of policing for each centre. Ngundu has succeeded in this matter by forming a watch committee.

Pertaining to the problem of obtaining supplies, improved market information on what commodities are available, where, and at what price would help. This would be in the form of a market intelligence bulletin. Again extension and research services could assist in this matter. Stallholders can also enter into market arrangements with producers to deliver their produce to centres.

Construction of overnight storage is important. This could be an area in which Non-Governmental Organizations could greatly assist.

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