The potential for marketing processed fruits and vegetables in Harare

[1*]T.H. Gadaga, [1]L.K. Nyanga, [1]P. Muredzi, [1]A.N. Mutukumira, [2]S Proctor

[1]Institute of Food, Nutrition and Family Sciences, University of Zimbabwe, P.O. Box MP167, Mount Pleasant, Harare, Zimbabwe

[2]Department of Agricultural and Food Economics, 4 Earley Gate, Whiteknights Road, P.O. Box 237, Reading RG6 6AR, UK

*Author for correspondence: gadaga@science.uz.ac.zw

Abstract

In order to assess the potential markets for processed fruits and vegetables produced by small-scale processors in Zimbabwe, focus group discussions and a consumer survey were conducted with consumers in Harare. Focus group discussions with high-, middle- and low-income consumer groups in Harare showed that dried fruits, dried vegetables, and jams/jellies produced by small-scale processors had the potential to penetrate the formal market (e.g. supermarkets, general dealer shops). Preferences for specific types of processed fruits and vegetables were class related. Although price was the most important determinant for the preferences of low-income consumers, it was apparently not a significant consideration among the high-income group. Results from a consumer survey conducted with 500 high-, middle-, and low-income urban consumers, suggests that low–income consumers in particular buy from small-scale processors. The consumer survey also showed that of the households that purchase processed fruit, 92.8% (n=346) would actually buy dried fruit. Of those that purchase dried fruit, 65.2%, 36.1% and 7.1% of the low-, middle- and high-income consumers, repectively, would buy from the local market. Most of the consumers that purchased dried vegetables (n=255) tended to do so at the supermarkets (70.2%), and about half made their purchases at the local markets (43.1%), and one fifth of households made purchases of dried vegetables with street traders (21.6%). High income consumers were more likely to make purchases of both dried fruit and vegetables at the supermarket than low income consumers. For example, low-income households (32%) were more likely to make purchases of dried vegetables from street traders than upper-income households (10%). Thefore the supermarket and the local market were the most common sources of

the dried vegetables. This study suggests that a large potential market exists in Harare for dried fruits and dried vegetables produced by small-scale processors.

Key words: fruits and vegetables, food processing, preservation

1. Introduction

Agriculture drives the economies of many developing countries, contributing substantially to the Gross Domestic Product (GDP). However, the sale of raw commodities alone is no longer able to provide a reliable livelihood for the growing populations in these countries. Alternative sources of income are needed to support the millions of poor families who can no longer support their livelihoods from the land alone. In many parts of the world, including sub-Saharan Africa, food processing has been touted as having the potential to reduce poverty and improve the quality of life of the poor through improved incomes, employment, food availability and nutrition. Furthermore, food processing has other benefits such as the reduction of post harvest losses, the preservation of food, providing consumers with convenience food items and improving distribution potential. In Zimbabwe, there is evidence to show that there is a growing urban population that needs processed food items (CSO, 1994). Over the years, these consumers have relied on large scale processors to provide them with essential food items. Large-scale urban-based companies control over 90% of commercially marketed agro-industrial produce in Zimbabwe - which includes products such as maize meal, edible oils, canned and preserved meat and fish, canned fruits and vegetables and other products (Price Waterhouse, 1994). This predominance of large-scale players could represent a barrier to small-scale players. However, many small and medium scale food processing enterprises have emerged in Zimbabwe over the past 10 years, as people diversified their sources of income. These enterprises may benefit from the potential increase in (largely urban) demand for processed foods, especially fruits and vegetables. However, these enterprises face a number of problems that may have hindered their progress. One of the most common problems has been the lack of appropriate markets.

One of the objectives under a study funded by the Department for International Development (DFID), entitled, 'Facilitating the effective production and marketing of processed food products by small-scale producers in Zimbabwe', was to assess the potential market for processed food products produced by small-scale processors in order to enhance their capacity and thereby helping in improving their incomes. The current report focuses on the potential for processed fruits and vegetables, produced by small-scale processors, to penetrate the formal market in Harare.

2. Approach

2.1 Focus group discussions

In order to assess consumer perceptions and establish the types of horticultural products manufactured by micro- and small-scale processors and the consumer demands for such products in Zimbabwe, a series of focus group discussions were held. A total of seven focus groups were held. Each session was planned in advance with a potential of eight participants. However, on the actual day the session was due to take place, some participants pulled out at the last minute and hence there was some variation in group size. The groups were structured according to socio-economic status of the consumer's household. They consisted of relatively homogenous groups of high-, middle- and low-income urban consumers. The information from these group discussions was then used to develop a formal consumer survey.

2.2 Consumer survey

A consumer survey was conducted with high-, middle-, and low-income groups in Harare. A total of 500 questionnaires which focused on the types of processed fruits and vegetables purchased and consumed and the approximate amounts of money spent per month or per week, were distributed. The questionnaire also gave consideration to differing consumption patterns based on ethnic group. The

target group was female heads of households. For the purpose of this discussion, the objective was to extract data that could indicate the potential markets for small-scale producers.

3. Results

3.1 Focus group discussions

The focus group discussions showed that consumer preferences were class related. For example, although price was the most important determinant of the preferences of low-income consumers, it was apparently not a significant consideration among high-income consumers. Product quality and consistency were seemingly the main factors that influenced purchasing patterns among the latter group. Imported products from South Africa for example, were considered by some high-income consumers to be of superior quality than locally processed products. Low-income consumers tended to rely on hearsay for information on product quality in particular. During these focus group discussions, consumers indicated the types of products they consumed (**Tables 1 and 2**). It emerged that dried fruits and vegetables, as well as jams and marmalades were considered as potential horticultural processed products that the consumers would buy. Indigenous fruits and vegetables featured prominently among the low-income consumers. Some of these observations were used to develop a questionnaire that was conducted across the three income groups in Harare.

3.2 Consumer survey

The target group of female heads of households was chosen because usually it is the females who make the decisions on what to purchase. However, in the absence of a female head of the household, the men's views were taken into consideration.

The majority of the respondents to the consumer survey (n=500), were between 20-49 years (87%) and female (89%). Forty five percent (45%) of these households spent between Z$1500 – Z$5000 per month on processed food. However, these figures may now have doubled due to inflation. Of the 500

interviewees, 437 (87.4%) consumed dried vegetables, 255 (51%) purchased dried vegetables, 346 (69.2) consumed dried fruits and 321 (64.2) purchased dried fruits.

3.2.1 Purchase and consumption of dried vegetables

Dried vegetable consumption was more pronounced among low-income households. For example, 65.6%, 47.9% and 44.5% of low, middle and high-incomes households consume dried vegetables at least once a month. A larger proportion of the surveyed households who consume dried vegetables actually process the dried vegetables at home (66%) rather than purchase them (58%) (**Table 3**). However, the majority of high-income households (76.3%) rely on purchasing the product. Just over a third of households (36.8%) receive gifts of dried vegetables from family members, mainly in rural areas.

Most of the consumers that purchased dried vegetables (n=255) tended to do so at the supermarkets (70.2%). About half made their purchases at the local markets (43.1%), and one fifth of households made purchases of dried vegetables with street traders (21.6%). Place of purchase varied between household income groups. Approximately 90% of high-income households made purchases of dried vegetables at supermarkets compared to 60% of low-income households. Low-income households (32%) were more likely to make purchases of dried vegetables from street traders than upper-income households (10%). Thefore the supermarket and the local market were the most common sources of the dried vegetables.

Some of the consumers bought their dried products direct from the small-scale processors. This group of consumers were of the impression that small-scale processors made their products available in varying (packaging) quantities, which were cheaper. In addition the consumers indicated that small-scale processors were better in terms of pricing and therefore had a competitive advantage over the large-scale processors. However, these small-scale producers were rated as performing very badly on

presentation of their products especially labelling and quality of packaging materials. This was a common observation across all income groups. The 'nutritional benefit' of the product was rated highly by the middle-income group.

In order to meet consumer demands, these consumers suggested that the small-scale processors should improve on food safety. However, accreditation to standards bodies such as Standards Association of Zimbabwe was not interpreted to mean guaranteed safety of the product. Actual presentation, consistency and shelf life were considered to be more important.

3.2.2 Consumption and purchase of dried fruit

The survey revealed that of the 500 surveyed households, a large number (30.8%) have never consumed dried fruit. However among the households who consume dried fruit (346; 69.2%), the frequency of consumption was similar across the income groups. About 32.3%, 35.4% and 32.1% of low-, middle-, and high-income consumers, respectively, consume dried fruit a few times a year, especially when these were readily available. About 92.8% (n=346) of the households who consume dried fruit, actually buy it. Other households obtain their dried fruits from other sources such as from other family members as gifts (7%), or process their own at home (0.2%).

The most common source for purchase was the local market although again there were class differences. For example, of the consumers who purchase dried fruits, 65.2%, 36.1% and 7.1% of the low-, middle- and high-income consumers, repectively, would buy from the local market. If the supermarket is considered, 89.3%, 27.8% and 5.9% of the high-, middle-, and low-income consumers, respectively, buy dried fruit from the supermarket (**Table 4**). Considering that most households purchase from the local market, it may be reasonable to suggest that the local market is a good place to sell these products. However, if safety concerns are taken into consideration, it would seem that these products could find a place in the supermarkets and other outlets.

The most frequently bought dried fruits were masau (*Ziziphus mauritiana*) (83.2%), matohwe (*Azanza garckeana*) (54.2%) and mawuyu (*Adansonia digitata*) (69.8%). More of the low-income consumers indicated that they do buy each of these fruits. For example,out of the total 321 households that consume masau, 65%, 16.8% and 1.2% represent low-, middle-, and high-income households, respectively. These indigenous fruits are not processed by the large-scale processors but are widely found on the local market when in season. This could provide a niche for the small-scale producers who may need to employ better methods of packaging and handling these fruits.The current practice is to sell these fruits in piles on the roadside and in small polythene bags.

As with the the case of dried vegetables, the consumers rated the small-scale producers of dried fruit products very low on product safety. This aspect was considered to be very important by all households who consume processed fruit. However, this could be explained by the fact that there is very little reliable information about the quality of the products of small-scale producers and consumers (especially low-income) and mainly rely on hearsay. However this group of processors have a great potential given that consumers believe they produce more user-friendly sizes of packages and have a pricing advantage.

3.2.3 Consumption and purchase of jams and jellies

Of the 500 households surveyed, 443 indicated that they consumed fruit preserves (jams/jellies). About 20.6% of these households consume the preserves almost every day while a similar proportion consumes them a few times a year. Most of the households actually purchased their fruit preserves, with the majority making their purchases from the supermarket. Only 12 of the 443 households procured fruit preserves directly from processors. Although most low-income consumers expressed a desire to consume more of the preserves, they could not afford the products. A significant number of consumers indicated preference for products produced by the large scale processors mainly because the large-scale processors are well established and therefore their products are well known. There was a certain level of brand loyalty mainly

because they are familiar with the products. However, some low-income consumers indicated that they would purchase from small-scale processors if their price was lower. There is, therefore, the potential for small-scale processors to sell more of their jams and jellies in Harare if they are consistent in product quality, presentation and they offer competitive prices.

4. Conclusions and Recommendations

There is a great potential market for processed fruits and vegetables produced by small-scale processors in Harare. Consumers across all income groups indicated that they consume and purchase processed fruits and vegetables, especially dried fruits and vegetables. If food processing activities by small-scale procducers are to make substantial contribution to household incomes, there is need to improve on advertising, packaging, labelling, and food safety requirements. The processors must be receptive to consumer needs and should target particular consumers, (e.g. poor urban consumers). Dried fruits and vegetables present an opportunity for small-scale processors to take the lead in the market as these usually do not require sophisticated equipment to process.

References

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Table 1. Processed fruits consumed by households

Category of processed fruits	**Fruit**
Dried fruits	• Mangoes • Masau • Sultanas • Matohwe (*Azanza garckeana)* • Mauyu (*Adansonia digitata)*
Fruit juices	• Granadilla • Guava • Orange • Pineapple
Fruit jam/jelly/marmalade	• Apricot jam • Marmalade jam • Mixed fruit jam
Canned/bottled fruits in juice/water	• Guava halves • Mangoes • Peach halves • Pears • Pineapple pieces
Frozen fruit	-
Other preserves (relish/chutney/pickles)	• Fruit flavoured yoghurt

Table 2. Processed vegetables consumed by households

Category of processed vegetable	Vegetable
Dried vegetables	• Beans • Nyemba (*Vigna unguiculata)* • Nyevhe leaves (mufushwa) • Nyimo (bambara groundnut) • Okra • Pumpkin leaves • Rape • Tomatoes • Tsunga (Indian mustard) • *Vigna subterranea*
Juices made from vegetables	-
Jam made from vegetables	-
Canned/bottled vegetables in juice/water/brine	• Baked beans • Peas • Whole tomatoes
Frozen vegetables	• Peas • Tomatoes
Other preserves (relish/chutney/pickles)	• Tomato puree

Table 3. Sources of dried vegetables consumed by different income groups in Zimbabwe

	Income group									Total		
	High			Middle			Low					
Source	Count	% Row	% Income Group	Count	% Row	% Income Group	Count	% Row	% Income Group	Count	% Row	% Total
Purchase	28	15.6%	75.7%	64	35.8%	54.2%	87	48.6%	31.1%	179	100%	41.1%
Process at home	7	3.6%	18.9%	33	16.8%	28.0%	156	79.6%	55.7%	196	100%	45.1%
Gift	2	3.3%	5.4%	21	35.0%	17.8%	37	61.7%	13.2%	60	100%	13.8%
Total	**37**	**8.5%**	**100%**	**118**	**27.1%**	**100%**	**280**	**64.4%**	**100%**	**435**	**100%**	**100%**

Table 4. The most frequent source for purchase of dried fruits by the different income groups in Zimbabwe

		Income group			Total
Source		**High**	**Middle**	**Low**	
Supermarket	Count	25	20	13	58
	% Of Total	7.8%	6.2%	4.0%	18.1%
Grocer/general store or dealers	Count		1		1
	% Of Total		.3%		.3%
Specialty shop/tourist outlet	Count	1			1
	% Of Total	.3%			.3%
Local market	Count	2	26	144	172
	% Of Total	.6%	8.1%	44.9%	53.6%
From street trader	Count		24	61	85
	% Of Total		7.5%	19.0%	26.5%
Direct from processor	Count		1	3	4
	% Of Total		.3%	.9%	1.2%
Direct from processor	Count		1	3	4
	% Of Total		.3%	.9%	1.2%
Total	**Count**	**28**	**72**	**221**	**321**
	% Of Total	**8.7%**	**22.4%**	**68.8%**	**100.0%**