DISSEMINATION OF IMPROVED BAMBARA PROCESSING TECHNOLOGIES THROUGH A NEW COALITION ARRANGEMENT TO ENHANCE RURAL LIVELIHOODS IN NORTHERN GHANA

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IDENTIFICATION OF MARKET OUTLETS FOR HIGH QUALITY BAMBARA FLOUR (HQBF)

A Project Report Submitted under the DFID/CPHP/FRI Bambara Processing and Utilization Project

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ABSTRACT

Market outlet identification studies were carried out in selected trading areas in four regions in Ghana. The rationale was to assess the market potential of well-packaged High Quality Bambara Flour (HQBF) as well as monitor its sales and promotional effectiveness to ensure strategic development of the distribution base of HQBF, which is key to guarantee its long-term success and profitability. This activity formed part of the bambara processing and utilization technologies dissemination project aimed at improving the livelihood and food security situation of poor households in the Northern Region of Ghana. A total of 25 retail outlets were identified in selected trading areas in the Greater Accra, Ashanti, Brong-Ahafo and Northern regions of Ghana. Various quantities of 0.5 kg HQBF at a wholesale price of ¢4,500 were stocked on the shop floor. Follow-up activities were done between the 4 - 6 weeks of stocking of HQBF to collate information on buyer comment on HQBF, market trends and the market potential. Most of the shop owners indicated that new food products usually have an initial low turnover especially when massive advertising had not been done earlier to introduce the product to the general populace. This view was supported by the findings of the present study where overall market performance of HQBF in all trading areas was found to range between 26.7% and 38.3%. In the study, open shop market retailers also indicated that consumption pattern of poor households was more price-responsive and therefore the HQBF, which obviously has added value, would be more suitable for people in middle and high-income class who were more likely to be seen in supermarkets. This observation was again proved right when it was observed that out of the 25 retail outlets identified 2 major chain supermarkets made repeated 100% sale of HQBF any time they stocked it. Larger retail outlets were able to sell HQBF compared to the smaller convenience stores identified. It was also observed that packaged HQBF appealed more to people in the middle and high income-earning category probably due to the presentation and specialty of the product. In order to achieve an expanded market for the benefit of the commercial processors, it was suggested that more aggressive marketing strategies should be employed to boost sale of the product. There is also the need for intensive advertising to introduce HQBF to the general public. The most effective, and efficient ways of advertising must be employed to optimize sale of HQBF. Strategic development of the distribution base of HQBF is key to ensuring long-term success and profitability of the food product and as such the trading areas need to be more extensive with more markets identified.

INTRODUCTION

High Quality Bambara Flour (HQBF) is a product that can effectively improve Bambara utilization in Ghana because of its suitability for existing traditional foods, as well as its versatility in application and the high potential for diversified food uses (Annan *et al.*, 2001). The processing technology for the production of HQBF was developed by the Food Research Institute, Ghana in collaboration with the Crop Post Harvest Programme (CPHP) of the UK Department for International Development (DFID) to lessen the drudgery involved in the processing of the bambara beans and enhance its utilization. Bambara groundnut is important constituent in the diet of the indigenous people from the Northern Ghana where the flour is extensively used in the preparation of an assortment of dishes.

The technology for production of HQBF has been effectively disseminated to women processors, households and communities in the North of Ghana with the aim of sustaining and promoting the utilization and processing of bambara groundnuts as well as ultimately expanding its production levels. Thus income levels of both bambara processors and farmers would be enhanced, nutritional status of consumers improved and consequently the food security situation and livelihoods of poor households will improve. The aim of the project is to establish a value-added chain through HQBF based recipe development, training of small–scale processors, and involvement of commercial processors as well as sale of well–packaged HQBF through identified market outlets.

As part of the activities under HQBF technology dissemination project, market outlet identification was to be undertaken to monitor sales and promotional effectiveness of HQBF and assess its marketing potential. A total of 25 retail outlets were identified in four selected trading areas of the country with emphasis on the consumers, location, and consumption patterns since bambara groundnut is an indigenous product. This paper reports on the findings of the markets identified and recommendations made to advance sale management of HQBF using the four selected trading areas as case studies.

METHODOLOGY

Marketing Strategy For HQBF

To enter a new market, a very good understanding of its structure and environment as it relates to the product is important. All kinds of retail outlets – such as supermarkets, open markets, department stores and other retail environments were visited and flexible options chosen, depending on the willingness of retailers to stock the product, how the product fits in the market and where to pitch it to ensure its success. Since Bambara groundnut is an indigenous product, the kind of people, their location, and consumption patterns were deemed important market entry decision factors. Hence, these main marketing questions were considered in souring for market outlets:

Who are our clients?

Where are they located?

How do we reach them?

Why do they buy?

The above questions helped to define and target meaningful market segments for HQBF.

Market Outlet Identification

A total of twenty-five new market outlets for distribution and sale of HQBF were to be identified. Selection of the consumer markets, trading and retailing areas were done using analysis of trading areas technique.

Consumer Markets

Consumer Markets for HQBF were identified based on the principle that consumer demands for similar products are affected by price and availability and also by consumers' personal tastes and income. Commercial demand is derived from final consumer demand and any demand estimation begins with defining the number of people, companies, and government agencies in the primary market with a need for the determined product.

Defining Trading Areas

To predict optimal sales potential for HQBF, trading and retail areas were identified within the consumer markets based on the potential of the consumer base and the supply of competitive stores in the area. As stated in the Neighborhood Business Development Methodology (2001), trading areas may be defined to be part of a neighborhood, a city, or can extend beyond the city's boundaries depending on the type of market and the density potential of customers surrounding it. The sites of the trading areas selected were a function of:

- The size of the store and the extent of the mix of merchandise. Larger retailers have greater drawing power than do smaller stores with less selection
- ❖ The type of goods and products offered. Specialty stores draw customers from a larger trading area than convenience stores because consumers are willing to travel greater distances to acquire specialty goods
- ❖ The number and size of neighboring competitors. Many larger compatible retailers clustered together create greater attraction than smaller, non-compatible retail clusters.

Based on the above principles the trading areas were identified in the Greater Accra, Northern, Ashanti and Brong Ahafo Regions of Ghana.

Retail outlets

Selections of specific retail shops were then done after a random customer survey had been carried out in the trading areas. Direct interviews were conducted with the shop owners, as a necessity due to the following reasons:

- i. This was a more accurate method of determining customers shopping habits and more importantly an opportunity to assess the willingness of the shop owners to participate in the study.
- ii. It was considered a vital aspect of the identification of the market outlets for HQBF since the product, though similar to others on the local market was new and was now being introduced to the general community.

iii. Also existing business owners may have an intuitive sense of their local market and may have been successful at capturing local residents and ethnic customers purchasing information, which was central for the successful distribution of HQBF.

The following retail trade channels were identified since they are marketers of such Specialty Food Products:

- ❖ Supermarkets and Grocery Stores: Both Chain and Independent
- Convenience Stores
- Niche Stores
- Open markets

Each retail trade channel offers its own unique opportunities and challenges.

A minimum of five retail outlets was identified in each of the regions. After the successful identification of the market outlets in the specified trading areas, 10 each of 0.5kg HQBF were given to the shop owners for sale giving them a baseline price of ¢4,500 per 0.5 kg HQBF to which profit margins were added by the shop owners at their own discretion. The baseline pricing given was obtained based on the production costs. Those who accepted to stock HQBF received an invoice (Appendix 1) on the quantity supplied, selling price, date of delivery and contact details.

Follow up activities were consistently carried out to determine whether HQBF had been properly displayed on the shop floor to attract the consumer and also to assess the trend of purchasing, demand and consumer assessments and reactions to the product. However some of the market outlets identified were not successful in the distribution and sale of the HQBF due to various reasons and therefore were eliminated from the study after two follow up visits had been done and no sale or improvement in sale had been observed.

RESULTS AND DISCUSSIONS

A total of twenty-five market outlets were identified. Each shop was given a specific number of the HQBF initially depending on size of shop as well as the number of shoppers in the area. Below are tables indicating the trading areas and the shop outlets identified, quantity of HQBF given and quantity sold after a maximum of six weeks.

A total of eight retail shops outlets were identified in the Greater Accra region, five in the Northern region, five in the Ashanti region and six in the Brong-Ahafo region. One open market in the Greater Accra Region was also identified.

Table 1.1 Market outlets identified in the Greater Accra region

Shop identified	Location	Quantity of HQBF given (0.5kg)	Quantity of HQBF sold (0.5kg)
Regal Shell Shop. Tel. 021 774284	Osu Regal	10	1
Phil Dzan Enterprise, P.O.Box NG 91 Accra. Tel. 021 712995/ 766420	Nungua Channel 5	5	5
Shalom Enterprise	Madina Market	5	0
Legon shell shop. Tel. 021 5005721	Legon Siashi	10	5
Batsonna mobil shop. Tel. 021 7010630. or 0244 611 493	Sakumono Batsonna	10	10
Sakari Enterprice. Shop No A/	Nima	5	0
Dorado Ventures. Tel. 021 501658	Madina Market	5	1
Coastal Road shell shop. Tel. 021 712728	Nunuga Last stop	10	1

Table 1.2 Market outlets identified in the Ashanti Region

Shop identified	Location	Quantity of HQBF given (0.5kg)	Quantity of HQBF sold (0.5kg)
A-Life Supermarket. Phone no 051 26753	Kumasi, Asafo	10	10
Mobil Mart Asafo. Phone no 051 22654	Kumasi, Asafo	5	1
Dickaggie Enterprise. Phone no 051 25428	Adum	5	0
Colgate Mart. Phone no 051 22629	Adum, Kejetia	10	4
Mobil Mart. Phone no 051 27314	New Amekroom	5	0
Shell Shop. Burma Road	Kumasi	5	0

Table 1.3 Shops identified in the Northern Region

Shop identified	Location	Quantity of HQBF given (0.5kg)	Quantity of HQBF sold (0.5kg)
Shell Sakagaka. Tel. 071 24026 or 0244 783266	Tamale	10	2
Shell Shop, Savelugu Road. Tel. 071 22244	Savelugu Road	5	3
Hendosous Enterprise Bank road. Tel. 071 22434	Tamale	5	0
Ofram Enterprise. Tel. 071 25746	Tamale	8	5
Goil shop. Tel. 071 25748	Amadu, Tamale	8	2

Table 1.4 Market outlets identified in the Brong Ahafo region.

Shop identified	Location	Quantity of HQBF given (0.5kg)	Quantity of HQBF sold (0.5kg)
Kwesi Yeboah Store. Tel. 0208 138001	Near Fiagya Rural Bank Techiman	5	0
Techiman Mobil Mart. Tel. 065 322042	Near Internal Revenue Service Techiman	10	2
Techiman Goil. P.O. Box 239, Techiman. Tel Phone no 0653 22089	Techiman	10	3
Big Heart Enterprise. Tel. 0244 806347	Dagomba Line, Ahimaigya Road	5	2
Precious shop. P.O.Box 355, Techiman. Tel. 0244 806347	Techiman Market Road	5	0
Akwasi Philip Shop. P. O. Box 703. Techiman. Tel. 0208 122262	Techiman Market Road	10	5

The quantities of HQBF sold were obtained during the follow up visits. Follow up trips were carried out to assess how well HQBF was doing on the local market in terms of sales and patronage by the general public and also to access consumer reactions and comments about the product.

Open Market

The main concerns raised by these traders who sell bambara was that people who buy bambara for flour preparation will perceive HQBF as more expensive and would rather buy beans and prepare flour themselves. Some also expressed their unwillingness to stock HQBF mainly due to fear of quality deterioration since new products have low turn over.

Others were quick to add that consumption pattern of poor households is more priceresponsive and therefore HQBF, which obviously has added value, will be more suitable for people in middle and high-income class who are more likely to be seen in supermarkets.

A major issue that was pointed out by some open market sellers is the lack of adequate promotional activities e.g. advertisement on the product since it is new. As one seller commented Ghanaians only buy advertised products. It was therefore apparent that understanding the prospective buyers decision making process which often seeks to address a need or want is important in the quest for prospective sellers. Only one open market seller located in Madina, in the Greater Accra region agreed to stock HQBF.

Supermarket (Chain and Independent)

As expressed by some open market sellers, the supermarkets were more willing to stock HQBF in all the trading areas visited. These supermarkets had confidence in the product probably due to its source. They were very impressed about the packaging but required additional information on the method of preparation of the prescribed foods on the packaging. The basis is that decision to buy such low-involvement purchase products is often made within the shop either impulsively or purposively. Thus, one often sees customers picking and getting first hand information on products at the supermarkets. This customer buying behaviors is rare in the open market situation.

Follow up Visits

Follow up visits indicated that HQBF was doing well in some few outlets identified while patronage by the general public in some areas identified was extremely low (Tables 2.1, 2.2, 2.3, and 2.4).

Out of the 25 shops identified only 12% had completely sold out all the HQBF given them. Another 48% had made some sales with the remaining 28% not making any sales at all. The main reasons given by the shop owners for the low patronage and non-sale of HQBF were:

- □ The lack of adequate advertisement to introduce the HQBF to the general market. Shop owners emphatically stated that the lack of advertisement on the airwaves and in the print media was an important factor in the low patronage and purchase of HQBF since most people new nothing about the product and therefore had to be convinced to buy it.
- □ Aggressive marketing strategies could also be employed to boost the sale of HQBF e.g. employing sales agents with adequate information on HQBF can help with the marketing.
- □ HQBF was more of an ethnic based food and its level of utilization is limited especially to people from other ethnic groups who form majority of the population.
- □ Comprehensive information about its uses and method of preparation of the dishes should be indicated on the packaging material.
- □ Recipes for which HQBF could be used for should also be indicated on the packaging material.

Though shop owners stated that HQBF is ethnic based and therefore utilization and purchasing would be more favorable in the Northern communities the shop outlets that made 100% sales of HQBF were not located within that region but in the Greater Accra and Ashanti Regions. The high sales could be due to the following reasons:

- Those retail outlets were larger and they created greater attraction to customers especially from the middle income-earning groups in the society due to the size of the store and the extent of mix of merchandize that could be found there. As indicated in the Neighborhood Business document larger retailers have greater drawing power than do smaller stores with less selection.
- Those retail shops were giants in the sales and marketing industry and were well
 known especially by the quality and type of goods offered. Again as stated in the
 Neighborhood Business document specialty stores draw more customers from a
 larger trading area than convenience stores because consumers are willing to
 travel greater distances to acquire specialty goods.

Below is the list of the retail outlets that sold out all the initial stock of HQBF given.

Name of shop outlet Location, Region

i. Phil Dzan Enterprise Nungua, Greater Accra

ii. Batsonna Mobil Shop Sakumono, Greater Accra

iii. A-Life Supermarket Asafo, Kumasi

It is important to note that though Phil-Dzan enterprise made 100% sale of HQBF it is comparatively a small retail outlet. The other two shops are larger and prominent outlets. However the high sales made by Phil Dzan could be due to the fact that the shop is situated in a highly populated area with people of various ethnic groups. After the initial 100% sale by the three shops listed, 10 packets of 0.5g HQBF were again stocked for all of them for the second time. Follow up visits again to these shops indicated another 100% of HQBF and the shop owners assessed that consumers were buying the HQBF at their own rate and that probably a market niche had been established in those areas. Hence the shop owners were interested in being linked directly to HQBF producers for continuous supply of HQBF on the local market.

Follow up visits were carried out between 4-6 weeks after initial stocking on the shop floor of HQBF. Subsequent visits were again carried out another 4 weeks after first follow up visit. Shops that were not able to make any sales of HQBF after this period had the products withdrawn from their shop floor since keeping it there any longer was not prudent.

During the follow up visits in some instances it was observed that some of the products (HQBF) were infected with weevils while others had their packaging materials being damaged. In almost all the instances investigations revealed that the weevil infestation was not due to poor quality of HQBF but rather due to its placement on the shop floor among similar flour products that were already insect infested. The damaging of the packaging material was mostly due to poor handling of HQBF. However in some instances it was observed that the seal was broken probably due to improper sealing of HQBF.

Overall sales of HQBF

The overall % sales of HQBF in the various areas selected are represented graphically below. The Greater Accra region had the highest overall % sale of 38.35 though two shop outlets identified in this area observed a recurrent 100% sale of HQBF after two follow up visits.

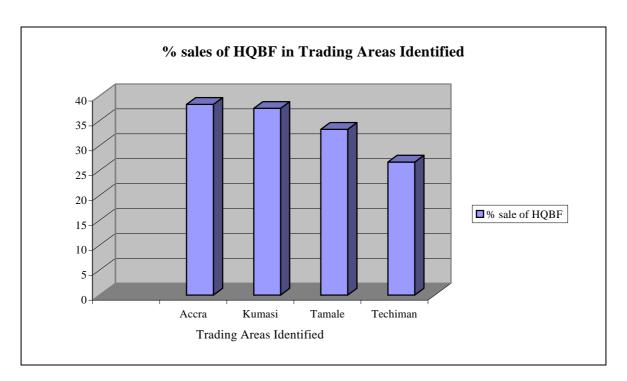


Fig 1. Overall % sales of HQBF in the four trading areas selected.

The overall % sales of HQBF did not really differ in the other trading areas ranging from 38.3% in the Greater Accra region to 26.7% in the Brong Ahafo Region. These low % sales of HQBF have been attributed to some factors indicated by shop owners as discussed earlier with the overall contributory factor being lack of advertisements to introduce HQBF to the general populace.

Pricing of HQBF

Pricing of HQBF at ¢4,500 per 500g was obtained based on the cost involved in processing and packaging 1 bag (100kg) of bambara groundnut using recovery rate of 75%. The cost structure is shown below.

Item	Cost (Cedis)	
Cost of raw material	250,000	
Steeping	5,000	
Water	5,000	
Dehulling	20,000	
Drying	80,000	
Milling	20,000	
Labels (Packaging)	75,000	
Polythene bags	30,000	
Labour	20,000	
Sub-total	505,000	
Utilities	25,250	
Depreciation	50,500	
Mark-up (20%)	101,000	
Total cost	681750	
Unit Price (1kg)	9,090	

This is the price at the manufacturing gate. However retail pricing of 500g HQBF was left to the discretion of the shop owner. Nonetheless shop owners were advised not to increase the retail price margin above 100% to facilitate quick purchase of the commodity and to make it attractive to the general population.

FINDINGS AND RECOMMENDATIONS

The main findings of the study are as follows:

- ➤ Marketing and sales of HQBF were low in all the four trading areas identified. The lack of advertisement to introduce the product to the general public is considered to be the major contributory factor.
- ➤ Larger retail outlets were able to sell HQBF compared to the smaller convenience stores identified.
- ➤ Packaged HQBF appealed more to people in the middle and high incomeearning category probably due to the presentation and specialty of the product.
- ➤ Bambara beans is perceived to be an ethnic based food and therefore most shop owners were reluctant to stock HQBF.

Recommendations for the successful marketing of HQBF are as follows:

- ➤ Aggressive marketing strategies should be employed to boost sale of HQBF. The following could be used to identify buyers:
 - Independent marketing representatives
 - Rely on distributors
 - Utilize merchandising services
 - Let another product marketing or sales company handle it for you
 - Do it yourself
 - Use a combination
- ➤ There is the need for intensive advertising to introduce HQBF to the general public. The most effective, and efficient ways of advertising must be employed to optimize sale of HQBF. The design of sales and promotional materials, to identification of and participation at key trade shows and successfully establishing buyer relationships must all be employed for efficiency in establishing a market niche for the purchase of HQBF.

- ➤ Packaging of HQBF must be enhanced to be more attractive to the buyer since packaging is also an important sales tool available to food marketers. There should be more detailed food uses of HQBF on the label as well as some of the simple recipes developed and the method of preparation.
- > Strategic development of the distribution base of HQBF is key to ensuring longterm success and profitability of the food product and such the trading areas need to be more extensive with more markets identified.

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APPENDIX I: COPY OF INVOICE



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P. O. Box M20 Accra 021-777330 fax 021-777647 Invoice No.

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Customer				
Name Address City Phone		Date Order No		6/25/03
Qty	Description		Jnit Price	TOTAI

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