FUFU MARKETING SYSTEMS IN SOUTH-WEST NIGERIA

Dipeolu, A.O., Adebayo, K., Ayinde, I. A., Oyewole, O. B., Sanni, L. O., Pearce, D.M., Wandschneider, T.S., White, J. L. and Westby, A.

NRI Report Number R2626

Revised July 2001

Natural Resources Institute
University of Greenwich
Central Avenue, Chatham Maritime,
Kent ME4 4TB, United Kingdom

Tel.: +44 (0) 1634 880088
Fax.: +44 (0) 1634 880066/77
Internet: http://www.nri.org
E mail: A.Westby@greenwich.ac.uk

University of Agriculture,
P.M.B. 2240, Abeokuta,
Nigeria.

Tel.: 234 39 254291
Fax: 234 39 244299
234 39 243045
E mail: oyewoleb@skannet.com
adereni@unaab.edu.ng

ACKNOWLEDGEMENTS

We would like to express our gratitude to the Department for International Development (DFID), United Kingdom for providing the funds to undertake this study. We are also grateful to the management and staff of the Natural Resources Institute (NRI), University of Greenwich, United Kingdom and the University of Agriculture, Abeokuta (UNAAB), Nigeria for all the support they have accorded us to ensure that this work was carried out as planned.

Moreover, we appreciate the assistance of the staff of the Central Bank of Nigeria (CBN), Lagos; Ogun State Agricultural Development Programme, Abeokuta (OGADEP); Lagos State Ministry of Agriculture; Diocesan Agricultural Development Project (DADP), Ijebu-Ode; Food Basket International (FBI), Ibadan; International Institute of Tropical Agriculture (IITA), Ibadan; Federal Institute of Industrial Research Oshodi (FIIRO), Lagos; Top-Rank foods Nigeria Limited, Ile-Ife and others, for the preliminary information they provided at the commencement of this work.

Last, but certainly not least, we thank our key informants at the various study locations for their friendly and accommodative nature during the field stages of the study.

This is an output from a research project funded by DFID. However, DFID cannot accept responsibility for any views expressed. *[R7495 Crop Post Harvest Research Programme]*.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF DIAGRAMS

LIST OF CHARTS

ACRONYMS AND ABBREVIATIONS

ADP	-	Agricultural Development Programmes
AMREC	-	Agricultural Media Resources and Extension Centre
CBN	-	Central Bank of Nigeria
DADP	-	Diocesan Agricultural Development Project
DFID	-	Department for International Development
FIIRO	-	Federal Institute of Industrial Research Oshodi
FBI	-	Food Basket International
IITA	-	International Institute of Tropical Agriculture
LGA	-	Local Government Area
NGOs	-	Non-Governmental Organisations
NNPC	-	Nigerian National Petroleum Company
NPC	-	National Planning Commission
NRI	-	Natural Resources Institute
OGADEP	-	Ogun State Agricultural Development Programme
PRODA	-	Project Development Agency
UNAAB	-	University of Agriculture, Abeokuta
UNEP	-	United Nations Environmental Programme
VEA	-	Village Extension Agent

Exchange Rate, February 2000

£1 = N150
US$ 1 = N100

EXECUTIVE SUMMARY

This study presents a characterisation of *fufu* marketing systems in Southwest Nigeria. It forms part of a wider three-year research project funded by the United Kingdom's DFID Crop Post-Harvest Research Programme, which seeks to identify an approach for the commercialisation of *fufu* processing in Southwest Nigeria that will contribute to poverty elimination and sustainable rural livelihoods.

The marketing outlet approach was the framework employed in this study. The approach relies on the identification of key supply areas and traces outlets up to their respective destination markets. In-depth analysis of five, quite diverse processing locations in Ogun State was undertaken to capture a variety of marketing chains and arrangements at operation in Southwest Nigeria. The principal data and information for the study were gathered through formal questionnaires and informal semi-structured interviews with key informants. Interviewees included processors, primary market assemblers, urban wholesale and retail traders, transporters, food vendors and restaurant owners.

Two forms of *fufu* are traditionally processed on a commercial scale in Ogun State: wet *fufu* paste and ready-to-eat *fufu*. Interestingly, market-oriented production of dried *fufu* (flour) was not found in the study area, as it is not a traditional product.

Fufu processing is by and large a small-scale activity, and more so in the case of ready-to-eat product. Several factors interact to prevent significant scaling-up of individual *fufu* processing and marketing activities. These include financial resource constraints, the difficulties and cost of procuring large amounts of fresh cassava, the lack of mechanised *fufu* processing technologies, and the impossibility of storing *fufu* for reasonable periods of time due to product perishability. The latter is an especially important constraint, since it forces processors and traders to be conservative in the quantities produced and purchased for sale. Despite this, aggregate volumes leaving each *fufu* processing location can be quite significant in view of the large number of people involved in this activity.

Market-oriented *fufu* processing is carried out in both rural and urban contexts. Primary processing, which entails transforming fresh roots into a wet paste, essentially takes place in villages or small towns located within important cassava production areas. Secondary processing on a commercial scale, consisting of cooking the ready-to-eat *fufu* balls from the wet paste for market sale, gains importance as distances to medium and large consumption centres become shorter. Because the wet paste is easier and less costly to handle and transport than the ready-to-eat product, it is usually processed further away from major consumption centres. Overall, however, neither the wet paste nor the ready-to-eat product can be processed in a cost-effective manner very far from consumption centres.

There are two predominant market channels for the wet paste processed in Ogun State: a direct one, linking the point of processing to wholesalers in Lagos, and an indirect one, whereby the wet paste is first assembled in a primary market before being channelled to Lagos. When buying directly from processors, wholesalers may either come to the processing location or wait for the product to come to them. They then sell the wet paste

to a wide range of retailers, who are often involved in secondary processing, selling the ready-to-eat product to consumers. Retailers include street vendors, canteens, restaurants and hotels. Consumers also buy wet paste for home processing directly from wet paste wholesalers and retailers.

Because of the more localised nature of ready-to-eat *fufu* marketing chains and the comparatively smaller quantities of the product leaving processing areas, there is practically no primary assemblage. The product normally moves from the processor to the retailer, and then from the latter to the consumer. Some ready-to-eat *fufu* traders act both as retailers and wholesalers, selling to consumers as well as restaurants, canteens, food vendors and institutional clients.

The marketing chains for *fufu*, whether in its wet paste or ready-to-eat form, present some interesting features that are worth noting. First, the product changes few hands along the chain. Second, processors sell mainly to wholesalers and are rarely in direct contact with the consumer, relying essentially on intermediary agents to market their production. Third, commercial processing of *fufu* in rural areas of Southwest Nigeria is common and to a great degree driven by proximity to large urban markets, to where most production is channelled. Finally, no cross-border and overseas exports of wet paste or ready-to-eat *fufu* are taking place, as this is not a viable option for highly perishable and relatively low-value commodities. In contrast, dried forms of the product have a much longer shelf life, and some export-oriented production by a few medium- to large-scale processors has developed.

Fufu marketing systems appear to function in a relatively effective manner. The high degree of co-ordination between processors and buyers through pre-arranged orders leads to a close match between supply and demand and minimal losses along the product chain. Trust is a major factor driving such arrangements. Generally speaking, therefore, present marketing arrangements and transport systems enable processors to quickly dispose of their produce while at the same time allowing for a rapid turnover of traders' stocks.

Market access does not seem to constitute a major constraint to processors. The presence of a considerable number of middlemen in processing sites and intermediary market centres, existing processor-trader links and networks, the availability and regularity of all weather transport vehicles, and the perceptions of market participants all point in this direction. The fair degree of specialisation found among processors is also a strong indication that processors enjoy relatively good access to close-by sub-urban and urban markets.

While market access may not be an issue for processors in the studied locations, it may represent a significant barrier to entry into commercial *fufu* processing for many who are currently not involved in such activity because of remoteness or failure to nurture direct relationships with specific buyers. Given the extremely perishable nature of the product, easy and regular access to markets is a fundamental pre-condition if market-oriented *fufu* processing is to occur.

Moreover, it is unclear whether the market is at present able to accommodate significant and widespread increases in *fufu* supplies. Whilst it is possible to ascertain that the

market for wet paste and the ready-to-eat product as a whole has not contracted in the recent past, the study found no evidence that it is expanding at a significant pace. Similarly, although prices at different levels in the marketing chain do not seem to have followed a declining trend, the evidence collected does not indicate dramatic increases. Finally, contradictory perceptions amongst different operators regarding market trends indicates that different locations and different market participants within the same location may be facing variable experiences in respect to demand and prices.

Although the marketing system has proven effective in transferring *fufu* supplies from processing to consumption centres, processors (and farmers) tend to command a relatively low share of the wholesale and retail price, and quite often have no option but to sell on credit. Only processors who manage to control the transport up to the destination market seem to be able to escape low prices and to capture a significant share of the wholesale price. Possible causes behind the above source of inefficiency in the marketing system include the relatively small quantities traded, poor access to market information by processors, their need to have a ready market to prevent product losses, the risk of product spoilage that is passed on to buyers, the inability of processors to intervene further up the marketing chain and high transport costs.

The highly perishable nature of both the wet paste and the ready-to-eat *fufu* has emerged as a recurrent and cross cutting issue throughout this study. On the demand side, the extremely limited storage possibilities reduce the convenience of *fufu* to traders and consumers, thereby restricting market size and limiting the potential for demand growth. On the supply side, processors must be cautious not to expand the size of their operations beyond a point in which unsold inventories and product spoilage can become a recurring phenomenon, resulting in heavy financial losses. Finally, the short shelf life of *fufu* has clear negative effects on the prices and margins processors and many assembly traders are able to command.

Hence, the case for developing a shelf stable form of *fufu* that could be stored by processors, traders and consumers over a longer time period has been clearly established in the study. However, great care must be taken when evaluating this option and the rationale for introducing it in the study areas or other parts of Southwest Nigeria. More specifically, the feasibility of developing market-oriented *fufu* flour production amongst relatively small-scale processors, the dissemination of appropriate technologies and the development of market linkages are issues that deserve careful analysis.

This study has also identified several other possible intervention options aimed at increasing the contribution of *fufu* to sustainable livelihoods in Southwest Nigeria. These include the provision of relevant market information, market linkage facilitation, and the development of well-targeted financial services. However, detailed analysis is required prior to embarking in any intervention in these and other areas in order to assess their likely impact and sustainability.

CHAPTER ONE

INTRODUCTION

1.1 Background

This study forms part of a wider three-year research project funded by the United Kingdom's DFID Crop Post-Harvest Research Programme. The research project seeks to identify an approach for the commercialisation of *fufu* processing in Southwest Nigeria that will contribute to poverty reduction and sustainable rural livelihoods. This will be done through the development of an understanding of the impacts that different approaches to commercialisation are likely to have on local livelihoods. The research project is largely based on an examination of five case study locations in Ogun State where *fufu* processing is taking place. The research is of direct relevance to the Southwest region of Nigeria; however, the findings will also be pertinent to other parts of Sub-Saharan Africa where cassava is widely grown and consumed.

The commercial potential of *fufu* products in Nigeria has not been fully realised due to a series of technical and socio-economic constraints. Although *fufu* is widely consumed in rural and urban areas, *gari* and *lafun* are the two most popular cassava products in Southwest Nigeria. Apparently, one of the main reasons behind differences in degrees of commercialisation between these two products and *fufu* lies in the fact that the former have a considerably longer and more stable shelf life than the latter (Henry *et al*, 1999; Nwajiuba, 1995). The contribution made by *fufu* processing to rural and urban livelihoods in Nigeria and elsewhere would be significantly enhanced if this and other key constraints to processing and marketing could be addressed. The goal of the project is to identify and test several options to overcome such constraints in ways that benefit large segments of the rural poor, including the processing of dried forms of the product that are acceptable to the consumer and have an extended shelf life.

The present study provides a fresh look into *fufu* marketing systems in Southwest Nigeria. It will be complemented by ongoing project research on consumer acceptability of and markets for dried *fufu*. Earlier work on *fufu* processing in Nigeria has been undertaken (e.g. Sanni *et al.*, 1998), and this is an area which the current project aims to develop further. In contrast, and quite surprisingly, very little is known about *fufu* marketing systems and dynamics and market constraints and opportunities. This study and the above mentioned market research work on dried *fufu* are an attempt to partly fill this important gap, and in so doing, provide relevant elements to inform and guide future livelihood enhancing interventions at the processing and marketing stages.

1.2 Objectives of the study and structure of the report

The objective of the study is threefold. First, as a step towards an improved understanding of *fufu* marketing systems and dynamics, the study aims to highlight typical market channels and marketing chains in Southwest Nigeria. Second, it seeks to complement this analysis with an outline of the key features of *fufu* marketing systems in

the region, including an identification of opportunities and constraints. Finally, the study attempts to evaluate the current performance of marketing systems and to suggest ways to improve these systems. Its findings are important in that they provide elements to guide and inform current and future project research and activities in the marketing, livelihoods and technical areas.

The report is structured as follows. The remainder of this chapter discusses data sources and methodology. Chapter two presents a general characterisation of *fufu* marketing functions and systems in the Southwest region of Nigeria. Chapter three examines prices and margins along the product chain. Chapter four discusses the main marketing problems and constraints as identified by market participants. Chapter five attempts to ascertain key market trends based on the views and perceptions of study respondents. Finally, chapter six summarises the main conclusions and findings of the study, and discusses possible intervention options. Detailed references are contained in Appendix 1. Appendix 2 characterises the five case study locations and outlines the different *fufu* marketing systems and channels in operation in each. Appendix 3 presents the questionnaire used in interviews with processors and other market participants.

1.3 Research Methodology and Data Sources

1.3.1 Study approach

The study draws largely on the marketing outlet approach. According to this approach, key supply or production areas are identified and outlets traced to their respective destination markets. In order to make the approach directly relevant to the current research project, special emphasis was given to processing locations, which were taken as the starting point of the product chain. Indeed, by focusing on specific processing locations, the market outlet approach offers a good perspective on how *fufu* processors in these locations interact with other market operators, as well as on the constraints and opportunities that they face.

The selected approach also has some weaknesses and limitations, which are worth noting:

- By providing a snapshot of marketing systems and dynamics at a particular point in time, the market outlet approach may fail to capture changes in systems and dynamics through time.

- Similarly, the somewhat static nature of this approach does not make it particularly useful as a means to understand seasonal variations, which in the case of agricultural commodities can be significant. The field survey was conducted in February and March 2000, during the dry season; hence, some of the information collected may not accurately reflect what happens during other periods of the year.

- It is equally important to note that by focusing on the marketing chains for certain supply locations, the market outlet approach may not offer an insight into product flows and the structure, conduct and performance of marketing systems in other parts

of the country. The study does not capture the marketing chains for *fufu* flour, a dried and non-traditional form of the product which is being processed mainly outside Ogun State, and exported overseas or sold in such large urban centres as Ibadan and Lagos.

For these reasons, this report should be regarded as a characterisation of the wet *fufu* paste and ready-to-eat *fufu* marketing systems in Southwest Nigeria at a particular moment in time, revealing key structural features of those same systems. As noted earlier, a rapid appraisal of dried *fufu* markets in this part of the country and a study on consumer acceptability for this product is ongoing and will complement the current study. Other gaps in the analysis are identified throughout the report and in the concluding section, and these will be subject to further enquiry should the need arise.

1.3.2 Data sources

A range of data sources was used to produce this study. Formal questionnaires and semi-structured informal interviews with key informants provided the principal data and information for the study. Data from the baseline survey conducted to inform the different areas of research within the current project were also used. Relevant publications and studies were consulted to support and complement the discussion. Unfortunately, so far no official statistics on *fufu* processing, marketing and consumption have been produced, making it difficult to quantify certain variables through time and posing some limitations on the analysis.

1.3.3 Methods of data collection

Several rapid market appraisal methodologies were employed together with a formal questionnaire. The use of similar methods has been described by Bockett (1997) and used in the assessment of post-harvest needs in non-grain starch staple crop systems in Ghana (Kleih *et al*., 1994) as well as in the study of urban demand/needs for non-grain starch staple crops in Dar-es-Salaam, Tanzania (Ndunguru *et al*., 1994).

Hence, a general picture of *fufu* markets and marketing systems was obtained using individual and group interviews with representatives at different stages in the marketing chain. Interviewees and key informants included processors, primary market assemblers, urban wholesale and retail traders, transporters, food vendors and restaurant owners. A cross-section of respondents was identified to best address the questions posed by the study. Emphasis was placed on ensuring that the information collected was consistent and valid, namely through triangulation. In other words, information obtained from one respondent needed to be confirmed by two or more other respondents.

A total of 70 respondents were selected to represent different types of market participants and different points in the marketing chain. Of these, 30 were from the five study processing locations, 20 from six sub-urban areas which play an important role in the *fufu* marketing chain, and 20 from three large urban markets.

1.3.4 Selection of study locations

The study is centred on a sample of five processing locations in Ogun State (Ereji, Ilaro, Ilewo-Orile, Ode-Remo and Soso). These locations were chosen because they capture a variety of situations in terms of access to urban and rural markets, importance of cassava processing activities, prominence of *fufu* processing as a source of livelihoods, and type of *fufu* produced. Ereji, Ilaro and Ode-Remo specialise in wet *fufu* paste processing whereas Ilewo-Orile and Soso sell *fufu* in its ready-to-eat form. Ilaro and Ode-Remo are medium-sized rural towns while all the other three locations are small villages.

Five other small to medium towns (Ifo, Ikorodu, Ogijo, Sagamu and Omi-Adio) were also visited during fieldwork because of their role as consumption centres and/or transit points in the marketing chain for *fufu* processed in the above study locations. Finally, three large urban centres (Abeokuta, Ibadan and Lagos) were included in the sample of locations covered by the study due to their importance as final destination markets.

A description of these different locations, their role in the marketing chain, the type of market players found in each, and how they interact with each other is presented in Appendix 2.

CHAPTER TWO

FUFU MARKETING SYSTEMS IN SOUTHWEST NIGERIA

2.1 Introduction

The five, quite diverse case study locations offer a general picture of the different *fufu* marketing channels, functions and characteristics currently operating in Ogun State. During fieldwork, information and data were also collected from processors and other market operators outside Ogun State, namely in Ibadan[1], Lagos and Omi-Adio[2]. Hence, even though the characterisation of *fufu* marketing systems presented below is particularly relevant to Ogun State, to a certain extent it also applies to other parts of Southwest Nigeria.

2.2 Key marketing functions

2.2.1 Storage

Storage performs a critical function in marketing systems since it allows for the period of availability of a certain product to be extended. Storage enables producers and traders to postpone sales in order to take advantage of better prices. In addition, it tends to smooth variations in product availability due to seasonal or other factors, increasing the regularity of consumption throughout the year and reducing price instability. Finally, the convenience of a product to consumers is enhanced by the fact that storage permits larger but less frequent purchases, thus reducing the number of trips to the market and the time and transaction costs involved.

Unfortunately, storage possibilities are quite limited in the case of *fufu*. Having a shelf life up to nine days (see table 2.1), processors, marketing agents and consumers can only store the product for a few days at most. By the time it reaches the consumer, *fufu* may have a remaining shelf life of one or two days only.

Several precautions are taken by different market operators to minimise the extent of product deterioration during the time it is stored. For example, while the wet paste is awaiting further processing or packaging into bags, it is often kept in plastic containers covered with water, which is changed daily. Special care is taken to avoid product contamination with flies, dirt oil and other contaminants. Refrigeration is also widely adopted as a way of preserving the product. In addition, ready-to-eat *fufu* balls are frequently kept in plastic warmers. In the case of the ready-to-eat product, however, thorough cooking appears to be the most effective and widespread precaution taken to

[1] Ibadan is the capital of Oyo State and the most populous city of Nigeria.

[2] Omi-Adio, in Oyo State, is a market town located on the Abeokuta – Ibadan highway. The town features a small group of ready-to-eat *fufu* processors that either sell to buyers (traders and restaurant owners) from many parts of Ibadan or take their wares to Apata-Ganga and Oritamerin markets in Ibadan.

prolong its shelf life. When properly cooked, ready-to-eat *fufu* may last for up to nine days.

Table 2.1 – Shelf life of *fufu* and methods used to extend the shelf life

Location	Shelf life as described by respondents (days)	Methods believed to extend shelf life
Wet *fufu* paste		
Ode-Remo	2 – 4	- Plastic containers covered with polythene - Avoid contact with flies and dirt - Refrigeration
Ereji	1 – 4	- Drain water properly - Use airtight nylon packs - Prevent contamination by flies
Ilaro	1 – 4	- Drain water properly - Use airtight nylon packs - Prevent contamination by flies
Ifo	1 – 9	- Use airtight nylon packs - Remix and Repack - Prevent contamination by flies
Ready-to-eat *fufu*		
Soso	1 – 7	- Refrigeration - Thorough cooking
Omi-Adio	1 – 9	- Sprinkle with water in which alum has been dissolved - Thorough cooking - Keep in plastic warmer - Protect from rats, salt and oils
Ilewo-Orile	5 – 6	- Thorough cooking - Refrigeration
Sagamu	1 – 9	- Thorough cooking - Refrigeration
Ogijo	1 – 4	- Store in plastic warmers
Lagos	3 –7	- For wet *fufu* paste, place in plastic bowls, cover with water and change water daily - For ready-to-eat: Thorough cooking - Refrigeration - Store in plastic warmers
Ibadan	7 – 14	- Use strong polythene bags - Proper cooking - Keep warm

The limited storage possibilities for both the wet paste and the ready-to-eat *fufu* have obvious negative demand implications (Nwajiuba, 1995). The impossibility of storing *fufu* over a reasonable period of time forces traders and consumers to be conservative in their purchases to avoid product spoilage[3], increases transaction costs due to the

[3] Adegeye (1999) applies a very similar analysis to cassava roots, which are also extremely perishable once harvested.

frequency of purchases, and limits product availability during the dry season, a period of reduced fresh cassava supplies. In addition, processors and traders are also left with limited marketing options in terms of the timing of sales due to perishability. As elaborated in section 2.3, processors need to quickly dispose of their produce, and this may serve to explain why they enter into sub-optimal marketing arrangements with traders.

2.2.2 Packaging

Packaging of agricultural commodities serves a variety of purposes. In the case of *fufu,* it facilitates handling and transportation; reduces adulteration and contamination; and extends the shelf life of the product.

Clear differences in packaging exist between the different forms of *fufu*:

- In one of the locations, Ereji, the wet paste is normally packed in air and watertight nylon and sealed in a coarser outer bag, a practice that is believed to help preserving the wet paste. In the other locations, the inner polyethylene bag is dispensed with. In Ode-Remo and Ereji each bag contains approximately 60 kg of wet paste while in Ilaro they weigh about 25 kg.

- Ready-to-eat *fufu* balls are wrapped in *gbogogi* leaves or packed into polyethylene sheets. Each wrap weighs on average 1.2 kg. Groups of about 40 wraps are then arranged in baskets lined with cloth for sale to traders. The leaves are used in Soso only. Processors insist that the specific type of wrap used by them is the best one for extending the shelf life of the product; however, most traders and consumers do not seem to show preference for any particular type of packaging.

2.2.3 Transportation

Transportation is a critical activity in any agricultural commodity system, linking rural areas with more distant, often urban, markets. The degree of efficiency of transport systems is, therefore, a major determinant of market access, having a critical influence on producer and consumer prices. Given the normally long distances between scattered farms or points of processing and final destination markets, it is not surprising that transport costs generally account for a considerable share of total marketing costs.

Fufu is transported by different means by various categories of market participants at multiple stages in the marketing chain. Vehicles range in size from small vans to big trucks. Panel and pick-up trucks are the most commonly used means to transport *fufu* from the point of processing to the distribution or consumption centres (see table 2.2). The use of lorries is more widespread in assembly and urban centres, where larger product quantities are traded.

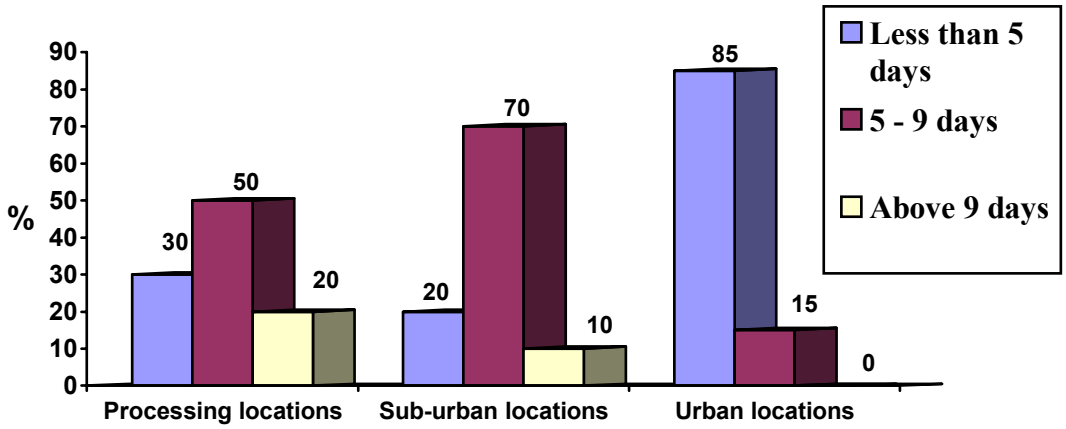
Table 2.2 – Type of vehicles used to transport *fufu* from processing locations.

	Head loading	Panel Van	Pick-up van	Cars/ Minibus	Truck/ Lorry	No response
Processing locations (N=30)	1	6	19	0	2	2

Southwest Nigeria is heavily populated and relatively urbanised, with a reasonably dense road network. As a result, unavailability of transport constitutes a significant problem only for small locations that are distant from the main transport routes and served by poorly maintained feeder roads. Essentially, the availability of transport in processing areas is a function of their proximity to sub-urban and urban centres, the state of access roads, the size of population served by transport services, and the level of economic transactions taking place with other locations.

Indeed, in light of the need to sell the *fufu* shortly after being processed, commercial production of this product would not be taking place in the study areas to the extent observed if transport problems were a major impediment to marketing. The regularity of transport in the study locations could not be more revealing. For 30 percent of respondents in the study processing locations, *fufu* is transported at intervals of less than five days and for 50 percent the periodicity of transportation is less than nine days (see chart 2.1). As expected, *fufu* transportation takes place at shorter intervals of time in the sub-urban and urban locations, with as high as 85 percent of all traders interviewed in urban centres declaring that *fufu* is brought in at cycles of less than five days. This is a clear indication that short cycles of supply-consumption-supply characterise *fufu* trading, pointing to product perishability as a key determinant of *fufu* marketing systems.

Chart 2.1 Frequency of *fufu* transportation (percentage)



Transport costs vary by location according to distance to markets, the state of roads, competition in transport service provision and the form of *fufu*. Differences in average transport costs between Ode Remo and Ereji (see table 2.3) are illustrative of the impact of road conditions and access to transport services on the fees charged. Whereas in Ode-Remo transport accounts for 10 percent of the wholesale price in Lagos, this proportion is 15 percent for Ereji, even though in this case distance to Lagos is almost half. At the same time, differences between locations with respect to transport costs per km show that wet paste is less expensive to transport as it is normally carried in larger quantities and is

more easily handled than ready-to-eat *fufu*. Consequently, it is possible to sell the wet paste to more distant markets on a regular basis.

Table 2.3 – Transportation costs (N) for different locations.

Location	Transport cost N	Average transport cost (1 kg) per km N
Wet paste (60 kg)		
Ode Remo – Lagos (50 km)	80.00	0.03
Ereji – Lagos (30 km)	124.00	0.07
Ilaro – Ifo (24 km)	24.00	0.02
Ifo – Lagos (25 km)	62.00	0.04
Ready-to-eat (48 kg)		
Soso – Sagamu/Ogijo (12 km)	38.00	0.07
Ilewo-Orile – Abeokuta (13 km)	30.00	0.05
Omi-Adio – Ibadan (10 km)	27.50	0.06

It is noteworthy that the data gathered during the fieldwork does not allow for any clear conclusions regarding seasonal patterns in transport availability and cost. It is reasonable to assume however, that for localities where access conditions are significantly affected by heavy rains, transport is less available and more expensive during the wet season.

2.3 Marketing arrangements

In most processing sites outside important consumption centres, wet paste and ready-to-eat *fufu* processors supply traders with pre-ordered quantities of the product, either to be collected at the point of processing or delivered to the buyer (see table 2.4). Ilaro is in this respect an exceptional case in our sample of processing locations. Pre-arranged sales are not common since processors have access to a major *fufu* assembly market (Ifo), where the product can be sold to a large number of market traders on a regular basis.

An interesting feature of marketing arrangements in some locations, for example Soso, is that transporters are often responsible for collecting payment from traders. More importantly, it was found that many processors sell *fufu* on credit. This is either an indication that traders face some financial constraints, being unable to make cash and carry purchases on a regular basis, or that farmers have a weak bargaining position. Many are able to sell on credit because they also purchase fresh cassava on credit from other farmers in the vicinity and/or cassava traders. Hence, it is the farmer who is often in the most vulnerable position. However, it is important to acknowledge that the distinction between farmer and processor is not always clear cut, since a significant proportion of the total fresh cassava used for processing activities often comes from the processor's or her husband's farm.

Table 2.4 – Percentage of pre-order arrangements between buyers and sellers

Chain	Pre-arranged orders (%)
Wet paste	
Ode-Remo – Lagos	66.7
Ereji – Lagos	71.4
Ilaro – Ifo	12.5
Ifo – Lagos	55.6
Ready-to-eat	
Soso – Ogijo/Ikorodu	100.0
Omi-Adio – Ibadan	83.3

Clearly, trust is a key element driving marketing arrangements, but little information was gathered on how these came to being. Links between processors and cassava farmers or traders in their community seem to be driven in part by kinship, friendship or neighbourhood relations. Reciprocity must certainly play an important role in these transactions. However, the extent to which similar dynamics influence and shape networks between processors and outside traders or transporters is unknown. This is an interesting area for future research, and one the current project will look at, as it may provide useful insights into entry barriers to *fufu* processing and marketing.

The importance of pre-arranged transactions in *fufu* marketing differentiates this from other less perishable cassava and food staple products. In fact, such arrangements are a response to the need to minimise inventory accumulation and product losses along the market chain. Pre-arranged sales provide processors with an assured and steady market for their production, which is an essential prerequisite if they are to engage in *fufu* processing activities. Concurrently, pre-arranged purchases enable traders not only to have access to regular supplies of the product but also to manage purchased quantities in accordance with the market's absorptive capacity. In addition, the favourable terms of payment often observed in such transactions enhance the capacity of traders to make frequent *fufu* purchases.

Finally, it is interesting to note that group marketing does not seem to be taking place in the visited areas of Southwest Nigeria. No processors were seen to join efforts in marketing their production. Social dynamics aside, the rationale for joint marketing seems to be largely absent in the case of a commodity like *fufu*. First of all, processors in all study locations seem to enjoy relatively good market access. They are not far from the main destination markets; are located along or close to primary transport routes; seem to have regular, although sometimes expensive, access to all-season vehicle transport services; and most often benefit from frequent visits by, or established contacts with, traders. Secondly, market intermediaries typically purchase modest volumes at each transaction in order to avoid product spoilage, thus being able to satisfy their requirements from one or a few processors at most. Hence, from a processor's point of view, there seems to be no need to bulk up production as a means to improve her/his market access and/or bargaining position.

2.4 Marketed quantities

The data collected during the fieldwork are not sufficiently detailed to allow for an estimation of *fufu* quantities leaving each case study location, nor are we able to draw clear conclusions regarding the seasonal pattern of sales. *Fufu* processing is carried out all year round, although the volume of output varies according to season. The dry season (March to November) is more conducive to *fufu* processing as heat facilitates fermentation, shortening the processing time. Cassava is also more available. However, because soils are more compact and harvesting more labour intensive during the dry season, the price of cassava rises. The cost of water during this season is another constraint. Notwithstanding such limitations, the information available (see table 2.5) provides some important evidence concerning marketed volumes and differences in size between wet paste and ready-to-eat *fufu* processors.

Table 2.5 – Sales volumes for different locations per processor per cycle (6/7 days).

Location	Dry season Kg	Rainy season Kg
Wet paste		
Ereji	120-780	120-600
Ilaro	500-1,500	500-1,500
Ode-Remo	600-2,100	600-2,700
Ready-to-eat		
Ilewo-Orile	85-150	85-150
Soso	120-360	120-360
Omi Adio	18-125	18-125

Despite variations in size and the degree of commercialisation of *fufu* processing within and between locations, it is possible to conclude that this activity is generally undertaken on a relatively small scale. Yet, as illustrated by the cases of Ode-Remo and Ilaro, the aggregate volumes leaving each processing location can be quite significant in view of the large number of people involved in *fufu* processing. In other words, even though this is an activity characterised by a relatively incipient level of commercialisation in comparison to *gari* and *lafun* processing, large quantities of *fufu* enter the marketing chain. A visit to the Ifo *fufu* market served to confirm this perception.

The larger processors were found in Ode-Remo. During the wet season some medium-sized operators in this location sell as much as 2.7 tons of *fufu* paste per cycle (see table 2.5). One month may comprise up to three or four processing cycles, depending on the processors' degree of specialisation on the activity and the resources available to her or him. Whilst for some this may be a permanent activity, for others *fufu* processing is essentially a complement to other equally or more important sources of income, namely farming.

Fufu processing is by and large a small-scale activity, and more so in the case of ready-to-eat *fufu*. This is due in part to the time and effort involved in the cooking of *fufu* balls,

which poses a considerable constraint on the amounts produced and therefore marketed by processors. Higher handling and transport costs are additional reasons for the comparatively smaller product volumes being channelled into the market by ready-to-eat *fufu* processors.

Several factors interact to prevent significant scaling-up of individual *fufu* processing and marketing activities:

- First, scaling-up requires financial resources, namely for the purchase of larger quantities of cassava roots, the hiring of additional labour and the acquisition of improved equipment. The financial resources needed to expand *fufu* processing activities in a significant manner appear to be beyond the capacity of most processors, measured by their personal savings and position in terms of access to credit.

- Second, even if financial resources were made available through credit, it would still be difficult and costly to procure large amounts of fresh cassava, a bulky root normally produced by dispersed smallholder farmers (Adegeye, 1999; Ekpere *et al*., 1986).

- Third, a sustained expansion of the size of individual processing and marketing operations requires management and business skills that most processors do not seem to possess in view of low levels of formal education (Odubote, 2000; Adebayo, 2001).

- Fourth, while the scaling-up of processing and marketing activities is generally associated with the adoption of mechanised equipment, these technologies have not yet been effectively developed for *fufu*, especially in what concerns such time-consuming and labour intensive operations as peeling and sieving (Olusegun, 2000).

- Finally, because storage is not a feasible option, there is a real danger that significant increases in processed volumes would be accompanied by high rates of product spoilage, leading to considerable and difficult to sustain financial losses.

Raw material supply constraints and product perishability become particularly stringent factors when many processors within and across locations decide to scale-up their activities simultaneously. On the one hand, local farmers would have difficulties in coping in a cost-effective manner with new and sudden demands for fresh roots, especially considering the varietal and age requirements for roots entering the *fufu* processing system. The case of Ode-Remo, where an expansion of *fufu* processing over the past few years has led to rising raw material prices, forcing processors to procure fresh cassava from increasingly distant areas, is in this respect quite illustrative. On the other hand, at present the market does not seem capable to absorb significant additional quantities of *fufu* supplies, largely due to the perishability element and the ensuing storage problems.

2.5 Market channels and product flows

Market-oriented *fufu* processing is undertaken in both rural and urban contexts. Primary processing, which entails transforming fresh roots into a wet paste, essentially takes place in villages or small towns located within important cassava production areas. Secondary processing on a commercial scale, consisting of cooking the ready-to-eat *fufu* balls from the wet paste for sale in the market, gains importance as distances to medium and large consumption centres become shorter. Ready-to-eat *fufu* processing and marketing is also an important source of livelihood for many people in rural towns and sub-urban and urban areas, including small canteen owners and food vendors.

Two sorts of factors, both related to the economics of transport, seem to dictate to a large extent the location patterns observed in *fufu* processing activities:

- The first relates to the fact that fresh cassava roots are extremely perishable once harvested and very bulky to transport, and as a result they are usually processed close to production areas, often by cassava farmers themselves, who thus have access to expanded income opportunities (Nwajiuba, 1995). In other words, it would not be economical to carry out the bulk of primary processing activities at urban centres that are relatively distant from the main sources of raw material.

- At the same time, because the wet paste is not as difficult and costly to handle and transport as the ready-to-eat product, it is usually processed further away from major consumption centres. Indeed, whereas market-oriented wet paste processing has been found to take place some 50 or 60 km from the main destination market, ready-to-eat *fufu* processors tend to sell their production in the vicinity or to supply close by sub-urban and urban areas, usually not more than 15 or 20 km distance.

Being a relatively low-value, highly perishable and costly to transport commodity (Nwajiuba, 1995), it is not economical to carry *fufu* over very long distances. Not surprisingly, the *fufu* consumed in such a large market as Ibadan comes from nearby locations such as Omi Adio and not from the neighbouring Ogun State, which is mainly supplying wet paste to Lagos. In turn, most ready-to-eat *fufu* is consumed within Ogun State itself, although some of it makes its way to Lagos.

There are two predominant market channels for the wet paste: a direct one, linking the point of processing to wholesalers in Lagos, and an indirect one, whereby the wet paste is first assembled in a primary market before being channelled to Lagos. When buying directly from processors, wholesalers may either come to the processing location or wait for the product to come to them. They then sell the wet paste to a wide range of retailers, who are often involved in secondary processing, selling the ready-to-eat product to consumers. Retailers include street vendors, canteens, restaurants and hotels. Consumers also buy wet paste for home processing directly from wet paste wholesalers and retailers.

Because of the more localised nature of ready-to-eat *fufu* marketing chains and the comparatively smaller quantities of the product leaving processing areas, practically no primary assemblage takes place. The product normally moves from the processor to the

retailer, and then from the latter to the consumer. Some ready-to-eat *fufu* traders act both as retailers and wholesalers, selling to consumers as well as to food vendors and institutional clients.

The marketing chains for *fufu*, whether in its wet paste or ready-to-eat form, present some interesting features that are worth noting:

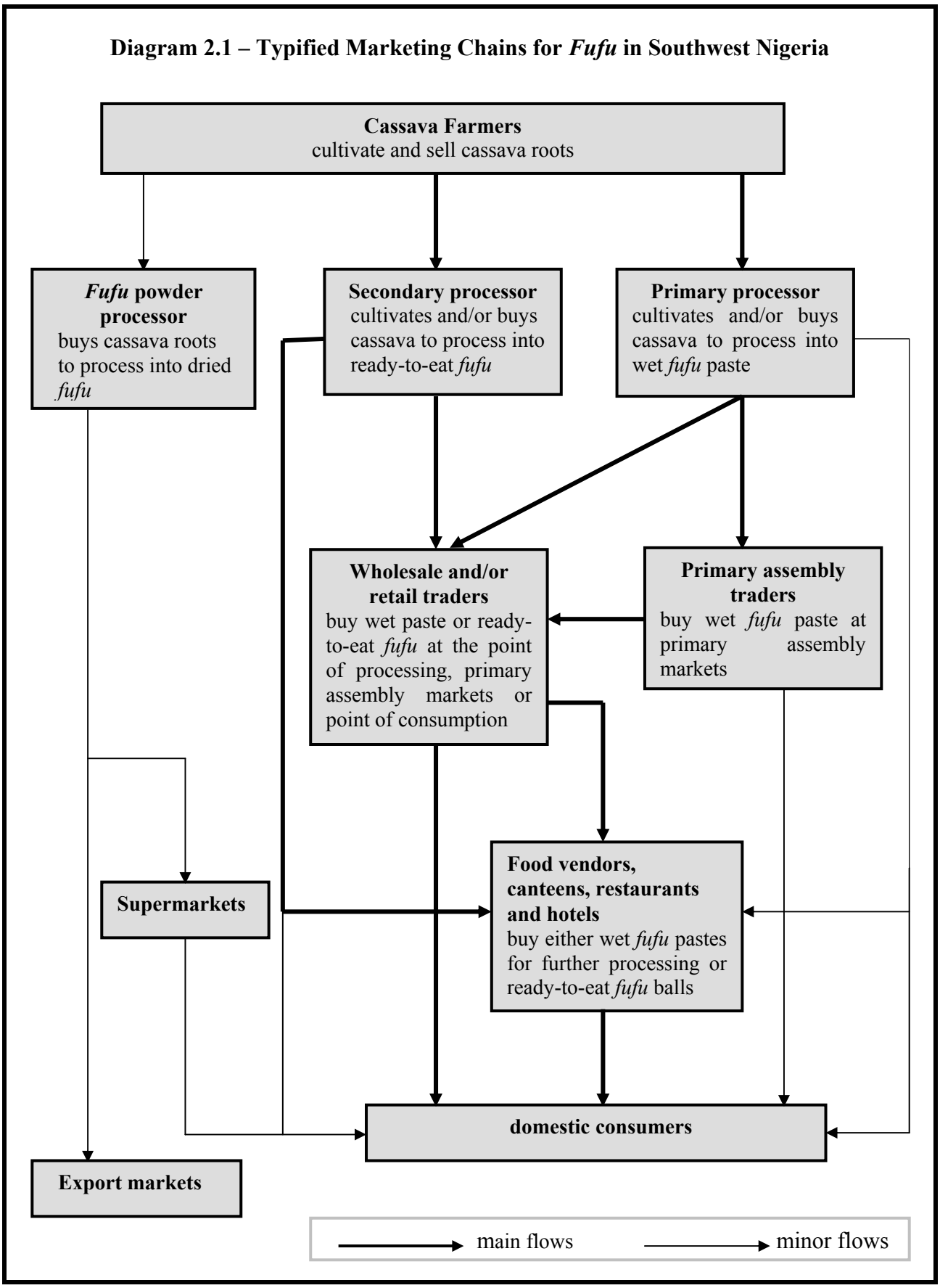
- First, the product changes few hands along the chain. The opposite would be surprising given the short shelf life of *fufu* and the relatively short distances from the point of processing to destination markets.

- Second, processors sell mainly to wholesalers and are rarely in direct contact with the consumer in the final destination markets. This is an indication that there is a fair degree of specialisation amongst *fufu* processors. More specifically, processed volumes are such that processors have to rely essentially on intermediaries to market their production. The alternative of selling directly to the consumer would not only be too time consuming but it would also impose too many limits on the quantities of the product that could be disposed of given the slow pace of direct sales to consumers.

- Third, commercial processing of *fufu* in the study areas is common and largely driven by proximity to large urban centres, by far the main market outlets. This somewhat contradicts previous findings from other studies (Henry *et al.*, 1999; Nweke, 1994), which suggest that most *fufu* processed in rural areas is for home consumption. While this conclusion may adequately describe the situation in remote rural areas, it certainly does not apply to most of our case study locations, where *fufu* processing is an important income generating activity and the bulk of production is channelled to the market.

- Finally, no exports to neighbouring countries or overseas markets are taking place. Exports are not a viable option in the case of a highly perishable, low-value commodities. The same cannot be said of dried *fufu*, which has a much longer shelf life. Some medium-scale manufacturers in cities such as Lagos and Ibadan are processing dried forms of *fufu* for export to overseas markets, apart from also selling to local supermarkets.

Diagram 2.1 – Typified Marketing Chains for *Fufu* in Southwest Nigeria



CHAPTER THREE

PRICES AND MARGINS

3.1 Introduction

During fieldwork, data on processor, wholesale and retail prices were collected. This data are used here to calculate processor and trader margins. Margin analysis is a useful tool to assess the efficiency of marketing systems, especially when complemented with information on the different marketing costs. More specifically, it often helps the analyst to identify potential problems at the marketing level and areas where interventions could yield significant benefits to producers, traders and/or consumers.

The analysis below is based on prices observed during fieldwork (February/March 2000) and therefore does not accurately reflect seasonal and other time trends. Nevertheless, gathered data provide useful insights into the existing degree of market competition and the capacity of processors to intervene at different points in the marketing chain.

3.2 Wet *fufu* paste

The analysis in this section is restricted to the point-of-processing and wholesale stages since not enough data on prices, marketing and processing costs further up the chain were collected to allow for rigorous calculation of wet *fufu* paste retail margins and profits. This is not a major shortcoming given that we are mainly concerned with the degree to which processors are able to capture a significant share of the wholesale price. Clearly, the capacity and interest of wet paste processors to intervene at the retail stage, to secure an increasing share of the consumer price, is rather limited and hence of little relevance to the analysis.

As shown in table 3.1, significant variations in point-of-processing prices and margins were found in the three study locations that produce wet *fufu* paste. Processors at Ode-Remo command much higher prices than processors at the two other locations, and unlike the latter they are able to capture a very significant share of the wholesale price. Processors at Ilaro seem to be the most disadvantaged, both in terms of the point-of-processing prices obtained and their share of the wholesale price in Lagos.

It was not possible to determine the extent to which differences in product quality affect the prices received by processors. Grades and standards are not applied in *fufu* marketing in the study areas. Moreover, evidence of significant price differentiation according to the quality of the wet paste sold was found neither at Ifo market nor at any of the other study locations. However, it could well be that certain locations, which through the years have developed a reputation for delivering wet paste of above average quality, are rewarded by increased demand and improved prices compared to places which do not enjoy a similar position. This is an issue that deserves further investigation.

Table 3.1 – Market margins for wet paste.

	Ode-Remo 60 kg	Ereji 60 kg	Ilaro 60 kg[4]
(1) Point-of-processing price	620	350	284
(2) Transport cost	80	124	24
(3) Point-of-wholesale purchasing price	700	474	308
(4) Wholesaler selling price	800	800	350
(5) Wholesale margin[5] (%) (4)–(3)/(4)	13%	41%	12%
(6) Processor share (%) (1)/(4)	71%	44%	81%
(7) Transport cost			62
(8) Point-of-secondary wholesale purchasing price			412
(9) Secondary wholesaler selling price			800
(10) Secondary wholesaler margin[6] (%) (9)–(8)/(9)			49%
(11) Processor share (%) (1)/(9)			36%

Overall, three factors seem to explain most of the price differences between the three wet paste processing locations under analysis:

- Control of transport to the wholesale point. This appears to be the major influence behind point-of-processing prices and the ability of processors to appropriate a significant share of the wholesale price. At Ode-Remo and Ilaro processors arrange the transportation and sale of their products in Lagos and Ifo, respectively. In both cases, a relatively high share of the wholesale price at these two destinations accrues to them. In contrast, marketers from Lagos come to Ereji and Ifo to buy wet *fufu* paste, thus enjoying significant marketing margins.

- Number of intermediary stages. It is true that the presence of primary assembly traders implies improved access to distant markets (Nweke, 1996; Ugwu, 1996). Without these middlemen, many processors would face greater difficulties in reaching such markets. Hence, primary assembly markets act as a major incentive to commercial *fufu* processing. At the same time, however, the higher the number of market intermediary stages the higher the marketing costs. Assemblage operations add costs to marketing and middlemen have to be rewarded for performing such activities. These marketing costs and profits in effect depress point-of-processing prices compared to a situation in which processors sell directly to traders in final destination markets. The situation at Ilaro illustrates this point quite clearly. Despite enjoying lower transport costs, processors at this locality command lower prices and capture a lower share of the final destination market wholesale price than their

[4] The wet paste from Ilaro is packed in 25 kg bags. Quantities and prices were converted to 60 kg to allow for a comparison with other processing locations, where bags weigh approximately 60 kg.
[5] Traders' market margins exclude transport costs but include other marketing costs such as salaries, market fees or rent, interest rates on loans and product spoilage.
[6] Traders' market margins exclude transport costs but include other marketing costs.

counterparts at Ereji, mainly because unlike the latter they are not selling directly to wholesalers from Lagos.

- Transport costs. Transport costs from Ereji to Lagos are significantly higher than for the other two wet paste case study locations, a factor that contributes to low point-of-processing prices at that particular locality.

The ability of processors to control the transport up to the wholesale point is particularly important because of the high returns associated with this service. As importantly, this gives them the opportunity to exploit the urban market to its fullest in that it allows processors to have easier access to price information and market conditions at the wholesale level and to have contact with a wider range of potential customers, leading to a stronger bargaining position. Processors who obtain market information mainly from point-of-processing buyers are at a disadvantage, as the latter have no incentive to share market information. It is difficult to determine which critical factors allow some processors to control transport up to the final destination market. Access to transport, financial capacity, and social networks may offer part of the explanation. It is particularly striking that processors from Ilaro are able to control distribution up to Ifo but not further. This is an area that merits further investigation.

Margins enjoyed by assembly traders at Ifo market are quite moderate. This not only reflects the fact that market traders have the product brought to them but it is also a consequence of the large volumes sold and the high degree of competition at the market, which accommodates many permanent *fufu* traders. Interestingly, market trader margins closely mirror their profit margins since transport, the main marketing cost element, has already been deducted in the above calculations. Apart from market fees paid to local authorities and membership contributions to the market association, which are relatively insignificant, market traders do not incur many other additional marketing costs. Unloading and loading of trucks and lorries is performed by the transporters themselves, and while re-packing does take place at Ifo market, the bags belong to either sellers or customers.

The same could not be said of traders at Lagos. High marketing margins seem to reflect high profit margins, an indication that these traders are able to exploit their relatively strong market position. First, they are near to the final end of the market chain, and therefore are well informed about market prices and alternative sources of supply and well positioned to anticipate market trends and explore profit opportunities. Second, as illustrated by the Ereji case, traders are aware of processors' need for an assured and regular market outlet for their production, and their reliance on *fufu* sales as a major source of income. Finally, as shown by the example of Ifo, they can take advantage of intense competition at the point of supply coupled with the suppliers' need to quickly dispose of their product.

It is important to realise, however, that traders from Lagos may incur some marketing costs that need to be accounted for. For example, some product losses due to spoilage may occur as a result of the short shelf life of *fufu*. Also, market fees or shop leasing costs may need to be paid. In addition, traders may employ one or more workers to

assist them. Finally, they may have to repay credit obtained from formal or informal sources.

3.3 Ready-to-eat *fufu*

The unit price per wrap of ready-to-eat *fufu* at Soso is N4, but the same unit is sold for approximately N10 at Ogijo and Ikorodu. This suggests that marketers at these locations enjoy very high retailer margins, even after accounting for transport and despite the fact that they often wait for the product to be delivered to them and frequently buy on credit. No detailed inquiry into the degree of competition at the retail level was undertaken, but it appears high given the large number of people involved in the business. Similarly, the marketing costs other than transport faced by retailers were not quantified. Hence, it is unclear why urban-based intermediaries are enjoying such high margins. Part of the reason may lie in the fact that relatively low volumes per trader are marketed, meaning that high margins are applied by them in order to secure a satisfactory minimal income that justifies their involvement in the business.

The case of Ilewo-Orile is quite interesting in that, on the one hand, very small volumes are being produced and marketed, whilst on the other hand, very high margins are being charged by processors who occasionally sell at the Lafenwa market (Abeokuta) or the streets of Abeokuta. One evident question that comes to mind is: why are female processors not selling more at Abeokuta given that they enjoy very high profit margins by so doing? Essentially, retail selling is a time-consuming activity, requiring travel to Abeokuta and being away from home for a whole day, thus having a very high opportunity cost. In addition, each processor can sell only limited product supplies during a particular market day.

Table 3.2 Market margins for ready-to-eat *fufu*

		Ilewo-Orile 1.2 kg	**Soso 1.2 kg**
(1) Point-of-processing price		5	4
(2) Transport cost		0.6	0.8
(3) Point-of-retail purchasing price			4.8
(4) Retailer selling price		10	10
(5) Retailer margin[7]	(4) – (3) / (4)		60%
(6) Processor share (%)	(1) / (4)	100%	40%

[7] Traders' market margins exclude transport costs but include other marketing costs.

CHAPTER FOUR

FUFU MARKET DYNAMICS

4.1 Introduction

An attempt was made during this study to understand market dynamics and trends. In the absence of comparative historical data, market operators in each visited location were asked about their perceptions with regards to trends in prices, *fufu* demand and number of market participants over the past three years. In order to examine market flows towards the northern part of Ogun State, processors and marketing agents at Omi Adio and Ibadan were also asked to provide their views on these different market aspects.

4.2 Trends in prices

As shown in table 4.1, respondents in the studied processing locations appear undecided as to the direction of change in *fufu* prices over the past three years. While 37 percent claim that prices have increased, 30 percent respectively view them as stable or declining. In the sub-urban locations however, close to two-thirds of respondents testify to rising prices, whilst 25 percent state that prices have declined. The majority of respondents in the urban locations (80 percent) pose that prices have either increased or remained stable.

Table 4.1 - Perception of trends in *Fufu* prices at different categories of locations

Location	Increase %	Same %	Decrease %	No response %
Processing locations (N=30)	37	30	30	3
Sub-urban locations (N=20)	60	15	25	0
Urban locations (N=20)	35	45	15	5
All 70 respondents	43	30	24	3

Because perceptions about price trends differ so widely both within and across different types of locations, it is difficult to arrive at clear conclusions based solely on the impressions of market participants. This is not surprising. Indeed, in a high inflation economy such as Nigeria, economic agents often have difficulties in discerning real price trends. Moreover, when asked to express their views, respondents may be influenced by their position in the *fufu* market chain. It is likely that processors (sellers) will have a tendency to understate prices and price trends whereas traders (buyers) will tend to exaggerate them. This is what the rows for the processing locations (where processors were interviewed) and for the sub-urban and urban locations (where mostly traders were contacted) seem to suggest.

Finally, it may well be that different locations or different market agents within the same location are experiencing diverging price trends. Hence, whilst more than one-third of

the processors interviewed in the study locations claimed to have benefited from improved prices, one-quarter shared the opposite view. In light of this, further research is needed to identify the factors that may be behind differing experiences within and between locations.

4.3 Trends in demand

Market participant views regarding demand trends also do not allow us to draw very clear conclusions on market dynamics (see table 4.2). Still, it may be safe to assume that demand for *fufu* has not declined over the past few years. Of all the respondents, only 20 percent seem to think that this has happened. In contrast, 40 percent of the respondents in the urban locations maintain that there has been an increase in *fufu* demand. It is noteworthy that being nearer to the final end of the market chain, urban respondents have access to information from several different sources and are therefore likely to be better informed than other respondents.

Table 4.2 – Perceptions of demand trends at different categories of location

Location	Increase %	Same %	Decrease %	No response %
Processing locations (N=30)	20	50	17	13
Sub-urban locations (N=20)	35	35	15	15
Urban locations (N=20)	40	35	25	0
All 70 respondents	30	41	19	10

4.4 Trends in the number of market participants

Finally, it appears that the number of *fufu* processors and traders has remained roughly stable over the past three years and may even have increased (see table 4.3). Unlike the two previous dimensions under analysis, there is a certain level of agreement across different categories of respondents over this issue. Almost 60 percent of all respondents share the view that the number of market participants has not changed significantly. Only an insignificant proportion is of the opposite opinion. For half of the urban respondents, however, the total number of market participants has risen. This information may signal an increase in the importance of *fufu* trading as a livelihood activity in urban centres. Interestingly, more than one-quarter of respondents in the point-of-processing locations have no opinion on the matter, which may reflect their limited perception of what is occurring beyond neighbouring areas.

Table 4.3 – Perceptions of trends in the number of market participants at different categories of location

Location	Increase %	Same %	Decrease %	No response %
Processing locations (N=30)	17	53	3	27
Sub-urban locations (N=20)	5	75	5	15
Urban locations (N=20)	50	50	0	0
All 70 respondents	24	58	2	16

4.5 Conclusions

Although the views expressed by a wide range of market participants at different locations do not point in a clear direction, they allow us to conclude the following:

- First, the market for *fufu* as a whole has not contracted over the recent past and may well have expanded, albeit not in a very significant manner.

- Second, in most cases, prices at different levels in the marketing chain do not seem to have followed a declining trend, and according to a fair proportion of respondents they have actually increased. Therefore, the evidence does not suggest a general and widespread decline in prices, but it also does not indicate dramatic increases. This is in line with the previous conclusion regarding demand trends.

- Finally, contradictory perceptions about market trends indicate that different locations and market participants may be facing variable experiences.

CHAPTER FIVE

CONSTRAINTS TO *FUFU* MARKETING IN SOUTHWEST NIGERIA

5.1 Introduction

The analysis so far indicates the potential presence of several constraints to *fufu* marketing in Southwest Nigeria. Some of these constraints are discussed in greater detail in this chapter. In this context, attempts were made during fieldwork to engage *fufu* processors and marketing agents in the identification of constraints which they perceive as major limiting factors to *fufu* marketing.

Although the study focuses specifically on marketing aspects, respondents at the study locations were also asked to indicate the main problems faced during processing. The relevance of this is twofold. On the one hand, constraints to processing are important from a marketing perspective since they place certain limits on the amount of *fufu* that can be produced and, hence, sold in the market. On the other hand, by asking processors to identify key problems that they encounter both at the processing and the marketing stages, it is possible to gain some understanding of the relative importance they attach to the former vis-à-vis the latter.

5.2 Constraints faced by processors

Processors do not seem to perceive marketing as a significant impediment to *fufu* processing activities (see table 5.1). Very few complained about poor market demand and none indicated spoilage as a problem. Only one interviewee out of 30 felt constrained by the low profits generated by *fufu* processing, which is somewhat surprising given that in some locations processors command a relatively low share of the wholesale (and retail) market price. Transport was the sole constraint to marketing cited by a fair number (30 percent) of processors interviewed.

Transport constraints appear to be essentially related to the regularity and possibly the high cost of such services, and not so much to an acute lack of access to transport *per se*. Evidence presented in section 2.2.3 seems to suggest that access to transport is not a major problem in the study areas. Yet for some of the processors interviewed (20 percent) *fufu* is transported at intervals of more than nine days, which may be a problem given the product's short shelf life and the concomitant need to sell it very soon after the end of each processing cycle. Moreover, for some locations (e.g. Ereji and Soso) transport costs are high, reflecting above all less than optimal access road conditions.

Another constraint stressed by some processors relates to the late payment of debts by traders. Approximately one-third of the ready-to-eat *fufu* processors mentioned this as an obstacle to the development of their *fufu* business. Interestingly, this was not regarded as a problem by wet paste processors. Due to the smaller size of their operations, ready-to-eat *fufu* processors are less reliant on market purchases of cassava to satisfy their raw

material needs, and therefore they have less room for manoeuvre to reduce cash constraints by acquiring fresh roots on credit from other farmers and traders. It may also be that ready-to-eat *fufu* producers face tighter financial constraints; as a result they may be more dependent on prompt payment from traders to finance subsequent production cycles. Finally, sales on credit are possibly more widespread amongst ready-to-eat *fufu* processors.

Table 5.1 Constraints identified by processors

Constraints	**Wet Paste Processors N=20**	**Ready-to-eat Processors N=10**
Marketing constraints	%	%
1. Transportation problems	30	30
2. Poor market demand	15	10
3. Lateness in settlement of debts	-	30
4. Spoilage	-	-
Processing constraints		
1. Inadequate finance	50	50
2. Scarcity of labour	30	-
3. Low availability and high cost of cassava	20	-
4. Scarcity of water	20	-
5. Drudgery of processing	15	50
6. Low profit	5	-
7. Electricity	5	-
8. Low availability and high cost of firewood	-	20

The respondents were much more prolific in stressing the constraints they face in processing, which seems to be their main focus of concern. For example, half of the processors interviewed identified inadequate finance as a critical problem. Having no access to formal credit and only limited access to informal credit sources such as relatives, friends, moneylenders, self-help credit management groups and traders, processors must rely to a great extent on their own personal savings to engage in *fufu* processing and other production and consumption activities.

Particularly important to this study are the negative implications of financial resource constraints on the ability of processors to organise and finance direct transfers of *fufu* supplies to Lagos and other major market outlets, an important shift if they are to improve their profit margins. Hence, inadequate financial capacity can also be regarded as an impediment to marketing. Poor access to finance also acts as a significant obstacle for processors wishing to scale-up their activity, which necessarily implies increased purchases of fresh cassava roots, the hiring of additional labour and possibly the adoption of improved equipment.

However, care must be taken not to hastily conclude that the expressed and unmet credit

needs are first and foremost related to *fufu* processing and to a lesser extent marketing. Money is fungible. In other words, financial resources may be used for a variety of purposes and activities. This means that processors could use additional financial resources obtained through credit in a range of activities other than *fufu* processing and marketing.

Other constraints identified by respondents are quite revealing in that they highlight differences in terms of size, needs and problems between wet paste and ready-to-eat *fufu* producers. For instance, the fact that labour scarcities and the low availability and high cost of cassava roots were mentioned only by some wet paste processors seems to confirm the larger size of their operations and, consequently, their greater labour and raw material needs. Ready-to-eat *fufu* processors are less likely to rely on purchased cassava and hired labour to the same extent as wet paste processors, and as a result do not seem to attach equal importance to the availability and cost of such inputs.

In contrast, whilst half of the respondents in the ready-to-eat *fufu* locations stress the drudgery of processing, no wet paste processor mentioned this problem, despite also being involved in some quite repetitive and time consuming tasks such as peeling and sieving. The drudgery of processing is a particularly important issue in the ready-to-eat *fufu* locations because during the cooking of the wet paste the processor has to stay very close to intense heat over a long period of time and keep turning the thick, starchy paste until it is well cooked. Large quantities of fuel wood are used in the process, and this explains why some processors also expressed concern over fuel wood shortages. The latter are likely to become an increasingly important problem in the long-term.

5.3 Constraints faced by *fufu* wholesalers and retailers

This section deals with traders' perceptions about the problems that they face in *fufu* marketing. Processors in the case study locations are the main focus group of this study. As such, and for the sake of simplicity, it was decided to restrict the analysis essentially to the impediments identified by operators that buy *fufu* directly from them at the point-of-processing, in primary assembly markets or in major urban destination areas. Accordingly, less significance was accorded to the views of wet paste retailers, processors and restaurant/canteen owners in urban areas. These marketing agents rarely buy directly from wet paste and ready-to-eat *fufu* processors in the study locations, and therefore are relatively marginal to our analysis.

It is interesting to note that the drudgery of processing was the most commonly referred problem amongst ready-to-eat *fufu* wholesalers and retailers (see table 5.2). Information collected from restaurant owners and canteens further reinforces the idea that this is an important constraint, the reason being that wet paste is transformed into ready-to-eat *fufu* balls at various points along the marketing chain. Hence, many wet paste buyers are also secondary processors, being involved in both the preparation and sale of ready-to-eat *fufu* balls.

Table 5.2 Constraints identified by traders

Constraints	Wet Paste wholesalers N=7 %	Ready-to-eat wholesalers and retailers N=14 %
Drudgery of processing	-	50
Poor market demand	29	-
Inadequate finance	14	14
Low profit	14	7
Transportation problems	14	14
Lateness in settlement of debts	14	-
Spoilage	-	21
Irregular availability of wet paste	-	14
No problem	-	14

Many other constraints were mentioned during the interviews, but only by a few traders each, and therefore cannot be considered as major impediments to marketing. For example, some wet paste wholesalers referred to poor market demand as a problem, but no ready-to-eat *fufu* retailer did so. This reflects the larger quantities of product handled by the former. Interestingly, no wet paste wholesaler complained about spoilage and only a few ready-to-eat *fufu* traders mentioned this problem, a strong indication that unsold inventories are not a widespread phenomenon. This information is consistent with the findings of this study, which point to the close and timely match between demand and supply along the *fufu* marketing chain as a response to the extremely perishable nature of the product. Traders need to be conservative in their orders and purchases in order to avoid heavy losses arising from spoilage.

Finally, a word of caution in interpreting the constraints identified by traders is required in view of the small number of respondents. A larger sample could confirm or slightly change the above conclusions.

5.4 Conclusions

Generally, market operators do not perceive marketing constraints as particularly acute. The main problem mentioned was the drudgery associated with the preparation of ready-to-eat *fufu* balls. Therefore, it can be concluded that the hardship involved in *fufu* cooking significantly limits the quantities processors are able to produce and channel into the market while at the same time reducing this staple's attractiveness to consumers. Nwajiuba (1995) also stresses this as one of the reasons why *fufu* is less popular amongst urban consumers than *gari*, a product that can be stored for six months or more.

Many *fufu* processors also testified to inadequate financing as an important constraint. Whether this is a specific problem to *fufu* processing and marketing or a more general

problem faced by processors and their families could not be determined with certainty. *Fufu* processing is generally carried out as a small-scale activity that uses traditional, low external input technologies. Capital needs are therefore relatively small. Still, poor access to finance may at times constrain the ability of processors to purchase raw material and hire labour, and certainly constitutes an obstacle to those who wish to scale-up their activity and adopt improved technologies. Moreover, financial resource constraints have negative implications on the capacity of processors to organise and finance direct transfers of *fufu* to destination markets.

CHAPTER SIX

CONCLUSIONS

6.1 The performance of *fufu* marketing systems

Fufu marketing systems appear to be functioning in a relatively effective manner. A high degree of co-ordination exists between processors and buyers, leading to a close match between supply and demand and minimal losses along the product chain due to spoilage. Transport systems could be improved, both in terms of service regularity and cost, but at present do not seem to significantly constrain the smooth and regular transfer of *fufu* from processing locations to distribution and consumption centres. In short, present marketing arrangements and transport systems enable processors to quickly dispose of their produce while at the same time allowing for a rapid turnover of traders' stocks.

Unsurprisingly, access to markets does not pose major constraints to processors in any of the study locations. Several factors point in this direction. These include the presence of a considerable number of middlemen in processing sites and intermediary market centres, existing processor-trader links and networks, the availability and regularity of all weather transport vehicles, and the perceptions of market participants. In addition, a fair degree of specialisation was found among female processors in small villages such as Ereji and Soso, which is also a strong indication that processors enjoy relatively good access to sub-urban and urban markets. If that were not the case, they would not be willing to risk scarce resources in producing a highly perishable commodity for market sale and would not be relying on this activity as a major source of income.

However, in view of the fact that market access is such an important determinant in the development of highly perishable commodity production systems, it is likely that only those in a relatively favourable position due to location and networks will be engaging to a significant extent in *fufu* processing activities on a commercial basis. Yet, those living in small locations distant from primary transport routes and served by poor access roads may not be able to sell reasonable amounts of *fufu* on a regular basis to somewhat distant market centres. Hence, while market access may not be an issue for processors in the case study locations and other similar places, it may represent a significant barrier to entry into commercial *fufu* processing for many who are currently not involved in such activity because of remoteness or failure to nurture direct relationships with specific buyers.

Furthermore, it is unclear that the market is at present able to accommodate significant and widespread increases in *fufu* supplies. It is true that neither processors nor marketing agents have pointed to lack of demand as a major impediment to their business, which is an indication that the market is absorbing current production levels. However, these perceptions do not imply that the same situation would prevail were processed quantities to expand in a considerable manner. Despite the fact that *fufu* appears to be an important food item in the urban areas of Southwest Nigeria, where it also plays an important role as an income source to a large number of urban dwellers, the study found no signs that the market is expanding at a significant pace.

Finally, it is important to note that even though the marketing system has proven rather effective in transferring *fufu* supplies from processing to consumption centres, processors (and farmers) tend to command a relatively low share of the wholesale and retail price and quite often have no option but to sell on credit. Possible causes behind this source of inefficiency in the marketing system include the relatively modest quantities traded by market intermediaries and their need to secure a minimum turnover, poor access to market information by processors, their dependency on a ready market to prevent product losses, the risk of product spoilage that is passed on to buyers, the inability of processors to intervene further up the marketing chain, and high transport costs.

6.2 Perishability as a major determinant of *fufu* marketing systems

The highly perishable nature of both the wet paste and the ready-to-eat *fufu* has emerged as a recurrent and cross cutting issue throughout this study. Perishability is such a determining factor behind existing *fufu* marketing systems and dynamics that its importance cannot be overemphasised.

On the demand side, it is important to bear in mind that the extremely limited possibilities for storage reduce the convenience of *fufu* to traders and consumers, thereby restricting market size and reducing the potential for demand growth. On the supply side, it is important to highlight the fact that because they are dealing with a highly perishable product, processors must be cautious not to expand the size of their operations beyond a point in which unsold inventories and product spoilage can become a recurring phenomenon, resulting in heavy financial losses.

Moreover, as already noted, the short shelf life of *fufu* seems to have clear negative effects on the prices and margins processors and many assembly traders are able to command. First, the need to sell quickly the production to avoid spoilage puts processors in a weak bargaining position and reduces their capacity to wait or search for better deals. Second, while pre-arranged transactions with regular buyers enable processors to have an assured market for their produce, this seems to come at a cost in terms of prices. More so if the buyer collects the product at the point of processing. Finally, prices must reflect the fact that the risk of product losses due to spoilage is passed on to the buyer after the transaction. Only those few who manage to control transport up to the destination market seem to be able to escape low prices and capture a significant share of the wholesale price.

6.3 The case for a shelf stable form of *fufu*

The case for developing a shelf stable form of *fufu* that could be stored by processors, traders and consumers over a longer period of time, so as to release existing demand and supply constraints in *fufu* marketing, has been clearly established in the study. If proven technically and commercially viable, this option could potentially translate into higher incomes for processors and traders alike, while generating benefits to the rural and urban consumers through a reduction in the effort associated with *fufu* cooking and an increase

in storage possibilities. At the same time, remoter localities would be better positioned to engage in *fufu* processing as a commercial activity due to the marketing possibilities opened up by the development of a shelf stable form of the product.

Still, great care must be taken when evaluating this option and the rationale for introducing it in the study areas or other parts of Southwest Nigeria. The feasibility of developing market-oriented *fufu* flour production amongst relatively small-scale processors must be carefully assessed. Good and assured market prospects are of critical importance if processors are to venture into a new product. Not only does this imply that the demand must be there, but at the same time it also means that small to medium scale processors must be in a position to compete with established, larger scale processing firms in order to capture a share of that market. It may well be that dried *fufu* has commercial potential in some but not all the locations, and for some but not all the processors within those locations. Furthermore, it is likely that market linkages and complementary services such as management and business training will have to be promoted and developed in an appropriate fashion if those who wish to venture into dried *fufu* production are to successfully market their product. The on-going studies on dried *fufu* consumer acceptability and markets should provide answers to these questions.

Equally important, the fact that processors face significant financial constraints must not be overlooked. This makes it imperative to explore the feasibility of cheaper drying methods, such as sun drying, along with more expensive mechanised alternatives. Apart from the issue of affordability, for the great majority of *fufu* processors in the study areas, mechanised technologies may be difficult to operate and maintain. Therefore, the rationale for disseminating more costly technologies amongst medium-sized entrepreneurs that are based in processing areas and that could act as service providers in their locations and other neighbouring areas, as is currently happening with *gari* grating, must also be carefully considered.

6.4 Other options for developing *fufu* processing in Southwest Nigeria

Apart from the short shelf life of *fufu*, this study has identified several other constraints which currently hinder processors' ability to expand and intervene more actively and effectively along the marketing chain. These constraints must be taken into consideration when evaluating possible intervention options aimed at improving the contribution of *fufu* processing activities to rural and urban households in Southwest Nigeria.

At this stage it is appropriate to mention some key areas for possible intervention. For example, different market operators seem to have different access to market information and networks. Many processors appear to be constrained in their bargaining position and ability to intervene further up the marketing chain due to insufficient knowledge of the market. The provision of relevant market information to these actors is, therefore, an area which could prove particularly promising, especially if complemented by market linkage facilitation and development interventions. Obviously, these must be informed by in-depth knowledge of the precise information needs of distinct target individuals and the way in which different marketing arrangements came into place and impinge upon various categories of market participants.

In addition, there is evidence that financial weaknesses limit the capacity of processors to scale up the size of their operations and interact with traders in more beneficial ways; for example, by controlling transport up to the wholesale or retail level. Lack of finance is also likely to affect the ability of traders to intervene in the market. Hence, addressing the financial needs of *fufu* processors and marketers in an effective and sustainable manner could stimulate *fufu* processing and marketing activities. However, in view of the complexity of the task at hand and the many unsuccessful experiences in the area, any attempt to provide financial services or link different market operators with existing financial institutions and programmes must be preceded by very careful analysis and design, namely in terms of the choice of target beneficiaries and the type of delivery systems and procedures.

Last but not least, it is important to stress that the present study does not offer substantial insight into the market chain from the farm gate to the point of processing. This is a critical area to understand the potential to intervene in existing cassava supplying systems in ways that are mutually beneficial to the farmer and the processor, and ultimately to all the other players further up in the product chain, including the consumer.

APPENDIX I

REFERENCES

Adebayo, K. (2001) *Perception of environmental issues by cassava processors in Ogun State*. PhD Seminar, Department of Agricultural Extension, University of Agriculture, Abeokuta.

Adegeye, A. J. (1999) *Issues and options in expanding the cassava industry (production, processing and marketing) in Nigeria.* IFAD, Rome.

Bockett, G. (1997) *The Project Approach.* Assessment of the Needs and Opportunities in Post Harvest System of Non-Grain Staple Food Crops Study. Natural Resources Institute. Kent. 5p.

Ekpere, J. A., Ikpi, A. E., Gleason, G. and Gabremeskel, T. (1986) The Place of Cassava in Nigeria Food Security and Farm Income Generation: A Situation Analysis for Oyo State Nigeria.

Henry, G., Westby, A. and Collinson,C. (1999): *Global Cassava End-Uses and Markets: Current Situation and Recommendations for Further Study.* FAO, Rome.

Kleih, U., Crentsil, D., Gallat, S., Gogoe, S. F., Nettey, D, and Yeboah, D. (1994) *Assessment of post-harvest needs in non-grain starch staple food crops systems in Ghana.* Natural Resources Institute, Kent and Ministry of Food and Agriculture, Accra. 45p.

Ndunguru, G., Modaha, F., Mashamba, F.,Digges, P. and Kleih, U. (1994) *Urban demand and needs assessment study for non-grain starch staple food Crops in Dar es Salaam.* Natural Resources Institute, Kent and Tanzania Food and Nutrition Centre, Dar es Salaam. 29p.

Nwajiuba, C. U. (1995) Socio-economic impact of cassava post-harvest technologies in Southwest Nigeria. *Farming Systems and Resource Economics in the Tropics*, Vol. 20.

Nweke, F. I. (1996) Cassava prospects in Africa. *COSCA Working Paper No. 13.* Collaborative Study of Cassava in Africa, Ibadan, Nigeria.

Nweke (1994) Cassava processing in Sub-Saharan Africa: the implications for expanding cassava production. *Outlook on Agriculture* **23,** 197-205.

Odubote, O. I. (2000) *Economic analysis of cassava processors in Odeda Local Government Area of Ogun State Nigeria.* Research project submitted to the Department of Agricultural Economics and Farm Management, University of Agriculture, Abeokuta, Nigeria.

Sanni, L. O., Akingbala, J. O., Oguntude, A. O., Bainbridge, Z. A., Graffham, A. J. and Westby, A. (1998): Processing of *fufu* from cassava in Nigeria: problems and prospects for development. *Science, Technology and Development* **16,** 58-71.

Ugwu, B. (1996) Increasing cassava production in Nigeria and prospect for sustaining the trend. *Outlook on Agriculture* **25**, 179-195.

APPENDIX II

FUFU MARKETING SYSTEMS IN THE STUDY LOCATIONS

II.1 Wet fufu paste processing locations

Ereji

Ereji is one of the villages in the boundary between Lagos and Ogun states. The village has about 25 houses, each consisting of 3 to 7 household units, and can be categorised as a rural community. The village has no access to electricity or any other social amenity. The main source of water for residents is the village stream. Ereji is located some 2 km from a larger and more developed village, Iloti. The major access road linking these two locations is not always passable during the rainy season. The distance between Ereji and Lagos is approximately 35 km.

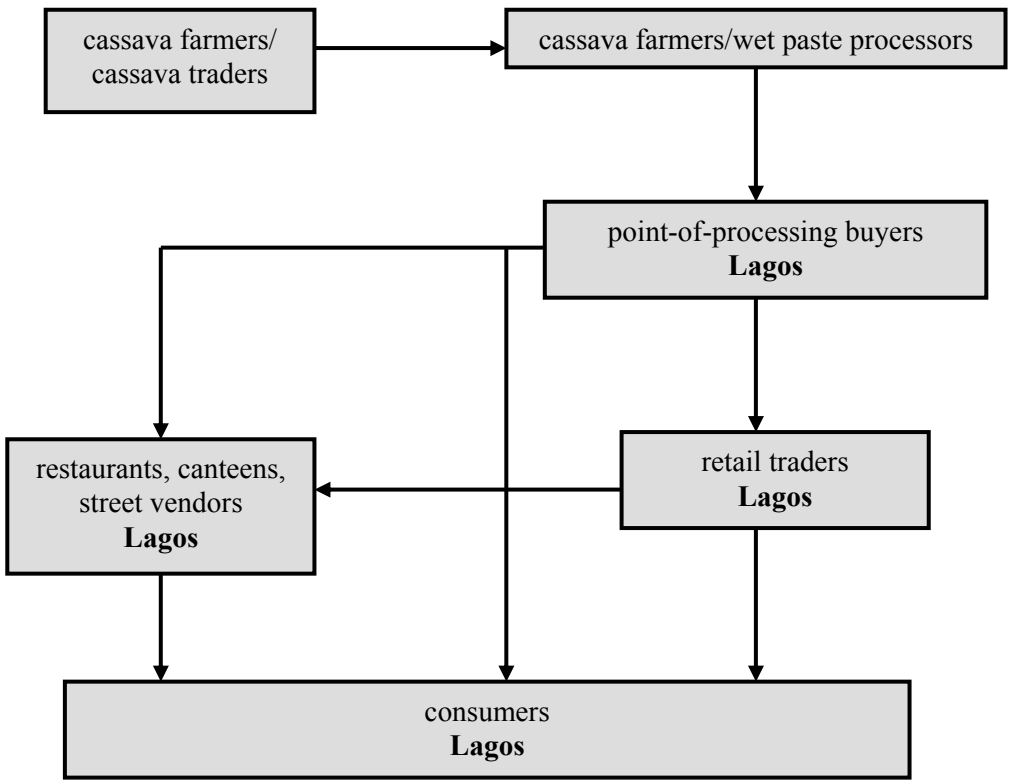
It appears that the entire village is involved in *fufu* production. Processing sheds can be seen close to each house. *Fufu* processing is an activity mainly undertaken by women, who rely largely on raw material supplies from their own cassava fields and their husbands' larger farms and who hire extra labour to assist them. Some women are also involved in *gari* processing, partly for home consumption and partly for income generation purposes, albeit at a very small scale. None of the processors contacted had access to formal sources of credit.

Fufu produced in Ereji is packed in airtight bags (synthetic fibre bags lined with polyethylene) before sale, a method that is believed to extend the shelf life of the product. Each bag contains about 60 kg of wet paste. They belong to and are supplied by point-of-processing buyers. Most marketed production is sold to female informal wholesalers from different locations in Lagos (e.g. Ajegunle, Apapa, Mushin and Shomolu) that come to Ereji on a weekly basis specifically to purchase *fufu*.

Traders buy on a pre-order basis from different processors in the village. Average sales per processor per processing cycle (approximately six days) range between 2 and 13 bags (120 and 780 kg) during the dry season and between 2 and 10 bags (120 and 600 kg) during the wet season. At the time of fieldwork, the price of one bag at the point-of-processing was approximately N350. Three forms of payment were found in operation at Ereji: pre-payment, cash and carry, and credit.

Through such buying arrangements processors have a secure and timely market for the sale of their product. Decisions on how much and when to produce and sell are largely based on trader requests, and as a result processors are seldom exposed to the risk of remaining with significant quantities of unsold product, an important feature given the extremely perishable nature of wet *fufu* paste. Existing buying arrangements are also convenient to traders, who are assured access to smooth and regular supplies of wet paste, in accordance to market demand and needs.

Diagram II.1 – Main *Fufu* Marketing Channels (Ereji)



Wet paste from Ereji is transported directly to Lagos. The most common means of transport are hired pick-up and panel vans. Transport providers, mainly men, charge an average fee of N120 per bag. In Lagos, each bag of wet paste is sold to retail traders, ready-to-eat *fufu* street vendors, restaurants, canteens and others for about N800. Most final consumers purchase *fufu* in its ready-to-eat form from a wide range of retailers, although some also buy the wet paste for home preparation. Therefore families and different types of retailers in Lagos undertake secondary processing, which basically consists of cooking the wet paste and converting it into ready-to-eat *fufu*.

Ilaro

Ilaro is an ancient town located some 30 km away from Ifo. The town accommodates the Federal Polytechnic and benefits from its proximity to the Abeokuta-Lagos road. Cassava processing is an important livelihood activity for many residents. Processors procure fresh cassava either from farmers or cassava traders from the area.

About 10 *fufu*-processing sites exist in the Ilaro area. The main site is Odo Oshun, named after the stream that supplies the water used in the processing activities. The site is located on both sides of the main road and comprises a large number of women processor. Vast piles of waste cassava peel lie right next to the road and also at a short

distance from the water source. Some processors moved to the site from Ilaro town following general complaints regarding the smell and the waste generated by *fufu* processing activities. Notably, the proximity to the water stream suits their purposes.

The water source seems to be the only resource processors share on this site. Both processing activities and marketing arrangements are done on an individual basis. Some women mark utensils with their initials to ease identification. Processors in this site have never employed any type of mechanical equipment. Apart from the wet paste, it was found that a few processors sundry the leftovers from market days for home consumption. This practice not only extends the shelf life of the product but also allows processors to save time and effort, as they find it physically straining to prepare ready-to-eat *fufu* from the wet paste.

Some of the wet *fufu* paste produced at Ilaro is taken to the local Sayedero market. Most of marketed production, however, is channelled to the *fufu* market at Ifo. The latter is by far the largest and most important *fufu* primary assembly market in Ogun State, and a main source of wet paste supplies to neighbouring Lagos.

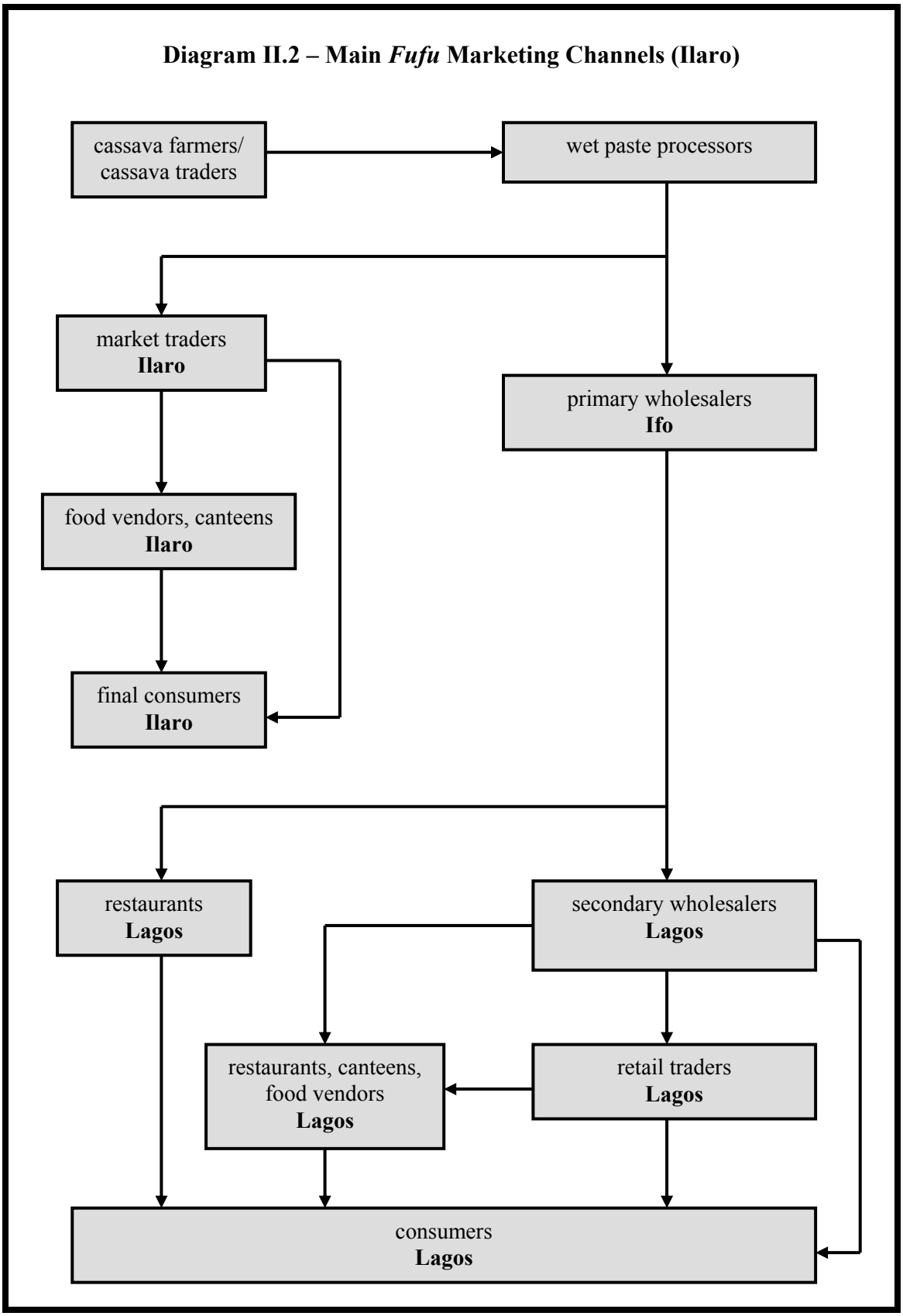
Ifo town is located some 25 km from Lagos along the Lagos-Abeokuta highway. Wet *fufu* paste is the dominant commodity sold at the market. Processors from other localities within a radius of 30 km visit this market to sell their product. *Fufu* trading activities are scheduled every five days. The local government is responsible for market maintenance while the market association, which comprises both traders and transport owners, manages it on a day-to-day basis. The market is equipped with well laid out modern stalls. Many of the traders are literate and converse freely in English.

Wet paste supplies from Ilaro are transported to Ifo market in 25-kg synthetic fibre bags. Pick-up vans are the most common means of transport used, and a transport fee of N8.50 per bag is charged. Volumes per trip range from 20 to 60 bags (500 kg to 1.5 ton). During the time of the survey, bags were being sold for N120 to market wholesalers. Interestingly, very few processors from Ilaro sell on a pre-ordered basis. Because of the very high level of *fufu* trading activities taking place at Ifo, selling prospects are good and pre-sale arrangements are generally not required. Nonetheless, some processors may not be able to sell their entire stock during a particular market day and have been found to sundry the leftovers for home consumption.

At Ifo the wet paste is repacked in 60-kg bags for sale to traders and restaurant owners from many different areas of Lagos (e.g. Ikorodu, Itire, Mushin and Oshodi). At the time of the field survey prices at the market averaged N350 per bag. Pre-arranged sales are quite common, but less so than in most of the other study locations. Transport vehicles such as trucks and lorries are normally available on site to carry the product to Lagos. A fee of about N60 per bag is charged for the transport service provided to buyers from Lagos.

In Lagos the product follows the normal channels, being sold to different types of retailers, including restaurants, canteens and street vendors. At the retail level the wet paste is generally turned into ready-to-eat *fufu* balls for sale to consumers. These also buy small quantities of wet paste directly from retail traders for home preparation.

Diagram II.2 – Main *Fufu* Marketing Channels (Ilaro)



Ode-Remo

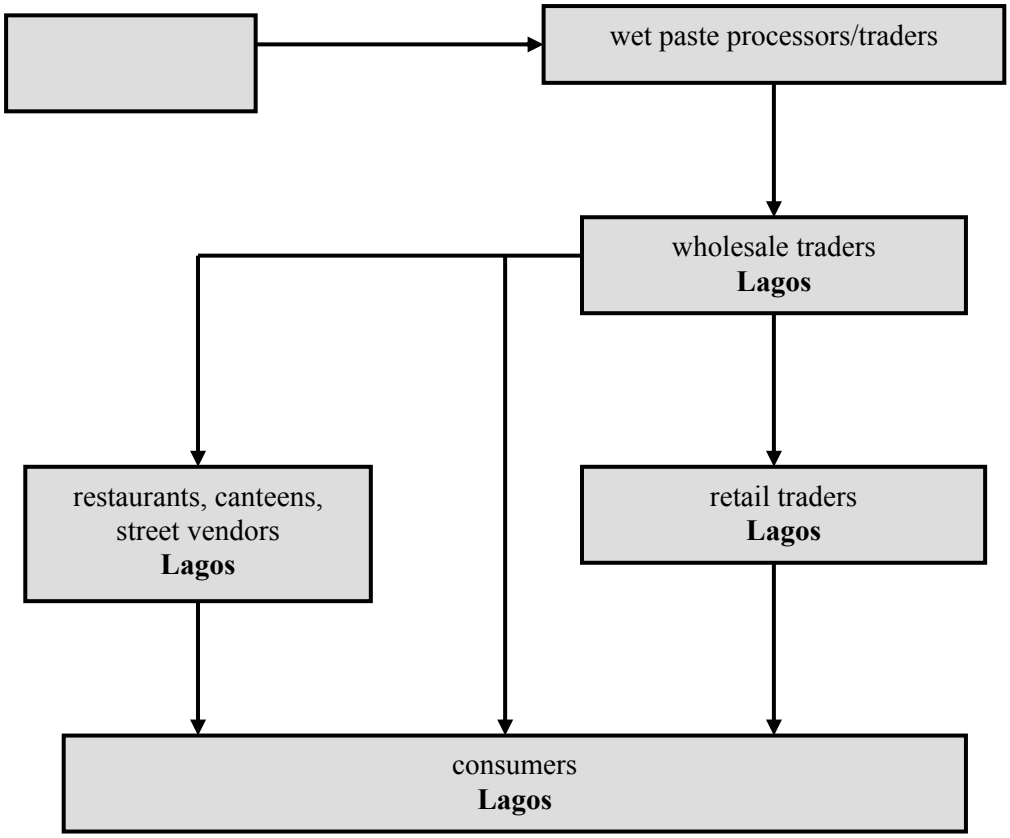
Ode-Remo is a medium-sized town located in close proximity to the new Lagos-Ibadan expressway. Distance to Lagos is approximately 50 km. A variety of ethnic groups inhabit the town. Although some local people are involved in the production of *fufu* paste, the activity is mainly undertaken by non-native inhabitants originating from Eastern Nigeria. Water shortages are a critical problem in the area, with most families having to rely on water bought from privately owned wells for their home consumption and other activities, including *fufu* processing.

There are some 30 *fufu* processing sites in the town, each containing a significant number of processors, mostly women. This study focused on Itun Ode section and its environs, which is the main processing area in town. *Fufu* processing activities in Ode-Remo are larger in scale than those found in other localities. Cassava roots are usually bought from cassava traders and farms in the area, some of which are an hour or so away from the processing sites. Unlike other sites studied, mechanical grating, dry sieving and sparse use of water are key features of the *fufu* processing system at Ode-Remo. Some processors at this location indicated access to informal finance from a range of sources, including self-help credit management group, moneylenders and friends and relatives.

Some of the wet paste produced in Ode-Remo is sold locally to traders who convert it into ready-to-eat *fufu* for sale at the market. However, the bulk of production is taken in jute bags (average 60 kg per bag) to different locations in Lagos (e.g. Ikeja, Iponri, Oshodi and Yaba), where it is sold directly to known women marketers and store keepers on a pre-arranged basis. The size of orders ranges from 10 to 35 bags (600 to 2,100 kg) during the dry season and from 10 to 45 bags (600 to 2,700 kg) during the wet season. The increase in the size of orders during the rainy season may reflect the good state of the road linking Ode-Remo and Lagos, providing this location with relatively privileged access to Lagos markets during this period compared to other less accessible *fufu* processing sites.

Contrary to findings in other study locations, the wet paste from Ode-Remo is taken in rented vehicles, mainly pick-up trucks, to Lagos by the processors themselves. An average fee of about N80 per bag is paid to transporters. In Lagos, processors sell each 60-kg bag of wet paste for approximately N700 to wholesale buyers, who re-sell each bag for approximately N800. Quite often sales are done on a credit basis, whereby processors are paid within one month after provision.

Diagram II.3 – Main *Fufu* Marketing Channels (Ode-Remo)



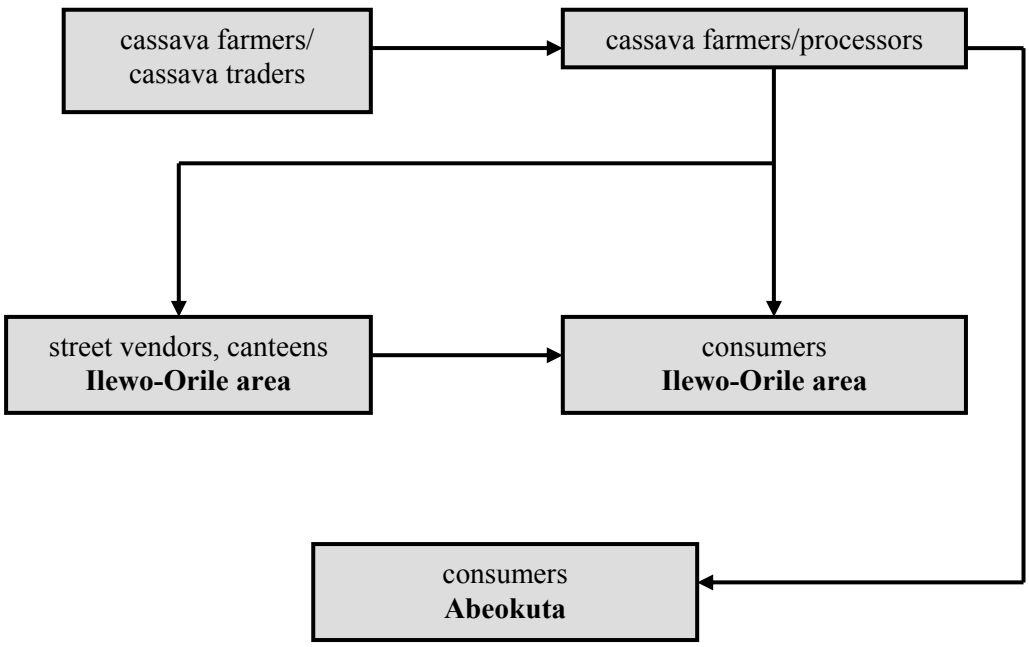
II.2 Ready-to-eat *fufu* processing locations

Ilewo-Orile

Ilewo-Orile is a large village with a major service road running through it. The approximate distance to Abeokuta is 13 km. The village benefits from electricity supply and a pipe-borne water system has just been completed. Farming is the main village occupation. The nearest farm is a 30-minute by foot. Other important livelihood activities include blacksmithing, vulcanising and bicycle repair.

Cassava processing activities are also significant, especially for women, who use cassava from their own and their husbands' farms in addition to purchasing it from other farmers in the vicinity and traders. *Lafun* and *gari* are the preferred cassava products. *Fufu* is less popular amongst processors, apparently due to the drudgery involved in its preparation, hence it is only produced when the availability of cassava and product demand justify it. *Fufu* is processed into its ready-to-eat form for sale in nearby markets; unlike the wet paste this requires cooking over a stove for long periods of time.

Diagram II.4 – Main *Fufu* Marketing Chains (Ilewo-Orile)



The ready-to-eat *fufu* balls are packed in polyethylene wraps, each weighing on average 1.2 kg. The wraps are then arranged in baskets lined with cloth. *Fufu* is marketed mainly in the neighbourhood and purchased by street vendors, canteens and consumers. At the time of field research each wrap was being sold for N5. Occasionally, the product is also taken to the Lafenwa market in Abeokuta, the capital of Ogun State and a significant market outlet for *fufu* produced in the city's many locations and neighbouring areas. Ready-to-eat *fufu* balls are either sold at specific locations within the market centre or hawked around by children on behalf of their mothers, who may or may not be present at the market centre. About N10 per wrap was being charged to consumers when taken to Abeokuta.

Soso

Soso, a small village of approximately 30 houses, is situated some 7 km away from the Sagamu-Ikorodu road. Access roads are generally in poor condition, especially during the rainy season. Most of Soso inhabitants are long-term non-natives settlers. The village is located close to a major perennial water stream. Farming is the main livelihood activity. *Fufu* processing is a major activity for the village dwellers, especially women, who are either working as entrepreneurs or as hired labour. Unlike other locations in the vicinity, *gari* is not widely produced and when so it is mostly for household consumption.

Fufu from Soso is marketed in its ready-to-eat form. Ready-to-eat balls weighing on average 1.2 kg are wrapped in local *gbodogi* (*Tomatococus danielli*) leaves and arranged in baskets containing approximately 40 wraps each. There are three main final market

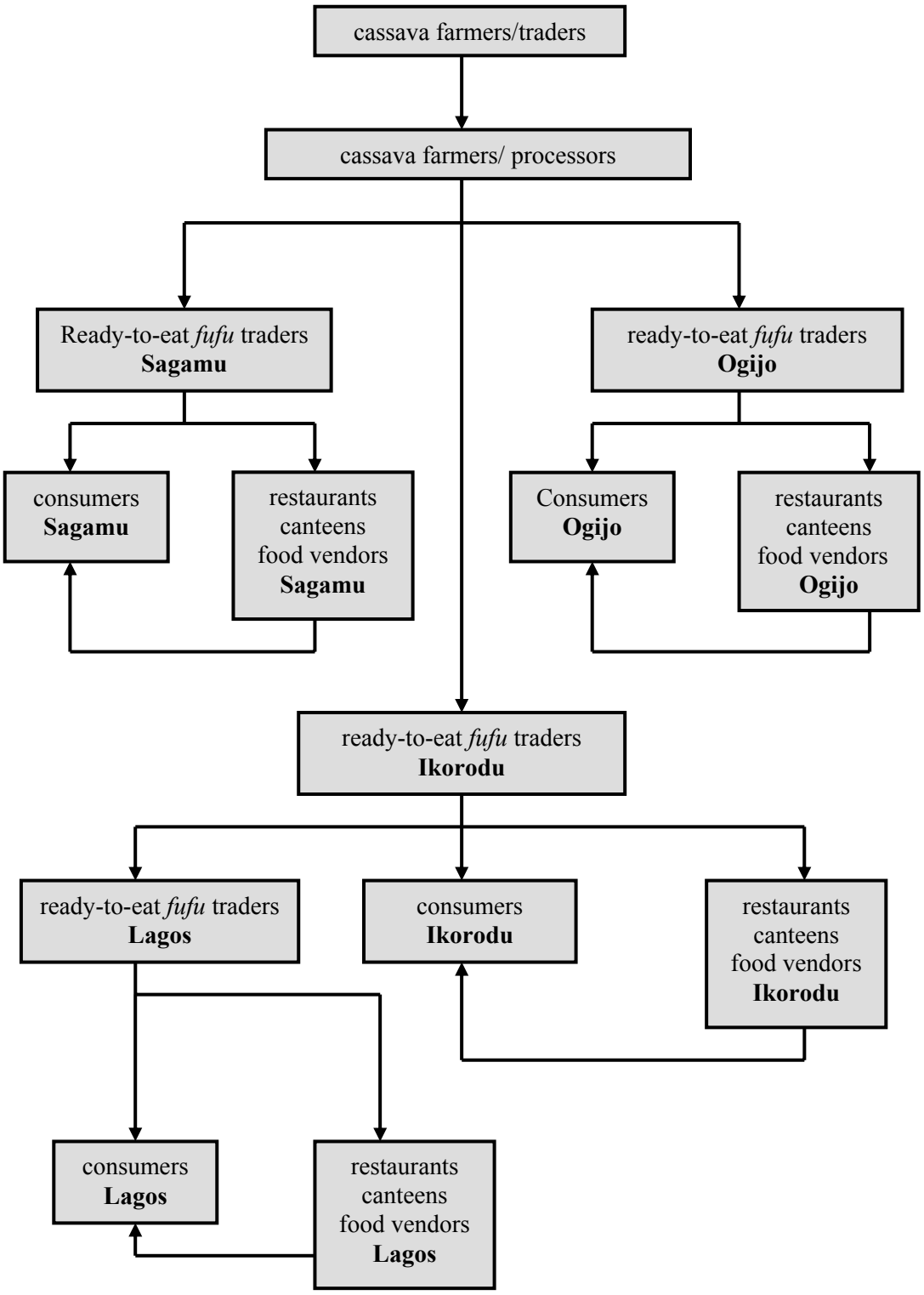
destinations: Awolowo market in Sagamu, Ogijo town, and Benson market in Ikorodu. Some traders at Mile 12 market in Lagos come to Ikorodu to purchase ready-to-eat *fufu* from Soso and other neighbouring *fufu* supplying locations.

Sagamu is the headquarters of Sagamu Local Government Area and serves as a consumer centre for the ready-to-eat *fufu* from Soso and its environs. The town is situated at the junction between the Lagos-Ibadan and the Lagos-Benin City expressways. Ogijo town is located on the Sagamu-Lagos road and has a large population of industrial workers from Lagos and the Nigerian National Petroleum Company at Mosimi. Ikorodu is one of many towns on the outskirts of Lagos. Ready-to-eat is the most commonly sold form of *fufu* found in Ikorodu.

Marketing arrangements for *fufu* processed in Soso are quite particular and symptomatic of the importance of trust and networks in *fufu* marketing systems. Processors receive pre-orders from customers in Sagamu, Ogijo and Ikorodu. Average orders during both the wet and dry season range from 100 to 300 wraps (120 kg to 360 kg). They then deliver the product to panel van drivers, who take it to customers, collect payment and charge transport fees. Drivers remit the money to processors upon their return. Quite often, however, the payment is received at a later date as many processors sell their product on credit to regular customers in Sagamu, Ogijo and Ikorodu.

In addition, some female traders from Sagamu also come to Soso to purchase pre-arranged quantities of ready-to-eat *fufu* directly from the processors. Prices in Sagamu and Ikorodu are very similar (N160) as are transport costs from Soso to these two towns (N40). Traders from Lagos who come to Ikorodu pay N10 for each ball of *fufu* (N400 per basket). In Lagos each *fufu* ball is split into two and sold for the same price (N800 per basket).

Diagram II.5 – Main *Fufu* Marketing Chains (Soso)



APPENDIX III

UNIVERSITY OF AGRICULTURE, ABEOKUTA
NRI / UNAAB FUFU COMMERCIALISATION RESEARCH

CHECK LIST FOR MARKET SURVEY

1 Fufu distribution outlets (tick one or more where relevant):

Wet paste: home consumption [ ] local neighbourhood [ ]
point of processing [ ] primary [ ] secondary [ ] tertiary [ ]

Ready-to-eat: vended local [ ] vended regional [ ]

Outlet locations:

_____
_____
_____
_____
_____

Observations:

_____
_____
_____
_____

2 Market chain:

Direct to consumer [ ]

To food vendor [ ]

To trader [ ] Final location (if known): _____

To a retailer [ ] final location (if known): _____

3 Transportation (method, cost, frequency)

Dry season _____

Rainy season:_____

---

4 Approach to marketing

Does the processor have an established relationship with certain traders?

Yes [ ] No [ ]

If yes, how does this operate?_____

If no, what kind of marketing approach / strategy does the processor have?

_____

_____

_____

5 Average volume per order / sale (No. of bags or kilo equivalent)

Dry season_____

Rainy season_____

6 Sale price per bag (dry and rainy season average prices). If variable, establish criteria behind this.

_____

_____

_____

7 Trends and dynamics in the market system (prices, demand, market channels etc) in the past 3 years:

Prices: _____

Demand:_____

Market channels:_____

8 Rank the constraints to marketing of fufu product.

_____

_____

_____

9 What is the shelf life of the processed product you sell?

_____

10 What (if any) measures have you taken to extend the shelf life of this product?

_____

_____

11 What type of packaging do you use for your product and why?

_____

_____

12 What other products compete with fufu in the market place and what relative advantages / disadvantages do they have?

Product1

_____

_____

Product 2_____