

FAO
Food Supply and Distribution to Cities
in French-Speaking Africa

FOOD INTO CITIES COLLECTION

AFRICAN URBAN CONSUMERS
AND FOOD SUPPLY AND
DISTRIBUTION SYSTEMS

IBRAHIMA DIA

AC/02-97 - June 1997

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The opinions contained in this document are the sole responsibility of their author(s) and are in no way binding on any persons cited. Nor do they necessarily reflect the official point of view of the institutions cited, or of their member countries.

Permission to make digital or hard copies of part or all of this work for personal or classroom use is hereby granted without fee and without a formal request, provided that copies are not made or distributed for profit or commercial advantage, and that copies bear this notice and full citation on the first page. Copyright for components of this series owned by others than FAO must be honoured. To copy otherwise, to republish, to post on servers, or to redistribute to lists, requires prior specific permission and/or fee.

Requests for permission to publish should be addressed to:

The Chief Editor

Food into Cities Collection

B 618 - AGSM

FAO

Via della Terme di Caracalla

00100 Rome

Italy

e-mail: olivio.argenti@fao.org

EXECUTIVE SUMMARY

This study is an overview intended to help develop an approach to food supply and distribution systems (FSDSs) focusing on the consumer as autonomous actor. Following a brief discussion of the lack of attention to African urban consumers in policies, programmes and research on African FSDSs, Chapter 1 offers an analytical framework that takes into account the variety of cultural, sociological and economic affecting the urban consumer in French-speaking West Africa. In Chapter 2, the consumer is considered in relation to some features of households and consumption models. Factors governing the shopping behaviour of the various urban social categories are then reviewed in Chapter 3: on the one hand, factors related to physical availability and financial accessibility of food and, on the other, those bound up with relations between consumers and traders.

Chapters 4 and 5 are devoted to discussing the impact of urban consumer behaviour on FSDSs, as well as likely future changes in urban life and their effects on the attitudes of the urban population. The concluding chapter deals with four aspects of the issue: improving knowledge of consumers as actors, strengthening consumer associations, the need for hygiene and nutrition education for consumers and traders and improving state quality control services.

CONTENTS

EXECUTIVE SUMMARY

- Chapter 1: INTRODUCTION
- 1.1 The issue
- 1.2 Methodology
- Chapter 2: FEATURES OF CONSUMERS AND CONSUMPTION IN
 AFRICAN CITIES
- 2.1 Features of households
- 2.2 Food management in urban households
- 2.3 Features of consumption patterns
- 2.3.1 Diet and nutrition
- Chapter 3: CHANGES IN FACTORS AFFECTING URBAN FOOD
 CONSUMPTION
- 3.1 Physical availability of produce in cities
- 3.2 Purchasing power
- 3.3 Conditions of life in African cities
- 3.4 Cultural influences
- 3.4.1 Food and cultural identity
- 3.4.2 Meals as occasions for socialisation
- 3.4.3 Perception of different types of food
- 3.5 Household food supply systems
- 3.5.1 Household production
- 3.5.2 Market shopping
- Chapter 4: SOCIAL RELATIONS BETWEEN CONSUMERS AND
 TRADERS
- 4.1 Traders and consumers as individual actors
- 4.2 Collective actors by traders and consumers
- Chapter 5: CONCLUSIONS AND RECOMMENDATIONS

BIBLIOGRAPHY

CHAPTER 1

INTRODUCTION

1.1 THE ISSUE

For a long time food security policies focused mainly on the rural population, for which reason consumers were not seen as separate actors from producers. It was presumed that consumers meet their food needs wholly through subsistence production and obtain any additional supplies through barter. The sale of farm produce was seen much more as the disposal of a surplus than a calculated response to demand.

Although during the colonial period and the 1960s, some level of subsistence production occurred in towns and cities, there was also a tradition of marketing agricultural produce in a way that followed commercial strategies and involved various actors. The dominant model at the time, which perceived self-sufficiency as producers' sole objective, reflected more a planners' preconception than an objective analysis of farmers' production and marketing strategies.

“Administered development” has been the most widely accepted approach in the supply and distribution sphere, particularly for staples, and has consisted in encouraging or discouraging the consumption of specific foods through administrative measures. For a long time this approach disguised the determining role of demand (i.e. the consumer) in favour of state-orchestrated supply. The consumer was completely marginalised, mainly because planners in Africa shaped consumption patterns in order to facilitate the pursuit of objectives that conformed to their preconceived ideas and models.

Rapid expansion of the informal sector and parallel markets, widespread failure of different regulatory policies, tax evasion and corruption characterised the *“administered development”* model and highlighted the need to take account of consumer demand as a major factor influencing the behaviour of various actors in food supply and distribution. Recognition of consumers as actors then becomes a vital ingredient in any planning policy for FSDSs, with knowledge about consumers growing in importance inasmuch as urbanisation and demographic changes will have significant effects on both the quality and quantity of food demanded.

The emergence of urbanisation as a major issue for the next millennium, particularly in the context of trade liberalisation, shows how important it is to take account of the consumer in any FSDS development strategy. In French-speaking Africa this development is taking place in a political context of democratisation, in which the role of civil society is being increasingly recognised. The appearance of consumer groups is, therefore, a major social innovation that has to be considered in this field of study.

The main difficulty in taking account of consumers in analyses of FSDSs is that the wide range of situations – both objective (social and economic categories) and subjective (perception, food preferences, level of awareness of rights, etc.) – means that the concept of consumer is far from precise. A global analytical framework is needed in order to overcome this difficulty, taking into account the following:

- Structural factors such as the socio-demographic features of households, activities, sources of income, places of residence, etc.; and
- Other more functional features connected with the internal organisation of households (how decisions on food purchases are taken, cooking skills, etc.) and organisation of consumption (choice of types of food and consumption periods), which also affect choices and manners of access to foodstuffs.

Apart from consumers' intrinsic features, various types of shopping behaviour have a more direct effect on supply and distribution systems. Consumers' decisions are a result of their environment, income and living conditions, but these economic determinants cannot be isolated from their cultural heritage and set values.

1.2 METHODOLOGY

Examination of the available material on food supply policies for African cities shows that although centralised planning has been abandoned in formulating agricultural policies in all the French-speaking countries of Africa, the need to focus production on consumers' needs is still marginalised. Very few studies have been devoted to consumers, and very little attention given to consumers in documents redefining policies. The very few studies looking at shortcomings of food supply systems tend to focus on demand (quantity, price and quality) and the training needs of agents and seldom on relations between consumer behaviour and distribution systems.

A review of existing literature shows that researchers in management faculties at African universities have only recently started to undertake studies focusing on consumers, although these are essentially marketing studies and tend to concentrate on manufactured goods.¹ Studies carried out in the framework of research programmes by external bodies (like CIRAD, Louvain and FAO) provide some useful information on consumers but their primary focus is usually on distribution and supply networks.² Even though surveys conducted by consumer associations provide important data on consumers' shopping behaviour, the objectives for which they are undertaken (usually to back demands) and significant methodological problems often limit their utility.

This study attempts to amalgamate available information on the behaviour of urban consumers' in French-speaking Africa with a view to developing an analytical framework that facilitates better integration of the interests of consumers in programmes to improve FSDSs. It is based essentially on information from secondary sources and brief surveys of resource people (university lecturers and heads of consumer associations in Dakar).

¹ According to Mr Dankoko, Senior Lecturer in Management, Economic Sciences and Management Faculty, UCAD, Dakar (oral communication, February 1997).

² Moustier & Leplaideur, 1996; Cheyns, 1996; Cerdan & Bricas, 1996; Bricas, 1996.

CHAPTER 2

FEATURES OF CONSUMERS AND CONSUMPTION IN AFRICAN CITIES

2.1 FEATURES OF HOUSEHOLDS

The evolutionary approach in the study of FSDSs and analysis of constraints faced by cities and cosmopolitan areas have often been used by a number of experts to provide support for orthodox paradigms on the development of urban households. These studies usually attribute changes in the structure of urban households to such factors as the reduction in size of the household, a move away from polygamy and the rise of individualism. The process of change, which typically occurred among the urban elite in the colonial period, was seen by the experts as inevitable. However, it is evident that the rate of change in household structure has varied widely and the process has not been linear.

Household structure: The structure of urban households is the outcome of a very recent historical process in Africa, which is attributable in part to massive rural-urban migration. Even if changes in social structures have been influenced by the constraints of urban life, household behaviour tends to be based more on rural socio-cultural structures. In other words, the way people from rural societies adapt to towns must be seen in the context of social structures that are rural in origin. The ethnic background of households is, therefore, important in understanding the structure of African families in towns and cities.

The concept of the extended family has often been used to explain differences between the European nuclear family and the African model. It does not, however, take sufficient account of significant variations in situations broadly covered by the adjective “extended”. Experts on rural societies have sought to resolve this problem by attempting to define rural families on the basis of combinations of various social units with different social and economic functions, including residence, consumption, production and savings. In typical European households these functions tend to be congruent with the nuclear social unit (couple and children), but in rural African society they are separate.

Residence units: These represent one level of social segmentation, and in most cases correspond to a lineage or a segment of a lineage, with couples of different generations sharing the same residential space under the authority of one member, often the oldest.

Production units: These may be composed of one couple or several related couples farming the same land and managing their resources (land, capital, labour) in common.

Consumption units: These may be composed of one couple or several related couples who share meals and manage in common the food they produce or their income in order to ensure reproduction of their social unit.

Savings units: These may be composed of a couple, one of the spouses, or a segment of the household (for example a woman and her children), who save their resources separately.

The combinations of social and economic units vary depending on ethnic group, ranging from the Western-type mononuclear model to the polynuclear model covering several generations. Extreme cases are represented, on the one hand, by the Soninke and Bambara ethnic groups found in Mali and Senegal and the other by the Peul group found in most West-African countries. In the former type, the reference point is the lineage segment, which may comprise several generations living together in the same space. Production and consumption units are congruent with this residence unit and there can be as many as 50 people (20 couples) eating from the same kitchen and managing stores in common. In the latter type, each couple is an independent production and consumption unit. It rarely contains more than five people and, even though meals may be exchanged, a son-in-law cannot eat with his in-laws.

Migrants to towns and cities usually try to preserve the family model of their ethnic group, and this desire to maintain a particular identity entails a series of ideological considerations. In towns and cities the functions of residence, consumption and savings are separate, partly as a result of the fact that the function of production (employment) is independent in urban areas. Despite variations from town to town, it is common to find the following features characterising urban households:

- The activities of wives and husbands, as well as those of active young people, are separate, reinforcing the separation of savings units. This affects eating habits, insofar as it allows individual eating

space and creates obligations for individuals to participate in group meals.

- Consumption units may not correspond to residence units, implying that those who live together may not all share the same kitchen and further that those who eat together may not necessarily live under the same roof.

In Ouagadougou, Emmanuelle Cheyns (1996) speaks of “household members and permanent guests” to describe the urban consumption unit. He estimates that “permanent guests” constitute about 1.39 out of an average of 7.5 people per household. The consumption unit excludes resident household members who eat outside without receiving any money for this from the head of household.

In Dakar, it is just as common for the household to cook for kin who live separately. In some cases, this takes place under a subscription scheme known as *bool*. At each meal, a plate is sent to the outside member of the consumption unit. This system began as an expression of solidarity with recent immigrants who were kin or recommended to the household, but the financial participation of immigrants was steadily formalised. Currently, poor families and women in medium-income families tend to incorporate the system into their consumption strategies. *Bool* subscribers become members of the consumption unit under various forms, including some with very explicit contracts, with “subscribers” being able to negotiate the number of meals and becoming more and more demanding.

Difficulties in finding individual housing partially explain this distinction between residence and consumption units. In some families, young couples prefer to stay with their relatives or share a house with their brothers. Each couple then asserts its independence by establishing an independent kitchen. Economic difficulties and sometimes the cultural heritage (as with the Soninke and the Toucouleur) may also lead to strategies of sharing meals or taking turns to cook for households or groups. In Dakar, the fall in purchasing power after devaluation led to a strategy in which brothers and unmarried working friends formed groups for consumption purposes.

Thus, contrary to theoretical predictions, there has been a trend towards polynuclear households, rather than individualisation. In Dakar, the number of polynuclear households grew from 7% of the population in 1969 to 23% in 1989. Data on the amalgamation of related households after devaluation of the CFA franc in 1993, as well as the shortage of

housing and growing unemployment, indicate that polynuclear households are likely to become the dominant pattern in future. In Ouagadougou, the size of the household (consumption unit) grew in one year from 7.64 to 8.27 (Cheyins, 1996). Furthermore, about 40% of households in the city can be described as very large (over 8 people), a situation that is largely due to the fact that several couples join together in a household.

Polynuclearization can lead to two main types of food behaviour in households:

- **A rise in group consumption:** where different households join in planning their spending on food and other items. This leads to the consumption of dishes suited to large numbers, for example rice, millet and maize couscous as seen in the case of polynuclear families in Dakar including Wolof traders, the Soninke (whatever their occupation) and the Toucouleur. In these cases rice is usually purchased in bulk once a month and millet every few months, depending on the market. It can also lead to:
- **A rise in individual consumption:** where groups share rent and bills for water and electricity but exclude any solidarity for individuals when their food supplies run out and can include the possibility of bulk purchase of food (like livestock or a bag of millet at weekly markets).

Household size and composition: The size of urban households is determined in large part by the type of household. Statistical averages conceal wide disparities, which affect food behaviour. In Dakar, the average number of persons per household is seven, but over 50% of households are above this average.

The size of households affects consumption behaviour. For large households whose diet is mainly cereal-based (in Dakar, Ouagadougou and Bamako), large stocks of such cereals as rice, maize and sorghum are usually held. Others who depend on root/tuber-based diets, however, tend to hold less stocks mainly because of the minimal processing that takes place prior to consumption and the style of cooking (Thuiler, 1991).

The age structure of urban households in Francophone Africa is typified by the case of Ouagadougou, where an average of 4 out of 7 of the population are children and Dakar, where 54% of the population is under 9 years old. A majority of the children in the population are under

7 years. This age structure of the urban population implies that food has to be prepared at home each day, even when parents work outside the home and sometimes have to spend the whole day away.

2.2 FOOD MANAGEMENT IN URBAN HOUSEHOLDS:

The division of responsibility for feeding the household is still largely determined by rural cultural values. The husband or head of family is responsible for procuring food for the whole family. In rural areas he is responsible for producing the staple cereals or tubers, building up stocks that the women manage, while in towns and cities he usually buys basic supplies and provides money (housekeeping money) for buying other ingredients like meat, fish and vegetables to his wife.

The housekeeping money is usually a fixed amount, but may be negotiated between a husband and his wife. In households with average but irregular incomes, the housekeeping money is paid daily but is fixed. In poorer households it is daily but uncertain, especially where it covers the purchase of cereals, since these families cannot afford to build up any real stocks. The provision of housekeeping money by rich families tends to be on monthly basis. Husbands and wives discuss the choice of dishes each day but children and dependants are rarely consulted. In practice the choice of meals to cook is made by wives, especially in polygamous households. When husbands “order” special dishes or invite guests, they are usually required to increase the housekeeping money by an amount that is negotiated.

How food is obtained: Consumption units obtain food by various means, depending on the type of food item and household income level.

Cereals: Cereals like rice and millet are usually purchased in bulk. Husbands are generally responsible for bulk purchases, often buying from the same suppliers regularly (in Dakar this usually means the “corner shop”). Cheyns (1996) reports that in Ouagadougou 60% of wholesale cereal purchases are made by men and 80% of retail purchases by women. In Cotonou many households buy directly from rural markets but bulk purchases tend to be concentrated in the main central Dantokpa market.

Low-income families usually buy rice and other cereals from retailers, and in such cases it is the women who are responsible for shopping. Families with large but irregular incomes tend to stock up for several months and supplement this with retail purchases whenever stocks run

out.

Meat: Meat is usually bought from retail outlets and rarely stored. Only relatively rich families with refrigerators store meat, which in most cases is bought by husbands from abattoirs. Such families occasionally buy live sheep from the market.

In Dakar, there is a practice where an association or individuals in a given neighbourhood slaughter cattle, which is shared equally among cost-sharing participants.³ Similar arrangements exist in workplaces to ensure supply of good quality meat at relatively low price. In Ouagadougou, households tend to store meat in the form of live poultry.

Fish: Fresh fish is usually in abundant supply in most cities but prices vary significantly. Refrigeration is replacing traditional storage methods (like pulping⁴). Only relatively rich families tend to have refrigerators, but the provision of refrigeration services is becoming quite common in working-class neighbourhoods with a few middle-income families, which have spare refrigeration capacity providing the service to neighbours at a fee.

Men are very rarely involved in purchasing fish since women are generally better skilled at haggling and identifying good quality fish.

Roots and tubers: These are quite often purchased from retail outlets and by women.

Condiments and vegetables: In all social categories, women are generally responsible for purchasing these items from retail outlets, usually on day-to-day basis. Working women tend to entrust servants or grown-up children with making such purchases. Households rarely stock vegetables that need to be consumed in as fresh a state as possible but often engage in strategic inter or intra-seasonal stocking of others, depending on market trends.

Women are traditionally responsible for processing food produce and preparing meals. The level of processing undertaken by the household depends on the type of dish. In Ouagadougou, preparation of the main dish (*tò* a maize/rice-based meal cooked with fat) requires preliminary

³ This practice is called *tong-tong* and allows consumers to cut out middlemen in the chain by organizing everything—transport, slaughtering, etc.—themselves.

⁴ The Wolof term *muusal* is used for this method.

processing of the maize or sorghum used. Generally, the women prefer to stock these cereals and undertake processing themselves rather than buy processed flour directly from the market.

Domestic processing of food is, however, problematic for most working women, except in cases where this can be entrusted to servants who are well-skilled in traditional methods of preparing food. In Senegal, for instance, because the process of preparing the traditional *couscous* is rather complex, most households tend to buy it in processed form from the market. The *couscous* industry is dominated by the Serère ethnic group (from processing to marketing). According to a survey of 26 districts in the Dakar urban area undertaken in September 1989 by USAID, most of the 94 millet processing plants (or mills) belonged to operators of Serère origin.

Cooking skills: Women pass cooking skills down from mother to daughter. This informal process starts during early childhood and is closely supervised at home. In most urban families, the availability of time for skill transfer is becoming a problem partly because school attendance leaves girls little time at home while working mothers increasingly rely on servants to cook.

The increasing role of servants in food preparation has contributed to the variety of dishes in urban households. Some of the servants receive professional training in domestic science centres and are a key factor in the spread of culinary skills in urban areas.

2.3 FEATURES OF CONSUMPTION PATTERNS

2.3.1 Diet and nutrition

One of the effects of urban lifestyle on food consumption by households is increased demand for cooked dishes and processed products. The consequent increased dependence on imports can only be minimised if efficient and dynamic marketing and distribution systems that enable domestic producers to better integrate their products into the market in response to consumer preferences are promoted. This requires investment in physical and institutional infrastructure to facilitate the flow of market information to producers. Due to the considerable financial constraints it faces, the state is incapable of providing the required facilities and needs to attract private investments by maintaining an enabling stable political and macro-economic environment.

Attempts to improve FSDSs may be impeded by conflicts arising from an apparent trade-off between the goal of enhancing market efficiency and social objectives in terms of jobs creation. This is particularly the case where there is a perception that such initiatives impact negatively on the informal small-scale sector and women who play an important role in the supply of food to the urban poor. To minimise these conflicts, the policymaking process should involve extensive consultation with all key stakeholders in the public or private sectors, including in particular traders, municipal authorities, chambers of commerce and consumers associations. The initiatives of development should also be based on a detailed interdisciplinary analysis of urban food demand and its impact on the structure and organisation of food marketing systems. Furthermore, the objectives pursued should be clear and consistent with the specific problems and circumstances prevailing in each particular town or city.

CHAPTER 3

CHANGES IN FACTORS AFFECTING URBAN FOOD CONSUMPTION

3.1 PHYSICAL AVAILABILITY OF PRODUCE IN CITIES

The segmentation of towns and cities into neighbourhoods with different socio-economic backgrounds is a key factor governing the availability of food. In most African towns and cities built during the colonial period, the major markets are located in the centre, as for example is the case in Dakar (Sandaga and Kermel), Cotonou (Dantokpa) and Ouagadougou (the Great Market). These are generally not wholesale markets but rather large retail markets with a very wide range of goods. Access to these markets is relatively easy for those living in central districts where supermarkets selling luxury products of European origin are also found.

Secondary markets and shops are found in more distant districts. Wealthy neighbourhoods, therefore, have easy access to produce and are also in a better bargaining position since they have more information on prices. This advantage applies to locally grown produce as much as to imports. Those living further from the centre have little choice about quality and are dependent on middlemen, usually micro-retailers. Some local products, such as *soumbala* in Ouagadougou and palm oil in Cotonou and Dakar, are distributed directly by ethnographic distribution networks through which neighbourhood traders maintain links with producer-processors in villages.

3.2 PURCHASING POWER

Public sector employees account for a dominant share of urban incomes. Dakar for instance accounts for 55% of the total salaries paid to public sector employees in Senegal (Ministry of the Interior, 1994). The situation is very much similar in other capital cities, where administrative and public service infrastructure is usually concentrated.⁵ Incomes in the commercial and industrial sectors also vary from city to city and are relatively higher and more secure than for those in the low-income social strata, which are irregular and unstable.

⁵ Since there is little industrialization, the informal and small-scale sectors contribute most to job creation.

The wide variation in urban household incomes is revealed by a survey conducted in Dakar by the Statistics Department (Ministry of Finance and Planning, 1995) showing the following 5 categories of households on the basis of annual incomes:

- (1) under 342 000 CFAF/year (i.e. 28 800 CFAF/month)
- (2) 342 000 – 655 000 CFAF/year (54 500 CFAF/month)
- (3) 655 001 – 1 080 000 CFAF/year (90 000 CFAF/month)
- (4) 1 080 001 – 1 872 000 CFAF/year (156 000 CFAF/month)
- (5) over 1 872 000 CFAF/year

The purchasing power of consumers is not determined solely by income, but also by the level of other household expenditure, including especially rent. It is also influenced by the type of household (polynuclear or mononuclear) and the financial contributions made by various members of the consumption unit. However, analysis of these other factors is often constrained by lack of data, particularly since the methodology used in most statistical surveys focus on other objectives.

Although differences in household income lead to social differentiation, its effect on the choice of basic staples is relatively less significant than on the proportion (in terms of quantity) of various food produce consumed. Generally, a reduction in the proportion consumed occurs in the following order:

- fresh meat/fish
- oil
- condiments
- vegetables
- cereals

Thus, when the purchasing power of households falls, meat and fish are sacrificed before staple vegetables and cereals. Indeed, the consumption of meat may symbolise wealth as, in general, the poorer the household, the less meat-based meals are consumed.

In most African towns and cities, structural adjustment policies and devaluation have accentuated the incidence of poverty. The economic recession of the 1970-80s in SSA contributed to a rise in the number of poor households. Average non-agricultural cash income fell by 45% between 1978 and 1985. West African states in the Franc zone recorded a 30% drop in employment in the modern (formal) sector between 1979 and 1984.

Apart from significant labour retrenchment by private and public sector organisations, there has also been a number of instances of non-payment of salaries for prolonged periods in some countries. The devaluation of the CFA franc in January 1994, in particular, resulted in a marked reduction in the purchasing power and quality of life of many urban households.

Most people in urban areas have, therefore, had to resort to individual and collective survival strategies. For the poorest, food security constitutes a basic problem around which households evolve strategies to cope with rising cost of living. Men engage in several activities since available employment opportunities are often temporary and poorly paid. In order to supplement the declining incomes of their husbands' and consequent reduction in the contribution to household food consumption expenditure, most women engage in petty trading and other micro-enterprise activities like sewing and brewing traditional beer on permanent or temporary basis. Street food trade usually represents a first step in the integration of women into the urban economy, as it requires very minimal capital and training. Children in most poor urban households also drop out of school and engage in activities like guarding cars, portering in markets or sometimes even begging or stealing.

Some urban households are particularly prone to food insecurity under these circumstances. They include:

- Recent migrants from rural areas who are usually unskilled and have difficulty with integrating into the urban economic system;
- Single mothers (widows or unmarried mothers);
- Newly-poor formal sector workers, whose purchasing power falls sharply as a result of long periods of non-payment of salaries or whose low salaries weaken their capacity to cope with rising prices during lean or poor farming seasons; and
- Urban households engaged in fiercely competitive and poorly paid activities in the informal sector (like water-portering, petty trading, micro-retailing of food).

Social systems of solidarity, which are characteristic of rural areas but also quite strong in some towns and cities, sometimes enable urban households to cope with food insecurity problems. For example, family networks that facilitate the transfer of food produce between rural and

urban households are essential for managing food security problems especially during lean seasons or in the case of famine. These supply networks are particularly important for recent migrants who maintain strong rural links. However, economic pressures contributing to falling urban real incomes are steadily weakening the informal family support systems. Consequently, some relatively wealthy urban households even prefer to take their meals outside the home in order to avoid social obligations to poorer relations.

The issue of food security among the very poor deserves in-depth study. The basic question that has to be examined is whether growing food insecurity among the urban poor is a structural fact to which FSDSs must adapt or it should be seen as a social aberration to be resolved by tackling the root problem of unemployment.

3.3 CONDITIONS OF LIFE IN AFRICAN CITIES

The historical development of African cities reveals a process in which work places and services infrastructure have become increasingly concentrated in city centres and far removed from residential areas. Thus, most households incur substantial travel costs (in terms of time and money) especially since transport and communication systems in most cities are poor and inefficient. This is particularly the case for most low-income households and informal sector employees living in shantytowns or suburbs far removed from city centres.

These conditions impose limitations on home consumption of meals, especially midday meals. As a result, some members of the urban household (usually working men and women) take their midday meals at workplaces while meals for their children and other dependants have to be prepared at home in advance. This increases the household food expenditure, inducing readjustments in budgets, with spending on the midday meals for children and dependants being kept at the barest minimum.

Workers tend to have a lot of options in terms of access to meals at work places. Restaurants offer a variety of dishes. In most cases cash payment is required for the meals but regular customers of particular restaurants can arrange various credits (often involving settlement of bills at the end of the month). There are also a few cases where workers form groups that provide finance to a particular woman to prepare

meals for them.⁶ The system may be restrictive and women tend to exploit this niche by delivering meals cooked at home.

This initiative has been growing in popularity in Dakar since the introduction of a non-stop working day for government employees. It has advantages in terms of both quality and flexibility for the two parties. Prices are relatively lower because the women incur no additional expenses in renting cooking space and facilities. It is flexible for the customers because they can decide to miss some meals, depending on the state of their finances and other priority needs. Food quality has also been noted as an additional advantage. Furthermore, the system tends to strengthen bonds between employees who share meals and the women preparing the food.

Households can make significant savings by preparing shared meals. For instance, in Dakar the lowest price for a restaurant meal (a sandwich or a cooked dish) is about CFAF 350. Hence, the cost for a family of ten would be about CFAF 3,500, which would be adequate for preparing at least two good quality meals.⁷

Where individual eating is the custom and meals are available at reasonable prices, each family member may be given a daily stipend for this purpose. This is quite common in Cotonou, where the basic diet is mashed tubers with sauce. Figures from a budget/consumption survey carried out in Cotonou show that over a seven-day period households prepare meals at home only 1.8 times. “These are supplemented by ready-made dishes or other items bought by three-quarters of those surveyed at a rate of 3.65 items per day. In other words, only one-third of the 5.49 items used per day per household is cooked at home” (Cerdan & Bricas, 1996).

The consumption of ready-made dishes, whether at home, in the street, workplaces, schools or in small restaurants, has become a very common feature of eating habits in Cotonou. Out of an average weekly

⁶ This kind of organization is called a *popote*, and it helps to strengthen ties within the company.

⁷ Data obtained from interviews with three housewives indicated that the preparation of a meal of rice with fish or sauce for a family of ten would the following expenditure:

rice: 2 kg at 250 CFAF/kg = CFAF 500

oil: ? litre at 650 CFAF/l = CFAF 325

fish: CFAF 500

vegetables: CFAF 250

condiments: CFAF 200

energy: CFAF 125

total: CFAF 1 900, or CFAF 190 per person

household food expenditure of CFAF 4,145, it is estimated that about 26% (CFAF 1,091) is spent on street food. This habit creates flexibility that enables people access to types of food that they can not prepare or eat at home because of the demands of urban life. It also enables the disadvantaged to feed themselves at relatively low cost.

In most urban households evening meals are taken together at home but about 14% of those surveyed indicated that they took such meals “outside the home”. There is no available data on the prices of ready-made dishes in Cotonou but they do not vary appear significantly, undoubtedly because of the types of dishes involved mainly include meals prepared with cereals and processed roots and tubers like fermented maize mash (*akassa*) and cassava semolina (*gari*).

3.4 CULTURAL INFLUENCES ON FOOD CHOICE

3.4.1 Food and cultural identity

Food constitutes a basic element in the cultural identity of urban migrants. They tend to preserve some of the typical eating habits of their region of origin. There is, therefore, diversity in the eating habits of most African cities, a reflection of their cosmopolitan nature. For instance, one finds in Dakar migrants from the south of Senegal who prefer meals cooked with palm oil while in Cotonou⁸ the main dishes originate from the rural southern regions of Benin.

This desire to preserve the cultural identity of individuals and groups is also found to influence the choice of local processed produce used by households in preparing traditional meals. Cheyns (1995) notes that “eating *soumbala*, (a dish typical of Burkina Faso) allows people to express cultural identity as members of specific regions in the country”. Since the method of preparation differs from region to region, “eating *soumbala* prepared in or by someone of the same ethnic or geographic origin is seen as an expression of a person’s cultural identity”. The situation is similar in the case of *couscous* in Dakar, where for example members of the Serère ethnic group usually buy slightly fermented *couscous* from women of the same group.

⁸ Cerdan (1996) distinguishes three rural “agro-nutritional diets”: the northern starch-based diet in which sorghum and millet, supplemented with yam predominate; the central diet, found in the northern part of Zou – an intermediate zone – in which yam, maize and cassava are the main items, but sorghum and oil-bearing crops are also important; and the southern diet, found in the coastal region, in which cassava and maize predominate, with a substantial protein input from fish.

3.4.2 Meals as occasions for socialisation

Meal times often constitute occasions when families traditionally get together around its head. They usually create opportunity for reaffirmation of the position and roles of members of the family, especially the head. The management of the *popote* or housekeeping money by women is a daily reaffirmation of their central role in the household. This role that meals play in social integration, communication and education explains why urban families have such difficulty adapting to a non-stop working day and their frustration, since only relatively well-off families manage to satisfy this cultural need.

3.4.3 Perception of different types of food

The way some types of food are perceived significantly affects procurement behaviour by households. For example, many African women feel rightly or wrongly that frozen meat has less flavour and is less healthy than that of freshly slaughtered livestock and, therefore, tend to use less of it in meals prepared at home. Cheyns (1995) attributes this choice of meat for its freshness rather than tenderness to what he describes as a “taste trajectory”. Certain dishes are also perceived as “poor people’s food” or “rich people’s food”. In Senegal, for example, rice dishes in which fresh fish is replaced with dried or smoked fish is considered food for poor people. Even where such dishes are more nutritious as argued by nutritionists, there is strong resistance to their consumption because of the social class perceptions attached to them. At the opposite end of the spectrum, meat- and chicken-based dishes are considered rich people’s food. The same distinctions can be found in Ouagadougou where the consumption of noodle and tubers declines with falling purchasing power.

3.5 HOUSEHOLD FOOD SUPPLY SYSTEMS

The main means by which households obtain food supplies in urban areas include household production, wholesale or sub-wholesale purchase from rural and urban markets and retail purchases from markets and hawkers.

3.5.1 Household production

Urban households depend less on subsistence production than is the case in rural areas. From Cheyns' (1996) estimates, only 5.4% of households in Ouagadougou produced cereals for subsistence.⁹ According to his survey, about 9.3% of the total consumption of cereals was supplied as gifts from relations rural areas. The situation is similar in Dakar, although such gifts tend to come more from peri-urban areas within 50-60 kilometres of the capital city.

In Cotonou, subsistence production accounts for 10% of cereals and 6% of tubers and roots (the most widely consumed food). The figure for meat is 2% (mainly from domestic poultry keeping). Although surveys available from Senegal do not address this matter, anecdotal evidence indicates that market gardening in urban areas is declining under increasing urban land pressure. Small-scale poultry keeping is on the increase in working-class districts, but an assessment of the impact of this activity on household meat consumption has not been undertaken. Similarly, there are no definitive estimates of the contribution of fish to protein intake by urban households even though fishermen constitute a significant section of the population in cities like Dakar.

3.5.2 Market shopping

The main sources from which urban households procure food include rural markets, importers, urban wholesale and large retail markets, secondary markets, small neighbourhood markets, local shops and supermarkets. These units have distinct functions but in most cases provide a combination of services depending on the food items sold and local situation.

⁹ This survey was carried out during a lean period, so that the percentage for household cereal production is in fact probably higher.

Quite often the marketing and distribution units act not only as channels for the supply of food to consumers, but also provide a social function. They are places where networks of relationships are established and information is exchanged on all aspects of human life, from material to spiritual life. This multiplicity of functions creates difficulties in analysing particular units in the chain. Quantitative analysis is particularly difficult, for which reason this study relied extensively on qualitative analysis.

Quite often the marketing and distribution units act not only as channels for the supply of food to consumers, but also provide a social function. They are places where networks of relationships are established and information is exchanged on all aspects of social life, from material to spiritual life. This multiplicity of functions creates difficulties in analysing particular units in the chain. Quantitative analysis is particularly difficult, for which reason this study relied extensively on qualitative analysis.

The evidence as summarised in Table 1 indicates that, even though urban wholesale and retail constitute the main sources of supply to most households, direct purchases from rural markets is still important in cities like Cotonou (where 17% of households obtain supplies from such locations). Patronage of rural markets is in most cases not systematic but undertaken occasionally as members households take advantage of social and professional trips to buy relatively cheaper supplies from rural areas.

Supermarkets are generally the least patronised in towns and cities. They are patronised mainly by middle and relatively wealthier classes. In less wealthy neighbourhoods, mini-markets and local shops usually retail supermarket-type items like cheese, milk, sausage, cakes and drinks.¹⁰ The same situation applies to modern butchers' shops (in Bamako, Ouagadougou and Dakar) which offer quality meat preferred by middle-income and well-off households. Meat sold by these butchers is classified along Western standards and prices tend to be relatively higher than supplies from other sources (Cheyns, 1995). Fish and meat are usually bought from large retail markets.

Table 1: Provisioning methods: items and places

City		Rural	Wholesale	Secondary	Modern	Traditional	Street-	Street -
------	--	-------	-----------	-----------	--------	-------------	---------	----------

¹⁰ Many sources indicate that some social groups patronize these places for reasons of status.

	Item	markets	markets	markets	facilities	facilities	fixed	mobile
Dakar	Millet	+	++	+				
	Rice			++	+	+++		
	Oil			++		+++		
	Meat		+	++	+	+++		
	Fish		+	++				+++
	Vegetables		+	++			+++	
	Cooked dishes				++	++		+
	Condiments			++			++	
Cotonou	Tubers							
	Cereals	+++		++			++	++
	Vegetables			+				
	Meat			+		+		
	Fish			++				
	Cooked dishes					++	+++	+++
Ouaga-dougou	Rice	+	++	+	+	+++		
	Maize	+++	+++	+		+		
	Sorghum	++	+	+				
	Meat	+		+++	+	+		+
	Fish			+++				
	Cooked dishes				++		+++	
	Condiments	++		+			+++	

Key:

+ infrequent ++ frequent +++ predominant

Rural markets: all purchases made near production areas, directly from the grower, at abattoirs in the case of meat and at beaches in the case of fish.

Secondary markets: all district or neighbourhood markets whatever their size, where a wide range of goods are available (cereals, meat, cooked items, fish, etc.).

Modern facilities: supermarkets, neighbourhood mini-markets, modern butchers' shops and stalls, fishmongers and restaurants in a fully enclosed place.

Traditional facilities: neighbourhood stores and traditional neighbourhood butchers' shops in sheds.

Street - fixed: sales points in the street with makeshift, open-air facilities (tables, etc.).

Street - mobile: vendors who carry their merchandise around.

3.5.3 Access to cooked food

In addition to price and quality, the choice of cooked meals is usually influenced by factors like proximity, trust in the culturally-determined skills and household income. Consumption of cooked food supplied by

informal sector providers “on the streets” is increasingly becoming the norm rather than an occasional supplement in many cities. This is particularly the case for poorer households.

The supply situation for cooked food differs from city to city. For instance, in Cotonou, there is a stable supply of cooked dishes of acceptable quality largely as a result of a well-organised network of small-scale units engaged in processing of local produce and preparation of cooked meals¹¹. The situation in Dakar is very different. Home-based cooking using imported foodstuffs remains the norm.

Choice based on trust in cooking skills mainly occurs because specialised skills in the preparation of some types of cooked food tend to be associated with particular ethnic groups. For example, the Mauritians and Hausas in Dakar are considered specialists in preparing grilled meat. The ethnic background of the producer/seller is, therefore, a fundamental factor influencing patronage. Even though hygiene may be important to some consumers, especially middle-class consumers, it is usually of marginal importance to most customers. In Cotonou, these ethnic-based skills are especially important, because most of the dishes are made of fermented mash, thus increasing food poisoning risks if not well prepared.

¹¹ A survey in Cotonou recorded 659 small-scale mills handling 150 tonnes of produce a day, and providing a milling service. Processing activities are mainly in the hands of certain socio-cultural or geographical groups because of their skills and the origin of the produce, and these are thus the groups that can reduce food costs for consumers.

CHAPTER 4

SOCIAL RELATIONS BETWEEN CONSUMERS AND TRADERS

Relations between consumers and traders can be viewed from two perspectives, depending on whether the two groups are considered individually or collectively. In most African societies, traditional trading relationships often evolved between families specialising in specific sectors of production and services. Those engaged in a particular activity rarely formed co-operatives but rather established special relations between families with complementary activities. For example, families producing cereals usually maintained links with particular dairymen and fishermen, and vice versa. These social relations constituted the basis of trust between families and governed their interaction.

4.1 TRADERS AND CONSUMERS AS INDIVIDUAL ACTORS

The situation may be different in urban areas trading activities are dominated by “foreigners” with whom consumers have little or no traditional ties. Traders-consumers relationships, therefore, have to be built up through exchange transactions in which the actors pursue different objectives. Urban housewives are usually keen to establish stable, lasting relations with particular traders in an attempt to guarantee the supply of quality produce, since prevailing cultural norms encourage fair play among parties between whom there is mutual trust.

In Dakar, each housewife tends to have her *cliante* (from the French word *client*), a trader with whom a trust-based trading relationship has been established. The relationship is, however, not exclusive but simply preferential, since the housewife is dependent on or restricted to dealing with a particular trader. The specific objectives pursued by consumers depend on the food item in question and the associated services required as discussed below.

Meat: A survey by Cheyns (1996) in Ouagadougou showed that hygiene and freshness are two key factors that affect the choice of the source from which housewives buy meat. The desire for clean, safe meat usually influences purchasing decisions of housewives with regard

to the place (such as abattoir and section of market) and time (early in the morning “before flies and heat affect the quality of meat” [Cheyns, *ibid.*]).

Most housewives from average-income families prefer buying from small-scale butchers selling without any standard weights and measures, since this presumably encourages bargaining between the two parties. Muslims also tend to buy from butchers of the same religion so as to ensure that the meat is from animals slaughtered in conformity with particular standards prescribed by their religion. Maintaining long-term relationships with particular meat suppliers tends to reduce risks with regard to uncertainty as to conditions and procedures at the point of slaughter and during transportation of supplies to the market.

Cereals: Wholesale purchase of cereals does not require long-term relationships between parties especially since quality and price are often standardised. However, for poor families who buy supplies on daily basis, such a relationship may be necessary to guarantee supplies during periods of shortages and also to enhance access to short-term credit when necessary.

In Dakar, Lebanese and Syrians dominate the wholesale trade in imported cereals while traders of Mauritanian origin used to predominate the retail sector (Mbow, 1976). The Mauritanian retailers usually maintained close personal relations with families and operated informal “savings and credit banks”. Many families “saved” housekeeping money and unused stocks of food with these retailer-bankers, who also provided short-term suppliers’ credit to those they were well acquainted with. These traders left Dakar in 1989 in the wake of hostilities between the two countries. There is no empirical evidence on the extent to which indigenous Guinean and Senegalese traders have taken over these activities.

Traditionally processed products (*soumbala, couscous*): As discussed in section 3.4.1 (in chapter 3), the choice of supply source for these products may be influenced by the desire of individuals and households to affirm their cultural identity. However, the need for quality assurance also promotes maintenance of long-term trust-based relationships between consumers and traders (Cheyns, 1996).

4.2 COLLECTIVE ACTIONS BY TRADERS AND

CONSUMERS¹²

Traders generally tend to form associations that are easily identified by produce and develop group strategies with respect to their suppliers and consumers. Consumers, on the other hand tend to show more individual behaviour. This is partly attributable to the long-term trade relationships between them and traders and the long history of state control over prices and quality in most African countries. These conditions discouraged consumers from collectively pursuing their interests in relations with traders.

Consumer associations are a very recent phenomenon in African countries. In 1990, there were only 6 in 6 countries, but by June 1997 the number had risen to over 100 in 45 countries. National consumer associations can now be found in almost every Francophone country in Africa. In many SSA countries, there was initial scepticism about these associations as most citizens perceived them either rightly or wrongly as being more suited to developed countries. Their formation was usually led by a small group of middle-class intellectuals whose primary concern was about produce quality, particularly since trade liberalisation under structural adjustment encouraged the importation of produce of doubtful quality (sometimes including even expired and banned products).

The consumer associations in SSA have largely been modelled after the European consumer movements, with public demands and lobbying as the central activities. However, difficulties in pursuing consumer interests in countries like Senegal have led to some adaptation in the methods used by the associations, as discussed below.

¹² This section is based on meetings with Mr Kanouté, a representative of the ITO.

Specialisation: The growing conviction among leaders that dissipation of effort is partly responsible for the ineffectiveness of consumer associations has led to the formation of sector-specific associations in a number of countries. These focus mainly on issues related to the provision of electricity, water, food and transport. The food sector associations tend to be closely linked with the environmental movement.

Adaptation of method to local conditions: The need for a social base and legitimacy in dealing with the authorities and traders has led some associations to adopt a strategy involving the formation of branches and units in working-class districts with structures modelled on those of political organisations (like cells and committees). This development has often affected the approach of the associations since the poor and disadvantaged are more concerned with ensuring regular supplies and price controls than with issues of quality. In a number of instances, women members from poor neighbourhoods urged their leaders to pursue new activities that reduced household food expenditure, including:

- Implementation of stock management projects and centralised purchasing of such items as rice, oil and sugar; and
- Establishment of direct relations with producers for such local produce as palm oil and processed fish.

This approach usually encourages growing awareness of the need for consumers to be actively involved, through their organisations, in all issues concerning food supply and distribution. It has been used, for instance, by consumers in Mali. They examined the food chain and concluded that distribution margins were too high. They, therefore, sought government support in promoting a distribution system that benefited young unemployed people.

The burgeoning associations, however, tend to have very limited means of fulfilling their roles (implementing projects and expressing objective views on subjects related to food supply and distribution). In most cases the militant option overshadows a scientific and objective approach, leading to errors of judgement. A major challenge facing the consumer movement in most SSA countries is that of broadening its social base so as to be relevant. It is also important that leaders clearly understand the interests of the social groups represented by the associations in order to avoid gaps between them and consumers that will undermine their legitimacy.

Another major challenge is that of informing and making citizens aware of the issues involved in food supply and distribution, especially those pertaining to hygiene and nutrition. They also have the task of making traders aware of consumer needs and working with them to devise strategies to meet those needs.

These associations can play a crucial role in promoting dialogue between consumers, traders and the state. This role can facilitate the resolution of conflicts as well as provide an effective framework for evolving strategies to deal with anticipated and unanticipated supply problems. In the medium term, consumer associations can also be encouraged to assume responsibility for managing buffer stocks from the state since they can be more effective than the latter.

The associations also have a crucial watchdog function. They should, therefore, be well-equipped (especially in terms of both resources and training for the leaders) and enabled to recruit and retain personnel with required technical skills in order to fulfil their role and establish credibility. Militancy and voluntarism soon reveal their limitations when expectations begin to grow. The movement, therefore, has to be “professional” without being “bureaucratized”.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The predominant orthodoxy in food security policies in developing countries in the 1950-70s presumed that consumers meet their food needs wholly through subsistence production and obtain any additional supplies through barter. Arising from this perspective, consumers were not seen as separate actors from producers. Furthermore, the sale of farm produce was seen much more as the disposal of a surplus than a calculated response to demand. In contrast, this paper has argued that this conventional wisdom is not applicable to urban households, stressing the impact of socio-economic and cultural factors on food demand by the urban population.

The discussions indicate that urban households are diverse in structure, size and function. Differences also exist in terms of household income and ethnic backgrounds, which affect preference for particular staples, cooking styles and strategies to cope with food insecurity. It is further noted that the sources of supply of food to urban households also differ. In particular, significant differences occur in the contribution of subsistence production and cooked meals from informal “street” providers to satisfying the food needs of urban households. These differences reflect in part variation in household income levels.

It is evident from the discussions that urban consumers in most African cities do not exhibit some illusory “average” behaviour. Efficient food supply and distribution systems, therefore, have to be capable of meeting the diverse needs of households with distinctly different characteristics. Furthermore, policymakers have to recognise that urban households are very dynamic in terms of their characteristic features, given social and technological changes. For this reason, it is crucially important to ensure effective monitoring and incorporation of information on these features in devising policies to improve the performance of urban FSDSs. However, in most cases, there is a dearth of on urban consumers, thus necessitating indepth studies to fill gaps in understanding of the target beneficiaries of reforms to improve the efficiency of urban food markets.

Another important conclusion from the discussion is how critical contributions from various stakeholders are to the development of effective food supply and distribution policy. Quite striking, in this context, is the recent rise in the number of consumer associations in many African countries. Most of these associations are fulfilling important market regulation and quality control functions and, therefore, should be taken into account in strategies to improve FSDSs.

It appears artificial, in the case of consumer associations in Africa to distinguish between the functions of consumption and supply as applies to those in developed countries, thus restricting their activities to lobbying and agitation. This is mainly due to issues of legitimacy with regard to the needs of poorer, under-represented classes, insecurity and imperfect institutional environment in the African context. The consumer associations will, therefore, need substantial technical and financial assistance to develop their organisational capability as well as support in terms of central purchasing projects in order to counter-balance the undesirable activities of traders and other suppliers.

Trade liberalisation has accentuated the problem of food quality. This is attributable to the fact that in most cases the state, which has retained responsibility for quality control is unable to effectively perform this function because agencies involved are poorly equipped. There is, therefore, the need for the state to examine the feasibility of contracting out this function to the private sector.

Lack of information and knowledge on hygiene and nutrition issues also undermines the capacity of the urban population to collectively police maintenance of food quality standards by traders and suppliers, especially of imported and cooked meals. Hygiene and nutrition concerns have little or no effects on methods of storing, handling and preparation of meals. This situation persists despite the existence of various public education programmes on hygiene and nutrition. It is evident that such programmes have proved largely ineffective and need to be reviewed.

In summary, the paper shows that efforts to improve the performance of urban FSDSs in Africa will benefit considerably from better knowledge of the urban consumer; stronger consumer associations; improved quality control and better organised public education on food hygiene and nutrition.

BIBLIOGRAPHY

ARDIS n.d. *Etude sur l'impact de la dévaluation du franc CFA sur les ménages à Dakar.*

ARDIS n.d. *Etude sur la pauvreté urbaine.* Ministère de l'habitat et de l'urbanisme, Dakar.

Bricas, Nicolas 1996. *Cadre conceptuel sur l'analyse de la dynamique alimentaire urbaine en Afrique.* FAO/CIRAD-SAR.

Cerdan, Claire Thuiller & Bricas, Nicolas 1996. *Etude de cas sur l'organisation alimentaire de Cotonou.* FAO/CIRAD-SAR.

Cheyns, Emmanuelle 1996. *Etude de cas sur les pratiques d'approvisionnement alimentaire des consommateurs de Ouagadougou.*

Hubard, R. 1979. Parameter stability in cross-sectional models of ethnic shopping behaviour, in *Environment and Planning*, vol. 11, no. 9, pp. 977-992.

Kanouté, Amadou C. 1996. *Lutter contre la pauvreté par l'organisation des consommateurs. Table ronde sur Pauvreté et consommation.*

Lericollais, André & Veunière, Marc. L'émigration toucouleur du fleuve Sénégal à Dakar, in *Cahiers ORSTOM Série Sciences Humaines*, vol. 12, no. 2, pp. 161-175.

Mbow, Lat Soukabé. 1976. *Structure du commerce de détail à Dakar. Mémoire de maîtrise de géographie.* Université de Dakar.

Moustier, P. & Leplaideur, A. 1996. *Cadre conceptuel pour l'analyse des acteurs commerciaux.* FAO/CIRAD-FLHOR