

Characteristics of Urban Food insecurity: The Case of Kinshasa

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Abstract

Feeding Kinshasa? How to ensure food security for millions of inhabitants who have to survive on low wages well below the poverty line? This is the daily challenge for a multitude of poor people in Kinshasa! Some see this situation as an opportunity for strengthening local producers. In the Democratic Republic of Congo (DRC), the constraints affecting the agricultural economy mean it cannot supply the city of Kinshasa on the basis of predominantly local production but through food imports. In a context of crisis as experienced in the DRC, food is of strategic importance and the focus is essentially on quantity: households turn to cheaper products and high calorie intake at the expense of high-protein foods, leading to unbalanced diets. This imbalance is exacerbated by an influx of imported products, often of poor nutritional quality but at very competitive prices and responding to new eating habits of urban consumers. To understand the issue of food security in DRC, a country with high agricultural potential but 70% of whose population is affected by food insecurity, various research devices have been established by an interdisciplinary research group to support policy, funded by the Belgian Development Cooperation Department (DGDC / CUD): the Research Group Supporting the Policy for Food and Agriculture in Africa (GRAP 3A). This paper presents one of the main focuses of the inter-university research program conducted jointly with researchers from the University of Kinshasa: an approach to food insecurity and strategies for a sustainable food policy based on the study of household food consumption in Kinshasa carried out by various surveys.

Key Words: *food consumption, food security, agricultural policy*

1. Introduction

Since independence, agricultural development in DR Congo has kept alive the hopes of the Congolese for much needed food self-sufficiency. It has mobilized capital, energy and enthusiasm. Nonetheless, these hopes have been dashed as the situation has deteriorated rather than improved. According to the FAO (2006), in a dozen years,

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the number of undernourished people increased by nearly 400%, rising from 11.4 million (1990-1992) to 43.9 million (2004-2006), while the population grew by only 50%, reaching 40 million in 1990-1992 and 59 million in 2004-2006. As shown by the Central Bank of Congo (2010), food imports now account for more than a billion USD, which represents about 15% of the total value of imports. Moreover, net foodstuffs trade (exports - imports) is currently estimated by the FAO at -5 % of the total GDP in 2010.

How did we get here? There are many reasons and those given often include trade policies adverse to local production, the practices of some leaders who have been more concerned with personal enrichment than the common good, and short-term profits from policy-driven investments while agricultural development must be considered over time (Trefon, 2009).

In the DRC, almost 70% of the population lives in rural areas and agriculture is often the main source of income for these families. The country is widely recognized as having enormous agricultural potential. Unfortunately, the succession of wars, looting, theft, insecurity and displacement have made rural people insecure and made it difficult to practise agriculture, worsening the already very difficult living conditions of the population (Ngeleza et al, 2011). The rural population is condemned to subsistence farming characterized by extremely low productivity, and exorbitant marketing costs, weak infrastructure (e.g., weak storage capacity and poor road networks) and a virtually non-existent market (Lebailly, 2010).

The critical situation of the agricultural sector can be attributed both to endogenous and exogenous factors. Among the latter, we can mention the economic policies applied by successive governments in recent decades that consistently favored the mining sector at the expense of agriculture. This has led the country to be supplied with cheap imported food (Hamilton, 2010). Food aid, justified by the soaring impoverishment of the Congolese population, has further accentuated the negative impacts of such policies on local farming. For example, at the beginning of 2010, a gift from Japan in the form of food aid consisting of 13,000 tons of maize meal sold in 25 kg bags at 16 USD (13,300 FC), coupled with massive imports of corn from Russia, caused a significant drop in prices in Kinshasa and a decline in demand for corn produced in the Bandundu with the consequence of a drastic fall in prices during the period before harvest had never been observed before.

Further down the chain, market access stands out as the most important issue to solve. Low agricultural productivity is also the consequence of a certain number of endogenous factors. These are primarily related to the nature of extensive agriculture, but also result from technical weaknesses, scarcity of inputs and lack of credit. In some parts of the country, these factors are also exacerbated by soil fertility degradation and pest outbreaks (Tollens, 2009).

Besides this, producers who succeed in generating a surplus then face enormous difficulties in marketing their products. In this regard, transportation is the main bottleneck, and considerable costs are generated by poor infrastructure. Roads are indeed only passable on certain routes that have benefited from repairs to their infrastructure and agriculture services. Given the condition of the road network and current fuel prices, road transport costs remain fairly high. Inland waterways are not sufficient to offer a real alternative, and most still remain under development (Tecsult, 2009)

The Congolese rural economy has fallen into a vicious circle, where the continual deterioration of competitiveness generates market losses and subsequent inadequate investment (Hamilton, 2010). The exodus of the population to the cities is therefore

inevitable and reinforces the state's disengagement from education and health in rural areas, which in turn affects farmers' production capacities, and so on.

At the same time, food insecurity is a major aspect of urban poverty (Bonfiglioli, 2007). Urban households spend a larger proportion of their income on food than rural households do and are therefore more vulnerable to changes in prices and declining trade terms. In DR Congo, cassava leaves are commonly consumed at home. The cassava field is a permanent food supply: the tubers are taken as and when the need arises. They are the staple diet in carbohydrates. The leaves are a popular side dish.

With nearly 6 million people and half of households living in poverty, Kinshasa accounts for 10.7% of the national population and 34% of the urban population of the DRC. The city has experienced rapid population growth: the population has multiplied by 7 in 40 years and the population density is very high (577 inhabitants per km²) compared to the national average (24 inhabitants per km²) (PNUD, 2009).

Most households in Kinshasa live in precarious conditions, in an environment characterized by a severe economic crisis (PNUD, 2009). In households, women must contribute to income and their small, often informal, jobs force them to be absent from home, sometimes till very late into the evening. Meal times and frequency are modified and they are therefore less often prepared in the home: they are consumed outside the home or the prepared food is brought home for the other household members. This abandonment of culinary practices is even stronger in poor households as the cost of fuel wood (mainly charcoal or *makala*) is very high due to overexploitation of forest areas near Kinshasa.

Eating habits change considerably: there is, for example, decreased consumption of traditional dishes like *chikwangu* (cassava dough) replaced by bread (made from imported cereals) consumed at any time of day. The growing success of large bakeries located in Kinshasa reflects these new behaviors in urban areas. In a context of crisis as experienced in the DRC, the food focus is essentially on quantity: households turn to cheaper products and high calorie intake at the expense of high-protein foods, and this leads to unbalanced diets. This imbalance is exacerbated by an influx of imported products, often of poor nutritional quality but at very competitive prices and responding to new eating habits of urban consumers. The supply process has also been modified: daily purchases of small quantities according to available income, mixing corn flour with cassava, the importance of leafy vegetables grown in peri-urban areas.

Even though the changes in eating habits observed and the individual or collective strategies adopted certainly depend on household incomes, they probably include important socio-cultural factors that should be identified in order to develop strategic aspects of a sustainable food policy. The rest of the paper considers the characteristics of urban food insecurity in Kinshasa, beginning with the challenges of food security.

2. The challenges of food security in Kinshasa

Food is the first basic need of mankind, so it must be considered a global public good. In a globalised world, choices and actions in one country can affect food security in other parts of the world. Beyond their individual interests, all countries agree in considering that food security is essential to peace and security (De Schutter, 2008).

In the face of the urban riots in developing countries related to rising food prices and its media coverage in the spring of 2008, the international community mobilized to consider the necessary answers. Today, the return of good harvests and the financial crisis have once again overshadowed the scandal of hunger. However, the

issue of food security is all the more crucial as by 2050 we must meet the challenge of feeding 9 billion people, and this will require doubling production while preserving the planet (CIRAD, 2009). This must be based on sustainable development of local agriculture based on a recognition of environmental issues (climate change, desertification, biodiversity loss), as the only responsible strategy to enable good market supply.

The current situation demonstrates that food security is not just a question of availability of food in markets but also of purchasing power (accessibility). Food security depends on agriculture but also on employment and income. It is no longer just a rural issue but also an urban one. In recent years, food security issues have dramatically returned with the soaring prices of basic commodities, the question of the development of biofuels, land-use strategies and agro-production of large transnational corporations (De Schutter, 2008). The concept and scientific analysis of food security have evolved from an excessive focus on availability to a problem of demand for food taking greater account of the notion of access, regularity and quality of food (FAO, 2006).

In terms of food security, in protracted crises, there is the problem of finding more appropriate strategies than short-term, humanitarian responses (FAO, 2008). The term "protracted crisis" was used to highlight the persistent nature of some emergency situations (Schafer et al., 2002) and the impact it causes on people's means of making a living: steady erosion that may lead to structural vulnerability.

We can observe the factors that hit the DRC and kept it in a context of protracted crises: the succession of wars, looting, insecurity and displacement, lack of efficient public services and controlled regulation in the areas of production and trade, decades of economic mismanagement and patrimonial rule, the transformation of economic resources into political assets and the private income activities of the ruling class that led to the collapse of the Congolese economy and have hindered any formal process of institution building (Alinovi et al., 2008).

It is now recognized that sustainable food policies should be based, not on an exclusively supply-oriented, traditional method of "food-before-everything", but on the threefold "supply-access-use". In order to highlight appropriate strategies and policies in response to food security in protracted crises, it seemed useful to address the issue through analysis at household-level of changes made to adapt to their means of making a living and the resilience of the food systems identified.

Food insecurity should not be seen merely as an insufficient food supply in a country but as the impossibility for households to access food; it is now recognized that the food self-sufficiency of a country is a poor indication of actual household access to food. In most cases, from 20 to 30% of the population consume less than 80% of their caloric requirements even when the food supply exceeds 100% of requirements (Jayne, 1995). Although the food balance sheets compiled and published by FAO for most countries of the world are an interesting tool for analysis over a long period and for cross-country analysis, they give no indication of the distribution of supplies within the population and are therefore of little use for studying the dynamics of food consumption at the local or household level.

Household food insecurity is the result of a complex system of "vulnerability factors"; it is largely due to a lack of purchasing power and, in the face of crises, a lack of resilience of households. Households find themselves in a situation of food insecurity when their lifestyles and means of making a living have changed or are not suitable and they lack the "capability" to strike a balance between a set of requirements (Sen, 1981). Household food demand cannot be analyzed independently

of all the means of earning a living and the living conditions of households: social relations, resources, geographical location.

Statistical surveys of consumers provide information on food intake when it comes to nutrition surveys or, for surveys of household budgets, record spending on food and all other household expenditure and income sources. These surveys may be of great use in food economics in industrialized countries but, in our opinion, they run a greater risk of error in some countries such as African countries: the fact that only expenditure is recorded implies that the vast majority of food consumed comes from the market, and this does not appear to be the case in African countries where non-traded supplies (own consumption, social transfers) are not negligible, even in the case of urban households. The practice of urban and sub urban agriculture is highly developed in Africa and is most often in the informal sector.

In addition, food expenditure on consumption outside the home is difficult to record due to the recognition of the independence of household members. Similarly, it is difficult to record reliably the income of the household as it often comes from several members and informal jobs. In addition, these surveys give no indication as to the mode of supply, food practices and how they change within the household.

All the data from surveys such as those described above and available for Kinshasa, did not seem sufficient to understand the reality of the food situation in terms of strategies for access and use by households. Also an update seemed useful, as the most recent data was for 2005 (Survey of living conditions of households 1-2-3; Houyoux, 1986; Goossens et al., 1995; CEPLANUT, 1999).

3. Research methodology

Our methodology is qualitative. Surveys relevant to our analysis were conducted in Kinshasa, especially in three municipalities selected to be representative of different types of urbanization and living standards. Since February 12, 2006, the city of Kinshasa has had provincial status and is the capital of the DRC. It covers 9.965km² and the majority of the economic and administrative activities of the country are concentrated here. It has nearly 6 million inhabitants and the density is 577 inhabitants/km² (UNDP, 2009). Administratively, the city is divided into 24 *communes* and 326 districts.

The urban area of Kinshasa-Brazzaville, straddling the river Congo, and the two countries Congo-Brazzaville and Democratic Republic of Congo, has seen a remarkable population explosion in recent years: the area is home to more than ten million people. The city is organized into an administrative and commercial centre (La Gombe) lined by residential neighbourhoods and a periphery consisting of the housing areas in which the majority of the population live. The roads have mostly deteriorated and, in view of the morning and evening congestion, the road network from the periphery to the centre appears to have reached its limits.

The situation in Kinshasa seems better than in other provinces of the DRC, which raises the issue of rural depopulation further amplified by armed conflict. Nevertheless, the figures of different socio-economic indicators reflect the precarious life of Kinshasa residents: the poverty rate is 41.6%, the rate of primary school enrolment is only 75%, and the infant mortality rate is 73% (PNUD, 2009). Sanitary and health conditions are precarious: 50% of households are not connected either to electricity or drinking water; there are 94 hospitals in the province, meaning there is one bed per 10,000 inhabitants, one physician for nearly 5,000 Kinshasa residents and only 15% of households benefit from public waste disposal services (PNUD, 2009). The population is young with half under 20 years and unemployment is high (15% in

2005). With nearly a million jobs, the non-agricultural informal sector is highly developed (mainly trade and services). Based on data collected by UNDP (PNUD, 2009), the following characteristics of the various communes in Kinshasa can be identified.

3.1 Limete Commune

The Kinshasa residents who live in this industrial area with quite a large amount of infrastructure are considered to have a relatively high standard of living. The total population in 2008 was 243,945 inhabitants. Of the 14 districts that make it up, it is the area called Résidentiel that was selected for our surveys. It consists of 1,038 plots and 50 access routes (21 streets and 29 avenues), with a population of 8,802 inhabitants.

3.2. Makala Commune

This *commune* is considered one of the poorest in the capital. It lacks virtually any urban infrastructure, plot creation is almost spontaneous and 173,550 inhabitants (2008) have a very low standard of living. Of the 18 districts of the municipality, we have chosen the Mabulu I district (17,389 inhabitants and 1,030 plots).

3.3. Ndjili Commune

With 328,531 inhabitants (2008), Ndjili is one of the new housing areas. The degree of urbanization and living standards of its inhabitants can be considered as lying between those of Limete and Makala. Of the 13 districts that make up this municipality, two will be the subject of our study surveys: Ward 1 (16,231 inhabitants and 765 plots) and Ward 7 (12,265 inhabitants and 634 plots).

Two surveys will follow one another: the first will consist of an inventory of household food consumption and the decisive socio-economic factors underlying it. A smaller sample of household representative of the types identified in the first survey will then be monitored for three years. These surveys will be supplemented with occasional interviews to get additional information deemed useful as a result of the results obtained.

The sampling method chosen will be of the simple random type: each plot is assigned a number from 1 to n and the selection is made using a random numbers table. Each plot is supposed to be occupied by one household and if this is not the case a new draw will be conducted, with a number assigned to each household. The number of members of a household can be very important and, in precarious situations, family size tends to increase, with "extended" families living together to provide solidarity. The notion of the concept of "household" used is that of all people who share meals and the interviewee is the person responsible for preparing them. The sample size of the first survey of living conditions and household food consumption concerns 10% of the total of all plots and 346 households.

The first survey (year 1) will consist of face-to-face interviews, in the household home, arranged in advance and based on a predetermined questionnaire, a few elements of which we indicate here. The socio-economic characteristics (age, sex, education level, employment, religion, ethnicity, number of members, children) of the household and the head of the household will be identified and supplemented with information on housing, goods, different sources of income, savings or loans. The question of the budget (list of monthly expenses) will be addressed in order to identify the proportion spent on food.

Questions about food consumption will focus on eating habits (number of meals per day, times, meals eaten outside the home), the type of food usually consumed (report on consumption during the last week) or occasionally the price, method of preparation, mode of supply, and any changes that occur and their cause. Based on the results of the first survey, a small sample of households, representative of different types identified and who are willing to collaborate, will have their consumption monitored for 12 months (year 2) and then 6 months (years 3 and 4).

Households will receive a notebook in which they will show every day what was consumed, the method of preparation, and the amount spent for the purchase. For larger purchases of supplies, the price and quantity will be indicated on the day of supply. Food consumed outside the home by each member and the cost will also be indicated. Regular visits by investigators (monthly or weekly or more frequently as needed) will check that the information has been transcribed correctly and regularly.

4. Preliminary results

The conclusions from the analysis of the first results allow a few pertinent observations to be highlighted. Comparing the three places in terms of number of meals per day (see table 1), we find that households generally have two meals a day. But the trends vary considerably in the different living environments. Approximately 74% of households in Limete (well-off area) have 2 or 3 meals a day. In Ndjili (intermediate area) about 85% of households eat one or two meals a day. In Makala (poor area) over 92% have either 1 or 2 meals a day.

Table 1: Number of meals per day

Location:	LIMETE	NDJILI	MAKALA
One meal 39%	26 %	41%	
Two meals 53%	48%	44%	
Three meals 8%	26%	15%	

Source: surveys conducted from April to June 2010.

For breakfast, the monthly cost is estimated at 106.6 USD (well-off), 46.7 USD (intermediate) and 38.6 USD (poor environment). These meals comprise bread, milk and sugar in the well-off community and almost the same in the intermediate area while they include only bread, sugar and tea without milk in the poor environment.

Staple foods consumed in the three environments are essentially *fufu* (a type of paste made of cassava, corn or a mixture of both). Plantain and rice complement cassava as a staple food in the well-off. The transition from the well-off area to the intermediate area is manifested by the inability of households to buy plantains; they are then substituted by *chikwangue*. Similarly, when we go from the intermediate area to the poor area, consumption of corn mixed with cassava in the preparation of *fufu* disappears and this leads to the consumption of *fufu* prepared with cassava alone.

Cassava leaves, beans, amaranths and leaves are the most common vegetable accompaniments. Households in the poor environment are less and less able to consume beans and replace these with sweet potato leaves. They are considered a

cheaper vegetable and their consumption tends to increase in the poor environment. They can be classified as inferior goods. The monthly cost of vegetable accompaniments is around 50 USD (Limete), 34 USD (Ndjili) and 25 USD (Makala). It can be perceived that these costs are significantly different because they are in a ratio of one to two between the poorer and the better-off area. In addition, the methods for preparing these foods vary especially according to the particular ingredients incorporated therein. The consumption of ingredients results in food models whose costs are very high and significantly different. Consumption of ingredients is highest in the well-off area. By including the costs of ingredients (spices and other condiments) used in food preparation in the cost of plant foods, we find that the costs of plant foods are in a ratio of one to two between Limete and Ndjili and of one to three between Limete and Makala.

Animal accompaniments consist essentially of horse mackerel, chicken legs, offal and chicken. Horse mackerel is one of the most widely available foods accessible to households. Horse mackerel is eaten a little less in the well-off area (25%) than in the poor area (38%). In the latter, chicken is substituted by cuts (wings, chicken legs) but especially by offal. The monthly cost of food of animal origin is respectively 137.3 USD (Limete), 70 USD (Ndjili) and 35 USD (Makala). We can see that the price of animal accompaniments is very high compared to that of vegetable accompaniments. This is why many households eat very few animal products and this leads to malnutrition, with serious consequences especially for children deficient in animal protein.

The consumption of desserts and fast food is very low and their monthly cost is about 5 USD in the well-off area and just under 2 USD in the poor and intermediate areas. Monthly expenditure on drinks at the household level results in different consumption patterns. In the well-off area, this item of monthly expenditures is quite high with an average of 55 USD. It mainly covers the cost of mineral water to which is added soft drinks and fruit juices. On the other hand, in the poor and intermediate areas, these same expenses are insignificant at respectively 2 USD and 7 USD to buy drinks at the household level. The most widely consumed beverages in these areas are mainly traditional beer and spirits.

Consumption outside the household is quite high in the well-off area. Household heads (60%) and spouses (52%) typically consume in the vicinity of their workplaces. In the poor and intermediate areas, the proportion of household heads and spouses consuming outside the household barely exceeds 40%. However, it is important to consider that in this environment snacks are not considered part of food consumption and are therefore not counted.

Comparing the expenditure on food consumption with the total expenditure incurred in households (see table 2): we see that it accounts for 49% (Limete), 55% (Ndjili) and more than 64% (Makala) of total household income. This shows that, in all three areas, the structure of expenditure is still dominated by food costs. The same trend was demonstrated in various studies on food consumption in Kinshasa carried out by Houyoux in 1969, 1975 and 1986. The results of these surveys showed that the share of food expenditure in household budgets was 67.4% (1969), 59.6% (1975) and 62.1% (1986).

Table 2: Monthly expenses (in USD) by households in USD

	LIMETE		NDJILI		MAKALA	
	Cost	%	Cost	%	cost	%
Food expenses at home	426.0	32.0	215.6	37.9	148.1	45.3
Outside food expenses	225.6	17.0	94.8	16.7	61.7	18.9
Total of food expenses	651.6	49.0	310.4	54.6	209.8	64.2
Loyer	250.0	18.8	80.0	14.1	22.0	6.7
Electricity	9.0	0.7	7.0	1.2	2.0	0.6
Water	10.0	0.8	11.0	1.9	7.0	2.1
Health	29.0	2.2	30.0	5.3	9.5	2.9
Transportation	167.0	12.6	40.0	7.0	27.0	8.3
Education	92.0	6.9	30.0	5.3	17.0	5.2
Clothes	30.0	2.3	30.0	5.3	11.0	3.4
Communication	67.0	5.0	17.0	3.0	5.0	1.5
Energy for cooking	25.0	1.9	13.0	2.3	16.3	5.0
Total non food expenses	679.0	51.0	258.0	45.4	116.8	35.8
Total expenses	1 330.6	100.0	568.4	100.0	326.6	100.0

Source: Surveys conducted from April to June 2010.

5. Conclusion

Wide disparities exist in the food consumption patterns in urban areas in Kinshasa. More importantly, these disparities seem to have remained and are likely to worsen in the coming years. What the socio-economic and political implications of this state of food insecurity and inequality are require further analysis, although recent rioting related to soaring prices of agricultural products suggests that there are deep challenges ahead.

At the same time, the analysis of food security has evolved and it is now recognized that it needs to be addressed in all its dimensions. The question is not only “how to produce enough food” but also “how to ensure food security for millions of inhabitants who have to survive on low wages well below the poverty line”. As noted by Devereux and Maxwell (2001, p.245). What is perhaps most significant is that food insecurity is not simply seen as a failed agriculture unable to provide sufficient production of food products at national level, but as the failure of ways and means of subsistence, which are unable to guarantee households access to sufficient food Food insecurity in Africa is the result of low agricultural production and insufficient income, but not one or the other alone, and is the result of political and institutional failure.

To move the state of knowledge on food security forward, it is important to have quantitative data on consumption patterns and food consumption according to different socio-economic criteria. This paper is a slice in a bigger inter-university research funded by Belgium (DGDC / CUD) and conducted jointly with researchers from the University of Kinshasa. The main objective of the research is to characterize the food habits of households in Kinshasa, identify the changes that have occurred in attitudes, and analyse the strategies developed by different actors in order to ensure the supply of sufficient quantity and quality of food supply.

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References

- Alinovi L., Hemrich G., Russo L. (2008) *Food Security in Protracted Crisis*, FAO and Practical Action Publishing, Rugby, U.K.
- Bonfiglioli A. (2007) *La nourriture des pauvres. Comment les collectivités locales peuvent-elles réduire l'insécurité alimentaire en Afrique ?* FENU, New York, 135 p.
- Bricas N. (1998) *Cadre conceptuel et méthodologique pour l'analyse de la consommation alimentaire urbaine en Afrique*, Montpellier, France, Cirad, série Urbanisation, alimentation et filières vivrières, n°1, 48.
- CIRAD (2009) *Agricultures et alimentation du monde en 2050: scénarios et défis pour un développement durable*. Note de synthèse, 34.
- CEPLANUT (2000) Enquête nutritionnelle et de consommation alimentaire dans la ville de Kinshasa, juin.
- De Schutter O. (2008) Rapport d'Olivier De Schutter, Rapporteur spéciale de l'ONU sur le droit à l'alimentation, <http://www.pfsa.be/spip.php?article435> (accessed on 25/1/2012)
- Devereux S. Maxwell S. (2001) *Food security in Sub-Saharan Africa*, ITDG London, 280, FAO (2006) *Sécurité alimentaire*. Notes d'orientation, http://ftp.fao.org/es/esa/policybriefs/pb_02_fr.pdf (accessed on 25/1/2012)
- FAO (2008) *Sécurité alimentaire dans un contexte de crise prolongée : Que peut-on faire ?* Note d'orientation, <http://ftp.fao.org/docrep/fao/011/ak057f/ak057f00.pdf> (accessed on 25/1/2012)
- Goossens B., Minten B., Tollens E. (1995) *Nourrir Kinshasa, l'approvisionnement local d'une métropole africaine*, Paris, L'Harmattan.
- Hamilton B. A. (2010) *Diagnostic de la réforme commerciale, juridique et institutionnelle dans le secteur agricole de la République Démocratique du Congo*. USAID, 183.
- Houyoux J. (1986) *Consommation de produits vivriers à Kinshasa et dans les grandes villes du Zaïre*, BEAU, Kinshasa, 59.
- Jayne T. S. (1995) Experiences from Sub-Saharan Africa, in D. L. Tschirley and al. (ed.) *Market-Oriented Strategies to Improve Household Access to Food*, Ann Arbor, Michigan University.
- Lebailly Ph. (2010) Cinquante années de dépendance alimentaire en RDC : situation et perspectives, <http://hdl.handle.net/2268/74168> (accessed on 25/1/2012)
- Makabu Kenda T. (2005) L'organisation de la collecte des données de l'enquête 1-2-3 de Kinshasa, République Démocratique du Congo, *STATECO*, n° 99, 143-154.
- Ngeleza G., Xinshen Diao, Ulimwengu J., Randriamamonjy J. (2011) Tendances de long terme pour la croissance et la réduction de la pauvreté en RDC: Une approche d'équilibre général. IFPRI, Policy Note Nr 1, 5.
- PNUD (2009) *Province de Kinshasa, Profil résumé. Pauvreté et conditions de vie des ménages*, http://www.cd.undp.org/Downloads/profil/Profil_kinshasa_Final.pdf (accessed on 25/1/2012)
- Schafer J., Alinovi L., Hemrich G., Russo L. (2002) *Food Security in Protracted Crisis*, FAO and Practical Action Publishing, Rugby, U.K.
- Sen A. (1981) *Poverty and Famines. An essay on entitlement and deprivation*, Oxford, Oxford University Press.
- Tecresult (2009) *Etude du secteur agricole. Rapport préliminaire Bilan – Diagnostic et Note d'Orientation*. République Démocratique du Congo, Ministère de l'Agriculture, Pêche et

- Elevage, 337.
- Tollens E. (2009) Agriculture, sécurité alimentaire et développement économique: défis et enjeux, *in* T. Trefon (dir.). *Réforme au Congo : attentes et désillusions*, Paris, L'Harmattan, 211-229.
- Trefon T. (2009) *Réformes au Congo (RDC). Attentes et désillusions*. L'Harmattan, Musée royal de l'Afrique centrale, Collection cahiers africains, 275.