The Congo Puzzle

Evolving livelihoods and poverty in the Democratic Republic of Congo (1970-2010) - a summary¹

Wim Mariyoet²

Abstract

The objective of this article is to analyse the evolving living conditions across the Democratic Republic of Congo (DRC) between 1970 and 2010. In the mid-1970s, the DRC entered a long downward spiral, which can be read as a textbook example of state failure and economic regress: the 1973 nationalization policy of Mobutu formed the starting point; the first African World War (1998-2003) was a brutal low. Over this period, the average Congolese saw his income decrease to only one fifth of the level he attained in the 1970s. Surprisingly enough, this economic decay of the country did not seem to have much affected the survival chances of its population: both life expectancy and mortality rates even improved a bit. In short, viewed through a macroeconomic telescope everybody must have been moribund, but through a microscope many seemed to be alive and kicking. To solve this *Congo puzzle*, five hypotheses will be put forward. Whereas the first focuses on the validity of this livelihood paradox itself, all other hypotheses are formulated as genuine coping strategies. In order to address each of them, this article will rely on various (national) survey data, coming in total from about 50,000 different households.

Keywords

Democratic Republic of Congo, poverty, coping strategies, 1970-2010

Note

This article provides a general summary of my doctoral research published as Marivoet, W. (2013) *The Congo puzzle: evolving livelihoods and poverty in the Democratic Republic of Congo (1970-2010)*, Antwerp, University of Antwerp, Faculty of Applied Economic Sciences, ISBN: 978-9089-940-86-5.

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Het Congo Raadsel

Veranderende levenswijzen en armoede in de Democratische Republiek Congo (1970-2010) – een samenvatting

Wim Marivoet

Abstract

Dit artikel bestudeert de wijzigende levenswijzen van de Congolese bevolking tussen 1970 en 2010. Sinds het midden van de jaren 1970 wordt de Congolese economie gekenmerkt door een diepe en langgerekte crisis: de catastrofale nationalisatiepolitiek van Mobutu in 1973 gaf het startschot, de eerste Afrikaanse wereldoorlog (1998-2003) zette het drieste orgelpunt. Over deze periode zag de gemiddelde Congolees zijn inkomen ongeveer gereduceerd tot slechts een vijfde. Vreemd genoeg heeft dit economisch verval van het land geenszins de overlevingskansen van zijn bevolking aangetast: zowel de gemiddelde levensverwachting als kindersterfte gingen er zelfs lichtjes op vooruit. Kortom, bekeken doorheen een macro-economische telelens was iedereen op sterven na dood, maar met het perspectief van een microscoop bleken velen springlevend. Om het *Congo raadsel* op te lossen worden in dit artikel een vijftal hypothesen voorop gesteld, gaande van louter methodologische stellingen tot pure overlevingsstrategieën. Om ze te toetsen wordt gebruik gemaakt van verschillende nationale huishoudenquêtes, die doorheen de jaren werden afgenomen bij in totaal zo'n 50 000 gezinnen.

Trefwoorden

Democratische Republiek van Congo, armoede, overlevingsstrategieën, 1970-2010

Noot

Dit artikel omvat een algemene samenvatting van mijn doctoraal onderzoek gepubliceerd als Marivoet, W. (2013) *The Congo puzzle: evolving livelihoods and poverty in the Democratic Republic of Congo (1970-2010)*, Antwerpen, Universiteit Antwerpen, Faculteit Toegepaste Economische Wetenschappen, ISBN: 978-9089-940-86-5.

L'Énigme Congo

Évolution des modes de vie et de la pauvreté en République démocratique du Congo (1970-2010) – un résumé

Wim Marivoet

Résumé

L'objectif de cet article est l'examen des multiples modes de vie à travers la République démocratique du Congo (RDC) entre 1970 et 2010. Au milieu des années 1970, la RDC est tombée dans un long cercle vicieux à la baisse, ce qu'on peut libeller comme un exemple par excellence d'un échec étatique complété d'un recul économique : la politique de nationalisation de Mobutu en 1973 a marqué le début; la première guerre mondiale de l'Afrique (1998-2003) représentait l'épisode le plus désastreux. Dans cette période, le Congolais ordinaire a vu son salaire diminuer jusqu'à seulement un cinquième du niveau qu'il touchait dans les années 1970. Curieusement, ce recul économique du pays ne semble pas avoir affecté tant les chances de survie de sa population : l'espérance de vie tout comme les taux de mortalité sont caractérisés d'une légère amélioration. En bref, vu par un télescope macro-économique, tout le monde devrait être à l'article de la mort, mais par un microscope beaucoup de gens semblent en vie et en plein forme. Pour résoudre cette énigme Congo, cinq hypothèses seront proposées. Là où la première se focalise sur la validité de ce paradoxe même, les autres sont formulées en tant que véritables stratégies de survie. Afin d'aborder chacune, le présent article fait appel aux données de plusieurs enquêtes nationales, qui ont été collectées au total auprès de 50 000 ménages différents.

Mots clés

République démocratique du Congo, pauvreté, stratégies de survie, 1970-2010

Note

Cet article comprend un résumé général de ma recherche doctorale publiée dans Marivoet, W. (2013) *The Congo puzzle: evolving livelihoods and poverty in the Democratic Republic of Congo (1970-2010)*, Anvers, Université d'Anvers, Faculté des Sciences Economiques Appliquées, ISBN: 978-9089-940-86-5.

1. The Congo puzzle

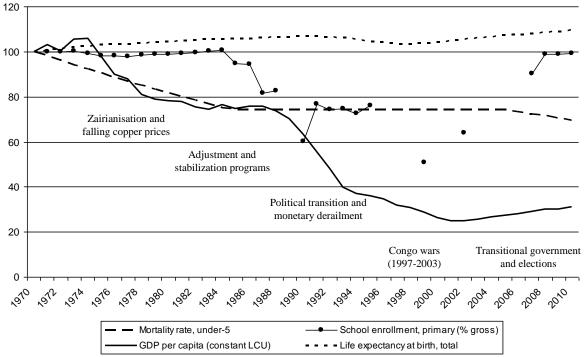
A common way to describe the Democratic Republic of Congo (DRC) is by a number of paradoxes, all of them boiling down to "so rich a country and yet so poor its population". To portray the richness, one can choose to refer to the geological or agricultural scandal (Turner 2007, p. 49), to the hydro-electrical potential (Herderschee et al. 2012, p. 58-60) or to some more recent environmental advantages offered by the Congo River basin, such as its carbon sink potential (Musampa Kamungandu et al. 2012) and freshwater reserves (AfDB & OECD 2007, p. 218). For every single aspect, the DRC is extremely well endowed and outperforms most of the other countries in the world. Paradoxically, the same country appears at the bottom of many lists in terms of development and well-being. The 2011 human development report (UNDP 2011) ranks the DRC in last place; according to the global hunger index, food security is the single worst of all countries (IFPRI 2011); and in terms of investment climate, one should better avoid the DRC altogether as it is among the worst six in the world to do business with (WB 2012a). As these examples only relate to composite indices, the list of bad performances can be made a lot longer by considering their underlying indicators. One such indicator, and still the most extensively used to assess a country's welfare and developmental state, is Gross Domestic Product (GDP) and its per adult equivalent. In 2011, GDP per capita reached \$329.30 (PPP at constant international prices 2005), implying that an average Congolese should live on less than a dollar-a-day. In 1999, the DRC replaced Liberia, and has occupied the last place ever since (World Development Indicators 2012). By adding data on food security, the country's situation looks even more dismal with around 70% of the population lacking access to adequate food, 25% of children younger than five years old being malnourished and 6.4 million Congolese suffering from acute food insecurity (see D'Haese et al. 2013 for more detail).

How could the DRC end up in such a bad situation? Indeed, the country at Independence Day in 1960 had roughly the same development level as South Korea (Reno 2006, p. 44), and was the second industrialized country on the continent after South Africa. Many authors have described in detail what exactly happened after Mobutu launched his unsuccessful policy of Zairianisation in 1973 (Bézy et al. 1981, Young & Turner 1985, Maton et al. 1998, Marysse 2005, Herderschee et al. 2012), a history which reads like a textbook example of state failure and economic decay. Whereas some drivers behind this economic and state collapse were of purely domestic or foreign nature, most of them were rather a combination of both, mutually triggering and reinforcing each other, and which finally led to the 'first African World War' (Marysse 2005). Simultaneously, different state models have been proposed to label the country's political system: from neo-marxist (Sangmpam cited in Clark 1998) and dependent (Gould 1980), through neo-patrimonial (Willame 1972, Young & Turner 1985) and absolutist

(Callaghy 1987), to extractive (Clark 1998), predatory (Reno 2006) and kleptocratic (Bayart et al. 1999).

Even if not all of these models axiomatically lead to economic decline (Reno 2006), some economic policies most certainly did. To begin with, the measures of Zairianisation launched in 1973 and their more radical phase one year later soon proved to be the perfect recipe for disaster (Young & Turner 1985, p. 66). The infamous Blumenthal (1982) report further underlined the structural economic mismanagement of public state resources during the Mobutu reign. This mismanagement saw its culmination point during the early 1990s with another series of catastrophic monetary policies (De Herdt 2002), including the printing of money as its most impudent example. All these policies, needed to finance Mobutu's neopatrimonial rule, completely eroded the state and its economy, making the country extremely vulnerable to any domestic or foreign events. As a result, the Rwandan civil war and its genocide in 1994 were exported to the DRC, plunging the country into a vicious cycle of violence between 1997 and 2003 (Reyntjens 2009). Later on, economic motives (driven by an abundance of mineral resources) gradually overtook political considerations as the explanation of the presence of domestic and foreign rebel groups, further prolonging the conflict beyond the formal signing of the peace treaties in 2003 (Reyntjens 2005).

Figure 1
The Congo puzzle



Source: Based on the World Development Indicators (2012).

To illustrate the impact of this daunting historical account on Congolese society, consider Figure 1 which depicts four different times series for the period 1970-2010 [1] (each of them indexed at 1970 in order to facilitate an examination of relative trends).

On the one hand, one can clearly observe the long but steady decline in per capita GDP over the period considered, which ended in 2010 at only a third of the level it had attained in 1970. After a small increase in per capita GDP at the beginning of the 1970s, which was mainly generated by favourable world copper prices, a first steep decline set in from 1974 onwards. This decline resulted from the poor economic and fiscal policies in general and the measures of Zairianisation in particular, undercutting the economic base of the country. This situation was further exacerbated from 1975 by falling copper prices, until then the financial backbone of the regime. From 1977 to 1986, the country was almost continuously under some sort of stabilization and adjustment program governed by the IMF, whose interventions could account for the relative stability in per capita GDP observed during this period (wa Bilenga Tshishimbi & Glick 1993). By the end of the Cold War in 1989, a long period of political transition set in, launching another episode of economic regression which seems to have reached a virtual bottom by the end of the second Congo War in 2002. Most of this decrease seems to have occurred during the early 1990s when a series of catastrophic monetary policies further eroded the economic fabric of the country (De Herdt 2002). After this highly volatile period of transition, a slight recovery of the economy took place during the transitional government (2003-2006) and the first mandate of president Kabila after the elections in 2006.

On the other hand, life expectancy – though at a low level between 44 and 48 years – largely remained constant over the period considered. It increased slightly between 1970 and 1990; it declined during the early nineties and has been increasing again since the beginning of the 21st century. Even more paradoxically, the under-five mortality rate substantially decreased to a level two thirds of what it was in 1970. This improvement in child health status was mainly achieved during the seventies and early eighties, after which this indicator largely remained constant. With respect to school enrolment, the series is more incomplete and certainly does not point to a significant increase in performance. However, for the most recent years, the Congolese again managed to send their children to primary school just as much as their parents did 30 or 40 years ago, but notwithstanding the much weaker economy.

So, how did the ordinary Congolese survive the many crises the country went through? Moreover, how did they manage to achieve even better development outcomes, as was clearly the case for child mortality and, to a lesser extent, life expectancy? In other words, what makes Congolese households so resilient; because if one would take the macro-level indicators of economic development for granted, "people should be starving in the streets"

(Maton 1992, p. 1)? This is the main puzzle this research tries to resolve by examining the evolving living conditions of the Congolese people between 1970 and 2010.

2. Five pieces to solve the puzzle

Fortunately, some scholars working on Congo/Zaire already studied the same incongruity between formal economic statistics and real-world development outcomes, offering already a number of hypotheses to ease the tension comprised within the *Congo puzzle*.

The first scholar surprised by the marked resistance of overall food intake in Kinshasa was Houyoux and his team, who led a number of methodologically similar budget surveys in the country's capital. Indeed, by comparing food outlays of 1969, 1975 and 1986, it seemed that the economic crisis did not much affect the overall size of the Kinshasa food bowl, prompting the authors to label this observation as 'miraculous' (Houyoux et al. 1986, p. 39). Following up on the work of Houyoux and colleagues, Maton (1992) stretched the same argument to 1990 by pointing to the surprisingly stable calorie intake experienced by the inhabitants of Kinshasa, nourished in part by easy imports during the period 1975-1989. Furthermore, this last author made the *miracle of Kinshasa* more explicit by contrasting the standard macroeconomic indicators with the micro-resilience of its citizens, while discussing the validity of a number of possible coping strategies (Maton 1992). Subsequently, other labels have also been used to describe the same incongruity in statistics: from the *enigma* or *black box of Kinshasa* (Maton 1992, p. 1) through the *Zairian miracle* (Braeckman 1991, p. 4) to the *Zairian anomaly* (De Herdt 2000, p. ii).

In this section, a non-exhaustive list of five possible hypotheses will be presented, all differing in terms of likelihood and testability. Consequently, some of them will be better researched than others. Furthermore, whereas the first hypothesis is of a rather methodological and transversal nature, the following four can be considered as concrete applications of the national constitution's *article 15*. This imaginary article postulates that people should "fend for themselves", symbolizing the overall variety of coping strategies that one can pursue in order to make ends meet. Let us briefly go through each of them.

Hypothesis 1: "Spurious data"

The first hypothesis simply relates to the poor quality of data and statistics on Congo. As such, the *Congo puzzle* would be nothing more than a fictitious statistical conundrum, either because the real economic decline was less sharp than depicted in Figure 1, or because data on human survival sketched too optimistic a scenario. To be sure, it is difficult to find a socio-

economic article on the DRC that does not start with a series of major reservations about the underlying data used, probably giving some ground to this first hypothesis.

Hypothesis 2: "Informalization"

Following the infamous statement *Iba na mayele* by Mobutu in 1976, "cleverly stealing" may be seen among the possible interpretations of article 15 (Tshiyoyo 2011, p. 107). As a matter of fact, this statement marked the real beginning of state decline as it involved the "implicit agreement between the Mobutist state and its citizens that allowed the former to retire from public life, while leaving to the latter the possibility to act unlawfully" (Raeymaekers 2007, p. 77). But apart from stealing, bribing and other unlawful acts, article 15 also refers to the many creative responses the Congolese employed in order to deal with a myriad of local problems. So, according to this hypothesis, the Congolese may have compensated their loss in formal revenues by engaging themselves more and more in informal income activities.

Hypothesis 3: "Redistribution"

All previous hypotheses in one way or another questioned the accuracy of the official economic figures representing real household budget. The following two will focus on a better use of the available budget, whether on a community or household level. The first way is by means of redistribution. This hypothesis states that economic decline was felt more by the richer layers in society than by the poorer – leaving the latter's budget and consequently their survival chances largely unaffected. From a poverty perspective, the decrease in national income was partly mitigated by a decrease in inequality.

Hypothesis 4: "Diet change"

Another way to survive a real income decrease is by consuming food items with a better calorie/price ratio. This hypothesis already stems from the Kinshasa studies performed by Houyoux in 1975 and 1986, where a shift from starchy staples to cereals could be observed over the period considered (Houyoux et al. 1986, p. 38-39). Later on, this conclusion was questioned again by Maton (1992) whose analysis rather pointed in favour of a shift *towards* cassava, as a low-priced and nutritious food item and thus of major importance for Kinshasa's food security. Moreover, De Herdt asserts more generally that a "typical *Kinois* diet is flexible and tends to be adapted in function of changing relative prices" (2000, p. 104), prices which would have evolved in favour of maize and (imported) rice but against cassava. Given the general importance of food for survival, the recent phenomenon of city gardening and the

soaring food prices observed during 2008, this hypothesis certainly deserves to be checked again.

Hypothesis 5: "Asset depletion and sharing"

A hypothesis that never received much attention in research on the DRC has to do with household assets, whose access can often play a vital role for people's survival – as the extensive literature on vulnerability and sustainable livelihoods has shown (Moser 1998, Scoones 1998, Ellis 1998, Bebbington 1999). In this research, two sub-hypotheses are considered. The first and perhaps most typical coping strategy in this respect is simply by selling off certain assets in order to compensate for declining income and thus to smooth consumption. The other sub-hypothesis rather focuses on possible improvements in asset sharing or allocation mechanisms, either with a direct positive impact on people's health or indirectly by extending their income generating possibilities. So, what happened with asset ownership and its use over the years?

3. Patchwork country, patchwork analysis

In several respects, our knowledge about the DRC is fragmented and scattered through time and place. Some regions in some periods are better documented than others. To a large extent, this is not only due to the country's volatile history, but also to its complex cultural and social heterogeneity combined with its disadvantageous economic geography, two factors which typically constrain the exchange of commodities, ideas and knowledge. As a result of all this, the country together with the data that should describe it, have become a patchwork (Pourtier 2008, p. 25-29). Indeed, apart from some particular regions (like the capital city, the mineralrich areas or the eastern and conflict-prone provinces), little is known about many other regions, especially those in the interior of the country. However, after the formal end of the conflict in 2003, several nation-wide representative household surveys have been executed in the DRC. These recent data combined with some previous efforts to shed light on the various living conditions across the country, in total comprising information about 50 000 different households, will serve as the main ingredients to solve the *Congo puzzle* (see Table 1). These raw data allow us not only to operate under the political radar of macro-level statistics, but also to adopt a spatially more refined and context-sensitive approach – in many instances indispensable given the multifaceted nature of the country. Evidently, given the extended time frame and the associated changes in welfare approaches and methodology, due care has been given to assure maximal comparability over time. For example, when analysing household budget over time, there has been a shift from expenditures to consumption, in order to include rental values for a number of durables owned by the household. Likewise, per capita measures have been gradually replaced by indicators using adult equivalence scales, which are able to control for the size and composition of the household – thus providing a more reliable measure of economic welfare. Depending on the flexibility of the data available, adjustments have been imputed to make datasets as comparable as possible.

Table 1Overview of cross-sectional datasets (1975-2010)

Survey	Year	Size	Description
8 City surveys	1975-1976	3 508	Series of eight demographic and budget surveys, executed in Kikwit, Bukavu, Kananga, Bandundu, Kinshasa, Kisangani, Matadi and Mbandaka
MICS 1	1995	4 574	Multiple Indicator Cluster Survey on the situation of children and women
MICS 2	2001	8 704	Multiple Indicator Cluster Survey on the situation of children and women
1-2-3 Survey	2005	13 215	National household and budget survey on employment, informal sector and consumption
DHS	2007	8 886	Demographic and health survey on population, health, HIV and nutrition
MICS 4	2010	11 490	Multiple Indicator Cluster Survey on the situation of children and women
Total		50 377	

Source: Own compilation based on survey reports.

4. Puzzling out...

After a qualitative assessment of the first hypothesis on data quality, the main results of the changing living conditions will be first discussed for Kinshasa then for some other important cities in the country. Given the limited space available, this section will only provide broad explanations to alleviate the tension comprised in the *Congo puzzle*. For more information on the underlying data used, the methodologies applied and the precise results obtained, the interested reader is invited to consider the corresponding chapters of the doctoral manuscript, which can be obtained upon request.

4.1. Hypothesis 1: "Spurious data"

Questioning the quality of country statistics in order to instantly elucidate the *Congo puzzle* is really a non-starter – as if the reader is invited to immediately stop reading and turn his attention to another country of interest. In fact, as Jerven (2013) discussed in his recent book *Poor Numbers*, this problem does not seem to be limited to the DRC alone but applies to many other African countries as well. As a result, being too rigid on minimal standards for data quality will probably prompt many researchers to forgo the African continent altogether.

This is neither an option nor a fair and constructive starting point: raising doubts is one thing, verifying and situating them quite another. By making this hypothesis explicit, this research intended to assess the overall data and information architecture of the country as being an integral part of the research results. So, what could be said about data quality in the DRC, and how did this affect the outlook of the *Congo puzzle*?

To begin with, it is certainly incorrect to state that there is hardly any socio-economic data on the DRC. As a matter of fact, each year new country statistics are added to the many time series comprised in several international datasets. For economic growth, life expectancy and child mortality for example, a few mouse clicks are sufficient to obtain complete data series. In addition, with respect to household data, one can also observe a marked acceleration in the number of surveys executed over the past decades. Chapter 2 documents on all seven major initiatives in this respect up to 2010. After the national census in 1984, there were four surveys on education and health (MICS/DHS), one survey on food security and vulnerability (CFSVA) and one budget survey (1-2-3 Survey). Meanwhile, a follow-up of the latter survey is currently underway and a second national census is planned for the near future.

Unfortunately, the available data are indeed of a questionable nature, if not basically poor. However, a distinction should be made between country statistics on the one hand and survey data on the other. Whereas the latter inherently contain the purer and less manipulated pieces of information, the former have proven to be the outcome of an obscure blend of various estimation techniques often applied to a weak informational basis underneath. A case in point is GDP per capita, where sizeable variation in official estimates exists and where the core data could only be obtained through information coming from an out-dated national census (1984) and an even more out-dated national accounting system (SNA1968). Moreover, all the official estimates largely ignore economic activity which takes place in the informal sector. Assuming this sector has increased in importance over time, the real economic crisis in the DRC will probably have been less pronounced than its depiction in the official GDP data. Similar observations could be made with respect to survival statistics: survey results on children's survival rates using very different mortality techniques have been inter- and extrapolated to produce complete, but clearly fabricated, data series. In this case, the official series on life expectancy and child mortality probably sketched too optimistic a scenario, compared to the survey totals on which they should have been ultimately based. Combining both observations, the hypothesis of data quality being at least partially responsible for the puzzling nature of the official country statistics could hereby be endorsed.

However, when taking the survey results on life expectancy and child mortality for granted, there is still enough room to mention an important discrepancy between human survival and macro-economic performance. Indeed, whereas between 1970 and 2003 the country at large

recorded a negative economic annual growth rate of more than 4% on average, life expectancy shrank only by 0.09% and child mortality rose by 0.31% during the same crisis years. Further, this *Congo puzzle* finds its replication in many other individual provinces. Most salient in this respect is the province of Bandundu with its counter-cyclical performance in health. To a lesser extent, the larger Kivu region and both Kasaï provinces are also puzzling in that their populations seem to have digested the economic crisis relatively well. This latter observation may also apply to the people of Kinshasa and Katanga, taking into account the much steeper economic decline observed in these provinces. On the other hand, the inhabitants of Bas-Congo, Équateur and Orientale seem to have shown much less resilience to crisis.

Whereas country statistics could be potentially misleading, survey data rather merit the label 'challenging to use'. One cross-cutting difficulty encountered with all national surveys in this respect relates to the underlying sample base used to claim representativeness. This sample base was set using only 10% of all census records obtained in 1984, while being updated ever since using a spatially homogeneous 3% annual growth rate. Evidently, the relevance of such a sample base may be highly questionable, certainly for the most recent survey initiatives (DHS 2007 and MICS4 2010), where indeed fierce discussion arose around the 'exact' ratio of urban to rural population. Other general difficulties relate to the poor (or in-)accessibility of raw data (except for DHS/MICS), the scattered nature of background material and the overall poor assistance provided when clarification is needed (except for MICS4). Furthermore, apart from changes in the underlying variable definitions over time and some inconsistencies between report and dataset, one more crucial problem stands out. Since the 1-2-3 budget survey did not capture prices in a standardized manner, most analyses on money-metric welfare remained highly nominal in nature and thus meaningless in terms of results. All these quality aspects may in part also explain why survey data on the DRC are barely ever used for academic research or policy making.

4.2. The capital city, Kinshasa (1975-2004)

Although this research went well beyond an analysis of the capital city, there was clearly a bias in favour of Kinshasa as Part II was almost exclusively devoted to it. Of course, this had something to do with a similar bias in terms of existing knowledge and available data, which made Kinshasa after all far better researched than many other regions of the country.

A first striking result based on Chapter 4 is the overall stability in welfare levels observed between 1975 and 2004: mean daily expenditure remained stable at 485 CF [2] per person as did overall inequality with a Gini coefficient of around 0.39. Against the backdrop of the

sharp macro-economic regression reflected by a 75% decrease in per capita GDP (which corresponds to an annual negative growth rate of around 4.6%), this finding can only relate to an equally drastic increase in informalization. To be sure, whereas only 19% of all household heads were self-employed in 1975, this percentage increased markedly to around 47% in 2004. Moreover, more than 80% of all families nowadays depend entirely or partially on the informal sector for their daily survival. As such, the *Congo puzzle* could be instantly explained for Kinshasa: the *Kinois* survived their troublesome history by compensating for their formal wage losses with incomes generated in the informal sector. Moreover, this sector also allowed the inhabitants of Kinshasa to counterbalance (at least partially) the retreat of the state from a number of public sectors. Indeed, the stability in mean expenditure levels between 1975 and 2004 is actually a reflection of an increase in real purchasing power by around 21% combined with an increase in people's needs to further privately finance the schooling of their children and (to a lesser extent) the housing for their family.

However, when considering the evolution of asset ownership over time (see Chapter 7 and 8), a sole reliance on the informalization hypothesis to explain the Congo puzzle does not seem to suffice. Indeed, despite the long and protracted crisis, the population of Kinshasa was able to accumulate a considerable amount of household assets, mainly in terms of housing and consumer durables. Therefore, in order to enable this asset drift, other coping mechanisms enter the picture again. One such mechanism entailed the sharing of assets. During the crisis years, the average household size in Kinshasa increased from 6.05 to 6.88 members, reflecting the integration and absorption of worse-off relatives, which in principle contributed to an increase in access to assets. Another, and maybe more genuine factor which enabled the asset drift, involved the hypothesis on diet change. Without a doubt, the Kinois over time made a more efficient use of their food budget, largely by reducing cassava and introducing much more maize and imported rice to their daily menu – two food items which are more nutritious than cassava. However, this diet change did not coincide with an increase in calorie sufficiency between 1975 and 2004: the daily calorie intake of the Kinois largely stagnated around a meagre 1351 kcal per person. Consequently, the financial benefits resulting from this more efficient use of food outlays must have been entirely used for other purposes than better nourishment; such as for asset accumulation. As such, these observations at the same time reflect a surprising dynamism in food habits combined with increased social pressure to invest in assets such as televisions and cars, the first being a genuine social status good for many *Kinois*, the second also having an important productive quality (see Chapter 7).

Moreover, this diet change did not seem to be a first-stage reaction to crisis, as it mainly occurred after 1986. Indeed, based on an analysis of the most important food items, Chapter 5 pointed to a substantial *increase* in calorie intake in the period 1986-2004, which by definition denotes a calorie decrease by the same token between 1975 and 1986. As such, and largely in

line with other African case studies on coping strategies (Corbett 1988), rationing of food consumption is often one of the first reactions to crisis. Furthermore, the changing food habits at a later stage clearly connect with Kinshasa's integration in world food markets. Since 1986 the inhabitants of the capital city depended for their daily survival to an ever increasing extent on food imports from abroad. The latter aspect became very tangible in Chapter 9 where a comparative analysis of local food prices revealed the very unfavourable position of the capital city within its own domestic food market. In general, food prices are twice to four times as high in Kinshasa compared to the rest of the country, which makes international food trade a profitable business in a country that in principle should be able to easily meet its own food needs. As a result, within the top 10 of the most consumed food items in Kinshasa, only cassava and maize are locally produced. For the same reason, the *Kinois'* diet nowadays is largely based on imported rice and wheat.

With respect to the hypothesis of a progressive income redistribution, which mitigated the effects of economic decline for the poorer layers of society, one would be tempted to conclude, based on the discussion above, that this simply did not occur in Kinshasa. Briefly stated, since informalization buffered most of the negative consequences between 1975 and 2004, there was no need to pass the invoice of the crisis to the richest in society. Again, the way Part II was organized, now allows us to say a little more on how inequality evolved over time. Notwithstanding the many methodological constraints in comparing the survey results of 1986 with the 2004 data, Chapter 5 pointed to a marked increase in inequality combined with a substantial growth in household expenditure. Therefore, given the marked stability in welfare levels between 1975 and 2004, the first eleven years (1975-1986) must be characterized by a downward levelling of Kinshasa's income distribution. This sequence of events may suggest that informalization first hit the middle and top segments of society, as they in particular lost much of their formal wage while being less equipped to survive in the informal sector compared to the poorest in society, who already depended much on the latter sector. Then, in a second stage, the same people may have learned the art of coping by using their previous or current, but financially eroded, formal affiliations as a stepping stone to engage in a new series of informal income activities, resulting in higher incomes and increased inequality.

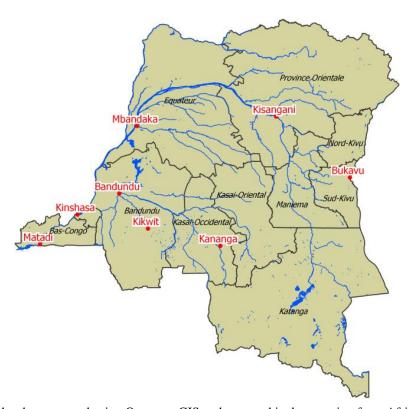
4.3. Congo's urban sector (1975-2005)

In Part III of this study, again a broader geographical perspective was adopted by first analysing the changing living conditions in a few other urban centres (Chapter 7 and 8), after which a more detailed account of the current living conditions was provided in a final Chapter 9. Just as the formal crisis affected the survival changes of the Congolese in varying degrees

(see infra), the portfolio of coping strategies pursued was also highly diverse across the country. To be sure, the exact way the inhabitants of Kinshasa responded to crisis between 1975 and 2004 was by no means identical for other cities' responses – although some ingredients were similar. Unfortunately, unlike for the case of Kinshasa, no intermediate surveys exist to identify coping strategies over time. Furthermore, for the provinces of Katanga, Kasaï-Oriental, Maniema and North Kivu, no ex-ante budget survey could be employed which kept the overall analysis biased towards the western part of the country (see Map 1). On the other hand, the data available for the other regions did allow us to check a largely similar set of hypotheses.

Map 1

Main research areas to study changes in livelihoods between 1975 and 2005



Source: This map has been created using Quantum GIS and geographic data coming from Africover.

To begin with, people living in cities geographically closest to the capital city also resorted to a number of similar coping strategies. Indeed, in Kikwit, Bandundu and Matadi (three cities in the two neighbouring provinces), the informal sector again represented a very important mechanism to compensate for losses in formal income. At the same time, asset ownership in these cities also markedly increased between 1975 and 2005, which required further inspection of the other coping strategies to clarify in turn how this was financed. In fact, the asset drift in these cities seemed to be most centred on technological goods (such as televisions, cars and fridges) and somewhat less on improved housing conditions. Again, this

increased asset ownership can be partially (and rather methodologically) explained by evolutions in household size, which were increasing during the crisis years and decreasing afterwards. Another explanation concerns the substitution of starchy staples (such as cassava) for cereals (such as maize and rice), which seemed to have been most economizing for Matadi. So far, the response to crisis formulated by the citizens of Kikwit, Bandundu and Matadi was quite similar to that of the Kinois. However, whereas inequality only slightly decreased in Kinshasa between 1975 and 2004, a strong progressive redistribution took place in Bandundu and Kikwit, whose Gini coefficient went from 0.34 to 0.24 in the former and from 0.33 to 0.28 in the latter. These more equal income distributions also suggest that the overall process of informalization worked relatively better for the poorer layers in both cities, which in fact also explains the distinctly better survival statistics observed in this particular province. Indeed, in line with the argument that inequality matters a lot for the poor (Naschold 2002), Bandundu was the only province recording anti-cyclical performances in terms of life expectancy and child mortality, as well as the only one characterized by a progressive income redistribution (at least within the urban sector). On the other hand, inequality largely stagnated in Matadi between 1975 and 2005. However, compared to its rural hinterland, the city's Gini coefficient is relatively high (around 0.37), which may relate to the unequal economic opportunities offered by the international port. And finally, in Matadi, one could also observe a more efficient use of sanitation facilities over time, pointing to a potential reduction in calorie leakage. Given the fact that Bas-Congo's track record in terms of human survival was among the poorest in the country and Matadi's set of coping strategies was somewhat similar to that of Kinshasa, one could assume that the province's rural sector was largely responsible for this worsening in human development.

In the cities of Mbandaka and Kananga, the provincial capitals of Équateur and Kasaï-Occidental, one could observe another combination of coping strategies. For sure, informalization again proved to be a powerful tool to compensate for falling formal revenues, as the mean family budget by and large remained equal in Mbandaka and even pointed to an increase in Kananga. This time, however, the hypothesis of asset depletion was confirmed, as reductions in ownership were observed for non-technological goods in general (cf. Chapter 8), as well as for fridges in both cities and cars in Mbandaka (cf. Chapter 7). At the same time, access to sanitation facilities also became more equal among the urban dwellers in Équateur. Furthermore, the citizens in both cities saw their daily menu substantially change. For the citizens of Kananga, who were already highly dependent on maize consumption back in 1975, the effect of the substitution of starchy staples by cereals was less economizing than it was for other cities. For Mbandaka, this diet change in fact did not concern the latter type of substitution, but was rather characterized by a marked increase in the consumption of palm oil, as a cheap and calorie-rich food item. Although the citizens of both cities exercised a similar set of coping strategies, the one followed in Mbandaka was clearly more pronounced.

Tragically enough, it clearly proved to be insufficient as the province's evolution in life expectancy and child mortality was among the most precarious of the country. Probably due to the coping behaviour observed, survival prospects in Kasaï-Occidental, on the other hand, were not much impaired over time.

And finally for Bukavu, the provincial capital of South Kivu, another set of coping strategies was used. To begin with, and unlike all the other cities discussed, mean budget levels not only more than halved over the period 1975-2005, the distribution also became significantly more unequal as the Gini coefficient rose from 0.36 to 0.43. As such, the hypotheses of informalization and redistribution could not be confirmed. Whereas the presence of mineral resources provided an argument for the growing inequality observed, the dubious quality of the budget data collected in South Kivu could be invoked to explain the very low welfare levels in 2005. Indeed, there is little or no reason to believe why expenditures in South Kivu in 2005 would be more than twice as low as those in North Kivu, and also the lowest of all regions in the country [3]. Moreover, the formal economic decline did not much complicate the health prospects of most Bukaviens, as survival statistics for the province largely remained constant over time. Other explanations for this marked resistance could again be found in the more economical use of the food budget. Over time, calories from starchy staples were increasingly substituted by calories from cereals. Within the asset dimension, a slight depletion occurred in terms of housing conditions and non-technological goods, coupled with an overall improvement in hygienic conditions as observed in a more equal access to available sanitation facilities.

Unfortunately, the survey report with local price information for Kisangani could not be located, which prevented a similar assessment of all budget-related hypotheses. However, in terms of asset ownership and use, the citizens of Kisangani increasingly shared a reduced asset base. This asset depletion mainly related to housing conditions and non-technological consumer goods, and therefore somewhat aligns with the observations of Bukavu.

5. Conclusions

Taken together, most people in the urban sector of the DRC survived their troublesome history by engaging massively in the informal sector. In some cases, this sector worked propoor, in others pro-rich; but in almost all cases informal revenues have fully compensated for any formal income loss that occurred between 1975 and 2005, as well as for the retreat of the state from some key public sectors like education. Another major safety net against adversity was also the extended family. In this respect, household size seemed to be a very reliable predictor of periods of hardship and relative prosperity, as larger households are better able to

pool risk and share available assets. The third most important coping strategy concerned the change in people's food basket; where cassava was substituted by cereals like maize and rice (and to a lesser extent by palm oil). Depending on local prices, this diet change often proved to be either more economical or more nutritious.

By contrast, asset depletion was far from a shared coping strategy among the urban citizens in the DRC, as it only occurred in cities further away from Kinshasa. In fact, depletion mainly took place in the urban sector of Équateur and Orientale, where cars were largely substituted for bicycles. Furthermore, even where people substantially depleted their asset base, housing quality largely remained unaffected and ownership of televisions typically increased between 1975 and 2005. The first observation of course relates to the ever-present necessity to be able to house worse-off relatives at all times, but also to the productive nature of a house in terms of providing space to perform a number of (informal) home-based income activities. The television drift on the other hand, combined with low overall nutritional intakes, clearly pointed to the social importance attached to this particular asset as well as to the relaxation of food habits. And finally, the hypothesis of a progressive income redistribution could not be confirmed in general, as it only occurred in two cities of Bandundu.

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[1] Although many new developments have characterized the DRC since 2010 (e.g. large-scale investments in infrastructure, the presence of new actors such as China, etc.), this research will limit its scope to the period 1970-2010.

^[2] This corresponds to approximately \$1.2 per person per day.

^[3] Consulting the pool manager of South Kivu for the 1-2-3 Survey (2004-5) did not reveal any irregularities in terms of data collection and processing. The former vice-rector of the Catholic University of Bukavu on the other hand declared the existence of an unintentional bias in sample design, as if only the poorest neighbourhoods in Bukavu (and the poorest territories in South Kivu) had been surveyed.