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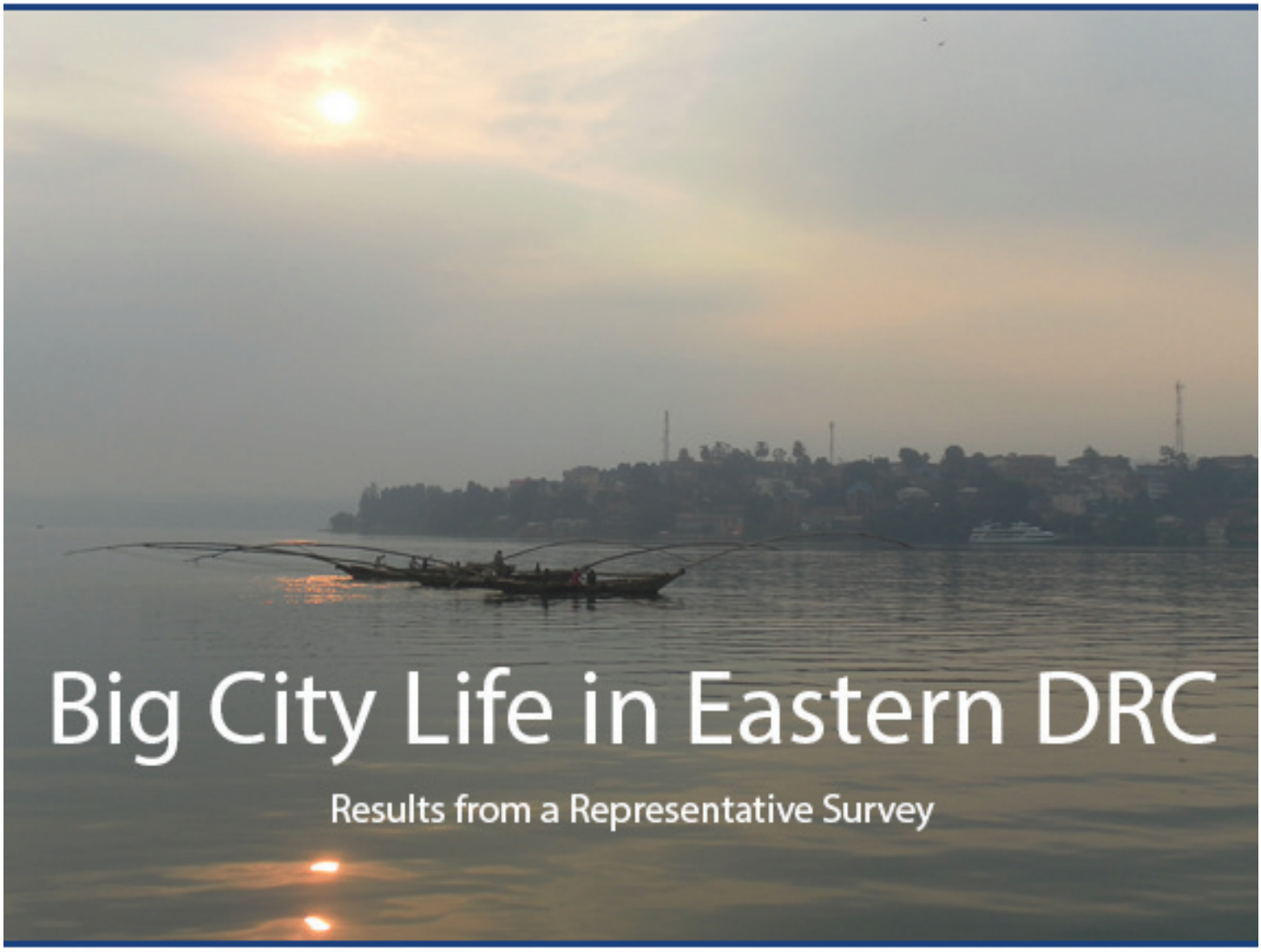

Big City Life in Eastern DRC

Results from a Representative Survey

Eastern DRC Recovery Project
Urban Baseline Report – April 2016

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All errors and opinions expressed remain ours.

Table of Contents

List of Figures and Tables

Acronyms

CDD:	Community-Driven Development
CDF:	*Franc Congolais*
DIME:	Development Impact Evaluation
DRC:	Democratic Republic of the Congo
FSRDC:	*Fond Social de la République Démocratique du Congo*
LIPW:	Labor Intensive Public Work
PSU:	Primary Sampling Units
PTSD:	Post-Traumatic Stress Disorder
STEP:	*Stabilisation de l'Est pour la Paix* (Productive Opportunities for Stabilization and Recovery)
USD	United States dollar

Appendices

Executive Summary and Key Findings

STEP aims to improve resilience and livelihoods in conflict-affected communities in North Kivu, South Kivu, and Oriental Province. Its key components include (i) a community driven development program; (ii) a labor-intensive public works program; and (iii) a program to strengthen selected agricultural value chains. To inform the projects' implementation and impact evaluation, and fill the gap in representative survey data for eastern DRC, two surveys were set up – one in the urban areas, one in the rural areas.

This report presents a first analysis of the urban survey, which yielded representative data for the five largest Congolese cities in Eastern Congo: Beni, Bukavu, Bunia, Butembo, and Goma. It gives insights into the economic, social, civic, and inner life of the inhabitants of these cities. Special attention is given to outcomes and conditions that are relevant for the STEP interventions.

In the five cities combined, 3,727 individuals were interviewed. More than half of the respondents were not born in the town they currently live in, suggesting an important inflow, which is partly explained by the widespread (past) violence and insecurity in the region surrounding the cities. Many sample respondents reported exposure to violence. Despite the difficult context, we find a steady improvement of literacy across generations. Nevertheless, an important share of youngsters can neither read nor write.

The typical household in our sample is poor. Monthly consumption stands at 82 USD. Given a median household size of six members, this implies that the median household lives below 1 USD per day. Basic necessities - food, medical expenses, and clothes - account for over 80% of expenditures. The vast majority of our sample households cannot afford putting money aside, making them vulnerable to shocks and weary of taking risks.

Poverty and vulnerability are exacerbated by the lack of a predictable income stream. About half of respondents are unemployed; others are mostly self-employed rather than salaried. Men, middle-aged and more educated people have more and better jobs than women, youngsters and non-educated individuals. Among the unemployed, more than half are "long-term unemployed" (more than a year). An overwhelmingly large share of respondents considers the lack of financial means as the main constraint to micro-business start-ups.

Effective access to primary schools and basic health centers is constrained by high cost. Many of our respondents live at a short walking distance from a health center, primary school, or even secondary school. But respondents express dissatisfaction with the state of buildings and equipment, and especially with the cost of services,

which are deemed to be overly expensive. Illustratively, given our respondents' low earnings, the median cost of 76 USD for a medical visit is exuberant; and high fees are often cited as a reason for school drop-out. In the absence of functional and subsidized public providers, the majority of households have turned to private providers for health care and even more so for schooling.

In the absence of formal insurance and government support, individuals rely mainly on their own strategies and their informal networks to deal with shocks. Less than one out of twenty households received a handout from an NGO or the government. Yet, about 60% of households faced a negative income shock during the year before the survey. To cope, households have to borrow money, deplete their own savings or assets, reduce food intake, or take children out of school. Many also relied on informal assistance from friends, relatives, neighbors, their avenue's chief, or their church. Depleting productive assets and taking children out of school jeopardizes households' future income-earning potential; and informal insurance falls short when the shock is covariant. These limitations may force households to manage risk ex ante, e.g. by making overly cautious business decisions, thus leading the poor to under-invest in risky, but profitable activities.

One type of safety net that is provided by many governments across the globe are food or cash for work programs, and we also find scope for such programs in DRC. In particular, according to our respondents, construction and maintenance of roads and water and sanitation systems regularly take place in their avenues and involve local labor. At the moment, however, this labor is mostly supplied free of charge, as part of community service. These works are usually managed by the avenue chiefs, sometimes in collaboration with several of the avenue's committees. Participation in these committees is rather low, and decision-making is not sufficiently transparent.

Several avenues organize security patrols, which is no luxury given the many security issues mentioned by our respondents. Burglary tops the lists, followed by land conflict, armed robbery & murder, aggression and domestic violence. Just like the absence of formal security and safety nets, these security issues spoil the business climate: even if individuals possess or receive the required endowments of labor, knowledge and capital to start up a business, they may refrain from doing so.

Social cohesion, inter-personal trust, and civic engagement also determine the productivity of labor and capital; here the findings sketch a carefully optimistic picture. Less than 10% of respondents had been part of conflicts in their avenue. An aspect, however, which deserves attention is that most of the reported conflicts involved migrants. Many households - about one out of three - participate in an association, which is likely to add to a household's resilience. Also positive is that a self-reported measure of trust reveals high levels of trust among neighbors, co-ethnics and family members. But, trust in 'strangers' is lower.

A considerable share of respondents consumes news through television and, especially, radio. Yet, friends and family or 'rumor' ('radio trottoir') remain other important channels. This informal information channel may be rather effective given that our respondents appear very mobile and far from isolated, very frequently visiting friends in other city blocks, and even abroad.

In terms of civic engagement and political participation, results show both disillusion and activism. A vast majority of respondents declare they "never" or "rarely" talk about politics with friends and family; perhaps because over half of respondents think they are unable to influence their 'political leaders'. There is however no lack of opinion. Almost all respondents express their opinion when asked about politics and their civic rights and duties; and a majority of respondents believe it is their right to hold the avenue chief or any political leader accountable. Moreover, actual political participation in meetings and campaigns and voter turnout was high during the 2011 elections. Day-to-day engagement with public officials is however almost completely confined to contact with the avenue's chief. Contact with the police or the justice system is surprisingly low considering the high rate of crime. This could indicate a lack of trust in these institutions.

The poor generally are under a great deal of stress, often fed by financial worries, and – as revealed in our survey - exacerbated by past exposure to violence. About one in eight respondents suffers from low self-esteem, a feature that is more pronounced among women, the uneducated and the asset poor. More than one in three have difficulties to sleep or suffer from nightmares, conditions that are more pronounced among respondents that were exposed to war events. The latter respondents also indicated to suffer more from headaches or chest pains when thinking about the war, symptoms that are associated with post-traumatic stress disorder (PTSD). Mental health care being rare to non-existent, people dealt with these issues in their own ways, very often seeking recourse to religion.

The remainder of this report further details each of these findings. In the last section, we discuss the implications for the two main project components in urban areas (LIPW and CDD). We start with a brief overview of the context and the survey design.

Background

1. STEP: Context, Project and Evaluation

The Democratic Republic of Congo (DRC) was home to the First (1996-7) and Second (1998–2003) Congolese Wars. The latter, with the direct involvement of eight African nations and 25 armed groups, has been the deadliest war in modern African history (IRC, 2007). Despite the formal end to the war in July 2003, eastern Congo continues to be an epicenter of conflict.

Basic infrastructure such as roads, schools, and health facilities is lacking, either due to outright destruction or a lack of investment. Competing land tenure regimes and claims arising from legal pluralism frequently give rise to disputes (Humphreys et al, 2012). The situation is exacerbated by high population density, especially in the cities, combined with cycles of forced displacement. These conflicts have the potential to undermine social cohesion, contribute to tensions between communities and ethnic groups, and perpetuate deep social and economic inequalities. With poverty being both a result and a predictor of violent conflict there is a fear that communities in eastern Congo can be caught in a violence–poverty trap.

Against this backdrop, the international community has been actively involved in efforts to end conflict and to support economic recovery in eastern DRC, as part of broader efforts to re-establish peace and security in the region. The World Bank supports these efforts in part through the IDA-funded Productive Opportunities for Stabilization and Recovery in the DRC (STEP, in its French acronym) – an $80 million project, being implemented by the Social Fund of the DRC (FSRDC) – a unique arm of the DRC presidency set up for development.

The project aims to improve resilience and livelihoods in conflict-affected communities in North Kivu, South Kivu, and Oriental Province[1] and has a number of key components, including (i) a community driven development (CDD) program, which aims to strengthen community resilience by improving access to socioeconomic infrastructure and strengthening local conflict prevention/resolution mechanisms; (ii) a labor-intensive public works (LIPW) program; and (iii) a program to strengthen selected agricultural value chains.

[1] In the beginning of July 2015, *Province Orientale* was split into four new provinces: *Bas-Huélé*, *Haut-Huélé*, *Ituri* and *Tschopo*.

STEP details	
CDD	An estimated 400 communities are expected to benefit from the CDD program. To strengthen community resilience, the CDD program consists of three pillars. The first pillar is the introduction of an infrastructural project. Second, these projects will go hand in hand with activities that facilitate and improve inclusive community participation processes. The final pillar takes into account that the possible divisions that exist within and across Congolese communities can interact with the implementation and outcomes of CDD programs. It is possible that by injecting additional resources into communities the CDD project exacerbates existing tensions leading to more conflict and social division. It is also possible that internal divisions work against the effective implementation of community development projects. The third pillar of this CDD program therefore consists of activities to strengthen local conflict prevention and resolution mechanisms.
LIPW	The LIPW program is going to create short-term employment opportunities in the rural areas of Province Orientale, Nord Kivu and South Kivu as well as in the five major cities of eastern DRC (Goma, Bukavu, Butembo, Beni and Bunia). Activities such as road rehabilitation, street cleaning, re-forestation and garbage collection will be implemented. Around 12,000 individuals will benefit from LIPW activities, which will earn 3$ a day and should last for at least 4 months. It is expected that temporary employment creation will contribute both to poverty reduction and stability, at least in the short-term. In order to make the impact last, beneficiaries in the urban areas will receive a savings account and a training program.[2]
Agricultural value-chain	Finally, the agricultural value chain sub-component aims to increase the food security and incomes of agricultural households in the rural areas of Eastern DRC. Project support will address constraints all along the selected value chains – on-farm productivity, post-harvest handling, storage and processing – in an effort to strengthen the hand of small-scale farmers in the value chain and get more profits returning to farmer households and villages.

[2] Due to supply side constraints, it will not be possible to offer the additional activities – savings account and training program – in the rural areas.

To measure and help improve the effectiveness of the STEP project, FSRDC is partnering with the World Bank's Development Impact Evaluation (DIME) to carry out an impact evaluation of STEP's CDD and LIPW program.

For the CDD impact evaluation, the 400 projects will be randomly assigned to communities in eastern Congo. In addition, a randomly selected half of the project areas is also targeted by a conflict mediation component that aims to overcome divisions in and between communities. This research aims to answer the following two questions: 1) Does the CDD program improve access to community social and economic infrastructure? 2) Are community projects implemented with an explicit conflict resolution mechanism more effective in improving access to infrastructure and community inclusive practices? The goal of the proposed impact evaluation is thus not only to investigate whether a CDD program can improve community resilience, but it also aims to understand how their implementation and effectiveness can be improved.

The goal of the LIPW impact evaluation is to learn what combination of program activities – LIPW, savings, and/or training – has the best chance of lifting people out of poverty and, by doing so, how the program may contribute to peace and stabilization in the eastern Congo. That is, beneficiaries will be randomly assigned to one of four treatment arms: LIPW, LIPW plus training, LIPW plus savings, LIPW plus training and savings. In addition, there will be a pure control. For logistical reasons, the impact evaluation is limited to the three largest cities, i.e., Bukavu, Goma and Bunia and will involve a total of 2,000 beneficiaries.

2. Baseline Survey: Data Collection Methodology

Disaggregated and accurate development indicators are lacking in eastern DRC. As a result, two baseline surveys were conducted – one in the urban areas, one in the rural areas – to get a representative picture of the local context and inform project decision making.[3] This report only concerns the urban survey.

Sample selection

We collected data from five Congolese cities: Goma, Bukavu, Butembo, Beni, and Bunia. Each of the five cities are considered as statistical domains. As such, we obtained representative information at the city level. To the best of our knowledge, this is the first survey in Eastern DRC to present information at such a disaggregated level. As the urban component of STEP's LIPW program aims to target adults, they are considered the population of interest.

[3] For the impact evaluation, separate data collection exercises will take place.

Finding an appropriate sampling frame in this setting is challenging. Generally, Congolese cities consist out of communities (*communes*), which consist out of neighborhoods (*quartiers*), which consist out of cells (cellules), which in turn consist out of avenues. For this study, we take avenues (the lowest administrative unit, with a clear chief) as PSUs. Avenues often consist of various blocks and have well delineated boundaries; together they cover the entire city; and the number of household per *avenue* makes them suited for PSU.[4]

As a sampling strategy, we opted for a two-stage cluster design, selecting 150 avenues in each city with probability proportional to the avenue's population size.[5] For each of the sampled PSU's, the survey firm, with technical support from DIME, performed a listing of households and selected a simple random sample of 5 households from each PSU list. In other words, 750 households were to be interviewed in each of the five cities. In addition, also 150 avenue chiefs were to be interviewed.[6] This sample size at least allows to capture (with a margin of error of 15%), a population characteristic held by 15% of the population (cf. the Appendix 2, page 78, for more details).

Survey instruments

We used two survey instruments: a household survey and an avenue chief survey. For the household survey we surveyed a randomly selected adult (i.e. older than 18 years old) in a randomly selected household, alternating between interviewing a man and interviewing a women to ensure gender balance. The household survey consists of several modules: the household roster; a socio-economic section including household assets, consumption and economic shocks; a section on employment, savings and agricultural activities; a section on mental health and trauma; a section on access to public services; and finally a section on social cohesion, community participation and collective action.

The 'chief' survey served to get complementary information from the avenue. The avenue chiefs of each of those 150 avenues were selected for interviewing. The chief survey included 12 sections: chief household information, avenue demographics, economic activity in the avenue, social cohesion, community resources and infrastructure, exposure to conflict and displacement, exposure to shocks and social assistance, chief authority, elections and finally a section on security. The household and chief surveys, including the detailed protocols for enumerators, are available on demand.

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[4] In eastern DRC, large towns are characterized by three administrative levels: *communes*, *quartiers*, and *avenues* For instance, Goma consists of 2 communes, 18 quartiers and 393 avenues. In Goma, an *avenue* contains on average 370 households.

[5] For the sampling replication material and detailed information about sampling procedures, please cf. Appendix or contact the authors.

[6] Avenue chief is the appointed representative of the '*avenue*'.

Survey implementation

Cabinet Experts, a survey firm contracted by FSRDC, was responsible for data collection, which took place between the 26th of May 2015 and September 5th, 2015. Surveys were administered on tablets, and data was automatically uploaded to an online server.[7]

Training took place between in Goma (from April 27th to May 5th) and Bunia (between July 1st and 8th) in presence of L. Smets and P. Van der Windt, as well as DIME's field-coordinators. In April 2015, a pre-testing was organized for both survey instruments. Furthermore, both surveys were piloted to make sure the instruments were well-adapted to the local context.

A total of 100 enumerators were hired to undertake the urban surveys. These enumerators were organized in four (overlapping) teams working in Goma (60 enumerators, 5 supervisors), Bukavu (30 enumerators, 2 supervisors), Butembo and Beni (30 enumerators, 2 supervisors) and Bunia (40 enumerators, 5 supervisors). In addition, *Cabinet Experts* sent four field-managers to realize support tasks (logistic, planning, field-visits). They also ensured liaison with DIME's two field-coordinators.

[7] IRB approval was obtained from Wageningen University.

Sample Characteristics

Key Findings

- **3,727 individuals were interviewed**
- **The sample is gender-balanced**
- **The median household has 6 members**
- **18% of households is female-headed**
- **The median respondent is 34 years old**
- **53.5% of respondents were not born in the town they live in**
- **86% of respondents are Christians**
- **The median schooling attainment is 4th year of secondary school, but 11% of respondents never went to school**
- **65% of respondents lived through traumatic events during wars**

We collected data from a representative sample of households in the five major cities of eastern DRC: Bukavu (*Sud Kivu*), Goma, Butembo and Beni (*Nord Kivu*) and Bunia (ex-*Province orientale*). In each city, 150 avenues were randomly selected, and in each avenue, 5 households were randomly selected. Inside each household, one respondent was randomly selected among every household member above 18 years old. By design we should obtain balance by gender. As Table 1 shows, the survey design was closely followed. **In the five cities combined, 3,727 individuals were interviewed. The sample of respondents is gender-balanced**. In 82% of the households visited, the head of household is a man. The median household size is 6 individuals (this is true on average as well as in every single city). Enumerators were allowed to substitute either household (e.g. because of long-term absence) or respondent (e.g. because only one gender was represented in the household), which happened in 0.5% of the cases.[8]

The respondent's key characteristics are listed in Table 2. About half of the respondents are aged between 18 and 35 years old. The median age is 34 years old. **Slightly over half of the respondents (53.5%) were not born in the town they currently live in, a share that is even higher in Goma (68%) and Bunia (65%).** It is very common among household members in low-income countries to temporarily migrate, as part of a risk coping strategy, or– as is also common in richer nations - to

[8] This average does not take into account the substitution of entire avenues that happened in some cases for practical reasons (mainly security issues).

pursue productive opportunities. Permanent migration is less common (Banerjee and Duflo, 2006). The relatively high share of our respondents that are not born in their city, suggests an important inflow. Several factors explain this inflow: among migrants, 20.6% mentioned an economic reason as the main explanation of their coming (e.g. job search represents 14.2%) and another 9.6% mentioned access to basic services (school, health). Violence of the war is an important 'push' factor (18.4%) especially in Goma where it was the main reason to migrate for 24.8%.

Table 1 Sample Characteristics.

Description of the sample and respondents' characteristics.

	Goma	***Bukavu***	***Butembo***	***Beni***	***Bunia***	**Total Sample**
Avenues	*151*	*150*	*149*	*150*	*150*	750
Respondents	*746*	*751*	*745*	*750*	*735*	3,727
Women	*53%*	*53%*	*52%*	*56%*	*56%*	54%
Men	*47%*	*47%*	*48%*	*44%*	*44%*	46%
Substitutions	*3%*	*0.3%*	*1.5%*	*0.8%*	*0.5%*	0.5%
Households						
Male-headed	*84%*	*83%*	*84%*	*80%*	*78%*	82%
Household median size[9]	*6*	*6*	*6*	*6*	*6*	6

[9] Due to missing data we used multiple imputation to estimate household size when the information was missing. We used *predictive mean matching* to estimate missing observation. This multiple imputation was performed simultaneously with imputation for assets (cf. description of wealth index below). Using or not the estimated values in addition of available observations leads to similar household size distributions.

Table 2 Sample Characteristics II.

	Goma	*Bukavu*	*Butembo*	*Beni*	*Bunia*	**Total Sample**
Age						
Median	*32*	*35*	*37*	*35*	*32*	**34**
≤ 24	*23,5%*	*24,3%*	*20,8%*	*22,1%*	*27,1%*	**23,6%**
25-29	*19,3%*	*15,7%*	*14,2%*	*14,7%*	*20,7%*	**16,9%**
30-34	*15,4%*	*12,5%*	*13,5%*	*12,2%*	*14,7%*	**13,7%**
35-39	*12,8%*	*13,5%*	*11,7%*	*13,7%*	*10,4%*	**12,4%**
40-44	*8,9%*	*10,3%*	*11,9%*	*9,8%*	*7,6%*	**9,7%**
45-49	*7,1%*	*7,4%*	*8,2%*	*7,1%*	*5,1%*	**7,0%**
50-54	*4,6%*	*5,1%*	*5,8%*	*5,0%*	*4,9%*	**5,1%**
55-59	*2,4%*	*3,2%*	*5,3%*	*6,3%*	*4,3%*	**4,3%**
60-64	*2,8%*	*3,2%*	*3,8%*	*3,5%*	*1,9%*	**3,0%**
65-69	*1,5%*	*2,1%*	*1,5%*	*3,1%*	*1,4%*	**1,9%**
70-74	*0,6%*	*1,1%*	*1,8%*	*0,8%*	*1,0%*	**1,1%**
75-79	*1,1%*	*0,8%*	*0,8%*	*1,0%*	*0,6%*	**0,9%**
80-84	*0,1%*	*0,7%*	*0,3%*	*0,3%*	*0,1%*	**0,3%**
≥ 85	*0,0%*	*0,3%*	*0,4%*	*0,4%*	*0,0%*	**0,2%**
Born in town	*67,7%*	*43,7%*	*41,4%*	*50,3%*	*65,3%*	**53,6%**
Religion						
Catholic	*37,1%*	*55,1%*	*67,0%*	*57,2%*	*40,2%*	**51,4%**
Protestant	*44,1%*	*39,0%*	*24,7%*	*28,4%*	*36,8%*	**34,6%**
Muslim	*3,8%*	*0,0%*	*0,9%*	*2,3%*	*3,8%*	**2,4%**
Traditional	*0,5%*	*1,2%*	*0,0%*	*0,4%*	*0,0%*	**0,2%**
Other	*13,0%*	*3,5%*	*7,0%*	*11,5%*	*18,8%*	**10,7%**
No religion	*1,5%*	*1,2%*	*0,4%*	*0,3%*	*0,3%*	**0,7%**
Education						
Median	*5th Sec.*	*5th Sec.*	*2nd Sec.*	*6th Prim.*	*4th Sec.*	**4th Secondary**
No school	*6,0%*	*6,4%*	*15,7%*	*21,9%*	*5,2%*	**11,1%**
Went to Primary	*20,2%*	*19,7%*	*27,7%*	*33,3%*	*19,4%*	**24,2%**
Went to Secondary	*48,1%*	*51,5%*	*46,4%*	*37,4%*	*58,1%*	**48,4%**
Went to Superior	*25,7%*	*22,5%*	*10,2%*	*7,3%*	*17,4%*	**16,2%**
Mental Trauma (≥1)	*69.1%*	*53.8%*	*62.4%*	*73.2%*	*66.8%*	**65%**
Taken Hostage	*12,4%*	*9,9%*	*8,9%*	*13,9%*	*14,1%*	**11,8%**
Killed (knows someone)	*65%*	*49,4%*	*59,7%*	*70,8%*	*64,9%*	**62,1%**
Abused (knows someone)	*22%*	*9%*	*11,2%*	*11,2%*	*14,3%*	**13,5%**

The education levels of respondents vary widely: 11% never attended school, 24% stranded in primary school, 30% enjoyed some secondary schooling, 18% completed secondary school, and 16% went to university or equivalent (cf. Table 2, Figure 1). **On average, men have higher schooling attainments than women.** Among men, 5.5% never attended school (vs. 16% of women), 21.7% stranded in primary school (vs. 26.5% for women), while 49.6% attended secondary school (vs. 47.5% for women), and 23.2% went to university or equivalent (against 9.8% for women). Beni and Butembo (to a lesser extent) lag behind the other three cities. **Despite the difficulties posed by war and instability, we find a steady improvement of literacy across generations (**Figure 2**)**.

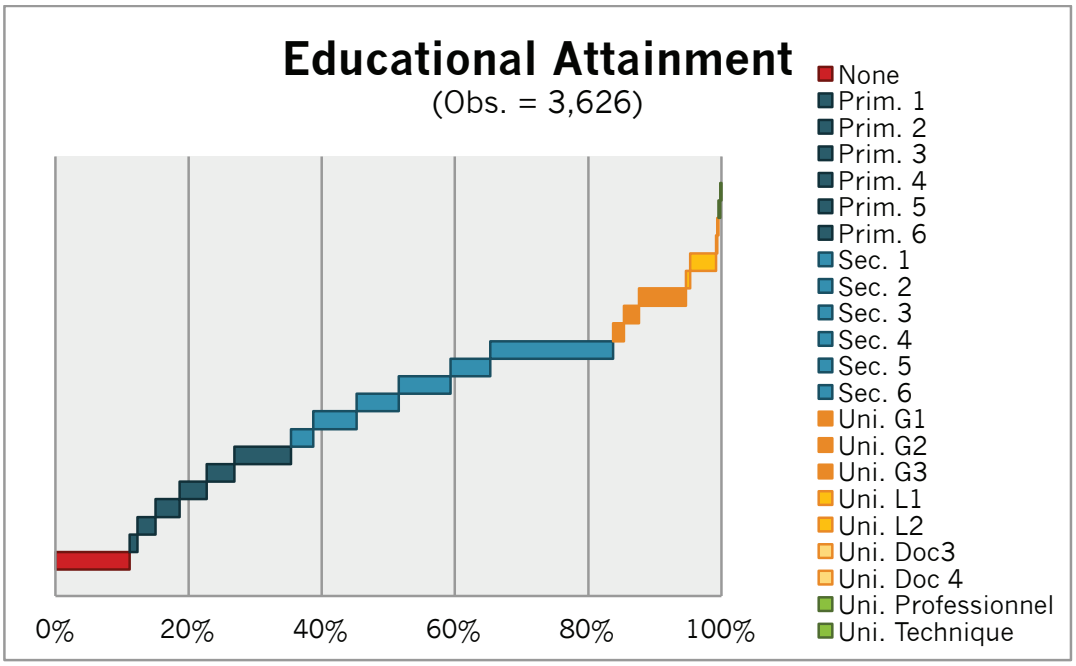


Figure 1

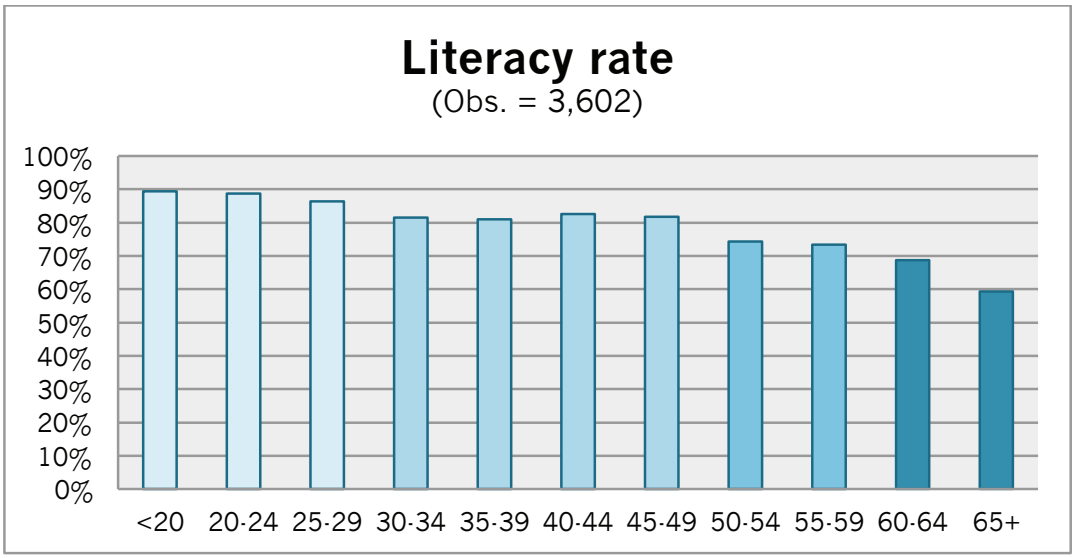


Figure 2

Many of our sample respondents reported exposure to armed violence or war: just over 10% had been taken hostage by an armed group, about 60% had lost a friend or a relative during the war, and almost 15% knows about someone (including themselves) that has been abused. On average, 65% of the respondents experienced at least one of these three traumatic events; 15% experienced two and 3% was exposed to all three events listed in the survey. Respondents in Goma, Beni and Bunia report higher exposure than respondents in Butembo and Bukavu. In particular, Goma's inhabitants report a much higher exposure to abuse (22% answer they know about someone that has been abused, almost 10 percentage points more than the average).

Main Findings

1. Economic Life

This section examines economic well-being and activities. After describing assets possession and the asset index (commonly referred to as "wealth index") (1.1), it presents income and consumption information (1.2.) as well as savings and debts (1.3.). These well being measurement are compared with "subjective well being" measures (1.4.) The last parts of the section focus on labor market (1.5) and respondents' trainings and skills (1.6).

Key Findings

Wealth	• **Households in Goma and Bukavu have a higher wealth index than households in the other three cities** • **Among the five cities, Beni is the poorest in terms of assets** • **Butembo and Beni have more agricultural activities**
Income & Consumption	• **Measures of income and consumption are correlated with the asset index** • **Households in Goma, Bukavu and Bunia earn most** • **Men earn more than women** • **More educated individuals earn more** • **Food is the main item of consumption** • **Medical expenses and clothes are other important consumption items**
Savings	• **12.5% of households have savings** • **51% have debt**
Subjective Well being	• **A large majority of respondents (89%) consider their well-being has not improved over the last year. 41% even consider it has worsen.** • **These improvement are mainly found among the richest respondents** • **Richer respondents are more likely to consider themselves better off than their neighbors**

	• **Also a large share of poor respondents consider they are still better off than their neighbors**
Employment	• **41.7% of respondents has a job, or an "income generating activity"** • **In 69% of the households, there is at least one individual that has a job** • **The share of employed people is lowest in Beni** • **Men and those with education are more likely to have a job** • **They are also more likely, when working, to be salaried** • **At least 67% of all workers have unskilled jobs** • **More than half of unemployed have not worked for more than a year** • **Respondents indicate the lack of contacts and job offers as the main reason for unemployment** • **84% report the lack of financial means as the main barrier to micro-business creation**
Training	• **35% of respondents received some professional training (mostly in arts and crafts, construction or information technology)** • **Respondents' answers tend to designate labor demand as the main issue (instead of lack of skills)** • **Poorer people are more likely to lack skills and are less likely to receive a training**

1.1. Wealth

In order to measure differences in wealth across households, we first explore the possession of assets. Table 3 gives a summary of the percentage of households that possess a certain asset. Table 4 gives the asset possessions by asset quintile (hereafter 'quintile'), and for the median household.[10] Most people have a house or a hut, a cell

[10] We derive these quintiles on the basis of an asset index, calculated in a standard way. This index is then divided into five quintiles (1st quintile is the poorest and 5th the richest). Specifically, each household receives a wealth score based on a number of specific assets that it possesses at the time of the survey. To compute household's score, each asset is weighted following a principal component analysis performed on the whole sample. Assets used to build the wealth score are: number of bedroom per household members; house's roof material; house's wall material; household durable consumption items (radio, television, dvd player, wardrobe, bed, bucket, basin, lamp, saucepan, motorbike, *tsukundu*, car, pirogue, cellphone, camera); household's livestock (head of cattle) and poultry (number of animals); agricutural tools (hoe and machete); house property (main home, other houses);

phone, an agricultural tool, kitchen utensils, a light source, a radio and some furniture. few people have a means of transport.

Table 3 Households' assets

Percentage (%) of household possessing certain assets: total and across cities.

	Goma	*Bukavu*	*Butembo*	*Beni*	*Bunia*	**Total Sample**
Household goods						
Bedroom	*94%*	*98%*	*95%*	*98%*	*92%*	**95%**
Bed	*97%*	*97%*	*96%*	*95%*	*98%*	**97%**
Wardrobe	*52%*	*56%*	*48%*	*27%*	*46%*	**46%**
Radio	*65%*	*67%*	*71%*	*58%*	*69%*	**66%**
Television	*58%*	*58%*	*31%*	*22%*	*49%*	**44%**
Dvd	*51%*	*52%*	*25%*	*20%*	*44%*	**38%**
Bucket	*85%*	*81%*	*84%*	*70%*	*93%*	**83%**
Basin	*96%*	*97%*	*91%*	*81%*	*93%*	**92%**
Lamp	*82%*	*81%*	*71%*	*78%*	*72%*	**77%**
Saucepan	*99%*	*99%*	*99%*	*99%*	*99%*	**99%**
Individual's goods						
Motorbike	*10%*	*2%*	*26%*	*21%*	*31%*	**18%**
Tuskudu	*1%*	*0%*	*1%*	*0%*	*0%*	**1%**
Pirogue	*0%*	*0%*	*0%*	*0%*	*0%*	**0%**
Bicycle	*5%*	*2%*	*31%*	*29%*	*11%*	**16%**
Car	*10%*	*2%*	*26%*	*21%*	*31%*	**6%**
Hoe & machete	*52%*	*60%*	*86%*	*87%*	*72%*	**71%**
Cellphone	*90%*	*89%*	*79%*	*66%*	*86%*	**82%**
Camera	*9%*	*13%*	*11%*	*5%*	*4%*	**9%**
Livestock						
Cattle	*14%*	*7%*	*31%*	*27%*	*10%*	**18%**
Poultry	*20%*	*13%*	*30%*	*41%*	*23%*	**26%**
Property						
Main House	*62%*	*55%*	*63%*	*76%*	*70%*	**62%**
Hut	*83%*	*75%*	*76%*	*92%*	*95%*	**83%**
Fields	*12%*	*12%*	*43%*	*41%*	*39%*	**29%**

property of farmland (fields). Five quintiles are then divided according to the wealth score (from the poorest 20% to the richest 20%). When information was missing for some assets, we used multiple imputations to estimate the missing information. Methodology for imputation was either *predictive mean matching* (in case of continuous variables), *logit* (for binary variables) or *ordered logit* (for other categorical variables). The multiple imputations for household size and assets have been conducted simultaneously.

From Table 4, we find that the median household in our sample, possesses one house (its main residency) and has one field; has one radio and two cellphones, but no television; it does not possess any means of transportation nor livestock. On average, a median household in the richest asset quintile has one television and four cellphones, and one means of transportation (car or motorcycle). **While cellphone ownership is very high, television ownership is very low compared to the urban poor elsewhere**.[11] The latter may be explained by the unreliability and high cost of energy supply in eastern DRC.

Table 4 Average assets per quintile, and assets of the median Household

Assets of a median household in total sample and average assets across wealth quintiles.

	1st qtl.	*2nd qtl.*	*3rd qtl.*	*4th qtl.*	*5th qtl.*	**Median hou.**
Household goods						
Bedroom	*2.58*	*3.03*	*3.35*	*3.65*	*4.49*	**3**
Bed	*1.47*	*2.30*	*2.89*	*3.42*	*4.66*	**3**
Wardrobe	*0.03*	*0.19*	*0.47*	*0.75*	*1.33*	**0**
Radio	*0.23*	*0.59*	*0.82*	*1.02*	*1.59*	**1**
Television	*0.01*	*0.08*	*0.34*	*0.79*	*1.21*	**0**
Dvd	*0*	*0.05*	*0.24*	*0.70*	*1.14*	**0**
Bucket	*0.66*	*1.45*	*2.00*	*2.70*	*3.80*	**2**
Basin	*1.17*	*1.90*	*2.50*	*3.04*	*4.03*	**2**
Lamp	*0.66*	*0.98*	*1.18*	*1.46*	*1.81*	**1**
Saucepan	*3.79*	*5.27*	*6.60*	*7.88*	*10.56*	**6**
Individual's goods						
Motorbike	*0.04*	*0.12*	*0.17*	*0.23*	*0.40*	**0**
Tuskudu	*0.01*	*0*	*0*	*0*	*0*	**0**
Pirogue	*0*	*0*	*0*	*0*	*0*	**0**
Bicycle	*0,10*	*0,16*	*0,17*	*0,14*	*0,14*	**0**
Car	*0*	*0*	*0.01*	*0.03*	*0.29*	**0**
Hoe & machete	*1.38*	*1.71*	*1.71*	*1.74*	*2.16*	**1**
Cellphone	*0.63*	*1.17*	*1.79*	*2.44*	*4.39*	**2**
Camera	*1.38*	*1.71*	*1.71*	*1.74*	*2.16*	**0**
Livestock						
Cattle	*0.41*	*0.61*	*0.72*	*0.66*	*0.61*	**0**
Poultry	*0.67*	*0.95*	*1.08*	*1.38*	*1.88*	**0**
Property						
House	*0.95*	*1.03*	*1.09*	*1.12*	*1.33*	**1**
Fields	*1.35*	*1.55*	*1.77*	*1.78*	*2.05*	**1**

[11] Banerjee and Duflo (2006) report television ownership by 60% of urban poor in Indonesia, 61% in Peru, and 38% in South Africa.

Households in Goma and Bukavu are more assets rich than households in the other three cities (see Table 3). While **households in Beni are concentrated at the bottom of the asset index**, they possess – as do households in Butembo - more "agricultural assets", i.e. fields, livestock and agricultural tools.

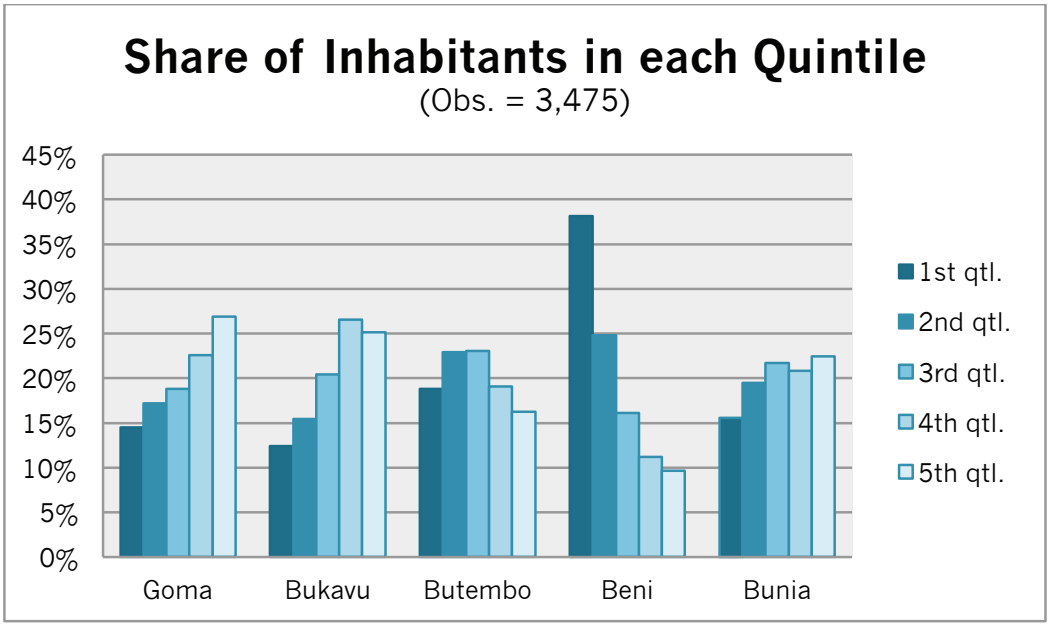


Figure 3

1.2. Income and Consumption

We now show information about income, however this should be taken as suggestive. Income is difficult to measure and we obtained data for only 25% of respondents Nevertheless, tabulations across asset wealth, gender and education levels are plausible.

Among the 1,036 households that answered questions about income, the average household weekly income is 39,200 CDF (i.e. 42 USD), while the **median household weekly income is** much lower, at 15,000 *CDF* (i.e. **16 USD**). **The large difference between mean and median income is suggestive of a long right tail in the income distribution**. In the right tail, the assets rich are over-represented (see Figure 4).

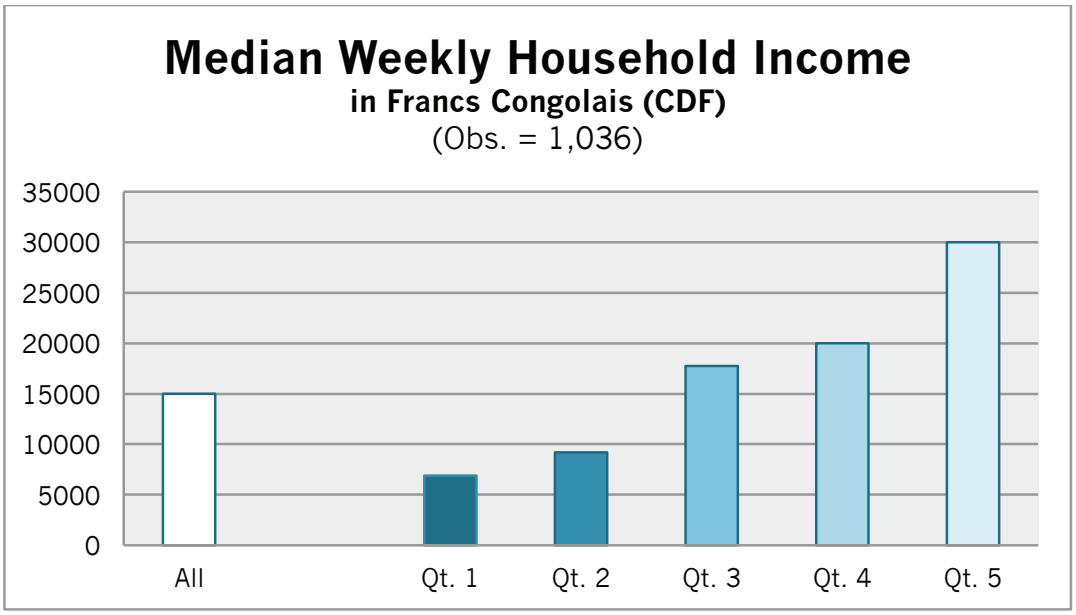


Figure 4

Turning to respondent's income (i.e. individual level instead of household level) we can explore individual level characteristics. As Figure 5[12] shows, **men earn more than women** (median weekly income being, respectively, 20,000 *CDF* and 9,000 *CDF*) and the median weekly **income increases with educational attainments**. Respondents that never attended schools have a median weekly income of 5,000 *CDF*; this almost doubles when respondents went to primary school (9,000 *CDF*); triples when they attended secondary school (13,900 *CDF*); and is multiplied by more than six for respondents that had a chance to attend university or technical institutes (31,375 *CDF*).

[12] Figure 5 shows the median individual income of respondents who answered and declared at least 1 *CDF*.

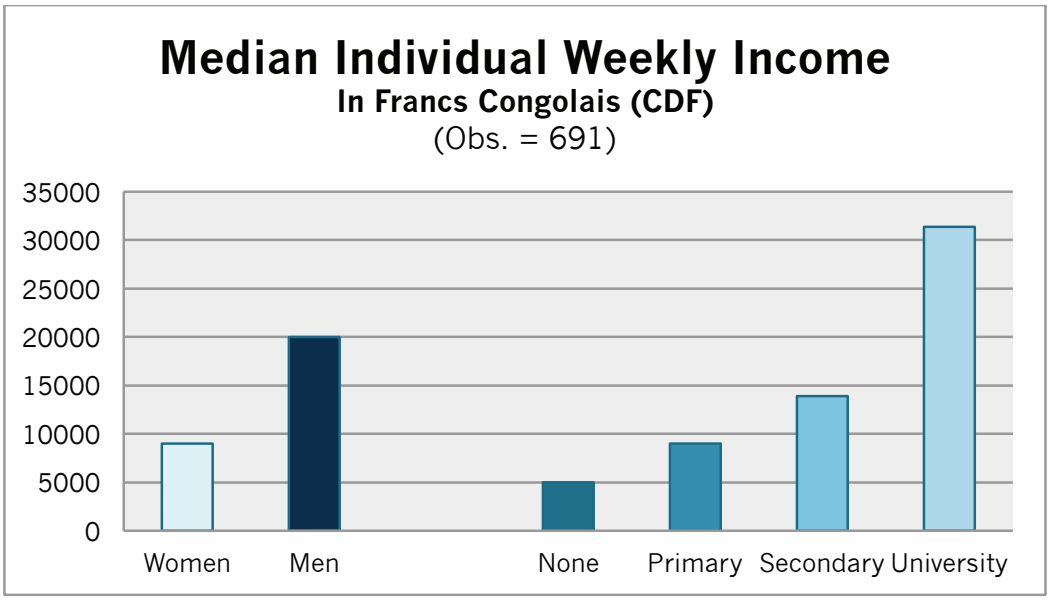


Figure 5

Generally, surveys succeed better at measuring consumption than income (Deaton, 2004). We therefore also explore consumption. To do so we rely **on self-reported recall data of expenditures in the past 30 days.**[13]

From Figure 6, we can see that the median (monthly) consumption expenditure is 76,000 *CDF* (i.e. **82 USD**). As in the case of asset wealth, **households in Butembo and Beni are concentrated at the bottom of the distributio**n (with consumption expenses under the average – 68,000 *CDF* and 59,000 *CDF* respectively). Unsurprisingly, households in the highest asset quintile spend almost four times more than households in the poorest asset quintile (145,000 *CDF* – i.e. 157 *USD* – against 39,000 *CDF* – i.e. 42 *USD*).

Across all five cities, food (43%) and medical expenses (31%) are the most important consumption items, followed at a distance by clothes (8% – Figure 7). Together, these three items count for over 80% of expenditures. We find that food takes up the largest share in self-reported expenditures, i.e. around 40% across all wealth quintiles. This is somewhat lower than what was found among the urban poor in 13 countries, for which Banerjee and Duflo (2006) found a food share of 56 to 74 percent.

[13] We thus do not build on more precise methods such as repeated visits or score cards over a longer period of time. In addition, the expenditure categories were far from exhaustive. The survey asked about ten broad categories: *food*", "*medical expenses*", "*clothes*", "*furniture*", "*leisure*", "*alcohol*", "*cigarettes*", "*seeds*", *minor upkeep and constructions (e.g. painting walls)*", "*major upkeep and constructions (e.g. build annex)*".

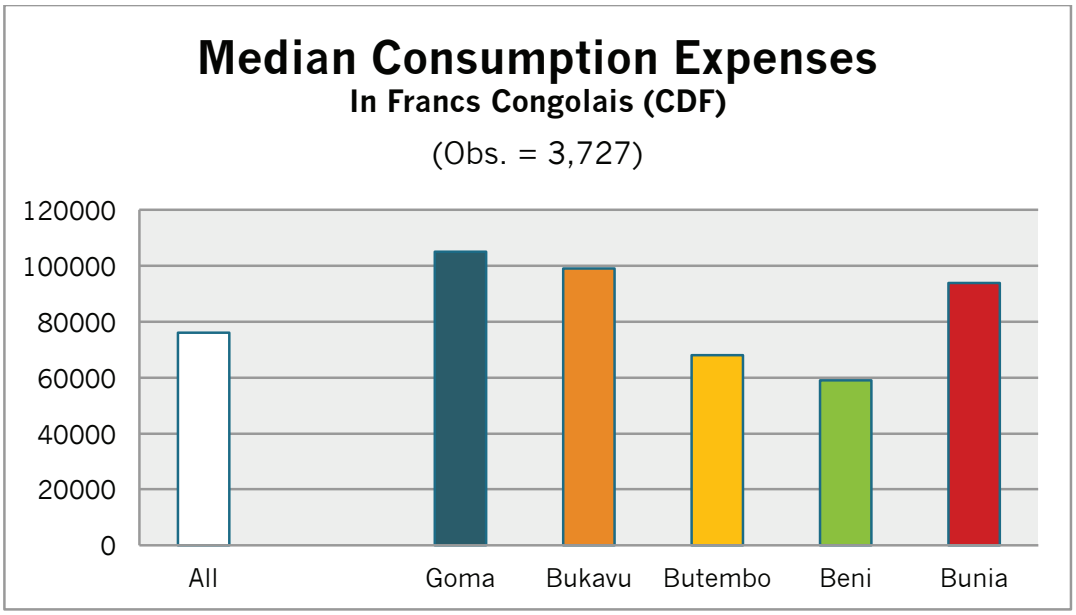


Figure 6

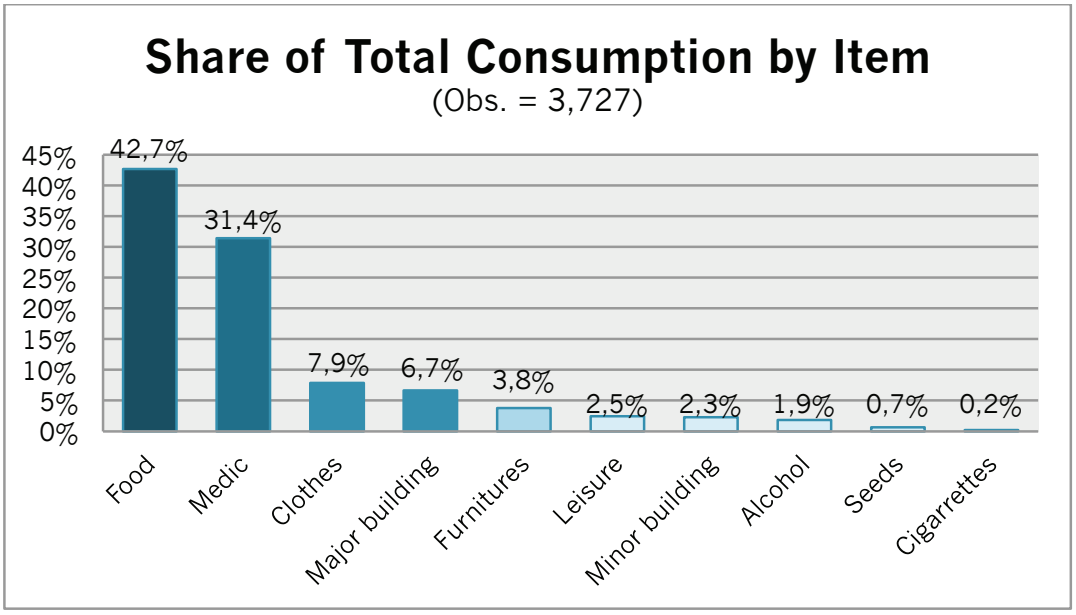


Figure 7

1.3. Subjective well-being

To complement wealth, income and consumption measures, the survey contains measures of subjective poverty. Respondents were asked to evaluate their current economic well-being, first in comparison with their own well-being the preceding year; and in comparison with their neighbors.

Regarding the comparison across time, **only 10.8% of respondents declared progress**, 48% indicated a status-quo, and a full **41% of respondents said their well-being had worsened**. This subjective evaluation of well being over time closely relates to asset wealth: the higher the asset quintile, the more likely respondents

reported improvements and less likely a worsening (Figure 8 shows the distribution of answers across quintiles).

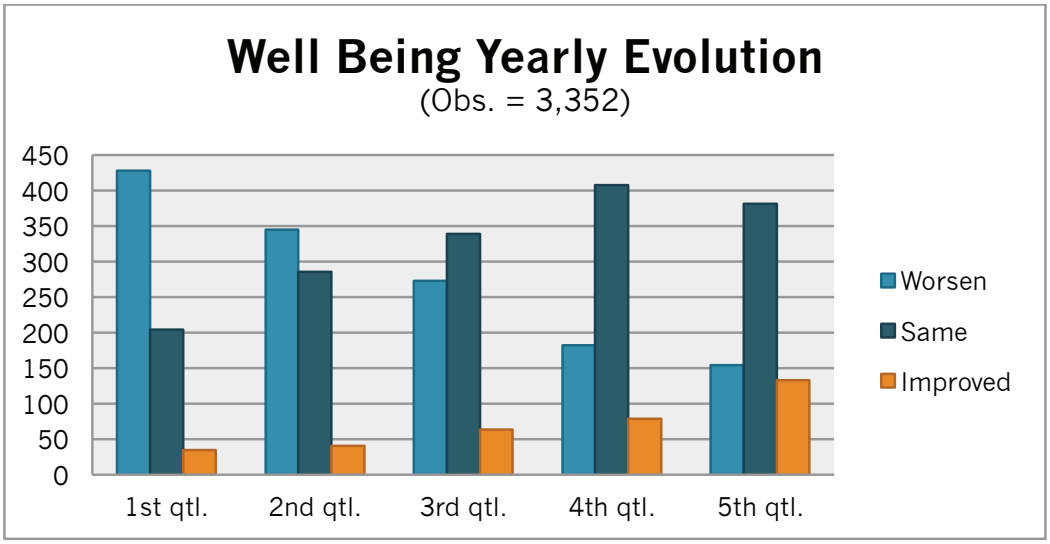


Figure 8

For the comparison with others, people were asked to imagine a 5-step ladder, with the poorest inhabitants of their avenue being on the first step and the richest on the fifth. Figure 9 illustrates that **the more asset rich the respondent, the more likely he considers himself richer than his neighbors**. However, an important number of respondents from the first quintile consider themselves as better off than their neighbors: this could be explained by the concentration of poverty in some areas of the city (people thus having even poorer neighbors).

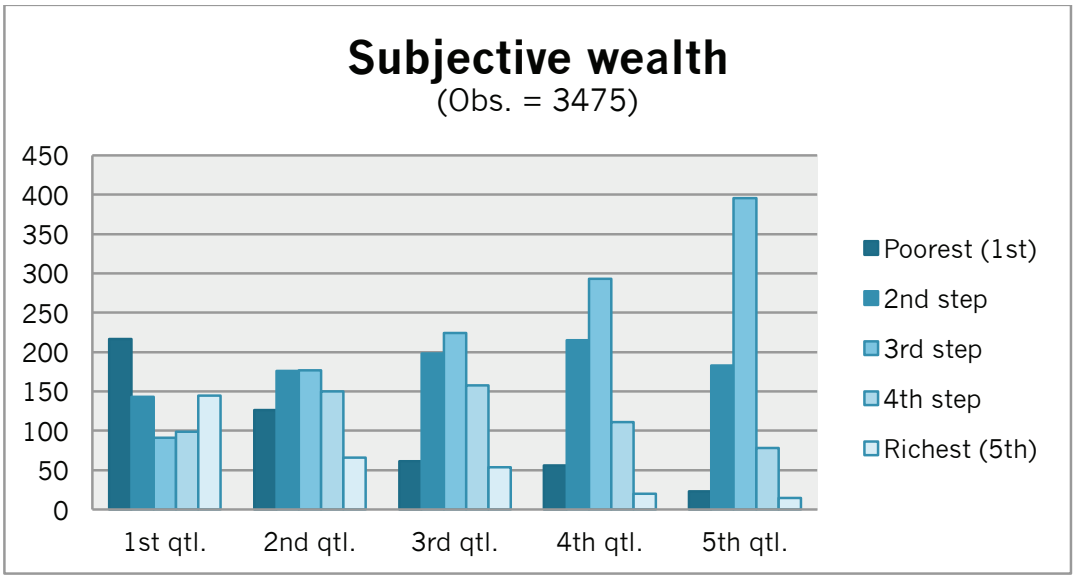


Figure 9

We found earlier that there is a correlation between subjective well-being and asset holdings. A stylized fact related to subjective well-being is that there is a correlation

between subjective well-being and income and consumption (e.g. Stevenson et al, 2008). We find that this is not the case. One explanation is that our measures of income and consumption are weak. Alternatively, this contrasting result may be due to the comparative aspect in our subjective well-being question (with respect to time or neighbors), while usually the 'happiness' literature inquiries about general satisfaction with life, without engaging in a comparative exercise.

1.4. Savings and debts

It is well known that **monetary savings in developing countries are constrained by the lack of a safe place to keep money**, let alone one that gives a positive return on cash. Even in urban areas, where banks are physically accessible, the transaction costs required to open a bank account may effectively exclude the poor. As such, analyzing survey data from 13 countries, Banerjee and Duflo (2006) find the share of households with a saving account to be similar in rural and urban areas. Banerjee and Duflo (2006) argue that the reasons for low savings rates are lack of accessibility, the uncertain environment (money at home can be stolen), the pressure to share with needy (or greedy) family members and one's own consumption temptation. As a result, **individuals in low-income countries often choose to save in kind rather than cash, for instance in productive capital (e.g. livestock) or in houses.**

Only slightly over 10% of our sample households did save in the three months before the survey. The median level of savings over the past three months is 18,400 *CDF* (i.e. 20 *USD*) – but this number must be read with caution because of the small number of observations. Differences across cities are noticeable: **Butembo and Beni again hang at the bottom** with a much lower proportion of visited households with savings (cf. Figure 10). Not surprisingly, especially households in the poorest asset quintile lack monetary savings.

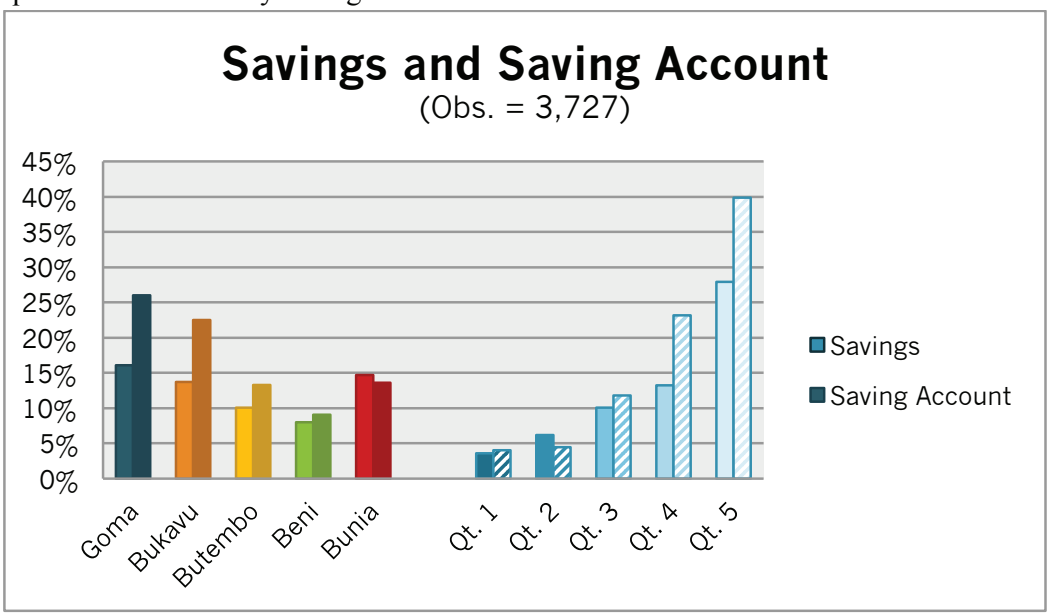


Figure 10

When respondents declared they saved money in the past three months, they referred to **a variety of monetary saving forms**: cash (34%), and savings account at a bank (25%), or at a cooperative or micro-credit institution (20%), or mobile phone money (13%). The use of a bank account varies most strongly across asset quintiles, going from 4% in the first two quintiles to 40% in the top quintile (cf. Figure 10).

Half of respondents owe debt (note that 7.5% have debts but were able to save over the last three month before the survey). Median debt amounts to 36,000 *CDF* (39 *USD*). Debt is a much more common phenomenon than savings: as we can see from Figure 11 it is fairly constant across cities (with Bunia having slightly less indebted households) and quintiles (respondents of the two richest quintiles being slightly less likely to be indebted).

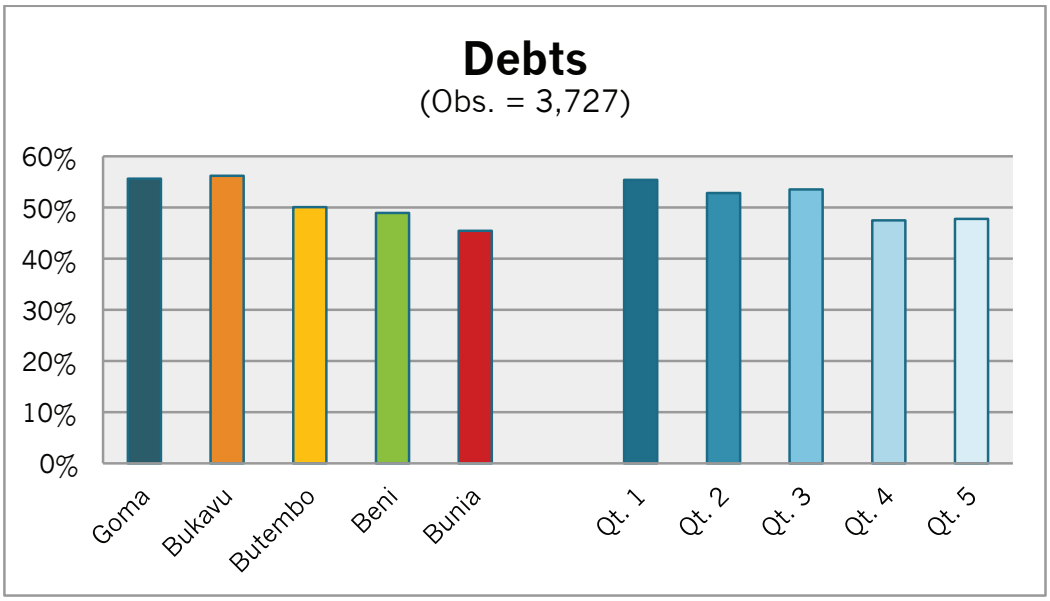


Figure 11

1.5. Employment and Labor Market

Rather than having just one activity, households in developing countries usually have a colorful portfolio of activities. Oft-cited reasons for this 'multi-tasking' and lack of specialization, are the need to manage risk as well as the lack of capital to scale up each activity to fully occupy at least one individual (Banerjee and Duflo, 2006). The latter also implies that businesses of the poor typically operate at a scale that is probably too small for efficiency.

To explore this, we asked respondents whether they and other members in the household had an income-generating activity or not (cf. Table 5). Among respondents, 41.7% declared they had at least one income generating activity. When considering the entire household of the respondent, 69% of the households reported that at least one member had an income generating activity (cf. Figure 12). **Our data thus indicates considerable unemployment**: only about four out of ten respondents have an income generating activity; and – even taking into account other household

members – seven out of ten household reported at least one income generating activity. Beni is located at the bottom; and so are women, youth, those individuals with little education, and the asset poor. The youth are also more exposed to economic inactivity than middle aged individuals. Interestingly, 22% of respondents who have a wage job also report another income generating activity.

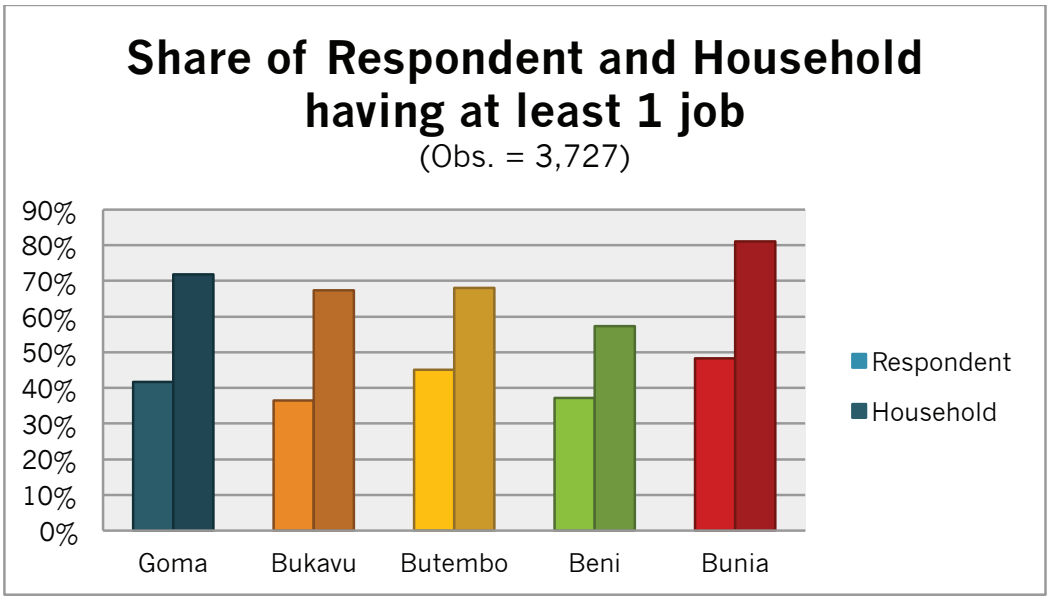


Figure 12

To uncover socio-economic correlates of employment status, we use a multivariate *logit* model (summarized in Table A. 1 in the appendix). In this multivariate analysis, correlations between employment and education or city of residence (with the exception of Bunia) are not significant anymore. Sex and age explain however part of the variation: **women have lower employment than men, and the youth and 'senior' individuals (older than 50) are more exposed to unemployment** than the middle aged individuals. The household's asset wealth also has predictive power: respondents from the highest quintile are more likely to have a job than respondents from any other quintile. Finally, even when these factors are taken into account, Bunia appears to offer more labor market opportunities: given sex, education, age and wealth quintile, the likelihood to be employed is higher in Bunia than in any other city.

Next to diversified activity portfolios, another stylized fact of low-income countries is that the majority of poor individuals are self-employed. Because the poor lack the skills or networks needed to find a permanent wage job, becoming "an entrepreneur" is generally easier than finding a job. We find that this also holds in Eastern Congo, in our sample **only 11% of total respondents are salaried (corresponding to 26% of employed respondents)**. (Table 5 also breaks down respondents' main activity between self-employed and salaried). Access to wage work is correlated with various characteristics (city, age, wealth index, etc.). In particular,

men are more likely to have a salaried job than women (16.4% vs. 6.5%). Education is also correlated with this likelihood: while only 2.5% of non-educated have a salaried job, 28.4% of respondents that studied at university (or equivalent) are salaried. Among individuals that attended primary or secondary school, wage work amounts to 6.2% and 10% respectively.

Gender and education attainments thus matter both for the access to employment, and for the access to salaried work, indicating that men and more educated people have more and better jobs than women and non-educated individuals.

Employed respondents mainly occupy unskilled jobs. This can be seen in Figure 13 that shows the main type of activity undertaken by the respondent. **Shopkeepers, farmers and unskilled workers together represent 67% of all workers.** Civil servant is an important category with more than one respondent out of ten working for local or national government (as administrator, policemen, teacher, etc.). 6% of the respondents are salaried in the private sector and 11% have 'other skilled jobs'.

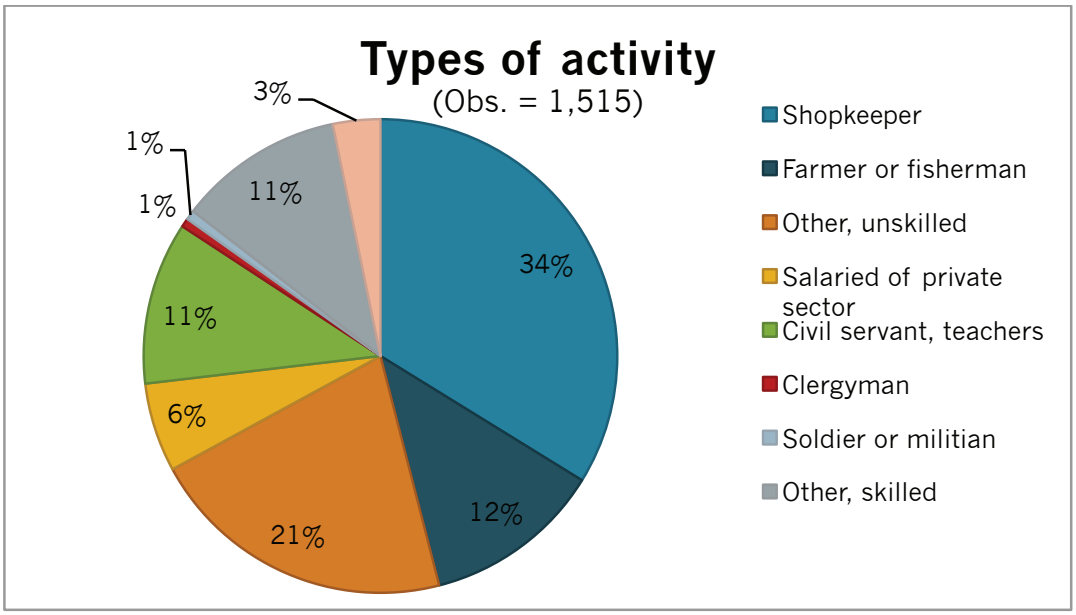


Figure 13

Table 5 Employment of respondents

Share of respondents that have no income-generating activity, whose main activity is self-employed or salaried.

	No activity	≥1 Activity	(	Self-employed		Salaried	)
All	**58,3%**	**41,7%**	**(**	**30,7%**	**+**	**11,0%**	
Men	*63,6%*	*36,4%*	*(*	*31,5%*	+	*16,4%*	*)*
Women	*52,1%*	*47,9%*	*(*	*30,0%*	+	*6,5%*	*)*
City							
Goma	*58,3%*	*41,7%*	*(*	*29,6%*	+	*12,1%*	*)*
Bukavu	*63,5%*	*36,5%*	*(*	*24,5%*	+	*12,0%*	*)*
Butembo	*54,9%*	*45,1%*	*(*	*33,2%*	+	*11,9%*	*)*
Beni	*62,8%*	*37,2%*	*(*	*30,3%*	+	*6,9%*	*)*
Bunia	*51,7%*	*48,3%*	*(*	*36,1%*	+	*12,2%*	*)*
Assets index							
1st quintile	*68,3%*	*31,7%*	*(*	*26,9%*	+	*4,7%*	*)*
2nd quintile	*57,6%*	*42,4%*	*(*	*34,1%*	+	*8,3%*	*)*
3rd quintile	*56,8%*	*43,2%*	*(*	*32,8%*	+	*10,4%*	*)*
4th quintile	*55,0%*	*45,0%*	*(*	*30,5%*	+	*14,5%*	*)*
5th quintile	*54,5%*	*45,5%*	*(*	*28,6%*	+	*16,8%*	*)*
Education							
No school	*63,9%*	*36,1%*	*(*	*33,7%*	+	*2,5%*	*)*
Went to Primary	*59,0%*	*41,0%*	*(*	*34,9%*	+	*6,2%*	*)*
Went to Secondary	*57,6%*	*42,4%*	*(*	*32,4%*	+	*10,0%*	*)*
Went to Superior	*54,0%*	*46,0%*	*(*	*17,6%*	+	*28,4%*	*)*
Age							
≤ 24	*76,2%*	*23,8%*	*(*	*18,6%*	+	*5,2%*	*)*
25-29	*57,1%*	*42,9%*	*(*	*30,7%*	+	*12,2%*	*)*
30-34	*49,8%*	*50,2%*	*(*	*34,3%*	+	*15,9%*	*)*
35-39	*47,7%*	*52,3%*	*(*	*38,3%*	+	*14,1%*	*)*
40-44	*46,3%*	*53,7%*	*(*	*39,1%*	+	*14,6%*	*)*
45-49	*51,2%*	*48,8%*	*(*	*36,5%*	+	*12,3%*	*)*
50-54	*53,6%*	*46,4%*	*(*	*35,5%*	+	*10,9%*	*)*
55-59	*56,5%*	*43,5%*	*(*	*31,2%*	+	*12,3%*	*)*
60-64	*56,9%*	*43,1%*	*(*	*30,3%*	+	*12,8%*	*)*
≥ 65	*73,9%*	*26,1%*	*(*	*19,7%*	+	*6,4%*	*)*

The survey also inquired about the nature and context of unemployment. Respondents without income generating activities were asked how long they had remained in this situation. Figure 14 summarizes the results: 35% of unemployed respondents have been in such a situation for less than a month, but more than half (54%) have been unemployed for a year or more. **Among the unemployed, there is thus a pronounced duality**: more than one in three are "short-term unemployed", but more than half are "long-term unemployed". This duality leads to a pronounced U-shaped pattern in Figure 14.

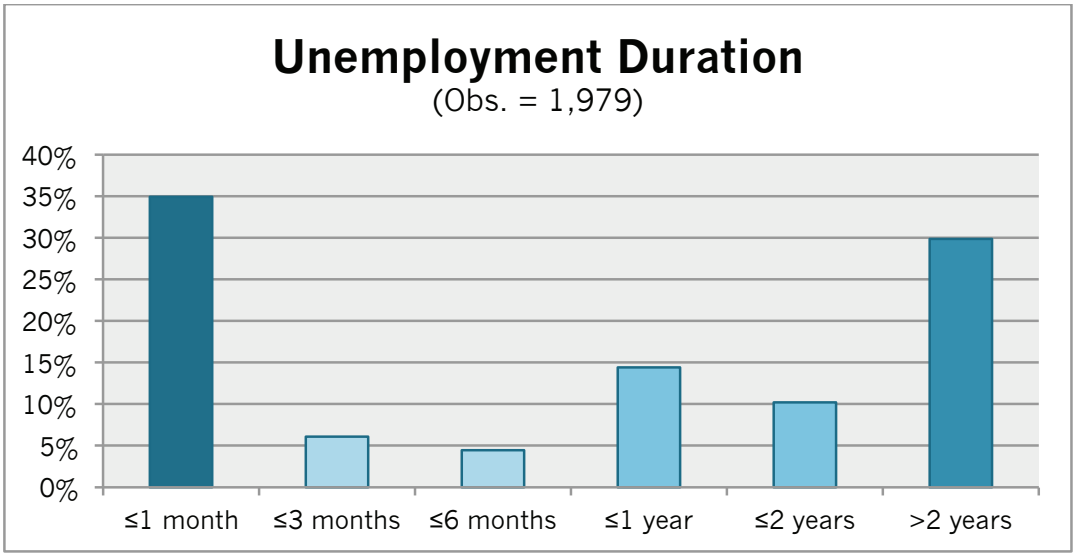


Figure 14

Finally, every respondent was asked to give his/her **opinion on the main constraints to find a salaried job, and to create a micro-business**. The main constraints to find a salaried job, are: the lack of contacts (31%), the absence of job offers (25%), the lack of skills (14%) and the lack of financial means (12%). These results are similar across the subsample of employed and non-employed respondents. Concerning micro-business start-ups, the main reported constraint is almost unanimous: **an overwhelming share of 84% of respondents consider the lack of financial means as the main constraint to micro-business start-ups**. This result holds when considering only the subsample of unemployed respondents. This finding reinforces the interest of the saving incentives included in STEP interventions.

1.6. Training

Among the respondent, 35.1% have received a professional training during their life. These trainings, which include internships and apprenticeship, are more common among men (44.4%) than women (27.2%), and among the asset rich (45.2% for 1st quintile) than the asset poor (23% for poorest quintile). People that have followed training are more likely to have an income generating activity (40.7% vs. 31.1%), which need not point to a causality from training to employment, but can also just

flow from on-the-job training. **Trainings are often specialized in professions that typically work with apprentices: crafts in 30% (e.g. tailor, cobbler, cook, etc.) and construction in 16% (e.g. painter, carpenter, builder, electrician, etc.).**

It is far from certain that a program that organizes trainings will increase the employability of respondents. The lack of skills was mentioned only by a small minority of the total sample (14%) as the main reasons for unemployment. Moreover, about **half of the unemployed respondents mention they have skills they are currently not using** (although they would like to), a share that reaches 72% when focusing only on those unemployed who received training. These **findings indicate that, rather than a shortage of skilled labor, there is a shortage of demand for this labor**. This could be explained by the lack of complementary factors, such as physical capital, credit to acquire it, and rule of law to secure it.

On the other hand, when only looking at the subsample of unemployed in the poorest quintile, 55% of respondents mention that they possess no specific skills they would like to use. **By targeting the poor, STEP could thus deliver training to people most in need of it; although it remains unclear at this stage, whether this would have an impact on unemployment or not.**

2. Access to Basic Services

Most households in low-income countries have physical access to primary schools and to basic health centers (Banerjee and Duflo, 2006). In many countries, governments have also subsidized health care and schooling, thus making these services also financially accessible. **However, the quality of the service delivery is often very low**, with poor infrastructure and high rates of absenteeism among teachers and health workers.[14] Even among the staff present, actual performance is low, either because they are not working (e.g. not in front of class), either because of generally low competences of the staff (Das and Hammer, 2004). **In part because of the poor public service delivery, private providers have stepped in**, although this has not always translated into a considerable improvement in quality of service delivery (Chaudhury et al., 2005, Das and Hammer 2004). In many ways, eastern DRC matches this description. This is what our findings show for health (2.1.), education (2.2.), access to infrastructures (2.3.) and basic security (2.4.).

Key Findings

[14] For instance, in a survey of six low- and middle- income countries, Chaudhury et al. (2005) find that the average rate of absenteeism among teachers and health workers is 19 and 35 percent, respectively.

Health	• **In 74% of households at least one individual fell ill in the year prior to the survey** • **Private systems are more frequently preferred than public systems** • **Half of the respondents live less than fifteen minutes away from a health post** • **Respondents are not satisfied with the costs of health services** • **Median expense for a medical visit in a clinic or hospital is is 76*USD***
Education	• **Illiteracy of youngsters (12-35 years old) occurs in 18% of households** • **In 9.5% of households, there is at least one child (aged 6 to 12) that never attended school** • **Literacy increases with education and wealth; and decreases with age** • **The majority of children attend private schools (73%), often religious schools** • **Publicly-funded schools are chosen by 26% of the households; especially by the poor** • **Almost half of households live less than 15 minutes away from primary and secondary schools** • **Costs are considered as a major constraint for enrollment**
Infrastructure	• **Median respondent lives 5 minutes away from a drinking water source, 17.5 minutes from a market and 8minutes from public transportation** • **Poorer respondents live further away from infrastructures**
Basic security	• **Only 3% of respondents declared that they received public assistance (from government or NGOs) during the year preceding the survey** • **61.5% of households went through a negative income shock in the same period** • **The most common negative shocks relates to health** • **Coping mechanisms are largely based on self-insurance: selling assets, using savings, taking children out of school, etc.** • **Informal assistance also plays an important role (friends, relatives or community helped 11.8% of affected households)**

2.1. Health

Health care is a very important service in Eastern Congo. A full **74% of respondents declare that at least one individual in the household fell ill in the 12 months prior to the survey**, a rate that is similar across wealth quintiles. Figure 15 below, gives a breakdown of choice of type of healthcare provision. When ill, respondents' first choice is to go to a biomedical health center (86%), be it a *Poste de Santé* (the smallest unit), *Dispensaire* or *Centre de Santé*, or *Hôpital general*. Only 14% choose an alternative option such as staying home (3%) or going to a pharmacy (7%). **Private systems are more frequently visited (41%) than public systems (32%)**, followed by the "hybrid" category managed by non-profit organizations such as churches or NGOs (13%).

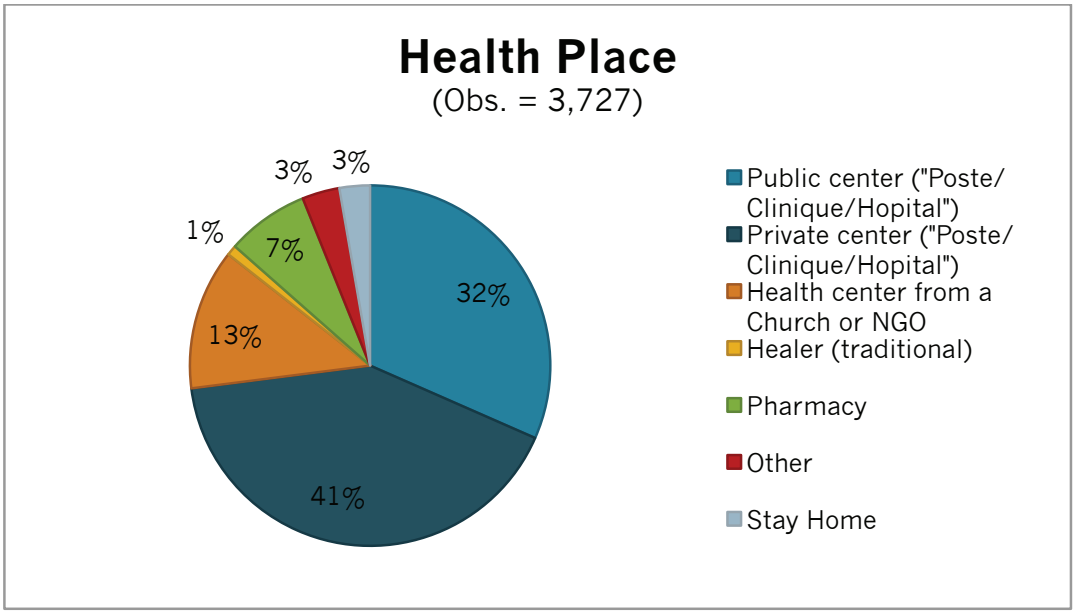


Figure 15

Figure 16, separates by city and wealth quintile. We find that the type of care sought after is very similar across the five cities. **Richer people (highest quintiles) make marginally more often use of biomedical health centers (90%) than poorer people** (e.g. the first quintile households use health centers in 80% of the cases, but opt for alternatives such as 'traditional' healers or pharmacists in 20% of cases).

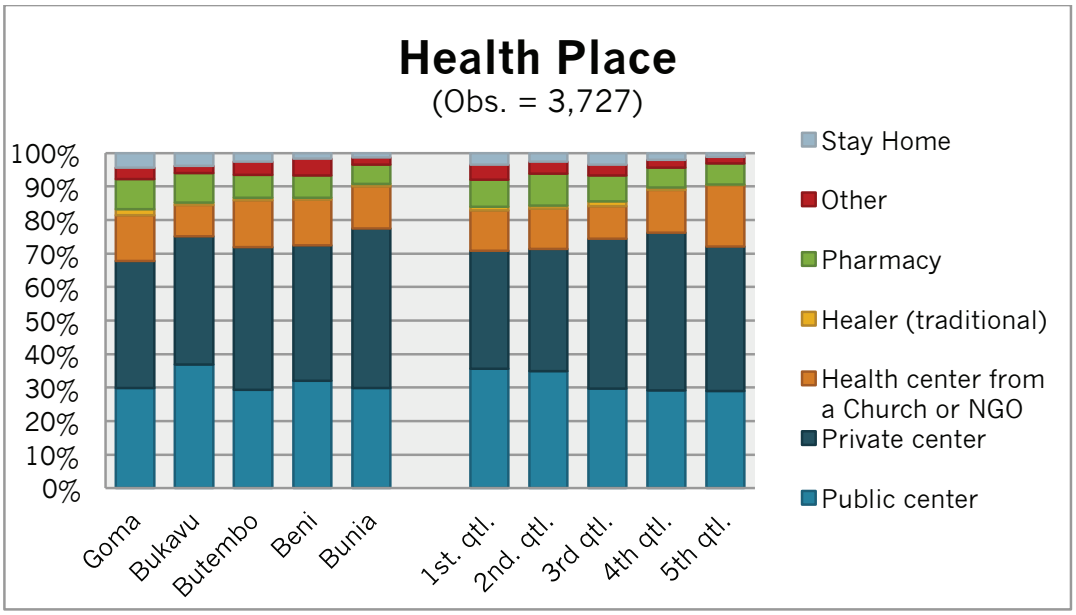
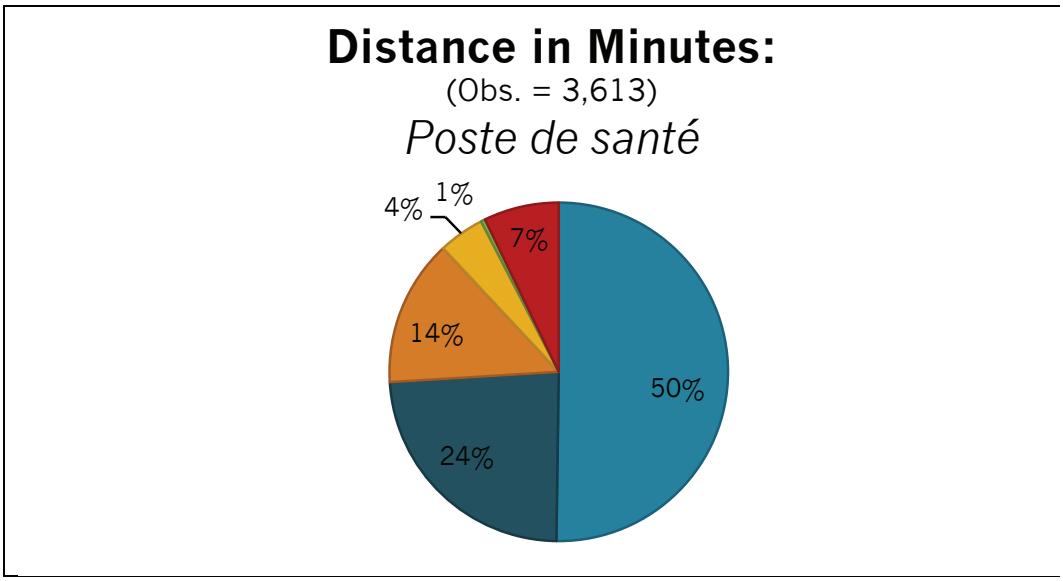


Figure 16

To measure distance to health centers, respondents were asked how long it takes to walk to the closest health center (during the rainy season). Not surprisingly, as the size of the health center increases, so does the distance. As we can see from Figure 17, **half of the respondents live less than fifteen minutes away from a *poste de santé*, 49% from a *dispensaire*, while this proportion decreases to one third in the case of a *hospital***. The proportion of people living at more than 90 minutes away increases from 7% in the case of a poste de santé to 25% in the case of a hospital.



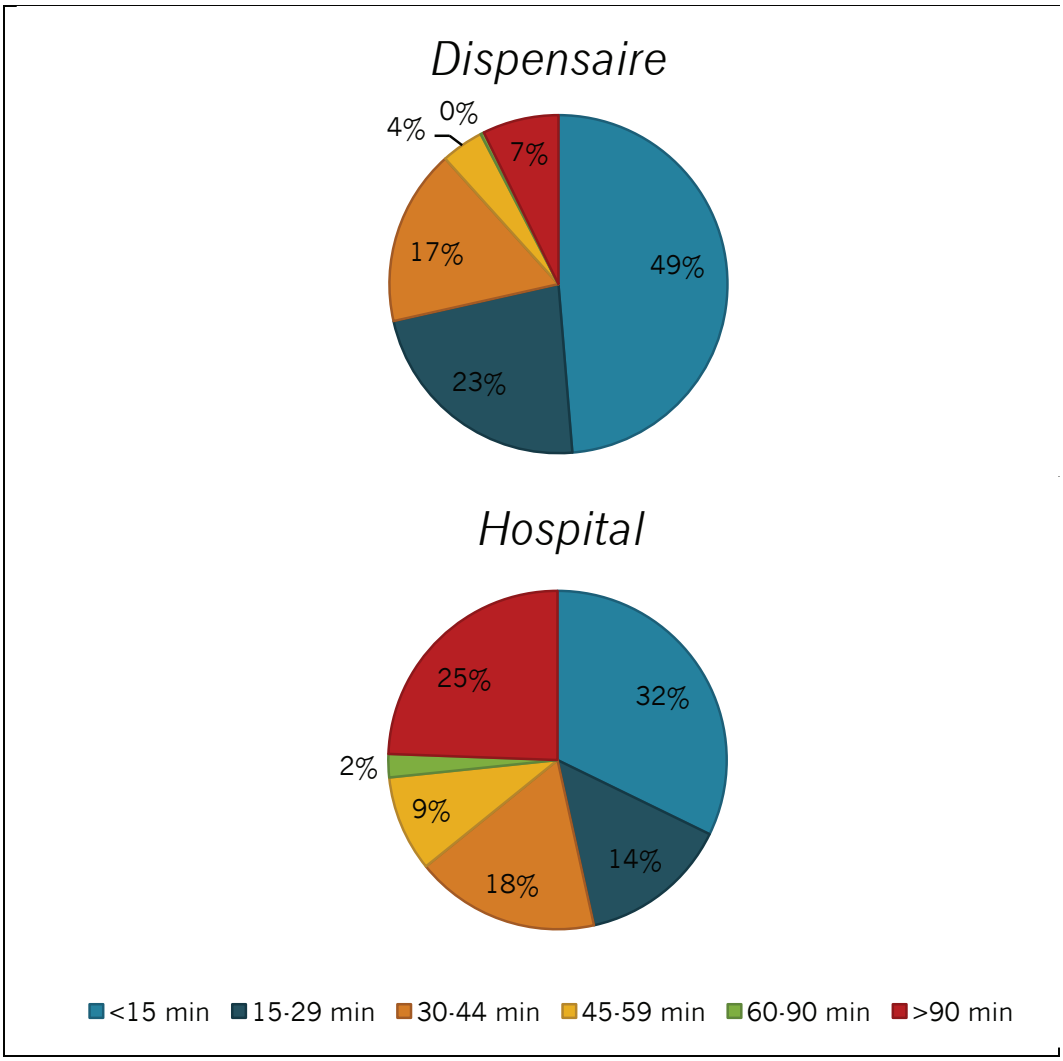


Figure 17

When asked to evaluate the quality of health services,[15] **respondents declare to be satisfied with the performance of the medical personnel, but less so with the state of buildings and equipment, and much less so when evaluation the costs of services**, which are deemed to be overly expensive (Figure 18). Indeed: compared to average weekly income and consumption, **the median expense for a medical visit in a *Clinique* or an *Hôpital* (70,000 *CDF* i.e. 76 *USD*) is exuberant**.

[15] Respondents were asked to rate ('good', 'medium' or 'bad') the following items: 1. "*Quality of the building*"; 2. "*Presence and quality of equipment*"; 3. "*Quality of care/treatment*"; 4. "*Staff competences*"; 5. "*Opening hours and presence of staff*"; 6. "*Interaction of staff with the community*"; 7. "*Costs: are they affordable?*"; 8. "*Diffusion of health information (e.g. vaccination for epidemics)*".

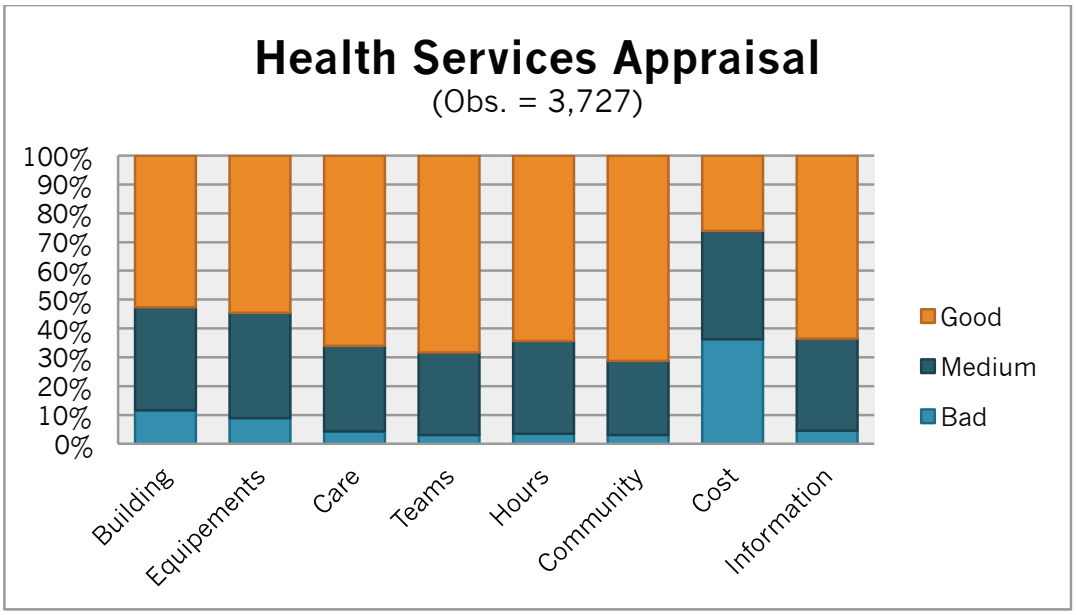


Figure 18

2.2. Education

When it comes to educational attainments, **we find that in 18% of the households interviewed, there is at least one youngster (between 12 and 35 years old) that cannot write nor read**. And in 9.5% of households there is at least one child (between 6 and 12 years old) that never attended school. Figure 19 Figure 20 below show the illiteracy rates and lack of school enrolment across cities and wealth index. The same pattern appears in both cases: **Butembo and Beni lag behind** other cities; and the asset poor lag behind the asset rich.

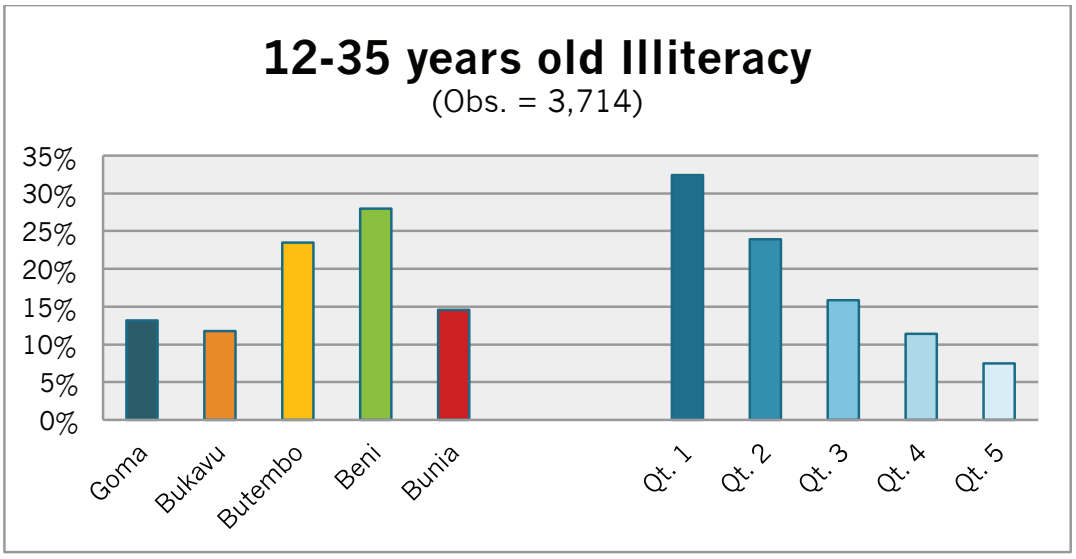


Figure 19

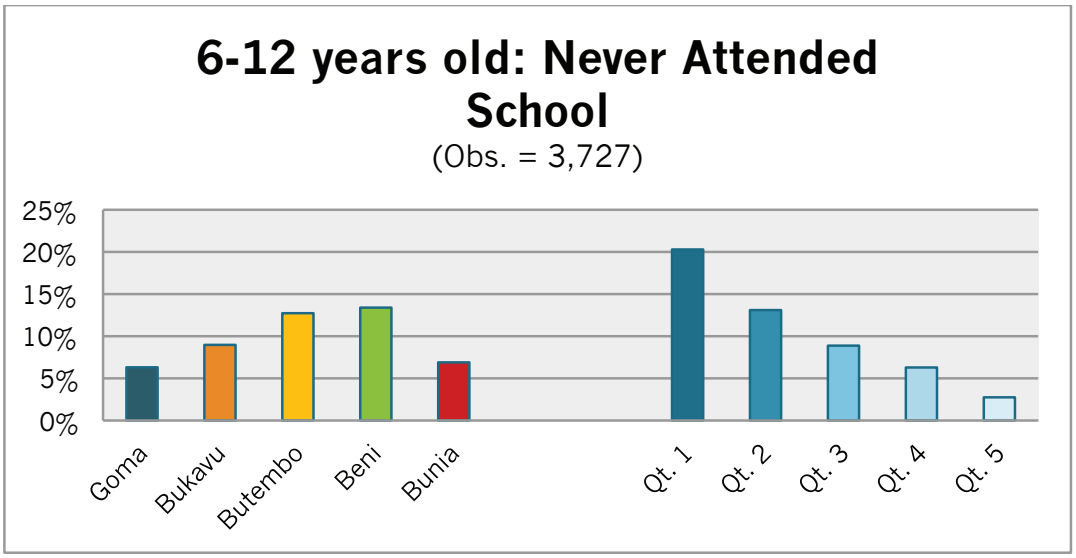


Figure 20

Only 6% of people that never attended school are literate, compared to 73% for respondent that attended primary school and almost 100% for those who went to secondary school or more. Looking at the age distribution of literacy (Figure 2 above), we find that younger generations are more likely to read and write (rate is above 85% from 18 to 29 years old) than older ones (literacy falls under 60% after 65 years old – cf. supra).

Households with children aged 5 to 17, were asked about the school they most often use. We have 2,475 observations of such households. Figure 21 shows that publicly-funded schools only concern 26% of the households (and NGOs' schools only 1%), while the vast majority of households use private schools (73%); of which the majority are catholic (33%) and protestant schools (24%) while the remaining 16% use private non-religious schools. Thus, **even more so than in the case of health, households rely on private service providers:** three out of the four schools attended are private, whereas just one out of four is public. The reliance on private schools increases as households get richer (around 30% for the first two quintiles, against 23% for the three richer quintiles).

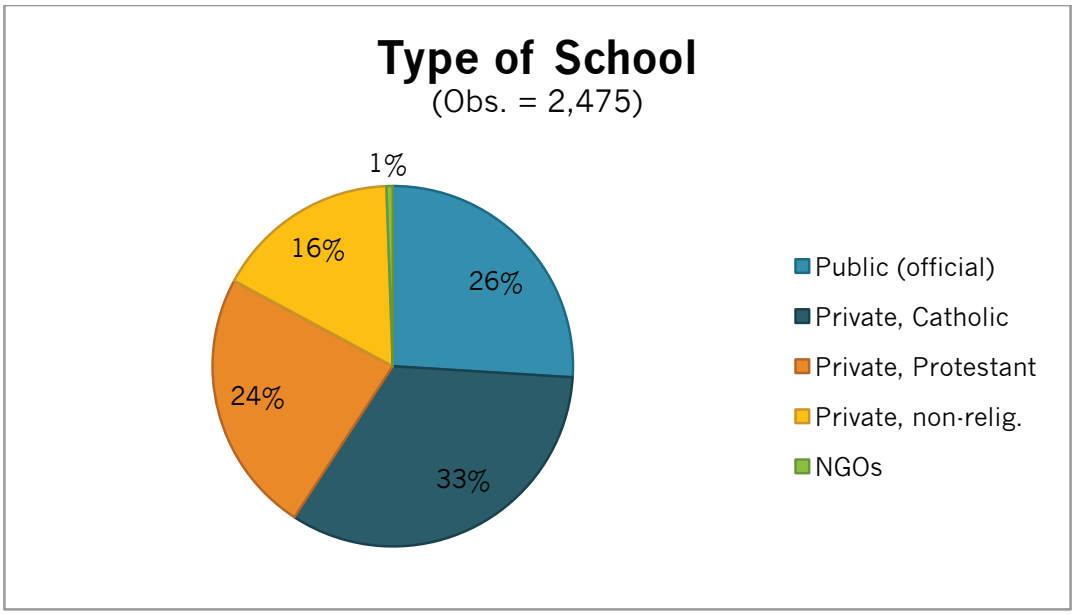
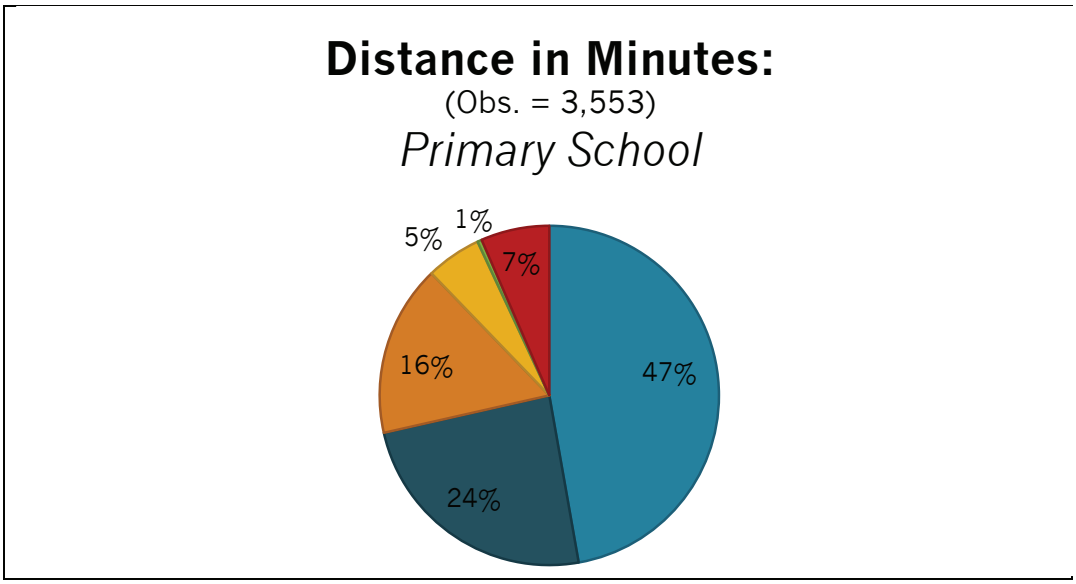


Figure 21

Distance to school was measured in a similar way as distance to health centers. **47% of the respondents declare to be living at less than fifteen minutes away from a Primary school** (Figure 22); this number falls to 43% when considering secondary schools. It is striking that, even in cities, **8% of the sample report to be living at more than one-hour distance from a primary school** (and 10% for secondary schools).



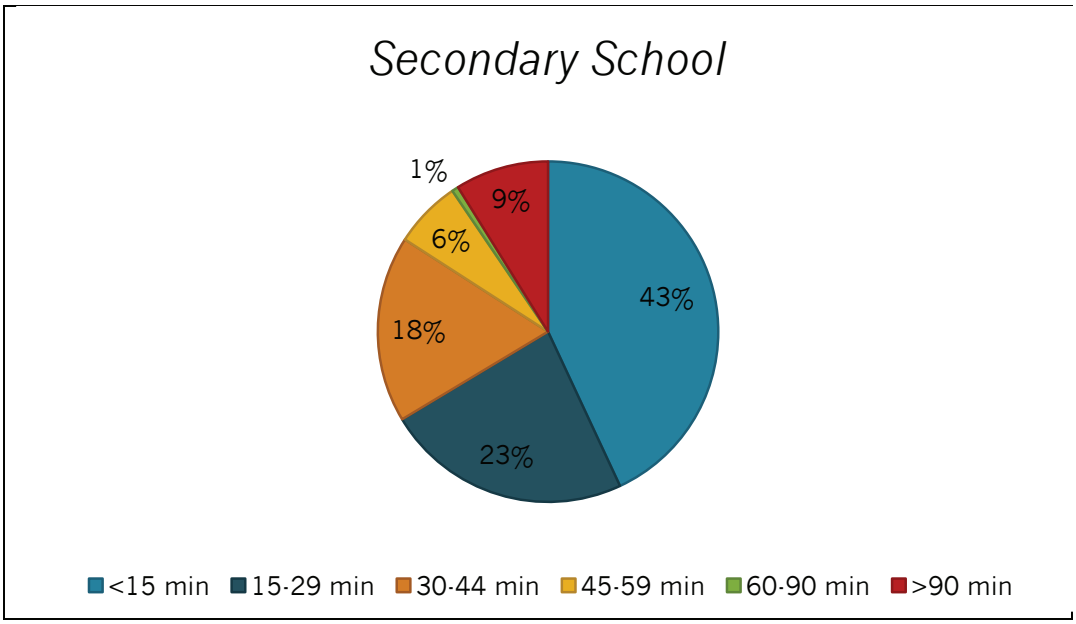


Figure 22

We also asked respondents to rate a number of school characteristics related to service provision.[16] Figure 23 shows the results. Respondents are mostly satisfied with school personnel, but express **dissatisfaction with buildings, equipment, and especially costs**. 27% of respondents consider costs are "bad" and another 43% consider they are "medium". **Households in which children had to leave school (or never went to school) declare costs were one of the main reasons in 74.2% of the cases** (in comparison, the second most common reason – illness – is mentioned in only 12% of the cases)**.** Despite these difficulties, we find that the steady improvement of schooling across generations – observed worldwide - also touched the urban population of eastern DRC. **Parents sending their children to private school are slightly more satisfied than those using the public system** in particular with equipment (that 49% rate as 'good' vs. 41.5% in the public system), quality of the teachings (71.4% vs. 64.4%) and teachers' competences (71.5% vs. 65%). Their rating of costs is very similar. The high frequency of private schools combined with their higher appreciation suggest that a large number of households, including the poorest, have been pulling their children out of public schools and spending money to send them to private schools. Alternatively, it may also be the case that public services are just in short supply.

[16] Respondents were asked to rate ('good', 'medium' or 'bad') the following items: 1. "*Quality of the building*"; 2. "*Presence and quality of handbooks and material*"; 3. "*Quality of teaching*"; 4. "*Staff competences*"; 5. "*Opening hours and presence of teachers*"; 6. "*Interaction of staff with the parents*"; 7. "*Costs: are they affordable?*".

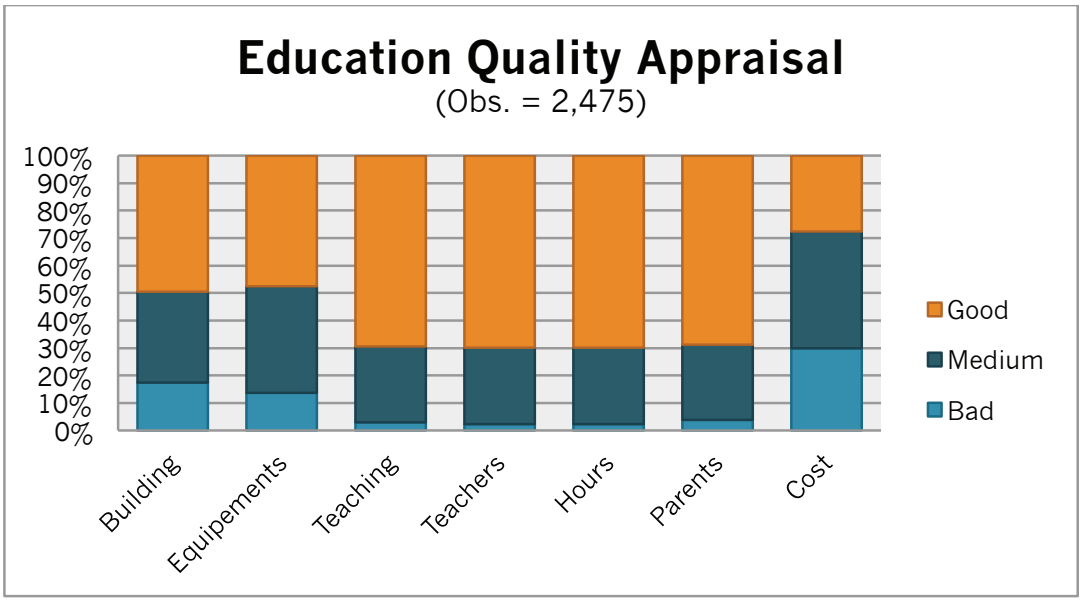


Figure 23

2.3. Access to infrastructure

Apart from schools and health facilities, infrastructure most importantly includes roads, power connections, and basic sanitation. These have an important direct effect on people's utility, but also can have **important indirect effects on people's lives, for instance through facilitating business start-up and thus income generating activities**.

We find that the Median respondent in our survey lives 5 minutes away from a drinking water source, 17.5 minutes away from the closest market and 8 minutes away from public transportation. **For all three infrastructures, the poorest the respondent, the further away he lives**. This is most noticeable in the case of drinking water. Respondents in the two bottom quintiles live at a median distance of 10 minutes (instead of 5 for respondents in the other quintiles – cf. Figure 24 below).

Figure 24

2.4. Aid and Basic Security

Along with basic services and infrastructures, aid and basic security may support individuals in their efforts to decrease economic uncertainty and enhance their capabilities. In the DRC as elsewhere, the poor have very little access to formal insurance (Banerjee and Duflo, 2006). The survey therefore investigated about the assistance respondents received from the government or NGOs. It appears that **only 3% of respondents declared they received public assistance during the year preceding the survey.** We cannot completely rule out that respondents answer strategically, but this very low rate is consistent with other findings of the survey. Among those that did receive assistance, 41% received food, and 30% received money. On the whole, avenue chiefs were reportedly involved in both the selection of beneficiaries and the distribution of cash or kind.

The low formal insurance and government support implies that individuals largely have to rely on their own coping mechanisms to manage income fluctuations and cope with shocks. This is not unlike other low-income countries where informal insurance and self-insurance also widely prevails (for an overview see Dercon, 2004).

In the sample 61.5% of the households went through a negative income shock during the year before the survey. The most common shocks reported were illness (in 42% of the cases) and death (19.5%) of a household member. Given the scarcity of public assistance, **coping mechanisms were indeed mainly supported by the households themselves:** in 39.5% of the cases, households had to borrow; 13% reduced their monetary savings; while 14% decided to deplete some of their assets or cattle; 20.5% reduced the number of meals; and 10% of households decided to withdraw children from school. **Informal assistance also played an important role as 11.8% received aid from either friends or relatives, avenue members or chief,**

and/or their church. Here again, NGOs (0.7%) and the government (0.3%) are almost absent.

Self-insurance through savings or assets requires investments in precautionary savings (in cash of kind), but accumulating money or assets is not always straightforward in uncertain environments. Besides, **depleting productive assets and pulling children out of school may jeopardize households' future income-earning potential**. An important limitation of informal insurance is that it falls short when the shock is covariant, in other words – when it hits many people in the same community, as in the case of civil war (e.g. Verpoorten, 2009). In this respect it is noteworthy that 7.8% of negative income shocks reported by our respondents were covariant (fire, flood, war). Because of these and other limitations associated with self-insurance and informal insurance, households are not well equipped to manage risk ex post and smooth their consumption over time. This **may lead households to manage risk ex ante, e.g. by making overly cautious business decisions**, thus leading the poor to under-invest in risky, but profitable activities (Morduch, 1991).

3. Development: Projects and Actors

This third section describes the implementation of local development projects. It focuses on the type of projects commonly implemented in eastern DRC (3.1.) as well as on the actors that decide on or manage these projects (3.2.). Our survey also investigates about respondents' opinion about these projects and actors (3.3.)

Key Findings

Development projects	• **Local initiative to improve roads (streets) and water and sanitation systems are common** • **They generally (in 75% of cases) involve avenue's labor force** • **Other constructions (school, health center, church, market) are more rare and do not involve many inhabitants** • **Patrols are commonly organized (reported by 15% of respondents), and more so in Bunia (26%)**
Actors of local development	• **Avenue chiefs usually manage local development initiatives** • **Various committees are involved in avenues' management: most common are those for education (36%), health (23%) and development (23%)** • **Direct participation of households in the committee is low**

Trust in development actors	• **The avenue chief is a most-trusted institution** • **Committees are also supported, although respondents think they are not sufficiently involved in decision making**

3.1. Development Projects

Many governments provide **safety nets in the form of food or cash for work programs**. Under these programs, individuals perform (often physical labor) at a pre-announced wage (in cash or kind). While these schemes often effectively target the poor (through a low wage offer), some poor are excluded (e.g. because they lack the physical strength or network and information to access the limited number of jobs created by the government).

We find that in the five major cities of Eastern Congo road and pipe improvements are commonly implemented, but these works occur mainly as unpaid community service (so-called *solongo* in Eastern Congo) rather than cash for work programs. This explains why participation rates are similar across asset quintiles (except for the highest quintile, which seems to escape this duty to a larger extent than other households). Figure 25 below illustrates. Over the six months before the survey, 43% of the respondents saw (at least) one project to improve roads (streets) in their avenue. Water and sanitation systems were also repaired, improved or built in the avenue of 22% of the sample. These two projects are far more common than other constructions or reparations (schools and health center combined occurred in 8,4% of the cases; churches in 6% and markets only in 2% of cases). **The road and water/sanitation projects involved local labor**: about 3 out of 4 households that declared knowing about such a project also reported that at least one member of their household had participated. This percentage is high compared to other projects, which are more demanding in terms of time and skill (e.g. participation falls to 43% for repairing churches or mosques, and 33% for building markets).

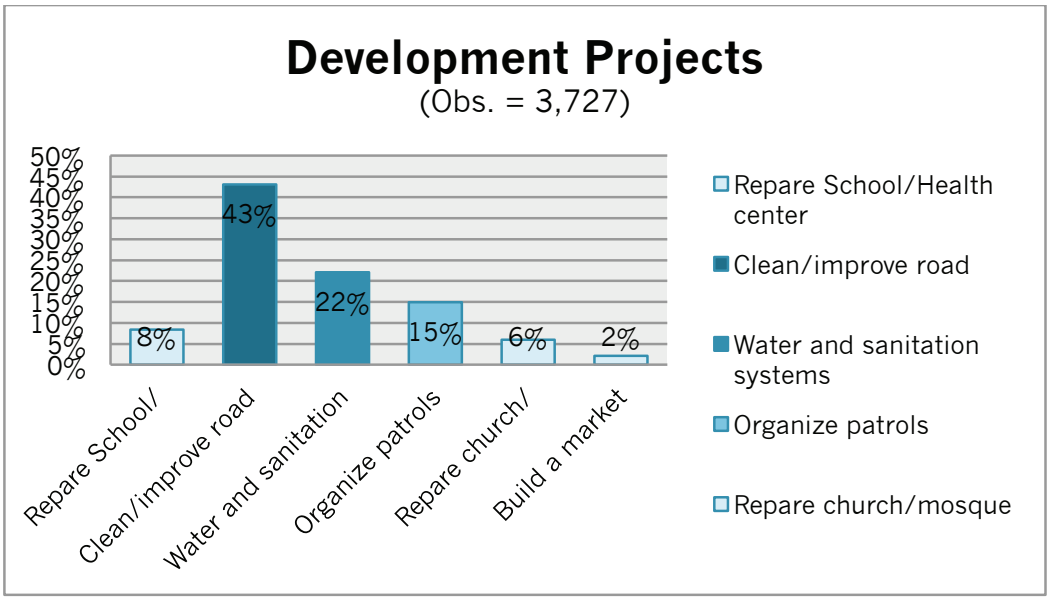


Figure 25

Local labor force participation also depends on the city: Butembo and Beni have slightly higher participation rates (84.5% and 86% respectively). Figure 26 illustrates the case for the most common project (i.e. roads).

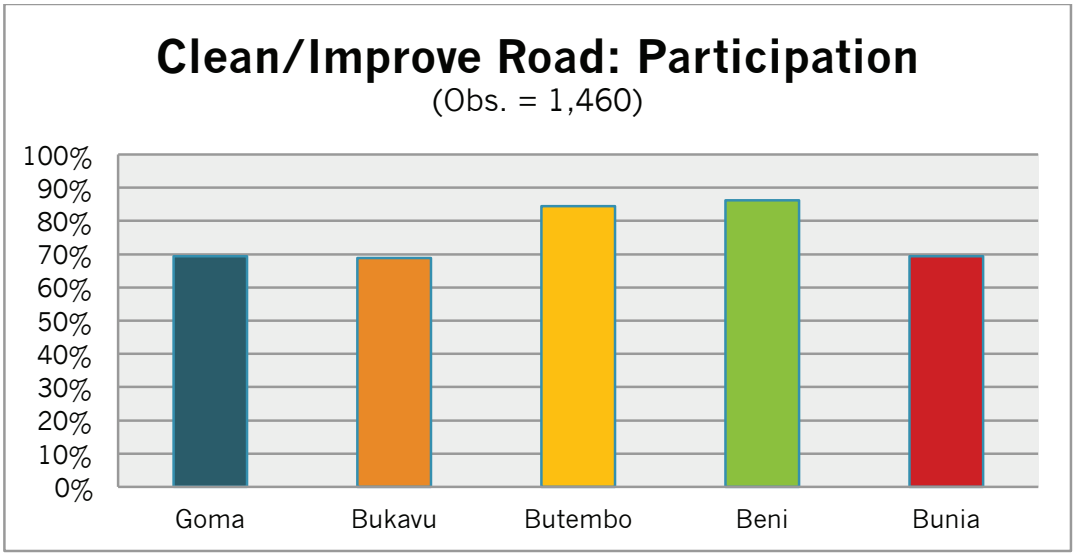


Figure 26

Given the context in eastern DRC, the organization of patrols is an important aspect of community organization and development. **15% of the sample answered that security patrols were organized in their avenue** in the six months before the survey. They mainly occurred in Bunia: 26% of the interviewed declared patrols had been organized there, far more than the sample average.

3.2. Local development Actors

Most of the above mentioned development projects were managed by the avenue chief. For roads and water/sanitation, avenue chiefs were in charge of day-to-day management (according to around 60% of the respondents). This is confirmed by another question asked to the whole sample (and not only about projects in the last six months): "who in the avenue organizes the public works?" Avenue chiefs and their assistant are indicated by 70% of respondents. **Patrols are organized, in the first place, by 'youngsters' ('les jeunes')**; churches building or reparation by clergymen; and NGOs are the main initiator of markets building.

Apart from the avenue chiefs, **various committees are involved in the organization and management of their avenue**. Figure 27 below indicates the share of respondents that reported the existence of a specific committee in their avenue, as well as the share of respondents whose household participates in the committee. Most common committees are the committee of parents (COPA by its French acronym) for education (36%), the health committee (CODESA) (23%), and community development committees (23%). Other committees are less common: protection and security (13.5%), conflict resolution (13%), and agriculture (6.5%). **Participation is rather low with only 2 to 4% of households being directly concerned** – with the exception of education committees (in which 8% of interviewed households attend). In contrast, **membership of diverse associations (youth, women, credit, human rights, farmers) is much more common**.

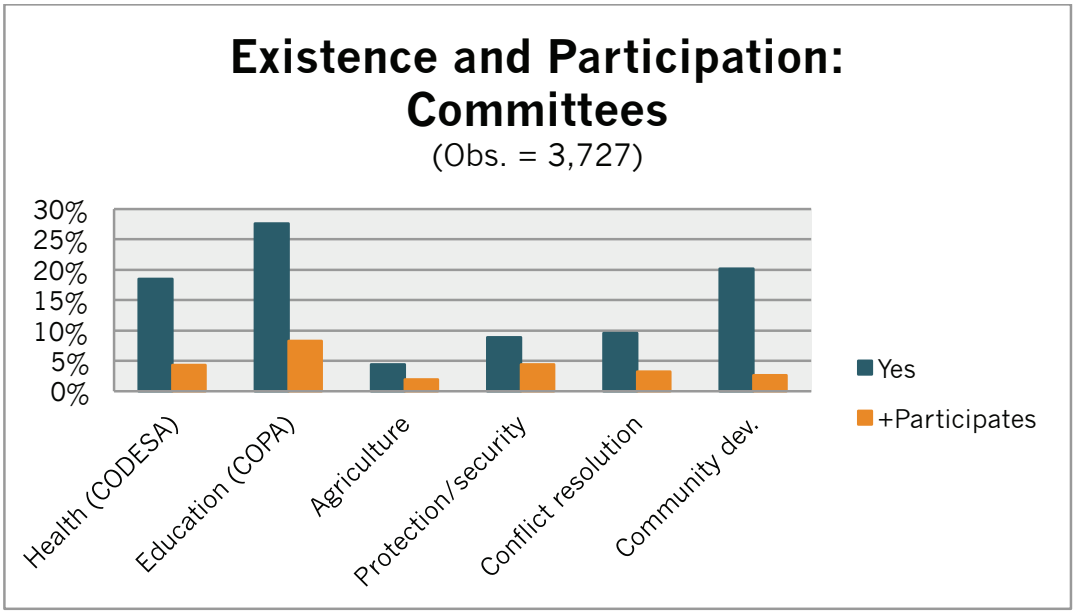


Figure 27

3.3. Trust in development actors

Trust in development institutions was measured through two main questions. The first question was: "if the avenue were to be given 1000 *USD* for its development, who

should be in charge of managing this amount to make sure the money would be used only in favor of inhabitants' well being?" Almost half of interviewees reply 'Avenue chief', while one out of five declare that (one of) the avenue's committee(s) should get involved, and 14% awards a role to NGOs. Other Congolese institutions that are higher up in the administrative hierarchy (national government, *territoire* and *chefferie*) are picked by only 2% of respondents. Figure 28 illustrates.

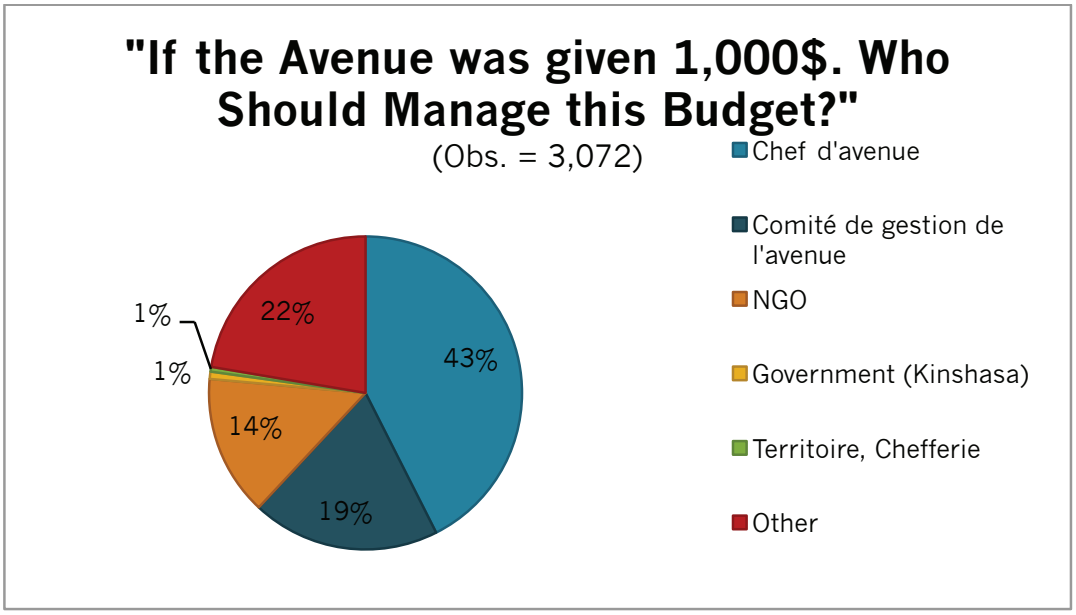


Figure 28

The second question that we posed in order to gauge the level of trust in development actors, was more general: "When it comes to the issues of development and improvement of your household's quality of life, whom do you trust the most currently?" Only half of respondents gave an answer. Here again, **avenue chief appears as the most trusted institution** (32% – Figure 29). In comparison, the National Government (Kinshasa) is chosen by less than 1% of the respondents, and local governments (altogether) represented only 3%. Civil society (young people, women, various association, etc.) and clergymen are also endorsed by 17% and 15%, respectively. **About 10% of our respondents indicated to trust the development committees with this task**.

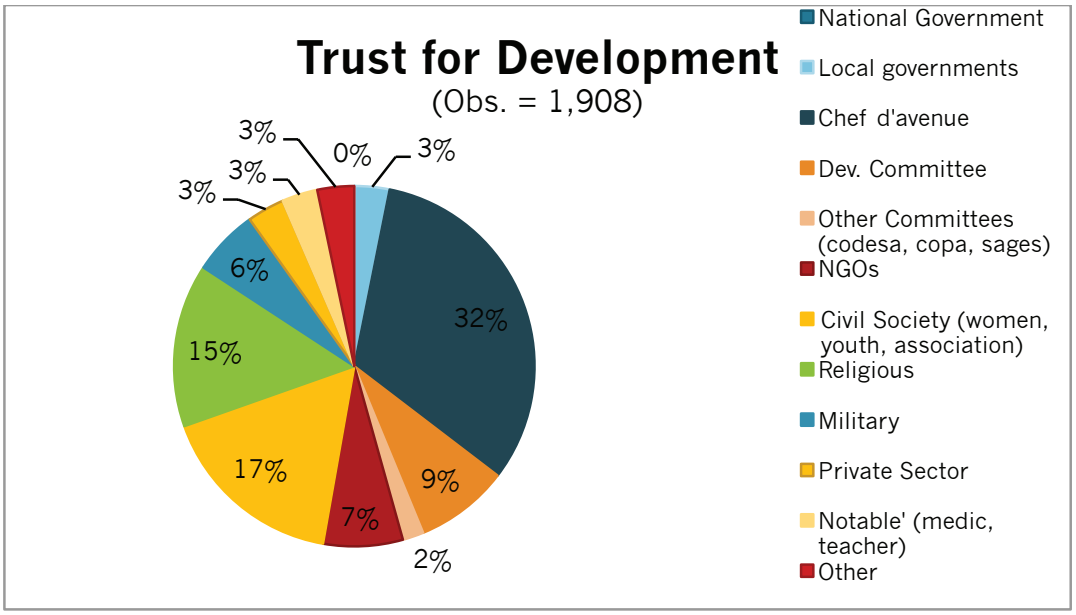


Figure 29

We also asked respondents to rate different activities undertaken by their local development committee. Figure 30 shows the results. Overall, respondents are positive about their local development committee. However, in relative terms (i.e. compared to for instance health or education services – cf. Figure 18 & 23), local development committees are rather badly graded. In particular, **respondents consider they are not sufficiently involved nor consulted in the committee's decision making process**. Moreover, 54% consider that the local development committee does not correctly assure that money serves only public interests. This suggest that **there is an issue with transparency, which will need special attention during the STEP interventions**.

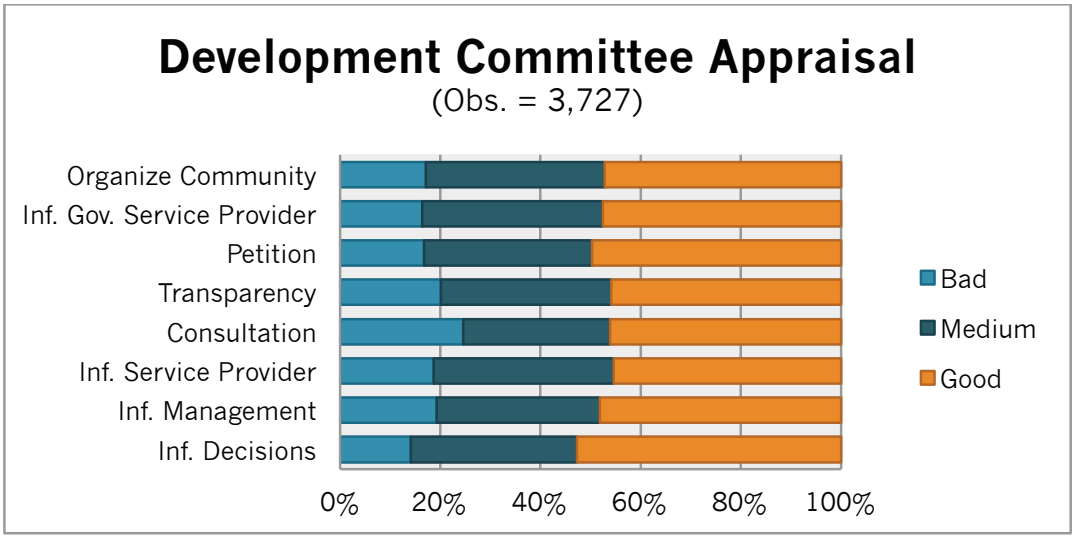


Figure 30

4. Social and Civic Life

The productivity of tangible factors such as labor and capital is determined by a country's general economic, social and political environment. This environment is made up of several specific but **less tangible factors such as the rule of law, social capital, civic engagement, inter-personal trust, and collective action**. How war shapes these less tangible factors is important for a country's post-war recovery. Blattman and Miguel (2010, p. 42), in their literature review paper, argue that "the social and institutional legacies of conflict are arguably the most important but the least understood of all war impacts". In this section we look in some detail at several of these less tangible factors. In particular, it describes the security context of urban areas (4.1.), the social cohesion and level of trust among respondents (4.2.), the access to information and use of medias (4.3.) and, finally, the political opinions and behaviors of eastern DRC cities' inhabitants (4.4.)

Key Findings

Insecurity

- **68.5% respondents report that an 'insecurity' event occurred in their avenue during the six months before the survey**
- **75.2% of the avenues are concerned**
- **Burglary is the most common insecurity event (concerning 52% of avenue)**
- **Insecurity events are concentrated in some avenues (i.e. insecurity events are correlated)**
- **Social tensions between groups (religion, ethnic, etc.) happened in only 10% of the avenues and only half of these tensions turned into violence**
- **Most common tensions occur between inhabitants and newcomers**

Social cohesion and inter-personal trust

- **31.4% of households have at least one member in an association**
- **Most common associations are those for the young and women**
- **In lending money, people would trust more their neighbors, co-ethnics or family members than strangers.**
- **In a behavioral game, respondents showed high level of trust in their neighbors, although less in Goma and Bunia than elsewhere.**

Isolation & Information	• **Urban people are mobile and not isolated: 72.4% visited, or were visited by, someone that lives more than one hour away** • **Friends, as well as rumors, are important (though informal) channels of information. This is especially true for local news, and more so in Butembo and Beni.** • **National media (TV and radios) are the main channel of information**
Political opinion and behaviors	• **84.5% of respondents "never" or "rarely" talk about politics** • **Only 28% think they are able to influence their political leaders** • **Respondents are in favor of citizens and women empowerment and against violence** • **They are divided about Kinshasa's legitimacy to collect taxes as well as on the requisites to be part of decision makers** • **83% of respondents voted in the 2011 elections** • **In these elections: 37% attended a political meeting and 17.5% contributed to a campaign (giving money or time)**

4.1. Insecurity

Even if individuals possess or receive the required endowments of labor, knowledge and capital to start up a business, they may refrain from doing so if the business climate is unfavorable or uncertain. This can be the case when property rights are insecure, or when there is high exposure to risk of robbery (Blattman and Ralston, 2005). The **quality of post-war institutions and political stability will thus to a large extent determine whether swift post-war economic catch-up can take place** (Serneels and Verpoorten, 2012).

68.5% of respondents say some security issues occurred in their *avenue* in the six months before the survey. The specific issues proposed to the survey respondents were the following: *conflict over land property (plot); burglary; aggression (mugging); domestic violence; armed robbery & murder; discovery of weapons or military equipment*. The main results are summarized in Table 6. The most commonly mentioned event is, by far, burglary (52%) followed by land conflict (32.5%), armed robbery & murder (29.5%), aggression (22.5%) and domestic violence (18.5%). These **insecurity events are widespread, affecting the large majority of avenues. Yet, some spatial concentration can be detected**: for instance, avenues where burglary was reported have also had property issues in 76.5% of the cases (vs. 42% where no burglary happened), aggressions in 66.8% (vs. 32.5%), armed robbery & murder in 72.8% (vs. 33.6%), etc. There is also variation across cities: Goma (72%)

and Bukavu (76.5%) appear more insecure than the three other cities (all below the average). **If LIPW aims to divert youngsters from illicit activities, the targeting of vulnerable and insecure areas may be important.**

Table 6 Insecurity

Percentage (%) of respondent declaring the event occurred in their avenue (last six months).

	Goma	*Bukavu*	*Butembo*	*Beni*	*Bunia*	**Total Sample**
At least 1 event	***71.5***	***76.5***	***65.5***	***66***	***62***	**68.5**
Land property	*34*	*49.5*	*29.5*	*29*	*19.5*	**32.5**
Burglary	*54*	*51.5*	*54*	*52.5*	*47*	**51.5**
Aggression	*28*	*29*	*23*	*20*	*13*	**22.5**
Domestic violence	*22.5*	*17.5*	*24*	*15*	*12.5*	**18.5**
Armed rob. & Murder	*41*	*32*	*20*	*21*	*32.5*	**29.5**
Military equipment	*6.5*	*1.5*	*4*	*4*	*2*	**35.5**

The survey also inquired about **disruptions of social cohesion**. Respondents were asked whether someone in their household had ever been part of an event (in the avenue) where social divisions or tensions had emerged among various groups of inhabitants (such as religious groups or migrants). "Being part of" could be interpreted as being an observer of or being an actor in such event. The answers of urban respondents indicate that, overall, **less than 10% of households had members that had "been part of" social tensions in their avenue** (Figure 31). **The most frequent tensions occurred with migrants**. A relatively large share of these reported tensions turned into violence. For instance, 40% of tensions with migrants became violent; 43% in the case of divisions between ethnic groups; 46% among farmers, etc. These numbers have to be interpreted with caution, not only because of the small number of total events, but also because more violent events linger on longer in the memory, resulting in reporting bias.

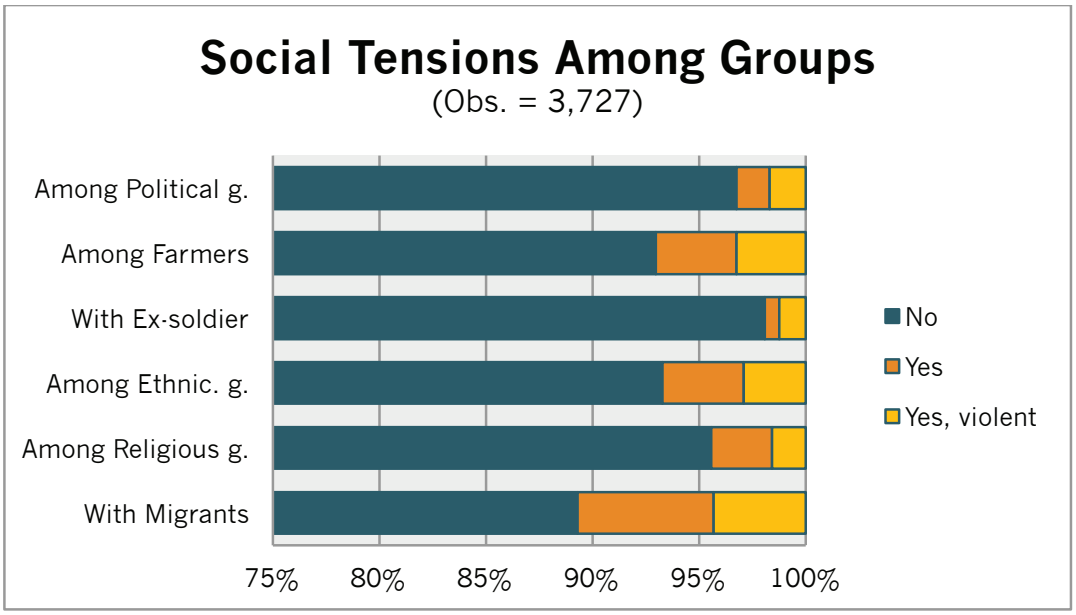


Figure 31

4.2. Social Cohesion and Interpersonal Trust

The survey measured 'social cohesion' in three different ways. The first measurement is the presence of (and participation to) associations in the avenue. The two other measurements try to grasp respondents' trust toward other persons: one by a thought experiment, the other by a small 'behavioral game'. We discuss them in turn.

Figure 32 below indicates the share of respondents that know about an association in their avenue, and the share of households that participates in the association. **The most common associations are associations of young people that exist in the neighborhood of 50.5% of the sample, and women associations (36.8%)**. Much less common are credit associations (12.8%), human rights associations (5.3%), political parties (5.2%) and farmers associations (4.6%). Regarding household membership, a rough approximation is that half of respondents' households that know about an association also participates. In the total sample of respondents, 24% of households have at least one member that participates in an association for young people, 19.5% have at least one member in a women association, 4.7% in an association for credit, etc. **Overall, 31.4% of the households have at least one member in an association (of any type)**. Inhabitants of Butembo (51%) and Beni (42%) are most likely to participate in associations, while the other cities feature membership rates of around 20%.

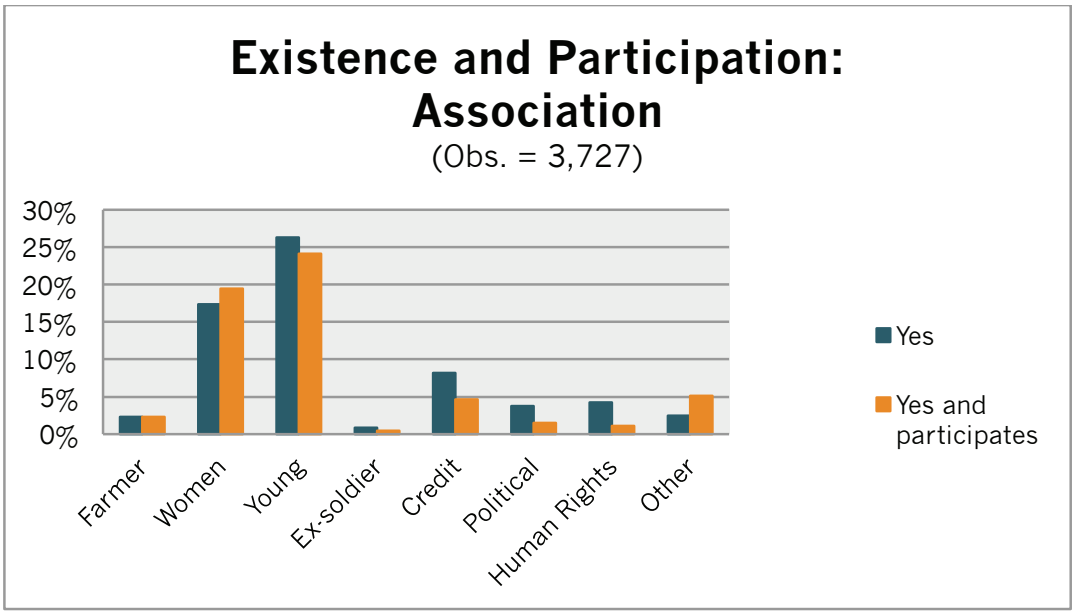


Figure 32

In the thought experiment to measure interpersonal trust, respondents were asked whom they would lend money to (one-option answer), if they were member of a saving cooperative. Figure 33 illustrates the responses. **This self-reported measure of trust shows relatively high levels of trust among neighbors, co-ethnics and family members, but somewhat lower levels towards 'strangers'**: only 27% of respondents reports to be willing to lend to every type of enquirer, while 58% would lend only to people they know directly either thanks to kinship (40%), or neighborhood (8% would lend to people living in the same avenue) or churches (7%). In Beni and Bunia, the share of people accepting to lend to any enquirer is as high as 32%, compared to only 19% in Goma and 17% in Butembo.

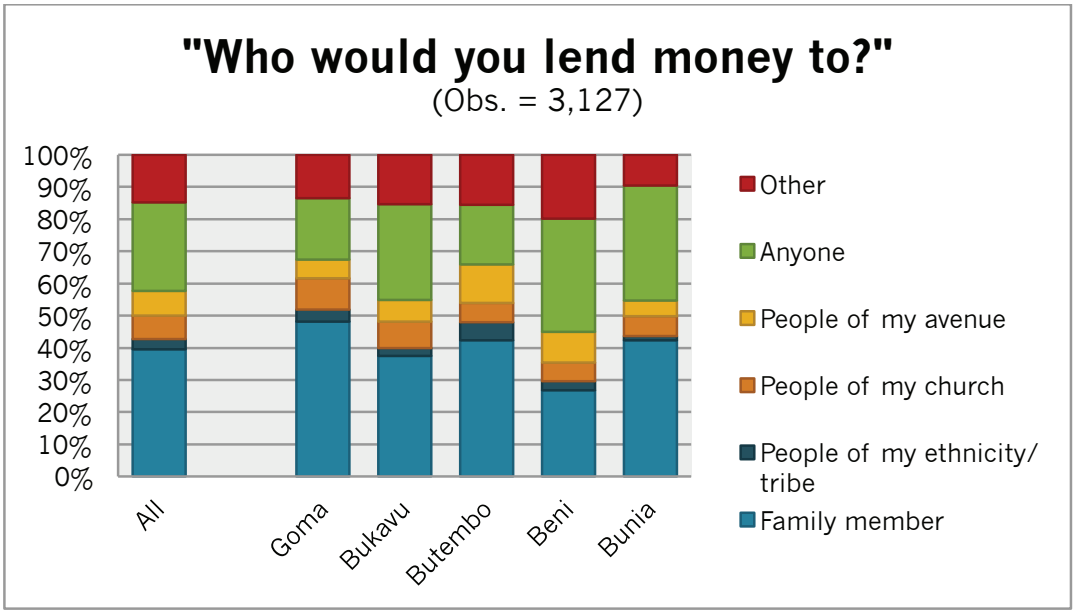


Figure 33

The self-reported measure correlates well with a behavioral measure of trust, which turns out especially low in Bunia. We also measure trust using a behavioral measure. The enumerators told the respondents they had 500 *CDF* to give them, yet – having only a note of 1000 *CDF* - needed change to pay with the exact money. Enumerators then suggested the following to the respondent: either to go to a neighbor after the interview, give him/her the 1000 *CDF* note, and ask the neighbor to return 500 *CDF* to the respondent (the other 500 would be kept by the neighbor). If the respondent accepted, he/she would thus have to get his/her share from his/her neighbor (i.e. which implied trusting the neighbors). If the respondent refused, no money was given at all. **The large majority of respondents accepted: 68% without hesitation and 16% with some hesitation.** Figure 34 illustrates. This proportion is **similar across gender, education, age, employment status and wealth quintile**. In Goma and Bunia, less people accept the agreement (82 and 78% respectively) than in Bukavu, Butembo or Beni (88, 85 and 86% respectively). And, even when controlling for several socio-economic factors in our multivariate model (see **Table A. 2** in appendix), trust in neighbors is weaker in Bunia, indicating less 'social cohesion' (as captured through this behavioral game) in Bunia than in other cities.

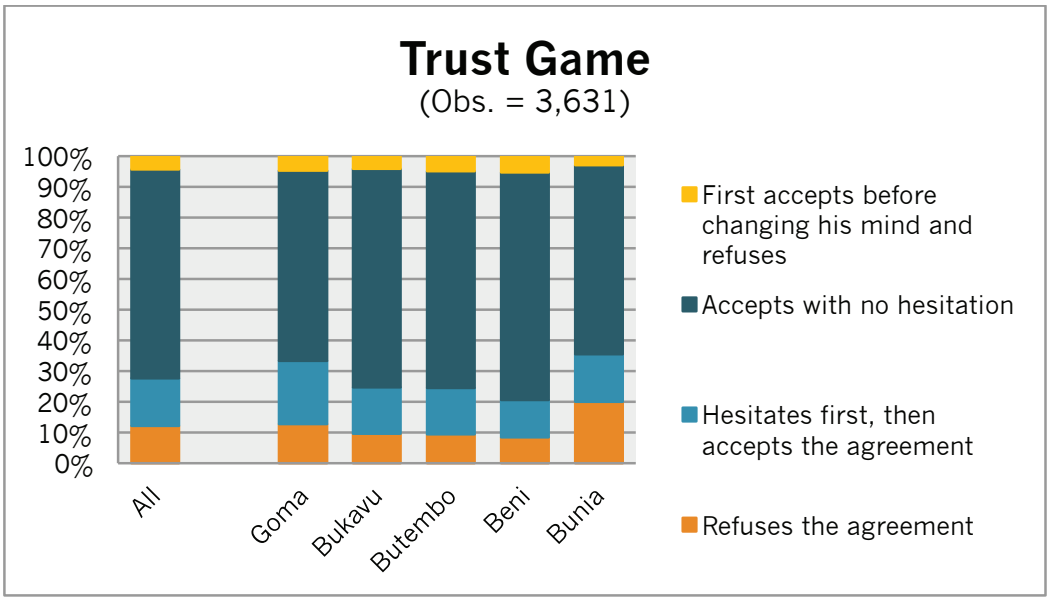


Figure 34

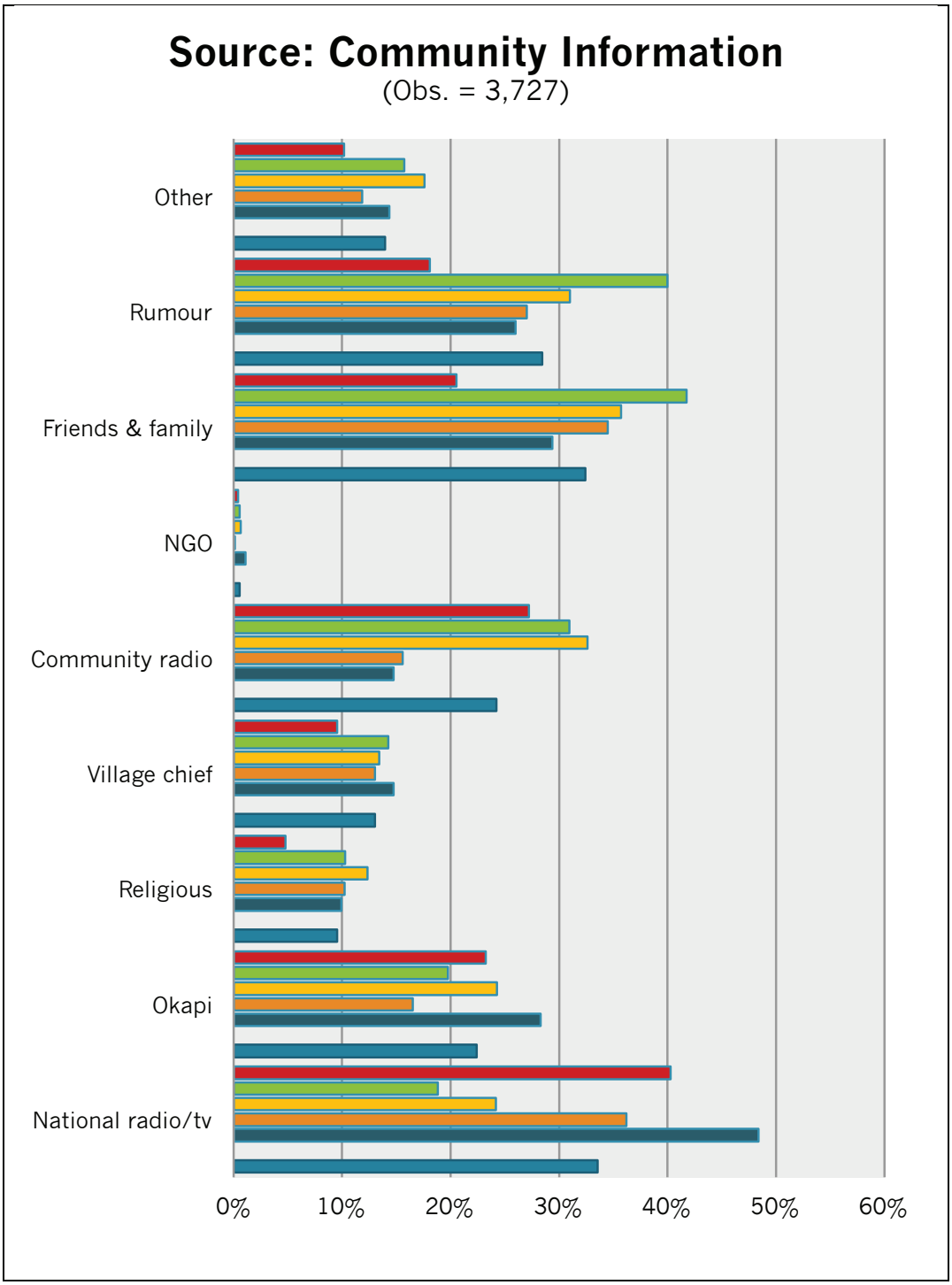
4.3. Isolation and Access to Information

Respondents are mobile and not isolated. During the month before the survey, 72.4% of respondents visited (or were visited by) someone that lives more than one hour (walking) away; and 67.5% visited (or were visited by) someone that lives in another locality (city block or rural commune). As many as 12.7% of respondents went abroad during the month before the survey: this is especially true for Goma

(22.2%) and Bukavu (20%) that are located at the border with Rwanda. Finally, 27% communicated with a friend or relative that lives abroad.

In terms of access to information, TV and radio are the most common media for both community (33.5%) and national (47%) information. **Radio Okapi is an important media for national news, while community radios have more importance for local news**.

The transmission of **information through friends and family or through 'rumor' ('*radio trottoir*') remain important channels**, and mostly so in Butembo and Beni. For instance, 32% of inhabitants in Beni would use rumor as a source of national information and this increases to 40% for local news. Yet, informal media are not limited to Butembo and Beni, especially concerning community information: rumor informs 28.5% of total sample (and 22% for national information); friends and family 29% (21% for national information). Figure 35 below give more extensive details.


Source: Community Information
(Obs. = 3,727)
Other
Rumour
Friends & family
NGO
Community radio
Village chief
Religious
Okapi
National radio/tv
0%
10%
20%
30%
40%
50%
60%

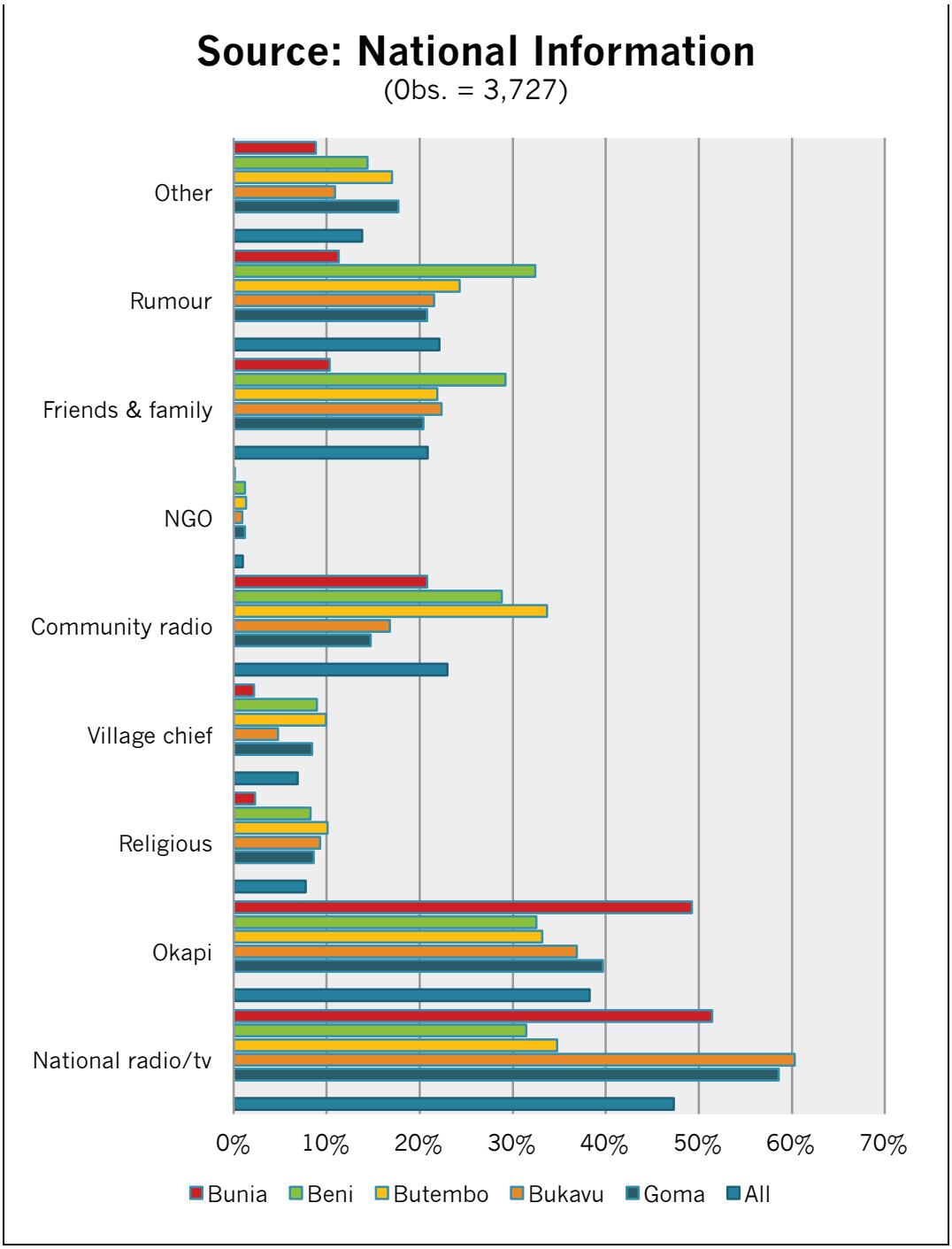


Figure 35

4.4. Political opinions and behaviors

Trust, collective action and other prosocial attitude and preferences have been shown to be important predictors of civic engagement and political participation (Brehm & Rahm, 1997; Sullivan & Transue, 1999). We first inquire about the respondent's general interest in politics. Answer reveal that this stands at a low level: **more than 84.5% of respondents declare they "never" or "rarely" talk about politics with**

friends and family.[17] This could be due to skepticism – or, probably also appropriate, realism - as **only 28% think they are able to influence** their 'political leaders' (52% think they cannot and 20% do not know). It is certainly not because of a lack of opinion, or unawareness of citizen rights. As shown in Figure 36,[18] a small minority expresses no opinion when asked about political and civic rights and duties; a majority of respondents believe it is their right to verify and discuss what the avenue chief or any political leader do; they think women should have the same rights as men; and that violence is never legitimate. **Two statements divided our respondents**: only 45% of them believe Kinshasa would be legitimate to collect taxes in their avenue (30% disagree); and 42% think everybody has the right (whatever his knowledge about the issue) to participate in political decisions making (35% disagree).

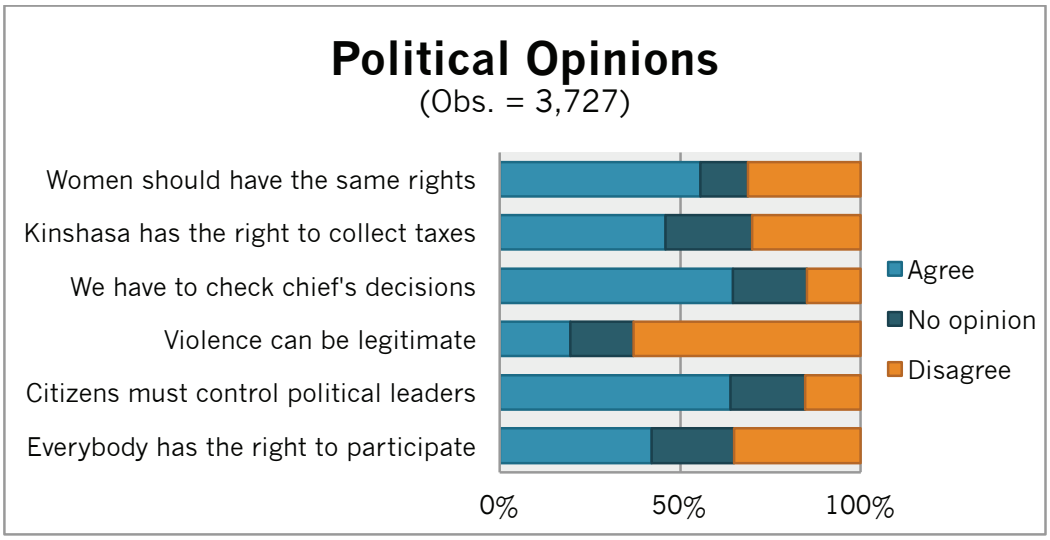


Figure 36

We also inquired about political participation. To do so, the survey focused on the 2011 elections as well as on day-to-day political involvement of respondents. Figure 37 illustrates. **83% of the respondent declared that they voted in 2011 elections, 37% attended a political meeting and 17.5% contributed to a campaign** (either by giving money or time). Goma appears as the city with the most vibrant political life. At the other extreme, we find Bunia. **Political participation correlates with socio-economic factors (such as age, employment, income or city** – Table A. 3**), but not**

[17] To the question « how often do you talk about politics with your friends? », 55.5% answered "never" and 29% answered "rarely". To the question "do your friends and family listen to your political opinion?", 55.2% answered "never" and 26% "rarely".

[18] Complete redaction of the statements is as follows: 1. *"Everybody has the right to participate in decision making (political or economical) even if they don't master every aspect of the issue"*, 2. *"Citizens have to verify and control political leaders (provincial as well as national)"*, 3. *"When necessary, violence is a legitimate mean in order to win your case"*, 4. *"We have to check and discuss regularly what our avenue chief does"*, 5. *"The Government in Kinshasa has the right to collect taxes here; and he who refuses to pay does not like his country"*, 6. *« In this avenue, women should have the same rights and duties as men"*.

with social cohesion except for membership in an association (people who live in a household that participates in an association are more likely to go to political meetings and to contribute – in time or money – to a political campaign). Once socio-economic factors are accounted for, the use of media (formal or informal – Table A. 4) is uncorrelated with voter turnout, but predicts a higher likelihood to participate in a political meeting, and formal media use is correlated with political campaign contributions.

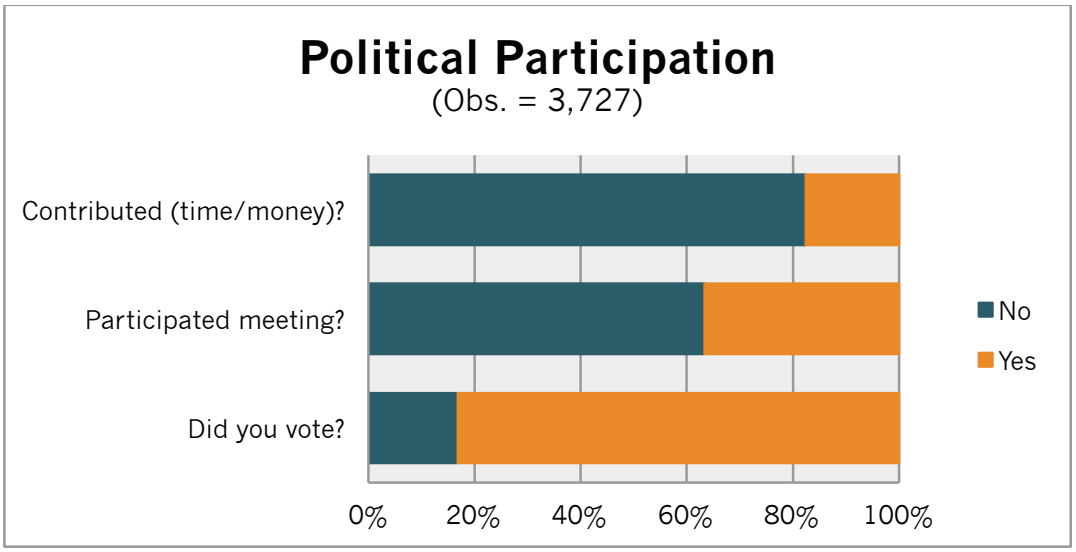


Figure 37

Finally, our respondents' **day-to-day political involvement appears to be mostly limited to meeting with the avenue's chief or with other inhabitants (avenues' meeting)**. During the six months before the survey about 30% of respondents met with their avenue chief to bring up issues (Figure 38); 27.6% had participated in a meeting with other inhabitants of the avenue; and 12.9% met with avenue's committee. **Only 7.6% contacted the police or the justice system**, which is low considering the high rate of crime and insecurity (cf. Table 6 above: 68.5% declared insecurity issues in their avenue over the same period).

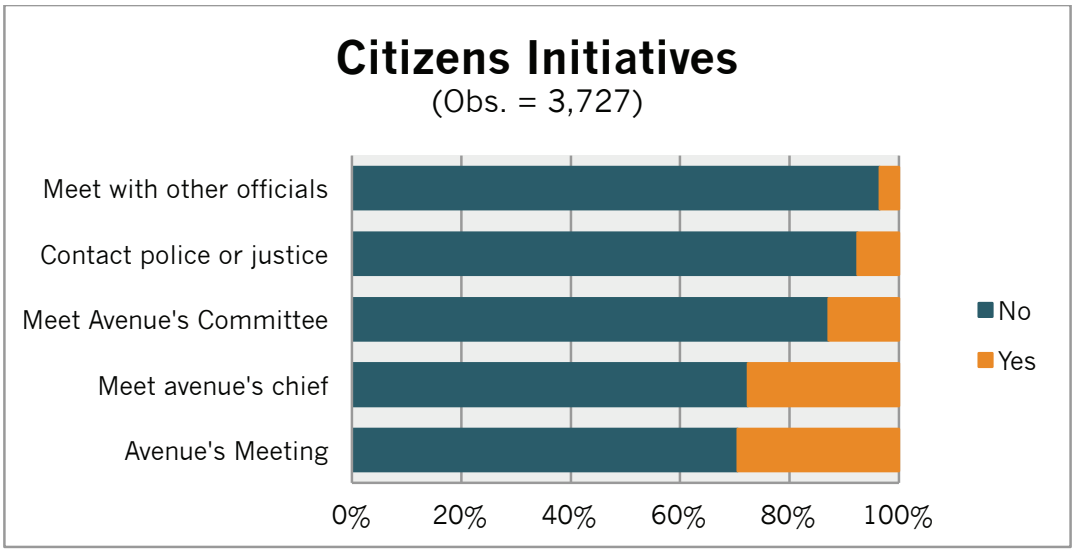


Figure 38

5. Inner Life

This last chapter describes the psychological well being in our urban sample population. In particular, it describes measurements of respondents' self-esteem (5.1.) and the prevalence of psychological traumas (5.2.)

Key Findings

Self-esteem

- **13.5% of respondents suffers from low self-esteem (as measured by Rosenberg scale)**
- **Men, educated and richer people have higher levels of self-esteem**

Traumas

- **41% of respondents declared facing difficulties to sleep or having had nightmares recently**
- **46% have headaches or chest pain when remembering the war**
- **People that went through traumatic events during the war are more likely to suffer mental-health issues (difficulties to sleep, headaches or chest pains)**
- **Preferred option to deal with these issues is, by far, religion (49.6%)**

5.1. Self-esteem

Despite their dire situation, **the poor generally do not complain about life**, i.e. their levels of self-reported happiness are not particularly low (Banerjee, Duflo, and Deaton, 2004). But, as shown in subjective poverty measures, they certainly *feel* poor (cf. section on subjective poverty), and they report to be under a great deal of psychological stress, often fed by financial worries. Hanandita and Tampubolon (2014) show that **poverty and mental health are negatively associated in developing countries**, and that this relationship is causal, not just or associational. In a case study of Ethiopia, Blattman and Dercon (2015) demonstrate that subjective well-being and mental health are positively influenced by employment.

To **gauge the state of mental health of respondents in our sample**, we first asked about their opinion about ten statements related to self-esteem. Five statements were globally positive statements and five were globally negative.[19] The statements and distribution of answers are presented in Figure 39 below. In most of the cases people esteem themselves: 80% of respondent agree or strongly agree with positive statements; and disagree or partially agree with negative statements.[20] **About one in eight respondents suffers from low self-esteem, and this is more pronounced among women, the uneducated and the asset poor**. The unemployed respondents in our sample do not report worse self-esteem, as captured by ten standard statements. These 10 statements can be used to build a score called "Rosenberg scale", which is one of the most widely used measures of self-esteem (Demo, 1985). Figure 40 shows the distribution of respondents' scores. **82% of the respondents score between 15 and 25, which is considered as 'normal' self-esteem**; 13.5% of respondents score less than 15, thus having a low self-esteem.

[19] Enumerators read the statements without presenting them as positive or negative. The order of the ten statements was following Rosenberg, so different from the order in which they are presented in this report.

[20] There are three exceptions: "Globally, I am satisfied of who I am" (as many as 23% disagree and another 17.5% only partially agree); "I don't have many reasons for being proud of myself" (as many as 44% agree and 11.5% strongly agree with this negative statements); and "I would like to have more self-esteem" (87% agree of strongly agree with the statement). These last results could nevertheless be read as a disillusion caused by socio-economic environment, more than appraisal of oneself.

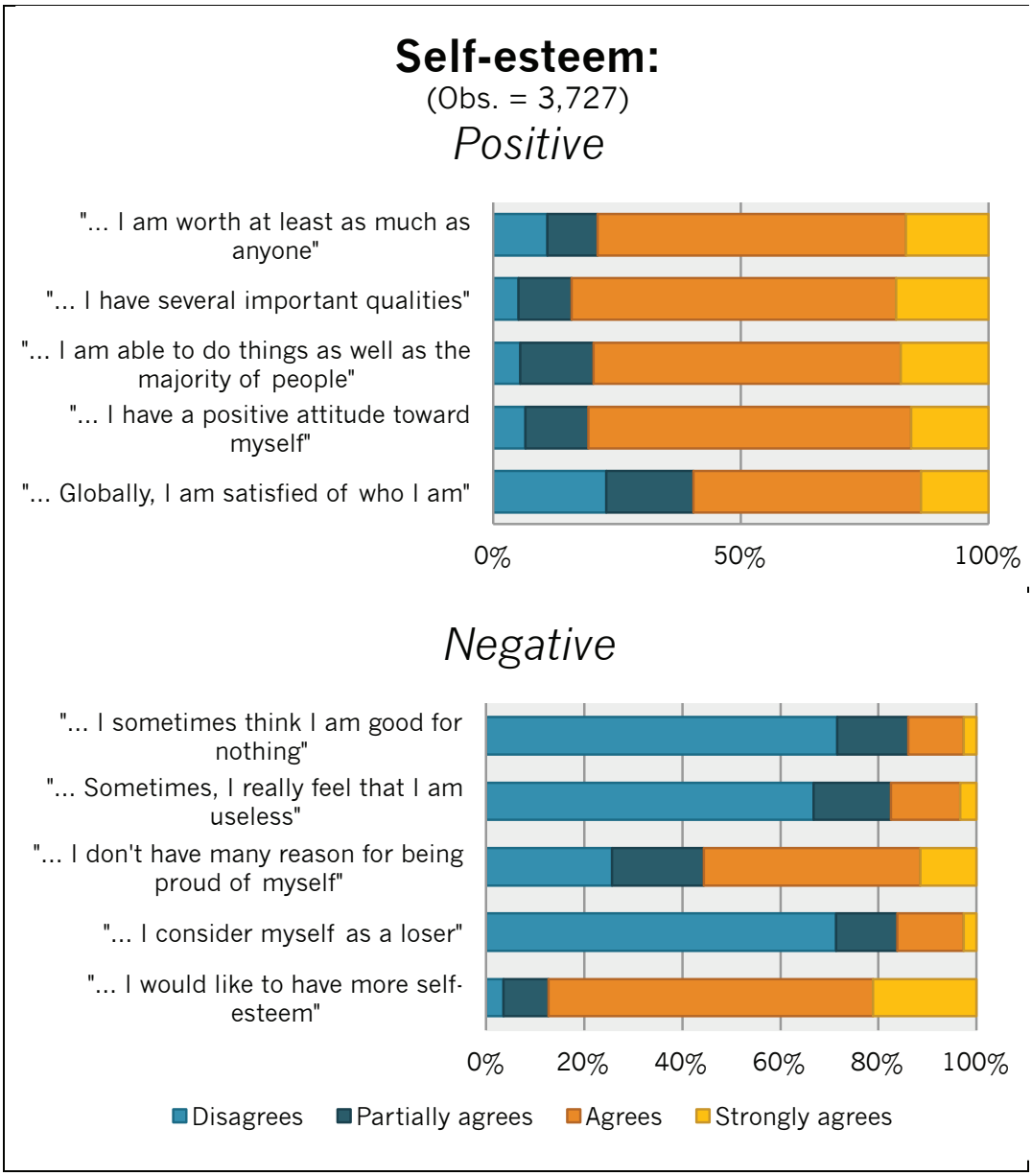

Self-esteem:
(Obs. = 3,727)
Positive
"... I am worth at least as much as anyone"
"... I have several important qualities"
"... I am able to do things as well as the majority of people"
"... I have a positive attitude toward myself"
"... Globally, I am satisfied of who I am"
0%
50%
100%
Negative
"... I sometimes think I am good for nothing"
"... Sometimes, I really feel that I am useless"
"... I don't have many reason for being proud of myself"
"... I consider myself as a loser"
"... I would like to have more self-esteem"
0%
20%
40%
60%
80%
100%
Disagrees
Partially agrees
Agrees
Strongly agrees

Figure 39

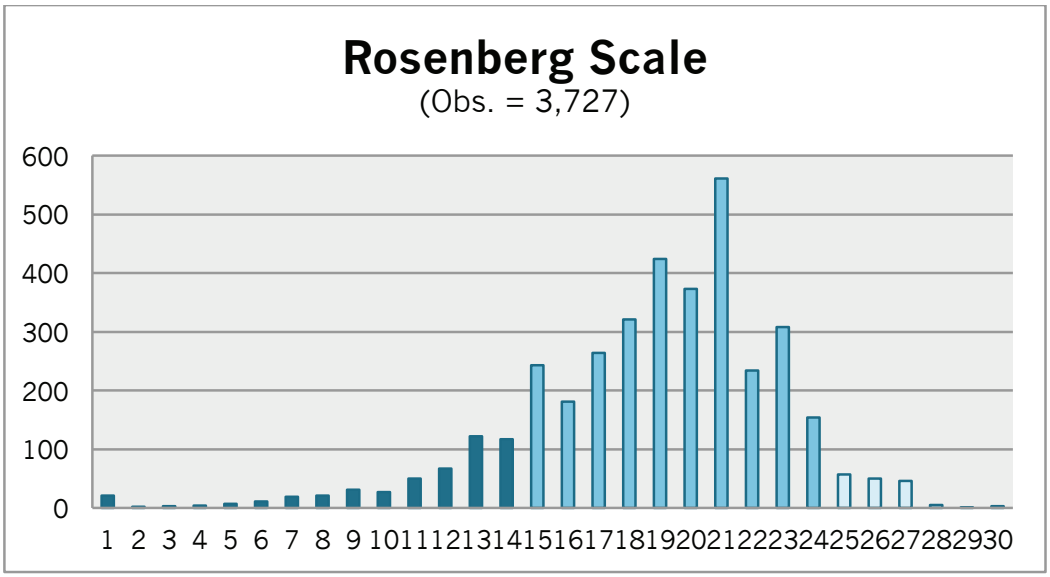


Figure 40

We use an *ordered probit* model to explore the correlation between these factors and respondent's Rosenberg score (cf. Table A. 5 in the appendix).[21] We find that men have a higher score than women, and that education as well as wealth positively correlates with the mental health score. On the other hand: age nor employment nor city of residence correlate with the Rosenberg's score. Given the potential endogeneity of these factors, no conclusions on causality should be drawn.

5.2. Traumas

As an indicator for trauma we measure quality of sleep. **41% of respondents declared they had difficulties to sleep or had suffered from nightmares recently**. This number is robust across gender but varies across cities and wealth, indicating a link between socio-economic factors and mental health. These symptoms are **more pronounced among respondents that reported having been exposed to war events**.

Three questions on traumatic events were asked to respondents: whether they had ever been taken hostage by an armed group; whether they knew someone (family or friend) that had been killed during the war; and, finally, if they or a relative had been abused during the war. As shown in Figure 41 & Figure 42, people that were exposed to one of these events are more prone to face difficulties to sleep or have nightmares, and they declare **suffering more from headaches or chest pains when thinking about the war** (which we take here as a symptom of "post-traumatic stress disorder" or PTSD). For instance, people that know about someone that has been killed during the war face difficulties to sleep in 53% of the cases (against 21% for others) and

[21] Here, we content ourselves with the sign of the coefficients (given the model, the coefficients' magnitude cannot be interpreted directly).

suffer from the PTSD symptoms when thinking about war in 59% of the cases (against 24.5% for others).

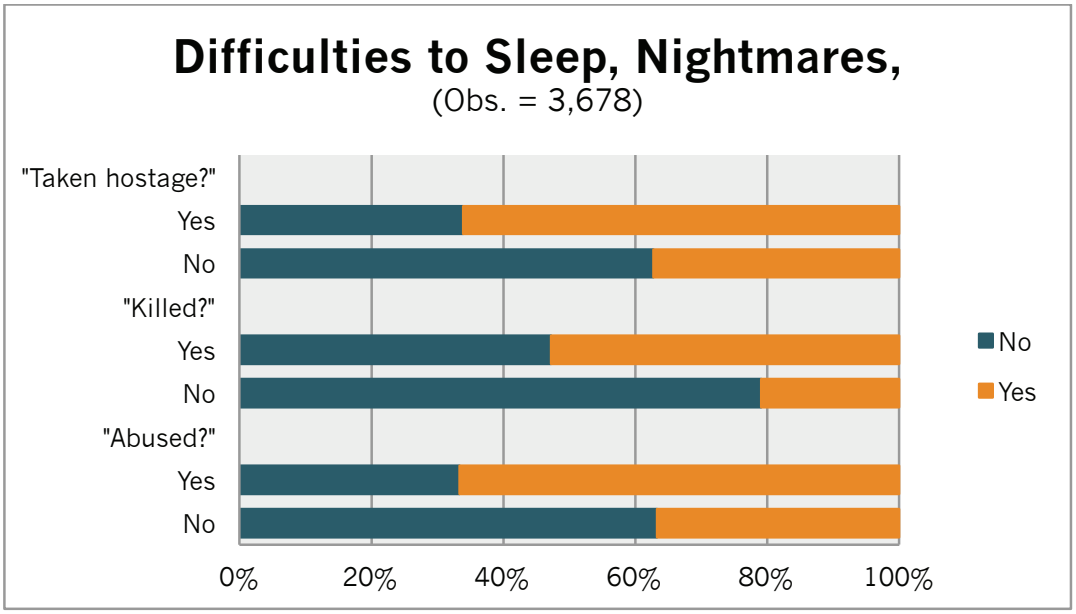


Figure 41

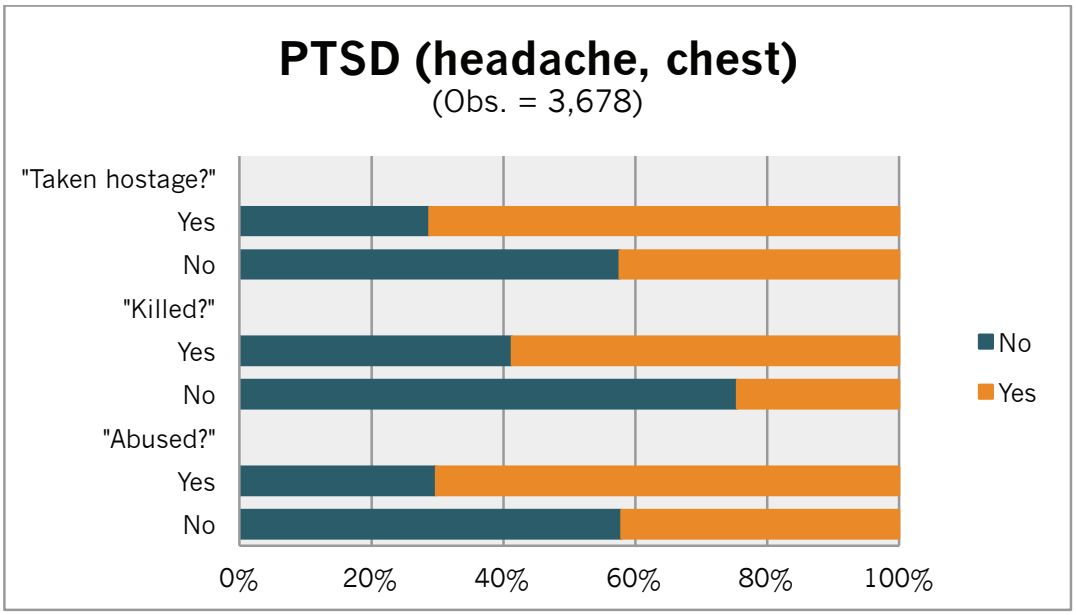


Figure 42

People that are subject to PTSD were asked how they dealt with these issues. The most common answer, by far, is "*religion*" (49.6%); followed by "*talking to friends or relatives*" (12.9%), "*go to the doctor*" (10.5%) and "*isolate myself*" (9.6%). "*Alcohol and cigarettes*" are only chosen by 3.8% of respondents, a bit less than "*sports or relaxation*" (4.4%).

All respondents were also asked whether they talked to friends or relatives about their concerns or issues (in general): 18.6% said they did not. But, this may just indicate a preference rather than the lack of opportunity to do so. When asked: "*when you spend some time alone, why do you do so?*" the majority of these respondents declared they just "*wanted to be alone*" (58.7%). These respondents are also not more likely to have issues with their relatives (6.4%) than others (7%), all indicating that solitude is a choice.

Conclusion and Implications for Project Design and the Impact Evaluation

This report sketches the economic, social, civic and inner lives of those Congolese living in the five biggest cities of Eastern Congo: *Goma (North Kivu), Bukavu (South Kivu), Beni, Bunia, and Butembo (Province Orientale).* ***The picture that emerges indicates that our respondents are fending for themselves in extremely difficult circumstance***. We find high levels of poverty, unemployment, and an almost complete lack of public services and government support. The business environment is spoiled by insecurity. Private initiatives are further constrained by a lack of access to start-up capital, and dissuaded by the absence of insurance and safety nets. A large share of respondents went through traumatic events, which has affected their mental health; and trust towards strangers or migrants is lower than trust towards in-group members. Respondents indicate to be disillusioned by politics. In terms of material welfare, respondents in Beni, and to a lesser extent Butembo, are worse off than in the other three cities. The women and uneducated are among the most vulnerable groups everywhere.

The scares – physical, economic, emotional, social and political – of decades of poor governance and of the two wars that hit the region have not yet healed. How do individuals and households cope given these circumstances? Many escape the hard reality of the physical world, seeking recourse in spiritual life. Many also build on networks of friends and neighbors. In the absence of other safety nets, informal- and self- insurance are relied upon to cope with shocks. In the absence of the state, collective action is organized within associations, and also within the avenue's communities, often led by the avenue's chief. Private providers of health and schooling have stepped in where the state has retreated or failed. In the absence of wage work, many have turned to self-employment, often earning little money in low-skilled, low-return activities. Despite their expressed disillusion with politics, people turn out to vote and participate in campaigns when they are offered the opportunity.

What lessons should be taken away for the implementation of STEP, in particular its labor-intensive public works program (LIPW) and its community driven development program (CDD)?

With respect to the LIPW intervention, four main features stand out. First, many respondents in our sample are poor and underemployed, indicating there is a pool of labor that will likely respond positively to the LIPW employment offer of $3 per day. Second, among the poor, savings are low, making them less capable to cope with shocks and to invest in productivity activities. Concerning the latter, the lack of capital is mentioned by an overwhelming majority of our respondents as the most

important constraint to business start-ups. It will be interesting to carefully monitor if the modest LIPW savings component can help the poor to overcome these constraints. Maybe it will fall short, for instance because it may not reach the threshold needed to overcome risk averseness in the absence of insurance. Health insurance seems particularly critical, given the frequency of health shocks and the high cost of health services in DRC, which could ruin any small-scale private business initiative. Third, at first sight there seems to be scope for the LIPW training component to increase returns on economic activities. Not only do we find that a substantial share of respondents have low educational attainment, and some are even illiterate, but our analysis of economic activities revealed that many respondents are engaged in low-skilled self-employment. Starting at these low levels, the marginal impact of additional training on productivity is potentially large. However, tailoring the training components to the exact skills needed is not straightforward. Therefore, it is important to strike the right balance between more generic skills (e.g. business start-up, literacy) and very specific skills (e.g. mechanics, hairdresser). Finally, we find that in many avenues, public works relying on local labor already take place in the context of community service, and are managed by the avenue's chief. LIPW would therefore probably gain from a close collaboration with the avenue's chief, but at the same time needs to assure sufficient popular participation in and transparency of decision-making.

In terms of the indirect impacts of LIPW, it will be interesting to monitor the evolution in illicit activities, mental health, and pro-social behaviors. In theory, there are reasons to assume that taking up wage work can reduce the relative attractiveness of crime or other illicit activities; increase one's sense of self-worth; and one's inclination to act on behalf of the other, or even the society as a whole. These effects are subtle, difficult to measure, and they are not born out by the correlations found in our baseline survey (e.g. between employment and self-esteem or civic participation). Yet, they deserve our attention because they are especially relevant to fragile states and post-conflict economic, social and institutional recovery (see also Blattman and Ralston, 2015). To maximize these indirect program effects, targeting is important, e.g. of young men in the most vulnerable and insecure areas, of city blocks with cleavages between long-time residents and migrants, and of those men and women who experienced traumatic events.

Four findings we deem to be relevant for the CDD intervention. First of all, while in the urban setting infrastructures are often present, they are located relatively far from the poorest households, and are generally in a poor state. Hence, next to adding infrastructure in the poorest city blocks, the CDD should also devote attention to maintenance. Second, while respondents reported that health and education services were physically accessible, effective access was constrained by the high cost of these services. Improving the physical infrastructure of schools and health centers may thus not be sufficient in itself to improve access of the poorest to these facilities. The CDD should therefore be imbedded in a more holistic approach that improves the access to

services, e.g. by including schemes for subsidized or free access to the poorest. Third, in terms of the management and decision-making regarding public works, the avenue chiefs turned out to be the most important figure. Several avenue committees also played a role, but respondents raised some red flags regarding the lack of participatory and transparent decision-making. Attention should be devoted on how the CDD scheme interacts with these existing local institutions. Finally, few respondents made mention of social tensions within their community. So, at least in urban areas, the CDD may not lead to conflicts. However, our survey results indicate that avenues with a large share of migrants probably deserve special attention for the mediating of conflicts.

Both the LIPW and CDD programs should tightly control and monitor the information circulated about their objectives and activities. As revealed in the survey, information through '*radio trottoir*' is considered important and travels fast. If not managed properly, rumors can lead to misunderstandings and parallel information channels can exacerbate contagion effects of the program's treatments.

Appendix

1. Tables

Table A. 1 – Correlations of socio-economic factors with a dummy that takes value 1 if respondent has an activity (0 otherwise). (*Logit* model, marginal effects.)

Dependent variable	Employment status
Respondent's sex	0.100
	*(5.99)***
Resp.'s education	0.000
	(0.02)
Respondent's age	0.218
	*(13.41)***
Squared	-0.011
	*(12.22)***
Wealth (base: 1st qtl.)	
2nd quintile	0.109
	*(4.25)***
3rd quintile	0.122
	*(4.63)***
4th quintile	0.144
	*(5.26)***
5th quintile	0.153
	*(5.35)***
City (base: Goma)	
Bukavu	-0.042
	(1.64)
Butembo	0.039
	(1.48)
Beni	0.000
	(0.00)
Bunia	0.104
	*(3.98)***
N	3,352

Sex: Woman (0), Man (1). Education: None (0), went to… Primary school (1), Secondary school (2), Superior education (3). Age: 5 years brackets (from ≤20 to ≥85 years old). Wealth: assets quintiles from first/poorest (0) to fifth/richest (4). City: Goma (0), Bukavu (1), Butembo (3), Beni (4).

Table A. 2 – Correlations of socio-economic factors with a dummy that takes value 1 if respondent accepted the game (0 if he refused). (*Logit* model, marginal effects.)

Dependent variable	Behaviour Game
Respondent's sex	0.003
	(0.23)
Resp.'s education	0.002
	(0.26)
Respondent's age	0.001
	(0.39)
Resp.'s employed	-0.014
	(1.10)
Wealth (base: 1st qtl.)	
2nd quintile	0.028
	(1.29)
3rd quintile	0.026
	(1.16)
4th quintile	0.047
	(2.10)*
5th quintile	0.039
	(1.65)
City (base: Goma)	
Bukavu	0.026
	(1.29)
Butembo	0.029
	(1.41)
Beni	0.038
	(1.86)
Bunia	-0.058
	(2.59)**
N	3,269

Sex: Woman (0), Man (1). Education: None (0), went to… Primary school (1), Secondary school (2), Superior education (3). Age: 5 years brackets (from ≤20 to ≥85 years old). Employed: dummy for unemployed (0) and employed (1) respondents. Wealth: assets quintiles from first/poorest (0) to fifth/richest (4). City: Goma (0), Bukavu (1), Butembo (3), Beni (4).

Table A. 3 – Correlations between social cohesions measures and political participation. (*Logit* mode, marginal effects)

Dependent variable	Voted	Participated to a political meeting	Contributed in time or money
Association	0.006	0.085	0.057
	(0.39)	*(4.36)***	*(3.59)***
Game	0.038	-0.009	-0.036
	*(2.27)**	*(0.39)*	*(1.88)*
Lend (base:family)			
Tribe	-0.102	-0.086	-0.037
	*(2.45)**	*(1.75)*	*(0.95)*
Church	-0.023	-0.007	0.035
	(0.79)	*(0.18)*	*(1.18)*
Avenue	-0.014	-0.017	-0.006
	(0.55)	*(0.48)*	*(0.23)*
Anyone	0.013	-0.061	-0.005
	(0.82)	*(2.75)***	*(0.28)*
Other	-0.005	-0.021	0.030
	(0.23)	*(0.78)*	*(1.34)*
Respondent's sex	-0.027	0.151	0.074
	*(2.06)**	*(8.63)***	*(4.87)***
Resp.'s education	0.011	0.054	0.021
	(1.16)	*(4.34)***	*(1.99)**
Respondent's age	0.068	0.009	0.005
	*(17.80)***	*(2.52)**	*(1.87)*
Resp.'s employed	0.061	0.070	0.027
	*(4.34)***	*(3.93)***	*(1.79)*
Wealth (base: 1stqtl.)			
2nd quintile	0.022	-0.077	-0.017
	(1.06)	*(2.57)**	*(0.68)*
3rd quintile	-0.012	-0.082	-0.026
	(0.56)	*(2.69)***	*(1.01)*
4th quintile	-0.026	-0.101	-0.020
	(1.18)	*(3.31)***	*(0.76)*
5th quintile	-0.054	-0.099	-0.032
	*(2.27)**	*(3.09)***	*(1.19)*

Table A3. (Continued)

City (base: Goma)			
Bukavu	0.008	-0.029	-0.056
	(0.43)	*(1.01)*	*(2.25)**
Butembo	-0.031	-0.100	-0.097
	(1.50)	*(3.42)***	*(3.87)***
Beni	-0.031	-0.081	-0.087
	(1.47)	*(2.68)***	*(3.34)***
Bunia	-0.088	-0.138	-0.140
	*(4.30)***	*(4.93)***	*(6.01)***
N	2,795	2,785	2,782

Table A. 4 – Correlations between use of certain type of media and political participation. (*Logit* mode, marginal effects)

Dependent variable	Voted	Participated to a political meeting	Contributed in time or money
Formal media	-0.007	0.094	0.048
	(0.42)	*(3.97)***	*(2.43)**
Informal media	-0.003	0.053	0.026
	(0.21)	*(3.15)***	*(1.92)*
Respondent's sex	-0.023	0.143	0.066
	(1.91)	*(8.90)***	*(4.80)***
Resp.'s education	0.007	0.061	0.025
	(0.88)	*(5.30)***	*(2.70)***
Respondent's age	0.066	0.010	0.004
	*(19.26)***	*(3.25)***	*(1.74)*
Resp.'s employed	0.056	0.061	0.024
	*(4.37)***	*(3.73)***	*(1.77)*
Wealth (base: 1st qtl.)			
2nd quintile	0.040	-0.057	-0.013
	*(2.09)**	*(2.08)**	*(0.56)*
3rd quintile	-0.009	-0.071	-0.029
	(0.46)	*(2.57)**	*(1.26)*
4th quintile	-0.003	-0.086	-0.016
	(0.14)	*(3.02)***	*(0.66)*
5th quintile	-0.039	-0.099	-0.029
	(1.77)	*(3.38)***	*(1.17)*
City (base: Goma)			
Bukavu	0.015	-0.046	-0.061
	(0.85)	*(1.77)*	*(2.74)***
Butembo	-0.036	-0.070	-0.069
	(1.93)	*(2.66)***	*(3.06)***
Beni	-0.029	-0.061	-0.071
	(1.54)	*(2.27)**	*(3.06)***
Bunia	-0.072	-0.151	-0.138
	*(3.87)***	*(5.95)***	*(6.70)***
N	3,345	3,334	3,331

Table A. 5 – Correlations of socio-economic factors with Rosenberg score. (*Ordered probit* model).

Dependent variable	Rosenberg score
Respondent's sex	0.140
	(3.83)**
Resp.'s education	0.208
	(8.44)**
Respondent's age	0.008
	(1.17)
Resp.'s employed	0.007
	(0.19)
Wealth (base: 1st qtl.)	
2nd quintile	0.213
	(3.76)**
3rd quintile	0.341
	(5.89)**
4th quintile	0.478
	(7.97)**
5th quintile	0.586
	(9.33)**
City (base: Goma)	
Bukavu	0.024
	(0.43)
Butembo	-0.140
	(2.51)*
Beni	-0.008
	(0.14)
Bunia	0.066
	(1.19)
N	3,352

Sex: Woman (0), Man (1). Education: None (0), went to… Primary school (1), Secondary school (2), Superior education (3). Age: 5 years brackets (from ≤20 to ≥85 years old). Employed: dummy for unemployed (0) and employed (1) respondents. Wealth: assets quintiles from first/poorest (0) to fifth/richest (4). City: Goma (0), Bukavu (1), Butembo (3), Beni (4).

2. Sampling Methodology

Size and Sampling Strategy of Urban Baseline Survey

We aimed to collect representative data from five Congolese cities: Beni, Bukavu, Bunia, Butembo, and Goma. The target population are adults (>18 years old). We conducted a household survey and in each survey we collected data about one individual.

Survey strategy approach

Sampling frame: There was no list of all households in the five cities. We therefore did a first-stage random selection at a higher level. Using the neighborhood ("*quartier*") was not appropriate. For instance, Goma only has 18 quartiers with some containing more than 10,000 households. After field-visits a smaller administrative unit, "*Avenues*" (that correspond to several blocks), was chosen as the best option: avenues have well-delineated boundaries, they cover the entire city and their size was adapted to the sampling.

Given field issues, two strategies *ad-hoc* were adopted.

> *Strategy 1:* local authorities gave list of avenues (with their approximate population size) by Communes[22]. 150 avenues were selected: first, a fixed number of avenues to be selected in each commune was computed, based on communes' respective number of avenues. Then in each commune, avenues were randomly selected using population weights (probability of selection was proportional to population size of the avenue).
>
> This strategy was implemented in Goma (2 communes, 393 avenues), Bukavu (3 communes, 336 avenues) and Bunia (331 avenues)[23].
>
> *Strategy 2:* in Butembo (4 communes) and Beni (4 communes) local authorities were unable to provide list of avenues. Consequently, random selection (stratified by commune) was made at the Cellule level (150 cellules were selected). In each Cellule, field-managers met with chief and established the list of avenues (with their approximate population size). In each cellule, one avenue was randomly selected.

Household frame: There was no list of households per avenue. Enumerator teams took a census of the 150 randomly selected avenues. (All the lists are archived and available in local FSRDC offices.)

Household selection: A random sample of households was then drawn.[24]

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[22] Each city is divided in "*Communes*" that include "*Quartier*" (or "*Cellules*"). Quartier include "*Avenues*".

[23] In the case of Bunia, approximate population was given by quartier. It is thus this data that weighted avenues selection.

Respondent selection: Finally, the enumerator randomly selected a respondent inside the household. This selection was stratified by gender: enumerators' dictionaries included whether in the household a "female" or a "male" was to be the respondent. (Substitution was allowed in households were only one gender was represented).

Sample size

The sample size is important because it determine how much confidence we have that the survey results are representative of the target population. Obtain data from more households is more expensive, but it also decreases the chance that the survey results differ from the truth. To calculate the total number of households to be sampled per domain we use the following formula:[25]

$$n = \frac{z^2\, r\, (1-r)\, f\, k}{p\, n_{hh}\, e^2} \qquad (1)$$

- **e** is the margin of error. This is the "plus-or-minus figure" you see in newspaper or television opinion poll results. For example, if the margin of error is 4 and 47% percent of your sample picks answer X, you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked answer X. We will explore how different assumptions influence the margin of error. The margin of error is normally taken to be 10 percent.
- **z** is the value related to a 95% confidence level. A confidence interval of 95% means that if you do 10000 surveys, in expectation 9500 times the population would be inside the confidence interval. It is standard to use a 95% confidence level, which means z=1.96.
- **p** indicates the target population. The target population for this survey are adults, which form around 46 per cent of the Congolese population (MICS RDC, 2011). p=0.46.
- **r:** We want the sample to reliably measure a characteristic held by r percent of the target population. We will present sample size estimates for different levels of r, ranging from 5% to 50%.
- $\mathbf{n_{hh}}$ is the household size. We take the average household size in to be n_{hh}=6.
- **k** is the non-response rate. If there is non-response it is necessary to ex-ante select more individuals. We assume a 5% non-response.
- **f** is the design effect, which takes into account the degree of clustering. The default value is typically set at 2.0.

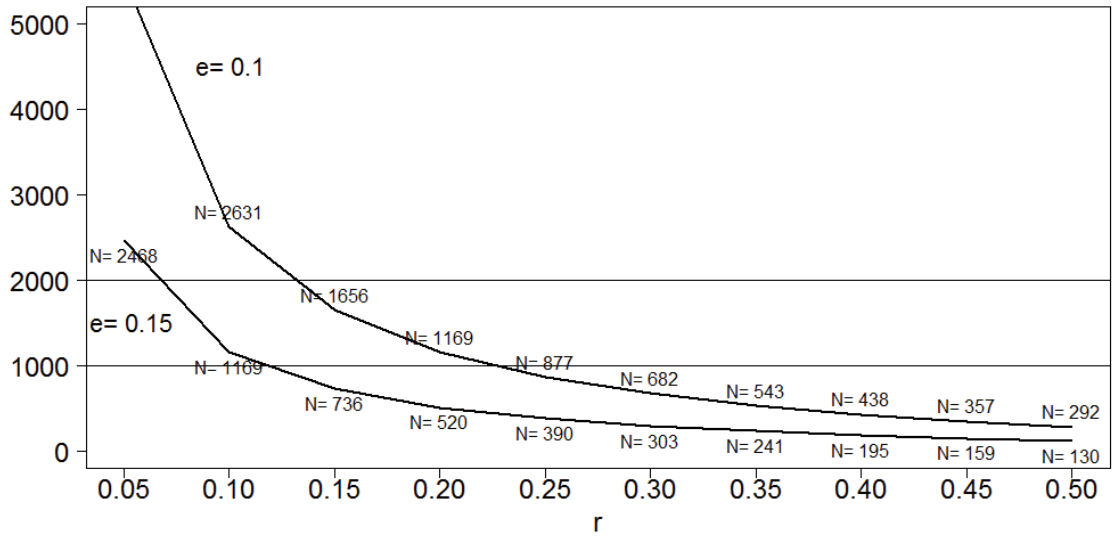
The necessary sample size per domain depends upon the assumptions made. This is illustrated in Figure 1, where we present the necessary sample size depending on the proportion of the sample that holds the characteristic of interest (r on the x-axis). Moreover, we present two different lines: one for a margin of error of 10% and another for a margin of error of 15%. As we expect a larger margin of error allows for a smaller survey, however it also makes our estimates less precise. In

[24] For sampling, household size was not taken into account. This information was still collected in order to create sampling weights.

[25] Source: United Nations. 2005. "Designing Household Survey Samples: Practical Guidelines"

words, say that half of the target population (all the adults of interest) is unemployed and this is the topic that we are interested in. Then r=0.5. We would only need 292 respondents per domain to have a margin of error of 10% with a 95% confidence interval. However, let's say we are interested in whether an adult has been part of a rebel group. Say that only 10% of all the adults have ever been a member of a rebel group. In this case to obtain a margin of error of 10% with a 95% confidence interval we would need a total of 2,631 respondents.

Figure S1: Sample Size per Domain, Urban Survey



The five major cities in Eastern DRC – Goma, Bukavu, Beni, Bunia and Butembo – were taken as domains. The same sample size is needed for each domain. Consequently, the total sample size is the sample size per domain times the number of domains. We selected 150 avenues per city, i.e. 750 households in each of the five cities (i.e. 3,750 respondents in total). As Figure S1 shows, this sample size allows to capture (with a margin of error of 15%) a population characteristic held by 15% of the population.

3. Survey Instrument Summary

Section A – Household Registration

Technical registration: Enumerator's information; Survey location (commune, quartier and avenue names, GPS location, avenue code, survey code); Hour.

Household registration: Need for substitution; List of household's member (name, age, gender); Presence of children.

Respondent registration: Names; Household's chief kinship; Referring individual information (for potential panel).

Section B – Socio-economic Information

Household's member specific situations (displaced, refugees, ex-soldier, handicapped).

Household head and Respondent (if different) information (gender, civil status, birth, language, religion, literacy, studies, father's studies).

Household's economic well-being: assets (cattle, poultry, cars, bikes, wardrobe, saucepan, tv, radio, etc.) and home (roof, floor matreials); Distance to infrastructure (drinking water, transportation, market, schools, health centers); household's properties (home, fields, documents); consumption type (food, medical, clothes, etc.) and expenditures; remittances; negative income shocks.

Social assistance: programs (types, organization, value).

Subjective well-being.

> *For chief only:* Village composition (ethnic groups, religion).

Section C – Economic Activities

Unemployment (if unemployed): duration; willingness to work.

Employment (if employed): type (wage or not); days worked; wage and earnings; same questions about household head (if different) and other household members.

Agriculture: number of fields; types and value of production; use of labor and capital; cattle farming; fishing; other activities.

Savings and Debts: types, amount.

Trainings: types; preferred occupation; unexploited skills; labor market issues.

Child work: occurrence; type; intensity; domestic tasks.

> *For chief only:* Infrastructure of the avenue; exposure to conflict; incoming migration (refugees and displaced); development projects and organizations; negative (covariant and individual) shocks and coping mechanisms.

Section D – Psychology and Traumas

Self-esteem: Rosenberg's test.

Integration: issues; relation with others (relatives, friendships, etc.); relief mechanisms.

War traumas: friends or relatives killed or abused; taken hostage; post-traumatic stress disorders (and coping).

Section E – Access to Basic Services

Health: use of healthcare; types; expenditures; service evaluation.

Education: use of education system; types; evaluation; illiteracy and schooling issues.

Section F – Community Life, Social Cohesion and Participation

Migration: place of birth; reason for coming; year of arrival.

Committees and Association: presence; functioning (elections; decision-making; population involvement).

Social tensions and Cleavages: occurrence among groups; violence; exclusion from social services.

Collective action: public work (types, initiative, involvement); trust in local development institutions; citizen initiatives; local development committee evaluation.

Social cohesion: interpersonal trust (though experiment, behavioral game).

Organization: local leaders and performance; avenue chief background.

Politics: opinions (agreement to various statements); political participation (meetings, contribution, votes, etc.).

Access to information: types of media; favorite broadcasts; isolation.

Security: insecurity events occurrence.

For chief only: extended chief background; chief initiatives.

Section G – Conclusion

Language used; Respondent's behavior (capacity to understand, concentration, affability); Interruption; Hour.

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