



START CENTER
STRATEGIC ANALYSIS,
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DRC SURVEY: AN OVERVIEW OF DEMOGRAPHICS, HEALTH, AND FINANCIAL SERVICES IN THE DEMOCRATIC REPUBLIC OF CONGO

UNIVERSITY OF WASHINGTON STRATEGIC ANALYSIS, RESEARCH & TRAINING (START) CENTER

OVERVIEW REPORT TO THE BILL & MELINDA GATES FOUNDATION

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EXECUTIVE SUMMARY

The Democratic Republic of Congo is one of Africa's largest countries, but ranks near the bottom in most global indicators. Weakened by decades of violence, instability, and unchecked epidemics, the DRC faces challenges on many fronts, with a nearly collapsed and overburdened health system, crippled infrastructure, humanitarian crises, and persisting conflict in the Eastern regions. Despite these formidable challenges, and with the support of private, bilateral, multilateral, and non-profit organizations, the DRC has seen improvements in some areas over the past few decades. However, further investments targeted at the key catalysts of development are required as the country seeks health, financial, and physical security amidst a rapidly changing and uncertain landscape.

To help inform strategic investments in the DRC, the Integrated Delivery team asked the Strategic Analysis and Research Training (START) Center at the University of Washington (UW) to develop an overview of demographics, health, and financial well-being in the DRC. The START team found concerns about the quality of much of the published data on the DRC. The data that was available showed stark health and social disparities by gender, class, geography, and urban vs. rural setting. Key challenges that were identified in the DRC include the following:

Demographics & Infrastructure

- Weak infrastructure is a major hindrance to economic development.
- Lack of ground transportation contributes to provincial disparities.

Health Sector

- The health system is fragmented and under-resourced.
- User fees inhibit care-seeking and access.
- Infectious disease outbreaks are recurring and detrimental.
- The epidemiological transition is increasing chronic diseases.

Financial Sector

- Informal financial services are the primary model for savings and loans.
- Barriers to mobile money have inhibited its broad adoption.
- Multiple factors must change to grow and sustain the mobile money and microfinance markets.
- Savings are more common than loans, and domestic remittance is more common than international remittance for households.

The DRC also has some notable strengths, such as a growing mobile phone subscription rate, a high rate of prenatal care use, the significant involvement of many religious and private nonprofit organizations in health care, and a well-structured and decentralized health zone system. Focused investments could leverage these strengths for service delivery and program implementation.



PURPOSE

The Bill & Melinda Gates Foundation has limited ongoing investments in the DRC, particularly focused on health and development, and is considering a 2-5 year strategy that balances opportunities for impact with risks to successful implementation. To help inform this strategy, the Integrated Delivery team asked the Strategic Analysis and Research Training (START) Center at the University of Washington (UW) to review the trends and current indicators in sectors including health, finance, and infrastructure. This report will serve as both a reference guide for decision-making around investments in the DRC and as a framework to explore the dynamic challenges faced by the country.



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INTRODUCTION

The Democratic Republic of Congo (DRC), one of Africa's largest countries with a population of over 74 million people, ranks near the bottom in most global indicators. Though rich in natural resources such as diamonds, copper, gold, oil, and timber, the DRC has been weakened by the legacy of its colonial past and decades of violence, instability, and unchecked epidemics. Today the DRC faces challenges on many fronts, with a nearly collapsed and overburdened health system, crippled infrastructure, humanitarian crises, and persisting conflict in the Eastern regions. Deep health and social disparities exist along the lines of gender, class, geography, and urban vs. rural settings. Despite these formidable challenges, and with the support of private, bilateral, multilateral, and non-profit organizations, the DRC has seen improvements in some areas over the past few decades. However, further investments targeted at the key catalysts of development are required as the country seeks health, financial, and physical security amidst a rapidly changing and uncertain landscape.

HISTORICAL CONTEXT

After decades of colonial rule, the Congo achieved independence from Belgium in 1960 with Patrice Lumumba as its first democratically elected prime minister. Lumumba was captured and assassinated by U.S. and Belgium-backed forces in 1961. One of Lumumba's captors, Mobutu Sese Soku, took power in 1965 and soon after renamed the country to Zaire. Under Mobutu's Western backed-rule, Zaire defaulted on loans, resulting in the cancellation of development programs and increased deterioration of the economy. In what is known as the First Congo War from 1996-1997, Tutsi rebels (with the help of Rwandans and others) capture most of eastern Zaire, renaming it the Democratic Republic of Congo (DRC). Civil war and leadership turnover continued, and the Second Congo War raged from 1998 to 2003, with nine countries fighting each other on Congolese soil (9). Peace agreements put a technical end to the war as the Transitional Government of the Democratic Republic of the Congo took power in 2003. In 2006, Joseph Kabila won the presidency in the DRC's first democratic elections in 40 years, despite calls of electoral fraud from opponents. Kabila won the presidential vote again in 2011 despite ongoing civil unrest and growing evidence of corruption (10). The eastern region remains particularly plagued by violence, including clashes with Uganda, Rwanda, and numerous unchecked rebel forces (9).

ONGOING CHALLENGES

The country is currently very unstable as Kabila has insisted on staying in power beyond his two terms, and violence has erupted across the nation. A power sharing deal was struck on December 31, 2016 between Kabila's government and the opposition, where Kabila would stay in office until elections at the end of 2017. Violence and threats to civilians are no longer concentrated in the eastern DRC, as community-based violence and inter-ethnic clashes have spread from areas already affected by armed conflict, such as the Kivus, to Tanganyika, the three Kasai provinces, Lomami, and Kongo Central (11). There have been various reports and videos released of Congolese troops attacking apparently militia members and civilians (12). In February 2017, the opposition leader set to take the top post in the transitional government, paving the way for Kabila's exit, died in Brussels (13). To date, only 19 million people are enrolled to vote, and the international community remains uncertain whether elections scheduled for 2017 will actually take place (11).

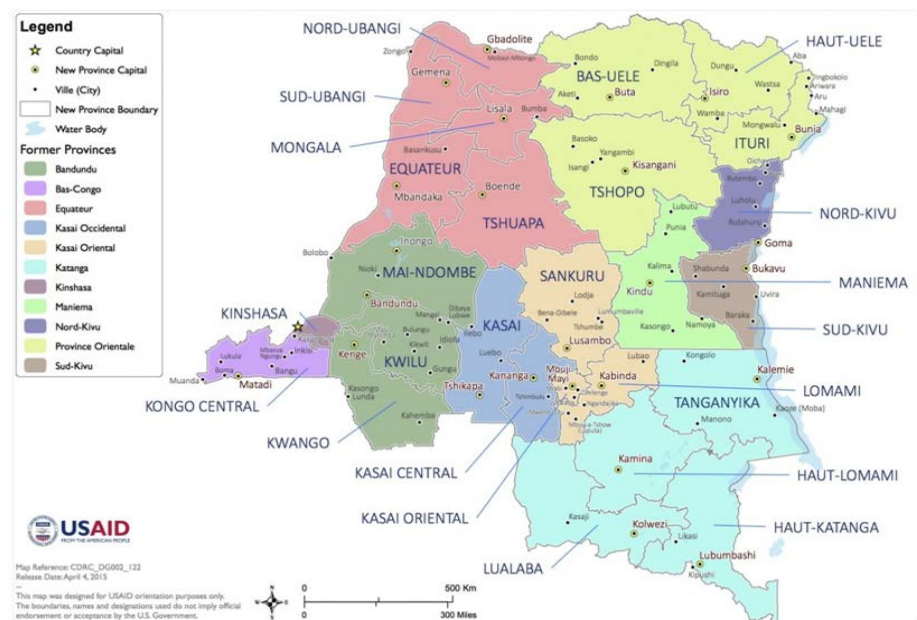


DECENTRALIZATION (“DECOUPAGE”)

The country’s massive geographic size and regional socio-cultural differences have long contributed to its tumultuous socio-political situation. As part of the DRC’s 2006 constitution, the number of provinces was set to increase from 11 to 26 through a territorial-administrative reform process called “decoupage,” in which power is subdivided among administrative states (15). However, President Kabila only began executing this territorial reconfiguration in 2015, without funding for new administrative entities or plans for national implementation. Many people believe President Kabila only began enacting the decoupage to weaken his primary political competitor, a governor of an economically powerful province slated to be divided as part of the decoupage, and to destabilize the country as part of a thinly-veiled attempt to seek a third, constitutionally-prohibited term.

These recent geopolitical changes have important ramifications for this report. Little to no data are available for the new provincial partitions. Almost all sub-national data available in the DRC has been collected and indexed according to the previous 11 provinces. Sub-national statistics and trends presented in this report are therefore presented within the context of the previous provincial boundaries as well.

Figure 1: Decentralized Provinces of the Democratic Republic of Congo

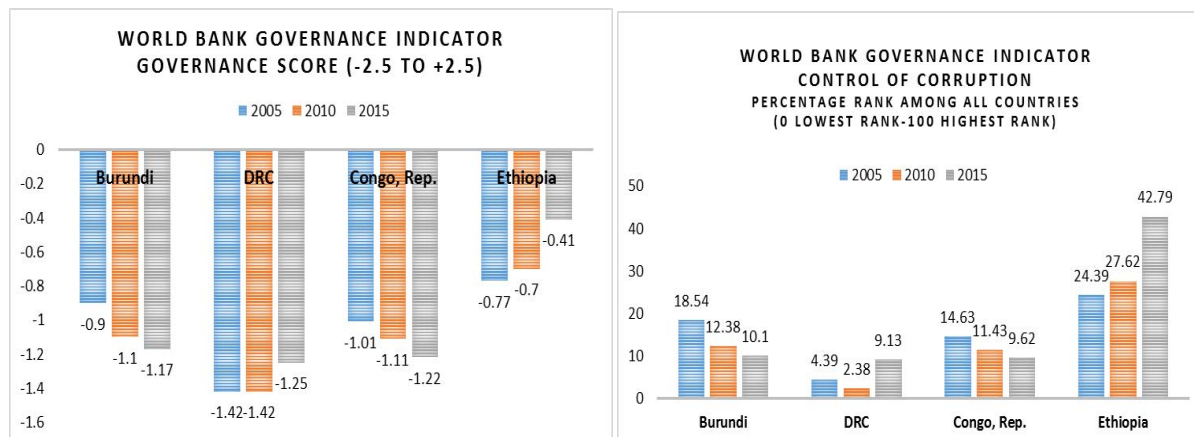


CORRUPTION

Corruption is prevalent in the DRC, observed at all levels of government and in all sectors of the economy. It seriously hinders business operations in the country. The country’s wealth has been despoiled by elites in Congo, Rwanda, Uganda, and other neighboring countries, including by those who directly and indirectly support the commission of mass atrocities. Those elites controlled and captured the main revenues streams of the country such as mining sector and government budget (14). Government officials are reported to regularly accept bribes due to low salaries and lax oversight and multinational companies have also been reported to use bribery and other corrupt practices on a regular basis (14). The country was ranked 156th of the 177 countries assessed by Transparency International’s Corruption Perceptions Index in 2016, with a score of 21 on a scale of 0 (highly corrupted) to 100 (highly clean) (15). According to the World Bank’s Governance Indicators, the DRC has not made progress and stands poorly compared with some other African countries like Burundi, Congo Republic, and Ethiopia.



Figure 2a and 2b: World Bank Governance Indicator Comparison



Source: World Bank (3)

DATA CONCERNS

In gathering research for this report, local academic experts who have worked in the DRC raised concerns about the quality of data from the country. They were particularly skeptical of government-produced statistics on health sector outcomes, which they believe are vastly underreporting significant health challenges such as HIV prevalence. These anecdotal reports are corroborated in the literature (16-18) and cast doubt on the quality of all demographic, health, and social statistics published in national surveys.

The DRC has not had valid, reliable, or routine statistical data at the national level since independence. The last national census was conducted in 1984 and the sampling frame used to develop sampling distributions for household surveys has not been significantly updated since then. Therefore, subsequent national surveys are based on assumed growth projections, which undermine the quality and accuracy of national survey statistics from all sources (18). The primary source of demographic data collected within the last ten years is the *Enquête Démographique et de Santé en République Démocratique du Congo*, provided by the Demographic and Health Surveys Program (DHS) in 2008 and 2014 (7).

The International Monetary fund, in a recent country strategy paper for DRC, highlights the need for a national statistics system and the lack of data comparability as two major barriers to development in the country (18). The World Bank has also recognized that “the statistical infrastructure needed for the production of reliable and accurate statistics is dramatically lacking” in the DRC and recently invested \$45 million dollars in DRC’s National Statistical System (19). Although some regions have higher quality sub-national data, their generalizability across the diverse and massive country is highly suspect (17). As such, in this report we aimed to support national statistics with external data when possible. Nationally-produced data, such as the Demographic and Health Survey, should be interpreted with caution. The recent provincial restructuring, described above, further complicates the current state of national statistics since geographic boundaries used to define those areas are no longer accurate.



DEMOGRAPHICS AND INFRASTRUCTURE

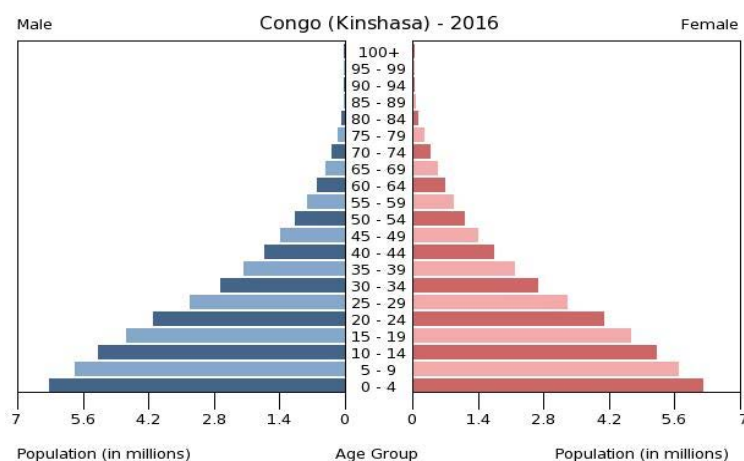
FACTSHEET

Statistic	Trend		Data Source
Population	Increasing	77.4 million	2015 – IHME Country Profile (20)
Growth Rate	Steady	3.1% (4.4% urban; 2.2% rural)	2015 – World Bank (21)
Population Density	Increasing	35.2 per sq km	2016 – UNdata (22)
Percent Female	Decreasing	50.13%	2015 – World Bank (21)
Birth rate	Decreasing	6.0 births per woman	2014 – World Bank (21)
		6.6 births per woman	2013/14 – DHS EDS (7)
Under-5 Mortality Rate	Decreasing	98.3 deaths per 1000 live births	2015 – World Bank (21)
		104 deaths per 1000 live births	2013/14 – DHS EDS (7)
		21 (Male) / 18 (Female) deaths per 1000 live births	2015 – IHME Country Profile (20)
Adult Mortality	Decreasing	290 (Male) / 241 (Female) per 100,000 people	2014 – World Bank (21) and 2013/14 – DHS EDS (7)
		929 (Male) / 853 (Female) per 100,000 people	2015 – IHME Country Profile (20)
Maternal Mortality	Decreasing	693 per 100,000 live births	2015 – World Bank (estimate) (21)
		846 per 100,000 live births	2013/14 – DHS EDS (7)
Life Expectancy	Increasing	59.4 yrs (Male) / 62.1 yrs (Female)	2015 – IHME Country Profile (20)

POPULATION

The Democratic Republic of Congo is geographically the second largest country in Africa (2.3 million square kilometers), bordered by nine other nations (22). The population is estimated to be around 77.4 million and growing at a rate of about 3.1% per year. However, as noted previously, these estimates are based on assumed growth projections which, while consistent across multiple sources for this statistic, rely upon outdated sampling distributions. Almost half the population is under the age of fifteen (21) and just 3% of the population is 65 or older (21). The economically active segment of the population, ages 15-64, has been approximately stable at about 51% over the past fifteen years.

Figure 3: The DRC Population Pyramid



Source: CIA Factbook 2016



According to the most recent Demographic and Health Survey (DHS), more than 200 African ethnic groups live in the DRC, with the Bantu peoples as a large majority. The official language is French, and the capital city Kinshasa is the second largest French-speaking city in the world. Four additional national languages are recognized: Kikongo, Lingala, Swahili, and Tshiluba. The majority of the country is Christian (approximately 96%), mainly Catholic and Protestant (7).

FERTILITY & MORTALITY

DHS survey responses also reveal that households average about 5.3 people in size, and one in four households is headed by a woman. A greater proportion of women (64%) are married compared to men (55%), and the median age of marriage for women is 18.7 years compared to 24.2 for men. Multiple partner relationships are common (22% of women and 15% of men; generally higher in rural areas) (7).

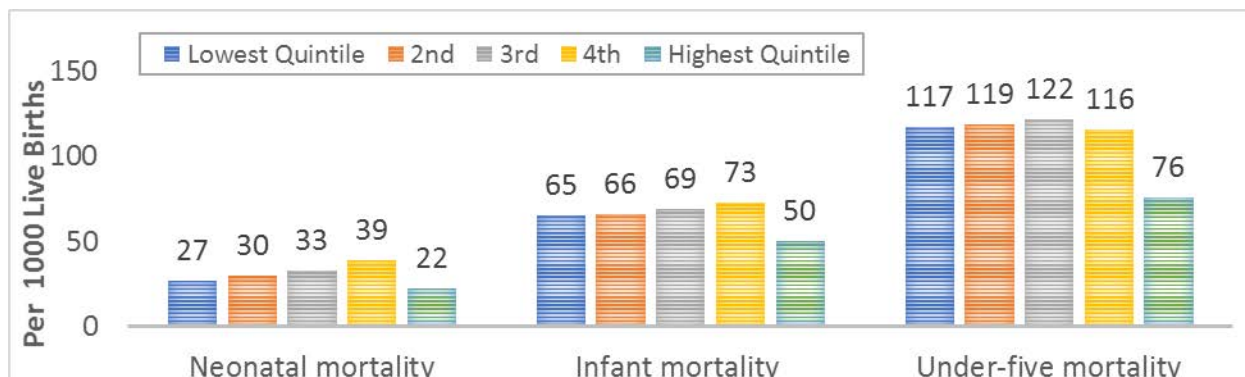
The average fertility rate is estimated between 6 and 6.6 children per woman [6.6 per DHS Survey (7), 6.0 per World Bank (21)], trending downward from a peak of 7.1 children in the mid-1990s (21). According to the 2014 DHS, there are major differences in fertility across provinces, ranging from 4.2 children per woman in Kinshasa to 8.2 children per woman in Kasai Occidental. Fertility is inversely correlated with economic status (7.6 children/woman for poorest households vs. 4.9 children/woman among wealthiest), education level of the woman (2.9 children/woman for women with secondary education vs. 7.5 children/woman for women with no education), and urban versus rural (7.3 children/woman in rural vs. 5.4 children/woman in urban). Adolescent fertility is also more common among the poorest households and more concentrated in rural provinces (7).

Elevated mortality rates persist across the DRC, though data are inconsistent and rates vary by region. It is estimated that war, hunger, and disease have killed more than 5 million people in the DRC since 1998 (23). However, less than 10 percent of these deaths have occurred directly from combat, as most deaths have been the result of preventable or treatable causes, such as recent outbreaks of cholera, malaria, and measles, and malnutrition, and nearly half of the deaths have been children under age 5 (23).

Childbirth remains a major risk for DRC women [846 deaths per 100,000 live births per DHS (7) and 693 per World Bank (21)]. See page 20 for more details on maternal mortality. Under-five mortality has declined overall, but remains higher in rural areas (118 deaths vs. 96 deaths in urban areas, per 1000 live births) and among mothers with less education [see page 15 for more on U5M] (7). Differences in child mortality among economic quintiles are minimal, except for in the highest wealth quintile [Figure 4]. Kinshasa is by far the more resourced province with better education access and economic opportunity, corresponding to lower rates of fertility and mortality (7).



Figure 4: Child Mortality by Wealth Quintile



Source: DHS (7)

MIGRATION

The Congolese population is unevenly distributed across the country, with the greatest density concentrated in the southwestern quarter (24). Approximately 60% reside in rural communities while 40% live in urban areas (21). However, economic opportunity and conflict pressures are driving internal migration towards urban centers, leading to faster annual growth in cities (4.4%) compared to rural population growth (2.3%) (21).

Internal displacement varies widely across regions of the DRC. Many families have been displaced multiple times due to resurgent conflicts between government and armed groups, especially in eastern provinces (25). Economic and conflict-driven migration are responsible for producing an estimated 1.7 million internally displaced people within the DRC as of June 2016 (26).

In addition to Congolese displacement, approximately 450,000 people from neighboring African countries are registered refugees in the DRC according to the United Nations Refugee Agency. This estimate includes 245,000 Rwandan refugees, with growing refugee populations from Central African Republic of Congo (more than 100,000) and South Sudan (approximately 65,000) due to recent conflicts in those countries. They have settled almost exclusively in rural areas (98.7%) (27). There has been a gradual long-term decline in the presence of African migrants and refugees in the DRC. In the early 2000s, immigration from non-African countries, primarily China and India, was driven by the development of private sector mining companies and this trend has continued in recent years (25), though recent political instability and falling metal prices will likely affect this trend.

EDUCATION

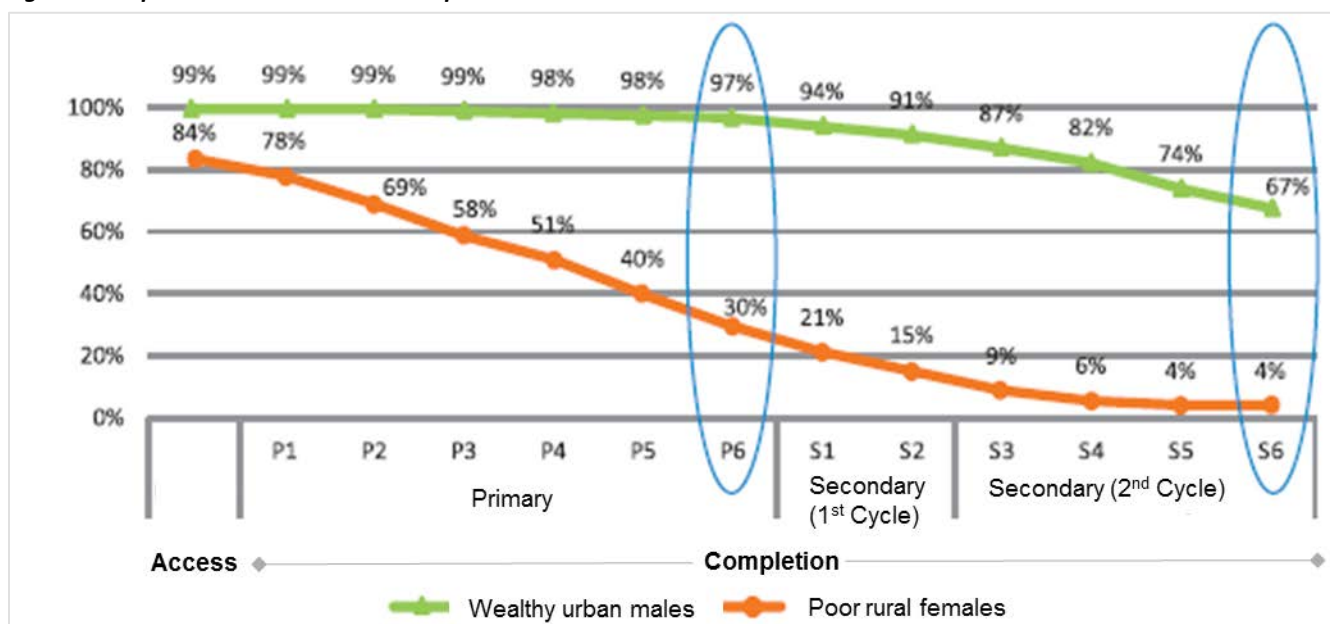
The DRC education system has many challenges and quality issues that are closely linked to broader governance challenges in the country. The government sets educational policies for standards and testing, but the management of schools is decentralized and falls under the purview of local administrations (28). Almost 90% of schools in the DRC are public schools, and more than a quarter of these are religiously affiliated (28).



School enrollment has increased significantly, from 5.5 million in 2001 to 13.5 million in 2013 (29). Attendance and retention rates, however, are low with nearly half of students dropping out before completing primary school (7). Female students and students from lower income households are particularly likely to leave school (29). Disparities in education have led to significant gender and geographic disparities in literacy: 64% of women compared to 88% of men overall, and 93% of women in Kinshasa compared to 51% women in Kasai Occidental (7).

The current system of school fees is a product of public-private partnerships with faith-based organizations (Catholic, Protestant, Kimbanguiste, and Islamic), and the government relies heavily on international donors to support the national education system (29). Households pay approximately 77% of total education costs, despite government promises of free access (30).

Figure 5: Disparities in Education Participation



(translated figure) Source: UNICEF (30)



INFRASTRUCTURE

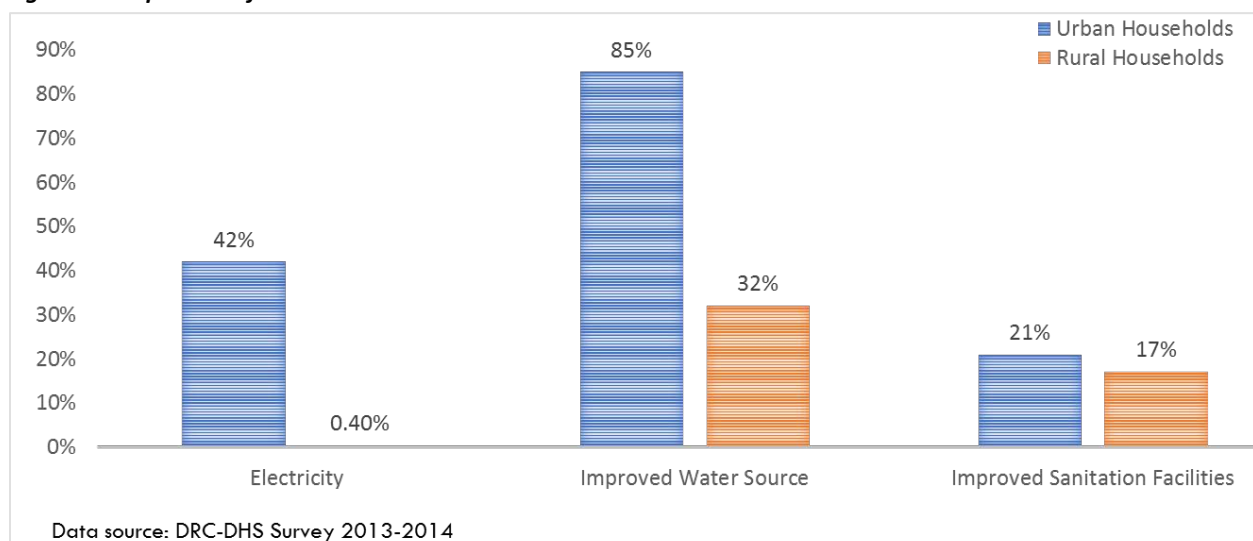
Despite improved access to financing, built infrastructure remains poor throughout the country. Instability and the unreliability of public infrastructure has led large companies to increasingly establish and manage their own private infrastructure (for example, investments in generators and private transportation) (23). Lack of transparency in the industry has also eroded trust in public utilities (31).

Table 1: Infrastructure Overview

	Strengths	Challenges
Water and Sanitation	Significant freshwater resources	<ul style="list-style-type: none"> - Large disparities between urban and rural households - Derelict water and sanitation infrastructure - High incidence of disease-causing microbial contamination
Power	High potential for hydropower generation	<ul style="list-style-type: none"> - Insufficient power generation infrastructure - Poor system maintenance - Deficient utility performance
Transportation	Economic growth potential through targeted investment	<ul style="list-style-type: none"> - Poor road maintenance - Inadequate transportation for economic development - Lack of construction sector competition
Information & Communication Technology	Broad signal coverage for mobile phones, growing subscription rates	<ul style="list-style-type: none"> - Moderate mobile phone market penetration, urban-rural disparities in access - Absence of a national fiber-optic backbone for internet service

Findings developed from sections below.

Figure 6: Proportion of Households with Utilities



WATER & SANITATION

Despite significant freshwater resources, just 26% of the population has access to safe drinking water in the DRC (32). Water and sanitation infrastructure collapsed following the outbreak of war in the early 1990s and are improving very slowly, with significant disparities between urban and rural communities (7). Water and sanitation infrastructure is slightly more developed in urban areas compared to rural areas, but extremely dilapidated and inadequate, even in Kinshasa (33). Although some reports suggest access to piped water is gradually improving in urban areas (7, 21, 34), information on water access is inconsistent and unreliable (32). Most “Improved water sources” are not potable due to the DRC’s poor piping infrastructure, regular flooding of wells, and high incidence of bacterial contamination. (32) Cholera has reemerged in Kinshasa and other urban areas in recent years despite reported investments in urban water systems (35, 36). Lack of clean water contributes to DRC’s high burden of diarrhea morbidity and mortality, especially among children under five (see page 21). In rural areas, virtually no households have access to piped water and seven in ten households obtain water from unimproved or surface water sources (37). Poor water access is compounded by the fact that two-thirds of households still do not have adequate access to a sanitary toilet (7) regardless of wealth quintile (37), though access to traditional latrines has improved slightly in recent years (34).

ELECTRICITY

Electricity scarcity and unreliability obstruct economic development in the DRC (38). Access is heavily skewed towards urban areas (42% urban residences vs. 0.4% rural residences) (7). Households predominantly use solid fuel to power cook stoves (charcoal and firewood) even in urban areas (7).

Only a small fraction of the DRC’s hydropower potential has been developed and much of it is currently nonfunctioning, though the government has proposed ambitious plans for building a series of hydroelectric dams on the Grand Inga river (31, 39). However, the current transmission infrastructure is insufficient to carry any additional electricity (28, 40). The national power utility Société Nationale d'Electricité (SNE) is a main source of inefficiencies in the sector. Almost half of generated power is lost in transmission and distribution due to illegal connections and lack of system maintenance (34).

TRANSPORTATION

About 50% of the DRC’s territory remains inaccessible by road or rail transport (39, 41). Lack of transportation infrastructure likely exacerbates many regional social and economic disparities by reinforcing national, provincial, and within-cities isolation and impeding access to development of private sector industries and employment opportunities. The DRC’s construction sector is heavily concentrated and the few operating firms lack both project management capabilities and qualified labor (28). The lack of competition within the construction sector is expected to continue to impede future economic growth (42).

Paved road density in the Congo Basin is among the lowest in the world with only 25 kilometers (km) per 1000 square km of arable land (43). Few of the DRC’s provincial capitals are connected by road to the capital city Kinshasa (28). Public transportation is managed by the Ministry of Transports and



Communication Routes but is largely insufficient due to poor management and equipment failure. An informal sector has emerged in this service gap, with private operators operating overcrowded minibuses on short-distance routes (44). Motorcycle-taxis are also a more recent addition to the informal transportation sector and are widely used in urban areas (45).

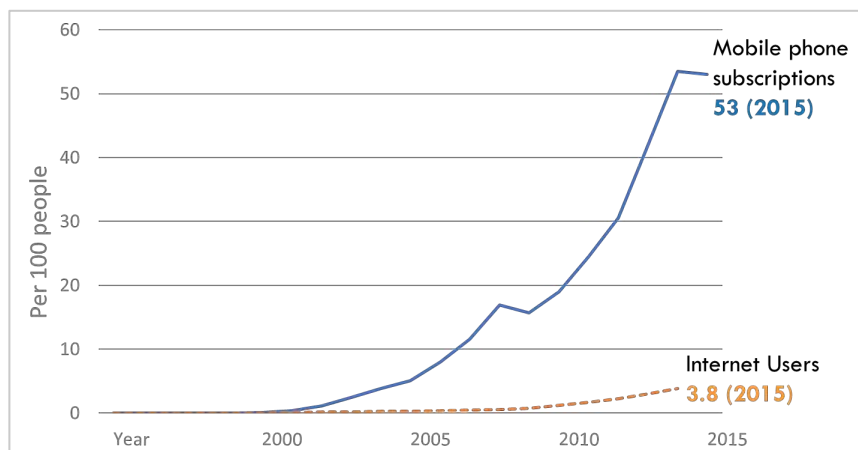
Economic analyses indicate that specific transportation corridors may be particularly useful in facilitating regional economic development through the sub-Saharan Africa (SSA) region. Specifically, investments in roads connecting Kinshasa to the Atlantic Ocean (through Matadi and Pointe Noire) and through the Congo River corridor (Kinshasa to Kisangani) have the potential for high economic returns, especially if bundled with construction of additional roads, telecommunications, and power infrastructure (46, 47).

INFORMATION & COMMUNICATION TECHNOLOGY

Mobile infrastructure is one of the most reliable and functional infrastructure sectors, with a privately funded Global System for Mobile communication (GSM) telephone network that provides signal to a majority of the population (34). Rural communities lag behind urban areas in gaining access to mobile networks due to the difficulties of transportation and installation of cell tower infrastructure (48, 49). However, demand is high and mobile companies are gradually making progress (50). Mobile phone ownership has more than doubled in the last decade to about 53 subscriptions per 100 people (21). However, rates of mobile phone ownership among urban households are much greater than rural households (49), approximately 80% urban households compared to 20% rural households (7). Mobile services also remain unaffordable: the poorest 20% of households would need to spend approximately a fifth of their income for a basic phone (50-52). Unreliable electricity infrastructure and complex taxation and regulation of mobile operators also remain as barriers to expansion of mobile usage, although neighboring countries like Kenya and Tanzania have achieved higher mobile access levels despite these same barriers (50).

Internet is available through private operators, although broadband access is limited because there is no national fiber-optic backbone and thus providers rely primarily on satellites (53). Internet access is also highly localized to major cities and mining sites, since demand is almost exclusively from business customers (28, 52, 54).

Figure 7: Information and Communication Technology Access



Source: World Bank (3)



HEALTH SECTOR

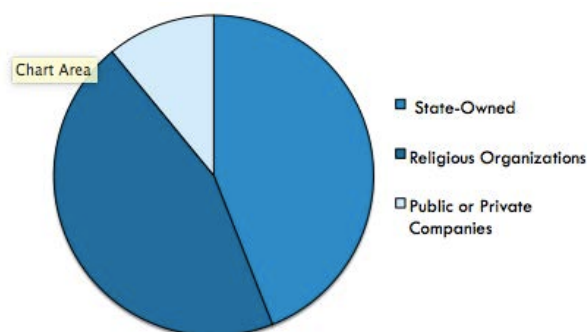
HEALTH SERVICE DELIVERY

HEALTH SYSTEM

Decades of conflict have led to a near collapse of the DRC healthcare infrastructure (55). Humanitarian crises and disease outbreaks, which are insufficiently addressed by the dysfunctional health system, have led to severe challenges in human health.

There are four levels in the DRC health system: (1) the central government level with the Minister of Health (MOH) and Secretary General of the MOH, (2) an intermediate level with the provincial health departments and (3) administrative health districts (65 districts subdivided from the DRC's 26 provincial divisions), and (4) a peripheral level with health zones and health centers. There are 516 health zones, each divided into health areas

Figure 8: Overview of All Hospitals in DRC in 2013 (n=401)



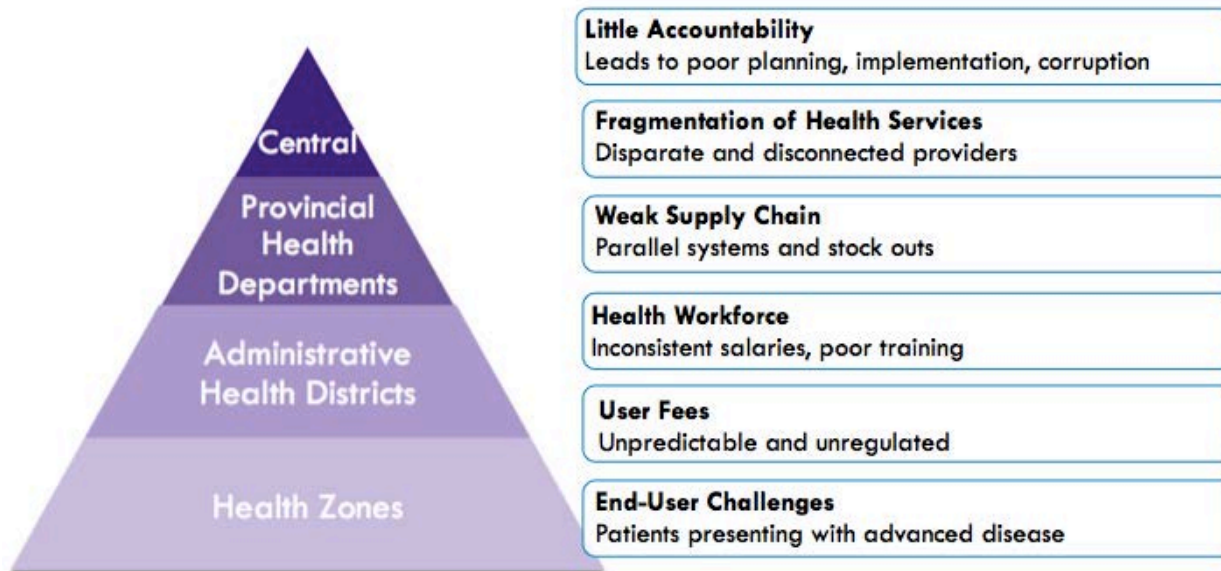
Source: Muyembe et al. 2013 (57)

with catchment areas of 10,000 people and usually containing a hospital (56). As of 2013, there were 401 hospitals in the country, of which approximately 44% were state-owned, 45% run by religious organizations, and 11% run by public- or private-sector firms (57).

Much of the country's health care system is subsidized by foreign governments and international aid programs, with support from multilateral, bilateral, and financial organizations. Humanitarian aid is concentrated in urban areas, and provides care in targeted geographic regions, often for specific vertical programs such as vaccines. Approximately 12% of the total health expenditure is government-funded, with fragmented external aid providing 37% of health expenditures in the country (56). Private and not-for-profit, faith-based organizations are particularly prominent, and in the absence of a public provider in a defined health area, not-for-profits have agreements with authorities to be recognized as the primary service provider (56). Half of health zones are non-publicly funded. Though non-public facilities are integrated into the health system, with the MOH paying salaries to employees (58), this fragmented system results in significant challenges, such as lack accountability and oversight as well as an inadequate supply chain (Figure 9).



Figure 9: The DRC Health System and Key Challenges Identified



Source: START Team

Additionally, disease surveillance data has been unreliable and insufficient, with challenges in even basic logistics, such as transporting samples to the laboratory in Kinshasa when testing for measles, yellow fever, polio, and maternal and neonatal tetanus (59). Data quality also varies geographically.

HEALTH WORKERS

A 2013 estimate of health care workers in the Congolese health system estimated 127,716 public clinical and administrative staff in the country (56). However there are no reliable data sources, and this is likely an underestimate given the challenges of the health information systems. The latest estimate of number of physicians in the country is from 2004, with 0.107 physicians per 1,000 population, among the lowest in the world. Public sector health care workers are concentrated in the urban areas. Recurring challenges with this workforce include high absenteeism, low education standards, and overall low performance (56). According to the World Bank, only 32% of health care workers in the civil service receive a consistent salary, and 81% are paid a “prime de risqué” (risk allowance), which is a payment all publicly-employed health care workers are entitled to (56). Many health care workers thus are not on payrolls or receive risk allowance. Health care workers often seek additional income from a variety of sources. Doctors are the only group who rely on governmental allowances as their main income source. Other health care workers are funded largely by user fees, per diems, and top ups (supplements to the state salary paid with the hospital’s income) (56). Community Care Sites, the community health program, serves as the lowest level of the DRC health system. It is comprised of a system of unpaid community health workers, including health promoters (*promotion relais*), and treatment workers with higher levels of education who deliver interventions (*treatment relais*) (58). The government, in cooperation with NGOs and faith-based organizations, supports the supervision and implementation of the program (60).



HEALTH ACCESS

The people of the DRC lack access to basic healthcare. The key barriers to health care access and delivery are lack of funds, corruption, high user fees and unofficial payments, operational costs, and health zone mismanagement. Health care facilities consistently lack properly trained staff, equipment, and supplies. User fees are used as an attempt to balance underfunded budgets. There is little accountability in the health system, which leads to poor planning and implementation, and corruption (61). Attacks on health care workers in the eastern regions have further interrupted care (23). Patients that do manage to access care often present in advanced stages of disease (55), which contribute to the country's poor morbidity and mortality indicators.

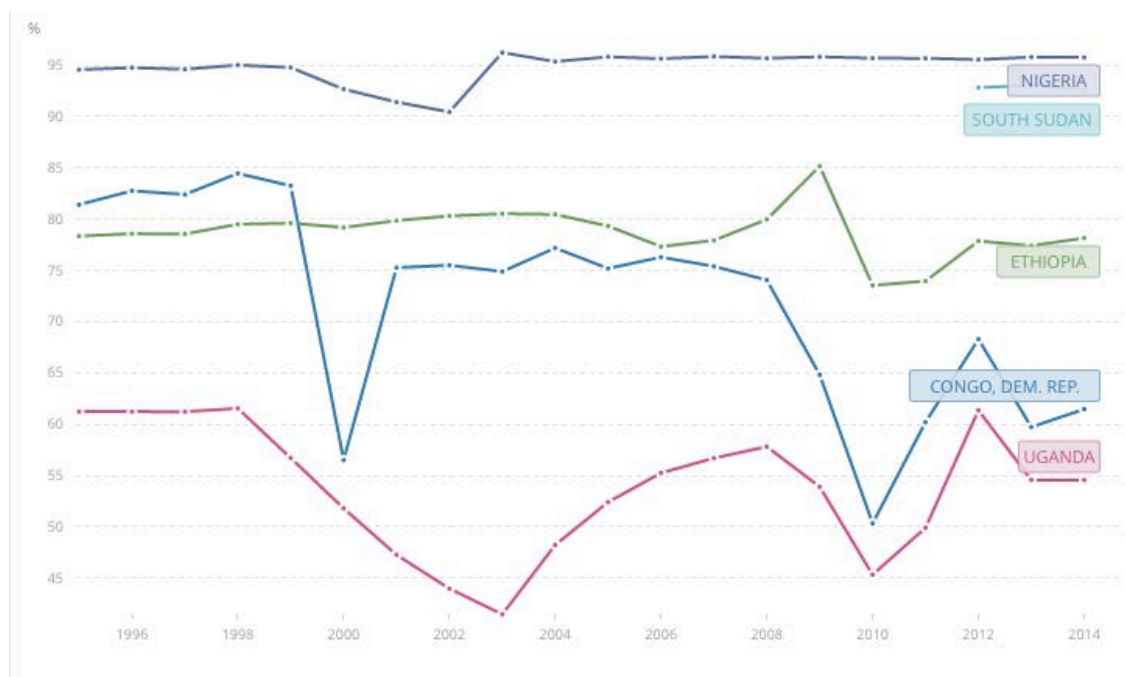
There are few data sources about specific health-seeking behaviors in the DRC, and they vary according to region, local health service providers, and rural vs. urban density. In 2013, it was estimated that 74% of the population lived more than 5 kilometers from a health center, and that often medicines and personnel were unavailable (61). A 2010 cross-sectional study in the Lubumbashi province showed that the most frequent initial treatment-seeking options were self-medication with modern medicines (54.6%), use of first-line health services (any public or private facility providing ambulatory curative or preventive care) (23.1%) and hospitals (11.9%). Formal health services are preferred for second opinions (62). Key barriers to accessing the health sector include insufficient human resources, lack of well-trained staff, long wait times at clinics, lack of centralized supply chain management systems leading to frequent stock outs of commodities, and loss to follow up (63).

USER FEES

Unpredictable and unregulated user fees exacerbate the challenges of health access, and burden the patient with the entire the cost of care. Every intervention requires a direct payment, and drug prescription costs are irregular (64). Households contribute approximately 61% of total health care expenditures through out-of-pocket payments (compared with a shocking almost 96% in Nigeria, and lesser 54% in Uganda) (Figure 10) (3). In the DRC, patients are charged for routine care, although treatment in cholera treatment centers and some targeted preventive services funded by external programs (such as vaccinations) are generally free (57). Revenues from the user fees are fed back into the system to support the purchase of drugs and equipment, address recurring costs, and to fund the practice of *'financement ascendant'*, which though deemed illegal by the Ministry of Public Health provides a portion of user fees to the higher-level health administration. Remaining funds are shared amongst staff as salaries (56).



Figure 10: Out-Of-Pocket Health Expenditure (% Of Private Expenditure On Health)



Source: World Bank (3)

ESSENTIAL MEDICINES

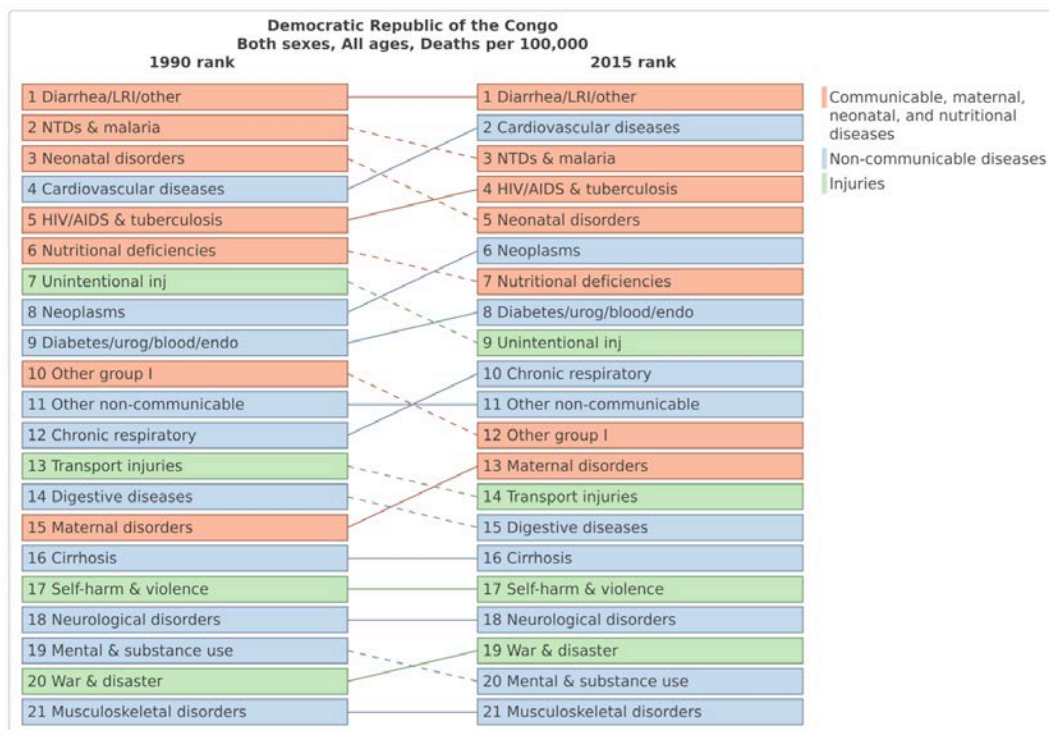
Through the nonprofit *Federation of Essential Medicine Procurement Agencies* (FEDECAME), the DRC has a National Essential Medicine Supply program that is a centralized pharmaceutical procurement system. There is a decentralized warehouse and distribution system, which is supported in part by the United States, the European Union, and Belgium Corporation. Despite this, the drug supply system is weak and lacking in accountability, as there are many parallel systems and frequent stock outs. Many donors operate parallel procurement systems for commodities such as condoms, anti-retrovirals, and contraceptives, which are not procured by the national system (58). Reviews of the Expanded Programme for Immunisation (EPI) found crucial barriers to delivery including vaccine shortages, neglected cold chain, out of order equipment, insufficient storage capacities, unreliable data collection systems, inadequate training, and budget shortages for vaccine transportation (59).



MORTALITY TRENDS

Though mortality rates from illness and disease remain high in the country, an “epidemiologic shift” has emerged from 1990 to 2015. There have been increasing rates of non-communicable diseases such as cardiovascular disease, cancer, diabetes, and chronic respiratory diseases, and decreasing rates of neglected tropical diseases and malaria, neonatal disorders, and nutritional deficiencies (Figure 11) (4). Figure 12 shows causes of premature death in the DRC compared to other countries in the region (5).

Figure 11: Mortality Trends in the DRC, from 1990 to 2015



Source: IHME 2015 (4)



Figure 12: Causes of Premature Death in Comparison Locations, 2015

	Lower respiratory infect	Malaria	HIV/AIDS	Cerebrovascular disease	Tuberculosis	Diarrheal diseases	Ischemic heart disease	Protein-energy malnutrition	Meningitis	Road injuries
Democratic Republic of the Congo	4,546.5	4,540.0	2,926.1	2,886.9	2,692.0	2,280.3	2,087.1	1,352.9	972.7	960.9
Comparison group average	4,278.9	3,215.4	4,523.5	2,911.6	1,595.5	2,464.1	2,475.5	992.8	962.1	1,247.4
Angola	4,450.6	3,015.9	2,838.2	3,470.1	1,844.5	2,184.2	3,044.6	1,004.8	1,063.7	1,620.6
Burundi	4,294.9	2,163.1	2,026.1	2,616.1	2,583.6	3,732.8	1,900.1	1,375.5	1,104.0	1,154.1
Cameroon	4,265.8	4,647.8	8,679.8	2,736.6	815.6	2,141.8	2,440.7	820.4	993.9	828.5
Central African Republic	7,105.6	6,895.2	9,724.7	5,208.0	4,517.5	4,706.5	3,603.6	1,959.0	1,509.6	2,344.2
Chad	6,528.1	3,231.2	4,199.5	2,708.5	1,863.7	6,504.7	2,365.3	1,658.7	1,794.6	906.4
Congo	3,272.0	3,413.8	6,073.0	3,283.6	1,088.5	1,281.5	3,137.0	586.9	696.1	1,121.6
Equatorial Guinea	3,401.7	6,049.4	5,436.3	2,094.1	743.2	846.3	2,305.7	675.4	822.6	1,427.8
Gabon	2,557.7	2,018.5	4,025.3	2,243.5	575.4	743.4	2,130.3	369.6	506.1	1,159.7
Rwanda	3,736.2	705.1	2,220.7	1,902.9	1,304.6	1,568.7	1,619.3	900.6	879.8	1,213.4
Sao Tome and Principe	3,176.5	13.6	11.7	2,852.9	618.6	930.8	2,208.8	577.3	250.9	697.8

Significantly lower than mean

Statistically indistinguishable from mean

Significantly higher than mean

Source: IHME 2015 (4)

MATERNAL & CHILD HEALTH

MATERNAL HEALTH

Maternal mortality in the DRC is severe challenge. Save the Children ranks DRC second from last above Somalia for mothers' well being, although maternal mortality has been reduced by 42 percent since 1990. It is estimated that 15,000 women die each year from causes related to pregnancy or childbirth (23). Though sources vary on the true figure, it has been reported that the DRC has a maternal mortality ratio of about 846 maternal deaths per 100,000 live births, two-thirds of which are due to direct obstetric complications and one-third due to indirect causes such as infectious disease and malnutrition (23). An estimated 72 perinatal deaths occur for every 1,000 births per year, though more than 70% of women give birth with skilled attendants. North Kivu is particularly hard hit with maternal mortality -- its rate in the first half of 2013 was 50% higher than the DRC national average, and nearly 60% higher than the regional average for sub-Saharan Africa (23).

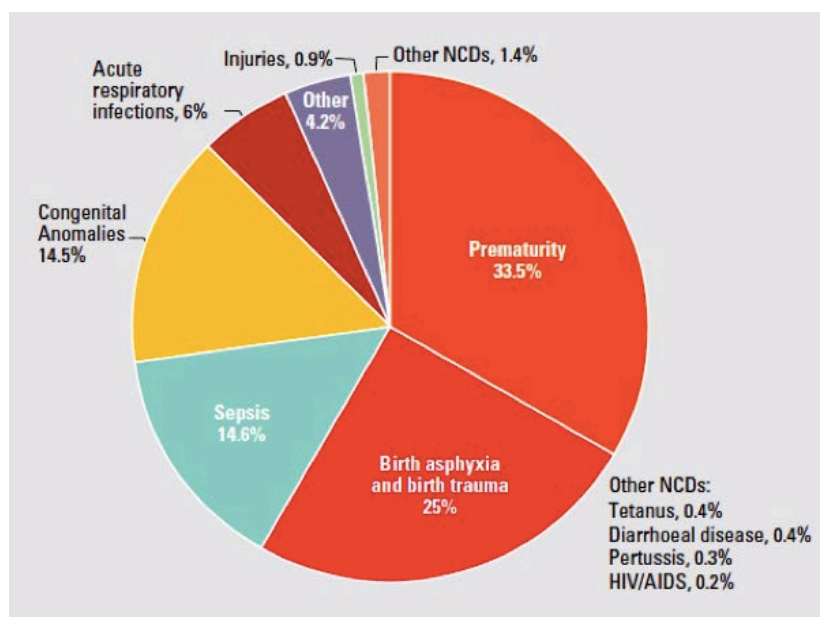


Among young women (aged 20-24), 27 percent give birth by age 18 (2). The fecundity rate of 6.6 children per women, early fecundity of adolescents (21.2%), and short birth intervals (27.1% births) indicate that pregnancies are occurring too early, too close, too often, and/or too late (23). According to the 2013 DHS, just 20% of married women use any method of contraception and only 8% use a modern method, with the male condom being the most widely used modern method (3%). These contraception data have remained unchanged since the 2007 DHS. Of the women who use hormonal contraception, injectables are the most common (64%) and are most often obtained from the public sector, while male condoms are primarily obtained from the private medical sector (70%) (7).

NEONATAL & INFANT HEALTH

The DRC has one of the highest infant mortality rates in the region, with 126 deaths per 1,000 live births (65). UNICEF estimated that in the DRC, 258 babies under a month old die each day. The neonatal mortality rate is 30 deaths per 1,000 live births, with some regional variation; in rural areas the rate is 31 deaths per 1,000 live births compared to 28 deaths per 1,000 live births in urban areas. The main causes of neonatal deaths in 2015 were prematurity (33.5%), birth asphyxia (25%), and sepsis (14.6%) (2).

Figure 13: Causes of Neonatal Mortality in DRC



Source: (2)

According to the 2013 DHS, 88% of mothers with a live birth in the five years before the survey received some prenatal care from a skilled provider (7). Kinshasa has the highest rate of prenatal care coverage (of at least 4 visits) (74%), while the lowest coverage was Sud-Kivu (35%). It was reported that 80% of births took place in a health facility, and the same proportion were assisted by a skilled provider (7). Kinshasa is the region with the highest coverage of skilled birth attendance (97%), while Katanga has the lowest (64%). The region with the highest coverage of postnatal care for newborns was Kinshasa (19%), and Kongo Central (Bas-Congo) had the lowest (1%) (2). According to the 2013 DHS, 48% of children under six months were exclusively breastfed, while 79% of children age 6-9 months received complementary foods (7).



UNDER-FIVE MORTALITY

It is estimated that almost half of the deaths in the country are children under age 5, with one child in seven not surviving to age five (23). This U5M rates has remained largely unchanged in the 1980s and 1990s, although since 2005 it has declined by 15% (23). Severe poverty, overall insecurity, lack of basic social services, and sexual violence affect child survival in DRC (2).

Diarrhea, acute lower respiratory infections and malaria account for more than 50 percent of the deaths of children under five in the country, and there are stark differences rural to urban, with urban children twice as likely to be vaccinated as rural children (66).

NUTRITION

Poor child health in DRC is exacerbated by severe challenges with nutrition. According to the DHS, 43% percent of children under age five are stunted, and 23% are severely stunted. Among children under age five, 8% are wasted. Additionally, 23% of children under age five are underweight (7). These rates of malnourishment (stunting) and malnutrition (wasting) reflect vulnerabilities to short-term crises (65). Malnutrition is widespread in all provinces with geographic variations in prevalence (7). According to the United States Agency for International Development (USAID), “Recurrent conflict and subsequent internal displacement of persons, lack of improved agricultural inputs and techniques, pervasive crop and livestock diseases, poor physical infrastructure, gender inequity, and a rising fertility rate are among the many factors challenging food security in DRC” (67).

Table 2: U5M in Central Africa and Great Lakes Countries

	U5M	Low bound	Upper bound
Angola	158	124	231
Burundi	139	116	199
Cameroon	127	107	135
Central African Republic	164	131	213
Chad	169	146	206
Congo Brazzaville	99	84	107
DRC	168	139	235
Equatorial Guinea	118	63	235
Gabon	66	50	81
Rwanda	54	47	67
Sudan	86	66	117
Tanzania	68	62	81
Uganda	90	84	105
Zambia	83	76	110

Source: UN Child Mortality Report (5)

Table 3: Malnutrition in the DRC

	DRC	Urban	Rural
Children under age five who are stunted (%)	43	33	47
Children under age five who are wasted (%)	8	5	9
Children under age five who are underweight (%)	23	14	26
Children age 6-59 months who are anemic (%)	60	59	60
Women age 15-49 who are anemic (%)	38	41	37
Men age 15-49 who are anemic (%)	23	21	24

Source: 2013 DHS (7)

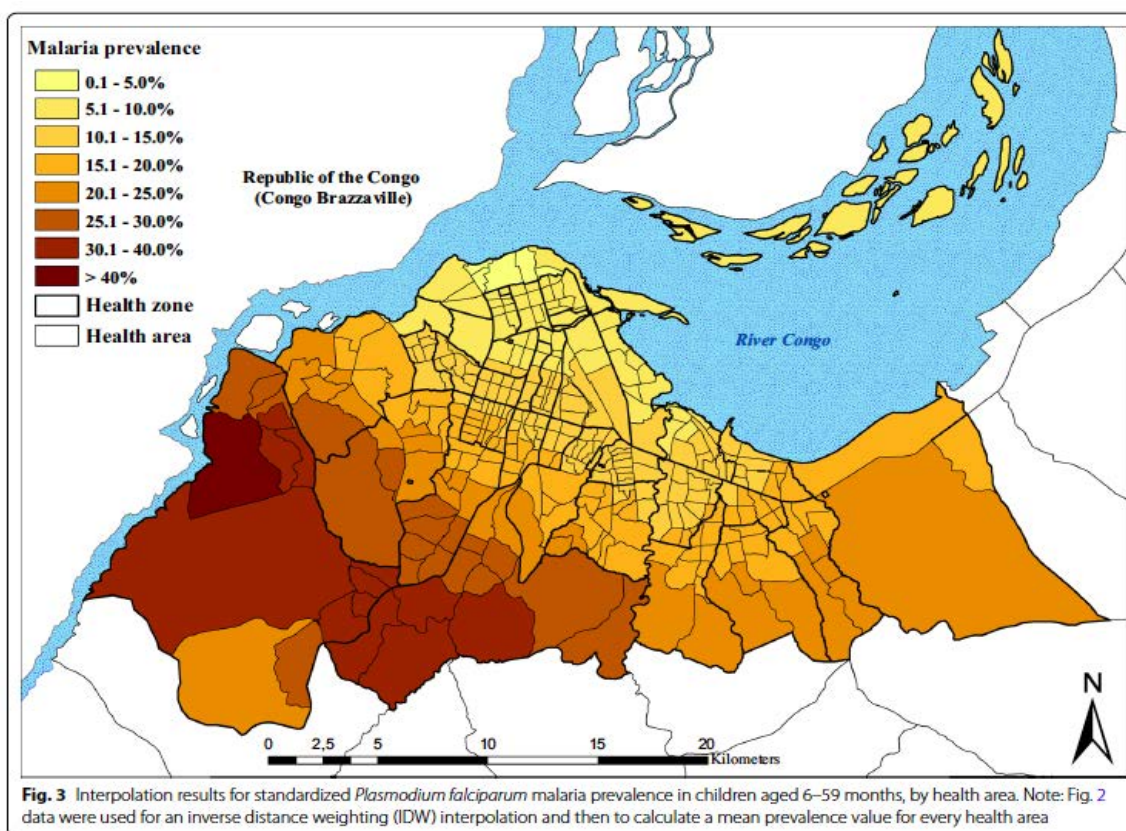


INFECTIOUS DISEASE BURDEN

MALARIA

In the WHO Africa region, malaria mortality rates have been decreasing overall, but increasing in the DRC, where malaria accounts for 40% of outpatient visits, 40% of overall mortality, and is one of the leading causes of morbidity and death. Recent cross-sectional surveys were conducted in Kinshasa to develop the first risk map of Kinshasa. The data revealed that urban areas had lower prevalence of malaria, anemia, and reported fever, and peri-urban areas had low coverage of insecticide treated bed nets, and sub-optimal net use. The overall standardized malaria prevalence was 11.9% in children 6-59 months (1).

Figure 14: Standardized *Plasmodium falciparum* malaria prevalence in children aged 6–59 months, by health area. (1)



Source: Ferrari (1)

MEASLES

Over the past six years, measles has reemerged as a significant health threat, especially to children. A measles epidemic has been raging since the beginning of 2015 in three provinces, including the former province of Katanga where over 40,000 cases and over 470 deaths have officially been reported. In 2015, children aged one to five years accounted for more than 77% of cases in children, and 88 percent of deaths (68).



The reemergence is due in large part to the falling vaccination rates since the 1980s; 27% of 1 year olds are not vaccinated (23). Vaccine distribution faces many challenges. In fact, the recent epidemic occurred despite mass vaccination campaigns done throughout the country less than a year before. Though the accuracy of data has been questioned, the current coverage of the measles vaccine in the DRC is estimated to be 84%, far lower than the 95% needed to prevent an epidemic (69).

HIV/AIDS

DRC experts at the University of Washington have cast doubt on HIV/AIDS data, and suggest that the disease is widely underreported, particularly due to lack of proper representative sampling and testing of the population (70). According to the published data, HIV prevalence varies according to gender and age, and is estimated at 1.2% among the overall adult population ages 15-49. Prevalence is higher among women (1.6%) than men (0.6%), with the highest prevalence among women age 40-44 (2.9%) (7). UNAIDS has also reported that prevalence is 1.2% (0.6-1.7% ages 15-49), is higher in urban (1.7%) versus rural areas (0.6%) and slightly higher among women than men 15 years and older (1.09% vs. 0.77%) (7). Most HIV transmission in DRC is believed to occur through heterosexual contact. Few primary care clinics offer CD4 testing or antiretroviral regimens for prevention of mother to child transmission (PMTCT). Only an estimated 35% of HIV-infected pregnant women received appropriate antiretroviral drugs in 2013, and only 2% received a complete package of PMTCT services in 2012 (71).

TUBERCULOSIS

The DRC has the third highest prevalence of tuberculosis (TB) in Africa, and incidence, prevalence, and mortality remain stubbornly high (72). In 2015, the TB incidence was approximately 250 per 100,000 people and prevalence was 324 per 100,000 people (73). TB is the primary cause of death among HIV-positive patients. National reporting of TB is likely underestimating the trends – in 2015, the DRC reported 111,683 TB cases, roughly half of WHO estimates (72). Kinshasa accounts for an estimated 20% of all TB cases nationwide (74). The DRC also has a high burden of multidrug-resistant TB (74).

OTHER KEY BURDENS OF DISEASE

Between January and October 2016, 22,002 cases of cholera and 646 deaths were reported in the DRC. In the same period in 2015, 12,269 cases of cholera with 192 deaths were reported (57). Cholera epidemics are seasonal in DRC, and primarily originate in the Eastern DRC, and concentrate in lake areas during periods of low incidence (May and July). Due to poor water quality and sanitation in many of the country's towns and cities, cholera is endemic in five provinces in the DRC (66).

Though in early 2001 wild poliovirus (WPV) types were eliminated in the DRC, WPV was imported from Angola on several occasions between 2006 and 2011. No cases of infection with WPV have been detected in DRC since December 2011 (75).



NEGLECTED TROPICAL DISEASES

The DRC ranks high globally in the number of cases of several high-prevalence neglected tropical diseases (NTDs), including intestinal helminth infections, lymphatic filariasis, and schistosomiasis (8). The DRC also likely leads the world in human African trypanosomiasis and leprosy cases (8).

SCHISTOSOMIASIS AND SOIL-TRANSMITTED HELMINTHS

Schistosomiasis is endemic in DRC, leading WHO to rank the DRC among the countries where preventive chemotherapy is recommended. As there is no surveillance of schistosomiasis in the country, the distribution and disease burden are not accurately known, although Madinga et al (2015; (76)) identified Kongo Central (Bas-Congo) as an endemic province. The estimated prevalence rate nationwide is 26.5%, and studies have shown schistosomiasis to be inversely associated with age and educational level, and associated with domestic use of rivers, such as bathing and cleaning (77).

In 2015, the National NTD Program mapped schistosomiasis and soil-transmitted helminths in 512 out of 516 health zones in the country. All of the health zones showed some level of low to moderate endemicity of schistosomiasis, with the highest prevalence ($\geq 50\%$) in 17 health zones in the eastern, northern and western provinces (78).

Table 4: NTDs in DRC (8)

Disease	Estimated Number of Cases	Rank in Africa
Hookworm Infection	31 million ²	2 nd
Schistosomiasis	15 million ³	3 rd
Ascariasis	23 million ²	3 rd
Trichuriasis	26 million ²	2 nd
Lymphatic Filariasis	49 million at risk ⁴	2 nd
Human African Trypanosomiasis	10,269–18,592 ⁵	1 st
Leprosy	3,621 ⁶	1 st

Source: Rimoin et al (8)

OTHER NTDS

Among countries in Africa, the DRC has the greatest number of hookworm cases (in 2009, 38 million and 31 million respectively), although it is likely that this is severely underestimated (79). For over three decades, the DRC has reported the highest number of cases of human African trypanosomiasis and in 2012, the DRC accounted for 84% of all cases reported on the continent (80).

NOTABLE RECENT OUTBREAKS

In December 2015, a yellow fever outbreak was detected in the DRC, having spread from an initial outbreak in Angola. As of October 2016, 7334 suspected cases, of which 962 have been confirmed, and 393 deaths reported, were reported to WHO from both Angola and the DRC (81).

As the Ebola virus disease (EVD) epidemic spread in West Africa, an outbreak of EVD was reported in the



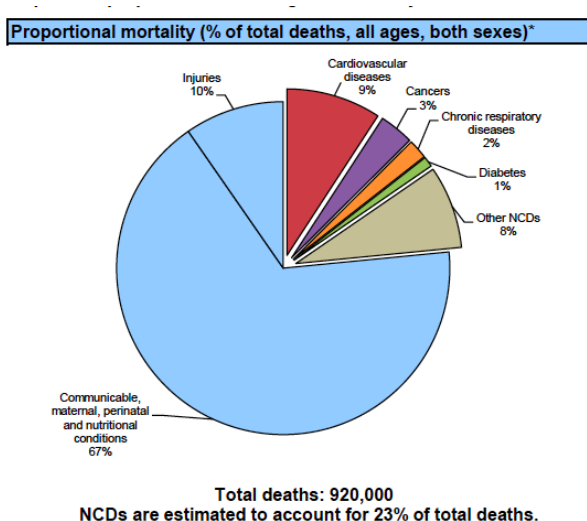
DRC in July 2014, the 7th in the country since 1976. It was determined that the DRC outbreak had clinical and epidemiologic characteristics that are similar to those of previous EVD outbreaks in equatorial Africa, and had a zoonotic origin different from that in the 2014 epidemic in West Africa (82).

NON-COMMUNICABLE DISEASES

Nearly one out of every four deaths in DRC are attributable to non-communicable diseases (NCDs) (6). In 2015 there were an estimated 1.7 million cases of diabetes (83). The prevalence of hypertension in DRC has increased over the past three decades, with higher rates of poor blood pressure control and increasing complications due to hypertension, including stroke and chronic kidney disease (84).

It is estimated that in the DRC, cancer kills more than tuberculosis, AIDS, and malaria combined. According to the MOH in 2008, nearly 44% of deaths in hospitals in the DRC were due to cancer. The most frequent cancers in men are of the lungs, the prostate, and the colon; and in women, the breasts, the lungs, and the colon. The DRC does not have a national cancer registry, statistics, or a formal cancer control program (85). It is estimated that cervical cancer is the most frequent cancer of women in DRC, although women’s level of awareness about the cancer is unknown. There is no national program for early detection or treatment of high-grade lesions (86).

Figure 15: Proportional Mortality (% of total deaths, all ages, all sexes, 2014). (6)



GENDER-BASED VIOLENCE

Sexual violence is used as a weapon amongst the warring factions in DRC, with women and children most affected. It is estimated that more than 1.80 million women have been raped in DRC, considered by some to be the worst region in the world for sexual violence (87). According to the DHS, 27% of women have ever experienced sexual violence and 16% experienced sexual violence in the last 12 months, and sexual violence in the last 12 months is highest in Kasai Occidental (24%) (7). Nationally, more than half of women reported some form of sexual, mental or other physical abuse (7). Perpetrators have been found to come from nearly all of the armies, militias, gangs, and other groups involved. However, rape and sexual violence are underreported due to stigma, and true rates are unknown (23). Sexual violence frequently leads to social rejection, as well as to both mental health issues such as Post Traumatic Stress Disorder (PTSD), Major Depression Disorder (MDD), and others, and physical health issues such as rectal and vaginal fistula, sexually transmitted diseases and HIV/AIDS, and unplanned pregnancies (87).

Source: WHO (6)



FINANCIAL SECTOR

ECONOMIC OVERVIEW

The DRC's economy has grown at an increasing rate since the 2009 global financial crisis, averaging 7.7% annual growth during 2010-2015 due to growth in forestry, mining, and oil extraction industries (88). Over the past two years, however, declining demand for minerals and uncertainty in the domestic political environment decelerated growth to 6.9% in 2015 and an estimated 3.8% in 2016 (89). Prudent national fiscal and monetary policies have played an important role in keeping the consumer price inflation rate around 1% over the period 2013-2015, down from 9.7% in 2012 as the result of the implementation of a fiscal anchor adopted in 2009 in the context of the International Monetary Fund-supported program (89). In the past five years, the CDF (Congoles franc) remained stable at around 920-930 per US dollar (88). However, data from December 2016 indicates consumer price inflation is accelerating to 4.5% and the CDF depreciating against the US dollar to 1011 CDF per US dollar (89). A forecast from the Economic Intelligence Unit suggests that low copper prices, inadequate power supplies, high inflation, and political uncertainties will continue to restrict economic growth.

Figure 16: DRC: Contribution to GDP Growth 2010-2014

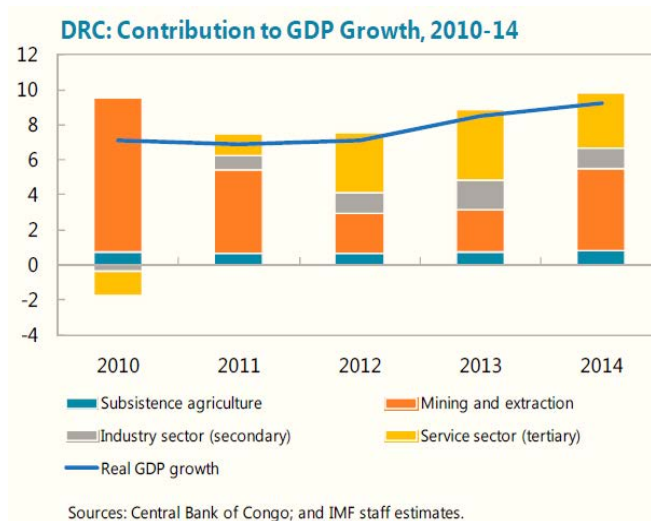


Table 5: Macroeconomic Indicators from Economic Intelligence Unit (2012-Dec 5th, 2016)

	2012 ^a	2013 ^a	2014 ^a	2015 ^a	2016 ^b
GDP at market prices (FC bn)	25,259	27,607	30,324	32,630	35,808
GDP (US\$ m)	27,463	30,022	32,774	35,238	35,393
Real GDP growth (%)	7.2	8.5	9.0	6.9	3.8
Consumer price inflation (av; %)	9.7	1.6	1.2	1.2	4.5
Population (m)	70.3	72.6	74.9	77.3	79.8
Exports of goods fob (US\$ m)	8,743	11,613	12,321	10,285	8,228
Imports of goods fob (US\$ m)	-8,677	-10,808	-12,706	-10,575	-8,671
Current-account balance (US\$ m)	-1,260	-3,109	-1,723	-1,546	-1,508
Foreign-exchange reserves excl gold (US\$ m)	1,633	1,678	1,557	1,216	825
Total external debt (US\$ m)	5,591	6,180	5,508	4,954 ^b	4,841
Debt-service ratio, paid (%)	3.1	3.3	3.2	4.8 ^b	6.4
Exchange rate (av) FC:US\$	919.8	919.6	925.2	926.0	1,011.7

^a Actual. ^b Economist Intelligence Unit estimates.

Source: Economic Intelligence Unit Country Report

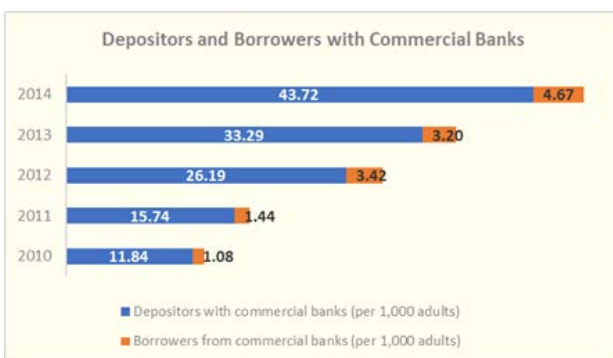


BANKING SERVICES

The Congolese financial system is shallow and underdeveloped. It comprises 18 licensed banks; a state insurance company (SONAs) and the National Social Security Institute (INSS); five specialized institutions; 143 MFIs and cooperatives; 59 transfer institutions; three electronic money institutions, and 16 forex exchange bureaus. There is neither a stock market nor a debt capital market (90). More than 90% of adults in DRC do not use banks. Instead, people rely heavily on community-based savings (91).

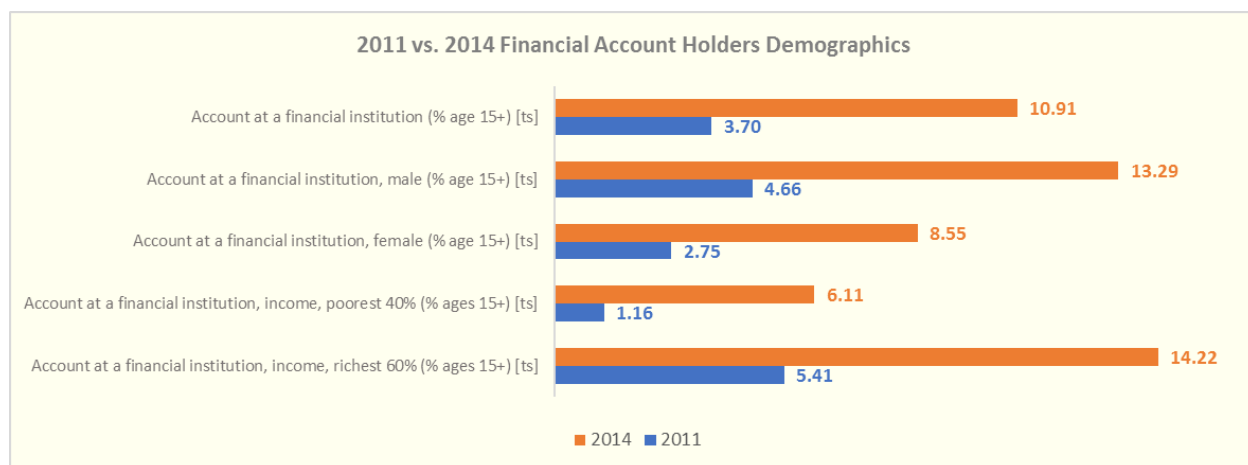
Though most of the country remains unbanked, the proportion of individuals with bank accounts has grown tremendously over the past ten years, from 0.8 in 2005 to 46.03 per 1000 adults in 2015 (21). The ratio of depositors to borrowers has remained constant at approximately four to one, despite a more than doubling of the number of people borrowing from the bank in recent years. This growth is shown in Figure 17, while Figure 18 illustrates the changing demographics of financial account holders.

Figure 17: Depositors and Borrowers with Commercial Banks



Source: START Team

Figure 18: 2011 vs. 2014 Financial Account Holders Demographics



Source: START Team

However, the number of commercial bank branches and ATMs has not kept pace with customer growth. There are about 10 bank branches and ATMs per million people in DRC (21) and this limited coverage may at least partially explain why informal services and community savings are so widely used. Other factors include the lack of deposit insurance protection or other supervisory standards, which expose



the current banking services adopters to financial risk. Overall the low infrastructure coverage as well as the lack of regulation have made banking services less attractive to people in the DRC.

When the DRC is compared with its neighboring countries (Figures 19a and 19b), the DRC lags far behind in providing domestic credit to support the private sector. Its much smaller portfolio is also exposed to the highest credit default risk. Figure 19a also illustrates two indicators that may explain the lack of incentive for banks in the DRC to expand their business: return on equity is low and cost to income is high.

Figure 19a. Banking System Indicators Comparison (DRC vs. Angola, Zambia and Tanzania)

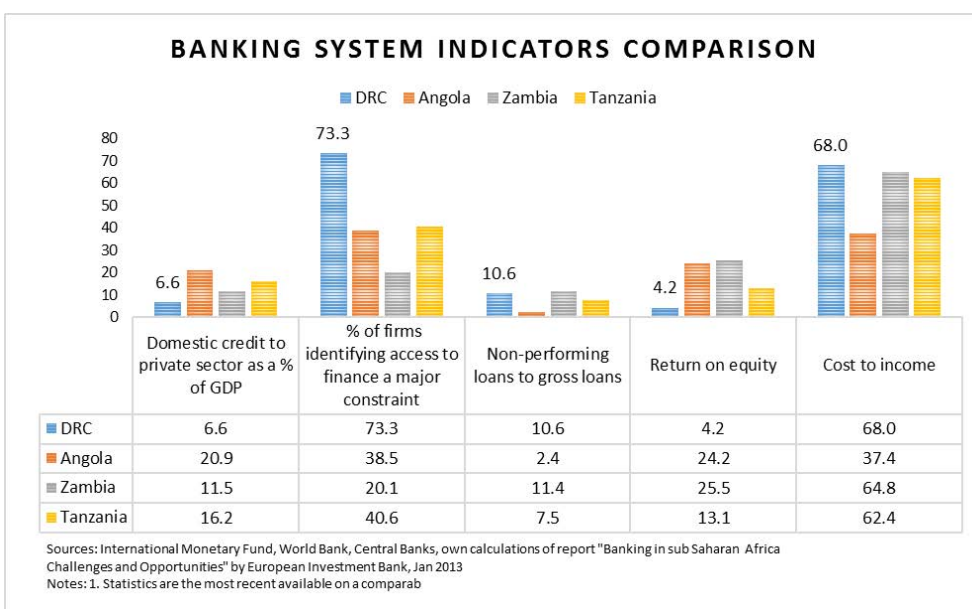
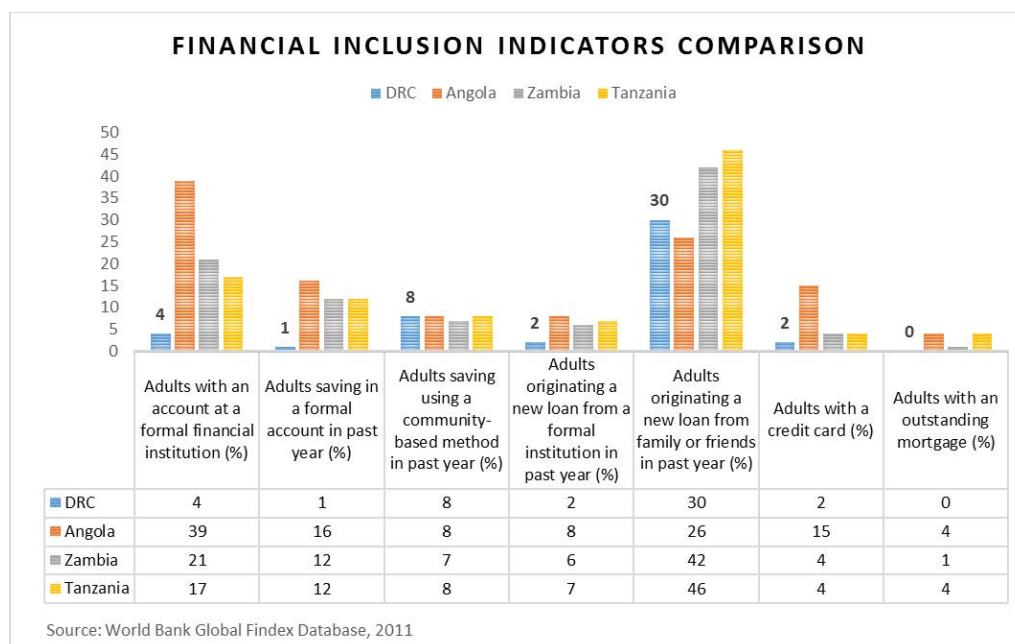


Figure 19b. Financial Inclusion Indicators Comparison (DRC vs. Angola, Zambia and Tanzania)



As shown in the below figure, DRC is behind other sub-Saharan African countries with regards to the advanced supervisory systems. It has not applied the International Financial Reporting Standards (IFRS) or the Basel II capital adequacy standard. Though most people who use banks in the DRC use them for deposits, deposit insurance has not been implemented yet to protect depositors.

Figure 20. Summary of Supervisory Standards by Country

Summary of Supervisory Standards by Country

	Accounting Standard	Capital Adequacy Standard 1/	BCPs 2/	Deposit Insurance	Asset Classification 3/
Angola	National	No Basel II yet	< 50%	No Dep. Ins.	< 90 days
Botswana	IFRS	Basel II in progress	> 80%	No Dep. Ins.	90 days
Burundi	IFRS Plan	Basel II in progress	< 50%	No Dep. Ins.	> 90 days
Cape Verde	IFRS	Basel II in progress	50-80%	No Dep. Ins.	< 90 days
CEMAC	IFRS Plan	No Basel II yet	N/A	Implemented	> 90 days
Comoros	National	Basel II in progress	N/A	No Dep. Ins.	N/A
Dem. Rep. of Congo	National	No Basel II yet	N/A	No Dep. Ins.	90 days
Eritrea	N/A	N/A	N/A	No Dep. Ins.	N/A
Ethiopia	IFRS Plan	No Basel II yet	N/A	No Dep. Ins.	90 days

Sources: IFRS.org (jurisdiction profiles, April 2014) and PwC report "IFRS adoption by country" (April 2013); FSI Survey on Basel II, 2.5 and III implementation (Financial Stability Institute, July 2014); Standards and Codes Database; Demirgüç-Kunt, Kane and Laeven (2014); World Bank Survey on Bank Regulation 2012; IMF FSAP and TA reports; Information from IMF country teams.

Notes:

1/ The Financial Stability Institute conducts a survey on the current status report on implementation of Basel II, 2.5, III for non-BCBS/non-EU jurisdictions and publishes unedited responses. The column is based for Basel II on answers to Pillar 1 (Standardized approach for credit risk, basic indicator approach and standardized approach for operational risk), Pillar 2 and Pillar 3.

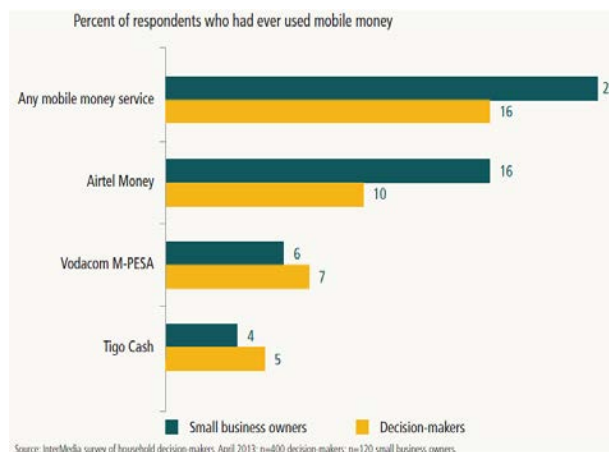
2/ This category shows percentage of compliant or largely compliant BCPs and is based on assessments against the 2006 Basel Core Principles methodology undertaken as part of FSAPs during 2007-12.

3/ This category indicates the threshold of "number of days in arrears" after which loans are classified as nonperforming loans.

MOBILE BANKING SERVICES

The DRC would seem to offer a significant potential market for mobile banking services considering its large population, the limited coverage of banking services, and the recent increases in mobile phone use. Total mobile cellular subscriptions in the DRC has grown sevenfold between 2005-2015 from less than five million to over thirty-five million (21). About 50% of individuals have access to a mobile phone compared to about one per 100,000 who have access to a bank branch or ATM (21). Mobile banking services could potentially mitigate the lack of formal financial access that forces most people to settle their transfers and payments such as salaries and bills in cash. However, surveys suggest that households and small business owners are concerned about mobile network failure and

Figure 21: Percent of survey respondents on mobile money usage



inadequate security of mobile money. To improve the adoption of mobile money, mobile banking service operators need to build trust with its customers by providing reliable network services, investing more in system security, and proving that mobile money delivers better service than cash settlements.

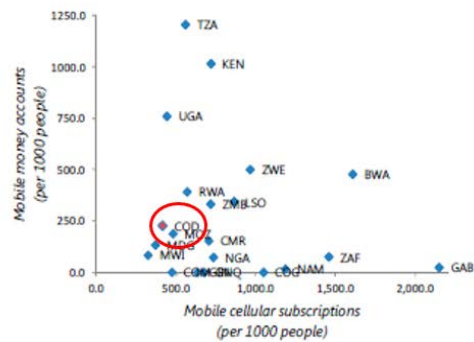
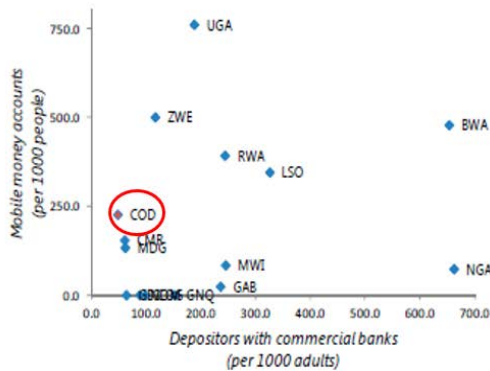
The three figures below illustrate some of the key issues with the mobile banking services in the DRC. Figure 22a shows that mobile money accounts are growing more popular than traditional bank accounts in the DRC, though penetration is low compared to other SSA countries. Figure 22b illustrates how the mobile cellular network, though growing rapidly, still only reached around half of the population, creating a bottleneck to the more widespread adoption of mobile banking services. Compared with some neighboring countries, the DRC has a higher percentage of mobile money accounts (Figure 23), but has plenty of room for growth.

Figure 22a and 22b: Mobile Money Accounts in DRC and SSA

Democratic Republic of the Congo: Mobile Money Accounts in DRC and SSA

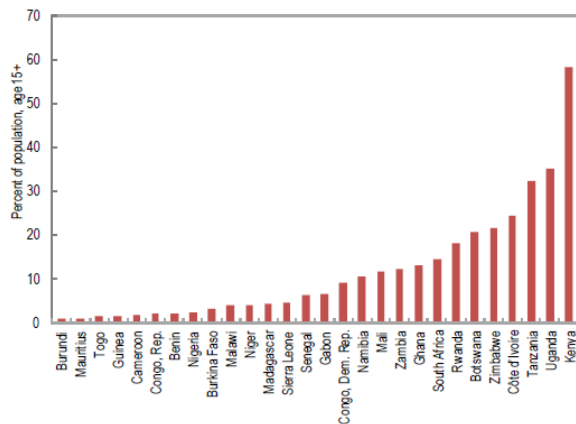
DRC has more mobile money accounts than traditional bank accounts...

...but the low penetration rate of the cellular network creates a bottleneck to more widespread use.



Source: World Development Indicators, 2013, The World Bank.

Figure 23: Mobile Accounts in DRC and SSA, 2014



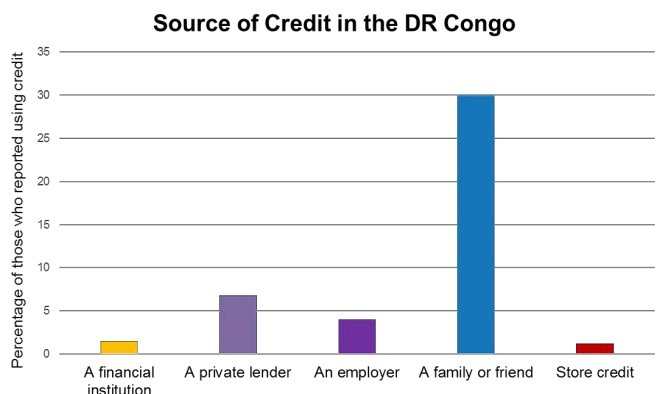
Source: GSMA Mobile Money Programme.



CREDIT SERVICES

Credit services have grown quickly but remain a scarce, expensive, and highly concentrated resource. People are more likely to borrow from a family or friend than a financial institution (Figure 24). Though domestic credit tripled between 2006 to 2013, it reached only to around 11% of GDP, and just 2% of adults have obtained a bank loan, compared with an average of 5% for SSA (90). However, according to the World Bank *Doing Business* ranking, access to credit services remains unfavorable for new businesses (Figure 25). Even though the DRC improved access to credit information by establishing a credit registry, the collection of credit information remains incomplete. Credit services are limited due to deficiency in infrastructure and regulatory management.

Figure 24: Sources of Credit



Source: Demircug-Kunt and Klapper 2012

For personal credit services, the challenge is not necessarily a lack of demand, but rather a resistance to formal lending options. As described in the mobile money section, the DRC has a strong culture of saving and informal lending networks (92).

Figure 25: World Bank Doing Business Ranking 2015

CONGO, DEM. REP.		Sub-Saharan Africa		GNI per capita (US\$)		400	
Ease of doing business rank (1-189)		184	Overall distance to frontier (DTF) score (0-100)		40.60	Population (m)	67.5
✓ Starting a business (rank)	172	Registering property (rank)	142	Trading across borders (rank)		175	
DTF score for starting a business (0-100)	58.53	DTF score for registering property (0-100)	55.39	DTF score for trading across borders (0-100)		29.09	
Procedures (number)	7	Procedures (number)	7	Documents to export (number)		7	
Time (days)	16	Time (days)	44	Time to export (days)		44	
Cost (% of income per capita)	30.0	Cost (% of property value)	9.5	Cost to export (US\$ per container)		3,365	
Minimum capital (% of income per capita)	500.0			Documents to import (number)		10	
		✓ Getting credit (rank)	131	Time to import (days)		63	
		DTF score for getting credit (0-100)	30.00	Cost to import (US\$ per container)		4,290	
		Strength of legal rights index (0-12)	6				
		Depth of credit information index (0-8)	0	Enforcing contracts (rank)		176	
		Credit bureau coverage (% of adults)	0.0	DTF score for enforcing contracts (0-100)		33.51	
		Credit registry coverage (% of adults)	0.2	Procedures (number)		43	
				Time (days)		610	
				Cost (% of claim)		80.6	
		✓ Protecting minority investors (rank)	146				
		DTF score for protecting minority investors (0-100)	42.50	Resolving insolvency (rank)		189	
		Extent of conflict of interest regulation index (0-10)	4.0	DTF score for resolving insolvency (0-100)		0.00	
		Extent of shareholder governance index (0-10)	4.5	Time (years)		NO PRACTICE	
		Strength of minority investor protection index (0-10)	4.3	Cost (% of estate)		NO PRACTICE	
				Recovery rate (cents on the dollar)		0.0	
		✓ Paying taxes (rank)	168	Strength of insolvency framework index (0-16)		0	
		DTF score for paying taxes (0-100)	46.11				
		Payments (number per year)	50				
		Time (hours per year)	316				
		Total tax rate (% of profit)	54.7				

Source: World Bank (3)

MICROFINANCE

The microfinance sector is one of the fastest growing sectors of the DRC economy. If lack of banking services is an opening for the mobile money market, it has already created a market of microfinance in the DRC. Its customer base has grown from 100,000 clients in 2007 to over one million in 2013 (93). They operate under Banque Centrale du Congo (BCC) which licenses and regulates them. In 2011, the DRC government established a “national microfinance fund” to boost the growth of this particular



sector. According to IMF, the DRC's microfinance institutions (MFIs) reported a balance sheet worth almost US\$222 million with over a million accounts opened by September 2013. Among the accounts opened, savings and loan cooperatives (COOPECS) accounted for 60% and MFIs for the remaining 40% (90). Most of the primary COOPECS and MFIs operations are concentrated in the eastern part of the country (88). This could partly be because of the high involvement of NGOs in that area.

The main services provided by MFIs are savings and loans. However, the profitability of those services is weak. The concentration of services, lack of financial management, and internal audit deficiency further prevent the sector from expansion and development. As shown in Figure 26, 34 out of 36 surveyed MFIs are not meeting the profitability indicator requirement and 30 out of 36 are not meeting the capitalization requirement. To mitigate the potential risk, new regulations for microfinance activities were passed in 2013. The new legislation doubles the minimum capital from US\$ 350,000 (2013) to US\$ 700,000 (2017) for those MFIs who take public savings. It also includes other measures to enforce regulatory standards (88). More efforts are required for the microfinance sector to expand financial inclusion and ensure long-term stability, such as a modern payments system and a credit registry for the financial sector.

Figure 26: MFIs not meeting regulatory norms

Democratic Republic of the Congo: Number of Microfinance Institutions Not Meeting the Regulatory Norms	
Key indicators	June 2013
<i>Prudential indicators</i>	
Solvency ratio	13
Liquidity ratio	2
<i>Profitability indicator</i>	
Operating revenues to operating expenses ratio	34
Operational expenses to the average gross loan portfolio	15
Return on equity	27
Return on assets	18
<i>Capital levels</i>	
Capitalization	30
Total number of institutions surveyed	36
Source: BCC.	

REMITTANCE

The African remittance market exhibits a low level of competition and has limited payout presence in rural areas (94). Three major Money Transfer Operators (MTO) – Western Union, Coinstar and Transhorn Money Transfer – control 97% of the remittance market in the DRC (Figure 27 below). People in the DRC primarily use Western Union or MoneyGram for distance transfers and local companies-- including Amis Fideles, STC, Soficom, Solidaire Transfert, and Agence de Freres-- for local transfers. Though large transfer companies also provide local transfer services, people prefer local transfer companies because they have lower fees than banks, good agent networks, and word of mouth reliability. Additionally, local transfer services have lower minimum transfer requirements compared to banks. MFIs have almost no market share of inbound payment of remittances, primarily due to a lack of technical capacity.

Figure 27: MTO Participation in the remittance market in Africa – DRC

MTO participation in the remittance market in Africa (%)										Inbound payment of remittances by institution (%)						
Country	Western Union	Money-Gram	Coinstar	Money Express	Express Funds Inter-national	Express Money Transfer	Trans-horn Money Trans	Money Transfer	Other	Country	Bank	Forex	MFI	Other	Post	Retail
Democratic Republic of the Congo	45	3	29	0	0	0	23	0	0	Democratic Republic of the Congo	25	0	0	67	0	9

Source: IFAD 2009 (93)

DRC Survey, START Center - March 2017



Employee compensation and personal transfers are the sources of the DRC's main inward and outward remittances, according to the World Bank. Data on personal transfers is hard to capture because a major part of the transfers are completed through informal financial services.

Figure 28: World Bank Migration and Remittance Fact Book 2016 - Country Profile

Total remittances: a+b+c+d			
Personal remittances: a+b+c			d
a	b	c	
Personal transfers (standard component in BPM5)	Compensation of employees less taxes, social contributions, transport, and travel	Capital transfers between households	Social benefits

Source: International Transactions in Remittances: Guide for Compilers and Users, IMF 2009.

Remittances

US\$ millions	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015e
Inward remittance flows^a	13	9	15	20	16	115	12	33	22	23
<i>of which</i>										
Compensation of employees	13	9	15	20	16	115	12	33	22	—
Personal transfers	—	—	—	—	—	—	—	—	—	—
Outward remittance flows	32	26	37	31	57	40	55	136	16	—
<i>of which</i>										
Compensation of employees	32	26	37	31	57	40	55	136	16	—
Personal transfers	—	—	—	—	—	—	—	—	—	—

a. Net FDI inflows US\$-0.40 billion, net ODA received US\$2.57 billion in 2013.

Per a survey on mobile money conducted by InterMedia, one-third of the remittance activities occurs intra-regionally among four main regions (Kinshasa, Kongo Central (Bas-Congo), Katanga, and North Kivu). Among the four regions, domestic remittance overshadows any international remittance, globally or within Africa. About 93% of transfers are sent to either the respondent's home province or another province in the DRC; 67% of the transfers received are also domestic (92).

Kinshasa is the second most common destination for transfers coming from Katanga, North Kivu, and Kongo-Central (Bas-Congo). Per survey results, 90% of respondents who send money in Kongo-Central (Bas-Congo) sent it to Kinshasa.

Regular family support is the top reason cited for sending and receiving money, according to interviews with household decision-makers. Other activities like school fees, business activities and emergency help are also mentioned.

Informal remittance is also a prevalent phenomenon in the DRC (Informal Remittance Systems in Africa, Caribbean and Pacific (ACP) countries published in 2005). Many types of operators work to deliver informal remittances between France and the DRC. Due to the political instability, wealthy individuals in DRC leverage informal channels to transfer their assets to another country quickly during periods of conflict. Hand delivery by an individual during his or her travel is widely used and regarded as the most secure transfer. Couriering requires a third person, usually an appointed family member or an acquaintance, to carry the money overseas. However, informal remittance systems pose potential risks such as the theft, customs controls, and lack of commitment of the third-party carrier.

Figure 29: Remittance frequency in different provinces



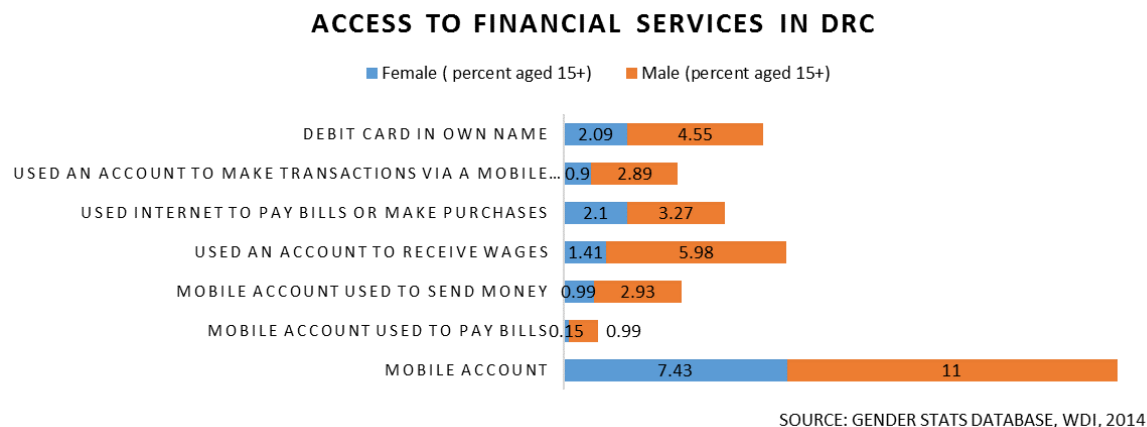
Source: GSMA 2009 (95)



GENDER DISPARITIES IN FINANCIAL ACCESS

Women in the DRC have poor financial inclusion, as illustrated in the figure below. Generally, women are not empowered to make financial decisions, especially when it comes to legal activity such as opening a bank account or making a transfer at a bank. They cannot legally be head of household if they get married. Women in the DRC are at best a marginal part of the financial system, no matter measured by account usage, loans outstanding, or use of mobile money services (95).

Figure 30: DRC - Access to Financial Services by Gender



Additional financial sector tables and figures are available in the Appendix.



KEY CHALLENGES

The DRC experiences many challenges across multiple sectors, each of which are exacerbated by instability and intermittent or recurring crises. The challenges have their greatest impact on women, the poor, and rural communities. We have identified the following as key barriers to health, financial, or physical security:

Infrastructure and Development

- **Weak infrastructure is a major hindrance to economic development.** The unreliability and limited access to electricity, information technology, and transportation limit private sector expansion.
- **Lack of ground transportation contributes to provincial disparities.** The absence of reliable transportation between provinces impedes sharing of information, migration of people, and trading of goods and services.

Health Sector

- **The health system is fragmented and under-resourced.** Health services are divided amongst disparate, disconnected care delivery providers ranging from public to private and religious organizations.
- **User fees inhibit care-seeking and access.** A primary challenge to care-seeking, user fees are prevalent and exacerbate poor access to care.
- **Infectious disease outbreaks are recurring and detrimental.** Recent outbreaks of vaccine-preventable diseases, such as measles, mumps, and cholera, have wreaked havoc in the country and strained limited health resources. The implementation of surveillance systems and laboratory capability, support and oversight for health workers, roll-out of systematic vaccinations, and overall improvements in the primary care delivery platform would effect significant change in this area.
- **The epidemiological transition is increasing chronic diseases.** Increasing rates of NCDs are being identified, and related complications are further burdening the health system.

Financial Services

- **Informal financial services are the primary model for savings and loans.** Formal financial services are increasingly adopted by the general public, but low infrastructure coverage and lack of advanced regulatory management make them less competitive than informal financial services.
- **Barriers to mobile money have inhibited its broad adoption.** The growth of mobile devices and subscriptions has not yet translated to broad adoption of mobile money. Cash-dominant settlements, concerns about network failure, and lack of familiarity inhibit the uptake and utilization of mobile money.
- **Multiple factors must change to grow and sustain the mobile money and microfinance markets.** Improving the payment system, service stability and non-banking sector supervision are all needed for mobile money and microfinance markets to expand.
- **Savings are more common than loans, and domestic remittance is more common than international remittance for households.** Household decision-makers use both formal and informal financial services mainly for savings and domestic remittances.



RECOMMENDATIONS

Perhaps the most important key challenge to address is the foundation for all that we do: data. The lack of reliable data is pervasive in all sectors, but investments that strengthen demographic and health systems data could have broad impact. Investments could include support for the Demographic & Health Surveys, other surveys used in regional countries such as PMA 2020 or PHIA, or DRC-specific surveys. Representative population-based health surveys could be implemented to accurately determine the true burden of numerous health conditions, including both infectious and non-communicable diseases. Surveys could also serve as surveillance tools to identify and track disease outbreaks. More accurate health data is essential to wisely direct future investments that aim to address key health challenges.

It is also important to note that the DRC also has important strengths in various sectors. To advance health equity, we recommend considering targeted investments that leverage these strengths for service delivery and program implementation. Because central government control is weak in many areas due to violence or lack of infrastructure, decentralized interventions that can be implemented and autonomously operated at the local or provincial level could have advantages over interventions that require involvement and coordination at the central government level. The following are examples of strengths that could be leveraged to improve health and financial well-being:

- **Growing mobile phone use.** With proper investments, the increased use of mobile phones combined with stronger mobile financial services could attract people to depend less on the informal cash economy and instead use formal financial services for money transfers, savings, and other financial transactions. Large mobile phone networks also have potential public health and health system applications. For example, mobile phone technology has been used in other low and middle income countries for disease surveillance. This could take the form of either passive surveillance, in which health care providers use mobile phones to report cases of diseases, or active surveillance, in which periodic disease tracking questionnaires are sent to health centers. Additionally, mobile phones could be used to provide training and decision support to doctors, nurses, and community health workers.
- **High rates of prenatal care.** With an estimated 88% of pregnant women receiving some kind of prenatal care, pregnancy is a time when many women interface with the health system in a systematic way. This access could conceivably be leveraged to deliver not only targeted health interventions such as for gender-based violence or family planning, but also to expand non health-sector interventions, such as education, social services, or even financial services to expectant mothers. Prenatal care could be a socially acceptable setting to advance gender equity.
- **Religious and private organizations in the health system.** Though the fragmented health system is problematic, the health care facilities operated by religious and private organizations could be leveraged to implement interventions where government-funded health facilities are weak or nonexistent. These faith-based and private facilities serve specific catchment areas, and



therefore may be suitable for use as “hubs” for implementing interventions. However, using them carries the risk of further perpetuating the parallel health systems that exist in the DRC.

- **Well-structured and decentralized health zones.** The geographically distributed system of 516 health zones, each serving a discrete catchment area and most containing a hospital, could be leveraged for pilot programs or studies where distinct geographic boundaries with well-defined populations are advantageous. These zones could be used for sequential “roll outs” of interventions, or could – with proper human subjects protections – serve as intervention and control areas for stepped-wedge or randomized controlled trials. Another possible way to leverage health zones could be to use them as hubs for non-health related interventions, similar to what was proposed for prenatal care above.

CONCLUSION

Though the DRC faces challenges and wide disparities on many fronts, the country has seen important improvements in some areas, and further investments targeted at the key catalysts of development will be crucial for health, financial, and physical security. Mortality rates have been falling, and life expectancy has been increasing. In the health sector for example, seventy percent of women give birth with skilled attendants, which provides opportunity for further interventions when women utilize with the health system in this way. The downward trend of inflation is expected to continue as a result of prudent fiscal and monetary policies, and there is an increasing availability of financing for government investments. In addition to these promising signs, the DRC has many strengths that could be leveraged for health and financial system interventions. Though the DRC still ranks near the bottom of most global indicators, the identification of these trends and ongoing challenges provides opportunities for the establishment of smart partnerships and innovative programs, leading towards the ultimate goal of improved governance, financing, health, and wellbeing.



APPENDIX

Figure A-1: DRC GDP Contribution by Sector

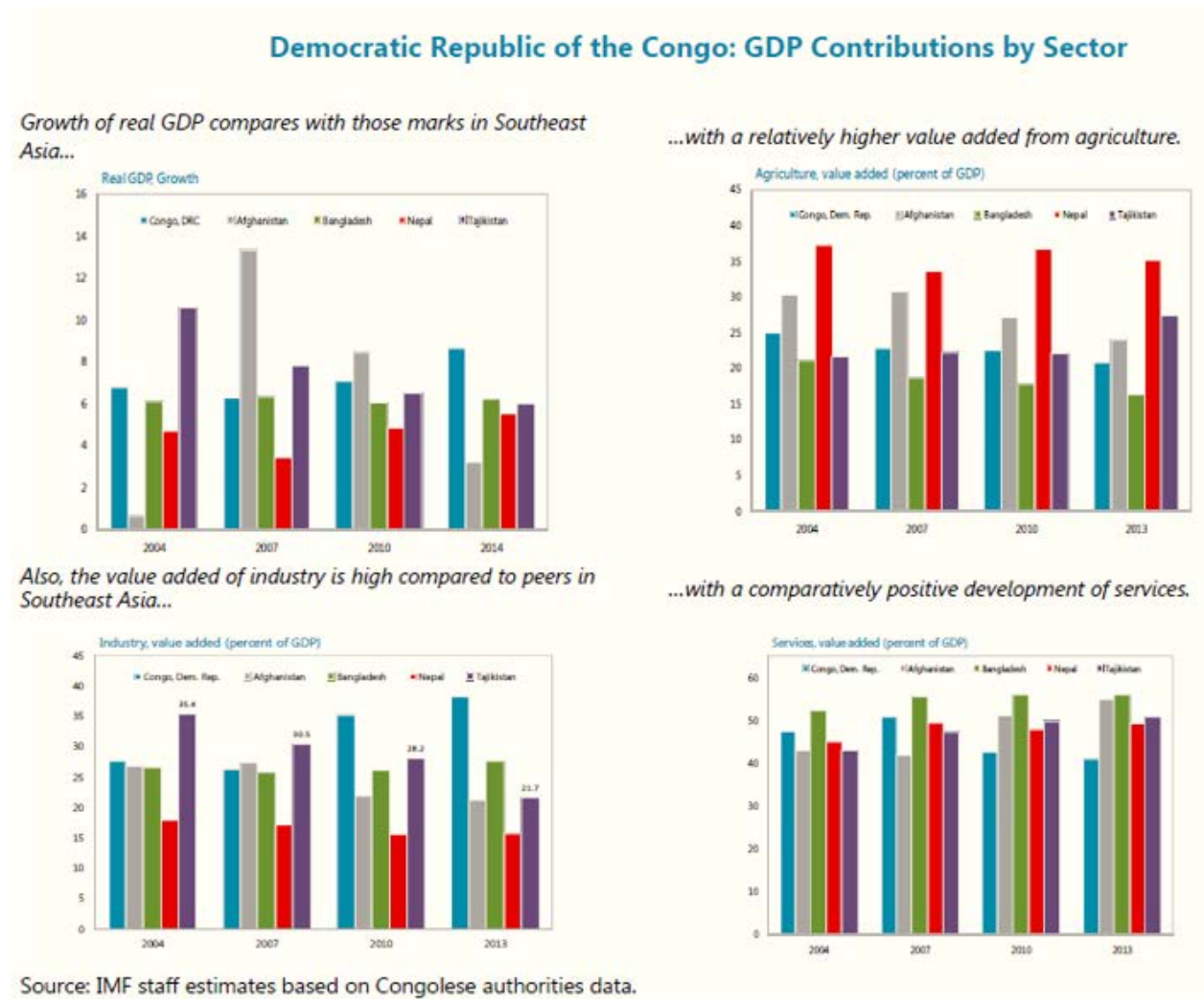
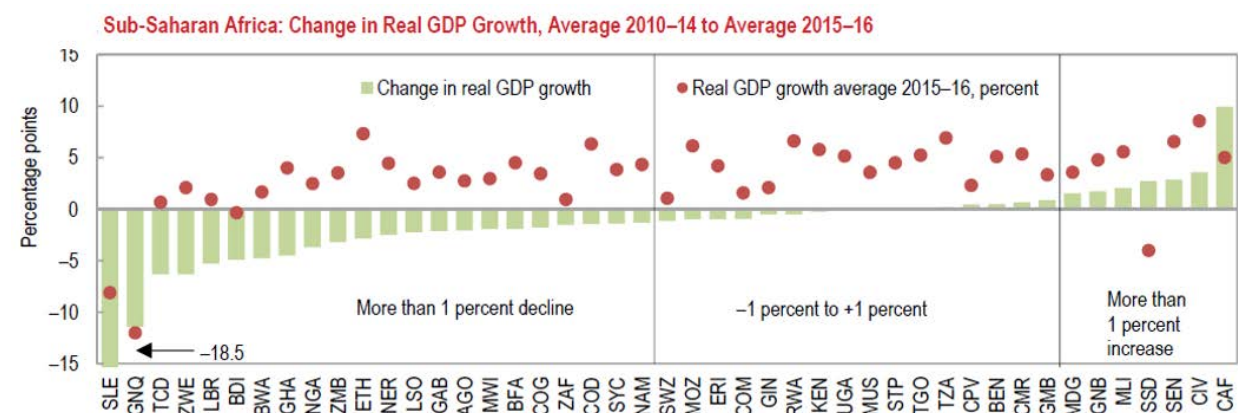


Figure A-2: Change in Real GDP Growth of DRC and SSA



Source: IMF, World Economic Outlook database.

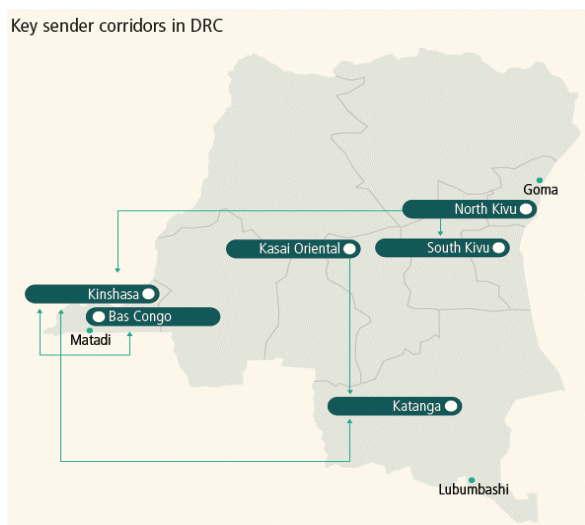


Figure A-3. DRC Microfinance Sector Landscape

Microfinance sector landscape			
Institutions	Number	Deposits (US\$ million)	Loans (US\$ million)
Banks (specializing in loans to MSMEs)	2	150	69
Savings and loan cooperatives	119	122	66
- Primary savings and loan cooperatives (COOPEC)	(117)	(112)	(62)
- Central savings and loan cooperatives (COOCEC)	(2)	(10)	(4)
Microfinance institutions (MFIs)	23	22	29
- Micro-credit enterprises	(18)	(2)	(4)
- Microfinance companies	(4)	(20)	(24)
TOTAL	144	294	164

Source: BCC and FSAP (2013)

Figure A-4: Key Sender Corridors in DRC



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