Implications for Population Health

Improving Financial Inclusion in Ghana

Immediate term approaches to improve financial literacy with the overall goal of persistent poverty reduction, economic growth, and improvements in population health

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Author's Note & Limitations

This report has gone through many iterations of development – it began as a focus on improving the quaternary sector of Ghana's economy, but I had so much fun writing about the macroeconomic landscape that I wanted to explore the overall viability of the financial sector. While researching the financial sector, I started wondering how the poor could access banking, especially for farmers who could benefit from access to credit and insurance. So, I started researching financial inclusion for overall development.

Now, I have settled on investigating how financial inclusion efforts can help address many of the SDGs, including poverty alleviation (#1), good health and well-being (#3), gender equality (#5), decent work and economic growth (#8), and infrastructure (#9). So, it is a divergence from the original prompt – but it has been a lot of fun writing it.

I would also like to note specific limitations about this report. I have omitted:

- Discussion on the many different financial products that are related to financial inclusion, like health insurance or crop insurance.
- Existing literature on the quantification of the impacts of financial inclusion. I have settled on the model provided by Stanford's Social Innovation Review, which characterizes financial inclusion as supporting poverty alleviation by working in many different scenarios (Collins and Ng'weno 2018). Simply put, **financial inclusion supports people in many different small ways** which add up to poverty reduction.
- An in-depth characterization of the many efforts in Ghana for digital financial inclusion, like mobile payment platforms and other strategies.
- More region-specific discussions of financial access, as accurate data was difficult to find. Instead, I take country-level estimates as overestimates of rural participation.

The main limitation, however, is simply the **complexity of financial inclusion** – the impacts are poorly described, comprehensive data is hard to find, and the long-term effectiveness of strategies is difficult to quantify. Even with these limitations, I hope that I effectively grasped the different macroeconomic factors facing the Ghanaian government and the different approaches for financial inclusion. Together, my hope is that the recommendations I provide outlay a multi-sector approach for universal financial inclusion that uplifts people and improves their health.

Christopher Kang

Executive Summary

Northern Ghanaians suffer from extreme, persistent poverty, with poverty rates ranging from **52% to 90%+** (Ghana Statistical Service 2015). This directly impacts population health, with the poorest regions of Ghana holding Crude Death Rates that are **40% greater** than the national average (Ghana Statistical Service 2010).

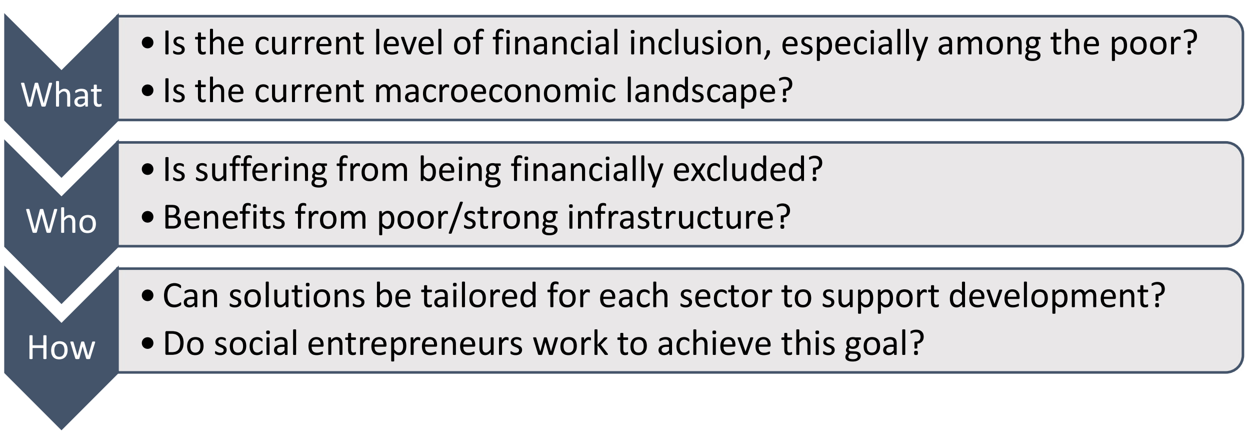
While northern Ghanaians suffer from extreme poverty, **Ghana as a whole is one of the most developed countries in Sub-Saharan Africa**: the country has a composite Sustainable Development Goal (SDG) score that is 18.6% above the region's average (Sustainable Delevopment Solutions Network 2019) and has increased the average years of schooling to 11.5 years over the past decade (UN Development Programme 2019).

What is the cause of this disconnect?

As characterized by the World Bank, much of the economic growth has been **distributed inequitably**, with consumption of the richest growing much faster than the poor (The World Bank 2015). This raises the question: **What strategies can be leveraged to include northern Ghanaians in the incredible economic growth?**

The focus of this paper is **leveraging financial inclusion to integrate the poorest Ghanaians into the rest of Ghana's vibrant economy**, thereby breaking the cycle of poverty and improving population health. I provide sector-specific recommendations to expand financial inclusion in the short- and medium-term. Specifically, this paper:

A. **Explains** the relevance of financial inclusion
B. **Identifies** the impact of these strategies on poverty and population health
C. **Discusses** the context of Ghana, its economy, and access to banking
D. **Provides** recommendations tailored to policymakers to improve financial inclusion by engaging the public, private, and voluntary sectors, with a special analysis on the role social entrepreneurs can play.



Understanding Financial Inclusion

What is Financial Inclusion & its Relevance?

> *"Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs"*
>
> ~The World Bank

Financial inclusion (FI), as defined by the World Bank, occurs when financial institutions **effectively serve citizens with a diverse set of financial products.** On the individual level, FI takes the form of traditional banking, but also mobile money accounts and other niche banking styles. Financially included individuals have money that is safely stored and more resilient to inflation, easier access to credit, and greater resilience from financial stressors.

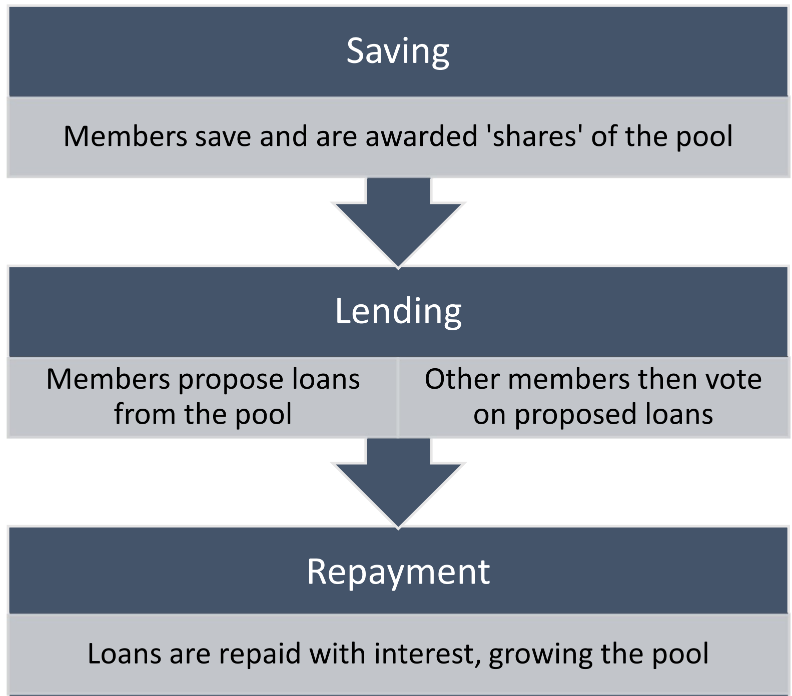
Components of Financial Inclusion

The first major component of FI is **saving**. Saving provides interest to individuals while returning capital to the financial system, supporting the broader economy while simultaneously being more resilient to inflation. This is crucial in Ghana, where inflation hovers around 10%, meaning that cash loses about half its value in seven years (The World Bank 2018).

Saving	FI
• Poor store of value • Subject to inflation • Capital is 'stuck'	• Good store of value • More resilient to inflation (interest) • Capital available for lending

The second component is **affordable access to credit**. When strapped for cash, many rural poor either sell productive assets or borrow from predatory lenders (Bill and Melinda Gates Foundation 2019). Affordable credit spurs investment and enables emergency support.

Credit for poorer people is often termed **microfinance**. One example is Village Savings and Loan Associations (VSLAs), or "a group of 15-25 people who save together and take small, low interest loans from these savings" (Join My Village 2011). VSLAs empower members to save/lend from their communities without needing banks. When implemented effectively, VSLAs show huge promise in generating wealth for savers, with almost 40% ROI in trials (Parker and Thomson 2016).



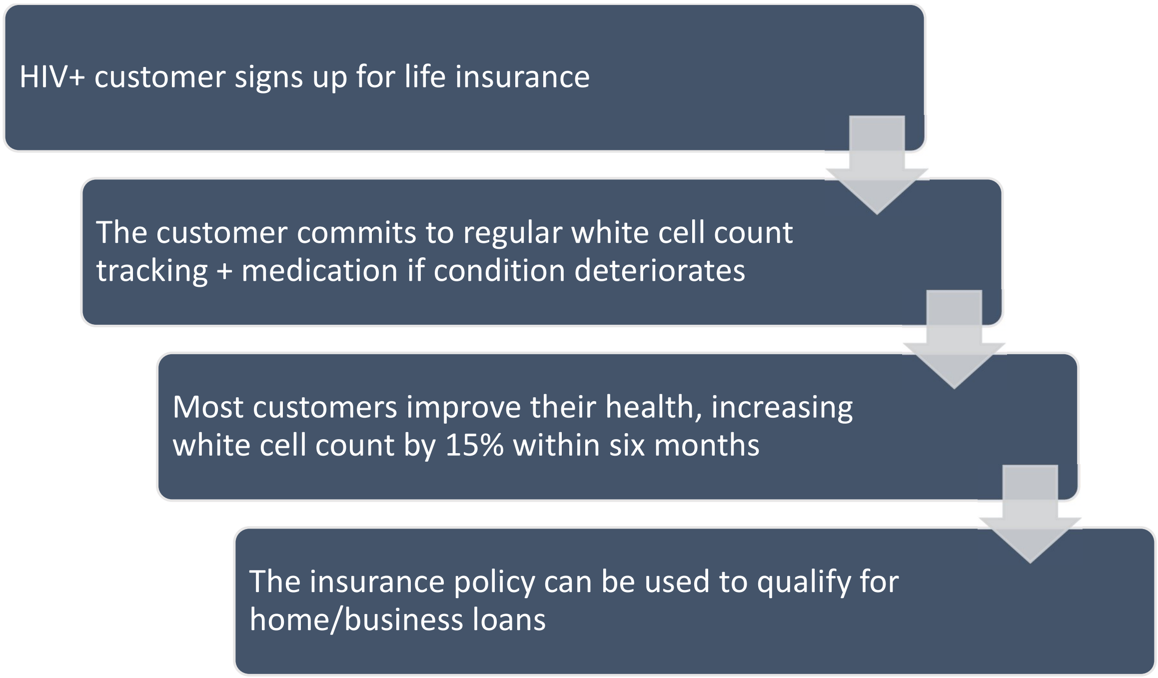
VSLAs are powerful because they **build wealth equitably for communities**. One study in Africa showed that women-centric VSLAs increased saving by 34.5% and increased the proportion of members who were able to receive loans from 31% to 42% (Karlan, et al. 2017). Moreover, requiring minority participation in VSLAs increased financial inclusion for women in these communities.

The final component is access to other financial products outside of savings and credit, or broader financial **resilience**. Financial products like health and life insurance are crucial for preventing relapses into poverty. For example, insurance provides adequate medical care, thereby supporting the ability to work/self-reliance (Morgan and Churchill 2016).

Financial Inclusion & Social Entrepreneurship

Financial inclusion initiatives can often return immediate profits with long-term ROIs. Consider, for example, expansion of lending. Successful loans return dividends which can be reinvested into further loans, while also improving the wealth of the borrower. As characterized by the Bill & Melinda Gates Foundation, "**highly profitable systems can achieve important outcomes for financial inclusion**, as well as systems that mostly break even" (Bill & Melinda Gates Foundation 2013).

While well-known financial products like payment platforms or microcredit have obvious monetization potential, emerging financial products also generate revenue. For example, profitable “inclusive insurance” targeted for lower-income users has shown promise with the rise of mobile payment platforms (Cheston 2018). The business model of AllLife, an inclusive life insurance company for HIV+ individuals in South Africa, is shown below:



Broader Relationships with SDGs

The research into financial inclusion does not fit neatly into a single SDG, but it does align specifically with Target 3 of SDG 9 (infrastructure):

> ***9.3*** *Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets*

While this target may have a limited direct impact on population health, it has huge **secondary effects in the determinants of health**. For instance, economic growth facilitates education, gender and race equality, and access to health services, all of which are determinants of health (World Health Organization n.d.). More broadly, financial inclusion is known to support advances in 10 other SDGs, including poverty alleviation and gender equality (Collins and Ng'weno 2018).

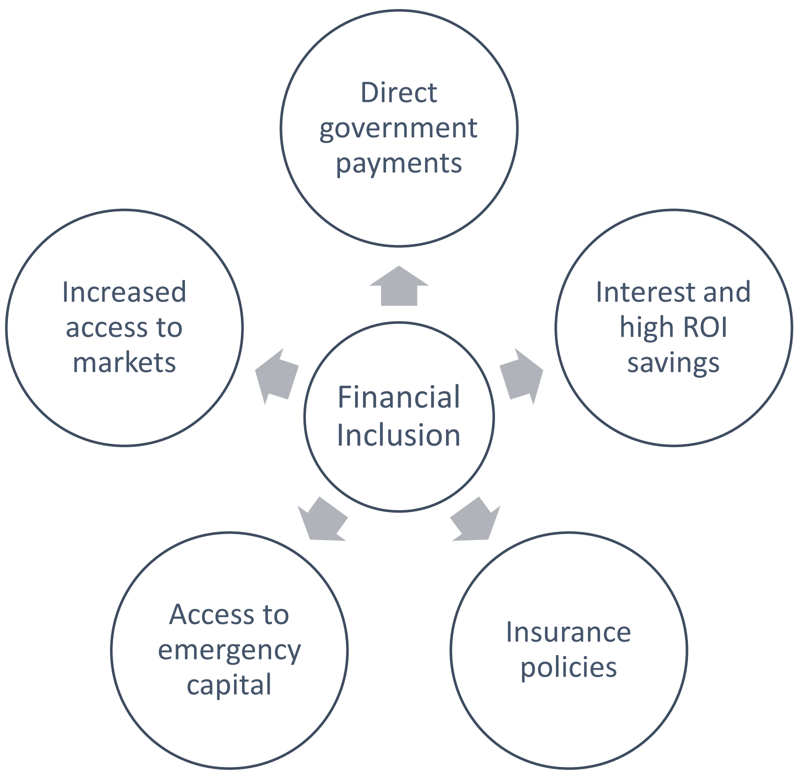
Financial Inclusion & Population Health

Indirect: Financial Inclusion Towards the Alleviation of Poverty

Financial inclusion plays an important, but poorly understood and multifaceted role in reducing poverty. Recent literature demonstrates a strong negative correlation between banking and the likelihood of poverty: access to a bank account decreases poverty by ~7.5% and access to credit decreases poverty by 4.6% (Koomson, Villano and Hadley 2020).

However, quantifying impacts of FI on quality of life is difficult. For example, M-PESA, a mobile transaction platform, only brought 2% of Kenyan households who used the service out of poverty. This study reflects the unique characteristic of financial inclusion: namely, **that it is a catalyst for change**. Switching to M-PESA strengthened social networks and created greater resilience to financial downturns, as users could rely on each other for loans or remittances. **Financial inclusion is a tool that benefits users most when there is a diversity of available products**.

> *"People don't pursue financial health for its own sake but as a means to achieve livelihood goals."*
>
> ~Emilio Hernandez in *Financial Health and the Impact of Financial Inclusion*



Ghana's Banks

What role are traditional banks playing?

While Ghana's banks have become stronger, they are unable to serve the poorest of Ghanaians. Only about 58% of adults have access to finance, with **35% of savers depositing money in banks** (World Bank Group 2016). Additionally, Ghana is primarily cash driven, with over 70% relying on hard cash over mobile banking (GhanaWeb 2019). Thus, the reliance on cash for transactions necessitates a strong ATM network, which Ghana lacks.

Access to credit is also limited: the Ghana Employers Association has compared interest rates to other African nations, stating (Ghana Business News 2019):

> *"In Nigeria the lending rate was 15.4 per cent…and our[s] is still hovering around **24, 25 and 26 per cent"***

Essentially, credit is still tailored to the select few who can afford the high interest rates, locking out Ghana's poor. Thus, traditional banks are presently not major players in advancing universal financial inclusion.

24%+

Interest rate on selected loans for businesses

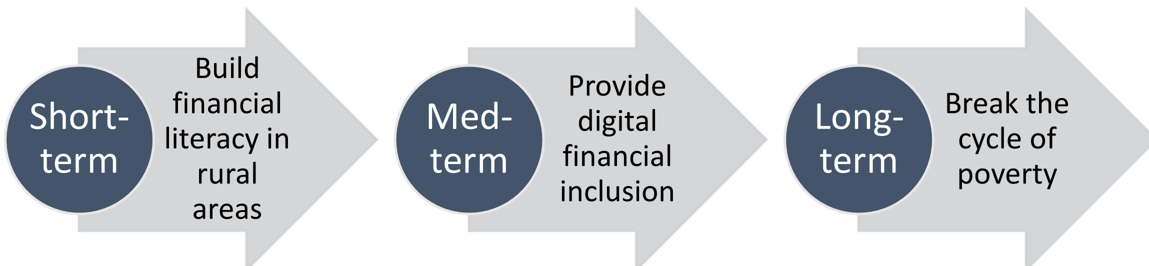
70%

Of Ghanaians rely on cash for transactions

Analysis & Recommendations

A core takeaway from prior analysis on FI initiatives is that they **do not exist in a void**: FI is unrealistic if people lack money or access to necessary equipment. Effective FI strategies for poverty reduction require long-term investments that integrate with other poverty reduction initiatives. Additionally, strategies differ depending on infrastructure, financial literacy, and other community factors.

I provide my recommendations for different sectors to financially include rural Ghanaians. These recommendations exist within two different time scopes: short- and medium-term, which build to the eventual long-term goal of elimination of poverty. **The recommendations focus on leveraging existing and novel FI strategies for the poorest Ghanaians, specifically those in northern Ghana.**



I recommend that:

Term\Sector	Public	Private	Voluntary
Short-	**Equitably investing** in fundamental infrastructure, like cellular networks	**Development** of necessary digital and financial infrastructure, including ATMs	**Continue supporting** analog financial inclusion efforts alongside trials of digital financial inclusion strategies
Med-	**Support investment** in necessary digital and financial infrastructure	**Expand credit initiatives** that leverage artificial intelligence to cheaply provide credit and reduce NPL rates	**Leverage research to expand mobile money platforms** and other digital financial inclusion efforts

Short-Term: Improve Financial Literacy via Analog Financial Inclusion

Strategy

In the short-term, I recommend focusing on universal financial inclusion using "analog financial inclusion." This includes VSLAs and microcredit systems, as opposed to notable mobile payment products. While mobile payment is crucial for the long-term, **establishing financial literacy enables high-impact transitions to complex financial products**. VSLAs and other microcredit institutions are stronger in the short-term because they engage entire communities while gradually introducing financial literacy. In contrast, banking requires significant trust and infrastructure, which poorer Ghanaians lack.

To achieve short-term goals, the voluntary sector must continue to expand analog financial inclusion efforts. Approaches like VSLAs require some equipment and setup to be truly self-sustaining (Join My Village 2011). Private sector banks should continue expanding ATM networks while maintaining strong credit flows. Finally, the government should expand infrastructure that maintains equitable access.

Opportunities for Social Entrepreneurs

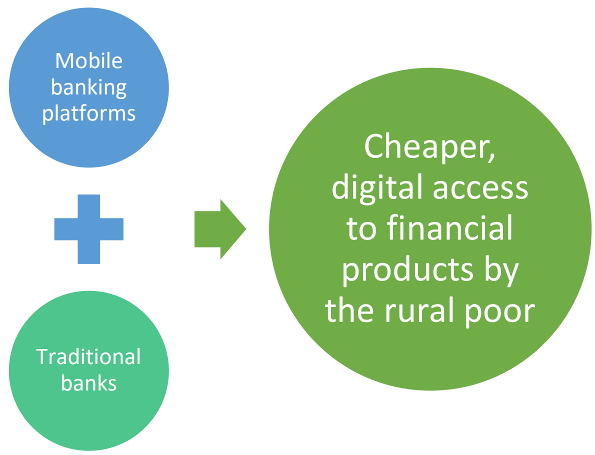
Social entrepreneurs play critical roles in supporting the development of analog financial inclusion efforts. For example, entrepreneurs can train members on effectively running VSLAs and provide necessary equipment/guidelines. Microcredit itself has demonstrated profit: Grameen, a notable microcredit institution, has historically reported a $13 million profit while simultaneously distributing $250 million in loans (Grameen 2017).

Medium-Term: Universal Digital Financial Inclusion

Strategy

In the medium-term, the core objective is transitioning rural poor to modern financial products. Greater engagement with traditional banking enables easier saving, loans, and other products with major impacts for individuals and entire economies.

To achieve medium-term goals, short-term efforts must increase financial literacy and support access to traditional banks/mobile payments. Investments by both public and private sector groups must ensure universal access to cellular infrastructure and ATMs. Banks must integrate with mobile payment platforms. The voluntary sector should continue efforts in promoting mobile payment platforms and leverage earlier studies to inform implementation.



Opportunities for Social Entrepreneurs

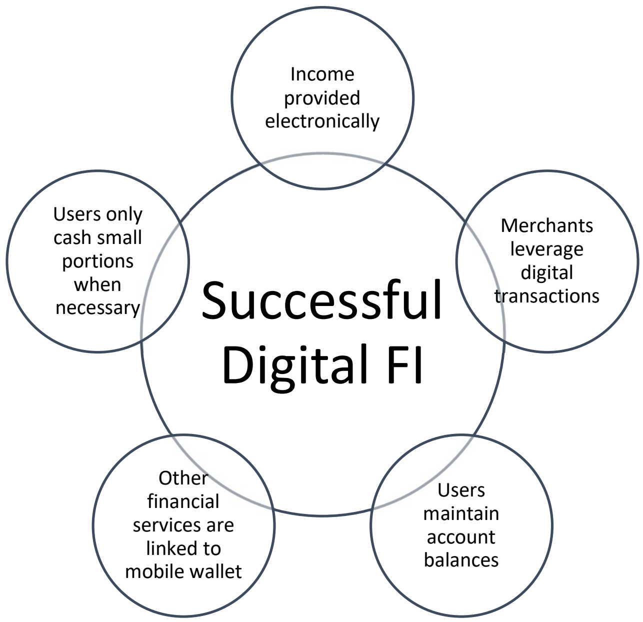
AI powered automated credit systems hold enormous promise for social entrepreneurs. If scaled correctly, automated scoring could increase banking profits by reducing NPL rates, support economic growth, and reduce the overall cost of credit (Wei, et al. 2014). With support from public sector investments in digital / financial infrastructure, existing data can be leveraged towards effectively scoring credit. AI scoring FinTech companies like MyBucks already exist and are actively trialing their products in Sub-Saharan Africa (Latte 2018).

Outside of credit scoring, social entrepreneurs could design new financial products to serve the newly digitized poor. Crop insurance collectives, AI-driven health insurance, and other financial products could all generate revenue and be cheaply administered via mobile payment systems.

Why is Traditional Banking a Medium-Term Goal?

Even with the benefits of traditional banking, VSLAs are a critical steppingstone for many rural poor. Traditional banking and mobile payments face significant hurdles due to lack of trust and financial illiteracy; for example, while the expansion of the mobile money platform M-PESA in Kenya occurred successfully, the system has now been characterized as "**cash in, cash out.**" Namely, many poor receive remittances/government payments through M-PESA, but almost immediately cash out of the system as soon as the payment is received (Stuart and Cohen 2011). This occurs because M-PESA occurs more as an intermediary between government payments and poor people than as trusted digital platform.

A second concern is inequities when distributing new technologies. For example, women often face additional hurdles towards financial inclusion: mobile payment platforms require phones which are often inaccessible to women, evidenced by **a gender gap of 16% for mobile phone ownership** (GSMA 2018). In contrast, VSLAs and microfinance can be **tailored exclusively for women**, improving financial literacy for people who need it most. Thus, efforts should begin with analog financial inclusion, which builds financial literacy and supports digital financial inclusion. Mobile payment platforms and electronic banking will follow.



Conclusions & Considerations

Ghana's strides towards developing its economy and industry bring hope for development in the entirety of Sub-Saharan Africa. However, many Ghanaians still cannot benefit from recent economic growth. This growing inequality has larger implications both for the population health of poor Ghanaians and overall economic growth. While financial inclusion itself will likely not be a silver bullet for economic growth nor population health, it serves as a core piece of infrastructure that advances other poverty alleviation initiatives.

My recommendations focus on universal digital financial inclusion for the elimination of poverty by first building financial literacy among the rural poor, then by extending more complex digital financial products to these communities. While my recommendations are far from exhaustive, I hope they provide insights into strategies for financial inclusion of rural Ghanaians and overall population health improvements.

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