

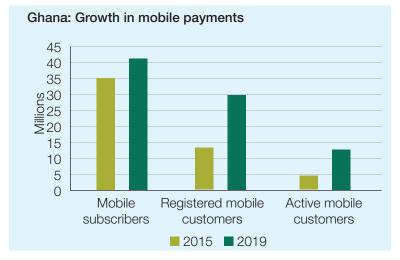


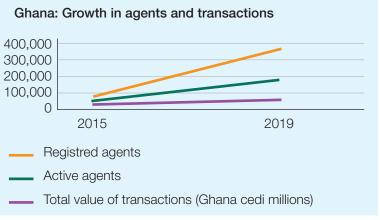
## Ghana and Tanzania – Opportunities and Challenges for Rural Digital Finance

Lilian Mwamdanga, Paa Kwesi Awuku-Darko and Rewa Misra

# Ghana and Tanzania - Growth Trajectories I Mobile Payments Systems

When the Bank of Ghana issued its new e-money guide in 2015, non-bank entities including Mobile Network Operators (MNOs) were permitted for the first time ever to operate as dedicated e-money issuers (DEMIs) as well as owning and operating mobile money networks. Previously, MNOs had no incentive to invest in developing agent networks, however, with the new banking guide the number of active mobile money subscribers climbed nearly three-fold to nearly 13 million customers. Total mobile money transactions grew by 26.75% in value and 39.56% in volume in the first quarter of 2019. The total value of transactions in Q1 of 2019 (Jan-March) was USD 14.7 million. Tables 1 and 2 show the trends between 2015 and 2019.





(\*Source: Bank of Ghana Payment System Statistics 2019)



Tanzania is a more mature market for mobile financial services. The Bank of Tanzania Act was amended in 2006 to give the Central Bank powers to oversee and regulate non-bank entities offering payment services. Account to account interoperability was introduced in 2014, boosting the growth of accounts and transactions. At the end of December 2018, the number of active registered accounts for mobile money stood at 23.3 million, compared to 19.4 million at the end of December 2017, indicating a growth of ~20 percent. Total mobile money transactions grew by 23.1 percent in volume and 14.7 percent in value, compared to the corresponding period in 2017/18. The total value of mobile money transactions between July and December 2018 stood at USD 1,250 million (Source: Bank of Tanzania Mid-Year Monetary Policy Review 2018/19).

#### **Expansion in Rural Areas**

A significant gap for most national or international sources of e-payments data is the absence of data disaggregated by urban and rural locations, making it difficult to assess the rural share in the growth of active users, transactions and agents. It is likely that with the saturation of urban markets in Ghana and Tanzania, providers will look for opportunities to extend services into rural areas. Whereas mobile money penetration has increased in rural areas, one important use case is payments from agribusinesses to producers. In Ghana for example 37 percent of those that (reportedly) receive payments for agriculture products, now receive them through a mobile money account (World Bank, 2017¹). In Tanzania this percentage is relatively smaller (but growing) at 18.7 percent.

Business-to-Person (B2P) agriculture payments are an important opportunity for expanding the use of mobile money. A number of enabling factors are important for relatively infrequent B2P payments that translate into active usage of mobile wallets by rural customers. One key link for success are rural cash-in-cash-out (CICO) agents. Active and liquid CICO agents are critical in the initial stages of mobile money expansion as customers build trust with mobile money. Other critical issues are connectivity, opportunities for digital payments either to merchants or through diversification to other financial products e.g. school fee, savings, etc.

#### **Opportunity for Rural Agents**

AGRA's work with rural agents in Ghana and Tanzania provides insights into the shifting scene for rural payment ecosystems, as well as the emerging challenges and solutions. It reveals how the business case for agents is evolving with agriculture payments projects. Abubakari Abdul-Aziz is a 31-year old mobile money agent situated

in Sang near Tamale in Northern Ghana. In business since 2015, Abdul-Aziz's average monthly transaction count was between of 5 and 15, yielding a monthly commission in the range of \$6-\$12. This categorized him as an inactive agent, conducting less than a transaction a day.

AGRA in partnership with Tanager (Agribusiness Systems International) introduced a project in collaboration with AirtelTigo cash, Vodafone cash and Farmerline Ghana to digitize agriculture payments in the cereals value chains (case study 'Digital payments as key enabler for rural financial inclusion' on www.agra.org). Agribusinesses and their supplying farmers were trained on the use of mobile wallets and the advantages of paying through mobile money as opposed to cash. Tanager, Vodafone and AirtelTigo also set up a network of mobile money agents and field officers to motivate farmers to use their mobile wallets for dedicated saving products and to purchase inputs.

As the project progressed, Abdul Aziz noted a significant growth in transaction counts and commissions. This now ranges from 40 to 50 transactions daily and commission earnings of up to \$75 month on month; a development he attributes to the expansion of farmers registered for and using mobile money services.

The business, while growing rapidly, is yet to reach its potential and Abdul-Aziz admits that rebalancing has remained an issue which was only recently addressed when AGRA facilitated a credit facility from a local bank. Agent liquidity is a well-researched constraint and as rural transactions expand in the more mature markets, agent liquidity will become a significant issue. This is partly due to the high degree of seasonality of transactions but also because rebalancing is expensive since agents incur both the costs of travelling to a super-agent as well as the opportunity costs of lost income during trips. A recent BCG study (2019) estimates an agent may make as many as eight rebalancing trips in a week.

One solution in addressing the constraints to rebalancing is to coordinate with local super-agents with access points closer to rural agent networks. Festo Sanga, a 32-year old mobile money agent, lives in Pawaga village, Iringa in Tanzania. He has been providing mobile money services for almost six years as an M-PESA agent. Rebalancing was a critical issue for Festo at 30-50 daily transactions and monthly earnings of approximately \$152, placing him at the lower end of the average for agents in East Africa (Unnikrishnan et.al, 2019²). This has changed with access to a local super-agent. Sanga's profit is on the rise month to month, and his average daily business today ranges from 65 to 91 transactions with monthly commissions of about \$350.

<sup>1</sup> Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank.

<sup>2</sup> Unnikrishnan, Shalini et.al – "How mobile money agents can expand financial inclusion." Boston Consulting Group, Feb 2019.

In the near future particularly for advanced markets, predictive analytics, float runners and geo-mapping (GSMA, 2018<sup>3</sup>) will increasingly contribute to a robust ecosystem for rural payments.

#### What next?

Agric-payments solutions form the basis of an expanding scaffold of rural digital finance solutions. The increased adoption of digital payments, strengthened ecosystems and data on payments flows opens the path for new savings and input credit products. AGRA Tanzania has partnered with three MFIs including MuCoBa (Mufindi Community Bank) to offer a simple and standardized income-smoothening loan product disbursed digitally in tranches based on the farmers' production cycle. This

product gives farmers an opportunity to receive loans digitally and to save in their mobile wallets. It is also a behavioral nudge to follow good agricultural practices. Similarly in Ghana, third party platform providers such as Farmerline Ghana, Nfortics/Onango and AgroCenta are partnering with banks like Ecobank to offer savings products to smallholder farmers and firms. In order for the mobile money ecosystem to operate effectively, it must have a source of continuous transactions even during off-peak farming seasons. New services such as input finance, and diverse savings products can play a key role in sustaining operations. Given the significant gaps in access to finance, the emerging partnerships and digital services offer strong potential for the inclusion of lowincome households in rural areas.

### **About AGRA**

Alliance for a Green Revolution in Africa (AGRA) is a partnership-driven institution that is African-led and farmer centered. Established in 2006, AGRA places smallholder farmers at the center of the continent's growing economy by transforming their farming beyond the solitary struggle for survival, into thriving businesses. Our partners include African governments, researchers, development partners, the private sector and civil society working primarily with smallholder farmers - men and women who typically cultivate staple crops on two hectares of land or less. Our five-year strategy (2017 – 2021), aims to catalyze and sustain an inclusive agricultural transformation through integrated, country-based investment plans in 11 countries with a high potential for success. The focus is on increasing incomes and improving food security for 30 million farm households with support that strengthens the capacities of governments and private sector through policies, programs and partnerships that increase productivity and access to markets and finance.

For more information, visit: www.agra.org

<sup>3</sup> Juma, Jaqueline and Wasunna, Nic - "Distribution 2.0 The future of mobile money agent distribution networks", GSMA, 2018