INTRODUCTION: Increased flows of finance to the agricultural sector remains one of the critical enablers to facilitate within sector growth commensurate with achieving poverty reduction, food and nutrition security, and employment creation in primarily agrarian societies. Yet access to agricultural financing, let alone commercial cash loans remains poor in most developing countries. Globally, only 1% of loans from commercial sources go to the sector (IFC 2012). In Zambia, this is no different, BOZ (2002-2016). The share of loans to agriculture is 17%; this has declined by 13% since 2004 (ibid). Smallholder farmers are the most financially excluded group within agriculture. Unlike commercial and emergent farmers, these produce very little marketable surplus, with close to...
70 percent having commercialization indices of less than 35 percent. Because they depend largely on the rains for production, their production activities are susceptible to weather shocks. They are also prone to pest and disease attacks for both crops and livestock, and this is at sub-optimal productivity levels (see Braimoh et al. 2018; Binswanger-Mkhize, and Savastano, 2017; van Ittersum et al., 2016; Jayne 2017). Smallholders also lack what is considered quality collateral, with only 9.8% of the 6,166,499 Ha of land under title. Worse, titled land is only among 4.1% of the 1.5 million smallholder farmers (see Samboko 2017). It is for this reason that agriculture contributes the highest share of non-performing loans at 26% and this has more than doubled since 2013.

Value chain financing seeks to address some of these challenges with some successes recorded, yet even this innovation faces challenges. There are inherent challenges with the loan product designs and/or its delivery as will be shown in this paper. All this, coupled with poor adoption of insurance and limited adaptive capacity among smallholder farmers makes them an unattractive market for financial institutions. This is despite Zambia ranking first in Africa, and joint second with the United States of America in terms of getting credit worldwide (World Bank 2018).

If left unaddressed, the attainment of earlier alluded to developmental objectives will be significantly delayed. More so that rapid population growth is expected on the African continent and Asia going into 2050 and agriculture growth will be critical for employing and feeding this youthful population.

In view of this, this policy brief provides insights into potential solutions aimed at deepening smallholder agricultural finance inclusion in Zambia. A detailed exposition on the subject is presented in Samboko et al. (2018).

**DATA AND METHODS:** This study relied on a mixed methods approach involving survey data analysis, key informant interviews, extensive literature review, and focus group discussions. Respondents were drawn from financial institutions, firms and farmers involved in contract farming, savings groups, the Bank of Zambia, and commodity exchanges.

**FINDINGS:** We find that only 14.9 percent of the 1.5 million smallholder farmers in Zambia have access to some form of credit or loan. Of these, the majority cultivate more than two hectares of land and are the most commercially oriented, with a crop commercialization index of almost 50 percent. Of the households that acquire loans/credit, outgrower schemes remain the single most important source of credit for smallholder farmers with an estimated 62% of financed smallholder farmers having indicated accessing credit through the schemes. Thought we note that in some cases, these loans are from commercial sources within Zambia through off-takers.

Typically, this is for cotton, tobacco, and soya bean crops. Friends/relatives and other informal money lenders are the second most important source of credit at 21.3%. While private companies, community based savings groups, the ZNFU Lima credit scheme, and farmers’ unions/cooperatives provide loans to a combined 11% of smallholder farmers. Only 2.01 percent of credit comes from commercial banks, yet this is significantly higher than that from microfinance institutions at 1.1%. To put this value into perspective, BOZ (2016) estimate the loan demand from commercial banks at 2,491 smallholder farmers, however, actual loan approvals are higher at 3,157 smallholder farmers. Community-based savings groups are an important source of loans accounting for 2.4% of the cases.

Zambia has made considerable progress in address financial exclusion, a number of risk mitigation measures are in place to reduce the asymmetric information in the financial sector, to the extent that lending infrastructure is among the best in the world, while Zambia ranks second on the getting credit rankings (World Bank 2018). Additional lines of credit have been mobilized from international sources, and these have different structures, and an agricultural commodity exchange and associated warehouse receipt system is operational, with some grain deposits used to provide input loans in the 2016/17 and 2017 /18 agricultural seasons. Further, legislation to facilitate the development of a credit registry is in place, as provided for under the Credit reporting Act No. 8 of 2018 (GRZ 2018). Moreover, in September 2018, 26 bank charges were abolished in order to improve financial inclusion (BOZ 2018). Despite these developments, more could be done to improve finance flows to agriculture in general and smallholder farmer in particular.

Notable gaps that if addressed could translate into increased finance flows include: (i) the absence of a credit registry that includes the unbanked; (ii) failure to recognize movable assets as of good quality by bank supervision guidelines in relation to immovable assets; (iii) weaknesses in contract farming such as the prevalence of fake seed, failure to consider other farmer needs, side-trading, and double contracting by farmers; (iv) underutilization
of the Zambia Integrated Agriculture Management Information System (ZIAMIS) platform as
financial inclusion tool; (v) high cost of using movable assets as collateral; (vi) political nature of
credit guarantee schemes; (vii) high cost of participation in guarantee schemes; (viii) threatened sustainability of the Zambia Agricultural Commodity Exchange (ZAMACE) and associated Warehouse Receipt System (WRS) due to limited business transactions owing to lack of government participation on the trading platform and very limited commercial orientation among smallholder farmers; (ix) Limited insurance uptake due to the high cost of uptake among poor farmers, and challenges around pay-outs. Firms also face basis risk where they are unable to reliably use satellite data to determine pay-offs, triangulation using local data is costly, and done on a small scale; (x) Low marketable surplus among smallholders with 70% having a commercialization index of under 35%; (xi) Information asymmetry on the smallholder market among financiers (especially banks) means that their loan application assessments are based on preconceptions; (xii) Intermittent and small demand for loans from smallholder farmers that raises the cost of servicing this market; (xiii) Exclusive agency agreements in the mobile money sector that is stifling technology use in financial inclusion; and (xiv) Poor liquidity among mobile money agents. Typically, in rural areas, mobile money agents are less liquid; they seldom have the much-needed cash to pay people demanding the service.

RECOMMENDATIONS: To deepen smallholder agricultural finance inclusion, we recommend the following:
- Enact legislation to outlaw agency exclusivity among mobile money operators.
- Promote financial technology development and use in agricultural finance. Including for cashless transactions, and integration of mobile money operator systems with bank systems.
- Promote the development of commercially oriented farmer groups that can access funds from commercial sources directly, through commodity exchanges (WRS), or through value chain financing arrangements.
- Expedite the development of a credit registry to include the unbanked and link this to the Zambia integrated agriculture management information system. Such a system must also include borrowers from non-banking institutions such as community-based microfinance institution, and contract farming.
- Conduct a capacity needs assessment for ZAMACE and the WRS, to identify required actions and investments to contribute towards its effective functioning. There is need to pilot the procurement and release of FRA reserves through ZAMACE in selected districts. This should be coupled with a proper feasibility assessment vis-à-vis the political economy.
- Strengthen cooperatives and use them as a financial inclusion tool, given the low production volumes by farmers, cooperative (aggregated) deposits on commodity exchanges can help facilitate farmer access to loans through warehouse receipts.
- Promote individual lending to smallholder farmers through the WRS given the limited competition in the banking sector.
- Explore the use of ZIAMIS as a financial inclusion tool. For ZIAMIS to be self-sustaining, it should be purely run as a business, ensuring FIs seeking information to assess creditworthiness pay a fee.
- Reform Central Bank Policy to consider moveable assets prudentially.
- Farmers must be encouraged to form savings groups and save in there to facilitate access to finance. Loan repayment records from these can be used to assess credit worthiness by FIs. For farmers participating in Savings groups, they must be encouraged to save, and make their Farmer Input Support Programme (FISP) contribution at the end of the savings cycle as is currently obtaining.
- Bundle insurance with other risk mitigation measures to improve smallholder access to finance. However, this must be coupled with sensitization on insurance products.
- To increase insurance uptake, there is also need to capacitate extension workers, to better advise farmers on WII. Basis risk in insurance must also be addressed through investments in agromet stations. However, there is need to first understand willingness to pay for such weather information.
- Reduce the cost of participation in credit guarantee schemes, and make sure these are not politicized.
- Financing for equipment by banks must be accompanied with business skills training, services and parts, and additional screening preferably by agents residing in the communities. This must be accompanied with a 20 percent down payment on the value of the equipment.
- FI’s financing agriculture must consider partnering with offtakers and input suppliers in a tight value chain financing arrangement to minimize market risks. However, these must be carefully designed to ensure proper functioning of the financing arrangement.
In contract farming (including VCF), there should be a dual-regulation system involving the private sector and government, but this must be adequately capacitated to effectively monitor the value chains being financed. Farmers should also be assisted in product grading.

To curb side-selling, there should be incentive-based contracting that rewards good behavior. In addition, contracting firms should also provide credit for non-agricultural credit that takes into account the other needs of the household. The provision of advance payments to the farmer against what they will supply to bridge the gap between sales and meeting their daily needs. We also recommend the bundling of credit with life insurance and/or seed germination insurance to minimize risks. Contracting arrangements should include extension service provision, with loan officers having an agricultural background and offering advice to farmers on a broad range of issues. There is need to promote seed multiplication for contracted commodities, and enhance monitoring of fake seed on the market, particularly for soya beans.

REFERENCES


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