

RURAL CREDIT ACCESSIBILITY AND ITS IMPACT ON AGRICULTURAL PRODUCTIVITY: A CASE STUDY OF GHANA

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ABSTRACT

Rural communities across the globe continue to lack access to productive assets in their quest to maximize productivity and escape poverty. Rural areas particularly in developing countries lack access to credit facilities to boost agricultural production. Meanwhile, the strong linkages between agriculture and poverty reduction are never doubted. This is because growth in the sector is thrice more effective in reducing poverty than growth from other sectors. Obviously, agricultural productivity growth is critical in reducing rural poverty. However, smallholders in developing countries especially in Sub-Sahara Africa (SSA) continue to lag behind as far as agricultural productivity and poverty reduction are concerned. The sector in SSA is characterised by low productivity due to endemic constraints including but not limited to lack of financial resources. It is estimated that 2.5 billion people in the world lack access to financial services and the majority of such are engaged in agriculture and related activities.

Credit is indispensable in production systems and thought to be a key requirement for enhancing rural welfare. The issue of credit accessibility is particularly pervasive in Ghana. It has been recognized that inadequate access to credit remains a central concern to rural farm households and a major deterrent to agriculture productivity maximization efforts. Current knowledge on rural credit constraint is scanty. More so, the connection between credit and agricultural productivity is blurred. The current study seeks to empirically clarify the connection between credit and agricultural productivity for poverty alleviation and sustainable

development at the household and community level by exploring the dynamics and complexities of the issue (s) using Ghana as a case study.

The study verifies two key hypotheses; (1) that improvement in productivity is critical in accessing credit in early stage of development and access to credit allows households to diversify their livelihood and (2) households doing other jobs aside from crop farming are likely to have access to credit. Cross-sectional data were collected with structured questionnaire from 109 farm households who were categorised into borrowed and non-borrowed households. The questionnaire captured socio-economic characteristics of the households. The study computed the average yield and profit of each household and subjected the differences to statistical test and further investigated the factors accounting for the productivity differences. In addition, Probit model and Cobb-Douglas production function were used to estimate credit constraint and the relationship between credit and agricultural productivity respectively.

The results reveal that 66% of the sampled households do not have access to credit. Inputs expenditure behaviour analysis shows that non-borrowed households on average spend more (GHc 675.6) on inputs than borrowed households (GHc 652.6). However, the yield productivity of major crops (cassava, maize and yam) of borrowed households is larger than that of non-borrowed households and the difference is statistically significant at 5% confidence level. Average profit of borrowed households (GHc 468.14) is also larger and statistically different from that of non-borrowed households (GHc 323.48). Borrowed households were found to be technically efficient than non-borrowed households and their efficiencies are attributed to the technical advice from lending institutions as a part of the credit packages. Furthermore, borrowed households on average are less advanced in age, have larger family size and more years of education than non-borrowed households. However, the main factor that distinguishes borrowed households from non-borrowed households is

livelihood diversification. The reason is that financial institutions prefer given credit to diversified households because of their ability to spread risk across a number of income generating activities. Borrowed households borrow for the purposes of non-farm business activities and purchase of farm inputs. Non-borrowed households on the other hand do not borrow due to high interest rates and complex application process.

The probit model result shows that livelihood diversification, household size, savings account, technical efficiency and gender are the significant factors that influence accessibility of credit by households. The significant positive coefficient of diversification clearly lends support to the hypothesis that diversifying ones activity is critical in accessing credit. Not only diversification but also technical efficiency as a proxy for household productivity is also a key factor.

The production function result shows positive relationship between agricultural productivity and credit (represented by variable inputs such as labour, fertilizer and improved seeds). Particularly, the coefficients of inputs usages among borrowed households are found to be larger than that of non-borrowed households which also lend support to the technical efficiency claim on the part of borrowed households. The result again exhibits increasing returns to scale which means that if a household double the usage of variable inputs in the course of production process, productivity will increase more than doubled.

The study lastly proposed household development transitional model. The model is a synthesis of the whole results. It is hoped that its usage will help improve productivity to contribute to poverty alleviation of households.

The results of the study imply that for a household to access credit, they should first increase productivity. This can be achieved by diversifying crops such as growing vegetables. Then at second stage, access to credit will make the households diversify more and access more credit thereby widely spreading risk and reducing vulnerability. The results again imply

that policies that support crop production only are not enough. Promoting diversification of income generating activities such as vegetables, snail farming and gari processing would be critical in helping households to have access to credit, increase productivity and alleviate poverty.

The study has made three major contributions; firstly, it has empirically clarified the relationship between credit and agricultural productivity and contributed evidence to support the current discourse on the potentiality of credit as being a poverty alleviation tool. Secondly, it has identified technical efficiency and livelihood diversification as key determinants of credit accessibility and thirdly, the study has proposed transitional model with the potential of improving productivity and contributing to poverty alleviation.

However, many are the questions that the study failed to answer. For instance, how viable and sustainable are the non-farm activities? The author would like to take the current study further by empirically investigating deeper into the interconnections and complexities between livelihood diversification, vulnerability and resilience of rural households. By understanding diversification in the context of sustainability and resilience, policy can be informed on the best interventions to enhance rural welfare.

Key words: Agricultural productivity, Credit, Diversification, Technical Efficiency, Ghana