

## **FARM HOUSEHOLD'S FINANCIAL LITERACY IN NIGERIA: A REVIEW**

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### **INTRODUCTION**

Agriculture, and especially the primary agricultural production, is characterized by a series of specificities (seasonality and organic character, slow capital turnover, etc.), due to which it is more demanding regarding other economic activities from the financing point of view. Unquestionably, a limited source of financing is one of the critical problems of farmers. Due to paucity of funds, farmer usually depends on other sources of funding, such as bank loans, government subsidies etc. (Paraušić, Cvijanović, 2006). However, the farmer in Nigeria does not have a sufficient level of financial literacy, which significantly hinders access to additional sources of funding. Financially literate people can make sound financial decisions, and make informed choices between different financial products and services, budget and plan ahead to build up some savings, protect themselves against financial risks and invest prudently and to understand their rights and responsibilities (Boekhold, 2016). According to OECD (2015), there is a greater tendency to over-indebtedness and bankruptcy in the absence of financial education in the modern globalized world. Traditionally speaking, the need for financial literacy is something that is commonly associated with the adult. The global financial situation has led to a completely different perception. The situation has shown that a large number of individuals worldwide have lost entire property as a result of insufficient financial knowledge. According to World Bank (2011), financial education should be introduced in the formal education system right from the lower grades of elementary school. According to FED (2010), one of the critical lessons of the financial crisis is the importance of financial literacy. In addition to improving the decision-making process about personal finances, teaching pupils about basic economic principles will help them to better understand and deal with some of crucial issues efficiently (Fabris, Luburić 2017). Promoting financial education and a positive financial culture in children

and youth is essential to ensuring a financially literate population capable of making informed decisions (UNICEF, 2013).

### **Critical issues of financial literacy in Nigerian agriculture**

The majority of agricultural producers in Nigeria do not have a sufficient level of financial literacy, which significantly affects the opportunities of growth and development for farming enterprises. Most of them have only agricultural experience obtained from the practice. A few finished an agricultural secondary school or college/university in agriculture.

Comprehensive observation and analysis of financing literacy in agriculture show there are several key areas could be the most significant for farmers in Nigeria: 1. Agricultural finance and accounting, 2. Agricultural record keeping, 3. Agricultural production and sales planning, 4. Bank loans, 5. Forms of farmers' associations, 6. Commodity exchange. The first necessary step in increasing the financial literacy of farmers is training in the field of agricultural finance and accounting. In the preliminary stage, it would explain the most important financial terms, such as fixed and working capital, depreciation, long-term and short-term liabilities, revenues and expenditures, profit and loss, liquidity, solvency, cost-effectiveness, bookkeeping principles, etc. Farmers need to learn the essentials in different calculation of agricultural products' cost price, which is a precondition of every long-term planning. Very often, farmers in Nigeria start a long-term production without calculating agricultural products' cost prices, expected revenues, and other elements of a simplified business plan. The required level of training in agricultural finance and accounting would be determined by the target group of farmers: farm size, activities, investment plans, etc. Financial cost-benefit analysis of different investment activities, which can be the purchase of expensive equipment or the decisions on mineral fertilizers quantity, is of utmost importance because the highest yield is not the most profitable at the same time (Živanović *et al.*, 2016). Of great importance within the financial stage of education is the improvement of knowledge in the field of different incentives available for farmers. Besides a lack of financial planning, most of agricultural holdings in Nigeria do not keep records on work processes that they perform, as on the specific parcels as well as on the entire production area. The result is a lack of precise data on the implemented agro-technical measures, consumed outputs, quality and quantity of obtained yields, and environment at the holding level. In this respect, great importance is the Fields Book, which is an instrument (data source) of production management. The Book is for recording the implemented agro-technical measures, production cost, and the obtained yields on parcels, and records for grown crop, fruit and vegetable cultures. The Field Book contain information such as soil analyses, fuel consumption, fertilizer application, phytosanitary protection, irrigation as well as all other operations for every culture and parcel separately. The Fields Book indicates, in a way, the literacy of a manager of an agricultural holding (Zakić, Kljajić 2016) in view of the fact that long-term production planning

requires market analyses. A farmer with the aid of market information systems can predict price trends for farm produce, and therefore chose the most favourable farm enterprise. Besides the selection of production, market analysis plans also determines the time of maturity of products. While selling agricultural products, financial knowledge and proficiency in marketing channels and marketing techniques are important for the success of the agricultural products sale. Marketing channels do help to overcome discrepancies during the marketing of agricultural products, thereby leaving farmers more opportunities to improve their financial knowledge (Nikolić, Popović, 2016). In terms of limited own financing resources and incentives, it is necessary for farmers to receive education in the field of bank loans. It could imply education in: types of credit/loan (commercial, subsidized, credits granted on commodity notes as collateral, etc.), types of interest rates (fixed interest rate and variable interest rate), the loan approval procedure at the bank, forms of loan provision (mortgage and pledge), types of interest rates (an effective and nominal interest rate, a reference rate etc.), payments instruments, etc (Zakić, Kljajić, 2016). Little confidence in the banking sector was formed as a result of high interest rates, relatively small total amount of agricultural credits which leads to high fixed costs of granting and repayment of loans, lack of expertise and experience of banking staff in dealing with agricultural producers but also the lack of experience and expertise of farmers in developing and presenting business plans. In this sense, any program for improving the financial literacy needs to be aimed significantly toward training courses for making business plans (Subić, Kuzman, 2016). Also, an increase in knowledge level in the field of association (cooperatives and clusters) is important. Cooperatives have had a significant role in the development of agricultural production in both developed as well as developing countries.

Cooperatives are facing different challenges. A conducive legal framework needs to be introduced and effectively implemented in order to enable the re-establishment of a healthy and prosperous cooperative sector in Nigeria.

Agricultural cooperatives could enhance the state of financial literacy of its members (Ševarlić, Nikolić, 2012). To increase financial literacy from the aspect of the association, the education of farmers should involve: significant and different forms of association, presentation of impressive results of a cooperative sector in developed countries, an expression of the new Law on cooperatives, expected incentives which are often announced in media, etc. Finally, of great importance could be the training in the area of commodity exchange and its role in the management of the business risk of agricultural enterprises, the instruments of the non-standardized future market (forwards), and standardized future market of commodity reserves (futures deal and options), the role of a clearing house as a warrantor, the system of pre-harvest financing etc. (Zakić *et al.*, 2014). This “advanced level” of education can be important for small individual farmers as well as for owners and managers of big corporate companies in the field of

agribusiness. It is therefore expected of science to transfer necessary knowledge and skills to agricultural holdings. By the adoption, they would be in a position to plan more efficiently, organize, fund, and manage the production process, save on inputs, produce more significant amount of healthy/safe products respecting the principles of environmental protection, and sell successfully everything manufactured on the local and regional markets; in a word, to affect the strengthening of their business independently.

### **OBJECTIVES OF THE STUDY**

The broad objective of the study is to assess the financial literacy of the farm households in Nigeria. The specific goals are to:

- (i). evaluate their level of financial literacy,
- (ii). investigate awareness, adoption, and willingness to adopt innovation

The focus on rural development is rooted in agriculture, health, education, and infrastructure's strategic importance in development, with 70 percent of the population living in rural areas, almost half in abject poverty. Financial literacy and the inclusion of farm households are one of the central strategies for rural development. And the centrality of rural development to any strategy for poverty alleviation is apparent.

### **LITERATURE REVIEW**

About two-thirds of the developing world's three billion rural people are in about 475 million small farming households, working on land plots smaller than 2 hectares (Nagayets, 2005). Many are poor and food insecure and have limited access to markets and services. Their choices are constrained, but they farm their land and produce food for a substantial proportion of the world's population. Besides farming they have multiple economic activities, often in the informal economy, to augment their small incomes. These small farms depend predominantly on family labor. In China, nearly 98 percent of farmers cultivate farms smaller than 2 hectares – the country alone accounts for almost half the world's small farms. In India, about 80 percent of farmers are small. In Ethiopia and Egypt, farms smaller than 2 hectares constitute nearly 90 percent of the total number of farms. In Mexico, 50 percent of the farmers are small; in Brazil, smallholders make up 20 percent of the total number of farmers (Lowder *et al.*, 201). In Nigeria, however, smallholder farmers own 0.5 hectares of land on average, predominantly managing mixed crop-livestock systems, including fish farming (FAO, 2016). Majority of those who till the ground or rear livestock in Nigeria cannot be termed 'farm household' because the term "farm households" is defined as any operation with \$1,000 or more of annual sales from agricultural products including crops, livestock, and timber (Economic Research Service, 2005).

The differences in smallholder farms between countries can be significant, and often reflect differences in the stages of development across countries. This is because the evolution of the small farm is intrinsically related to the process of economic growth. But across all stages of development, smallholders operate their farms as entrepreneurs operate their firms, or at least they try. These smallholders raise capital from multiple sources and invest in productive assets; for many of them, even a spade or a bicycle is an essential assets. They make choices and take both risks and profits. Agriculture involves many decisions: what to plant, which inputs to use and how, when to plow, seed, and to harvest; how much to keep for consumption in the household and how much to sell to raise cash, or how much to store. Smallholders often make these decisions in an economic environment where markets do not function well, if at all, and which is also subject to many risks, such as adverse weather and price surges. And this has significant implications for their choices and their livelihoods. It also affects their choices on investing in themselves and their children; on attaining social and human capital objectives, such as education and health.

### **Financial literacy**

Farm households are an under-served audience because sizable financial service firms and financial education providers are often not located nearby, making it challenging to access personalized investment information. In addition, they have unique investment education needs. For many farmers, the measure of their wealth is a function of land asset possessed instead of savings in an account. Further, if substantial assets are required for retirement or long-term care, land can be a secured asset for borrowing, assuming cash flow from the farm operation are adequate to service the debt. Thus, knowledge of available investment products and their characteristics, as well as investment risks in general, the benefits of tax-deferred investing, and types and indicators of investment frauds are critical to farmers' financial security in later life.

Without question, demand-side barriers have played a role in preventing growth in the smallholder finance market. These are large and familiar challenges: lack of producer organizations and structured value chains for smallholders; low financial literacy and financial management skills among farmers; and low productivity, margins, and cash flow for servicing loans.

Assessing smallholder loans and designing appropriate financial products requires specific agricultural expertise that many smallholders lack or have difficulty acquiring. While banks report that the margins and average risk for smallholder lending is similar to the rest of their lending portfolios, the risk distribution is skewed toward occasional harmful spikes that can undermine profits in down years.

The lack of reliable insurance or reinsurance products for smallholders further contributes to banks' discomfort with lending. Another significant barrier to standard lending practices is the absence of land titles (for collateralization) and credit bureaus (for customer assessment). It is of little wonder, then, that most local banks do not readily lend to smallholder farmers.

Financial institutions do collaborate with local agriculture expert to design loan with flexible repayment terms. The goal of this collaboration was to checkmate default in loan repayment. The repayment is linked to a specific crop circle. And to manage risk effectively, the most innovative banks have developed an intimate knowledge of value chains and buyer relationships To gauge future cash flows and improve the credit assessments of smallholders.

### **Technology adoption**

In many parts of the world, especially in South and East Asia, growth in agricultural productivity has been rapid primarily because of the adoption of new farm technologies. For instance, for millions of poor people in Asia, the technological advances of the green revolution (complemented by a massive increase in irrigation) provided a route out of poverty by directly increasing producer incomes and wages, lowering the price of food, and generating new livelihood opportunities as success in agriculture provided the basis for economic diversification. Thus agriculture led the Asian industrial revolution (Wen, 2015).

However, to be effective, agricultural technology must be appropriate. An appropriate technology must relate to the developmental objectives of the sector, and the production problems of the farmers. The criteria used to test the appropriateness of a technology are ecological considerations, socio-cultural considerations, simplicity, labor intensity, divisibility and riskiness (Ayoola, 2008; Odii, 2003). New technologies come in two different forms (i) new products such as chemicals to control pests, and drugs to control diseases, or sensors and computers that automatically control moisture conditions and (ii) new processes such as the ability to make better economic decisions or apply the best combination of cultural practices.

Adopting technology requires adequate incentives for producers, because investment in labor and cash will not be made unless there are sufficient returns. According to Maduekwe (2008), one of the most important supporting factors for technology adoption is the adequacy of markets for output and inputs. Idisi and Obi (2005) observed that Nigeria had entered the advanced agricultural and information technology era with (a) falling farmland values and (b) a growing lack of comparative advantage in producing traditional Nigerian export, commodities. This decline in agricultural export he observed, could significantly account for the current low income of Nigerian farmers. According to Ike (2008), the components of improved crop production technology in Nigeria include (i) high-yielding varieties, (ii) timely planting, (iii) fertilization,

(iv) improved cultural practices, (v) minimum tillage and, (vi) use of pesticides. The author, however, is of the opinion that small-scale farmers have low access to such technologies.

Silva and Broekel (2016) observed that generally, new technologies have a beneficial effects on the environment and natural resources in two ways (i) most of the technologies are expected to increase productivity and thus reduce the land and water requirements for future agricultural needs. As a result, these technologies are expected to reduce environmental problems associated with land and water, namely soil erosion, threats to wildlife habitats, and contamination of the environment. (ii) Most new technologies are biological and informational rather than mechanical and chemical which prevailed in the past. For instance, new vaccines produced using recombinant Deoxyribose Nucleic Acid (DNA) techniques are safer than transitional vaccines, and genetically altered diseases and insect-resistant crops could reduce or eliminate the use of chemicals that contaminate the environment.

However, it should be noted that not all technologies are environmentally friendly (or even beneficial). New tillage technologies that reduce soil erosion could threaten wildlife because of increasing damage from agricultural chemicals. For example, genetically engineered new herbicide-resistant varieties of crops could cause farmers to use much higher levels of herbicide than currently being used in weed control. For these reasons, Maduekwe (2008) maintained that in making decisions about new technology, policymakers should consider international competition, benefits to agriculture, and other industries, as well as the ethical, social, environmental and public health impacts of the new technology.

## **CONCLUSION**

The majority of smallholder farmers in Nigeria have no sufficient financial knowledge. They are not involved in any financial planning, and lack awareness of the use and the existence of most products and services provided by the financial institutions. Therefore, it is necessary for financial literacy to be included in school curricula, and should be part of agricultural extension teaching programs for rural farmers.

## **REFERENCES**

- [1] Ayoola, J.B. 2008. Economic Assessment of Fertilizer Use and Integrated Practices for Sustainability and Productivity in Sudan Savannah Zone, Nigeria. Proceedings of the 10th Annual Conference of Nigerian Association of Agricultural Economists held at University of Abuja, Nigeria pp 56-59.
- [2] Economic Research Service. (2005). Farm structure glossary. Washington, DC: USDA Economic Research Service.

- [3] FAO (2010). Policies and institutions to support smallholder agriculture. Committee on Agriculture, 22nd Session.
- [4] Idisi, P.O. and Obi, E. 2005. An X-ray of Nigeria's agricultural sector exports and gross domestic product under diverse exchange rates policies: 1960-2002. *Journal of Economics and Allied Fields* 2(2): 157-182.
- [5] Ike, P.C. 2008. Agricultural Technology Adoption and Environmental Degradation among Rural Small Scale Farmers in Enugu State, Nigeria. Proceedings of the 10th Annual Conference of Nigeria Association of Agricultural Economics, 7–10th October held at University of Abuja pp86-90.
- [6] Lowder, S.K., J. Skoet and S. Singh (2014). What do we really know about the number of farms in the world? ESA Working Paper No. 14-02. Rome, Agricultural Development Economics Division, FAO.
- [7] Maduekwe, I. M. (2008). Emerging technologies, structural change and socio-economic environment of Nigerian agriculture. Proceedings of the annual conference of Nigerian association of agricultural economists held at the University of Abuja pp157-163.
- [8] Nagayets, O. (2005). Small farms: current status and key trends. Paper prepared for the Future of Small Farms Research Workshop. Wye College, June 26–29, 2005.
- [9] Odii, M.A.C.A. 2003. Effect of improved technologies on gender productivity in cassava production. *Journal of Agriculture and Social Research* 3(1): 56-62.
- [10] Silva, K.N.N. and Broekel, T. 2016. Factors constraining Farmers' adoption of new Agricultural Technology Programme in Hambantota District in Sri Lanka: Perceptions of Agriculture Extension Officers. 13th International Conference on Business Management, Sri Lankapp378-398.
- [11] Wen, Y. 2015. *The Making of an Economic Superpower: Unlocking China's Secret of Rapid Industrialization*. St. Louis Fed Working Paper (Online). <https://research.stlouisfed.org/wp/more/2015-006>. (8 Jan. 2019).