

ROLE OF FINANCIAL KNOWLEDGE IN MAKING INVESTMENT AND FINANCIAL DECISIONS BY FARMERS IN ALBANIA

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ABSTRACT

Aim: The purpose of the study is to highlight the importance of financial knowledge among farmers in Albania, and to assess the current state of financial education within the agricultural sector. This study also aims to identify the main factors that influence the farmer's financial knowledge and decision-making, and investigates through questionnaires if the financial literacy of farmers is directly related to the level of education or experience on the farm, as well as whether it will have an impact on the performance of the farm. **Methods:** This study uses a qualitative approach. This paper is based on a structured face-to-face survey with 25 farmers in the Maliq area (District of Korçë, Albania). The respondents were selected in a random-purposive method and represented about 25% of farms registered in this area. **Results:** This study is very important to understanding whether the financial system offers appropriate financial products for farmers, and if there is an appropriate level of support by state institutions and by private institutions that deal mainly with the agricultural sector. Our results conclude that farmers do not have much financial knowledge, while also saying that it is very important regarding the decisions they make on the farm, regarding their sustainability in the market, risk management and the management of the obligations they have. Most farmers are not market-oriented and do not have any contracts. **Conclusions:** This study has revealed key aspects of financial education among farmers in Albania, which significantly impact the efficiency of agricultural holdings. The findings indicate that the level of financial literacy among farmers remains low, limiting their ability to manage financial obligations and effectively utilize available resources. Additionally, their restricted access to credit, low propensity to save, and weak engagement with banking services may contribute to reduced agricultural productivity. These results highlight the need for further educational initiatives and institutional support in the field of agricultural finance.

Key words: financial literacy, investment planning, record-keeping, sustainability, financial planning

JEL codes: E22, F63, F65, F66, F68, G41

INTRODUCTION

In Albania, the importance of financial education has been growing in recent years due to the development of financial markets as well as demographic, economic, and

political changes. Financial literacy is the knowledge gained through formal education or practice to manage one's personal financial needs. This study will shed light on the importance of financial knowledge among farmers. In recent years in the field of agriculture, it has

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been observed that more training is being carried out by the responsible agricultural institutions regarding financial knowledge so that they can manage their farm from the point of view of obligations, costs, subsidies and most importantly the productivity of their farm. The study analyzes the farms that are not market oriented, mainly the farmers have a lower level of financial knowledge, while for the farms that are market oriented, they have a more independent approach and level of knowledge. In addition to this division, there are many factors that are mentioned in the questionnaire that are obstacles for farmers. Such as education, specializations, economic status, market perceptions, risk, sustainability, etc.

LITERATURE REVIEW

In the early years, financial literacy had many definitions, and some have argued that financial literacy, financial education and financial knowledge could be used interchangeably [Howlett et al. 2008, Yoong et al. 2012], while Huston [2010] argued that financial literacy goes beyond financial education and financial knowledge. Following the definition of financial literacy by the Organisation for Economic Co-operation and Development [OECD 2017], Atkinson and Messy [2012] recommended that financial literacy should encompass three components, namely financial knowledge, financial behavior and financial attitude. As such, the computed financial literacy scores of the OECD Survey in 2015, 2018 and 2019 considered these three components [OECD 2016, OECD 2019, OECD 2020]. Nevertheless, a number of studies still regard financial literacy to be synonymous with financial knowledge [Lusardi and Mitchell 2011, van Rooij et al. 2012, Disney and Gathergood 2013, Mouna and Anis 2017, Kadoya and Khan 2020]. Lusardi and Mitchell's study [2011] is one of the earliest studies to research financial knowledge around the world. In the study, the term "financial literacy" was used to refer to financial knowledge. The authors found that low financial knowledge levels even exist in economies with developed financial markets such as Germany, the Netherlands, Sweden, Italy, Japan, New Zealand and the United States of America (USA). Furthermore, financial knowledge levels differed significantly across countries and sub-populations. Many subsequent studies on financial literacy then take

into account financial knowledge, financial behavior and financial attitude. Financial literacy differs widely by socio-demographic variables such as gender, age, education and income [Atkinson and Messy 2012, Lusardi and Mitchell 2014, Bucher-Koenen et al. 2017, Garg and Singh 2018, Potrich et al. 2018, Yoshino et al. 2020, Mirzaei and Buer 2022]. Moreover, Bucher-Koenen et al. [2017], Bannier and Schwarz [2018] and Potrich et al. [2018] found significant gender gaps in financial literacy levels while Yoshino et al. [2017], Garg and Singh [2018] and Kadoya and Khan [2020] found that age also affects financial literacy levels. As for education, Lusardi and Mitchell [2014] and Bianchi [2018] pointed out that higher educated individuals are more likely to have opportunities to learn about financial issues at the workplace and are more financially sophisticated. Financial literacy can help to prepare consumers for tough financial times Gjoni et al. [2022], by promoting strategies that mitigate risk such as accumulating savings, diversifying assets and purchasing insurance [Gjoni-Karameta et al. 2021]. Financial literacy also helps to improve behavior, such as avoiding over-indebtedness. Financial literacy enables people (individuals and business owners) to make better financial decisions and to understand and manage risk [Gjoni and Muça 2023, Gogo et al. 2025]. Financially literate consumer and business owners help to enforce competitive pressures on financial institutions to offer more appropriately priced and transparent services because they have the relevant knowledge of how financial markets operate [Gjoni et al. 2024b]. Financial literacy permits people (individuals and business owners) to make more competent financial decisions and to grasp and manage risk [Gjoni et al. 2024a].

AIM AND METHODS

The aim of the study is to assess the current state of financial knowledge of farmers in Albania through interviews with farmers and constructed questionnaires. The main research questions concerned how farmers understand financial literacy, and how important it is for them (farmers) to manage risk and to build sustainability on the farm.

This study uses a qualitative approach. This paper is based on a structured face-to-face survey with 25 farmers in the Maliq area (Korçë District, Albania).

Their farms accounted for approximately 25% of all registered farms in this area and the respondents were selected by a random-purposive method. This region is one of the main agricultural areas of the country. The Maliq area was a marshy area that, after drying, turned into very fertile land that is very suitable for the cultivation of vegetables, cereals and citrus fruits. This area represents one of the largest units of cultivation of agricultural products in the Korçë District, which is why we selected this area for our study. The economy of the region is based mainly on the cultivation of cereals, fruits, vegetables and food for animals. The questions in the structured questionnaire included:

1. Family farm demographics (age, education and gender).
2. Structure of the farm (farm size, number of family members engaged in the farm activities).
3. Aspects related to financial management and education.
4. Participation in various forms of financial education and their perception and views of financial institutions and services.
5. Farmers' relations with microfinance institutions/banks and their working capital (microfinance institutions, banks, government, borrowing from informal lenders, etc.).

RESULTS

From the answers of the interviewees (farmers), it results that 46% of the farmers interviewed are female and the rest (54%) were male. This low number of men is a consequence of emigration. Female farmers have a more positive attitude with regard to offering information on their perception of financial products. The results of the study show that 56% of the farmers interviewed are in the 40–55 age group, 40% are in the 25–40 age group and 4% are over 65 years old. This aging trend of the farmers in this area is due to the increasing rate of emigration of young people to EU countries where they find it easier to find a job and to live a decent life.

Regarding the question on the level of education of the farmers (Fig. 1), a large portion of the respondents (28%) do not have any type of education, while 24% of them have two types, having attended basic education and professional education, and the rest

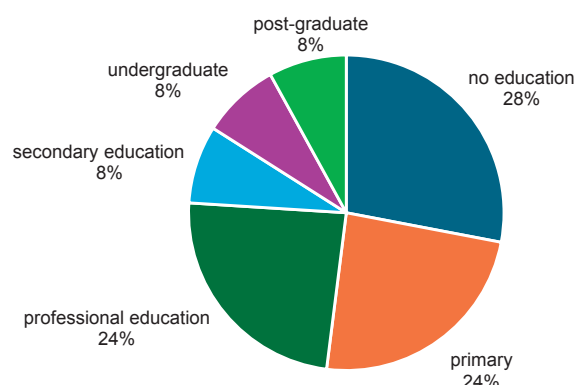


Fig. 1. Respondents' level of education

Source: authors' research.

of them have a secondary education, or undergraduate or post-graduate degree, with 8% each of these three groups (post-graduate, undergraduate and secondary education). It is evident that the farmers of the Korçë District in Albania show a low level of education, a consequence of which being their low level of information and understanding of financial products and services.

Another interesting variable of study is the sizes of the farms of the interviewees. The largest portion of the farmers that declared having a farm of up to 1 ha predominate, and this portion is 72% of the interviewees, while 20% of them declared having farms with a size of 1–5 ha, and 4% declared having farms larger than 5 ha in size (Fig. 2). This is explained by the fragmentation of the farms in Albania due to Land Law 7501 of 1991; according to this regulation, all farmlands in Albania were fragmented into small

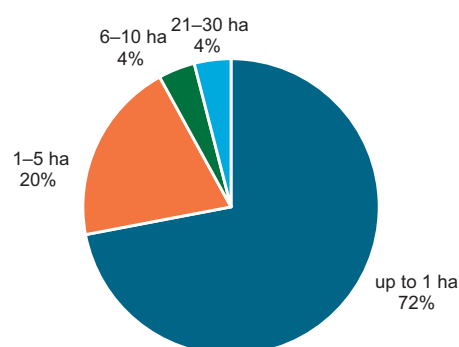


Fig. 2. Respondents' farm size

Source: authors' research.

parcels, with the basic criteria for distribution being the number of family members. This resulted in many difficulties that are still unsolved today because, with smaller farms, farmers find it difficult to expand their activities and to get financial support. It is very difficult for any other part, which is mentioned in Figure 2 (sizes of the farms), to support them because they have to deal with many owners of these lands and farms.

Another important variable of the study is the number of family members of the farmers subject to this research. The results show that 80% of the interviewees have 1–4 family members, while 16% of them have 5–7 family members. The remaining 4% have more than 7 family members (Fig. 3). The size of their family members also shows how many people of the family contribute to the farm activities because most of the farms in Albania are managed and operated by family members. Families with more family members engaged in farm activities tend to be more successful than farms where only one or two family members contribute. This large proportion of small families is also due to emigration because farmers are finding it increasingly difficult for them and their families to live on only their farm's income.

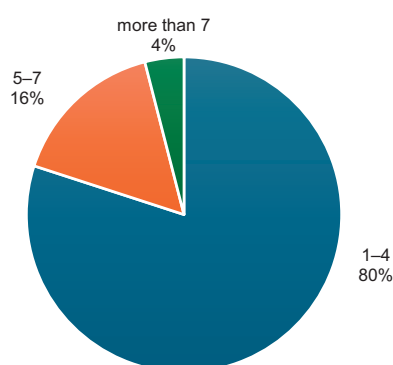


Fig. 3. Number of people living in the respondents' households
Source: authors' research.

This question was directed to farmers to determine whether they find it important to have financial skills to better manage their daily activities. The results of the study show a variety of answers, which makes the study more pertinent. Improving financial literacy was very important for decision-making for 44% of the interviewed farmers. In comparison, 28% of the interviewed farmers thought that it is important,

20% thought that it is not so important, followed at the end by 8% who believed that the level of financial literacy is not important at all (Fig. 4). These answers show a level of self-awareness of the fact that the higher the level of such education, the better the level of management of daily operations of farmers and their farm's performance.

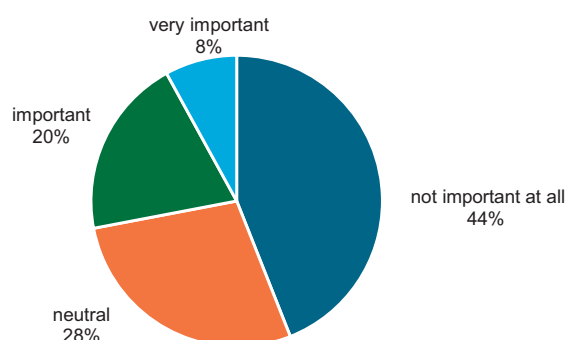


Fig. 4. Importance of improving financial skills in the opinion of the respondents
Source: authors' research.

The results of the question regarding the farmer's level of financial planning show that 48% of interviewees prepare plans for future financial needs and goals, while 32% of the interviewed farmers prepare (predict) an annual budget concerning income and expenses, or they at least record their expenses and incomes (16%). The rest of the farmers (4%) claimed that they do not do any financial planning (Fig. 5). The level of economic planning seems moderate-to-low to achieve the financial performance they projected.

Another important question for this research was intended to determine the level of savings of farmers, and the results of the study show that 60% of the interviewed farmers say that they cannot save either for a future investment or for their future needs, while 32% of the interviewed farmers try to save more often when they earn more income, and the remaining 8% is divided in such a way that they keep part of their savings at home for liquidity reasons while the rest is kept in a savings account at the bank (Fig. 6). This means that a very large portion of the farmers have no possibility of saving because of the low performance of their activities and the low level of financial management. This second factor is exacerbated by their low level of education and financial skills.

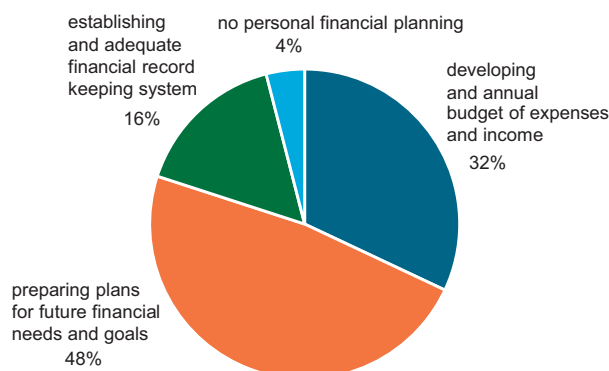


Fig. 5. Respondents' personal financial planning
Source: authors' research.

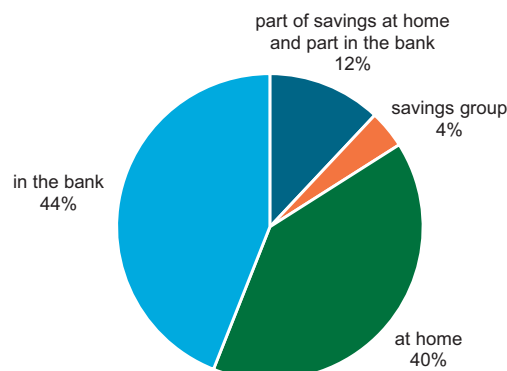


Fig. 7. Where respondents store their savings
Source: authors' research.

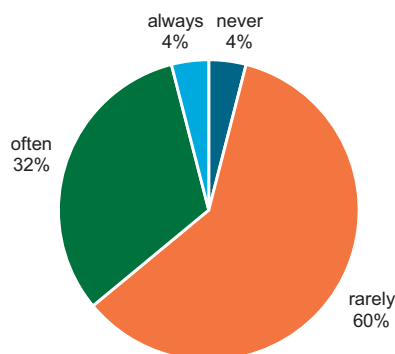


Fig. 6. Respondents' attitude toward regular saving
Source: authors' research.

The next question intended to determine the form of savings that farmers use, with the results showing that 44% of the interviewed farmers prefer to keep their savings in the bank, classifying them as safer. In comparison, 40% of the interviewed farmers prefer to keep them at home. Another portion affirmed that they prefer to store their savings partly in the bank with the rest staying at home so that they have liquidity when they need it to buy inputs for the farm (Fig. 7). These results show that farmers in Albania are still very skeptical of financial institutions, they feel calmer if they have their saving closer to them, and they ignore all the benefits of the financial products and services on offer, a relationship with the financial system and all the opportunities to expand their activities and improve their economic performance.

Considering the recent investments that the farmers have made in their farms, their answers differ. But the majority of them state that they have not made investments in the last five years for two different reasons, with the first reason being that they have had no opportunity to make investments due to low profits, while some of them have applied to one of the national schemes and they are waiting to receive an answer. The minority had made investments, including buying calves, fixing their cowshed, buying new machines, irrigation pumps and sprinklers, new working tools, expanding, etc. These results again show that because of their low level of awareness of the financial support available in the existing financial products, they have difficulties in finding the right solutions to their problems.

CONCLUSIONS

This study brought forth some important conclusions regarding the relationship between the financial knowledge of farmers in Albania and their investing and financing decision-making. The study's findings and meetings with farmers confirmed that some farmers still remain negligent in keeping their daily records about costs and calculating unit costs. Although many keep records, many do not, and most of those who do keep records of expenses, income, etc., do not keep them properly. Referring to the study's findings, farmers do not consider the costs periodically. Only a portion of the interviewed families often make financial planning for the future operation of the farm. The results show

that such farmers need further education and training. Most of them have not participated in training related to finance. Most interviewees claim they would like to participate in financial education training. Still, this opportunity has not been given to them, while another portion claims that they have developed training, but that it was also insufficient. Access to credit is also low. The majority of the farmers claimed that they have not applied for agricultural loans. The results show that most families are unwilling to apply for a loan because they cannot afford it with their income. The results of the study show low savings and a low orientation toward banks. Some of the farmers declare that they rarely manage to save a part of their profits. As a result, their profits manage to cover only their costs. Most of the interviewed farmers answered that they keep their savings at home. Another group of the farmers who save money, keep a portion of the money in the bank, but there are also those farming families who keep a portion in the bank and the remainder in their homes to give them liquidity to buy agricultural inputs in cases of need. Also, the fact that many farmers state that they find it difficult to use a micro-finance institution product may reflect a lack of trust in them. The majority of the farmers claim that they find it difficult to manage their farm obligations, so they need immediate and different training and specializations in this direction. They express interest in and a desire to learn and apply this knowledge to their farm. In conclusion, this study shows that farmers in Albania demonstrate a low level of financial knowledge, and this affects their attitude toward financial institutions and financial decision-making, and as a result, it negatively affects their farm's management and performance. More studies in this field are needed to activate the stakeholders to engage in more appropriate policies to improve the relationship between farmers and the financial system.

REFERENCES

- Atkinson, A., Messy, F.A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. *OECD Working Papers on Finance, Insurance and Private Pensions*, 15. <https://doi.org/10.1787/5k9csfs90fr4-en>
- Bannier, C.E., Schwarz, M. (2018). Gender-and education-related effects of financial literacy and confidence on financial wealth. *Journal of Economic Psychology*, 67, 66–86. <https://doi.org/10.1016/j.joep.2018.05.005>
- Bianchi, M. (2018). Financial literacy and portfolio dynamics. *The Journal of Finance*, 73(2), 831–859. <https://doi.org/10.1111/jofi.12605>
- Bucher-Koenen, T., Lusardi, A., Alessie, R., Rooij, M. van (2017). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2), 255–283. <https://doi.org/10.1111/joca.12121>
- Disney, R., Gathergood, J. (2013). Financial literacy and consumer credit portfolios. *Journal of Banking and Finance*, 37(7), 2246–2254.
- Garg, N., Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics*, 45(1), 173–186. <https://doi.org/10.1108/IJSE-11-2016-0303>
- Gjoni, A., Çela, S., Mlouk, A., Marku, G. (2022). Determinants of financial performance in Albanian economic entities, case of construction industry in Albania. *WSEAS Transactions on Business and Economics*, 19, 453–461. <https://doi.org/10.37394/23207.2022.19.41>
- Gjoni, A., Gogo, G., Uku, S. (2024a). Factors influencing tax evasion in the developing country: a regulatory policy context. *Journal of Governance and Regulation*, 13(4), 8–14. <https://doi.org/10.22495/jgrv13i4art1>
- Gjoni, A., Muça, E. (2023). Effects of the new taxation system on rural households in Albania. *Acta Scientiarum Polonorum. Oeconomia*, 21(4), 5–11. <https://doi.org/10.22630/ASPE.2022.21.4.13>
- Gjoni, A., Mustaqe, E., Lici, E., Nakuçi, S. (2024b). Evolution of green finance in Albania. *Acta Scientiarum Polonorum. Oeconomia*, 23(4), 5–11. <https://doi.org/10.22630/ASPE.2024.23.4.13>
- Gjoni-Karameta, A., Fejzaj, E., Mlouk, A., Sila, K. (2021). Qualitative characteristics of financial reporting: An evaluation according to the Albanian users' perception. *Academic Journal of Interdisciplinary Studies*, 10(6), 35–47. <https://doi.org/10.36941/ajis-2021-0151>
- Gogo, G., Gjoni, A., Uka, R. (2025). The effects of education and knowledge on investing in cryptocurrencies in Albania. *Quality-Access to Success*, 26(4), 24–31.
- Howlett, E., Kees, J., Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *Journal of Consumer Affairs*, 42(2), 223–242. <https://doi.org/10.1111/j.1745-6606.2008.00106.x>
- Huston, S.J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Kadoya, Y., Khan, M.S.R. (2020). What determines financial literacy in Japan? *Journal of Pension Economics & Finance*, 19(3), 353–371. <https://doi.org/10.1017/S1474747218000379>

- Ligj Nr. 7501, datë 19.7.1991 për tokën (Land Law No. 7501 dated 19 July 1991). Fletorja Zyrtare e Republikës së Shqipërisë Viti 1991 Numri 5. <http://qbz.gov.al/eli/ligj/1991/07/19/7501>
- Lusardi, A., Mitchell, O.S. (2011). Financial literacy around the world: an overview. *Journal of Pension Economics & Finance*, 10(4), 497–508. <https://doi.org/10.1017/S1474747211000448>
- Lusardi, A., Mitchell, O.S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Mirzaei, M., Buer, T. (2022). First results on financial literacy in Oman. *Managerial Finance*, 48(9/10), 1413–1429. <https://doi.org/10.1108/MF-09-2021-0456>
- Mouna, A., Anis, J. (2017). Financial literacy in Tunisia: Its determinants and its implications on investment behavior. *Research in International Business and Finance*, 39, 568–577. <https://doi.org/10.1016/j.ribaf.2016.09.018>
- Organisation for Economic Co-operation and Development [OECD] (2016). *Skills Matter: Further results from the survey of adult skills*. OECD Skills Studies, OECD Publishing, Paris. <https://doi.org/10.1787/9789264258051-en>
- Organisation for Economic Co-operation and Development [OECD] (2017). *PISA 2015 results (Volume IV): students' financial literacy*. PISA, OECD Publishing, Paris. <https://doi.org/10.1787/9789264270282-en>
- Organisation for Economic Co-operation and Development [OECD] (2019). *PISA 2018 Results (Volume I): What Students Know and Can Do*. PISA, OECD Publishing, Paris. <https://doi.org/10.1787/5f07c754-en>
- Organisation for Economic Co-operation and Development [OECD] (2020). *PISA 2018 Results (Volume IV): Are Students Smart about Money?* PISA, OECD Publishing, Paris. <https://doi.org/10.1787/48ebd1ba-en>
- Potrich, A.C.G., Vieira, K.M. (2018). Demystifying financial literacy: a behavioral perspective analysis. *Management Research Review*, 41(9), 1047–1068.
- Rooij, M.C. van, Lusardi, A., Alessie, R.J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449–478. <https://doi.org/10.1111/j.1468-0297.2012.02501.x>
- Yoong, F.J., See, B.L., Baronovich, D.L. (2012). Financial literacy key to retirement planning in Malaysia. *Journal of Management & Sustainability*, 2(1), 75–86. <https://doi.org/10.5539/jms.v2n1p75>
- Yoshino, N., Morgan, P.J., Long, T.Q. (2020). Financial literacy and fintech adoption in Japan. *ADB Working Paper Series*, 1095. Retrieved from <https://www.adb.org/sites/default/files/publication/574806/adb-wp1095.pdf> [accessed: 23.03.2025].

ROLA WIEDZY FINANSOWEJ W PODEJMOWANIU DECYZJI INWESTYCYJNYCH I FINANSOWYCH PRZEZ ROLNIKÓW W ALBANI

STRESZCZENIE

Cel: Badanie służy podkreśleniu znaczenia wiedzy finansowej wśród rolników w Albanii i ma na celu ocenę obecnego stanu edukacji finansowej w sektorze rolniczym, a także zidentyfikowanie głównych czynników wpływających na wiedzę finansową rolnika i podejmowanie przez niego decyzje. W ramach celu drugiego analizowano, czy wiedza finansowa rolników jest bezpośrednio związana z poziomem wykształcenia lub doświadczeniem w prowadzeniu gospodarstwa, a także czy ma wpływ na efektywność finansową gospodarstwa. **Metody:** W badaniu wykorzystano podejście jakościowe, oparte na ustrukturyzowanym wywiadzie bezpośrednim z 25 rolnikami w rejonie Maliq (dystrykt Korçë w Albanii). Zastosowano losowo-celowy dobór respondentów, którzy reprezentowali około 25% gospodarstw zarejestrowanych w tym rejonie. **Wyniki:** Uzyskane wyniki pozwalają zrozumieć, czy system finansowy oferuje odpowiednie produkty finansowe dla rolników, a także czy istnieje odpowiedni poziom wsparcia ze strony instytucji państwowych i prywatnych, które zajmują się głównie sektorem rolniczym. Okazuje się, że badani rolnicy nie mają znaczącej wiedzy finansowej, ale jednocześnie podkreślają, że jej posiadanie jest bardzo ważne w zarządzaniu gospodarstwem w kontekście utrzymania działalności zrównoważonej na rynku, efektywnego zarządzania ryzykiem i zobowiązaniami. Większość rolników nie jest zorientowana na rynek i nie ma żadnych umów. **Wnioski:** Badanie to ujawniło kluczowe aspekty edukacji finansowej rolników w Albanii, które mają istotny wpływ na efektywność gospodarstw rolnych. Wyniki wskazują, że poziom edukacji finansowej wśród rolników

pozostaje niski, co przekłada się na ograniczoną zdolność do zarządzania zobowiązaniami finansowymi oraz efektywnego wykorzystania dostępnych zasobów. Dodatkowo ograniczony dostęp do kredytów, słaba skłonność do oszczędzania oraz słaba orientacja na korzystanie z usług bankowych mogą przyczyniać się do obniżonej produktywności gospodarstw rolnych. Wyniki te podkreślają potrzebę dalszych działań edukacyjnych oraz wsparcia instytucjonalnego w zakresie finansów rolniczych.

Słowa kluczowe: edukacja finansowa, planowanie inwestycji, prowadzenie dokumentacji, rozwój zrównoważony, planowanie finansowe