Challenges of agricultural insurance development in Albania _____

Grisejda MYSLIMI, PhD(c)1

Department of Economics & Finance, European University of Tirana, Tirana, Albania grisejda.myslimi@uet.edu.al

Emirgena NIKOLLI, PhD(c)² ____

Department of Economics & Finance, European University of Tirana, Tirana, Albania emirgena.nikolli@uet.edu.al

Joana SHIMA, Msc.³

DEPARTMENT OF ECONOMICS & FINANCE, EUROPEAN UNIVERSITY OF TIRANA, TIRANA, ALBANIA joana.shima@uet.edu.al

Grisejda Myslimi is a PhD candidate at Agricultural University of Tirana, following the doctoral study program in Finance. She is graduated in "Finance" at the "Ismail Qemali" University of Vlora, in 2013. Afterwards, she continued the Master of Science program in Finance at the European University of Tirana, UET. At the end of the second cycle of studies Ms. Myslimi had her first working experience at the Regional Directorate of Taxation, Vlora, as tax Inspector. Since October 2015 she is part of full time staff of European University of Tirana as assistant lecturer at the Department of Economics and Finance.

² Emirgena Nikolli, PhD(c) is assistant lecturer at the Department of Economics & Finance, Faculty of Economics, Business and Development, at the European University of Tirana. She is a PhD candidate at the University of Gdansk, Sopot, Poland. Prior to the European University of Tirana, she was a part-time lecturer at "Ismail Qemali" University, Vlora, Albania. Ms. Nikolli finished her Bachelor and Master of Science Studies in Economics, at the "Epoka" University, Tirana, Albania. She worked for nearly three years as a banker at the American Bank of Investments. She is author of some scientific articles, presented at several international conferences. Her primary research interests are in the field of economics, macroeconomics, finance, education, etc. Since October 2021, she is part of the academic staff at the "European University of Tirana", Tirana, Albania.

³ Joana Shima, MSc., is graduated in "Finance and Banking" at the European University of Tirana, in 2015. During October 2014 – March 2015, she worked as economist in a private company. Since 2015, she joined the European University of Tirana's staff as assistant lecturer, at Finance & Economics Department, Faculty of Economics, Busines and Development. Mrs. Shima has published articles in different scientific journals. Also, she has participated in different international conferences.

Abstract

Agricultural production is exposed to natural risks that cannot be prevented and lead not only to production losses but also to a decrease in farmers' income. As a result of these risks, farmers often do not have the opportunity to pay their loans. Against risky borrowers, credit institutions refuse to give loans. Under these conditions, the government must intervene in risk management, trying to reduce these negative effects. The provision of agricultural products as one of the most important instruments for the financial support of this sector will be the focus of this paper. Agricultural insurance provides compensation for economic losses resulting from unfavorable natural phenomena, contributing to the reduction of poverty. Without adequate insurance, lenders would not provide farmers with insurance policies. Agricultural insurance is a tool that helps farmers to predict the future, to protect the business from unforeseen events, supply and demand fluctuations or various operational challenges. In the case of developing countries such as Albania, these markets are not developed. A main problem in the development of these markets is the lack of demand due to unaffordable prices for farmers. One of the biggest challenges of the agricultural insurance industry is not only providing the right insurance product, but also helping agricultural sector in improving risk management practices to increase production. As Hazell (2009) puts it, many agricultural risks cannot be insured on a financially sound basis, but there is scope for increased insurance of farm assets, of the life and health of rural people, and of some specific perils that affect crop and livestock yields. Such insurance could be efficiently provided by the private sector if governments were to remove some of the important constraints impinging on commercial insurers. The greatest challenge is to find ways of insuring low-income rural households against natural hazards on a financially sound basis.

1.Introduction

Farmers face many risks. Their income is very uncertain. They often do not have the opportunity to pay their loans. Against risky borrowers, credit institutions refuse to give loans. Over the years, lenders have developed ways to reduce risk. Risk coping strategies are important for dealing with catastrophic revenue losses after they occur. To repay loans and meet essential living costs in catastrophic years, farmers rely on new loans, asset sales, use of their own food stocks, help from relatives, or off-farm employment. But these strategies are also costly. For example, the sale of assets such as land or livestock may leave the household without suitable productive assets. In addition to traditional methods of risk management, farmers can use



insurance as a strategy for managing agricultural risks. An insurance provider is an entity, issuing or reinsurance agency, willing to provide insurance coverage for a premium. The agricultural insurance market in developing countries, including our country, is very underdeveloped compared to the agricultural insurance markets of developed countries.

In our country, investments from the state budget for the agricultural sector are very small in relation to the income and employment provided by this sector. There is no program for farmers in case of natural disasters or losses. The provision of a fund by the government for insurance companies would lower the price of the insurance premium and would encourage Albanian farmers to cultivate different crops, increasing the yield and diversifying the planted products. The government can intervene in the regulation of agricultural insurance markets through regulations to help farmers manage risks. Governments of different countries offer their own landscape insurance schemes. Also, governments can supervise insurance programs offered by private companies or cooperate with these companies.

The insurance market in Albania is a relatively new market since the first insurance company in Albania, Insig, started operating in 1991. The performance of this market is closely related to the legislation for the development of this industry. Strong legal and regulatory bases and supervisory tools for the development of this market are also important for Albania's EU membership. Insurance products in our country are purchased when they are mandatory or in cases where it is a condition for obtaining a loan. Albania is vulnerable to natural disasters mainly of hydro-meteorological origin and climate changes which have increased. Fires and droughts due to high temperatures have continuously affected the agricultural sector in our country. Such events nedd risk management strategies. One of the risk management strategies is its transmission. But the products of ogricultural insurance for natural risks are low, and the impact of natural disasters such as floods or fires leaves businesses or families unprotected.

Agricultural insurance is classified into two groups, traditional insurance and Index Based Insurance. On the basis of traditional insurance, after the occurrence of unfavorable event, which may come as a result of a single risk or a multiple risk, farmers are repaid on the basis of losses assessed by experts. Insurance based on index is an innovative type of insurance that calculates losses and pays compensation to farmers based on a statistical index predetermined before the start of the insurance period. Index Based Insurance (IBI) was born out of the need to overcome the problems with traditional insurance schemes. Like private insurance, index insurance seeks to provide coverage against specific risks, but in this case contracts are written against specific events and registered at regional levels.



Purpose

The purpose of this study is to analyze the role of agricultural insurence market in the economy and to identify the challanges of agricultural insurance in Albania.

The main objectives of the paper are:

- a. to consider genesis of views on the point and role of the agricultural insurance scheme;
- b. to analyze the current contour of the agricultural insurance system;
- c. to prove the priority directions of development of the system of agricultural insurance

Research question

The main question raised in this paper is: What are the main challenges faced by the agricultural insurance sector in Albania?

2. Literature Review

Agricultural insurance is a financial instrument that pays farmers if they face production losses due to natural disasters (IFC, 2002). Agricultural insurance was born as a financial instrument in the early 1930s in the United States of America to help farmers cope with the loss of agricultural production as a result of various natural disasters. Agricultural insurance is offered in the insurance market. In the case of developing countries such as Albania, these markets are not developed. The increase in natural disasters has grown the need for insurance. As smallholder farmers face a variety of climate risks, agricultural insurance has become a key protection tool (Hellmuth et al., 2009). The frequency of adverse events is expected to increase significantly. Such a situation has increased the need to take measures to mitigate the negative impacts that these disasters cause in the living conditions, economy, assets or services of the affected regions. In developing countries, capital losses are smaller compared to developed countries, but their impact is so important that it affects sustainability (Hatch et al, 2010). Agricultural insurance is a tool that helps farmers forecast the future, protect the business from unforeseen events, supply and demand fluctuations or various operational challenges. Agricultural insurance increases productivity, guarantees sustainability and survival of businesses, increases the well-being of farmers' families (Munyoro & Moyo, 2019). In the conditions



of the international economy, the lack of agricultural insurance instruments is at the disadvantage of farmers in developing countries in conditions where farmers in industrialized countries have great access to these instruments. Farmers who are facing climate risks produce less products reducing not only their income but also the tax revenue. Declining tax revenues limit the ability to finance social services and cause economic stagnation. Export earnings will decrease, migration from rural areas to urban areas will increase, financial markets will shrink and the demand for fiscal aid to cope with emergencies will increase. At the macro level, all these situations will affect the increase in the level of poverty and the failure of the market or the government. Munyoro & Moyo (2019) showed through their study the importance of agricultural insurance as a prerequisite for every farm. According to them, insurance companies should undertake awareness campaigns to make farmers understand the importance of insurance in the development of the agricultural sector.

3. The situation of the agricultural sector in Albania

Albania has and will continue to have as its main priority the improvement and consolidation of the activity in the agriculture sector, as one of the main sectors of the Food Economy. Albania has a total of 2.8 million ha of land, of which: 699,021 ha is agricultural land or 24% of the total that has been cultivated in years, while meadows and pastures occupy 16%, lands (non-productive, urban, internal water bodies) occupy 15 %, forests 36% and others 9%.

Many farmers use the land to meet their livestock needs only, but a significant number of these farmers still have a excess of products for the needs of the country's market. Also, a part of the remaining farmers have invested and are in the process of investing in agriculture in all links of the food chain, to produce products for the local market and for export. The rural area in Albania, in contrast to many developed countries, is still very populated. Residents have made significant investments in new housing and the reconstruction of existing ones. Currently, in these areas, in over 2,500 villages, about 40% of the country's population lives, which continues without stopping the investments. It affects the generation of income, employment, the reduction of poverty, the progress of other economic sectors.

In the table below are presented some statistics from the Albanian Investment Development Agency for the production of plants in the years 2015- 2020. The agricultural products that are produced more in Albania are cereals and maize.



TABLE NO. 1 The production of plants, 2015 – 2020 (in 000 ton)

Nr.	Title	2015	2016	2017	2018	2019	2020
1.	Cereals	695.5	698.4	701.7	678.2	666.1	684
	Wheat	275	275	274.9	240.3	233.2	233.4
	Maize	380	379.7	381.1	391.1	389	399.1
	Rye	3	2.7	2.7	2.3	2.6	3.2
	Barley	7	9	9	9.7	7.9	12.6
	Fodder	30.5	32	34.1	34.9	33.4	35.6
2.	Vegetables	1030	1129	1152	1166.3	1258	1295.7
	Strawberry			5.1	4.4	5.3	5.4
	Potato	245	238.3	249.8	254.5	260.7	254.9
	Lagume	28	24.8	21.2	24.5	24.8	25.8
	Tabacco	2.2	1.8	1.4	1.7	1.4	1.4
	Sunflower	2	2	1.1	0.8	1	1.3
	Soybeans	0.5	0.7	0.5	0.7	0.6	0.4
	Sugar-beet			29.7	27.5	30.7	27
	Medicinal plant	10.8	10.6	12.8	12.5	12.9	14.4
	Fresh fodder	6000	6144	6688.6	7050.1	7115.2	7170.6

Source: Albanian Investment Development Agency

Table number 2 present some statistics from the Albanian Investment Development Agency related to the cultivated surface with vegetables. In Albania, Fieri is the region with the largest area cultivated with vegetables

TABLE NO. 2 Surface cultivated with vegetables, 2015 – 2020 (in hectar)

NO.	County	2014	2015	2016	2017	2018	2019	2022
1	Berat	2406	2481	2689	2789	2824	2969	3098
2	Diber	1835	1506	1584	1626	1660	1699	1944
3	Durres	3666	3713	3590	3673	3763	3710	3731
4	Elbasan	2917	2998	3176	3020	3057	3035	3198
5	Fier	8452	8636	9310	9152	9298	10481	10936
6	Gjirokaster	916	942	918	900	1095	1154	1136
7	Korce	2622	2853	2859	2980	3026	3105	3148
8	Kukes	685	662	697	674	705	747	757
9	Lezhe	1444	1755	1920	2111	2044	2057	2084

10	Shkoder	3904	3773	3949	4242	3754	3771	3737
11	Tirane	5785	5907	6047	6081	6053	6148	6253
12	Vlore	1937	1942	2062	2177	2189	2564	2652
	Shqiperi	36569	37168	38801	39425	39468	41440	42674

Source: Albanian Investment Development Agency

3.1 Insurance and the risks faced by the agricultural sector

Insurance in general is defined as a type of service business activity that protects people and their property from the consequences of multiple risks. Insurance products in our country are purchased when they are mandatory or in cases where it is a condition to obtain a loan. The increase in natural disasters has increased the need for insurance. In September 2020, the farmers of Konispoli area in Saranda faced a great economic loss, due to a hailstorm. According to their statements in the media, about 30% of citrus production was damaged, while in olives, the damage is estimated to be even greater. The hail of September was the latest example of the great dangers that the agricultural sector is exposed and which periodically cause damage. When it's not hail, it could be flood, frost, drought or fire. The reason why Albanian farmers are particularly exposed to economic damage is the almost total lack of insurance in agriculture and further, in the entire food value chain. Securing agricultural production is a complex issue. Currently, insurance products in agriculture are almost non-existent.

Agricultural risks negatively affect the growth of agricultural production (Ding, 2019).

Risk occurs when the consequences of a decision are not fully known at the time the decision is made (Kahan, 2008). There are some risks that affect the agricultural sector:

Production or yield risk – Weather is the main source of production risk. Diseases and insects are also risks that affect the production sector. So, this risk is caused by factors that affect the quantity and quality of agricultural products and farmers can be protected from this risk by mechanisms such as insurance.

Market risk or price risk - directly affects the price of raw materials and production as a result of sudden changes in competitive markets. Changes in international markets, which are always more dynamic, can negatively affect the profitability of producers. Other factors that affect the price change are the fluctuations in the exchange rate, the change in supply and demand, the quality of the products, the change in transport costs, subsidy policies, etc.

Institutional risk – Refers to unexpected changes with negative impact of laws or regulations on agricultural business. Restrictions imposed by the government



regarding production, pricing of inputs or outputs, decisions to reduce imports or exports of a certain crop, changes in policies affecting animal disposal, changes in income tax policy, etc. are examples of institutional risk.

Financial risk – Related to the ways of financing and using the firm's capital. It refers to increased costs of capital, lack of liquidity, loss of capital and the ability to obtain credit from lenders. So, the farmer may be target to changes in interest rates for borrowed capital or face a lack of liquidity by not having enough funds to pay investors.

Personal risk – Refers to uncertainties and risks related to health and personal relationships, ability to continue working, accidents, illness, death and divorce. These events threaten the continuity of production on the farm.

3.2 Risk management strategies in agriculture

Risk management strategies are classified into four groups:

Avoidance - According to this method of risk management, businesses in agriculture eliminate activities with a higher level of risk. Also, to avoid risk, the bank can be structured in a way that some risks will not be present.

Reduction - is related to reducing or mitigating risks and negative consequences that affect the business, thus minimizing possible losses. Expansion and diversification of agricultural activities is the strategy most used by farmers to reduce risks. Thus, farmers can use different crops or use better techniques in addition to existing ones for the prevention of diseases that affect agriculture.

Acceptance – businesses accept risk with the assumption that increased risk will increase the benefits of the economic entity. In some cases, due to high costs or the inability to identify risks, it is difficult to use other risk management strategies and accepting it is the only option for farmers.

Transfer – Risk is reduced by being transferred from one party to another against payment.

4. Agricultural insurance market development

Agricultural insurance support, implementation of laws, policies, regulations and investment promotion are key factors for managing agricultural risks. The lack of cooperation between the government and the private sector of insurance or reinsurance negatively affects the development of agricultural insurance. According to Ghosh et al. (2021), in addition to investments in technology and effective production methods, agricultural insurance is an important factor that affects risk management, increasing welfare and production security. One of the biggest challenges of the agricultural insurance industry is not only providing the right



insurance product, but also helping the agricultural industry to implement risk management practices to increase production (Kramer et al., 2022).

According to Hatch (2008), the result of the impact of insurance in different countries is influenced by many factors such as the possibility of demand for insurance, the expectations of governance from this industry, the divergence of objectives between the public and private sectors, lack of coordination between organizations and insufficient cooperation between farmers and insurance companies.

Sustainable insurance programs take years to develop in the right place. It requires an appropriate legal framework, analysis, planning, collection of information on the risks affecting the agricultural sector, engaged experts, good administration, etc. A part of the farmers do not trust the insurance company and another part cannot afford to pay the premiums. Others believe that their misfortunes are the will of God and cannot be prevented. Insurance programs should be oriented by demand and not by supply, since the identification of farmers' needs is a priority in the success of insurance programs. Besides the insurance programs must be in compliance with the needs of the insured, the price of the products must be affordable by the farmer. The education of buyers and their support also affects the development of insurance. Promoting the loan program for farmers would increase the demand for insurance. For a sustainable agricultural insurance system, the cooperation of the Ministry of Agriculture with the Ministry of Finance for the financial process and with other ministries that can help in the design of programs is needed. Identification of best practices and their adaptation according to the conditions of the country where they will be applied. Withdrawal of private investments, promotion of free markets, good laws and policies that promote sustainability, transparency and accountability

The experience of developed countries shows that the role of reinsurers in the operation of agricultural insurance is a priority. They help not only in the technical management of risk and its evaluation, but also bear responsibility for financial losses in the event of an accident. Accurate data on weather, production, natural disasters, market information are important for forecasting and determining the risk profiles a country faces.

4.1 Challenges of development of Agricultural Insurance Market

Being that small farmers face a series of climatic risks, agricultural insurance has become a main means of protection (Hellmuth et al., 2009). Some factors that decrease the demand for agricultural insurance products are as follows:

- Product quality
- · Product and contract drafting



- Income and profitability
- · Lack of information, knowledge and education
- Behavioral factor and socio-cultural factor
- The role of government in setting policies, regulating and stabilizing the market

Promoting the demand for agricultural insurance remains one of the biggest challenges for the governments of developing countries. Increasing demand can be achieved not only through infrastructure development and reinsurance, but also by creating policies and regulatory institutions to increase confidence. In relation to the supply, farmers ask products with good quality (Clarke, 2016). The establishment of quality standards and innovation enables the increase of product quality (Lewis, 2013). According to Clarke (2016), insurance products are often of poor quality due to the level of risk, which refers to the probability that the insurance will not cover the damaged production. When the basic risk is high, farmers are less motivated to insure their products (Elabed, 2013 & Hill, 2013). Eforuoku et al. (2018) found that households in locations with high losses and those with low-risk locations have low insurance coverage. Families who are not insured are aware of their unfavorable location. Morsink et al. (2016) suggests that in order to reduce the risk the products might cover all losses. In summary, we can say that the challenges faced by agricultural insurance market include the lack of high-quality information, inadequate regulatory framework, weak supervision, lack of actuarial expertise, lack of professional expertise in designing and monitoring agricultural insurance products, clients with low-income and the tendency of governments to control the market.

For being successful agricultural insurance need the support of the government. This support can be provided financially through subsidizing the premium, reinsurance, subsidizing part of the administrative expenses, etc. Providing assistance to insurance companies will help increase insurance coverage and sustain insurance schemes. Also, the government can help in the insurance of agriculture

- a. Payment of premiums increases the chances of farmers participating in insurance schemes
- b. Providing information on risk history
- c. Subsidy of the research costs that are made before the start of the agricultural insurance program
- d. Reinsurance support where a part of the reinsurance cost is paid by the government
- e. Reimbursement of administrative expenses of insurance companies
- f. The increase in agricultural loans based on insurance collateral



5. Conclusions

Agricultural market insurance is a must for the economic development of a country. Agricultural insurance products are difficult to deliver in a sustainable manner. Modern risk management strategies are important for income stabilization, avoid asset reduction, and improve competitiveness. Traditional risk management practices at times are not adequately strong to deal with the moods of weather and disease and cause considerable economic losses that negatively affect families, societies and government. The role of governments in developing agricultural insurance markets is vital. Government have to take actions as adjusting legal and regulatory frameworks, increasing public information, training staff, instructing farmers, organizing pilot experiments, creating catastrophic disaster support programs etc. Although agricultural insurance should not be seen as a magic answer to weather problems but a risk management strategy. Albanian's agricultural insurance is in low level. So, the government should pay more attention to its development and chooses pilot areas to scrabble for a new method affecting to Albanian's agricultural insurance in turn to quicken the development of new agriculture. The development of the system of agricultural insurance is important to reflect the interest of the government, the insurer, the insured and their combination reproduces the efficiency of the entire scheme. The growth and introduction of new insurance products as an instrument of innovation in agricultural insurance, should cover measures from promotion and insurance agreements to the pursuit of investment instruments and advanced ways of trade modification.

6. References

Clarke, D. (2016). A Theory of Rational Demand for Index Insurance. *American Economic Journal: Microeconomics*, 286-290.

International Financial Corporation (2002). Agricultural Finance. World Bank.

Ding, Y. (2019). Risk and Insurance in Agricultural Economy. Journal of Integrative Agriculture. Eforuoku, F., Balogun, V., & Joshua, A. (2018). Determinants of crop farmers' utilization of agricultural insurance scheme in Osun State, Nigeria. Nigerian Journal of Rural Extension and Development, 27-29.

Elabed, G. (2013). Managing basis risk with multiscale index insurance. Agricultural Economics. Ghosh, R. K., Gupta, S., Singh, V., & Ward, P. (2021). Demand for Crop Insurance in Developing Countries: New Evidence from India. Journal of Agricultural Economics, 295-298.

Hatch, D. (2008). Agricultural Insurance A powerful tool for governments and farmers. *COMUNIICA*, 23-28.



- Hatch, D., Garcia, M., & Nuñez, M. (2010). Developing Successful and Sustainable Agricultural Insurance Programs Fundamental Concepts and Initial Steps. *World Bank*, 4-9.
- Hazell, P. B.R. (1992). The appropriate role of agricultural insurance in developing countries, *Journal of International Development*, Vol. 4, No. 6, 567-581
- Hellmuth, M., Callaway, J., & Louw, D. (2009). Benefits and costs of measures for coping with water and climate change: Berg River Basin, South Africa. *DTU Findit*, 2005-220.
- Hill, R. V. (2013). Adoption of weather-index insurance: learning from willingness to pay among a panel of households in rural Ethiopia. *Agricultural Economics*.
- Instat (2021). Statistikat e Bujgesise 2020. Tirana.
- Kahan, D. (2008). Farm management extension guide MANAGING RISK in farming. FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS.
- Kramer, B., Hazell, P., Alderman, H., Ceballos, F., Kumar, N., & Timu, A. (2022). Is Agricultural Insurance Fulfilling its Promise for the Developing World? *Annual Review of Resource Economics*, 1-6.
- Lewis, L. W. (2013). The Role of Government in Index Insurance for Individuals. *fondation* pour les études et recherches sur le développement international.
- Morsink, K. (2016). How to Measure Whether Index Insurance Provides Reliable Protection. *Journal of the Econometric Society* .
- Munyoro, G., Moyo, B. (2019). The Significance of Agricultural Insurance in The Development of the Agricultural Sector in Zimbabwe: A Case Study of Mashonaland Central Province. *International Journal of Research in Business, Economics and Management.*

