Journal of Research and Rural Planning
Volume 13, No. 2, Spring 2024, Serial No. 45, Pp. 77-91
eISSN: 2783-2007 **ISSN: 2783-2791**
http://jrrp.um.ac.ir

Original Article

Evaluation of the Effectiveness and Efficiency of the Agricultural Insurance Fund in the Development of Rural areas of Shiraz County

Ali Shamsoddini[*1]

1. Associate Prof. in Human Geography, Shiraz Branch, Islamic Azad University, Shiraz, Iran.

Abstract

Purpose- The agricultural insurance fund plays a crucial role in rural areas and agricultural sector. Evaluating the performance of this fund can better identify its effectiveness and challenges. This study aims to evaluate the effectiveness and efficiency of the agricultural insurance fund in the development of rural areas in Shiraz County.

Design/methodology/approach- This descriptive-analytical research is based on data collection through a survey. The data collection tool was a researcher-made questionnaire. The validity of the questionnaire was confirmed by experts, and its reliability was verified with a Cronbach's alpha coefficient greater than 0.70. The statistical population consisted of rural residents totaling 55323 individuals. Based on Cochran's formula, the sample size was determined to be 382 individuals.

Findings- The test results, at a significance level less than 0.05, indicated that the Agricultural Insurance Fund had poor efficiency in rural development from the perspective of rural residents. The average test result of 2.404 also confirms this finding. Despite its poor performance, the fund's highest effectiveness and efficiency were related to promoting social justice with an average score of 2.609. Furthermore, analysis of variance showed no significant difference between rural areas regarding the performance status of the Agricultural Insurance fund at a level greater than 0.05 but equal to 0.774. It is also predicted that the Agricultural Insurance Fund may have an impact on the situation of rural areas. According to the regression results, support for the expansion of greenhouse cultivation with a beta value of 0.349 has been the most important factor in the effectiveness of the fund.

Research limitations/implications- challenges related to data collection access and significant costs complicated this research endeavor. To mitigate these negative impacts, villages with larger populations were prioritized for inclusion.

Practical implications- Sustainable rural development in agriculture hinges on various forms of managerial support from entities like the Agricultural Insurance Fund. Dynamism in this area can expedite development.

Originality/value- Despite being relatively overlooked, evaluating the performance of Agricultural Insurance Funds can highlight positive aspects for managers and specialists due to their importance. The villages within the research scope also provide value and authenticity to this study.

Keywords- Evaluation, Agricultural Insurance Fund, Sustainable Rural Development, Shiraz County.

Use your device to scan and read the article online

How to cite this article:
Shamsoddini, A. (2024). Evaluation of the effectiveness and efficiency of the agricultural insurance fund in the development of rural areas of Shiraz County. *Journal of Research & Rural Planning, 1*3(2), 77-91.

http://dx.doi.org/10.22067/jrrp.v13i2.2402-1099

Date:
Received: 15-04-2024
Revised: 17-05-2024
Accepted: 15-07- 2024
Available Online: 01-08-2024

1. Corresponding Author:
Ali Shamsoddini, Ph.D.
Address: Department of Geography, Faculty of Humanities Sciences, Shiraz Branch, Islamic Azad University, Shiraz, Iran.
Tel: +989177234707
E-mail: A_shamsoddini@iau.ac.ir

1. Introduction

Rural development as a multifaceted strategy to improve the social and economic conditions of poor rural residents is being discussed. This effort is particularly achievable through increasing production and enhancing efficiency in rural areas (Shamsodini & Amiri Fahliani, 2014). In recent years, these areas have been recognized as a potential to create synergies for sustainable development (Clausen & Rudolph, 2020). In this regard, villages are of significant importance and play a crucial role in sustainable development (Fadaie et al., 2021). Sustainable development in Agriculture and rural areas requires constant attention because agricultural activities not directly related to food production were not noticed until the twentieth century, leading to consequences (Long et al., 2022). However, successful agricultural productivity growth has been the source of initial development and subsequent structural and industrial transformation in most high-income countries today (De Janvery & Sadoulet, 2020). Given the correlation between agriculture and rural development, this relationship cannot be overlooked; since agriculture as a major driver can contribute to sustainable rural development (Irwin et al., 2010). Due to this relationship, rural development policies and strategies are usually intertwined with agricultural sector, and the position of the agricultural sector cannot be ignored in rural development policies (Gao et al., 2023). Therefore, it is essential to identify existing developmental capacities including the agricultural sector (Mikaniki & Sadeghi, 2021). One of the important capacities for rural development is the agricultural sector. Agriculture has been facing fundamental changes. Population growth, income improvement, and changes in dietary patterns increase the demand for food and other agricultural products (Nchuchuwe & Adejuwon, 2012). On the other hand, risks due to unplanned urbanization, persistent poverty, and ecosystem destruction are growing. This has led to a focus on risk financing insurance playing a significant role in various economic sectors. Insurance as a financial risk management mechanism is part of the comprehensive disaster risk management, playing a crucial role in disaster risk reduction (Alam et al., 2020). It is an economic tool to address the impacts of climate change (Lee et al., 2022). Insurance can cover a wide range of non-climatic and climatic risks through evolving insurance products (Tran & Huynh, 2023). This approach (insurance) is doubly important for the agricultural sector; Because agriculture is an activity that always encounters risk due to its dependence on climatic and environmental conditions. Among the well-known risks in agriculture are the production or performance risk and the hazard risk that cause the instability of the income and profit of the producers of this sector (Chaiyawat et al., 2023). Providing insurance services to agriculture by governments through various insurance companies and funds is encouraged due to the continuity of risks in agriculture, especially in rural areas (Salami & Ravasizadeh, 2015). The necessity of attention to agricultural insurance is undeniable and this sector requires extra planning and attention.

Due to special ecological, social and economic conditions, Iran's rural community is facing various risks. Therefore, expanding social insurance coverage is crucial for comprehensive and sustainable development of rural areas (Gol Mohammadi et al., 2022). Establishing agricultural insurance funds for farmers, villagers, and nomads aims at promoting social justice, reducing poverty, alleviating deprivation in rural areas, developing and prospering villages, and sustaining populations by enhancing social and economic security levels (Qadermarzi et al., 2020). Insurance of agricultural products can be considered a pillar for agricultural sector development; Since it enhances security for agricultural producers, creating more secure conditions for attracting private investment in this sector. Agricultural product insurance facilitates broad participation of farmers in achieving sustainable agriculture by providing secure conditions for capital attraction in agriculture sector. It also helps mobilize rural savings, increase risk management efficiency in the agricultural sector, optimize capital allocation more effectively within this sector, deal with poverty and vulnerability among smallholders and rural farmers. Hence, the role and importance of agricultural insurance cannot be overlooked.

Given that the main target of agricultural insurance development is to increase production levels, reduce risks caused by natural factors, and ensure farmers' income, adopting desirable mechanisms to increase participants (villagers or farmers) and improve their satisfaction is an important goal of rural agricultural insurance fund (Hosseinnejad, 2015). Considering

the importance of this issue in the sustainability and continuous operation of this fund, its effectiveness and efficiency should be evaluated. In fact, evaluating this fund can be a step forward in understanding its capabilities and performance. In this research, villages of Shiraz County have been studied. This region holds an acceptable position in the country's annual agricultural production. Having a significant share in the county's agriculture as well as various climate challenges, water resource problems, and diverse risks make rural areas of this county suitable for conducting this research. Thus, efforts have been made in this study to evaluate the effectiveness and efficiency of the agricultural insurance fund in developing rural areas in Shiraz County. This objective can enhance addressing the problems of this fund and improving its performance.

2. Research Theoretical Literature

Agricultural production is a risky activity exposed to several potential hazards that make agricultural income unstable and unpredictable year by year. Bakst et al., (2016) report that economic research by the U.S. Department of Agriculture (USDA) has identified five types of agricultural risks:
1. Human and personal risk (such as human health), 2. Institutional risk (related to government actions), 3. Financial risk (such as access to capital), 4. Price or market risk, and 5. Production risk (such as weather and pests) (Baskt et al., 2016).
Each of these risks may affect the agricultural trend of a region. This impact leads to reduced production and income for the local community (He, 2023). As a result of this process, local and national economies become unstable. Governments are therefore seeking various mechanisms to support the agricultural sector. Given that the agricultural sector has close ties with rural communities, its effects are always injected into rural communities (Zhou et al., 2023). In other words, supporting the agricultural sector means helping achieve sustainable rural development. Various agricultural insurances are considered as support for rural development (Chhikara & Kodan, 2012). The main goal of creating social and agricultural insurances includes providing economic security for rural residents, preventing rural poverty, establishing economic stability in production relationships, preserving important rural community values, increasing labor productivity in agricultural production, and achieving development based on social justice (Qadermarzi et al., 2020). Agricultural insurance aims to minimize risks and uncertainties in the agricultural sector. This program is required by farmers who are exposed to multiple risks of crop failure. So far, there have been various obstacles in the implementation of agricultural insurance (Fadhil et al., 2021).

In Iran, like many other countries, various measures have been taken to support rural communities and agriculture. The establishment of the Farmers', Villagers', Nomads' Insurance Fund since 2005 can be seen as a milestone in achieving these goals (Qadermarzi et al., 2020). The fund aims to support rural residents and farmers by compensating for agricultural losses (e.g. pests, drought), damages to facilities and agricultural machinery, livestock losses (e.g. diseases), implementing fund programs in villages, seeking advice from villagers on fund performance, implementing risk reduction plans covered by insurance, etc. Ebrahimi et al., (2015) studied the role of rural and Nomadic insurance in stabilizing the rural population and found that rural residents play a vital role in economic security as economic actors who need government support and empowerment. Social insurance for rural residents and nomads can be an suitable solution for this purpose and play a significant role in it. Rezvani and Kuchaki (2016) demonstrated that having social insurance for rural residents and nomads is essential to support them, build trust among them towards the fund, ultimately leading to influencing rural development and enhancing social and economic security. Varmazyari and Moradi (2017) found that structural barriers are the key obstacles to the development of social insurance for farmers, villagers, and nomads in Kermanshah County. These barriers stem from weak regulations, inadequate organization of rural and nomadic labor force, and insufficient service coverage. Azizpour et al (2016) in a study to analyze nomads' perspective about the quality of rural insurance fund services, concluded that there is a gap between the current state and quality of services provided by the rural insurance fund and what expected by policyholders in all dimensions except tangible factors. The results showed that policyholders' expectations of the quality of services were more than what they received, and their satisfaction with the services was evaluated at an average level. Qadermarzi et al., in a study entitled "Explanation of factors affecting the effectiveness of social insurance fund of farmers

and villagers", identified social and cultural factors as more influential on the effectiveness of the social insurance fund for farmers and villagers compared to economic and geographical factors.

Yuliong (2001) studied the relationship between productivity growth, income inequality, and social insurance in China and concluded that economic growth, total productivity and income inequality increase with a decrease in the level of social insurance. Ramesh (2007) found that rural residents in India are not opposed to insurance; But require affordable costs and adequate coverage against risks. Maiyaki & Ayuba (2015) investigated factors influencing policyholders' attitudes towards insurance in Kano, Nigeria. For this purpose, they evaluated the level of policyholders' awareness, and their perception, confidence and trust in insurance services. The results indicated that, the awareness and correct understanding of insurance services and trust in brokers and insurers play a vital role in generating positive attitudes of policyholders towards insurance. A study conducted by Pratiwi & Budiasa (2022) showed that the effectiveness of the agricultural insurance program was acceptable according to effective criteria. In this regard, assurance and expanding insurance services can play the most significant role in farmers' satisfaction. Zeng et al., (2022) in a study on "agricultural insurance and economic growth", concluded that agricultural insurance supports farmers and sustainable production, contributing to long-term economic growth. Investigating the agricultural insurance performance, Timu & Kramer (2023) emphasized that while insurance is a suitable support mechanism for agriculture, its implementation and policies are crucial for its efficacy. Analysis of past research and comparison with the present study shows that unlike many past studies, this research emphasizes on the agricultural insurance fund. Furthermore, an attempt has been made to establish a research framework in line with the duties of this fund. Additionally, this study examines the effectiveness and efficiency of the agricultural insurance fund, which has not been significantly addressed in past research. Therefore, the present study is innovative in these aspects.

Figure 1. Conceptual model of the research

3. Research methodology

3.1. Geographical scope of the research

Shiraz County is located in Fars Province, with Shiraz city being its center. This County consists of three districts: central, Arzhan, and Siakh-e-Darnegoun. The population of this county has been 1869001 individuals and 567,567 households in the year 2016. Based on the latest census data available (2016), there are 68 inhabited villages in this County. Shiraz County has a significant potential in agriculture and tourism sector. In terms of agriculture, this County has various capacities. Due to climate diversity, agriculture has always been an important part of this region's economy. Grapes, pomegranates, nectarines and wheat are among the most important products of this County. In this study, 12 villages have been selected as study subjects.

3.2. Research Method

This study is of an applied and quantitative nature, methodologically falling under descriptive-analytical research. It is based on field data collection through questionnaires administered at the individual level. The target population of this research consists of rural residents in the central part of Shiraz County. Due to constraints, villages with

more than 700 households were selected for the study in the first phase, totaling over 12 villages. In the second phase, sample size determination was carried out based on these villages. The 12 studied villages have a population of 55323 individuals and 15119 households. According to Cochran's formula, a sample size of 382 individuals were determined. Table (1) shows the distribution of the sample based on the studied villages.

Table 1- Distribution of questionnaires in the studied villages

Village	Household	Population	Sample size
Sultan Abad	2324	8734	60
Tafhian	1713	6170	43
Karoni	1615	5689	39
Kyan Abad	12389	5039	35
Zafar Abad	1265	4856	34
Qalat	1140	3953	27
Koushk Bidak	875	3871	28
Kafari	954	6424	44
Gerd Khoun	782	2880	20
Dehak Qara Bagh	762	2636	18
Kaftark	743	2526	17
Gachi	15119	2545	17
Total		55323	382

The validity of the questionnaire was confirmed by experts in the field. Considering the importance of reliability in the analysis of the questionnaire, the reliability coefficient was calculated using Cronbach's alpha, which was found to be higher than the acceptable criterion and standard value of 0.07 (Table 2). Statistical tests were used for data analysis in the SPSS software in this study. It is necessary to mention that factors were collected and utilized through various studies.

Table 2- calculating dimensions and indicators of the study based on Cronbach's alpha coefficient

Dimension	Indicator	Number	Cronbach's alpha
Agricultural situation	Employment in the agricultural sector, variety of agricultural products, the amount of cultivated area, paying attention to agriculture, investment in agricultural sector, greenhouse cultivation, land use changes to agriculture, water resources of the agricultural sector, number of beneficiaries, livestock situation.	10	0.771
Current situation of the agricultural insurance fund	Performance of the fund in case of agricultural damages (hail, drought, etc.), fund's performance in case of damage of facilities, agricultural machinery etc., fund's performance in case of livestock damages (diseases etc.), implementation of plans and programs of the fund, obtaining advice from the villagers regarding the operation of the fund, number of plans to reduce the losses caused by risks covered by insurance, time limit for insurance claim payment	7	0.765
Effectiveness and efficiency of the agricultural insurance fund	Support during unexpected natural disasters (flood, drought, etc.), support during humanitarian disasters including fire, support and insurance of agricultural machinery and tools, educating and informing farmers about insurance fund, participation of fund in agricultural plans, providing plans to reduce agricultural losses, the process of carrying out the affairs of agricultural insurance, granting subsidy and financial assistance to farmers, improving villagers' income, preservation of the rural population, increasing social justice, poverty	15	0.784

Dimension	Indicator	Number	Cronbach's alpha
	alleviation, expansion of cultivated areas, support for the expansion of greenhouse cultivation, better management of water consumption		

4. Research findings

4.1. Demographic characteristics of the sample

Frequency distribution regarding gender indicates that, 75.1% of the sample were men and 24.9% were women. Additionally, 3.4% were between 25-30 years old, 7.1% between 31-40, 36.6% between 41-50, 29.1% 51-60, and 23.8% were between 61-63 years old. The minimum age in the sample was 25 and the maximum age was 63 years old. In terms of education, 7.9% were illiterate, 23.6% had a degree less than a diploma, 33% had a diploma, 16.8% had a bachelor's degree, and 17% had a master degree.

The distribution based on gender, age, and education variables suggests a desirable distribution in the sample which can be effective in generalizing results to the population as a whole. Moreover, it shows that 90.6% of the sample (346 individuals) used agricultural insurance facilities while only 9.4% (36 individuals) did not use these facilities.Therefore, most individuals in the sample are aware of agricultural insurance funds. Furthermore, an assessment of the satisfaction level of the sample with the performance of agricultural insurance funds generally indicates that: 22.8% chose very low satisfaction, 83% chose low satisfaction, 21.4% chose moderate satisfaction, 13.1% chose high satisfaction, and 4.7% chose very high satisfaction. Overall, more than 60.7% of the respondents expressed low satisfaction with the performance of agricultural insurance funds.

4.2.The situation of rural areas in terms of agriculture

The results of the inferential part of the research show the status of rural areas in terms of agricultural indicators. The one-sample t-test suggests that all agricultural indicators are significantly below 0.05. The examination of significance using the mean indicates that except for the indicator of land use change from agriculture use to other uses with a mean of 4.314, other indicators have means lower than the average test limit (3). Therefore, agricultural indicators in rural areas have not been adequately evaluated. The total agricultural indicators also confirm this, as the level of significance of the total indicators is equal to 0.000 and less than 0.05, with a mean of 2.676 confirming that it is lower than the average limit (3). The negativity of the lower test limit (0.393) and upper test limit (0.253) also confirms this issue. As mentioned, the indicator of land use change from agriculture to other uses had the highest mean at 4.314. Hence, land use changes from agriculture to other uses in rural areas have increased. In other words, agricultural lands in rural areas have been reduced and other uses have taken their place. Other indicators with higher means include the status of agricultural product diversity, number of operators, and employment status in the agricultural sector (Table 3).

Table 3- situation of rural areas in terms of agriculture (one=sample t-test)

Indicator	Test Basis = 3				
	T	Significance level	Mean	Confidence interval at the 95% level	
				Lower limit	Upper limit
Employment in agricultural sector	-5.200	0.000	2.680	-0.440	-0.198
Diversity of agricultural products	-2.738	0.006	2.861	0.238	-0.039
The amount of cultivated areas	-03.082	0.002	2.811	-0.308	-0.068
Paying attention to agriculture	-9.586	0.000	2.345	-0.788	-0.520
Investment in agricultural sector	-5.176	0.000	2.615	-0.531	-0.238
Greenhouse cultivation	-14.26	0.000	2.075	-1.05	-0.796
Land use change from agriculture to other uses	32.61	0.000	4.314	1.23	1.39
Water resources of agricultural sector	-15.81	0.000	2.120	-0.989	-0.770
Number of operators	-6.073	0.000	2.636	-0.481	-0.246
Livestock	-8.916	0.000	2.306	-0.846	-0.540
Total (indicators)	-9.038	0.000	2.676	-0.393	-0.253

4.3. The status of agricultural insurance fund in rural areas

The status of agricultural insurance fund in rural areas has been evaluated based on their duties framework. The test results indicate that the status of the agricultural insurance fund is significantly below 0.05 and equal to 0.00. The average of 2.138, as well as the negativity of the lower limit (-0.777) confirm that the performance of the agricultural insurance fund in rural areas is not satisfactory. The highest average belongs to the indicator of agricultural losses (hail, drought, etc.) at 2.675 and the lowest average belongs to the indicator of time limit for insurance claim payment at 1.740, confirming that the comparison between minimum and maximum averages of indicators clearly shows that the performance of the agricultural insurance fund in rural areas has been assessed as weak (Table 4).

Table 4- Evaluation of agricultural insurance fund status in rural areas (one-sample t-test)

Indicator	Test basis = 3				
	T	Significance level	Mean	Confidence interval at 95% level	
				Lower limit	Upper limit
Performance of fund in case of agricultural losses (hail, drought, etc.)	-5.023	0.000	2.675	-0.451	-0.197
Performance of fund in case of damages to agricultural facilities, machinery, and tools	-7.066	0.000	2.486	-0.655	-0.370
Performance of fund in case of livestock losses (diseases)	-9.165	0.000	2.342	-0.798	-0.516
Implementation of fund plans and programs in villages	-12.55	0.000	2.102	-1.038	-0.757
Obtaining advice from villagers in line with the operation of the fund	-18.03	0.000	1.808	-1.321	-1.061
Number of plans reducing the losses caused by risks covered by insurance	-17.97	0.000	1.814	-1.315	-1.056
Time limit for insurance claim payment	-21.76	0.000	1.740	-1.372	-1.145
Total (indicators)	-20.32	0.000	2.138	-0.944	-0.777

4.4. Evaluation of the significance of the difference among rural areas in terms of the status of the agricultural insurance fund

In this research, the significant difference in the status of agricultural insurance fund was evaluated. The study focused on the performance of the insurance fund in 12 villages in Shiraz County and found that overall, the fund's performance was not satisfactory. However, there may be some differences among rural areas. An analysis of variance (ANOVA) test was used to determine and investigate this issue. The ANOVA results showed that at a significance level greater than 0.05 and equal to 0.774, there is no significant difference between rural areas in terms of the status of the agricultural insurance fund.

Table 5. Evaluating the significance of the difference among rural areas in terms of the status of agricultural insurance fund using one-way analysis of variance

Indicator	Variance	Total square	Degrees of freedom	Mean square	F	Sig
The status of agricultural insurance fund	Intergroup	5.045	11	0.459	0.662	0.774
	Within-group	256.234	370	0.693		
	Total	261.279	381	***		

The results of table (5) showed that there is no significant difference between rural areas in terms of the performance status of the agricultural insurance fund. Therefore, there is no need for follow-up tests. However, to better demonstrate this lack of difference, the results of Duncan's post hoc test are reported (Table 6). According to the results, the highest average rank is related to Kaftarak village with a value of 2.319 and the lowest average is related to Kafari village with a value of 1.954.

Thus, firstly, the average performance status of the agricultural insurance fund in all villages has been lower than the average (3). Secondly, no significant difference between villages was observed based on the maximum and minimum averages.

Table 6. Explaining the differences among villages in terms of the status of agricultural insurance fund (Duncan's post hoc test)

The significance of classes at the alpha level of 0.05		
Village	Number	Mean status of the village in terms of agricultural insurance fund
Soltan Abad	60	2/097
Tafhian	43	2.255
Karouni	39	2.164
Kian Abad	35	2.155
Zafar Abad	34	2.037
Qalat	27	2.079
Koushk Bidak	28	2.173
Kafari	44	1.954
Gerd khoun	20	2.400
Dehak qara bagh	18	2.238
Kaftarak	17	2.319
Gachi	17	2.016

4.5. Evaluation of the effectiveness and efficiency of agricultural insurance fund in rural development

The effectiveness and efficiency of the agricultural insurance fund in rural development have been evaluated through 15 indicators. The results of the one-sample t-test show that all indicators are significant at a level less than 0.05 and equal to 0.000. The examination of significance using the mean indicates that all indicators have a mean lower than the average test limit (3), suggesting that the agricultural insurance fund has poor effectiveness and efficiency in rural development from the perspective of rural residents. Additionally, the test result at the overall level of effectiveness and efficiency confirms this finding, as the significant value is less than 0.05 and equal to 0.000. The mean of 2.404 also confirms the fund's weak effectiveness and efficiency in rural development. The negativity of the upper limit (-0.508) and lower limit (-0.683) of the test is another reason to confirm this (Table 7). Despite its poor performance, the fund's highest effectiveness and efficiency belonged to promoting social justice with a mean of 2.609, followed by improving water management with a mean of 2.596. in conclusion, it can be inferred that the agricultural insurance fund has not been effective within its duties in rural development. If any impact has occurred, it has not been tangible and successful from the perspective of rural residents. In other words, the agricultural insurance fund has failed to effectively contribute to rural and agricultural sector development, as perceived by rural residents.

Table 7. Evaluation of the effectiveness and efficiency of the agricultural insurance fund in rural development (one-sample t-test)

The effectiveness and efficiency indicators	Test basis = 3				
	T	Significance level	mean	Confidence interval at 95% level	
				Lower limit	Upper limit
Support in case of unexpected natural disasters (flood, drought, etc.)	-7.500	0.000	2.523	-0.601	-0.351
Support in case of humanitarian disasters including fire	-12.85	0.000	2.141	-0.989	-0.727
Support and insurance of agricultural machinery and tools	-14.82	0.000	2.125	-0.990	-0.758

Training and informing farmers about insurance fund	-12.23	0.000	2.133	-1.005	-0.727
Participation of the fund in agricultural plans	-9.131	0.000	2.327	-0.817	-0.527
Process of carrying out agricultural insurance affair	-9.117	0.000	2.377	-0.757	-0.488
Providing plans to reduce agricultural losses	-12.34	0.000	2.157	-0.977	-0.708
Granting subsidy and financial assistance to farmers	-6.958	0.000	2.552	-0.574	-0.321
Improving villagers' income	-6.619	0.000	2.568	-0.560	-0.303
Preserving rural population	-8.246	0.000	2.486	-0.635	-0.390
Promoting social justice	-4.936	0.000	2.609	-0.545	-0.234
Poverty alleviation	-5.909	0.000	2.568	-0.575	-0.288
Expansion of cultivated areas	-10.62	0.000	2.324	-0.800	-0.550
Expansion of greenhouse cultivation	-6.953	0.000	2.567	-0.554	-0.309
Improving water management	-6.248	0.000	2.596	-0.530	-0.276
Total (effectiveness and efficiency of the fund)	-13.44	0.000	2.404	-0.683	-0.508

4.6. Explaining and predicting the effectiveness and efficiency of insurance fund in improving the agricultural situation in rural areas

Analysis of variance and regression model (Table 8) demonstrates that the significance level (Sig) of the regression model is less than the acceptable error rate (0.05) and equals 0.000, indicating a statistically significant relationship between the effectiveness of agricultural insurance fund and the improvement of rural areas with over 99% confidence level. Therefore, the effectiveness of agricultural insurance fund in improving rural areas is justifiable. The degrees of freedom are 381. Overall, the analysis suggests that the agricultural insurance fund can be effective in improving rural areas, especially in the agricultural sector and this is explainable through various approaches and methods.

Table 8. Significance test of the regression model for predicting the effectiveness of the agricultural insurance fund in improving the condition of rural areas

Significance	F value	Mean square	Degrees of freedom	Total square	Model
0.000	214.85	11.150	15	167.249	Regression
		0.052	366	18.993	Remaining values
		***	381	186.243	Total

Based on Table (9), the correlation coefficient or effectiveness of the agricultural insurance fund in improving the situation of agriculture in rural areas is 0.0948, indicating a direct correlation. However, despite this, the agricultural insurance fund collectively explains 94.8% of the variance in the situation of agriculture in rural areas and about 2.5% of the variance is explained by other factors. The predictability or effectiveness of the agricultural insurance fund in improving the situation of agriculture in areas is significant.

Table 9. Explaining the changes in dependent variable (rural areas' status) through the indicators of the effectiveness of the agricultural insurance fund

Standard error	Corrected R value	R-squared value	R value	model
0.22780	0.898	0.898	0.984	1

The level of power and the effectiveness of various indicators of agricultural insurance fund in improving the situation of rural areas are not uniform and consistent. Regression results show that some indicators have become significant. The significant indicators of the agricultural insurance fund include rural income improvement (0.000), social justice expansion (0.013), poverty alleviation (0.026), support for greenhouse cultivation expansion and water consumption management improvement (0.003). Analysis of the significance direction indicates that the agricultural insurance

fund can positively impact the improvement of rural areas through rural income enhancement with a beta value of 0.302). Additionally, the agricultural insurance fund can have positive effects on improving the situation of rural areas and the agricultural sector through poverty alleviation with a beta value of 0.096 and through support for greenhouse cultivation expansion with a beta value of 0.349. The status of other effectiveness indicators of the agricultural insurance fund in terms of significance or insignificance, as well as their influencing directions, can be observed in table (10).

Table 10. Statistics of independent variable regression model coefficients (effectiveness indicators of agricultural insurance funds

Status	Significance value	Standard coefficients	Nonstandard coefficients		Model
		Beta value	Standard error	B value	
Significant	0.000		0.135	1.326	Constant
Insignificant	0.764	-0.014	0.026	-0.008	Support in case of unexpected natural disasters (hail, etc.)
Insignificant	0.413	0.070	0.046	0.038	Support in humanitarian disasters including fire
Insignificant	0.862	0.011	0.037	-0.006	Support and insurance of agricultural machinery and tools
Insignificant	0.162	0.195	0.070	0.098	Training and informing farmers about insurance fund
Insignificant	0.507	-0.020	0.015	-0.010	Process of carrying out agricultural insurance
Insignificant	0.777	0.017	0.032	-0.009	Providing loss reduction plans
Insignificant	0.113	0.211	0.069	0.110	Granting subsidy and financial assistance to farmers
Insignificant	0.338	0.078	0.045	0.043	Improvement of rural income
Significant	0.000	-0.302	0.041	0.166	Participation of the fund in agricultural plans
Insignificant	0.065	-0.141	0.044	0.081	Preservation of rural population
Significant	0.013	0.216	0.039	0.098	Social justice expansion
Significant	0.026	0.096	0.021	-0.047	Poverty alleviation
Insignificant	0.668	0.031	0.041	0.018	Expansion of cultivated land
Significant	0.010	o.349	0.077	0.201	Support for greenhouse cultivation
Significant	0.003	-.180	0.033	-0.100	Water consumption management improvement

5. Discussion and Conclusion

Agriculture is considered as an important part of rural development which faces various challenges. Some of these challenges are rooted in natural hazards. In fact, environmental and climate changes pose serious threats to agricultural products. Supporting agricultural sector of rural areas is crucial in such conditions. One approach is through agricultural and rural insurance. In Iran, support for farmers and rural development includes establishing insurance funds. A study on the effectiveness of agricultural insurance from the perspective of rural residents showed unsatisfactory agricultural conditions in the region, with various indicators like crop diversity, farmer numbers, employment status, cultivation area, investment, water resources, and government support being poorly evaluated by villagers. This weakness may stem from inadequate government support and other external factors impacting agriculture. Evaluating the effectiveness and efficiency of the agricultural insurance fund in rural development indicates that this fund has performed poorly regarding rural development. As a matter of fact, villagers have evaluated the performance of agricultural insurance fund in Support during unexpected natural disasters (flood, drought, etc.), support during humanitarian disasters including fire, support and insurance of agricultural machinery and tools, educating and informing farmers about insurance fund,

participation of fund in agricultural plans, process of carrying out agricultural insurance affairs, providing plans to reduce agricultural losses, granting subsidy and financial assistance to farmers, improving villagers' income, preservation of the rural population, increasing social justice, poverty alleviation, expansion of cultivated areas, support for the expansion of greenhouse cultivation, better management of water consumption as being weak. Investigating these indicators demonstrates that, most of them are within the framework of agricultural insurance fund duties and the lack of satisfaction of the villagers in this matter requires further consideration. The results of the studies conducted by Rezvani and Kouchaki (2016), Maiyaki and Ayuba (2015), Zeng et al., (2022), Pratiwi and Budiasa (2022) are not consistent with the results of the present study; since in these studies the efficiency of agricultural insurance has been emphasized, while the results showed that the effectiveness and efficiency of the insurance fund was not satisfactory from the villagers' perspective. This may be due to the method and process of performing the fund's supportive duties for agriculture. According to the results, it is also predicted that, agricultural insurance.
fund can be effective in the status of rural areas. The fund's highest effectiveness has been determined in terms of support for the expansion of greenhouse cultivation. Improving villagers' income and poverty alleviation are also among other predictable effects of this fund. Needless to say that, planning and sustainable support for rural community are the requirements of this effectiveness. The results of the studies conducted by Ebrahimi et al. (2015), Rezvani and Kouchaki (2016), and Pratiwi and Budiasa (2022) emphasize on the importance and effectiveness of agricultural insurance which are consistent with the results of this part of the present study. On the whole, the results of the present study demonstrated that, the performance of the agricultural insurance fund has not been satisfactory and the actions taken by this fund did not have tangible effectiveness and efficiency. In general, the results indicate that, the agricultural insurance fund holds significant potential for rural and agricultural development; yet this potential remains largely untapped. To actualize these capacities, it is necessary to identify, clarify, and emphasize the development areas based on identified factors and impacts. Given these conditions, the following recommendations are proposed:

1- it is suggested that the agricultural insurance fund review its charter in terms of providing support to farmers.

2- initiatives aimed at reducing losses should be made available to rural residents and farmers by the agricultural insurance fund.

3- the process of agricultural insurance for rural residents should be facilitated.

4- seeking advice from rural residents regarding fund's performance is another recommendation to enhance its effectiveness.

Acknowledgments

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Authors′ contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

Reference

1. Alam, A. F., Begum, H., Masud, M. M., Al-Amin, A. Q., & Leal Filho, W. (2020). Agriculture insurance for disaster risk reduction: A case study of Malaysia. *International Journal of Disaster Risk Reduction*, 47(2), 45-63. https://doi.org/10.1016/j.ijdrr.2020.101626
2. Azizpour, F., Mahmoudian, F. & Azizi, S. (2020). Analyzing the Views of the Nomadic on the Quality of Social Insurance Fund of Villagers and Tribes Services (Case Study: Chaghakhor Village of Chaharmahal and Bakhtiari Province). *Spatial Planning*, 10(3), 47-65. [In Persian] https://doi:10.22108/sppl.2020.117003.1384
3. Bakst, D., Sewell, J., & Wright, B. (2016). Addressing Risk in Agriculture. Heritage Foundation Special Report 189. Washington, DC: Heritage Foundation. https://www.heritage.org/agriculture/report/addressing-risk-agriculture

4. Chaiyawat, T., Mekkriengkrai, S., & Phanwichit, S. (2023). Enhancing the Effectiveness of Insurance Risk Management in the Agricultural Sector in Thailand. *AgBioForum*, 25(1), 130-139. https://agbioforum.org/menuscript/index.php/agb/article/view/220
5. Chhikara, K. S., & Kodan, A. S. (2012). National agricultural insurance scheme (NAIS) in India: an assessment. Management and Labour Studies, 37(2), 143-162. https://doi.org/10.1177/0258042X1203700205
6. Clausen, L. T., & Rudolph, D. (2020). Renewable energy for sustainable rural development: Synergies and mismatches. *Energy Policy*, 138(2), 21-42. doi.org/10.1016/j.enpol.2020.111289
7. de Janvry, A., & Sadoulet, E. (2020). Using agriculture for development: Supply-and demand-side approaches. World development, 133(2), 34-51. doi.org/10.1016/j.worlddev.2020.105003
8. Ebrahimi, N., Gholamrezai, S., Rahimian, M., & Zarifian, Sh. (2016). Performance Evaluation of Rural and Nomads Social Insurance Fund: Case Study of Khorramabad Township. *Third International Conference of Management*, Economy and Accounting, Tabriz, [In Persian] https://civilica.com/doc/449950
9. Fadaei, M., Rahmani, B., & Tavakolinia, J. (2021). Environmental Analysis of Villages on the Skirt of Farsan City based on the Urban and Rural Relationship. *Journal of Research and Rural Planning*, 10(4), 59-76. [In Persian] doi: 10.22067/JRRP.V10I4.2105.1012
10. Fadhil, R., Yusuf, M. Y., Bahri, T. S., & Maulana, H. (2021). Agricultural insurance policy development system in Indonesia: a meta-analysis. *Journal of Hunan University Natural Sciences*, 48(2),121-132. http://jonuns.com/index.php/journal/article/view/508
11. Gao, P., Xie, Y., Song, C., Cheng, C., & Ye, S. (2023). Exploring detailed urban-rural development under intersecting population growth and food production scenarios: Trajectories for China's most populous agricultural province to 2030. *Journal of Geographical Sciences*, 33(2), 222-244. https://link.springer.com/article/10.1007/s11442-023-2080-3
12. Ghadermarzi, H., Fayeghi, N., & Riahi, V. (2020). Explaining the Effective Factors on the Effectiveness of the Performance of the Social Insurance Fund for Farmers, Villagers, and Nomads (Case Study: Sarvabad City). *Journal of Geographical Engineering of Territory*, 4(2), 295-308. [In Persian] doi: JGET-2012-1224
13. Golmohammadi, F., Farajzadeh, A., & Abedi Sarvestani, A. (2020). Analysis of the Strength, Weaknesses, Threats and Opportunities (SWOT) Facing the Social Insurance Fund of Farmers, Villagers and Nomads in Darmian County, South Khorasan Province, 6th International Conference of Developing Agriculture, Natural Resources, Environment & Tourism of Iran. [In Persian] https://civilica.com/doc/1622896/
14. He, T. (2023). Power Mechanism and Practical Path of Agricultural Insurance to Help Rural Revitalization. *Applied Mathematics and Nonlinear Sciences*, 9(1), 1-17. DOI: 10.2478/amns.2023.2.01341
15. Hosseinnezhad, A. (2015). Factors Affecting the Acceptance of Wheat Crop Insurance, Case study: Weat farmers of Kermanshah Province. *Journal of Agricultural Insurance Fund*, 12 (46). 125-145. [In Persian] http://journal.sbkiran.ir/article-52-1-fa.html.
16. Irwin, E. G., Isserman, A. M., Kilkenny, M., & Partridge, M. D. (2010). A century of research on rural development and regional issues. *American Journal of Agricultural Economics*, 92(2), 522-553. https://www.jstor.org/stable/40648001
17. Lee, H., Zhen-Jiang, Y. O. N. G., & Qiao-Ming, L. I. M. (2022). Insurance development and economic growth. *Financial Statistical Journal*, 5(1),1-17. https://systems.enpress-publisher.com/index.php/FSJ/article/view/1057/828
18. Long, H., Ma, L., Zhang, Y., & Qu, L. (2022). Multifunctional rural development in China: Pattern, process and mechanism. *Habitat International*, 121(3), 32-51. doi.org/10.1016/j.habitatint.2022.102530
19. Maiyaki, A.A., & Ayuba, H. (2015). Consumer's attitude toward Islamic insurance services (Takaful) patronage in Kano metropolis, Nigeria. *International journal of marketing studies*, 2(7), 27-34. https://DOI:10.5539/ijms.v7n2p27

20. Mikaniki, J., & sadeghi, H. (2012). Determining the optimal spatial pattern of rural service centers by AHP method with an approach to land suitability (case study: Dehdiz District, Izeh County). *Journal of Research and Rural Planning*, 1(2), 47-69. [In Persian] https://doi:10.22067/jrrp.v1i2.16417
21. Nchuchuwe, F. F., & Adejuwon, K. D. (2012). The challenges of agriculture and rural development in Africa: the case of Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 1(3), 45-61. https://www.academia_Development_in_Africa_The_Nigeria
22. Pratiwi, L. P. K., & Budiasa, M. (2022). Effectiveness of agricultural insurance program as a sustainable agricultural development effort. *SEAS (Sustainable Environment Agricultural Science)*, 6(2), 134-143. DOI:https://doi.org/10.22225/seas.6.2.5856.134-143
23. Ramesh, T.V. (2007). Rural Initiatives, Micro-Insurance, School of statistics, Central University of Finance and Economics, Xueyuan South Rd, Haidian District, Beijing, China. https://ir.knust.edu.gh/handle/123456789/9129
24. Rezvani, M.R., & Kochaki, M. (2017). An Analysis on Effects of Social Insurance of Farmers, Villagers, and Nomads on Social Security and Sense of Belonging in Rural Community (Case Study of Badreh County- Ilam Province. *Human Geography Research Quarterly*, 49 (2), 445-463. [In Persian] https://doi:10.22059/jhgr.2017.58817
25. Salami, H., & Ravasi Zadeh, S. (2016). Comparing Risk of Wheat Production in Kerman and Other Provinces of Iran: A Stochastic Dominance Criteria Analysis. *The Quarterly Journal of Insurance and Agriculture*, 12 (46), 7-20. [In Persian] http://journal.sbkiran.ir/article-fa.html
26. Shamsoddini, A., & Amiri Fahlyani M.R. (2014). An Analysis of the Factors Related to the Development of Tourism in Rural Areas Using SWAT Model (A Case Study: Mamasani). *Geographical Journal of Tourism Space*, 3(12), 107-126. [In Persian] https://www.sid.ir/paper/214242/fa
27. Timu, A. G., & Kramer, B. (2023). Gender-inclusive,-responsive, and-transformative agricultural insurance: A literature review. *Global Food Security*, 36(1),1-22. https://doi.org/10.1016/j.gfs.2023.100672
28. Tran, Q. T., & Huynh, N. (2023). Can insurance ensure economic growth in an emerging economy? Fresh evidence from a non-linear ARDL approach. *Journal of Financial Economic Policy*, 15(6), 596-612. doi.org/10.1108/JFEP-05-2023-0125
29. Varmazyari, H., & Moradi, M. (2017). Analysis of Obstacles Related to the Development of Social Security of Farmers, Villagers, and Nomads in Kermanshah County. *Social Welfare Quarterly*, 17(66), 291-320. [In Persian] http://refahj.uswr.ac.ir/article-3030-1-fa.html.
30. Yui Leung, C.K. (2001). Productivity growth, increasing income inequality and social insurance: the case of China?. *Journal of Economic Behavior & Organizati*on, 46(4), 395-408. https://ideas.repec.org/a/eee/jeborg/v46y2001i4p395-408.html
31. Zeng, S., Qi, B., & Wang, M. (2022). Agricultural Insurance and Agricultural Economic Growth: The Case of Zhejiang Province in China. *International Journal of Environmental Research and Public Health*, 19(20),1-21. https://doi.org/10.3390/ijerph192013062
32. Zhou, C., Liu, J., Wan, S., Zheng, H., & Chen, S. (2023). Agricultural insurance and rural revitalization—an empirical analysis based on China's provincial panel data. *Frontiers in Public Health*, 11(2),1-18. https://doi:10.3389/fpubh.2023.1291476

Journal of Research and Rural Planning
Volume 13, No. 2, Spring 2024, Serial No. 45, Pp. 77-91
eISSN: 2783-2007 **ISSN: 2783-2791**
http://jrrp.um.ac.ir
Original Article

ارزیابی اثربخشی و کارایی صندوق بیمه کشاورزی در توسعه مناطق روستایی شهرستان شیراز

علی شمس الدینی[1*]

۱. دانشیار جغرافیا و برنامه ریزی روستایی، واحد شیراز، دانشگاه آزاد اسلامی، شیراز، ایران

چکیده مبسوط

۱. مقدمه

کشاورزی با تغییرات اساسی مواجه بوده است. از سوی دیگر خطر بلایا در نتیجه شهرنشینی برنامه ریزی نشده، فقر مداوم و تخریب اکوسیستم همچنان در حال رشد است. این وضعیت سبب توجه و تاکید روی مکانیزم بیمه شده و جایگاه خاصی در بخش های مختلف اقتصادی یافته است. از آنجا که هدف اصلی توسعه بیمه کشاورزی، بالابردن سطح تولید، کاهش مخاطره های برخواسته از عوامل طبیعی و تضمین درآمد کشاورزان است، اتخاذ سازوکارهای مطلوب جهت افزایش مشارکت کنندگان(روستاییان یا کشاورزان) و جلب رضایت آنها از رویکردهای مهم بیمه صندوق کشاورزی روستایی است. با توجه به اهمیت این موضوع در راستای پایداری و فعالیت مستمر این صندوق، بایستی اثربخشی و کارایی آن مورد ارزیابی قرار گیرد. در واقع ارزیابی این صندوق خود می تواند یک گام رو به جلو در راستای شناخت توانمندی و کارایی آن باشد. در این مطالعه روستاهای شهرسان شیراز مورد مطالعه قرار گرفته اند. این منطقه از لحاظ کشاورزی جایگاه قابل قبولی را در تولیدات سالانه بخش کشاورزی کشور برعهده دارد. برخورداری از سهم قابل توجه کشاورزی کشور و همچنین چالش های مختلف اقلیمی، معضلات منابع آب و مخاطرات متنوع در نتیجه این شرایط، دلایلی بر انتخاب مناطق روستایی این شهرستان برای انجام این پژوهش است. بر این اساس، در پژوهش تلاش شده است که در مناطق روستایی شهرستان شیراز، اثربخشی و کارایی صندوق بیمه کشاورزی در توسعه مناطق روستایی ارزیابی شود. این هدف می تواند در راستای رفع معضلات این صندوق و عملکرد بهتر آن موثر باشد.

۲. مبانی نظری

تولید کشاورزی یک فعالیت مخاطره آمیز است که در معرض چندین مورد احتمالی است که درآمد کشاورزی را سال به سال ناپایدار و غیرقابل پیش بینی می کند. باکست و همکاران (۲۰۱۶) گزارش می دهند که تحقیقات اقتصادی وزارت کشاورزی ایالات متحده (USDA) پنج نوع خطر کشاورزی را شناسایی کرده است. ۱-خطر انسانی و شخصی (مانند سلامت انسان)، ۲-نهادی، ریسک (در رابطه با اقدامات دولتی)، ۳-ریسک مالی (مانند دسترسی به سرمایه)، ۴-ریسک قیمت یا بازار، و ۵- ریسک تولید (مانند آب و هوا و آفات) (. هر کدام از این ریسک ها، روند کشاورزی یک منطقه را ممکن است تحت تاثیر قرار دهد. این تاثیرگذاری سبب کاهش تولید و درآمد برای جامعه محلی است. در نتیجه این فرآیند، اقتصاد محلی و ملی دچار تزلزل می شود. در این زمینه دولت ها به دنبال سازوکارهای متنوعی جهت حمایت از بخش کشاورزی شدند. این حمایت با توجه به اینکه بخش کشاورزی با جامعه روستایی ارتباط تنگاتنگی داشته دارد، همواره تاثیرات آن به جامعه روستایی نیز تزریق شده است. حمایت از بخش کشاورزی، یعنی کمک به تحقق توسعه پایدار روستایی است. مهمترین هدف ایجاد بیمه های اجتماعی و کشاورزی را می توان ایجاد امنیت اقتصادی برا روستاییان، پیشگیری از فقر روستایی، ایجاد ثبات اقتصادی در روابط تولیدی، حفظ ارزش های مهم جامعه روستایی، افزایش بهره وری نیروی کار در تولیدات کشاورزی و دستیابی به توسعه مبتنی بر عدالت اجتماعی عنوان کرد.

۳. روش تحقیق

تحقیق حاضر از نوع تحقیقات کاربردی و از لحاظ روش‌شناسی جز تحقیقات توصیفی-تحلیلی و همچنین از نوع کمی است. این تحقیق مبتنی بر گردآوری داده‌های میدانی است. ابزار گردآوری داده‌های میدانی از طریق ابزار پرسش‌نامه بوده است. پرسشگری در سطح فرد انجام گرفت. جامعه آماری این تحقیق را ساکنان روستایی در بخش مرکزی شهرستان شیراز تشکیل داده است. بر اساس آخرین آمار سرشماری قابل دسترس(۱۳۹۵)، تعداد روستاهای دارای سکنه، ۶۸ روستا بوده است. با توجه به تعداد روستاها، در مرحله اول برای محدود نموده روستاهای مورد مطالعه با توجه به محدودیت های پژوهش، روستاهای با بیشتر از ۷۰۰ خانوار تعیین شد.

۱. نویسنده مسئول:
دکتر علی شمس‌الدینی
آدرس: گروه جغرافیا، دانشکده علوم انسانی، دانشگاه آزاد اسلامی واحد شیراز، شیراز، ایران.
پست الکترونیک: A_shamsoddini@iau.ac.ir

۴. یافته‌های تحقیق

وضعیت کشاورزی منطقه چندان مطلوب نبوده است. بگونه ای که شاخص های مختلف در این زمینه شامل تنوع محصولات کشاورزی، وضعیت تعداد بهره برداران و وضعیت اشتغال زایی بخش کشاورزی، میزان سطح زیرکشت، سرمایه گذاری در بخش کشاورزی، استقبال از کشاورزی، منابع آب بخش کشاورزی از دیدگاه روستاییان ضعیف ارزیابی شده است. این ضعف می تواند از یکسو به ضعف در حمایت از بخش کشاورزی توسط دولت و سازمان های مرتبط از جمله حمایت به صورت بیمه ای مرتبط باشد و از سوی دیگر برخی عوامل بیرونی دیگر را دخیل دانست. ارزیابی اثربخشی و کارایی صندوق بیمه کشاورزی در توسعه روستایی نشانگر آن است که صندوق بیمه کشاورزی در توسعه روستایی، اثربخشی و کارایی ضعیفی داشته است. در واقع روستاییان عملکرد و اثربخشی صندوق در حمایت در حوادث غیرمترقبه طبیعی(سیل، خشکسالی و...)، حمایت در حوادث انسانی از جمله آتش سوزی، حمایت و بیمه ماشین آلات و ابزار کشاورزی، آموزش و آگاهی کشاورزان از صندوق بیمه، مشارکت صندوق در طرح های کشاورزی، روند انجام امور بیمه کشاورزی، ارائه طرح های کاهش دهنده خسارات کشاورزی، اعطای یارانه و کمک های مالی به کشاورزان، بهبود درآمدزایی روستاییان، افزایش ماندگاری جمعیت، گسترش عدالت اجتماعی، محرومیت زدایی، گسترش سطح زیرکشت، حمایت در گسترش کشت گلخانه ای، بهبود مدیریت مصرف آب را ضعیف دانسته اند.

۵. نتیجه‌گیری

عملکرد صندوق بیمه کشاورزی رضایت بخش نبوده و اقدامات انجام شده توسط این صندوق، اثربخشی و کارایی ملموسی نداشته است. همچنین صندوق بیمه کشاورزی دارای ظرفیت های قابل توجه ای جهت توسعه روستایی و کشاورزی است اما به صورت بالقوه باقی مانده است. برای آنکه این ظرفیت ها بالفعل گردد بایستی زمینه های توسعه آنها با توجه به عوامل و تاثیرات شناسایی شده، تبیین و مورد تاکید قرار گیرد.

کلیدواژه‌ها: ارزیابی، صندوق بیمه کشاورزی، توسعه پایدار، مناطق روستایی، شهرستان شیراز

تشکر و قدردانی

پژوهش حاضر حامی مالی نداشته و حاصل فعالیت علمی نویسندگان است.

Use your device to scan and read the article online

How to cite this article:
Shamsoddini, A. (2024). Evaluation of the effectiveness and efficiency of the agricultural insurance fund in the development of rural areas of Shiraz County. *Journal of Research & Rural Planning, 1*3(2), 77-91.

http://dx.doi.org/10.22067/jrrp.v13i2.2402-1099

Date:
Received: 15-04-2024
Revised: 17-05-2024
Accepted: 15-07- 2024
Available Online: 01-08-2024