Study Regarding the Opinion of Rural Inhabitants About the Effects of the COVID-19 Pandemic. Case Study

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Abstract

The effects caused by the COVID-19 pandemic have had a significant socioeconomic impact on rural inhabitants. The aim of the study is to identify the impact it has had on rural inhabitants and to develop a series of recommendations to help them manage more effectively such health crises with social impact. The method of the questionnaire was used, applied on a sample of 94 people, from Tetoiu commune, Valcea county. The results obtained from the application of the questionnaire were determined by the frequency of responses, using the Spearman correlation coefficient determined between two variables.

Keywords: Rural area, inhabitants, COVID-19 pandemic, social impact, Romania

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1. Introduction

The effects caused by the COVID-19 pandemic had a significant role on human health, but also from a social and economic point of view.

By the decree of the President of Romania, regarding the state of emergency, certain decisions were taken with a great impact on the inhabitants and the economic environment, such as:

Restricting or prohibiting the movement of vehicles or persons in / towards certain areas or between certain hours, as well as leaving that areas.

This could be achieved by completing a certificate stating the place and purpose of the trip, being allowed certain activities, such as those in the professional interest, providing goods that cover basic needs, medical care that can not be postponed, carrying out activities such as agriculture, blood donation or marketing of agri-food products.

Temporary closure of restaurants, hotels, coffee shops, clubs, casinos, association headquarters and other public places. The organizations sent their employees in technical unemployment and they were granted with an income of 75% of the due salary, being granted by the Romanian government.

112

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In a recent study on the impact of COVID-19 on the global labor market, the ILO drew attention to the risk of increasing the incidence of low-income poverty among the employed population (Paun, 2014). Given that about half of the income of rural households is wage income, the reduction or loss of this income can cause a large part of the rural population to fall below the poverty line (Mitrica, 2020).

By reducing revenues and imposing restrictions on movement and physical distance, it directly affects the demand for agri-food products at fairs and agri-food markets. At the same time, these measures increase the costs for farmers who sell these products, requiring them to purchase additional equipment and resources (Popa, 2019). According to the study conducted by the Institute of Agrarian Economy, over 20% of farmers' incomes come from the sale of agri-food products, which will contribute to a substantial reduction in their incomes (Rusu, 2020).

2. Material and method

In order to carry out the study, a questionnaire was made, containing 18 questions, which was applied to the inhabitants of rural areas, from Tetoiu commune, Vâlcea county, between 28.05.2021-29.06.2021, in order to identify the opinion of rural inhabitants regarding the effects produced by the COVID-19 pandemic at local level. By processing the statistical data, the frequency of the answers of the respondents was determined, as well as the determination of the links between the variables, using the Spearman correlation coefficient, using the formula:

$$r_s = 1 - \frac{6\sum D^2}{n(n^2 - 1)}$$

Regarding the structure of respondents applied on a sample of 94 people, from Tetoiu locality, Tulcea county, 51% of them are female, while 49% are represented by men.

Regarding their age, 41.5% are between 40 and 65 years old, 28.7% are between 18 and 40 years old, 14.9% under 18 years old, 14.9% over 65 years old.

Analyzing the level of the structure of the respondents according to their age, 48.94% of the respondents have primary education, 46.81% have secondary education, while only 4.26% have university education.

Analyzing the income structure of the respondents, 38.3% have incomes between 1400 and 3200 lei, 32.5% have incomes below 800 lei, 23.7% have incomes between 800 and 1400 lei, and 5.5% have incomes of over 3200 lei.

3. Results and discussions

In this paper will be addressed the most relevant answers obtained from the application of the questionnaire, for a sample of 96 people, residents of Tetoiu commune, Vâlcea county.

Table 1. Frequency of respondents' opinion on the negative impact of the COVID-19 pandemic (question 6)

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Frequency	Very much	Much	A little	Nothing	Total
Professional (%)	25.5	21.3	34	19.1	100
Financial (%)	31.9	23.4	27.7	17	100
Mental (%)	38.3	21.3	21.3	19.1	100
Relationship (%)	31.9	19.1	31.9	17	100

Source: Own calculation

Analyzing the respondents' opinion on the negative way in which the situation caused by the COVID-19 pandemic affected them from a professional point of view, 34% of the respondents stated that this affected them "slightly", while 25.5% of them considered that the effects of the pandemic affected them "very much", in a context in which during the state of emergency, activities in various fields were closed, sending employees in a technically unemployed or most of them were fired. From a financial point of view, 31.9% of all respondents considered that they have been affected "very much" by this situation caused by the pandemic, while 27.7% considered that this had affected them "slightly". Employees who were sent into technical unemployment were given only 75% of their salary, thus affecting people's income (Table 1).

Regarding the mental state, 38.3% of them stated that they were affected "very much", while 21.3% said that they were affected "a lot". Restrictions imposed by the state of emergency or the state of alert involved, the limitation of daily travel or in the case of persons who were dismissed / sent into technical unemployment, the mental state was aggravated by these decisions. Also from the point of view of socialization, 31.9% of the respondents consider that they were much affected by the restrictions imposed, and 19.1% consider that they were little affected by this situation, in the context of the physical distance regulated and imposed by the authorities (Table 1).

There is a strong correlation (p <0.001; R2 = 0.722) between rural residents who have been severely affected professionally and rural residents who have been severely affected financially. In other words, we can say that the inhabitants of the rural area who have been affected very much professionally, have been affected to the same extent and financially (Table 2.).

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Table 2. Statistical correlation using the Spearman correlation coefficient between different aspects affected by the covid-19 pandemic among rural residents

	Correlations					
			Professional	Financial	Mental	Relationship
	Professional	Corr.Coeff.	1	,722**	,559**	,426**
		Sig.(2tailed)		0	0	0
		N	94	94	94	94
	Financial	Corr.Coeff.	,722**	1	545**	,430**
		Sig.(2tailed)	0		0	0
Spearman's		N	94	94	94	94
r ho	Mental	Corr.Coeff.	,559**	,545**	1	,776**
		Sig.(2tailed)	0	0		0
		N	94	94	94	94
	Relationship	Corr.Coeff.	,426**	,430**	,776**	1
		Sig.(2tailed)	0	0	0	•
		N	94	94	94	94

**. Correlationissignificant at the 0.01 level (2-tailed).

Source: Own calculation

There is also a strong association between the inhabitants of the rural area who consider that they have been very strongly affected from the point of view of the psyche and the inhabitants who consider that they have been very strongly affected from the relational point of view (p <0.001; R2 = 0.776) (Table 2).

Analyzing the distribution of the main sources of information on the measures that have been taken and / or how the COVID-19 pandemic has evolved among the rural population, 49.94% of them stated that TV was the main source of information, while a significant share is held by those whose main source of information was the Internet. At the opposite pole are the respondents whose main source of information is the local authorities, and who hold a share of 6.36% of their total (Fig. 1).

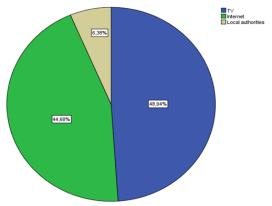


Figure 1. Percentage distribution of the main sources of information on the measures / evolution of the COVID-19 pandemic in rural areas (Question 8 of the questionnaire)

Source: Own calculation

Regarding the percentage distribution of the respondents' opinion regarding the observance of the measures suggested by the authorities, 53.19% of the total respondents state that they respected them "in full", while 44.68% of them state that they complied with them "to a large extent", while only 2.13% claim that they did not comply with these measures "at all" (Figure 2).

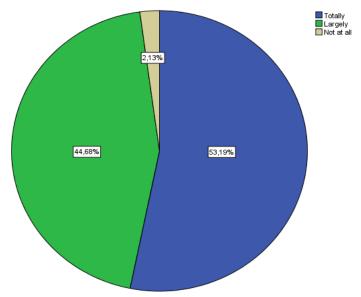


Figure 2. Percentage distribution of respondents' opinion on compliance with measures suggested by authorities whose role was to limit / combat the spread of the COVID-19 pandemic (Question No 10 of the questionnaire)

Source: Own calculation.

Analyzing the percentage distribution of respondents' opinion on how they appreciate the involvement of local authorities in the management of the COVID-19 pandemic, 40.43% of them consider the measures taken by local authorities to be partially effective, while 25.53% of them consider that the measures taken by the authorities are effective. Also, only 21.28% of the total respondents consider as inefficient the activity carried out by the local authorities in order to manage the pandemic (Figure 3).

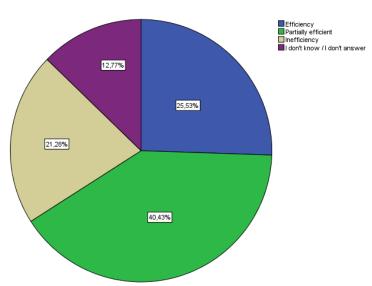


Figure 3. Percentage distribution of respondents' opinion on the involvement of local authorities in the management of the COVID-19 pandemic (Question No 11 of the questionnaire)

Source: Own calculation.

During quarantine, travel to purchase household products, or other activities, such as commuting to work, had to be justified by a statement. Otherwise, people who did not have this justification with them risked very high fines compared to the minimum wage in the economy. We can observe that 27.7% of the respondents stated that they did shopping more often than usual, and 40.4% of them stated that they took care of household activities more often than usual (Table 3).

Table 3. Frequency with which the inhabitants of the rural area carried out various activities during the quarantine period

Activity	More often than usual	As usual	Less often than usual	Total
Shopping	27.7	48.9	23.4	100
Eat	25.5	63.8	10.6	100
Communicate	38.3	46.8	14.9	100
Household activities	40.4	53.2	6.4	100

Source: Own calculation.

Analyzing the percentage distribution of respondents' opinion on the issues that helped them get through this period, 36.17% of all respondents said that friends and acquaintances (socialization) helped them get through this period, 30.30% of them stated that they did not need help to get over this period. There is

also a share of 4.26% of their total, which considers that religion has played an important role for them, in order to overcome this moment (Figure 4).

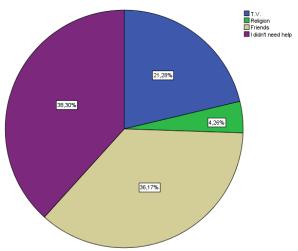


Figure 4. Percentage distribution of respondents' opinion on the issues that helped them get over this period

Source: Own calculation

There is a strong correlation (p <0.05; R2 = 0.242) between the inhabitants of the rural area who stated that their friends and acquaintances (socialization) helped them to get over these periods and female responses. In other words, we can say that the inhabitants of the rural area who claimed that their friends and acquaintances (socializing) helped them get through this time, are generally made up of females (Table 4).

Table 4. Statistical correlation using the Spearman correlation coefficient between different aspects that helped them get over this period and their type

Correlations				
			1) Your gender:	
Spearman'sr ho	13) Which of the following managed to help you get through this period?	Correlation Coefficient	,242*	
		Sig. (2-tailed)	0.019	
		N	94	
**. Correlation	onissignificant at the 0.01 level (2-tailed).	•		
*. Correlation	issignificant at the 0.05 level (2-tailed).			

Source: Own calculation

There is a fairly high percentage among respondents who say that they needed medical care and that they postponed for fear of COVID-19 infection, with a share of 29.79% of all respondents. Also 69.09% stated that they did not need medical care during this period (Figure 5).

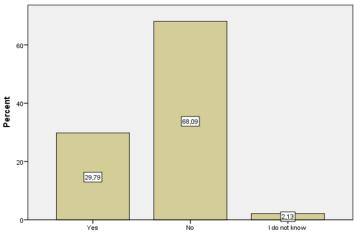


Figure 5. Percentage distribution of the opinion of the answers regarding the need for medical care that were postponed due to the COVID-19 situation

Source: Own calculation.

There is a fairly high percentage among respondents who say that they needed medical care and that they postponed the fear of COVID-19 infection, with a share of 29.79% of all respondents. Also, 69.09% stated that they did not need medical care in this activity (Figure 5).

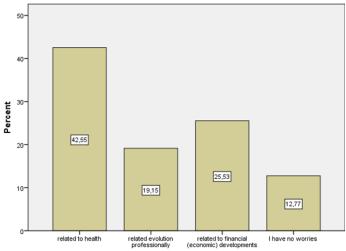


Figure 6. Percentage distribution of respondents on the most important concerns about the future

Source: Own calculation.

Regarding the percentage distribution of respondents with the most important concerns about the future, it is noted that 42.55% of them are related to health, while 25.53% have concerns about financial developments (economic), and 12.77% of all respondents say they have no concerns about the future (Figure 6).

4. Conclusions

The effects produced by the COVID-19 pandemic are also found in rural areas, affecting the inhabitants both socially and economically. The recommendations of the authorities regarding the limitation of the physical interaction between them, but also the disturbance of the ordinary activities at the level of the society are felt mentally by the inhabitants.

At the same time, in addition to these social restrictions, financial measures were implemented in order to help companies that encountered difficulties during this period, sending employees into technical unemployment, paid by the state, but which had a significant impact on income of the inhabitants. On the one hand, incomes were reduced by 25% because the state ensured the payment of 75% of their income, and on the other hand, in industries where employees' incomes were rounded from "tips" they were completely eliminated, in the context of who no longer had customers.

A significant part of the inhabitants of Tetoiu commune, have as main activity the sale of agri-food products in fairs and markets, whose activity suffered along with the imposition of traffic restrictions and physical distance measures, by determining a lower number of customers.

Another category of employees even more affected, were represented by employees who were laid off, which caused disruptions both psychologically and financially, in an already difficult period.

In the future, the reaction of the authorities should be much more prompt to limit the damage caused to companies that need assistance to support the number of jobs.

References

- 1. Buta, A., Neculita, M., Cristea D., (2020), Opportunities Of Sustainable Development In The Rural Area At The Level Of Galati County, Romania, *Scientific Papers-Series Management Economic Engineering In Agriculture And Rural Development*, Volume: 20, Issue: 2, Pages: 101-110.
- 2. Dumitru, E. A. (2017), The influence of European funds in the viable use of localities necessary for rural areas case study, place. Ciugud, Alba County, *International Symposium*, *Agrarian Economy and Rural Development Real Situations and Perspective for Romania*, 8th edition of the international symposium, pp. 236-241.
- 3. Dumitru, E.A., Badan, D., Petre, I.L. & Bratulescu, A.M. Analysis of agricultural holdings in Romania in terms of size. *Sci. Pap. Ser. Manag. Econ. Eng. Agric. Rural. Dev.* 2020, 20, 193-198.
- 4. Dumitru, E.A., Micu, M.M. & Tudor, V. Conceptual approches regarding the Romanian rural area. *Sci. Pap. Ser. Manag. Econ. Eng. Agric. Rural. Dev.* 2019, 19, 121-127.
- Dumitru, E.A., Ursu, A., Tudor, V.C. & Micu, M.M. (2021), Sustainable Development of the Rural Areas from Romania: Development of a Digital Tool to Generate Adapted Solutions at Local Level, *Sustainability 2021*, 13, 11921. https://doi.org/10.3390/ su132111921.

- Dumitru, E. A., Micu, A.-R., Alecu, I.-N., Tudor, V. & Micu, M.M. (2017), Analysis Regarding The Romanian Village - Case Study, Grindu, Ialomita County, *Proceedings* of the 29th International Business Information Management Association Conference, 3-4 May 2017 Vienna Austria, Education Excellence and Innovation Management through Vision 2020: From Regional Development Sustainability to Global Economic Growth, pp. 740-747.
- 7. Dumitru, E. A., Micu, M. M. & Tudor, V. C. (2019), Conceptual Approaches Regarding The Romanian Rural Area, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 19 (2), 121-129.
- 8. Mateoc-Sîrb, N., Mateoc, T., Mănescu, C. & Grad, I. (2014), Analysis on the phenomenon of population's migration in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 14 (1), 211-214.
- 9. Mitrica B., Erban P., Mocanu I. et al. (2020), Social Development and Regional Disparities in the Rural Areas of Romania: Focus on the Social Disadvantaged Areas, *Social Indicators Research*, Volume: 152, Issue: 1, Pages: 67-89.
- 10. Păun, F. (2014), Studies regarding the situation of rural development in Prahova County and the managerial measures which need to be taken, Scientific Papers Series Management, *Economic Engineering in Agriculture and Rural Development*, Vol.14(1), 273-276.
- 11. Popa (Podaru), A.M. & Turek Rahoveanu A. (2019), Population Migration, Cause of The Decline of the Romanian Village, *Education Excellence And Innovation Management Through Vision 2020*, Page 4739-4743.
- 12. Rusu, R. Necultita V., Cristea, D., (2020), Sustainable Development Of Rural Areas Of South East Region of Romania, *Scientific Papers-Series Management Economic Engineering In Agriculture And Rural Development, Volume:* 20, Issue: 2, Pages: 523-529
- 13. Rusu, M. (2017). Rurality and competitiveness typologies: analysis at country level in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.17(1), 367-374.
- 14. Serban, V. & Turek Rahoveanu A. (2019), Analysis of Rural Population and Main Rural Infrastructure Issues in Romania in Period 2008-2017, *Education Excellence And Innovation Management Through Vision 2020*, pp. 9454-9460.
- 15. Sterie C. (2020), Analysis Regarding The Situation Of The Romanian Village Case Study, Tetoiu Commune, Vâlcea County, Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 20 (3), 579-582.
- 16. Sterie, M. C. (2020), Research on the evolution of the equipment fleet in Romania in the period 2012-2018, Agrarian Economy and Rural Development Realities and Perspectives for Romania, 11 th edition.
- 17. Sterie, M. C., Dumitru E. A. (2021), Comparative analysis on accessing european funds through the two national rural development programs in the south-muntenia region, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 21, Issue 1, p. 729-734.
- 18. Sterie, M. C., Dumitru E. A. (2021), Research on the evolution of the number of agricultural holdings in the period 2002 2016, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development* Vol. 21, Issue 1.