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SELECTION OF ECONOMIC INDICATORS FOR MEASURING SUSTAINABLE RURAL DEVELOPMENT

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Abstract

Sustainable rural development consists of three components: economic, ecological, and social. The paper paid to the economic component through selection of the most relevant economic indicators for measuring sustainable rural development at NUTS 3 level. Objectives of the research were: a) to identify the most appropriate economic indicators for measuring sustainable rural development, either used so far or proposed in the literature, b) to select five most relevant indicators according to the experts' estimate. The analysis of previous research has outlined and explained 15 economic indicators. After the first phase of selection, an additional selection of indicators by expert evaluation was carried out. Based on the expert evaluation, five most relevant economic indicators were identified, namely according to the average grade: unemployment rate (4.49), accessibility of agricultural infrastructure (4.47), gross domestic product per capita (4.45), education level as a prerequisite for the use of innovation (4.26) and productivity of agricultural production (4.21). Looking at separate assessments of each of the expert groups, it is evident that their selection of the five most relevant indicators only coincides in two of them: unemployment rate and availability of agricultural infrastructure.

Key words**:** *economic indicators, experts' evaluation, sustainable rural development*

INTRODUCTION

One of the biggest challenges most of the countries in the world are facing with is the mitigation of rural population migrations to cities, which is, inter alia, reached by ensuring equable development of a country's rural and urban areas. Rural development is the implementation of political, economic and social projects that are in harmony with the common vision of rural regions' future [44]. The concept of sustainable development consists in three pillars: ecological, economic and social, which in ideal conditions equally contribute to the objective. Therefore, Smith and McDonald [41] say that ecological sustainability means that development is in harmony with maintenance of ecological processes, economic sustainability means that it is economically feasible and social sustainability means that it is socially acceptable. Considering that nothing is ideal in the real word, accomplishing the goals within one pillar can harm, or even disable accomplishing goals stemming from other pillars'. When this happens, the concept of sustainability points to the need for finding real balance between the three pillars of sustainability, taking into account that when achieving a goal in one pillar, minimal standards in other two pillars have to be respected [9]. Golusin and Munitlak Ivanovic [22] say that in its first stage, economic development assigns the need of depletion of ecological resources. Kordej-De Villa et al. [30] point out that the environment starts to recover when people achieve a certain level of income. Since the level of income in Croatia is lower than satisfactory. According to the EUROSTAT data [18] GDP per capita in Croatia in 2018 was € 12,620, while the EU 28 average was € 30,980. Only Romania and Bulgaria have a lower GDP than Croatia.

As evidenced by numerous migrations to more developed EU countries, it could be said that the economic component is the most important and it will remain as such until an appropriate level of income per capita is accomplished, alongside a grown environmental consciousness. Subsequently, this paper pays attention to the economic

pillar through the selection of the most appropriate economic indicators for measuring sustainable rural development.

Sustainable rural development can be observed at different levels, from local to international. Reed et al. [40] pointed out that the majority of hitherto proposed indicators is based on the top-down definition of sustainability and is using data that are available at state level, which can result in disregard of critical sustainability issues at the local level and a postponement of factors that are important to the people at the local level. To avoid that, selection of the most appropriate economic indicators is adjusted to the NUTS 3 level. Sustainable development at the local level implies that local economic development supports life and strength in the community by using talents and resources of local people. Economic development benefits must be equally distributed within the community and available to all community groups in the long-term [25].

The need to construct a system measurable rural development indicators results from the effort to objectively, by using scientific and specialised tools, quantify the level of accomplished rural space sustainability. According to Abolina and Zilans [1] indicators are pieces of information that point out what is going on in a large system. They are little windows that give us a view of the bigger picture. Indicators inform us how a system functions, whether it is a machine, a human being, an ecosystem or a country. They help us define goals, connect them and evaluate the progress in their accomplishing [39]. In this paper selection of economic indicators is described along with the argumentation of their role in the overall assessment of economic sustainability of the rural space.

The first objective of the paper is to identify the most appropriate economic indicators for measuring sustainable rural development already used or proposed in literature. The second objective is to choose the five most appropriate indicators according to experts' assessment.

MATERIALS AND METHODS

The first step of the research was a literature review with the objective of defining theoretical-methodological determinants of the paper and identifying a broader set of economic indicators of rural development used in different works of research, as well as the ones only proposed by competent institutions. Those are the indicators that certain institutions (e.g. the European Commission) proposed in their templates for assessing rural space sustainability, but examples of their use in specific works of researchers have not been found. The second step was the experts' assessment of identified indicators with the objective of a narrower selection. On a scale from one to five, the experts determined the relevance of each indicator for the assessment of sustainable development. The experts could also suggest other indicators that they consider important, and were not on the list of offered indicators. The expert assessment was conducted face to face and via e-mail, among 47 expert representatives of scientific institutions connected with rural development, sociology and economy, representatives of counties connected with rural development and agriculture, representatives of various relevant agencies and associations and leaders of Local Action Groups (LAG) operating in Croatia. The expert assessment included 20 representatives of scientific institutions, 20 representatives of LAGs and associations and seven representatives of local and state bodies (counties, ministries and agencies). The research was conducted in the period from July to August 2016.

The data was processed in the SPSS Statistic 17.0 program, that calculated the average for each indicator and performed a Chi-square test for the experts' workplace dependence with grades assigned to each indicator.

RESULTS AND DISCUSSIONS

Proposed economic indicators for measuring sustainable rural development with results

After analysing previous works of research on the subject of sustainable rural development, especially its economic component, 15 economic indicators were singled out and described below. Table 1 lists previously mentioned indicators and authors that used/proposed them in respective works of research.

Table 1. List of proposed economic indicators with specified authors that used/proposed them

Economic indicator	**Authors using/proposing the indicator**
Budget revenues of local or regional self-government units per capita	Khalifa and Connelly (2009) [29]
Number of beds in rural tourism in relation to the total population	EC (2001); Boggia et al. (2014); (EC, 2013a). [13, 3, 15]
Diversification of sources of income on the farm (additional activities on the farms)	EC (2001); Dantsis et al. (2010); (EC, 2013a) [13, 10, 15]
Diversification of economic activities in the rural area (GVA of individual activities, number of employees in individual sectors)	EC (2001); EC (2013); Niggemann (2009) [13, 15, 14, 34]
Number of EU-level protected products in each county in relation to the total number of such products in the country	EC (2001); Boggia (2014) [13, 3]
Unemployment rate	Ferrarini et al. (2001); EC (2001); Niggemann (2009); Khalifa and Connelly (2009); Golusin and Munitlak Ivanović (2009); Ramos (2009); Boggia and Cortina (2010); EC (2013); [19, 13, 34, 29, 22, 38, 4, 15]
GDP per capita	EC (2001); UN (2007); Ramos (2009); Khalifa and Connelly (2009); Golusin and Munitlak Ivanović (2009); EC (2013) [13, 42, 38, 29, 22, 15]
Productivity of agricultural production (GVA / agricultural land area)	EC (2001); EC (2013) [13, 15, 14]
Number of entrepreneurs in agricultural and non-agricultural activities in rural areas	EC (2013) [15, 14]
Education as a prerequisite for using innovation	Niggemann (2009); Dantsis et al. (2010) [34, 10]
Number of cars per household	Niggemann (2009) [34]
Internet access – number of connections / number of inhabitants or households	EC (2001); UN (2007); (NN 30/2009); Golusin and Munitlak Ivanović (2009); EC (2013a) [13, 42, 35, 22, 15]
Availability of infrastructure facilities connected to agriculture	Bosshaq et al. (2012) [5]
Economic vitality – the number of blocked vs. the number of newly established companies	Niggemann (2009) [34]
Land fragmentation — average farmland size in ARKOD	-

Source: Authors' synthesis based on literature.

Budget revenues of local or regional self-government units per capita is one of the indicators used to calculate the Development Index. In addition to it, these are also used: (1) unemployment rate, (2) per capita income, (3) general population movements and (4) education rate [36]. According to the Regulation on the Development Index [36], the budget revenues of local or regional self-government units per capita are calculated as the ratio of realized revenues of local or regional self-government units, minus revenues: from domestic and foreign aid and donations, from special contracts: co-financing of citizens for local self-government, realized on the basis of additional shares in income tax and equalization assistance for financing decentralized functions and from surtax on income tax, and number of inhabitants in the area of local or regional self-government unit. This indicator indicates the strength of the economy of regional or local self-government units.

Number of beds in rural tourism in relation to the total population. The tourist supply on agricultural holdings indicates the multifunctionality of agriculture, represents additional sources of income for agricultural holdings, facilitates the placement of products at higher prices, generates jobs in rural areas and contributes to a higher number of young people keeping to live in the countryside. In this paper, not only agritourism will be observed, but rural tourism as a whole. Hjalager [24] states that the economic benefits of rural tourism for rural areas are multiple: (1) diversification of local industry, (2) higher employment rate, (3) higher income, (4) higher tax base, and (5) business income growth. EC [13] proposes this indicator as a form of additional source of income for farmers. Boggia et al. [3] measure this indicator by the number of beds in agritourism per square kilometre. The indicator needs to be measured in relation to the number of inhabitants and not to the size of the area because of the significantly different population density in rural areas. Rural tourism should also be included in the measurement as it would be unfair to exclude

other entities engaged in rural tourism, seeing as they generate income and provide jobs for the local population.

Diversification of sources of income on the farm (additional activities on the farms). Given the low profitability of agriculture, price volatility, uncertainty of purchase and payment, and its seasonal character, an additional source of income is important for economic stability and sustainability of agricultural economy. The indicator is proposed by the EC [13] stating that, among other factors, diversification of sources of income in the economy is important for the economic dimension of sustainable rural development. It has also been used in research by Dantsis et al. [10] as well as in a report on rural development in the EU [15]. This indicator is measured by the number of holdings in an area with registered additional activities in relation to the total number of agricultural holdings.

Diversification of economic activities in the rural area (GVA of individual activities, number of employees in individual sectors). Greater economic diversification is assumed to lead towards greater economic stability in a given region. If only a few activities predominate in the region, the region is more vulnerable when undergoing structural changes. Another advantage of business diversification is the wider supply of jobs that makes the region more attractive [34]. The EC [13] proposes an indicator that compares the number of enterprises registered in rural areas engaged in non-agricultural activities in relation to the total number of enterprises. Ramos [38] proposes the company structure indicator. The EC (2013) in its report on rural development in the EU uses two indicators that can be linked to this, namely: the structure of employment and economy in rural areas. This report monitors the share of the primary, secondary and tertiary sectors in rural, rural-urban and predominantly urban areas. The economic diversification indicator is also used by Niggemann [34] investigating the difference in the number of employees in each of the ten industries according to the classification of activities in Sweden. The municipality with a difference higher than 10% is attributed the least points, while an even distribution of all activities is attributed the most points. This indicator is calculated according to the number of employees in the activities that monitored by the national statistics according to the National Classification of Activities (NCA). NUTS 3 units are ranked according to the index of specialization (diversity) which is calculated according to the formula $I = 10{,}000/\sum u^2$, where u is the share of each activity in the total employment of NUTS 3 units. An index closer to one means greater specialization.

Number of EU-level protected products in each county in relation to the total number of such products in the country. The Ministry of Agriculture [32] states that indigenous agricultural and food products are protected due to: higher price category, creation of identity and recognisability, direct connection of products with a certain geographical area which gives additional value and recognisability to that area and contributes to rural development and the establishment of interest associations, that is, the joint promotion of a food product. Given the higher added value, the price of these products is also higher, which is reflected in the income of the farm as well as in the entire rural economy. The indicator is also suggested by the EC [13] as a number, sales or market share of products with a local designation, designation of origin or designation of origin in a particular area. This indicator is also used by Boggia [3] in measuring the number of these products in a particular municipality compared to the number in the entire region of Umbria. The evaluation takes into account the number of protected products in a given NUTS 3 unit in relation to the total number of these products in the country.

Unemployment rate. Unemployment is a major problem in Croatia in general, and in rural areas in particular, where unemployment rates are higher than in the urban parts of the country. People looking for jobs are moving from these areas to larger towns and cities, and villages are dying out due to depopulation. Finding a job in a rural area is a particular problem for more educated people, due to the limited number of jobs for which a

university degree is required. The unemployment rate is defined as the share of unemployed people in the total labour force, i.e. the total population. The unemployment rate indicator is used by Ferrarini et al. [19]. Niggemann [34] used it by relating the number of unemployed persons between 16 and 64 years of age and the total number of persons of that age. A lower unemployment rate was attributed a higher number of points. Khalifa and Connelly [29] use this indicator to monitor sustainable development in rural areas of Egypt, while Golusin and Munitlak Ivanović [22] use it to measure sustainable development in the countries of Southeast Europe. Boggia and Cortina [4] use it to measure the sustainable development of municipalities in Italy, and the EC [14] used it in a report on rural development in the EU. It is also proposed by the EC [13] in its Framework for Indicators for the Economic and Social Dimension of Sustainable Agriculture and Rural Development as well as Ramos [38] to measure sustainable development in the Algarve region of Portugal. The indicator is used in the Community Sustainability Assessment manual [21].

GDP per capita. Regional GDP is an indicator of a region's output and can therefore be used to measure and compare the degree of economic activity of different regions [7]. GDP is an important indicator from a policy point of view as it serves to determine the extent to which each EU Member State should contribute to the EU budget and therefore the three-year average GDP is used to identify regions eligible for the EU Structural Funds [16]. Although it shows the economic strength of a particular rural area, it should not be relied upon only on in political debates because other characteristics of an area, such as environmental sustainability or social inclusion, are not taken into account. The indicator is proposed by the EC [13] in the Framework for Indicators for the Economic and Social Dimension of Sustainable Agriculture and Rural Development, the UN [42] and Ramos [38]. It was used by Khalifa and Connelly [29] to monitor sustainable development in rural Egypt, by Golusin and Munitlak Ivanović [22] to measure sustainable development in Southeast European countries as well as by the EC [14] in a report on rural development in the EU. They observed the differences in GDP in rural, rural-urban and predominantly urban areas of the EU. Economic development is usually expressed in terms of GDP, which in a regional context can be used to measure macroeconomic activity and growth and to provide a basis for comparisons between regions [16].

Productivity of agricultural production (GVA/agricultural land area). Productivity is defined as the quantity or value ratio of production and the amount of expended labour. A higher value of the productivity indicator indicates either a better use of labour input, less labour required to produce an effect, or a higher value of production with equal labour consumption [33]. Labour productivity in agriculture is calculated by the ratio of Gross Value Added (GVA) and Annual Work Units (AWU). Gross Value Added is equal to the difference between agricultural production in base prices and intermediate consumption in purchase prices [23]. The indicator is proposed by the EC (2001) in the Framework for Indicators for the Economic and Social Dimension of Sustainable Agriculture and Rural Development, that used it in 2013 in preparing a report on rural development in the EU. If calculations of agricultural production productivity at NUTS 3 level are not available in official statistics, the indicator must be adjusted to the available data. Thus, for example, instead of annual units of work, the number of agricultural holdings in NUTS 3 units can be used.

Number of entrepreneurs in agricultural and non-agricultural activities in rural areas. This indicator is proposed to show the economic activity of the rural area. A higher number of entrepreneurs in agricultural and non-agricultural activities indicates a more economically active area. In order to make the indicator as transparent as possible, the number of entrepreneurs is expressed in relation to the number of inhabitants in a certain area. The non-agricultural economic

development indicator was used by the EC [14] in a report on rural development in the EU. They monitored differences in rural, rural-urban and predominantly urban areas. An area with more entrepreneurs per 1,000 inhabitants is more economically active.

Education as a prerequisite for using innovation. According to the OECD [37], the level of education of farmers and effective farm management as well as the timely adoption of environmentally sound management practices are positively correlated [10]. Effective governance is key to a positive economic performance, which is why this indicator is proposed in the group of economic indicators. Innovations are assumed to be more easily accepted by more educated farmers because, as Niggemann [34] posits, people can reach their full potential and additionally improve their quality of life through the learning process. She also states that education is positively related to economic growth. The importance of innovation in agriculture is also emphasized by Dwyer et al. [12] stating that they are a key element in helping agriculture achieve long-term sustainability and adaptability in meeting global challenges. In terms of sustainability and the CAP, innovation is seen as key to stimulating a greater degree of acceptance of the more significant challenges of the future, including climate change, water conservation, and biodiversity protection [12]. The Strategy for Sustainable Development of the Republic of Croatia [35] states that an increase in GDP can occur if the education of the population increases, whereupon the population will be able to use new technologies and more complex production processes. The economic consequences of population aging can also be seen through this indicator because of the assumption that younger people in general, and especially in rural areas, will find it easier to accept innovations and apply them than older people, who generally have lower education [26]. Dantsis et al. [10] measure the level of education in the years of education of farmers while Niggemann [34] observes the progress in the farmers' education level in a given period. The indicator is measured as the level of farmers' completed education.

Number of cars per household. Niggemann [34] divides the mobility indicator into two sub-indicators: (1) car ownership and (2) internet access. Here, these two sub-indicators are listed separately. Car ownership is very important if we take into account the fact that public transport in rural areas is mostly underdeveloped. People often travel to work outside their place of residence and are dependent on a car. In addition to the benefits of owning a car, it is important to emphasize the negative consequences that arise from it, such as environmental pollution, noise, traffic jams, traffic accidents etc. In evaluating this indicator, only the advantages are taken into account, and this indicator is evaluated as the number of cars per household. Niggemann [34] believes that every household should have at least one car, because owning a car is crucial for rural development, and this is taken as a reference value for comparing the NUTS 3 units.

Internet access – number of connections / number of inhabitants or households. The development of the information society is considered key to meeting the needs of the EU society and economy [17]. The official statistics on the Internet usage in Croatia is based on a survey commissioned by the CBS and done by Ipsos plus d.o.o. on a sample of 5,975 persons [8]. Niggemann [34] states that the use of IT technologies is widespread in Sweden and that good results (70%) are correlated with the overall development in Sweden. The indicator is proposed by the EC [13] in the Framework for Indicators for the Economic and Social Dimension of Sustainable Agriculture and Rural Development, the UN [42], whereas the importance of access to modern technologies is also emphasized by Dolata [11]. The indicator was also proposed in the Strategy for Sustainable Development of the Republic of Croatia [35], and was used in the research by Golusin and Munitlak Ivanović [22] and in the EU report on rural development [15]. In the evaluation, the NUTS 3 units are compared with the national average.

Availability of infrastructure facilities connected to agriculture. The description of this indicator refers mainly to the economic

infrastructure which, according to Franić and Ljubaj [20], includes transport (in the broadest sense), energy, telecommunications and utilities, as well as all other activities directly related to the production processes (storage, warehousing, cooling, confectioning, product packaging). When evaluating this indicator, warehouses and mills for cereals, cold stores and packing plants for fruits and vegetables, slaughterhouses, mini dairies, wholesale markets and markets are taken into account. The existence of these facilities arguably allows the storage of primary agricultural products and the option of waiting for a favourable moment to enter the market, which increases the economic profit. Certain infrastructure also allows the processing of primary agricultural products into value-added products, which facilitates sales and improves the financial performance of agricultural holdings. Markets and wholesale markets provide easier access for customers to farmers' products. The evaluation of infrastructural availability includes the analysis of agricultural production in the observed NUTS 3 unit, which is compared with the existing agricultural infrastructure. This indicator was used by Bosshaq et al. [5] to measure factors affecting sustainable agricultural development in rural areas in Ravansar Province, Iran. The indicator is evaluated on convenient scales because it is not possible to set exact unified parameters applicable to all counties due to the differing structure of agricultural production, and thus differing needs for the type and capacity of infrastructure facilities. A higher coverage of agricultural production with storage and processing capacities and accompanying non-economic infrastructure carries a higher rating.

Economic vitality – the number of blocked vs. the number of newly established companies. Niggemann [34] states that the number of newly established companies versus the number of blocked ones is a very important indicator for assessing the economy of a particular area. Small businesses contribute to local economies by bringing growth and innovation to the community in which the company is founded. Small businesses also help in stimulating the economic growth by providing employment opportunities to people who are not employable in larger corporations [6]. On the other hand, the number of blocked companies indicates a decline in economic growth and a decline in employment. The ratio of newly established and blocked companies is put in relation to the population in order to reach comparable data. The indicator is evaluated by the number of newly established companies, and the number of blocked companies per 1,000 inhabitants.

Land fragmentation — average farmland size in ARKOD (Croatian land parcel identification system). The Agricultural Land Agency [2] states that the advantages of land consolidation are: (1) creation of larger and more regular plots/holdings for a more economical use and creation of more favourable conditions for agricultural production development, (2) increase of farmers' competitiveness by creating more favourable production conditions, (3) improvement of physical conditions of each plot – levelling of the soil surface and implementation of measures for soil improvement, (4) improvement of the rural environment and (5) creation of basic conditions for irrigation. The abovementioned advantages of land consolidation show the shortcomings of the current state of land fragmentation, which greatly affect the economic viability of agricultural production. For the evaluation of this indicator, the reference condition is the one listed in the ARKOD system, since it represents the actual size of the analysed particles. The larger the average size of an ARKOD parcel in a NUTS 3 unit, the higher the grade, because it is considered that in this way less investment is needed for the same yields and lower logistics costs are required.

Ranking of the economic indicators of sustainable rural development according to experts' assessment

As stated in the Methods chapter, experts of different profiles evaluated the relevance of the described indicators in the overall assessment of the economic viability of the rural area. Based on the obtained results, the five most relevant indicators with regard to

the level of the average grade were selected. The best rated indicators with the corresponding grades are shown in Table 2.

Table 2. List of the most relevant economic indicators according to the expert opinion

Indicator	Average grade of the experts
Unemployment rate	4.49
Accessibility of agricultural infrastructure	4.47
Gross domestic product per capita	4.45
Education as a prerequisite for using innovations	4.26
Productivity of agricultural production	4.21

Source: Own results.

Respondents were able to suggest indicators that they considered to be very important and were not offered in the survey. Only five respondents (three representatives of scientific and educational institutions and two from associations and LAGs) availed this opportunity and their suggestions are: unemployment rate in agriculture, number of associations/cooperatives of agricultural producers, size of agricultural households, number of family households in the observed area and family household revenues compared to the total income of the area. It can be seen that these indicators are mostly related to agriculture because it is still the most common activity in rural areas and therefore its development is linked to the development of the whole area.

Below is Table 3 with selected five indicators and their average grades assigned to them by representatives of individual groups that participated in the research.

The results show that there are differences in the choice of indicators depending on which group the respondents belong to (scientific and educational institutions, LAGs, state and local authorities), which indicates that different life experiences shape different judgments about the importance of individual indicators. It is possible that these differences are a consequence of the place of work, respectively life, because the respondents from the LAGs are mostly residents of rural areas, while the representatives of scientific and educational institutions are mostly from larger cities. Keseru et al. [28] in their study, that also involved several stakeholder groups, concluded that there is a large heterogeneity in their responses. Although different five indicators according to the workplace of the experts were selected the Chi-square test found that the relationship between the evaluation of indicators and the group of experts exists only for the GDP per capita indicator ($p <= 0.05$).

Table 3. Economic indicators with the highest average grades according to the opinion of different groups of experts

Scientific and educational institutions	LAG's and associations	State institutions
Unemployment rate (4.65)	Gross domestic product per capita (4.45)	Education as a prerequisite for using innovations (4.86)
Gross domestic product per capita (4.60)	Accessibility of agricultural infrastructure (4.45)	Accessibility of agricultural infrastructure (4.57)
Education as a prerequisite for using innovations (4.45)	Unemployment rate (4.35)	Unemployment rate (4.43)
Accessibility of agricultural infrastructure (4.45)	Diversification of sources of income on the farm (4.30)	Fragmentation of agricultural land (4.43)
Productivity of agricultural production (4.40)	Diversification of economic activities in the rural area (4.15)	Internet access (4.29)

Source: Own results.

The most relevant indicators in the paper are selected based on the average score of all respondents, but it is interesting to consider the opinions of individual expert groups, each of which participating in rural development a different capacity. The coincidence in the selection of the five most relevant economic indicators in all three expert groups is visible in the case of two indicators: unemployment rate and availability of agricultural infrastructure. The importance of the unemployment rate as an indicator of economic development is also emphasized by Živić and Pokos [45]. The importance of this indicator is reflected in the fact that employed residents will find it easier to decide to stay in rural areas while sacrificing some other things (cultural content, distance from key government services and institutions, lack of a good public transport system, etc.). If the unemployment rate is high, dissatisfaction is high and people leave rural areas in search of work, which negatively affects the sustainability of these areas. The importance

of this indicator was also emphasized in the measurement of the county development index, in which the unemployment rate participates in the final assessment with 30% [36]. The results show that the ranking of counties according to the unemployment rate is equal to the overall ranking of counties, which indicates a correlation between these variables. Observing all Croatian counties, it can be seen that in all counties where population growth was recorded, except in Zagreb, the unemployment rate is below the Croatian average. In Zagreb County, the unemployment rate is only one percent higher than the Croatian average.

Another indicator selected by all three expert groups is availability of agricultural infrastructure. It is very important for the development of agriculture because its function is to directly reduce production losses, increase the market value of agriculture and improve primary agricultural production [27]. The choice of this indicator is most likely a consequence of understanding its importance, as well as its lack in the whole country, which is evident in the research of Krapina-Zagorje County in the study by Jež Rogelj et al. [27] where representatives of cities and counties state that there is not enough public agricultural infrastructure, in which they concur with farmers in the area.

This review of indicators selected by different groups of respondents intended to point out the importance of involving different stakeholders in sustainable rural development in the whole process because everyone has their own opinion and perception of the meaning of the term "sustainable rural development" and how it should be achieved. Apart from involving different stakeholders, a heterogeneous group of respondents was selected to reduce the subjectivity of judgments as much as possible because each group has its own priorities determined by the level of education, area of scientific interest, attitudes, background etc. The importance of group heterogeneity in the research containing sensitive topics (environment, sustainable development and socially responsible business) is also emphasized by Mardle et al. [31] and Von Solms [43]. The disadvantage of the conducted research is the fact that the respondents from all groups did not respond to the research in equal numbers, and as a result, the opinion of the representatives of scientific and educational institutions, who are mostly from large cities, as mentioned earlier, prevails.

CONCLUSIONS

The paper proposed 15 economic indicators that have been used in similar research or suggested in professional literature for the purpose of measuring sustainable rural development. Based on the expert assessment on a scale of one to five, the five most relevant indicators were selected with regard to the obtained average assessment: unemployment rate (4.49), availability of agricultural infrastructure (4.47), gross domestic product per capita (4.45), education as prerequisite for using innovation (4.26) and productivity of agricultural production (4.21). Looking at the assessments of each of the expert groups separately, it can be seen that in their selection of the five most relevant indicators, only two match: unemployment rate and availability of agricultural infrastructure.

However, no significant difference was found between the assessments of experts from different groups. The only exception is the GDP/capita indicator by the Chi-square test, for which a statistically significant difference ($p \leq 0.05$) was determined in the assigned assessment, depending on which expert group the experts belong to.

Although not statistically significant, there is a difference in the choice of indicators and it is due to the heterogeneity of expert groups as well as individuals because everyone has their own priorities according to education level, area of scientific interest, attitudes, background and so on.

Because of the above, it is very important to involve as many stakeholders of different profiles as possible in order to make the results as credible as possible.

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