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The place of culture in sustainable development of European countries – homogeneity or diversity of the phenomenon?

INTRODUCTION

European countries are very diverse in terms of the level of sustainable development and the pace of changes of its aspects. Some research conducted in this area demonstrates that the greatest diversification is found in the social component (Klonowska-Matynia, Redlińska, 2018) or that it is the social aspect that diminishes the level of sustainability of European countries to the largest extent (Pondel, 2021). Therefore, this paper focuses on this very component of sustainable development, with a special emphasis on culture.

The authors focus on culture as a factor substantially affecting societies in their pursuit of actions aimed at achieving sustainable development, which is deemed an important element of competitive advantage, determining the level and quality of life of society. A significant role in the way culture is perceived in the context of sustainable development has been played by the UNESCO Declaration, which places culture at the heart of sustainable development policies. The document underlines, among other things, the following:

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- the economic, cultural, social and environmental aspects of sustainable development complement one another,
- the protection, promotion and maintenance of cultural diversity contributes to the social development and cultural well-being of both individuals and groups of people,
- it is necessary to acknowledge the diversity of forms of cultural expression in the development processes as it contributes to reinforcing identity and social cohesion, and fosters inclusive societies which follow the rules of equality and respect for all cultures (UNESCO, 2013).

Therefore, to achieve the sustainable development goals, culture should be integrated within national policies and international cooperation strategies.

The aim of this paper is to evaluate the level of sustainable development in selected European countries, taking into account the economic, social, environmental and cultural dimensions. Taking up research in this area fills the research gap regarding the evaluation of sustainability development in dimensions other than the three principal ones. The analysis assumes that cultural indicators determine the level of the measure of sustainable development. The selection of countries was based on indicators of their ethnic and cultural diversity. The time range of the analysis is 2012 and 2019, and the data source was the Eurostat database. A taxonomic method (linear ordering method) was used in the analysis of the research problem.

CULTURE AND SUSTAINABLE DEVELOPMENT – LITERATURE REVIEW

Differences in the theoretical definitions of culture are based on emphasising different aspects thereof, as well as the use of different terminologies and determining different types of connections and dependencies. Reviews of the meaning of culture for development have been conducted by, among others: Giraud-Labelle *et al.* (2015), Dümcke and Gnedovsky (2013), and Matarasso (1997). The differences in the theoretical approach to sustainable development regard primarily its definition, relations to other categories of unconventional concepts of development (e.g. Borys, 2005), aspects (e.g. Nazarko, Dobrzyński, 2006; Kistowski, 2003), rules or indicators.

The multi-faceted nature of culture and sustainable development is interesting for researchers and offers broad possibilities for approaching the analysis. The literature on sustainable development points to the need to provide more detailed analyses of the factors affecting sustainable development, underlining the necessity of a holistic approach. This allows us to extend the proposed set of indicators monitoring sustainable development by the culture-related ones. This is because culture can be examined in various contexts: symbolic (aesthetic experience, reinforcement of ties), institutional (formally organised institutions),

political (cultural policy), social (development of human and social capital), or economic (a field of the economy) (Plebańczyk, 2018, p. 167).

The proposal to incorporate culture permanently within the sustainable development paradigm is now of crucial importance (after: Pascual, 2009, p. 38). It involves replacing the previous three-faceted approach of sustainable development (social, environmental and economic aspects) with a four-faceted one, incorporating culture as an equally valid aspect (see: Krzyminiewska, Ponder, 2017, pp. 1017–1034). In the works of Mehdinezhad and Nabi (2016) “culture was not considered a separate dimension since it was part of the social dimension of sustainability until the last decade. However, the scenario gradually changed and culture is recognized as an essential factor in achieving sustainable development”.

Bearing in mind the above, it is worth noting that the validity of this perspective allows researchers to perceive culture in three contexts:

1. relations taking place between the economy and culture; culture as an equally legitimate factor affecting the development of the economy and referred to the cultural context of entrepreneurship; the economic culture determining the manner of human participation in economic life (see: Glinka, 2008; Nawojczyk, 2009);
2. the impact of the normative system (beliefs, attitudes and values) on the economy; it underlies the considerations of outstanding researchers and their works, today deemed classic (Weber, 2002; Fukuyama, 1997; Landes, 2000; Harrison, Huntington, 2003; and others). They formulate a thesis that culture not only has meaning but (according to Landes) also “determines nearly everything” (more in: Krzyminiewska, 2010);
3. the shape, models and values allowing us to adopt attitudes adequate to the contemporary challenges of the globalised world (Throsby, 2010; Florida, 2010).

RESEARCH MATERIALS AND METHODS

In substantive terms, this paper includes, in its empirical part, an analysis and evaluation of the level of sustainability development in selected European countries, with a special emphasis on cultural sustainability³, and a literature review in its theoretical part. The paper is limited to an analysis of institutional statistical data regarding the area of culture, omitting the so-called soft factors of culture, such as values, behavioural patterns, etc.

³ According to Soini and Birkland (2014), “some of the story lines establish the fourth pillar of sustainability, whereas others can be seen as instrumental, contributing to the achievement of social, economic, or ecological goals of sustainability. The eco-cultural civilization story line suggests culture as a necessary foundation for the transition to a truly sustainable society”. *Cultural sustainability means the ability to maintain or improve values and attitudes under the influence of various external factors.*

The European countries to be analysed were selected based on the indicators of their ethnic and cultural diversity. This was the basis for further evaluation of the level of sustainable development in the selected countries, including:

- a. countries with high ethnic cohesion and relatively low cultural diversity, such as Portugal, Italy, Poland, Greece and the Netherlands;
- b. multinational and highly culturally diverse countries, such as Latvia, Switzerland, Belgium, Estonia and Spain.⁴In terms of time, the analysis covers the years 2012 and 2019, a timeframe that was determined by the availability of data.

The analysis of the research problem was carried out by applying the taxonomic method (the linear ordering method), which allows us to evaluate the diversity of the analysed phenomenon in selected units, based on an analysis of several variables. The selection of indicators for the analysis was determined by the adopted assumptions and the conviction that they would allow us to solve the research problem. This, however, is not tantamount to questioning other approaches to evaluating the place of culture in sustainable development.

An important stage of the applied research method was the choice of diagnostic variables. Material progress is observed in terms of reporting progress in striving for the sustainable development goals. Increasingly more indicators are available, albeit, considering the adopted prerequisites of the analysis, they may not always be used. When investigating the selected European countries, limitations were considered regarding the validity and availability of the data for all the characteristics and entities under analysis.

When pursuing the set research goal, Eurostat data were used. Due to the aforementioned limitations, and most of all, due to the substantive prerequisites, variables were identified regarding four aspects of sustainable development: economic, social, cultural and environmental. To assess whether the proposed potential variables may be useful, the Pearson correlation coefficient and the coefficient of variation were employed. The set of variables selected for the research and their characteristics may be found in Table 1⁵.

⁴ In the selection, the ethnic diversity indicators (EDI) and cultural diversity indicators (CDI) were used as developed by R. Zenderowski based on J. D. Fearon (Zenderowski, 2019). They were as follows for the selected countries: Portugal – EDI: 0.040 and CDI: 0.040; Italy – EDI: 0.040 and CDI: 0.040; Poland – EDI: 0.047 and CDI: 0.041; Greece – EDI: 0.059 and CDI: 0.050; the Netherlands – EDI: 0.077 and CDI: 0.077; Latvia – EDI: 0.585 and CDI: 0.441; Switzerland – EDI: 0.575 and CDI: 0.418; Belgium – EDI: 0.567 and CDI: 0.462; Estonia – EDI: 0.511 and CDI: 0.492; Spain – EDI: 0.502 and CDI: 0.263. The indicators took values from 1 (maximum diversity) to 0 (lack of diversity).

⁵ Initially, 22 variables were pre-selected for the research. Due to the formation of correlations between the variables and referencing the coefficients to the critical value, 7 variables were subsequently excluded from the analysis.

Table 1. Variables considered when evaluating the level of sustainable development in selected European countries and their types

No.	Variable name	Variable type
Economic aspect		
X ₁	Real GDP per capita (euro)	Stimulant
X ₂	Nominal labour productivity per person employed (percentage EU-28, current prices)	Stimulant
X ₃	Total unemployment rate (% of population in the labour force)	Destimulant
X ₄	Gross domestic expenditure on research and development (R&D) (% of GDP)	Stimulant
Social aspect		
X ₅	persons at risk of poverty or social exclusion (% of total peoples)	Destimulant
X ₆	People at risk of income poverty after social transfers (% of population aged 18 years or over)	Destimulant
X ₇	Young people neither in employment nor in education or training (% of population from 15 to 29 years)	Destimulant
X ₈	Adult participation in learning (% of population aged 25 to 64)	Stimulant
Cultural aspect		
X ₉	Cultural employment (% of total employment)	Stimulant
X ₁₀	Household expenditure on recreation and culture (% of total expenditure)	Stimulant
X ₁₁	General government expenditure on cultural services (% of total expenditure)	Stimulant
X ₁₂	General government expenditure on broadcasting and publishing services (% of total expenditure)	Stimulant
Environmental aspect		
X ₁₃	Greenhouse gas emissions per capita (tonnes of CO ₂ equivalent per capita)	Destimulant
X ₁₄	Share of renewable energy in gross final energy consumption (%)	Stimulant
X ₁₅	Area under organic farming (% of total utilised agricultural area)	Stimulant

Source: own elaboration based on (Eurostat, 2022; World Bank, 2022).

Table 2 presents basic measures of descriptive statistics of the diagnostic variables to be further analysed. Due to different units and a differentiated ranges of values of the variables, they were normalised in the analysis using the zeroed unitarisation method. For this purpose, the following formulas were employed (Olejnik, 2006, pp. 198–199; Pondel, 2021, p. 387):

a. for stimulants:

$$z_{ij} = \frac{x_{ij} - \min x_{ij}}{\max x_{ij} - \min x_{ij}}$$

b. for destimulants:

$$z_{ij} = \frac{\max x_{ij} - x_{ij}}{\max x_{ij} - \min x_{ij}}$$

where:

z_{ij} – normalised value of the j -th variable in the i -th country

x_{ij} – value of the j -th variable in the i -th country.

Based on the set of the normalised diagnostic variables, a synthetic development indicator was determined, i.e. a taxonomic measure of sustainable development (TMSD) of the European countries selected for the analysis both for the particular aspects as well as an aggregate indicator, for the years 2012 and 2019.⁶

For this purpose, the non-model-based linear ordering method was employed⁷:

$$TMSD_i = \frac{1}{m} \sum_{j=1}^m z_{ij}$$

where:

i – ordinal number of the country

j – ordinal number of the diagnostic variable

m – total number of diagnostic variables.

The linear ordering made it possible to assess the examined countries and classify them in terms of the achieved level of sustainable development, both in the particular aspects and in aggregate, in both years under analysis (2012, 2019). When creating the classification, the mean value of the synthetic indicator ($TMSD_{mean}$) for the entire population examined and the standard deviation from the mean (σ) were used.

For the indicators depicting the level of sustainable development in aggregate and in the economic, social, cultural and environmental aspects, four intervals of the indicator value were set, to which the following groups of countries were assigned: countries with a very high, high, low and very low level of development⁸.

The results obtained allowed us to determine which aspect of sustainable development fosters or impairs the sustainability level of a country, and, most of all, what the impact is of the cultural component on this level.

RESEARCH RESULTS

The results from the analysis conducted for ten selected European countries show that the value of the general synthetic sustainable development indicator in 2019 grew in as many as nine of the countries compared to 2012. In the case of one country, the Netherlands, the value of the indicator declined in the period under analysis (Table 3).

⁶ The synthetic development indicator takes values from the interval [0.1] – the higher the value, the better the situation of the object (Łogwiniuk, 2011, p. 15; Pondel, 2021, p. 387).

⁷ The normalised values of variables Z_{ij} were averaged in the cross section of variables, taking into account weight factors – constant weights were adopted. This means that each variable in the taxonomic analysis has the same significance, which is in line with the essence of sustainable development, which assumes the equality of the economic, social and environmental aspects (Pondel, 2021, pp. 387–388).

⁸ Countries with a very high development level: ($TMSD_{mean} + \sigma$) and more; countries with a high development level: ($TMSD_{mean}$) to ($TMSD_{mean} + \sigma$); countries with a low development level: ($TMSD_{mean}$) to ($TMSD_{mean} - \sigma$); countries with a very low development level: ($TMSD_{mean} - \sigma$) and less.

Table 2. Basic characteristics of distribution of diagnostic variables

Variable	Mean		Standard deviation		Coefficient of variation		Minimum		Maximum	
	2012	2019	2012	2019	2012	2019	2012	2019	2012	2019
X ₁	24,392.00	27,078.00	15,510.16	15,928.06	0.64	0.59	9,680.00	12,530.00	58,820.00	62,800.00
X ₂	95.59	93.75	24.88	22.16	0.26	0.24	63.20	69.00	130.20	129.50
X ₃	13.14	7.70	7.12	4.82	0.54	0.63	4.50	3.30	24.80	17.90
X ₄	1.54	1.75	0.73	0.83	0.48	0.48	0.66	0.64	2.85	3.16
X ₅	25.74	22.71	6.79	4.44	0.26	0.20	15.00	16.50	36.20	30.00
X ₆	15.71	16.58	3.22	3.67	0.21	0.22	8.90	11.80	21.00	23.60
X ₇	15.48	11.31	6.25	4.91	0.40	0.43	6.00	5.20	25.40	21.20
X ₈	10.90	12.49	7.59	8.80	0.70	0.70	3.30	3.90	29.10	32.30
X ₉	3.97	4.02	0.95	0.80	0.24	0.20	2.90	3.30	5.80	5.40
X ₁₀	7.44	7.62	1.69	1.50	0.23	0.20	4.60	5.70	10.70	9.90
X ₁₁	1.23	1.26	0.83	0.79	0.68	0.63	0.20	0.30	2.80	2.60
X ₁₂	0.39	0.40	0.20	0.12	0.51	0.29	0.10	0.20	0.70	0.60
X ₁₃	9.50	8.68	5.50	6.00	0.58	0.69	5.50	6.00	15.30	11.20
X ₁₄	17.39	21.79	9.49	10.18	0.55	0.47	4.66	8.89	35.71	40.93
X ₁₅	7.99	11.07	3.80	6.00	0.48	0.54	2.61	3.49	14.86	22.33

Source: own elaboration.

Table 3. Values of the synthetic sustainable development indicator for selected European countries in 2012 and 2019

EU country	Economic indicator (TMSD _{econ})		Social indicator (TMSD _{social})		Cultural indicator (TMSD _{cult})		Environmental indicator (TMSD _{envir.})		Aggregate indicator (TMSD _{general})	
	2012	2019	2012	2019	2012	2019	2012	2019	2012	2019
Countries with low cultural diversity										
Portugal	0.2621	0.3294	0.4127	0.5462	0.1929	0.1070	0.5912	0.6036	0.3647	0.3966
Italy	0.4974	0.4440	0.2196	0.2350	0.1794	0.2420	0.5359	0.5595	0.3580	0.3701
Poland	0.2396	0.3651	0.3478	0.5312	0.2246	0.2742	0.2758	0.1188	0.2720	0.3223
Greece	0.1030	0.0976	0.0189	0.2282	0.1351	0.0179	0.4383	0.4110	0.1738	0.1887
the Netherlands	0.6942	0.6911	0.8818	0.8725	0.5899	0.6405	0.1054	0.0110	0.5678	0.5538
Mean for the group	0.3593	0.3854	0.3762	0.4826	0.2644	0.2563	0.3893	0.3408	0.3473	0.3663
Countries with high cultural diversity										
Latvia	0.1149	0.2025	0.2168	0.2589	0.6414	0.6369	0.8849	0.8602	0.4645	0.4896
Switzerland	0.9928	0.9499	0.8538	0.9214	0.6965	0.6633	0.7076	0.7246	0.8127	0.8148
Belgium	0.7625	0.8256	0.5396	0.6479	0.4634	0.4630	0.2164	0.1087	0.4955	0.5113
Estonia	0.3964	0.3797	0.4958	0.4723	0.7901	0.8314	0.5580	0.5710	0.5601	0.5636
Spain	0.2801	0.3108	0.3545	0.4251	0.3719	0.4173	0.4907	0.4652	0.3743	0.4046
Mean for the group	0.5093	0.5337	0.4921	0.5451	0.5927	0.6024	0.5715	0.5459	0.5414	0.5568
All countries under analysis										
Value	0.4343	0.4596	0.4341	0.5139	0.4286	0.4294	0.4804	0.4434	0.4443	0.4615

Source: own elaboration.

Among the nine countries with a growing general synthetic *TMSD*, none recorded growth in all four partial indicators. In this group of countries, the economic sustainable development indicator increased in five countries, the social one in eight, and the cultural and environmental ones in four. The countries with a growing general synthetic indicator of sustainable development included all five countries from the high cultural diversity group and four countries from the low cultural diversity group.

As demonstrated in Table 3, both in 2012 and in 2019, only in one country, i.e. Estonia, the cultural aspect was the one with the most significant impact on the general sustainable development indicator. It was the least impactful aspect for the development of the general indicator value in four countries in 2012 and in three countries in 2019. Two countries – Portugal and Switzerland – retained this position in both the analysed periods. The value of the cultural indicator declined in those countries; in Switzerland, however, despite the decrease in 2019, the value remained at a high level in general (0.66).

The synthetic sustainable development indicator in the cultural aspect in both years under analysis was lower in the countries with low cultural diversity compared to those with high cultural diversity (Table 3). Only one of the countries from the first group, the Netherlands, recorded the cultural indicator (0.58 in 2012 and 0.64 in 2019) close to the mean for the countries from the second group (0.59 and 0.60, respectively).

By evaluating the general level of sustainability development in the examined European countries in 2012 and 2019, it may be concluded that there were as many countries characterised by a very high level of sustainability development (5) as those characterised by a low and very low level (5) (Table 4). In both periods under analysis, no changes in this area took place in the structure of the countries.

In terms of the economic aspect of sustainable development, both in 2012 and 2019, a larger number of countries (6 and 7, respectively) achieved a low and very low level of development rather than a high and very high level (4 and 3, respectively). Furthermore, the economic climate in Italy declined. A similar situation could be observed for the social indicator – the country that improved its position in 2012 compared to 2019 was Poland. In the cultural aspect, similarly as in the case of the general indicator, the same number of countries was characterised by a very high and high level of sustainability (5) as those characterised by a low and very low level (5). Slight changes were noted in Switzerland (in 2012, it was in the group of countries with a very high cultural indicator, while in 2019, it was in the group with a high indicator), Italy (a change from the group of countries with a very low level of the indicator to those with a low level of the indicator) and Portugal (the reverse situation to the case of Italy).

Table 4. Surveyed European countries by the level of sustainable development

Synthetic sustainable development indicator	2012		2019	
	TMSD value	Country	TMSD value	Country
	Aggregate indicator – TMSD _{general}			
very high	above 0.6235	Switzerland	above 0.6304	Switzerland
high	0.4443–0.6235	the Netherlands, Latvia, Belgium, Estonia	0.4615–0.6304	the Netherlands, Latvia, Belgium, Estonia
low	0.2651–0.4443	Portugal, Italy, Poland, Spain	0.2926–0.4615	Portugal, Italy, Poland, Spain
very low	below 0.2651	Greece	below 0.2926	Greece
	Economic indicator – TMSD _{econ}			
very high	above 0.7316	Switzerland, Belgium	above 0.7344	Switzerland, Belgium
high	0.4343–0.7316	Italy, the Netherlands	0.4596–0.7344	Italy, the Netherlands
low	0.1370–0.4343	Portugal, Poland, Estonia, Spain	0.1848–0.4596	Portugal, Italy, Poland, Latvia, Estonia, Spain
very low	below 0.1370	Greece, Latvia	below 0.1848	Greece
	Social indicator – TMSD _{social}			
very high	above 0.7072	the Netherlands, Switzerland	above 0.7607	the Netherlands, Switzerland
high	0.4341–0.7072	Belgium, Estonia	0.5139–0.7607	Portugal, Poland, Belgium
low	0.1610–0.4341	Portugal, Italy, Poland, Latvia, Spain	0.2671–0.5139	Estonia, Spain
very low	below 0.1610	Greece	below 0.2671	Italy, Greece, Latvia
	Cultural indicator – TMSD _{cult.}			
very high	above 0.6697	Switzerland, Estonia	above 0.6955	Estonia
high	0.4285–0.6697	the Netherlands, Latvia, Belgium	0.4293–0.6955	the Netherlands, Latvia, Switzerland, Belgium
low	0.1873–0.4285	Portugal, Poland, Spain	0.1631–0.4293	Italy, Poland, Spain
very low	below 0.1873	Italy, Greece	below 0.1631	Portugal, Greece
	Environmental indicator – TMSD _{envir.}			
very high	above 0.7139	Latvia	above 0.7251	Latvia
high	0.4804–0.7139	Portugal, Italy, Switzerland, Estonia	0.4434–0.7251	Portugal, Italy, Switzerland, Estonia, Spain
low	0.2469–0.4804	Poland, Greece, Spain	0.1617–0.4434	Greece
very low	below 0.2469	the Netherlands, Belgium	below 0.1617	Poland, the Netherlands, Belgium

Source: own elaboration.

As shown in Table 4, among the four aspects of sustainable development, in 2019, only the environmental aspect was associated with a larger number of countries attaining a very high and high level of the indicator (6) compared to those that attained a low and very low level (4).

When assessing the meaning of the cultural aspect for the level of sustainability development of the selected European countries, linear ordering of the examined countries was conducted, taking into account a synthetic indicator based on four aspects and an indicator based on three aspects. The results are presented in Table 5 below.

Table 5. Level of sustainability development of European countries, results of linear ordering

Country	TMSD (econ.+social+cult. +envir.)		Average position	TMSD (econ.+social +envir.)		Average position
	2012	2019		2012	2019	
Switzerland	1	1	1	1	1	1
the Netherlands	2	3	2.5	2	3	2.5
Estonia	3	2	2.5	4	5	4.5
Belgium	4	4	4	3	2	2.5
Latvia	5	5	5	7	6	6.5
Spain	6	6	6	8	8	8
Portugal	7	7	7	5	4	4.5
Italy	8	8	8	6	7	6.5
Poland	9	9	9	9	9	9
Greece	10	10	10	10	10	10

Source: own elaboration based on Table 3.

As results from this calculation show, culture has a substantial role in sustainable development. In the case of Estonia, the country for which the cultural aspect was the most impactful for the development of the general indicator, eliminating this aspect from the set of sustainable development components impaired the position of this country in the sustainability hierarchy of countries. Latvia is an example of a country in which the cultural aspect was the second most important one for the development of the general sustainability indicator, and so, excluding culture from the measurement of the general indicator shifted the country to a lower position in the ranking. However, eliminating the cultural aspect from the construction of the synthetic indicator of sustainable development definitely had a lower impact on the results of the linear ordering for the countries for which this component only slightly affects the final value of the general indicator, e.g. in Greece.

DISCUSSION

Based on the research conducted, it can be concluded, though with great prudence, that the social component plays a special role in the sustainable development of the analysed countries: an increase in the social indicator in the period of 2012–2019 was noted for the eight out of nine countries in which the general synthetic indicator of sustainable development had grown. There was no unequivocal relationship between the social and economic components of sustainable development: while in Portugal, Poland, Latvia, Belgium and Spain the growing significance of the social component was accompanied by the growth in the economic indicator, Italy, Greece and Switzerland noted the opposite trend. Undoubtedly, the improvement in the economic situation of a country may positively drive the improvement in the synthetic indicator of sustainable development in the social aspect, but it does not have to take place as lower values of this indicator may result, for example, from lower demand among a society for support granted under social policy, or generally from the better quality of life of a society.

In the analysis, the cases of the Netherlands, Greece and Poland are worth underlining. In the structure of the research sample, the Netherlands belongs to the countries with low cultural diversity, and yet it noted a value of the cultural indicator at the mean level of the countries with high cultural diversity. This is certainly an effect of adopting the cultural diversity indicators as of the beginning of the 21st century as the basis for grouping countries according to their cultural diversity. Meanwhile, the most important factor of demographic changes in the Netherlands of the recent years is migration, both economic and by those from places affected by environmental changes or conflicts and wars. The scale of this phenomenon undoubtedly affects the cultural diversity of this country. The Netherlands is also an example of a country where the economic indicator did not change in the analysed period, while the social indicator declined, and this fact did not result from reduced social needs of the residents; the number of people at risk of poverty and social exclusion grew in 2019 compared to 2012. This is most probably also related to the migration wave.

Greece is a country which improved in terms of the level of sustainability in the analysed period, mainly due to a huge increase in the social indicator, accompanied by a parallel significant decrease in the cultural indicator, as well as declines in the other aspects. Despite the material improvement of the social indicator, this country still belongs to the group of countries with a very low level of sustainable development in this area – the reference point was a very low level of the indicator in 2012. Certainly, the changes in the social aspect in this country brought about a drop (in the analysed period) in the number of people at risk of poverty and social exclusion.

Poland is a country which materially improved the value of the social indicator in the analysed period, but unlike Greece, this improvement contributed to

Poland having changed its position in terms of sustainability: in 2019, Poland was one of the countries with a high social indicator (whereas in 2012, the country was in the low indicator group). Undoubtedly, this is a result of the social policy pursued in Poland, including the welfare policy, and the value of cash transfers intended for the implementation of the policy.

As results from the analysis conducted, the cultural aspect has a much bigger role in the sustainability of development of countries with a high cultural diversity level: in this group of countries, the mean values of the cultural indicator in both the analysed years were more than twice the values for the group of countries with low cultural diversity. This may be a sign of the significantly greater challenges that the functioning of multicultural communities brings about. Of course, the examples of Estonia and Latvia do not allow us to generalise the conclusions and determine a general trend in the development of the phenomenon, but they do allow us to observe certain trends.

Research on the importance of the cultural dimension for sustainability is carried out in relation to different countries or regions, covers different research periods, and is based on different data. As Bervar (2019) notes, it is often difficult to determine the specific effects and scale of these relationships due to the lack of comparable and unified analysis criteria. However, some research results confirm certain regularities. Estonia and Latvia are countries where, according to our analysis, the importance of the cultural dimension for sustainable development has been demonstrated. Similar conclusions regarding Estonia and Latvia were drawn by Streimikiene, Mikalauskiene and Kiausiene (2019) based on their research. By determining the integrated cultural value index – based on an expert survey, they showed that in countries such as Estonia, Latvia and Lithuania, there is a very strong positive relationship between the cultural value index and sustainable development goals (correlation coefficient $r = 0.9992$). Bacchini and Valentino (2020), in turn, conducted a multidimensional analysis of homogeneity and heterogeneity between the countries of the European euro area, in which they also showed a relationship between culture and sustainable development.

CONCLUSION

The research results show that the cultural aspect definitely has a greater role in the sustainable development of countries with high cultural diversity. It seems that this may be attributed to the public policies of the given country which support various areas of education (funding language-learning, integration programmes, etc.) and place an emphasis on reinforcing the human capital of minority groups. Although the analysis was based on quite selective data and is a very general examination of the problem, it still allows us, even at this stage of the research,

to observe certain regularities or relations. However, any broader conclusions require the analysis to be extended and significantly deepened, including by way of qualitative research. This is because the above-mentioned three possible areas of research require an analysis of attitudes (behavioural, cognitive and emotional aspects) regarding culture, which is possible by way of sociological research. In a taxonomic analysis, it is only possible to refer to data such as employment in culture, household expenditure on culture or state expenditure in this area. All of them are of great importance precisely because they not only suggest a choice of the development path of a country but also indicate the current level of participation of various aspects of culture in the development.

Emphasis must be placed on synergies occurring between the sustainable development indicators, which emerge when culture is considered in the research, and which may determine the processes of sustainability development. The results of the taxonomic analysis and literature review suggest that it is indispensable to incorporate the existing cultural resources into the development strategies created and the decisions made. Ignoring them may result in alienation of individuals and groups, dangerous processes of social disintegration, disturbance of social order, as well as impairment of the scale and pace of sustainable development. It would also be a mistake to underestimate culture due to strong social-cultural-political changes that in recent years have been dynamically affecting the transformations of the system itself, which today is the reference point for many economies around the world. Taking into account the cultural specificity of a region, the existing systems of values and the way societies are organised will allow us to take advantage of the most valuable endogenous characteristics of each given group to forge an effective relationship with the other components of sustainable development.

Future research on the cultural dimension of sustainable development should focus on a comprehensive and holistic understanding of culture, and not only on its fragmentary (e.g. institutional) approach. However, it will be particularly important to deepen the qualitative research and analyse the impact of soft factors on sustainable development, such as knowledge, customs, habits, abilities and lifestyle. Due to the variability of culture and its multidimensionality, research should reflect the diversity of perspectives on how culture enables or limits actions for sustainable development (e.g. the perspective of society, creators of cultural policies, managers of the cultural sector, experts, non-governmental organisations, etc.).

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Summary

The aim of this paper is to evaluate the level of sustainable development in selected European countries – taking into account its economic, social, environmental and cultural dimensions, as well as the level of diversification of the phenomenon in the entities under analysis. The analysis assumes that culture has a positive impact on sustainable development measures. The selection of countries was based on indicators of their ethnic and cultural diversity. The time range of the analysis is 2012 and 2019, and the data source was the Eurostat database. A taxonomic method

(linear ordering method) was used in the analysis of the research problem. The achievement of the aim was determined by limitations in the selection of indicators and the availability and validity of data in European statistics. Based on research to date, it can be concluded that, in the cultural aspect, the same number of countries presented a very high and high level of sustainable development (5) as those presenting a low and very low level (5). The cultural aspect has substantially greater meaning for the sustainability development of the countries characterised by high cultural diversity. Taking this aspect into account while conducting analyses makes it possible use the most valuable, endogenous characteristics of a given population for forging an effective relationship with the other elements of sustainable development.

Keywords: culture, sustainable development, diversity, European countries.

Miejsce kultury w zrównoważonym rozwoju krajów europejskich – jednorodność czy zróżnicowanie zjawiska?

Streszczenie

Celem artykułu jest ocena poziomu zrównoważonego rozwoju w wybranych krajach europejskich – z uwzględnieniem jego wymiaru gospodarczego, społecznego, środowiskowego i kulturowego, oraz zróżnicowania zjawiska w badanych jednostkach. W analizie przyjęto założenie, że wskaźniki kulturowe determinują poziom miernika zrównoważenia rozwoju. Doboru krajów dokonano w oparciu o wskaźniki ich różnorodności etnicznej i kulturowej. Zakres czasowy analizy to lata 2012 i 2019, a źródłem danych była baza Eurostatu. Do analizy problemu badawczego wykorzystano metodę taksonomiczną (porządkowania liniowego). Realizacja celu determinowana była ograniczeniami w wyborze wskaźników oraz dostępnością i aktualnością danych w statystyce europejskiej. Na podstawie dotychczasowych badań można stwierdzić, że w wymiarze kulturowym, taka sama liczba krajów charakteryzowała się bardzo wysokim i wysokim poziomem zrównoważenia rozwoju (5), jak niskim i bardzo niskim (5). Wymiar kulturowy odgrywa zdecydowanie większą rolę w zrównoważeniu rozwoju krajów silnie zróżnicowanych kulturowo. Uwzględnianie go w analizach pozwala na wykorzystanie najbardziej wartościowych endogennych cech danej zbiorowości dla ukształtowania efektywnej relacji z pozostałymi składowymi zrównoważonego rozwoju.

Słowa kluczowe: kultura, zrównoważony rozwój, różnorodność, kraje europejskie.

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