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Inclusive development of social entrepreneurship in nature management

Kateryna O. Kostetska¹, Yevgeniia G. Gordiichuk¹, Anastasiia V. Movchaniuk², Nataliia M. Vdovenko³, Vitalii V. Nahorni³, Viktor V. Koval⁴

¹*Institute of Market Problems and Economic-Ecological Research NAS of Ukraine, Odessa, Ukraine, e-mail: kathryn81@ukr.net*

²*Uman National University of Horticulture, Uman, Ukraine*

³*National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine*

⁴*National Academy of Sciences, Kyiv, Ukraine, e-mail: victor-koval@ukr.net*

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Abstract. Social entrepreneurship development in Ukraine is a priority guideline based on the creation and improvement of government policy on ecosystem orientation and inclusion, which provides public access to tourism and natural resources. The main component of inclusive development of social entrepreneurship emphasizes the basic principles of its existence,

such as the ability to achieve one's own goals, despite the economic effect of one's activities. In the quantitative comparative analysis and need to reach economic indicators, the main factors are determined by the idea of inclusive development in nature management, as a field of activity in which not only the state but also multidisciplinary international organizations invest. The aim of the article is to identify opportunities for inclusive nature management development in social entrepreneurship in Ukraine by summarizing the existing practice of using indices and identifying indicators that will correspond to inclusive nature management parameters. Determining the position and directions of social entrepreneurship development in Ukraine was determined using an index approach, which, in contrast to others, allows one to identify indicators that characterize the sphere of development on economic and environmental influence of the country on the basis of inclusivity. The analysis of international rating assessments and Ukraine's place in them requires a rethinking of existing approaches to the search for economically feasible ways to improve socio-economic and environmental indicators and their rating positions. The method of multi-indicator immersion is used in the article to identify the main indicators of economic, inclusive growth and social components, which are due to the experience in nature management and characterize the development of social entrepreneurship. The calculations of the Inclusive Development Index of Social Entrepreneurship in Ukraine as a consolidated index according to the geometric formula, which comprised synthetic indicators of the human capital index to outline the inclusive range of components, brand index and index of environmental indicators, proved that today the ecological state of environment and health of the population have a significant negative impact on economic growth and welfare of the population.

Ключові слова: *inclusive development, social entrepreneurship, nature management, index approach.*

Інклюзивний розвиток соціального підприємництва в природокористуванні

К. О. Костецька¹, Є. Г. Гордійчук¹, А. В. Мовчанюк², Н. М. Вдовенко³, В. В. Нагорний³, В. В. Коваль⁴

¹*Інститут проблем ринку та економіко-екологічних досліджень НАН України, Одеса, Україна, e-mail: kathryn81@ukr.net*

²*Уманський національний університет садівництва, Умань, Україна*

³*Національний університет біоресурсів і природокористування України, Київ, Україна*

⁴*Національна академія наук, Київ, Україна, e-mail: victor-koval@ukr.net*

Анотація. Розвиток соціального підприємництва в Україні виступає першочерговим орієнтиром розвитку соціальних підприємств на основі створення та удосконалення політики уряду щодо екосистемної орієнтації та інклюзії, яка передбачає суспільний доступ до туристичних та природних ресурсів. При цьому основна складова інклюзивного розвитку соціального підприємництва підкреслює основні принципи його існування, такі як здатність реалізації власних цілей, незважаючи на економічний ефект від своєї діяльності. При кількісному порівняльному аналізі та необхідності виходу на економічні показники основні фактори визначаються ідеєю інклюзивного розвитку в природокористуванні, як тої сфери діяльності, в яку інвестує не лише держава, а й багатопрофільні міжнародні організації. Метою статті є ідентифікація можливостей розвитку інклюзивного природокористування в соціальному підприємстві в Україні шляхом узагальнення існуючої практики застосування індексів та виокремлення індикаторів, які будуть відповідати параметрам інклюзивності в природокористуванні. Визначення позиції та напрямів розвитку соціального підприємництва в Україні було визначено за допомогою індексного підходу, який на відміну від інших дозволяє виокремити індикатори, які характеризують сферу впливу на економіко-екологічний розвиток країни на

засадах інклюзивності. Аналіз міжнародних рейтингових оцінок та місце в них України потребує переосмислення існуючих підходів до пошуку економічно доцільних напрямів підвищення соціо-економіко-екологічних показників та своїх рейтингових позицій. В статті методом мультиіндекаторної імерсії виявлено основні індикатори економічного зростання, інклюзивного зростання та соціальних складових, що обумовлені досвід у природокористуванні якими характеризується розвиток соціального підприємництва. Проведено розрахунки Індексу інклюзивного розвитку соціального підприємництва в Україні як зведеного індексу за формулою середньо геометричного, який включив в себе синтетичні індикатори індексу людського капіталу для окреслення інклюзивного кола складових, індексу бренду та індексу екологічних показників, який довів, що сьогодні екологічний стан довкілля та здоров'я населення оказують значний негативний вплив на економічне зростання держави та добробут населення.

Ключові слова: інклюзивний розвиток, соціальне підприємництво, природокористування, індексний підхід.

Introduction.

Inclusive development of social entrepreneurship is a fairly new vector of today. This is due to the contradictions that arise between inclusion and social entrepreneurship in nature management. Thus, if inclusion provides public access to tourism and natural resources, which is guaranteed by the state, the development of social entrepreneurship is based primarily on making a profit from its activities for its further redistribution to social needs.

Social entrepreneurship shows how developed in the country are the institutional environment and business support which are based on the principles of sustainability and inclusivity. The index approach is the most convenient way to perform calculations, while analyzing many disparate indicators and elements and combining them into one set (aggregate).

To study individual indicators an index approach was chosen with which it will be possible to determine the current state of the inclusive economy in Ukraine and identify opportunities for its development. Theoretical index analysis makes it possible to compare economic phenomena between the compared situations and elements of the system and carry out analysis of qualitative differences between individual factors of the system.

Strategic management of economic system development (Seleznova, Boiko, Bondar, 2020) provides the relationship of strategic objectives with indicators of current development. Thus, in this study it is necessary to identify synthetic indicators based on the generalization of indicators inherent in the inclusive development of social entrepreneurship in nature management. The result indicators of the general change generated by complex economic phenomena are broken down into the individual components of this phenomenon or factors influencing it. So, it is advisable to dwell in more detail on the indices and their components used in international practice.

The aim of the article is to identify opportunities for the inclusive development of nature management in social entrepreneurship in Ukraine by summarizing the existing practice of using indices and identifying indicators that will show the parameters of nature management inclusiveness.

Problem statement.

According to the indicative goals and objectives of the National Civil Society Development Ukraine Strategy for the years 2021–2026, social entrepreneurship is defined as a springboard for the key vectors of social awareness development of the community and the key areas of inclusion and sustainability in the business environment.

There are a number of documents developed on international achievements in the progress of social entrepreneurship in Ukraine (Global Innovation Index 2020) which state that the primary guideline of amplification of social enterprises is the creation and improvement of government policy on ecosystem orientation. At the same time, foreign experts have developed two criteria groups for the activities of social enterprises divided into economic and social, namely: the creation of entrepreneurship on a voluntary basis with a minimum number of paid employees, the volunteering being aimed at profit, a significant part of which will be distributed to the needs of society. Areas of activity and decisions are regulated by voting, regardless of the capital contributed by a member of the enterprise.

Today, the activities of social startups are a new direction of profit, competitive advantages of business development with a focus on social and inclusive goals. Ukrainian researchers (The Inclusive Development Index 2018) have proved that the main vectors of social entrepreneurship development are as follows:

- first of all, it is the ideology of doing business according to international recommendations;
- accessibility to its products of all segments of the population and obtaining commercial benefits from activities;
- environmentally oriented component in conducting commercial activities.

The legislation prescribes such activities and has many competitive advantages related to taxes, fees, etc. However, there are no clearly defined normative and methodological recommendations for calculating the level of social entrepreneurship development in Ukraine. Therefore, the purpose of this article is to scientifically generalize index approaches to calculating the level of industry development in the country and to distinguish from their composition indicators that would

clearly characterize the state of social entrepreneurship development.

Material and Methods.

The definition of the theoretical basis was carried out using the method of theoretical generalization to identify the main indicators in international indices that characterize social entrepreneurship development. To identify index indicators of social entrepreneurship progress, we used the multi-indicator immersion method to identify the indicators of economic growth,

inclusive growth and social components, which are due to experience in nature management.

The characteristic indicators outlining the formation of social entrepreneurship in the country are indices. Thus, the Inclusive Development Index (INCI) is an annual assessment of economic progress that does not use GDP. The index includes: components of economic development, gender equity and equality, inclusivity in financial and environmental governance. The latest data on the Inclusive Development Index show that Ukraine takes 49th place in the ranking, having lost 6.8 % over the past 5 years.

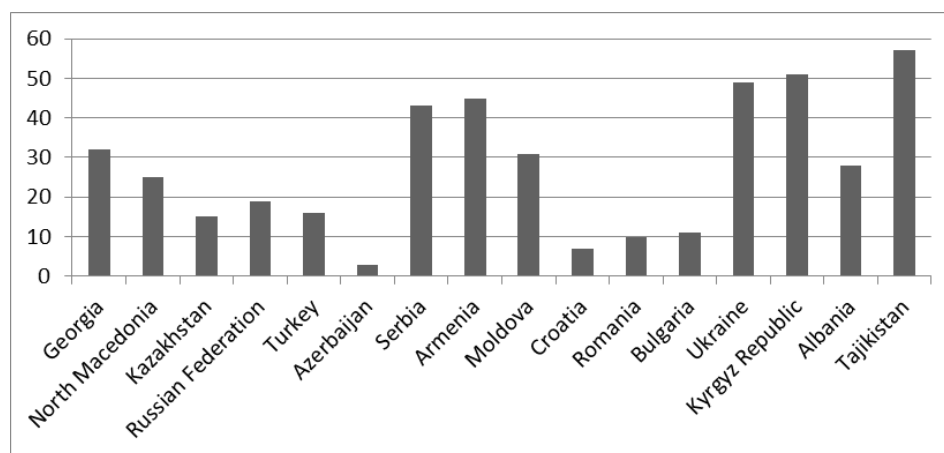


Fig. 1. The Inclusive Development Index is based on data (*The Inclusive Development Index 2018*)

Ease of Doing Business Index (Doing Business 2020: Comparing Business Regulation in 190 Economies) – measures the main economic, legislative and management indicators of business formation. The Ease of Doing Business Index measures:

- Launching a business: starting a business, employment, number of employees.
- Location: building permits; availability of electricity; property registration.

– Access to finance: availability of loans, protection of minority investors.

– Conducting business operations: payment of taxes, export trade; cooperation with the government.

Business security: the number of concluded contracts, solving insolvency problems.

Ukraine's position is 64th in the ranking with a doing business indicator of 70.2.

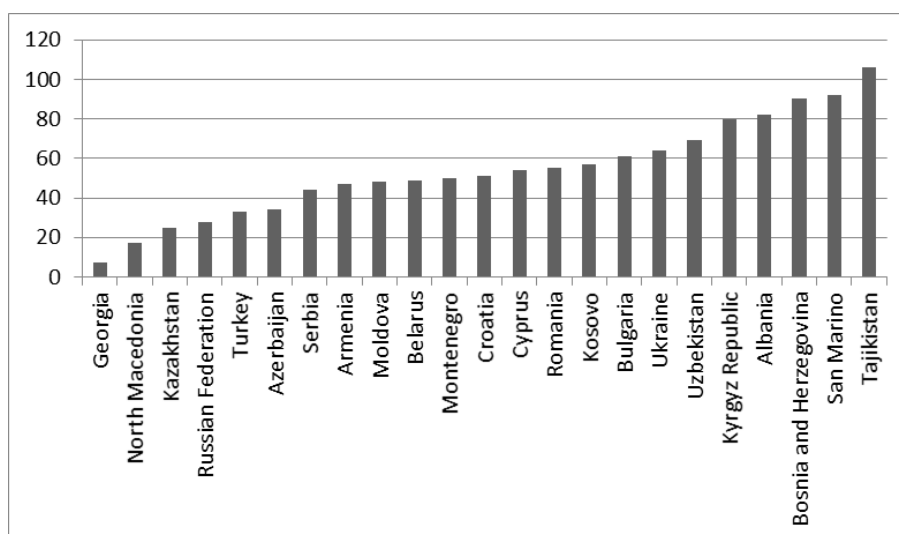


Fig. 2. The ranking according to the Ease of Doing Business Index is based on data (*Doing Business 2020: Comparing Business Regulation in 190 Economies*)

The Social Progress Index is a new way of measuring the success of our societies. This is a comprehensive indicator of real quality of life, independent of economic indicators. The Global Index: Overview is designed to complement and replace economic measures such as GDP.

The Social Progress Imperative programme defines social progress as the ability of a society to meet the basic human needs of its citizens, to establish conditions that enable citizens and communities to improve and maintain their quality of life, to create conditions for all people to develop their potential. Instead of emphasizing traditional measures of success, such as income and investment, the Social Progress Index measures 51

social and environmental indicators to create a clearer picture of everyday people life. Ukraine ranks 80th out of 149. The index does not measure people's happiness or life satisfaction, focusing on real life results.

The index includes:

1. Basic human needs: food and basic medical care, water and sanitation, housing and sanitation, personal safety (whether a person feels safe).

2. Welfare: access to secondary education, awareness, health and wellness, quality of the environment.

3. Opportunities: personal rights (protection of human rights), personal freedom and choice, social inclusion, access to higher education.

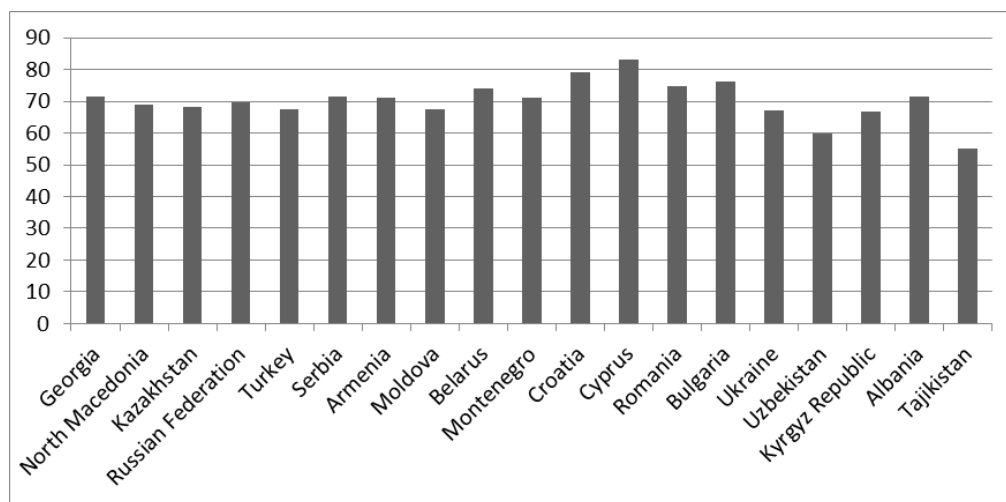


Fig. 3. The ranking according to the Social Progress Index is based on data (*Global Index: Overview*)

Note that all indices in one or another area are inherent in the input indicators of social entrepreneurship. However, in the field of inclusion and nature management there is a skew towards recovery, recreation, gaining experience, which is extremely relevant in the post-pandemic period.

Results and discussion.

In the post-pandemic period the social entrepreneurship definition and components are oriented to the development vectors such as environmentally oriented activities in the field of nature management, which in themselves entail inclusion. In the future, this direction of growth will be achievable for the tandem "state – enterprise – society" – overcoming the destructive impact on the environment, encouraging conservation and sustainable use of natural resources, making inventory of recreational areas, ensuring inclusive economic growth.

Therefore, the determination of indicators to be used in making an index of development of social entrepreneurship was carried out using definitions and characteristics of economic growth, inclusive growth and impressions/experiences in nature management. Thus, the research algorithm is formed (Fig. 4).

Based on the research algorithm, synthetic indicators of the social entrepreneurship development index should reflect their essence according to the selected classification features. However, there is a problem of establishing the boundaries of the study, because the set of indicators can be constantly increasing, moving beyond the phenomena inherent in the sphere of research. Therefore, international experience of research indicators of sustainable development (Mikhno, Koval, 2021), the selection of indicators in the study will be carried out on the principle of multi-indicator immersion, as one in which the limits are set beyond the identifying features.

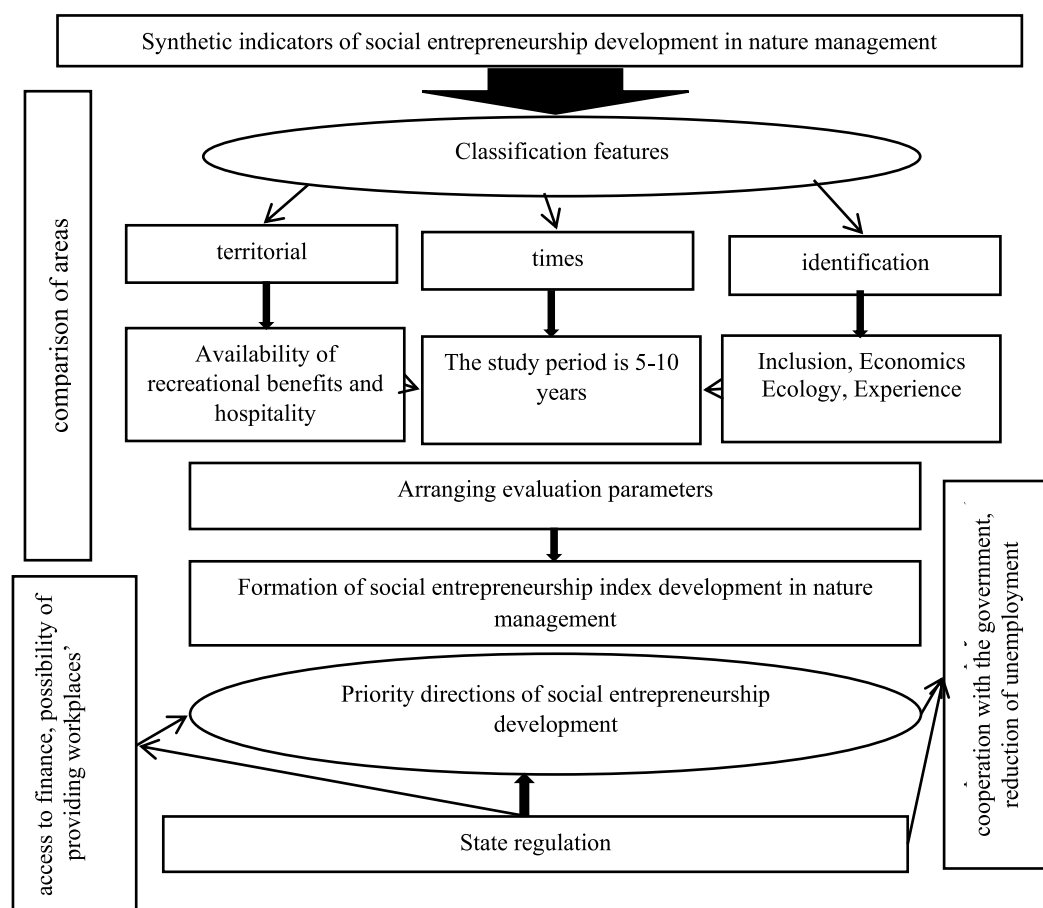


Fig. 4. Algorithm of social entrepreneurship inclusive development in nature management

In foreign research publications, this is a fairly common method. Thus (Levett, 2002) Sustainability Indicators – Integrating Quality of Life and Environmental Protection considers sustainable development by multi-indicator immersion, proposing to move away from the idea that sustainable development is a crossroads of social, environmental and economic goals, and considering instead the environmental goal as the core of the concept of sustainable development, which is formed based on the needs of society that can be solved by the economy. Thus, sustainable economic development depends on and must take into account environmental and social constraints.

Other views using the same multi-indicator immersion model are discussed (Brady, 2005) in *Environmental management in organizations*. The IEMA Handbook considers sustainable development through the prism of the production process in organizations and work model multi-indicator immersion as an alternative to the sustainable development three-ring model, where economic progress depends on social activity, and economic activity acts as an auxiliary in ecological and social well-being. The author proves that such a model of sustainable development, rather than a three-ring one, reduces social and environmental risks from

economic activity, taking into account the impact of manufactured products or services on the environment.

The initiative of the WHO Regional Office for Europe (World Health Organization, 2012) examines welfare using a multi-indicator immersion model, where the circle boundary includes public administration, economy, environment, which interact with society to directly influence factors of individual well-being that include: health (physical and psychological), relationships, personal finances, education and skills, work, housing. The inner circle is defined by personal well-being, which should take indicators of happiness, life satisfaction and affective experience. Methods for measuring personal well-being are based on questionnaires and observations of a person's behaviour during the day including changes of mood, or compensation of some components for others.

The report (Ahmad, 2020) Sustainable Neighborhood Development in Emerging Economies: A Review considers sustainable development according to the multi-indicator immersion model as an economic one to achieve economic adequate benefits to society within ecological limits.

Tuti Haryati (Su, 2014), consider the impact of sustainable development on the cost of commercial office buildings using the multi-indicator immersion

model approach. The authors consider three concentric circles: the most remote the environment, society and the economy at the center. This alternative concept puts economic factors at the center as the basis for wealth creation, which is a further development engine, but at the same time limited by environmental and social parameters. The authors argue that creation of green buildings will provide a social effect for workers due to the provision of more environmentally friendly working conditions, which will increase the economic effect, as the main goal to be achieved due to work capability and public health and greater green structures sustainability.

Dixon (2011) considers sustainable social development as the basis for achievement of economic growth, well-being and happiness of the population, arguing that not only does environmental sustainability require intervention and reorientation of state regulation, but social sustainability is the at core of achieving economic and environmental needs.

Pei-Ing (Wu, 2014) analyzes different views on sustainable development: the approach to environment monetization, economy and society using the multi-indicator immersion method proves that the better the aggregation environmental index, the lower the aggregation social index in achieving economic development.

In Russian *Dolls and Chinese Whispers: two perspectives on the unintended effects of sustainability indicator communication* (Lyytimäki, 2014), the authors propose to form a sustainable development indicator as a set of dolls that decrease in size and take into account the main features of the parameters. In the study (Kostetska, Laurinaitis, 2020) the index was formed using the "multi-indicator immersion principle" to establish a framework of indicators of digital technology use for transformation of individual sectors of the economy, reproducing the general index scheme and focused on measuring specific conditions (effects) of digital technologies that are directly related to a given economy sector. This approach allows use of a comprehensive sub-index and a set of indicators for the digital transformation of an economic sector as an independent full-fledged tool.

The report "The quality of the environment affects our happiness" confirms the importance of the natural environment for people in nationally representative household surveys. For example, asking how important environmental protection is for their well-being and life satisfaction, 88 % of respondents in a survey by the German Socio-Economic Group (SOEP) said it was important or very important. So, in response to the question how concerned they are about the state of the environment, 72 % say they are somewhat or very concerned. Similarly, 70 % say they are somewhat or very concerned about the effects of climate change.

Academic interest in the relationship between the environment and happiness was twofold: first, there was a real interest in how the environment affects people's subjective well-being. Work has also been done on using subjective well-being indicators for the monetary assessment of environmental factors, which are publicly available, often intangible, goods for which there are no market prices. The interaction of environmental factors with life satisfaction – a measure of experimental usefulness – and income assessment, this approach is called the experimental benefits assessment. Second, there is a growing interest in the effects of environmental behaviour on people's subjective well-being, and in turn, how people's emotional states can effectively encourage more environmentally conscious behaviour.

In psychology, there is evidence that when a person is in the natural environment, his mental well-being improves. There is a decrease in stress, growth of positive emotions, cognitive recovery and a positive effect on self-regulation.

Thus (Koval, Mikhno, 2019), analyzing the different approaches of the principle of multi-indicator immersion use, we note that the core of this model should be the main achieved goal, the next circles are those cores within which the goal is achieved. Thus, the model uses normalized social, environmental, and economic indicators to include them in a unique performance indicator.

Research analysis has shown that in the application of the index approach based on multi-indicator immersion principle, it is necessary to establish external and internal limits for the selection of indicators that would indicate the development of an inclusive economy in general and directly within each circle would be independent. The quality of the environment affects human health through the quality of air, water and soil, which is associated with the presence and density of hazardous substances. The quality of the environment is also essential for people who value the natural beauty and for whom amenities influence their life choices (e. g., place of residence) (Balestra and Davide, 2012). This sentence describes the situation of inclusive economy development in nature management.

This area of study is reflected in the contradictions of economic growth and natural resources use; social values and phenomena which affect people's experiences. Therefore, in order to combine nature management, inclusion, economic growth and experience, based on the multi-indicator immersion principle, using an index approach, we will identify indicators from existing international indices that are specific to social entrepreneurship in nature management.

External borders will be generalized by inclusive growth, namely indicators of the human contribution of productive country development, economic growth

is characterized by the limits of inclusion and comprise design, innovation and skills. Experience (Baranets, 2020) in nature management is formed by the internal circle of multi-indicator immersion, the functions of which are aimed at achieving a sense of environmental quality, attractiveness of the place, ideal space for

communication, in the context of declared economic growth, inclusion and does not go beyond range of regulations based on nature management.

Thus, the conceptual approach of the social entrepreneurship index in nature management can be determined:

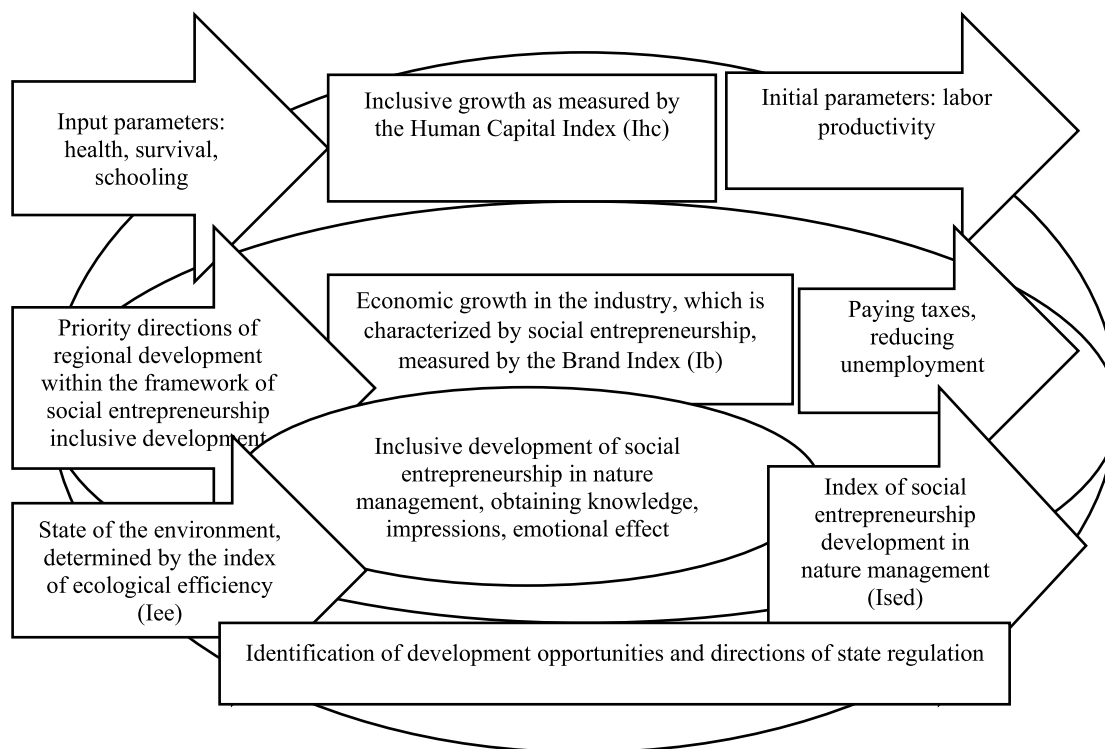


Fig. 5. Conceptual approach of the Social Entrepreneurship Index development in nature management

Classification features are based on the selection of indicators by territorial component; we selected 3 regions for calculations: Odessa, in which the main recreational potential is determined by the marine environment, Transcarpathia, in which forest, river and mountain recreation is concentrated, and Kyiv as a hospitality center.

A time period of 5 to 10 years was chosen as one in which can observe changes in indicators of the chain growth rate.

The identification feature characterises a multi-indicator immersion range and includes selection of

synthetic indicators according to inclusive, economic and environmental indicators.

The inclusion scope is directly related to economic growth and nature, as defined by the OECD, can be calculated by the human capital index, which consists of knowledge, skills, abilities and other qualities that an individual possesses which are important for economic activity.

The International Bank (Human Capital Development Project) proposes to calculate the Human Capital Index by multiplying the indicators of the relative contribution of survival, schooling and health as impact productivity aspects, namely:

$$I_{hc} = Survival * Schooling * Health \quad (1)$$

$$Survival = \frac{1 - \text{child mortality up to 5 years}}{1} \quad (2)$$

$$Schooling = e^{f(\text{expected duration of schooling} * \frac{\text{unified test results}}{625} - 14)} \quad (3)$$

$$Healthh = e^{V_{ASR} * (\text{Adult survival rate} - 1) + y_{\text{short stature}} * \frac{\text{Proportion of children who do not suffer from short stature} - 1}{2}} \quad (4)$$

The percentage of short stature is recommended as one of the key parameters influencing the achievement of the Millennium Development Goals by 2030, namely the eradication of hunger.

The components of the Index in this case are presented as indicators of the relative contribution to productivity in comparison with the reference indicator of the full education course and full health. Parameter $\phi = 0.08$ measures the return from each additional year of schooling. Parameters $Y_{ASR} = 0.65$ and $\gamma_{\text{Short stature}} = 0.35$ measure the increase in productivity due to improved health, using indirect indicators of health data on adult

survival and short stature. The reference indicator of complete and high-quality education corresponds to 14 years of schooling and a unified test result of 625 points. The benchmark for good health means that the survival rate of children and adults is 100 percent, and the percentage of short stature is 0 percent.

When calculating I_{hc} , these indicators are used as weights. These weights were chosen because they are the same for different countries, and thus the differences between countries in the value of I_{hc} reflect only the differences in the variable values of the components.

The chain growth rate of I_{hc} is shown in Fig. 6.

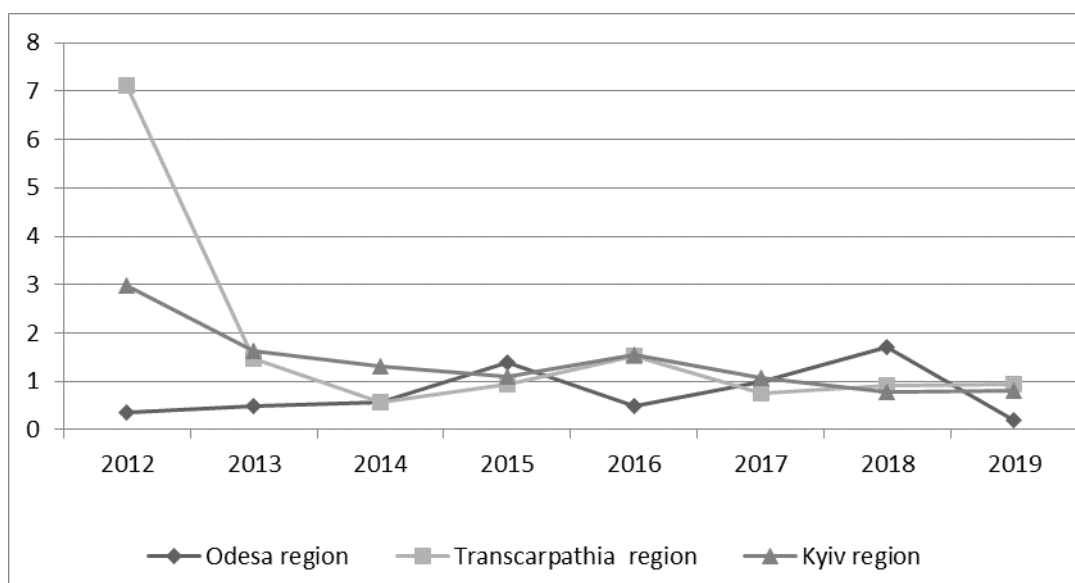


Fig. 6. I_{hc} chain growth rate for the period 2012–2019 is based on data (Metadata, 2020)

The data presented in fig. 6 show that the human capital index in the selected regions has not changed over the past 5 years, which contradicts the general data for Ukraine, as our country scored 0.65 points and ranked 50th out of 157 overall world rankings. The growth of I_{hc} in studied areas is inhibited by the health status of the population, which is extremely poor, especially in Odesa region.

The economic growth range of social entrepreneurship in nature management can be characterized by the Brand Index. BDI (Brand Development Index) (Balestra & Dotti, 2011) or brand development index – an indicator that allows you to assess development / strength level of brand in a particular region and is measured in%.

$$I_b = \frac{\% \text{ from the total sales of the brand in the region}}{\% \text{ from the total population of the country living in the region}} * 100 \quad (5)$$

$$\% \text{ from the total sales of the brand in the region} = \frac{\text{revenue from the sale of the region's brand}}{\text{revenue from brand sales across the country}} \quad (6)$$

$$\% \text{ of the total population of the country living in the region} = \frac{\text{population of the region}}{\text{population in the country}} \quad (7)$$

In our specific study, it is advisable to calculate the Brand Index of the region by tourism indicators, namely the chain growth rate I_b is shown in Fig. 7

the cost of tours sold and the number of tourists who were served by travel agents.

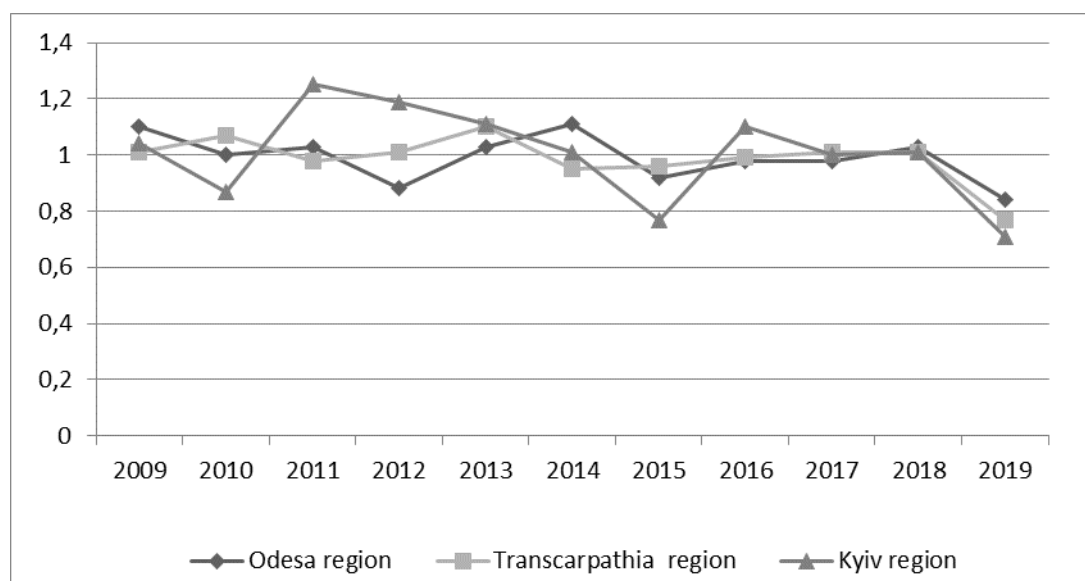


Fig. 7. Chain growth rate Ib by region 2009–2019 is based on data (Metadata, 2020)

The overall decline in 2019 by Ib is due to the fact that at the end of 2019 the epidemiological situation worsened and the COVID-19 epidemic emerged. The overall Ib indicator for 2015–2018 had a constant positive growth rate, which characterizes the selected areas as those where signs of social entrepreneurship inclusive development in nature management by economic circle have been identified.

The ecological range of indicators can be characterized by the index of ecological efficiency which reflects achievements of countries in the field of natural resources management and their rational use.

In 2020, the Yale Center for Environmental Law and Policy (Metadata Environmental Performance Index, 2020) used 32 indicators in 11 categories (Table 1) to calculate the state of countries and find management solutions to overcome environmental crises.

Table 1. Framework of the environmental efficiency index (Iee)

Environmental efficiency index framework	
Ecological health 40 %	Ecosystem viability (60 %)
Air quality – 50 %	Biodiversity and habitat – 25 %
Water and sanitation – 40 %	Ecosystem services – 10 %
Heavy metal pollution – 5 %	Fisheries – 10 %
Waste management – 5 %	Climate change – 40 %
	Greenhouse gases – 5 %
	Agriculture (nitrogen content) – 5 %
	Water resources (wastewater treatment) – 5 %

The reduction of indicators to one dimension was carried out based on the rationing of individual indicators (according to formulas 8, 9). If the growth of unit indicators leads to an increase in unit estimates, the rationing of indicators is carried out according to formula 10, otherwise according to formula 11.

$$z_i = \frac{x_i - x_{\min}}{x_{\max} - x_{\min}} \quad (8)$$

$$z_i = \frac{x_{\max} - x_i}{x_{\max} - x_{\min}} \quad (9)$$

Where z_i – normalized value of unit indicators ($0 \leq z_i \leq 1$)

$x_{\max}$, $x_{\min}$, x_i – maximum, minimum, i -th value of a unit indicator.

The selected Ukraine regions can be characterized by the following data according to time series that show by how many times the current level of the Environmental Efficiency Index has changed compared to the previous level (Fig. 8).

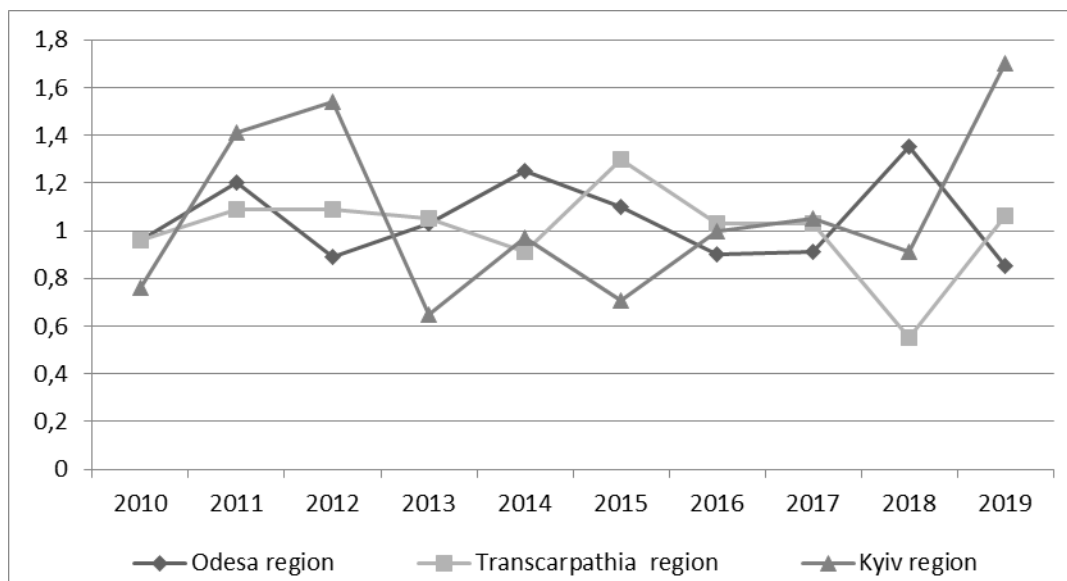


Fig. 8. The chain growth rate of Iee for the period 2009–2020 is based on data (Metadata,2020)

According to the figure, we note that Iee indicators have increased significantly over the past year in Transcarpathia and Kyiv regions, while in Odesa they have sharply decreased, despite the fact that the dynamics of the index had been uniform in previous years. Therefore, it is necessary to indicate the weakest indicators for each region; namely in the Transcarpathia region there is an increase in the presence of greenhouse gases and nitrogen content in agricultural lands, in Odesa oblast the index of ecological efficiency was greatly influenced by indicators of biodiversity loss, ecosystem services, increased nitrogen content in agricultural lands and pollution of water resources of the oblast. Some negative points are also observed in

Kyiv region. Indicators that inhibit the growth of the environmental efficiency index include climate change and greenhouse gases.

Based on the experience of domestic scientists and international approaches for calculation of consolidated indices in this study, we propose to calculate the index of inclusive development of social entrepreneurship in nature management according to the formula of geometric mean (Ised) as indices of environmental efficiency, human capital and brand.

$$Ised = \sqrt[3]{Iee * Ihc * Ib} \quad (10)$$

The values of Ised indicators are given in Table 2, and the chain growth rate in Fig. 9.

Table 2. Ised indicators by region

Year	Odessa region	Kyiv region	Zakarpattia region
2012	2.09	1.44	1
2013	1.54	1.77	1.1
2014	1.41	2.02	0.95
2015	1.33	1.9	0.96
2016	1.18	1.8	0.99
2017	1.14	2.32	1.01
2018	1.53	2.29	1.01
2019	0.79	2.23	0.77

Analysis of dynamics of indicators by selected areas shows that in 2019 the index tends to decrease. This is primarily due to the pandemic, which has increased the amount of disease in the regions and brought a decline in tourism.

A major influence on the Index, which inhibits inclusive development of social entrepreneurship in nature management in the country, is exerted by impact on all such indicators of the Environmental Efficiency

Index and the state of health of the population. Therefore, the task of state regulation should primarily be based on overcoming these disparities.

Conclusion.

Identification of opportunities for inclusive development of social entrepreneurship in nature management indicates the presence of potential in the regions of Ukraine. The study proves that Ukraine

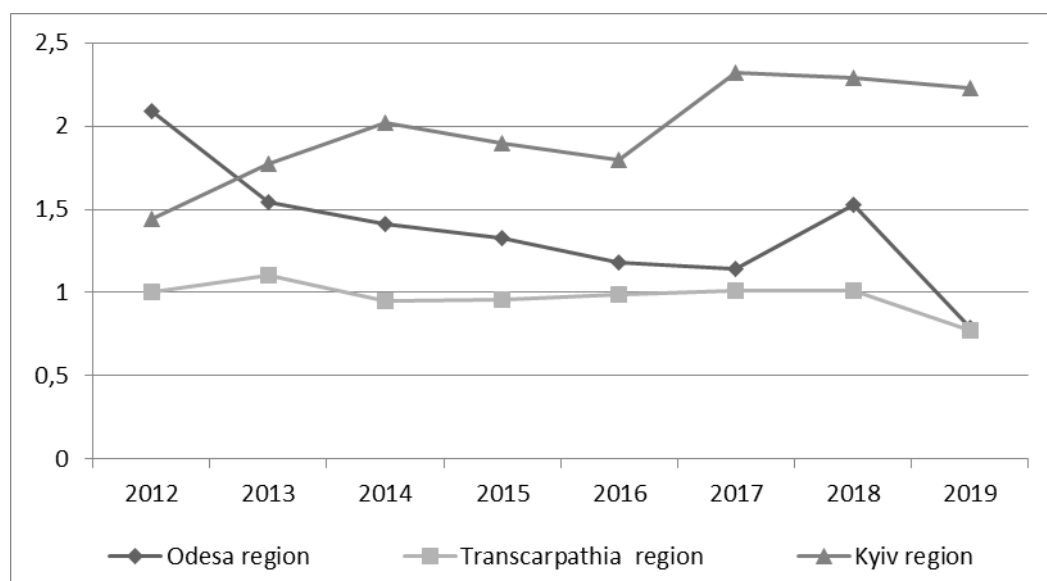


Fig. 9. The chain growth rate of Ised for 2012–2019 is based on data (Metadata,2020)

is very slow in its development in international index rankings, especially in the indicators of the globalization index (which is related to digitalization), human development (population health indicators), the international happiness index (population welfare indicators), ease of doing business index (due to difficulty in obtaining documentation and low financial support). Also, the analysis of consolidated international indices allowed us to identify synthetic indicators that were included in the social entrepreneurship development index in nature management in Ukraine. We note that almost all international indices include, to a greater or lesser extent, indicators of human development, which are measured by health status, population skills and environmental impact. Based on the achievements of foreign scientists in the field of sustainable development, a scientific vision and methodological support for the social entrepreneurship

development in nature management on the multi-indicator immersion principle were formed to analyse in further detail the internal indicators outlined by inclusion, economy and ecology. The index calculations prove that the economic growth of the analyzed regions (Kyiv, Zakarpattia, Odesa) according to the measurement of the brand index has a positive impact and does not require structural changes in management. However, some of the inclusive and environmental indicators indicate the need for intervention in their regulation, in particular through the transformation of experience and awareness of the population of the economic growth of the region and the achievement of personal well-being.

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