pp. 1432-1454

The Culture of Global Ecological Security: Theoretical and Empirical Aspects

Submitted 15/09/24, 1st revision 20/10/24, 2nd revision 05/11/24, accepted 30/11/24

Ewa Jadwiga Lipińska¹

Abstract:

Purpose: The main of this article is to present a model of the culture of global ecological security policy that allows for the assessment of the ecological security of each country based on the development of its cities.

Design/Methodology/Approach: The question was asked whether the difficulties in modeling the ecological security of the state are a consequence of limitations in the coherence of four ecological security, sustainable development, social responsibility and dogmas: environmental management. The model was developed after conducting an archival search of literature and management practices on the example of 18 regional cities in Poland. It was assumed that the properties of environmental aspects of cities are a natural quantity influencing the ecological safety of these cities and therefore of each country in the contemporary global civilization system. The research view provided a synthetic picture of regional cities studied in an "isolated" way in the context of the organizational maturity of city development in micro-communities for which regional city development policies were adopted. The multi-criteria method allowed us to identify and describe these microcollections in order to map the macroscopic observation of the development of regional cities emerging from the entire development of the country. This method also allowed us to determine the level of maturity of implementation and respect for the four doctrines in the development of cities, i.e.: ecological safety, social responsibility, sustainable development and environmental management. The research structure is based on the organizational coherence of these doctrines and represents holistic realism, which enabled the use of a synthetic research approach "from specific to general".

Findings: A synthetic approach to the theory and practice of state development, regional cities and development doctrines allowed for an assessment of the maturity of the coupling of doctrines in all areas of regional city development. The study was inductive and empathetic, therefore it indicated how to improve the maturity of the state management process. The model emphasizes the importance of adopting best development practices, using ecoinnovative public services and supporting the involvement of city stakeholders in order to increase the organizational culture of the country's ecological safety. I have developed 13 catalogues of elements of the structure of the development strategy of regional cities in Poland, containing 1 390 public services.

Practical implications: The model is needed to improve the diagnosis of administrative decisions and the selection of intervention investments with positive environmental aspects. The model can be used to develop a diagnosis of the development of each city, update the strategy of urban development and analyze social conclusions from the point of view of the environmental aspects of the entire country. The environmental aspects of the state and its

¹Dr. inż. Rzeszów University of Technology Rzeszów, Poland, e-mail: <u>e.lipinska@prz.edu.pl</u>;

cities are still not identified.

Originality/Value: This means that the model creates necessary and sufficient boundaries of the state's development, optimizes the state management process, emphasizes the role of the authorities in achieving development efficiency, i.e. in reducing external costs by optimizing the environmental aspects of the state.

Keywords: International ecological security, sustainable state development, social responsibility, environmental management, the value of regional cities.

JEL Code: M14, M38, Q01, Q51, R58.

Paper type: Research article.

1. Introduction

Global and regional effects and implications of socio-economic growth usually result from the processes of governance of states in the context of their security (Routshild, 2009). The terms *globalization* and *regionalization* refer to the integration of multiple national development strategies in global or regional markets. I notice that in the context of similar needs of global or regional producers and consumers, the behaviour of local organisations goes beyond preferential environmental constraints. Globalization and regionalization may therefore neither lead to homogeneous markets nor to increased integration of national development strategies in the context of global ecological security *values* (Eichengreen *et al.*, 2016).

I understand this value as the basis of civilization through the importance of a broader perspective on the Hamas-Israel war from 2023 (Greenland *et al.*, 2023), the economic impact of the Russia-Ukraine crisis on nations since 2014 (Endam and Wasum 2022), Russia's escalation of actions against NATO as a result of the war in Ukraine (Frederick *et al.*, 2022), climate change and its threats to ecosystems (Malhi *et al.*, 2020), the transnational political concerns of extended stakeholders as a result of the Belarus-Poland migration crisis since 2018 (Erdoğan and Dora, 2022), or the COVID-19 pandemic in 2019-2022 (Gatto *et al.*, 2020).

Global ecological security is treated as the coherence of sets of political concepts of countries dividing the common good in the context of justice and law enforcement (Kaul and Mendoza 2003). Global ecological security is therefore dependent on the process of association of nations, especially liberal-democratic nations. Global security problems are seen as local and regional problems because that is where they are created and have their effects (Sohrabi *et al.*, 2020; Workman *et al.*, 2020; Salvioni and Astori, 2013; Rushton, 2011; Scherer and Palazzo, 2011; Logsdon and Wood, 2002; Weaver, 2001; Micklethwait and Wooldridge, 2000).

Global environmental effects and their implications for increased socio-economic development therefore result from *countries' governance processes* (Gaub, 2019; Kaul *et al.*, 2011; Kaul, 2003; Dower, 2004; Lowi, 2001; McMichael, 2000; Jeannet and Hennessey, 1998).

In this context, the change in security policy concerns the principles of state intervention to improve the life of its society. I ask three questions. Do competitive but practical actions for the ecologically safe development of the state still matter in the capitalist system? Do governments evaluate the ecological security of the state as a value? Are its cities organizations in a given country with an increased culture of ecological security policy if they lack sufficient depth of development of general security?

To answer these questions, a diagnosis of the development of cities and their states is required in the context of five aspects of the *depth* of the public culture of security policy. These are (Rawls, 1993): (1) the basic needs of an orderly society, (2) justice as impartiality and honesty, (3) rights, freedoms and opportunities arising from the constitutional this charge, (4) goods and perfectionist values of a liberal and democratic state, and (5) an active society that effectively benefits from selfintegration and good life.

The term *responsibility* of public authority is no vaguer than the distinction between the principles of justice relating to the basic structure of society and the existing political, legal and social institutions which actually realise that structure (Rawls, 1993). In this context, *the obligation* to regulate the culture of the state's ecological security policy is important because it means the obligation to identify the environmental aspects of the state.

I see the source of the practical application of the term *obligation* in the division of the common good in the concept of *freedom*, with which the concept of *independence* should not be confused. I relate the term freedom to four tenets: ecological security, sustainable development, social responsibility and environmental stewardship. In this context, there are different types of freedom depending on the spheres that make up the structure of the state (or only its cities) and the spatial form of the state (or only its cities).

The connection between these different types of freedom naturally relates to human rights and the rights of nature. The next question is how this concept of freedom can be convincingly extended to encompass one nation's relations with others. The goal is also to create a sensible culture of environmental security policy for the nation based on the development of its urban areas.

From the point of view of the global culture of environmental security policy, the ways in which diverse global organizations influence countries are import ant (Crowther and Aras, 2008): (1) increase in competition, (2) development of

techniques, technologies, methods and ways of development, (3) knowledge transfer, (4) transfer of funds between developing and developed countries, (5) regulation and deregulation of markets, (6) implementation of international standards of good quality, (7) market integration, (8) mobility of intellectual capital, (9) responsible management of the consequences of a financial, social or ecological crisis, and (10) the dependence of nations' development policies on the natural resources they possess, included in the global set of common foods.

In this context, the concept of the culture of a state's ecological security policy is more detailed than considering only the internal security of a state as part of its external security. Moreover, the culture of the state's ecological security policy is linked to the idea of *a social contrach* (Rawls, 1993).

The two most obvious obstacles to maintaining a culture of environmental security policy are the global and regional expansion of resource-intensive economic practices and the lack of capacity of countries to enforce international conservation law (Scott, 2016). The ecological image of states – even among leading organisations on global markets – is no longer sufficient in applying voluntary monitoring and reporting of their own impact results on the social and natural environment. Hiring independent organizations to certify the results of these activities does not at all stimulate competition between organizations at the level of developing countries.

The context of competition takes on a different meaning in developing the obligation to grow the culture of environmental safety policy. I see this *incorrectness of obligation* in the concept of *sustainable development* of the impact of the organization of cities on their natural spacer (Terrevowa and Jelinkova, 2019; Ringenson and Höjer, 2016; Verbeke and Kano, 2015). Therefore, the political recognition of ecological security as a beneficial socio-economic phenomenon in a situation where the state is not at risk of losing its development potential is not sufficient (Kaul *et al.*, 2011).

International law as a positive legal order – although incomplete in some respects – does not constitute a thorough implementation. Environmental aspects as the essence of the state development policy do not characterize the values of national law. Local management structures and systems are not burdened with determining environmental aspects. It is therefore impossible to realistically define either a national or global culture of environmental safety policy.

For example, Poland did not immediately cease lignite mining in the Turów opencast mine located in Poland near the borders of the Czech Republic and Germany, although the factual and legal allegations raised by the Czech Republic justified the application of the requested interim measures (Ochodková, 2022). The term *immediately*, however, did not take effect immediately.

It can be generally said that issues of internal security and external security are anchored in ecological security. I do not refer the modeling of the sense of global culture of ecological security policy to the world state (Rawls, 1993). I explain it as part of the good organization of democratic nations dependent on a certain kind of consciousness and knowledge. Understanding this global culture leads to selfdefense and liberation from irrational political decisions.

2. Literature Review

Globalization is transforming many markets and economies into one market and one economy, according to Dower (2004). In this context, the previous negative image of industrial cities changed quite quickly. However, the changes consisted in transferring negative development factors from developed to developing countries, which can be seen in the works of Estol (2019), Selten and Cantor-Graae (2005) or Changnon *et al.* (2000). And this is still the case because the legal and administrative systems of countries differently address the issue of safety in urban areas, in the opinion of Gu *et al.* (2020), Valtonen *et al.* (2017).

Giffinger *et al.* (2007) identified six aspects of a smart city: 1) smart economy, 2) smart citizens, 3) smart governance, 4) smart mobility, 5) smart environment, and 6) smart living.

The concept of security relates to two of these features, firstly, smart mobility because it includes sustainable, innovative, safe transport systems; secondly, smart environment because it includes sustainable management of the city's natural resources. According to Hollands (2008), the significant novelty of the realistic approach to the smart city in its subject concept is that this term is identical to the term progressive city or the term entrepreneurial city. Townsend (2013) understands the concept of a smart city as a place where information technology is connected with infrastructure, architecture, everyday objects and with the city's inhabitants.

It can therefore be assumed that the problems of city development are solved more efficiently. According to Giuseppe Piro *et al.* (2014), a smart city tries to analyze public problems and even solves them based on information and public-private partnership. The participation of those city stakeholders who have their headquarters in the city is therefore inevitable. Höjer and Wangel (2015) believe that the term smart city expresses such an integration of physical, digital and personal systems in a specifically created urban environment that ensures a sustainable future for all city residents.

In turn, the European Commission (2014) defines a smart city as a place where traditional networks of social and economic processes are expanded by using digital technologies. It should come as no surprise that with the benefits for residents and other internal city organizations in mind (European Commission, 2014).

The context of urban development is based on Rothschild's (2009) observation that societies are oriented towards a sense of security, i.e. towards the search for good. The adopted way of functioning of societies in everyday life is oriented towards having a certain system of security, just to be able to count on someone or something. A sense of security is a basic requirement of the psyche. In this situation, threats have their value because they stimulate the search for new solutions.

However, the concept of a sense of security should not be identified with the feeling that there is nothing to fear - as Fierke (2015) concludes - because the unpredictability of events changes the form of government and excludes the strategic functions of countries in a changing world. This means that safety systems, i.e., protection systems, are imperfect when they are based only on predictions and plans, programs or strategies created for them, note Hoijtink and Muehlenhoff (2020) and Fierke (2015), which is why they fail and social, economic and ecological crises occur.

Literally speaking, it is the risk of expectations not being met when they are entrusted to planners, programmers, strategists or possessions without insight into the natural laws governing security (Pickett, 2015). Hoijtink and Muehlenhoff (2020), Fierke (2015) and Rothschild (2009) note the position that the process of rebuilding a sense of security may contain old elements, but left under control, they should be gradually removed.

From the point of view of the discussion on security policy, Rothschild (2009) as well as Buzan and Wæver (2003) link security with the way it is understood by individuals, groups or nations and even with their awareness of functioning in the social, economic and natural space. Regardless of the division of initiatives of diverse organizations striving to achieve security, social organization is seen as an obvious form of group solidarity, in Malešević (2013).

According to Malešević, compulsory territorial bureaucratic organizations are strongly legitimized forms of rule, which can be related to all levels of hierarchical regional communities. According to Wood (1991), the advantage of the model of social organization performance is the ability to respond to its social results.

The normative and descriptive approach to the social performance of organizations was integrated by Swanson (1999). She sought a more dynamic, process-oriented model of organizational social performance that could take into account the interplay and outcomes of different social values. In the context of organizational social performance, Waddock (2004) suggested principles of economic citizenship. Clarkson (1995) suggested principles of stakeholder management. Hemphill (2004) proposed principles for improving an organization's relationships with its stakeholders. And Goodpaster (2003) introduced principles of the global economy before Wood and Logsdon (2002) provided principles for regulating organizational behavior.

In this context, there is still a lack of universally accepted definitions of social responsibility for organizations to be competitive in the markets, as emphasized by Gatti *et al.* (2012) and Carroll and Buchholtz (2006). However, in the context of the discussion on the essence of ecological safety, the thesis on social responsibility by Blowfield and Frynas (2005) is convenient. In the traditional approach organizations are responsible for their impact on society and nature, organizations are responsible for the behavior of those with whom they do business or organizations manage their relationships with society within the scope of their profitability and the values of society.

According to Dahlsrud (2008), the social aspect of social responsibility refers to the relationship between the economy and society, the economic aspect is expressed by the external costs of the organization, the ecological aspect makes us aware of the value of human health and life and biodiversity, the stakeholders' aspect requires recognition of their benefits from the existence and durability of the organization on the market and the voluntary aspect means the freedom to implement activities that go beyond the organization's own interests.

Taking as a starting point the view of Friedman (1970) on the priority of shareholders' profits, it was assumed that the concept of social responsibility is not taken into account by practitioners when the interest in managing third parties as stakeholders prevails.

Gibbs's (2015) theory of moral development includes the concept of equilibrium that explains the need for transformations in moral development.

Studies show the influence of the theory of organizational resources, stakeholder theory, management theory or organizational theory by authors such as Windsor (2006), McWilliams *et al.* (2002) or Carroll (1986) on the development of the doctrine of social responsibility, expressed in its different definitions. The issue of complementing the definition of sustainable development is explained by the term generational goal, which Höjer and Wangel (2015) understand as the general or main goal of the environmental security policy.

In this context, the term sustainable development assumes that the national economy should be developed in accordance with natural environmental conditions, as stated by Klarin (2018). Therefore, the term change refers to influencing the management system, which also means influencing the natural space as a result of the development of organizations such as cities-regions (Ravetz 2016).

In this context, Paolo Neirotti *et al.* (2014) note that the term smart can be misleading because the number of smart initiatives launched in a city or region is not an indicator of their efficiency. Instead, the term smart can only be a representation of efforts suggesting improving the quality of life of city or region residents.

According to the concept of Kaul and Mendoza (2003), the standard definition of public goods is based not on competition and excludability but on the properties of public goods that do not always correspond to the definition of public goods. In this sense, Verbeke and Kano (2015) express the view that the historical consideration of the concept of sustainable development indicates that the relationship of this concept with specific levels of the hierarchical organization of the state was, but it is still variable.

This means that in the economic practice of cities and their regions, management systems are still not related to the positive and negative environmental aspects of cities or regions, but generally only to the economic aspects according to Ringenson and Höjer (2016).

This observation confirms the conclusion of Salvioni and Astori (2013) that the implementation of sustainable development of the state - as the basis for the dynamism of an integrated model of management of the common good - can impose a uniform cultural model without being instrumentalized by the global economy.

This model takes into account intergenerational equity, regional scale, multiple use, long-term uncertainty and economic-ecological integration (Lemaître and Vitcheva, 2020). This model integration is based on the need to preserve the development potential of society and the common critique of clean growth strategies in the opinion of Lemaître and Vitcheva (2020).

However, if the research on multidimensional elements of sustainable development is important - according to Lemaître and Vitcheva (2020) - it is not to offer integrative, transdisciplinary approaches to designing the state's sustainable development policy.

Real, i.e., socially responsible and sustainable development requires that pure economics refers only to such practical modifications of development that are useful in working for environmental management (Lemaître and Vitcheva, 2020).

According to Salvioni and Astori (2013) and Jennings *et al.* (2014), the community strategy of social responsibility and sustainable development includes all aspects related to organizational order that affect the management of the development of all urban areas.

This ability is conducive to establishing a policy of systemic and methodological solution of a set of socio-ecological problems that relates to industrial culture according to Fath *et al.* (2019). It is therefore rightly pointed out (Greenland *et al.*, 2023; Endam and Wasum 2022; Erdoğan and Dora, 2022; Gatto *et al.*, 2020) that the institutional defect of the state in dealing with challenges (social, economic and ecological) is the lack of effectiveness of governments responsible for reliable and credible national ecological security policies.

The inevitable result of basing regionalization on the principle of greening the country's techniques and then adopting an ecological security policy is the delimitation of cities and their regions in the context of two explicit or implicit eventualities Jaffe *et al.* (2002), firstly, the impact of social and economic activity on natural space depends on the manner and direction of changes in production; secondly, environmental interventions create new constraints or incentives, thus influencing the development of eco-innovative techniques.

Winston (2006) assumed that the failure of government in ecological security policy, usually caused by the influence of powerful economic groups, is a development challenge. The European Commission (2014) therefore proposes to improve the development results of countries by continuously improving the tools of urban development policy.

In conclusion, it can be said that the psychosocial effects of lack of security have been studied for over a hundred years and their negative results are still surprising, which is why the implementation project of a global security culture based on the security culture of each country is important.

3. Researcg Methodology

I do not separate the definition of *a state* from the definition of *a nation* or *society*. I relate the definition of the state to the development challenges and development policies that inequality poses for global sciences on the management of the state and its cities. The analysis draws attention to the underrepresented discussions in the scientific literature on state development in the context of the coherence of four dogmas: ecological security, sustainable development, social responsibility and environmental management.

They are useful in understanding how a state shapes its security to maintain its international *public interest* in various other spaces. Institutions specify the concept of *public interest* when such a situation arises in order to explain its content and demonstrate that such interest speaks for or against the proposed solution (Coman (Nuță) *et al.*, 2023; Ochodková, 2022; Fiedler, 2018; Kaul, 2003; Kaul and Mendoza, 2003; Lowi, 1967).

The concept of public interest is therefore not an abstract concept because it is a concrete concept and must result from a specific situation that requires the defense of this interest even by violating the good name of another person, group of people or institution.

In a state governed by the rule of law, the concepts of *social interest* and *public interest* or *state interest* are semantically identical but are not synonymous. In discussions about real social aspects – as opposed to philosophies that advocate political parties or entire societies – *the public interest* is more popular than *justice*,

fairness, equality or *freedom* (Rawls, 1993). Additionally, the public interest cannot be considered as the economic or fiscal interest of the state. From the point of view of the culture of ecological security policy, one can therefore expect the process of satisfying the public interest to eliminate the negative effects of the imperfections of the market mechanism.

I define the subject of my research as an outline of the theory of the culture of the development policy of an ecologically safe state, conducted since 2019. I pose the research question of whether difficulties in modeling the state's ecological security are a consequence of local limitations in the identification of environmental aspects. Research implements the objectives of the European Union's urban Policy (European Commission, 2014).

My goal was to define a theoretical framework for determining when a state is ecologically safe using the example of 18 Polish regional cities. The continuation of this goal required the formulation and definition of *the state's ecological security* and *the culture of the state's ecological security policy*, as well as the definition of *a socially responsible city and sustainable city development*.

I have adopted the thesis: the concept of the culture of politics of an ecologically safe state is based on the concept of cities as an object of cognition – as opposed to cities as a tool for action. In this article – unless otherwise stated – the state or the city is always understood as the object of knowledge.

In the context of the purpose, subject and thesis of the research, I have formulated and provide my own definition of the ecological security of the state: *it is comprehensive security, i.e.* protection of the health and life of people and protection of the environment, protection of cultural heritage and protection of property, *i.e.* a rigorous and broad-based system of protection in advance, which consists in preparing and effectively responding to an emergency (e.g. natural disasters, cyberattacks, pandemics and potential war invasions).

Then I formulated and provided a definition of the culture of *ecological safety* policy, which is the achievements of the nation in the field of legal and constitutional institutions, including views, ideas and theories and norms of conduct, as well as the actual actions of individuals and groups within the framework of state coexistence.

In turn, I have formulated and provided a new definition of *sustainable development* of the state, which means a model of state development in which meeting current and future social needs is treated equally and the document presented by governments combines development activities in a harmonious and socially responsible manner with progress in the global civilizational and economic-political system - as well as with the preservation of the historical and natural heritage of the nation - which are the share of all social groups based on environmental aspects.

And further I formulated and provide a comprehensive definition socially responsible and sustainable development of the city as an organization means universally accepted ecological issues, i.e. in the process of city management, in the system of organizing the urban community and in economic relations with interested partie; the city as an organization creates a coherent system of values of the community using the natural and technical space of the city; this space serves to achieve real ecological security of the city; in this context, environmental aspects of the city in all its spatial forms, i.e. production, consumption, power, symbolism, exchange and habitation, are continuously identified.

The essence of these three definitions stems from the fact that the global market has not developed specific proposals for an objective and independent of will or worldview combination of the four dogmas (mentioned above). Meanwhile, the interpretation of their essence and role in each state results from new philosophical directions that have not been referred to before (Greenland *et al.*, 2023; Endam and Wasum, 2022). In the definitions, I emphasize the property of environmental aspects as a natural quantity that influences the increase or degradation of ecological security according to the cause-effect principle in the context of the global civilization system.

In terms of content, I base my work on three assumptions. Firstly, that knowledge about Polish regional cities is important from the point of view of cultural interests and traditions. This fact distinguishes these explanations from mechanistic explanations and from general processes (Huneman, 2018; Shapiro, 2017). Secondly, the development of the state as an ecologically safe organization is not limited to describing *how it is* and *how it should be*. Thirdly, the ultimate source of the practical significance of the development of states as ecologically safe organizations can be found in the concept of freedom.

I assumed that the community that constitutes Poland's regional cities has features resulting from the advanced social and economic development of these cities. The individual characteristics of cities become apparent only during the performance of duties. In this context, statistical certainty was increased by the purposive selection of regional cities for the study.

I conducted the research based on five data sources, which are: (1) presentations by other authors (post-conference, in peer-reviewed journals, monographs and reports with university, industrial or organizational characteristics), (2) eighteen development strategies of regional cities, (3) eighteen environmental protection programs of regional cities in Poland, (4) a list of organizations registered in the national "Register of organizations in the Community eco-management and audit scheme (EMAS)" (Regulation of the European Parliament and of the Council, 2009), and (5) an original research questionnaire on the "model of an integrated eco-management and audit system of cities with the goals of sustainable development of cities and social responsibility of cities".

I used a multi-criteria comparative and descriptive analysis of the collected scientific material because it is a helpful instrument for assessing the local and regional application of the tenets of social responsibility and sustainable local development when they are integrated with spatial values.

This tool does not provide an objective answer in terms of *what* and *how to do best*, but supports decision-makers in three ways (Ringenston and Höjer, 2016) identifies spatial decision-making criteria for the country's development, assesses ecological options for investment activities by referring to spatial decision-making criteria and analytically combines assessments of environmental aspects of the country's development. The synthesis of techniques for assessing the environmental aspects of the state creates a basis for analysing the impact of investment decisions on state security.

4. Research Results and Discussion

The empirical analysis of 18 regional cities development strategies allowed to identify the directions of development of regional cities in Poland. It is assumed that the directions of city development are identical with the development challenges of cities or city development policies (Snider *et al.*, 2003).

As a result of the analysis, I developed a *Catalogue of Development Challenges* arranging 123 development challenges (also understood as public services from 18 development strategies), Table 1.

The directions of development of regional cities were the basis for the development of development programs for these cities. They therefore require further research to determine their culture of ecological safety policy in Polish regional cities.

Development directions and development challenges were determinants of the creation of policies for the development of regional cities. I identified 16 sub-policies of *spatial activity* in the development of regional cities.

These are: (1) sub-policy of spatial, (2) sub-policy of municipal, (3) sub-policy of housing, (4) sub-policy of transport and communication, (5) sub-policy of improving public safety and order, (6) sub-policy of supporting the development of science and higher education, (7) sub-policy of educational, (8) sub-policy of health and solving social problems, (9) sub-policy of supporting the development of culture and protection of cultural heritage, (10) sub-policy of physical culture, tourism and recreation, (11) sub-policy of developing civil society, (12) sub-policy of supporting economic development, (13) sub-policy of managing local government structures and (16) sub-policy of financial.

Table 1. Percentage of public services classified by development directions of 18 regional cities of Poland

No.	Directions of city development	Public services [%]
1.	Green space of the city.	6
2.	Natural capital of the city	6
3.	Adaptation to climate change and improvement of air quality.	4
4.	Friendly space of the city.	19
5.	Social responsibility and sustainable development of the city.	18
6.	Well-being of the city.	8
7.	Other development challenges.	39

Source: Author's calculations.

It is worth noting that the spatial activity of regional cities should be based on three basic connections: socio-economic, economic-ecological and socio-ecological. The diversity of these connections is based on the caution in generalizing the coherence of three doctrines: social responsibility of the state, sustainable development of the state and environmental management of the state.

Only in the context of these doctrines should we notice the environmental aspects of regional cities in order to properly arrange the spatial activity of these cities. It is observed in the processes of satisfying the public interest, through the provision of public services which are determinants of the creation of 18 development policies of Polish regional cities.

The empirical analysis of spatial activity cases showed the existence of 18 development sub-policies in 18 regional cities. Based on the comparative analysis, I distinguished 1 267 public services which I classified according to these 18 development sub-policies of Polish regional cities. Table 2 presents the percentage of public services classified according to the development policies of Poland's regional cities.

I have developed 12 *catalogues of elements of the structure of the development strategy of regional cities in Poland* (Table 3) and the corresponding percentage of public services, according to the 1 267 identified services.

The catalogues listed in Table 3 are open collections of public services, i.e. they can be supplemented with other services. In this way, larger, coherent and thematically unique catalogues of public services can be created. In this context, the directions of development of regional cities listed in Table 1 constitute the next, thirteenth catalogue of public services with 123 public services.

This means that a total of 1 392 public services are important for the development of regional cities in Poland.

However, the research analysis showed that no environmental aspects were identified for these services. This means that the development strategies of regional cities do not implement administrative decisions containing elements of ecological safety.

Table 2. Percentage of public services classified according to development subpolicies of 18 regional cities of Poland

No.	Sub-policies of development conditions of regional cities	Public services
1.	Sub-policy of environmental protection	11
2.	Sub-policy of spatial order	9
3.	Sub-policy of health care	7
4.	Sub-policy of employment promotion	2
5.	Sub-policy of cultural development	5
6.	Sub-policy of development of sports, tourism, recreation and	3
7.	Sub-policy of the development of cities and metropolitan areas	7
8.	Sub-policy of rural development	2
9.	Sub-policy of science development and growth of economic	5
10.	Sub-policy of the development of pro-social behaviors of communities and structures of civil society	7
11.	Sub-policy of human resources development	3
12.	Sub-policy of stimulating the creation of new jobs	2
13.	Sub-policy of creating and modernizing social infrastructure	4
14.	Sub-policy of creating and modernizing technical infrastructure	14
15.	Sub-policy of supporting the modernization of state institutions	7
16.	Sub-policy of supporting the development of entrepreneurship	3
17.	Sub-policy of supporting economic growth	5
18.	Sub-policy of increasing the competitiveness of the economy	4

Source: Author's calculations.

In general, it can be stated that there is a lack of a real culture of ecological safety policy in regional cities in Poland. Moreover, there is a lack of progress in sustainable development and social responsibility of the authorities towards their communities due to the lack of environmental management of these cities.

Table 3. Percentage of public services classified according to catalogues ofstructure elements of 18 regional cities development strategies of Poland

No.	Catalogue of elements of the structure of 18 regional cities development strategies	Public services [%]
1.	The catalogue of development strengths of cities	7
2.	The catalogue of development opportunities of cities	10
3.	The catalogue of development weaknesses of cities	10
4.	The catalogue of development threats of cities	8

5.	The catalogue of development directions of cities	10
6.	The catalogue of development activities of cities	7
7.	The catalogue of detailed development goals of cities	9
8.	The catalogue of detailed development goals of cities	7
9.	The catalogue of operational development goals of cities	8
10.	The catalogue of strategic development tasks of cities	8
11.	The catalogue of detailed development tasks of cities	7
12.	The catalogue of results of development activities of cities	9

Source: Author's calculations.

Finally, it should be noted that in the literature the issue of recording environmental aspects is not directly addressed, although references are made to these issues in publications (Tetrevova and Jelinkova, 2019).

5. Conclusions, Proposals, Recommendations

The discussion about the state as an ecologically safe organization is characterized by terminological and conceptual discipline. However, the concept of *ecological safety policy culture* has never been formally defined in Polish and international law. It was sometimes used interchangeably with the – also essentially undefined – concept of "concrete actions" aimed at protecting citizens and their future generations from threats resulting from insufficiently harmonized social and economic development with the requirements of environmental protection (Babic, 2023; Erdoğan and Dora, 2022; Fierke, 2015; Eichengreen *et al.*, 2016).

I conducted my research based on the duties of authority specified in the Polish Constitution of 1997. Environmental protection as a tool for ensuring ecological security should be guided by the principle of sustainable development. Ensuring this obligation assumes achieving a state of the natural environment that allows for safe residence in it and enables human development – using its resources.

The Constitution distinguishes two types of actions by public authorities: (1) preventing the deterioration of the environment and (2) improving that environment. However, by implementing this law, each organization becomes an ecological organization without going into the details of how ecosystems function. However, this is still not sustainable development of the organization.

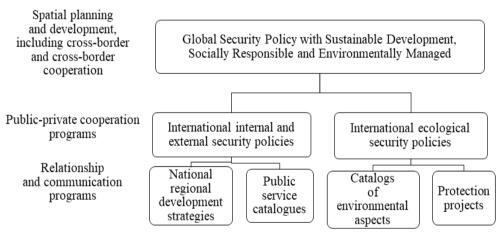
This means that sustainable development of the organization is an argument for the social responsibility of the organization in the context of justifying the existence of the state as an organization, but it is their partial acceptance mutated by various interests (Rothschild, 2009; Rawls, 1993). Real sustainable development requires referring only to such practical modifications of development that are useful for environmental management (Regulation of the European Parliament and of the Council, 2009).

Figure 1 illustrates how the concept of a global culture of security policy can be implemented. It requires adopting the correct orientation in the policy of organizational dissemination of values common to the network of organizations that make up the state. The model of the global culture of general security policy is based on the cooperation of governments in the field of internal and external security in the context of ecological security.

It identifies global investment interventions and connects market practices with nonmarket practices. I relate investment interventions to the organizational order in the state's spatial policy when using common goods. I relate the dissemination of values to the strategy of market practices in determining the global effects of public activities. The aim of the global security policy culture model is to take over threat control systems to protect people and the environment.

In theory, state security is traditionally considered in terms of territorial integrity, inviolability of borders, presence of authority in order to be subject to the same laws and create *unity* (Fierke, 2015). However, one argument should be taken into account in these considerations: the natural environment prefers *diversity*.

Figure 1. The model of the global culture of general security policy, understood as the sum of internal, external and ecological security



Source: Author's calculations.

At the methodological level, I am making a "synthesis" of ecological security, but without success - I cannot demonstrate the existence of ecological security in Poland. I notice that it is acceptable to reject innovations in creating ecological safety when these innovations may increase investment costs.

An excess of these "traditional" behaviors leads to a loss of value. In this context, security science cannot justify the facts because at the same time as the unknown

circumstances of the threat are announced and security is increased, the realization of anti-security is announced.

The research method revealed several facts. From the point of view of selecting Polish regional cities for the study, this selection was not intended to fully present how the country's ecological security is achieved. It was intended to show what this process looks like in Poland because it also has international significance. The author of this article is aware that the selected regional cities are seriously overrepresented in the selection and other developing cities were not included.

From the point of view of the analysis of scientific literature, in-depth descriptions of urban projects were not always available even on the Internet. A complete listing of all available web applications in each literature database was not considered a realistic intention within the study.

From the point of view of the 18 development strategies of Poland's regional cities, the examples selected for analysis cannot be perceived as comprehensive solutions to achieve my research on the culture of ecological safety policy in Poland. Similarly, the selection of regional cities was not intended to fully present what an ecologically safe city currently looks like in Poland or even the world.

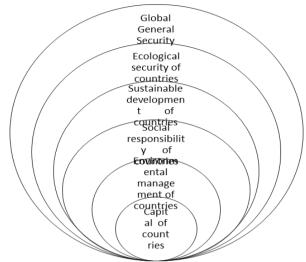
The documents I looked at are *visions* or *dreams* transformed into policies, plans, projects and programs to obtain the initial capital expectations of producers and consumers in Polish regional cities. The course of their creation was not controlled and their effects were not analyzed, but possible effects were discussed from the point of view of the global ecological security model.

In Figure 2 I present a model of the system of global resources understood as sets of states' capital. The structure of six concentrically overlapping circles represents a model of inclusive relations between countries. In this model, every resource of the inner circle belongs to the outer (more inclusive) circle, never the other way around. The inclusive arrangement recognizes the connections between the six resources of countries as common goods. It is the foundation of a culture of ecological security policy, internal and external, aimed at global prosperity.

No credible control studies were found in the literature regarding the impact of urban development policies on the internal and external environment of the state. Superficial or common information was found as colorful and attractively designed presentations of products and services of Polish regional cities.

No complex data was found on the effects of political decisions that led to the nonimplementation of development policies due to the lack of knowledge about the environmental aspects of cities. The lack of such political decisions could have resulted from two reasons: this information is not available on the Internet and implementations in such cases abandon formalized principles of public information.

Figure 2. An inclusive model of ecological security policy culture, that connects global resources - responsible for the well-being of nations



Source: Author's calculations.

The national register of organizations in the EMAS system enabled the identification of economic entities that have voluntarily implemented a culture of ecological safety policy. A comparative analysis of 18 processes of managing the development of regional cities revealed a lack of identification of environmental aspects of cities. This also means a lack of description of how to reduce the negative environmental effects of development.

Therefore, such a social transformation is needed to use the positive results of the development of Poland's regional cities. Which can also apply to other implementations in the spatial management of these cities. This requires real respect in development of the dogmas: sustainable development, social responsibility and environmental management.

Various concepts and terms are created regarding environmental safety, but their complexity leads to different opinions because they can be considered in many different ways. The concept of the coherence of the four dogmas enabled me to formulate, provide and explain three definitions: *the ecological security of the state*, *the culture of the ecological security policy of the state* and *socially responsible and sustainable development of the city*.

I conducted research on the impact of development strategies on society, economy and ecology on the example of 18 Polish regional cities. I have developed 13 catalogues of elements of the structure of the development strategy of Poland's regional cities. These catalogues contain 1 392 public services aimed at meeting the public interest of producers and consumers of Poland's regional cities.

Diverse public services were identified and organised based on their formal planning and adoption in 18 development strategies of regional cities by the Presidents of these cities. Public services were categorized according to the identified 16 policies of spatial activity of regional cities and 18 policies of development conditions of these regional cities.

I state that there are hidden positive and negative environmental aspects in these public services because they were not identified either before or after the adoption of the regional cities development strategy. What is important, the lack of environmental aspects means a hidden negative cause and hidden negative effect that will more or less unpredictably manifest itself in the future of regional cities. This blurs and complicates the understanding of the country's overall security because organizations see other development opportunities or are encouraged to manage differently.

The realistic concept of *a culture of global ecological security policy* is a theoretical result of ensuring freedom through security as a general aspect of the development of societies. This culture is determined by *the global limit of tolerance of societies and nature*.

References:

- Babic, M. 2023. State capital in a geoeconomic world: mapping state-led foreign investment in the global political economy. Review of International Political Economy, 30(1), 201-228. https://doi.org/10.1080/09692290.2021.1993301.
- Blowfield, M., Frynas, J.G. 2005: Setting new agendas: critical perspectives on Corporate Social Responsibility in the developing Word. International Affairs 81(3), 499-513.
- Carroll, A.B. 1986. A three-dimensional conceptual model of corporate performance. The Academy of Management Review, 4(4), 497-505.
- Carroll, A.B., Buchholtz, A.K. 2006. Business and Society: Ethics and Stakeholder Management. Mason: Thomson South-Western.
- Changnon, S.A., Pielke, R.A., Changnon, D. 2000. Human factors explain the increased losses from weather and climate extremes. Bulletin of the American Meteorological Society, 81, 437-442.
- Clarkson, M.B.E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. Academy of Management Review, 20(1), 92-117.
- Coman (Nuță), A.C., Lupu, D., Nuță, F.M. 2023. The impact of public education spending on economic growth in Central and Eastern Europe. Economic Research-Ekonomska Istraživanja 36(1), 1261-1278. https://doi.org/10.1080/1331677X.2022.2086147.
- Crowther, D., Aras, G. 2008. Corporate Social Responsibility. BookBook.com; https://my.uopeople.edu/pluginfile.php/57436/mod_book/chapter/121631/BUS5116. Crowther.Aras.CSR.pdf.
- Dahlsrud, A. 2008. How corporate social responsibility is defined: an analysis of 37 definitions. Corporate Social Responsible Environment Management, 15(1), 1-13.
- Dower, N. 2004. Global Economy, Justice and Sustainability. Ethical Theory and Moral Practise 7(4), 399-415. http://dx.doi.org/10.1007/s10677-004-2215-2.

- Eichengreen, B., Chit, L., Mehl, A. 2016. Network effects, homogeneous goods and international currency choice: New evidence on oil markets from an older era. The Canadian Journal of Economics / Revue canadienne d'Economique, 49(1), 173-206. https://www.jstor.org/stable/43974477.
- Endam, M.R., Wasum, D.F. 2022. Russian-Ukraine 2022 War: A Review of the Economic Impact of Russian-Ukraine Crisis on the USA, UK, Canada, and Europe Department of Business, Bethany College, Lindsborg, KS, USA. Advances in Social Sciences Research Journal, 9(3), 144-153. https://doi.org/10.14738/assrj.93.12005.
- Erdoğan, Z., Dora, Z.K. 2022. Belarus-Poland migration crisis and supra-national political concerns of the extended actors. Journal of Security Sciences, 11(2), 417-440. DOI:10.28956/gbd.1119842.
- Estol, C.J. 2019. Is breathing our polluted air a risk factor for stroke? International Journal of Stroke 0, 1-11.
- European Commission. 2014. Communication from the Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of The Regions. The urban dimension of EU policies – key features of an EU urban agenda. Document 52014DC0490. Brussels, COM(2014) 490 final.
- Fath, B.D., Fiscus, D.A., Goerner, S.J., Berea, A., Ulanowicz, R.E. 2019: Measuring Regenerative economics: 10 principles and measures undergirding systemic economic health. Globak Transitions, 1, 15-27.
- Fiedler, B.A. 2018. Translating National Policy to Improve Environmental Conditions Impacting Public Health Through Community Planning. Springer International Publishing.
- Fierke, K.M. 2015. Critical approaches to international security. Cambridge: Polity Press, 1-320.
- Frederick, B., Charap, S., Boston, B., Flanagan, S.J., Mazarr, M.J., Moroney, J.D.P., Mueller, K.P. 2022. Pathways to Russian Escalation Against NATO from the Ukraine War. The RAND Corporation. https://www.jstor.org/stable/resrep42607.
- Friedman, M. 1970. The Social Responsibility of Business is to Increase its Profits. The New York Times Magazine, 13(33), 122-126.
- Gatti, L., Caruana, A., Snehota, I. 2012. The role of corporate social responsibility, perceived quality and corporate reputation on purchase intention: implications for management. Journal of Brand Management, 20(1), 65-76.
- Gatto, M., Bertuzzo, E., Mari, L., Miccoli, S., Carraro, L., Casagrandia, R., Rinaldog, A. 2020. Spread and dynamics of the COVID-19 epidemic in Italy: Effects of emergency containment measures. Proceedings of the National Academy of Sciences of the United States of America, 117(19), 10484-10491. https://doi.org/10.1073/pnas.2004978117.
- Gaub, F. 2019. The global trends to 2030 challenges and choices for Europe. In: Foreword the Future is Nowby, edited by Ann Mettler, 1-52. European Strategy and Policy Analysis System (ESPAS).
- Gibbs, J.C. 2015. Moral Development and Reality: Beyond the Theories of Kohlberg, Hoffman, and Haidt. Oxford Scholarship Online.
- Giffinger, R., Fertner, C., Kramar, H., Kalasek, R., Pichler-Milanovic, N., Meijers, E. 2007. Smart cities - Ranking of European medium-sized cities. Vienna: Centre of Regional Science.
- Goodpaster, K.E. 2003. Some challenges of social screening. Journal of Business Ethics, 43(3), 239.

1732
Greenland, P., Lakser, O., Lipschutz, L. 2023. Importance of a broader view of the Hamas-
Israel war. BMJ Glob Health, 1, 9(2), e014378.
https://doi.org/10.1136/bmjgh-2023-014378.
Gu, B., Zhang, X., Fu, B., Chen, D. 2019. Four steps to food security for swelling cities.
Nature, 566, 31-33.
Hemphill, T.A. 2004. Corporate citizenship: the case for a new corporate governance model.
Business and Society Review, 109(3), 339-361.
Hollands, R.G. 2008. Will the real smart city please stand up? Intelligent, progressive
or entrepreneurial? City: analysis of urban trends, culture, theory, policy, action,
12(3), 303-320.
Hoijtink, M., Muehlenhoff, H.L. 2020. The European Union as a masculine military Power:
European Union security and Demence Policy in 'times of crisis'. Political Studies
Review, 18(3), 362-377.

Höjer, M., Wangel, J. 2015. Smart Sustainable Cities: Definition and Challenges. ResearchGate, 1-16.

Huneman, P. 2018. Outlines of a theory of structural explanations. Philosophical Studies, 175, 665-702.

https://link.springer.com/article/10.1007/s11098-017-0887-4.

- Jaffe, A.B. 2000. The U.S. Patent System in Transition: Policy Innovation and the Innovation Process. Research Policy, 29, 531-558.
- Jeannet, J.P., Hennessey, H.D. 1998. Global Marketing Strategies. New York, Houghton Mifflin Company.
- Jennings, K., Wellington-Moore, C., Bouwman, H., Sims, R. 2014. Sustainable Urbanization Policy Brief: Proliferation of Urban Centres, their Impact on the World's Environment and the Potential Role of the GEF. Report to the 5th. México: GEF Assembly, Scientific and Technical Advisory Panel.
- Kaul, I. 2003. Providing Global Public Goods: Managing Globalization. Oxford: Oxford Scholarship Online. DOI https://doi.org/10.1093/0195157400.001.0001.
- Kaul, I., Conceição, P., Goulven, Le, K., Mendoza, R.U. 2011. How to Improve the Provision of Global Public Goods. In Providing Global Public Goods: Managing Globalization edited by Inge Kaul, 21-58. Oxford University Press. https://doi.org/10.1093/0195157400.003.0002.
- Kaul, I., Mendoza, R.U. 2003. Advancing the Concept of Public Goods. In: Providing Global Public Goods: Managing Globalization edited by Inge Kaul, 78-111. Oxford University Press. https://doi.org/10.1093/0195157400.003.0004.
- Klarin, T. 2018. The Concept of Sustainable Development: From its Beginning to the Contemporary Issues. Zagreb International Review of Economics & Business 21(1), 67-94.
- Lemaître, M., Vitcheva, C. 2020. Podręcznik. Strategie zrównoważonego rozwoju obszarów miejskich. Luksemburg: Urząd Publikacji Unii Europejskiej.
- Logsdon, J.M., Wood, D.J. 2002. Business citizenship: from domestic to global level of analysis. Business Ethics Quarterly, 12(2), 155-187. https://doi.org/10.2307/3857809
- Lowi, T.J. 2001. Our Millennium: Political Science Confronts the Global Corporate Economy. International Political Science Review, 22(2), 60-81. https://doi.org/10.1177/0192512101222001.
- Lowi, T.J. 1967. The Public Philosophy: Interest-Group Liberalism. The American Political Science. 61(1), 5-24. https://doi.org/10.2307/1953872.
- Malešević, S. 2013. Nation-States and Nationalisms: Organization, Ideology and Solidarity. New Jersey: John Wiley and Sons.

- Malhi, Y., Franklin, J., Seddon, N., Solan, S., Turner, M.G., Field, C.B., Knowlton, N. 2020. Climate change and ecosystems: threats, opportunities and solutions. Philosophical Transactions of the Royal Society B – Journals, 375(1794), 20190104. DOI:10.1098/rstb.2019.0104.
- McMichael, A.J. 2000. The Urban environment and health in a world of increasing globalization: issues for developing countries. Bulletin of the World Health Organization, 78(9), 1117-1126. https://iris.who.int/handle/10665/268216.
- McWilliams, A., Siegel, D.S., Wright, P.M. 2006. Corporate social responsibility: Strategic implications. Journal of Management Studies, 43(1), 1-18.
- Micklethwait, J., Wooldridge, A. 2000. A Future Perfect: The Challengeand Hidden Promise of Globalization. New York: Times Books.
- Neirotti, P., De Marco, A., Cagliano, A.C., Mangano, G., Scorrano, F. 2014. Current trends in Smart City initiatives: Some stylised facts. Cities, 38, 25-36.
- Ochodková, K. 2022. The Czech-Polish Agreement on Turów Coal Mine: Unsettling Settling? In Czech Republic Human Rights Review edited by Pavel Doubek, 13, 20-23. Brono: Czech Centre For Human Rights And Democracy.
- Pickett, K.E., Wilkinson, R.G. 2015. Income inequality and health: A casual review. Social Science and Medicine 128, 316-326.
- Piro, G., Cianci, I., Grieco, L.A., Boggia, G., Camarda, P. 2014. Information centric services in Smart Cities. The Journal of Systems and Software, 88, 169-188.
- Ravetz, J. 2016. City-region 2020. Integrated planning for a sustainable development. London: Routledge.
- Rawls, J. 1993. The Law of Peoples. In: On Human Rights: The Oxford Amnesty Lectures, edited by Stephen Scute and Susan Hurley. Copyright by Basic Book.
- Regulation of the European Parliament and of the Council. 2009. Regulation on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.
- Ringenson, T., Höjer, M. 2016. Smart City Planning and Environmental Aspects? Lessons from six cities. Paper presented at the 4th International Conference on ICT for Sustainability (ICT4S 2016). https://doi.org/10.2991/ict4s-16.2016.19.
- Rothschild, E. 2009. Condorcet and the Conflict of Values. The Historical Journal, 39(3), 677-701. https://doi.org/10.1017/S0018246X00024493.
- Rushton, S. 2011. Global Health Security: Security for Whom? Security from What? Political Studies, 59, 779-796. https://doi.org/10.1111/j.1467-9248.2011.00919.x.
- Salvioni, D.M., Astori, R. 2013. Sustainable Development and Global Responsibility in Corporate Governance. Symphonya Emerging Issues in Management, 1, 1-25. http://dx.doi.org/10.4468/2013.1.03salvioni.astori.
- Selten, J.P., Cantor-Graae, E. 2005. Social defeat: risk factor for schizophrenia? The British Journal of Psychiatry, 187, 101-102.
- Scherer, G.A., Palazzo, G. 2011. The New Political Role of Business in a Globalized World: A Review of a New Perspective on CSR and its Implications for the Firm, Governance, and Democracy. Journal of Management Studies, 48(4), 899-931. https://doi.org/10.1111/j.1467-6486.2010.00950.x.
- Scott, G.F. 2016. Ecological Developmental Biology: Interpreting Developmental Signs. Biosemiotics 9, 51-60. DOI 10.1007/s12304-016-9257-4.
- Shapiro, L.A. 2017. Mechanism or bust? Explanation in psychology. British Journal for the Philosophy of Science, 68(4), 1037-1059. DOI 10.1093/bjps/axv062.

- Snider, J., Hill, R.P., Martin, D. 2003. Corporate social responsibility in the 21st century: A view from the world's most successful firms. Journal of Business Ethics, 48(2), 175-187. DOI 10.1023/B:BUSI.0000004606.29523.db.
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, R. 2020. World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). International Journal of Surgery, 76, 71-76. https://doi.org/10.1016/j.ijsu.2020.02.034.
- Swanson, D.L. 1999. Toward an integrative theory of business and society: a research strategy for corporate social performance. Academy of Management Review, 24(3), 506-521.
- Tetrevova, L., Jelinkova, M. 2019. Municipal Social Responsibility of Statutory Cities in the Czech Republic. Sustainability, 11(8), 1-19. https://doi.org/10.3390/su11082308.
- Townsend, A.M. 2013. Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia. New York: Norton and Company.
- Valtonen, E., Falkenbach, H., Viitanen, K. 2017. Securing public objectives in large-scale urban development: Comparison of public and private land development. Land Use Policy, 78, 481-492.
- Verbeke, A., Kano, L. 2015. The New Internalization Theory and Multinational Enterprises from Emerging Economies: A Business History Perspective. The Business History Review, 89(3), 415-445. DOI 10.1017/S0007680515000689.
- Weaver, G.R. 2001. Ethics Programs in Global Businesses: Culture's Role in Managing Ethics. Journal of Business Ethics, 30(1), 3-15. DOI 10.1023/A:1006475223493.
- Winston, C. 2006. Government Failure versus Market Failure: Microeconomics Policy Research and Government Performance. Washington: Brookings Institution.
- Waddock, S.A. 2004. Creating corporate accountability: foundational principles to make corporate citizenship real. Journal of Business Ethics, 50(4), 313-327.
- Windsor, D. 2006. Corporate social responsibility: Three key approaches. Journal of Management Studies, 43(1), 93-114.
- Wood, D.J. 1991. Corporate Social Performance Revisited. Academy of Management Review, 16(4), 691-718.
- Wood, D.J., Logsdon, J.M. 2002. Business citizenship: from domestic to global level of analysis. Business Ethics Quarterly, 12(2), 177.
- Workman, C.L., Cairns, M.R., de los Reyes, F.L., Verbyla, M.E. 2020. Global Water, Sanitation, and Hygiene Approaches: Anthropological Contributions and Future Directions for Engineering. Environmental Engineering Science, 38(5), 402-417. DOI 10.1089/ees.2020.0321.