INTEGRATED SCHEME OF REGIONAL SUSTAINABLE DEVELOPMENT DRIVERS

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Abstract. *The complexity of sustainable development and the diversity of regions generate lots of challenges for the implementation of sustainable development at the regional level. In the process of implementation of the global sustainable development objectives, regions are taking different development paths because they are impacted by a unique internal interaction of the drivers. The problem is how the initial conditions of a region define the drivers and their interactions in the process of sustainable development policy implementation.*

The purpose of the study was to define a tool for the analysis of the interaction of drivers in the process of regional development moving towards sustainable development.

The study methods were scientific literature analysis, conceptual, methodological, and visual modeling, and synthesis of the ideas.

The paper concludes that an integrated scheme of drivers was used as an analytical method to explain how the difference in a region's development level defines the path towards sustainable development. Synergy between the dimensions of a well-developed eco-centered region would be achieved by reforms in the economic and institutional dimensions. The scheme of a well-developed techno-centered region reveals a productive amalgamation among the institutional power, welfare level, and market mechanism. The scheme of a less-developed techno-centered region reveals that reform actions are needed in all dimensions of sustainable development synchronically. Also, some extraordinary events or shocks have to happen to spur the reforms. The holistic view of the drivers suggests that a less-developed eco-centered region has to go the evolution path of social and environmental development, but with rapid reforms in both the institutional system and market relations.

Key words: *sustainable development, region, institutions, development dynamics*

Introduction

The implementation of the sustainable development policy encounters many challenges. The characteristics and complexity of the concept of sustainability (multi-dimensional, global, dynamic) as well as the fact that it reaches out into the future make sustainability a concept which gives a certain direction for policy making rather than serving as a benchmark that could be precisely defined (EU Commission, 2001).

Global objectives and targets of the policy are not easy to achieve on the regional level. Regions are inherently different, thus, their development paths differ substantially. For example, the transition process from centralized to market economy for the countries

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of the former Soviet Union was very different (Čičinskas, 2011, p. 14). Even integrated regions differ substantially as regards the structure of economy, available resources, geographical position, neighbourhood, and behavioral patterns (Čiegis, Štreimikienė, 2004; Starkevičūtė, 2011). A more effective and efficient regional policy is needed.

Why do regions have such distinct performance profiles (Wye, 2007)? The problem is that regions have different possibilities to develop. Čičinskas (2011) emphasizes the importance of both the initial conditions and the presence and quality of the regional institutions for the development processes (e.g., transition processes from planned economy to the market economy in Central and Eastern European countries). Pukelienė and Butkus (2012) say that the fundamental structural characteristics of a region define its development path (i.e. convergence with or divergence from other regions).

The initial conditions and characteristics are described by many drivers (factors, criteria, variables). For this reason, a systemic analysis is required. For example, Čičinskas (2011) offers the analysis of systemic transition.

The institutional and evolutionary approach to the developmental processes of the regions, the requirement of a systemic analysis and implementation of the sustainable development policy – all these factors define the necessity of a methodological tool which would ease the analysis of the regional development processes.

The first chapter defines the complexity of the regional sustainable development. The second chapter offers a methodological tool for an integrated analysis of the drivers of the sustainable development policy implementation. The third chapter analyses the sustainable development drivers of a well-developed region. The fourth chapter analyses the sustainable development drivers of a less-developed region. The conclusions finalize the paper.

Perception of sustainable development

Development is defined as an evolutionary process determined by the history of the objective forces (drivers) of both the natural environment and human activities (Lydeka, 2001). Analysis of the development of a social system requires a context analysis because of a unique list of "objective forces" (drivers) in the development process.

A system is not developing *eo ipso*. During the development process, a social system changes its qualitative features (Kvedaravičius, 2006). A qualitative feature of the system is changing when its elements change their qualitative features (Lydeka, 2001). The modification of the qualitative features of the elements changes the behaviour of elements in the system. Therefore, the behaviour of the system also changes. So, the system is developing because of changes in the behaviour of its elements. This means that social systems with a different development level behave differently in the same environment.

It is obvious that all regions as social systems are unique. Thus, their behaviour is different and often competing. Competition encourages the regions to be more productive, more powerful and to have a higher potential, i.e. the regions have to develop in order to be able to change so that to increase their competitive advantages. Thus, development is the ability to make changes.

From the macro point of view, development is a dynamic concept related to medium to long-term changes and adjustments in technology, natural environment, economy, and society (Wye Group, 2007). Dynamics is described as the number of drivers (forces) and their temporal interactions. The results and effects of the interactions depend on both the period of time and the geographic area the interaction is taking place.

Sustainable development is a process of the interaction of the ecological, economic, and social systems during which the objectives of all the systems are maximized in a single point of time and place (Čiegis, 2010). Hopwood et al. (2005) say that sustainable development is an attempt to combine the growing concerns about a range of environmental issues with socio-economic issues. As Roosa (2008) says, sustainable development is a physical development of the socio-economic system, which ensures that the impact on the natural environment would be insignificant in the long-term period. There should be a "demarcation line" between the natural environment and the socio-economic system. Inductively, the interaction of the natural environment and a socio-economic system is a fundamental interaction of the sustainable development. Sustainable development determines the quality of the interaction: the better the quality of the interaction, the better the sustainable development.

Sustainable development increases the ability of the economic actors (e.g., consumers, companies, communities, etc.) to meet their economic goals by keeping the economic, social, and environmental systems viable (Munasinghe, 2009). A fundamental requirement for the sustainable development is not the requirement to improve the quantitative indicators, but to create more "space" for the action.

A region is exposed to the interaction of different drivers. From the sustainable development point of view, these drivers are grouped into four dimensions: 1) economic, 2) social, 3) environmental, and 4) institutional. The interaction of the dimensions heavily depends on the state-of-the-play of each dimension. The state of the play describes the potential to take actions. Thus, it is not sufficient to have a single dimension well-developed in order to be competitive (viable).

A region is exposed to the interaction of the multiple actors who are motivated by their own interests and rationale. By interacting, the economic actors use limited resources available to them. The limits of the resources are not constrained in the quantitative or qualitative sense. Zimmerman defines the resources as a human devise (McDonald, 1995). The limit of the resources depends on the technological development (innovations)

and consumption rate. Development increases the availability of resources, while the consumption of resources indicates their depletion. If the consumption rate grows faster than the development rates, resources become limited or scarce (Vaughn, 2008).

Thus, natural resources are materials from the natural environment with a potential to be used in the production or consumption process. Man-made resources are manufactured products used to produce other products. Human resources are skills and knowledge which could be applied in the production or consumption processes.

Economic actors, by acting rationally from their personal point of view, ultimately deplete limited resources, and this is a paradox of being wrong while being rational. The paradox is called the tragedy of commons (Hardin, 1968). So, being rational is not enough. The personal development is not enough. A global view of the development is required. Thus, the concept of sustainable development is needed. The concept is aimed to harmonize the development path of different actors among different dimensions on different levels of the social system.

The complexity of concept of the sustainable development requires better methodological tools of control and monitoring in order to improve the process of moving towards the sustainable development. The tools have to include contextual, multi-dimensional and dynamic aspects of the concept of sustainable development.

Integrated scheme of sustainable development drivers

This section focuses on the description of the drivers' scheme, which is proposed as a tool for an integrated analysis of sustainable development dynamics.

O'Riordan (1989) provides a scheme of approaches to sustainable development. Hopwood et al. (2005) expanded the map by considering environmental and socio-economic views from the point of view of four criteria: the level of importance given to 1) human well-being and 2) equality; and the priority of the environment from 3) techno-centered to 4) eco-centered approaches.

There is a wide range of approaches to sustainable development (Boons, 2009; Čiegis, 2002). Within the limits of this paper, only two approaches – eco-centered and techno-centered – are presented.

On the one side of the range of sustainable development approaches there is the eco-centered approach which is based on the principle of strong sustainability. The ecosystem cannot be replaced by human activity. The ecosystem has no substitutions, it requires a lot of time to develop, and thus the ecological value of the object is priceless *per se*. The market value cannot estimate the real value of the ecosystem; thus, economic processes are able to destroy it by neglecting it. From the eco-centered point of view, economic processes have to be decoupled from the ecosystem processes.

On the other side of the range of sustainable development approaches there is a belief that man-made resources can substitute natural resources by improving technologies; in case of the depletion of natural resources, there will be a man-made alternative found. This kind of thinking is based on the weak sustainability principle and is referred to the techno-centered approach of sustainable development.

These approaches can be applied in the sustainable development strategies. Furthermore, different approaches to the sustainable development for the different actors mean different actions. Thus, a more sophisticated methodological tool of sustainable development is provided in this section.

Finding an appropriate set of actions in the process of implementing sustainable development is not an easy task. It requires knowledge of what is important for the viability of the systems involved, and how that contributes to sustainable development (Bossel, 1999). According to Hopwood et al. (2005), the actions aimed at sustainable development are categorized into three groups: evolution (or "status quo"), reform, and transform (see Fig.1).

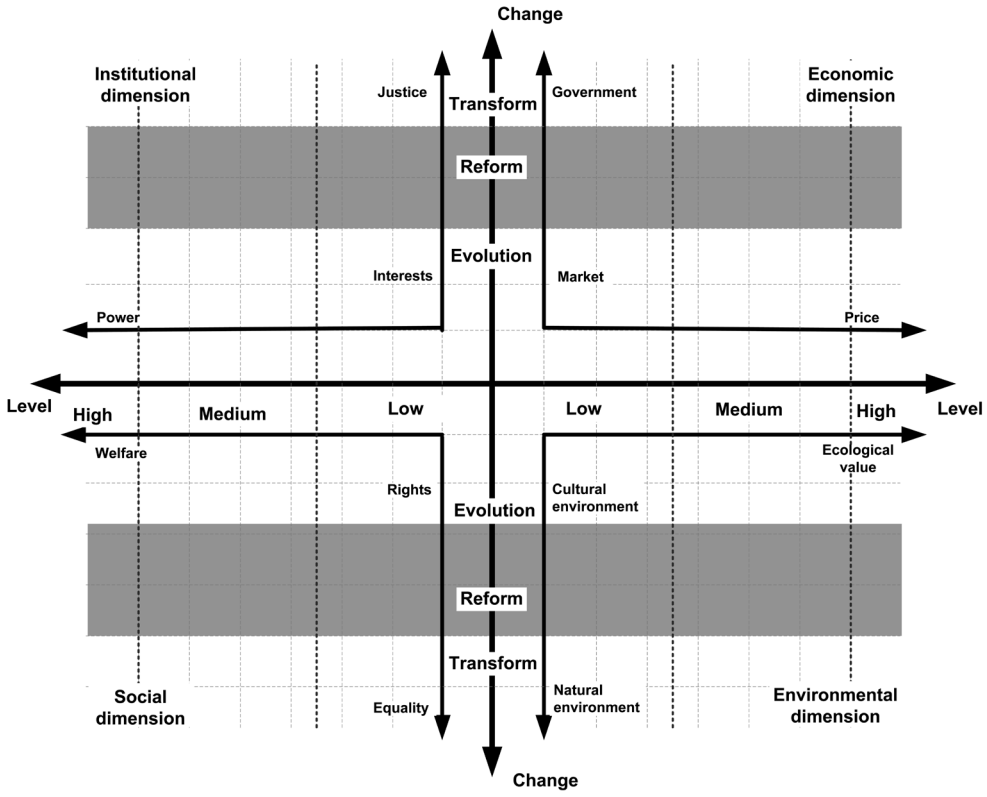

FIG. 1. **A scheme of sustainable development drivers**

Source: compiled by the author.

The status quo group of actions says that when moving towards sustainable development there is no need of additional tools for corrections or intensification. The reform group of actions says that reforms need to follow the sustainable development path. Finally, the transformation group of actions says that fundamental transformation is required for the sustainable development in socio-economic development while keeping the natural environment viable. Transformation is a long-term process consisting in changes of the formal institutions, particularly of the ownership rights, agreements, and informal institutions such as moral norms, customs, religious beliefs, and the mentality of society (Swatek, 2008).

The fundamental elements of the regional sustainable development are presented by a number of dimensions (groups of drivers). The dimension of sustainable development is selected according to the objectives of the sustainable development management.

There are four types of the objectives: 1) economic, which meet consumption demands; 2) social, which strengthen social cohesion; 3) environmental, which protect the natural environment; and 4) institutional, which to take an active part in the processes (Čiegis, Pareigis, 2010; Levy, 2010).

The importance of the institutional dimension for sustainable development is emphasized by Hagedorn (2008), Ostrom (2005), Van Huylenbroeck et al. (2004), Vatn (2005) and others. Čičinskas says that "*no single social process can be treated without regarding its institutional surroundings and historical development*" (Čičinskas, 2011, p. 10).

The horizontal axe covers the state of play of all dimensions of the sustainable development. State of play in this case defines the initial conditions of the region under analysis. As discussed in the previous section of this paper, initial conditions play a substantial role in the behaviour of the region.

The economic dimension is defined by the market efficiency and the level of its regulation. The market is an objective mechanism of value distribution among economic actors. There is a substantial difference between free market and government-driven market. The level of the market regulation reflects the regime under which the market functions as an institution distributing goods and services.

The price level of the commodities and services reflects the efficiency of the market. Although the profit level of the economic actors would be a more perceptive indicator as a measure of market efficiency, the price level reflects a smooth performance of the market. If the market is working perfectly, the price level should be decreasing with time.

Of course, this is not always the case, and that is a problem of market failures. Governmental regulation is needed to avoid the market failures. Starkevičiūtė (2011) says that government regulation together with sound institutions creates macroeconomic sustainability needed for an effective market performance, i.e. for avoiding internal and external imbalances.

The environmental dimension is divided into the natural environment, i.e. a non-cultivated zone, and the cultural environment, i.e. the environment cultivated by humans. The cultural environment is an area adapted to economic activities (e.g., physical infrastructure, land cultivation, etc.) or to human living (e.g., buildings, accessibility, social infrastructure, etc.).

The fundamental measure for the quality of the environment is its ecological value. Different approaches to sustainable development strongly argue as to the ecological value of the environment and how it affects the market prices.

The social dimension is divided into two groups: 1) civil rights (to what extent personal rights are met in society), and 2) equality (the minimal gap between the social status of the members of society). The social development is measured by the well-being level of society. Presumably, a strong protection of civil rights and an equal social status provide the conditions for a person to "feel" welfare while living in the region.

The institutional dimension reflects organizational efficiency and effectiveness. Institutions play an important role in demographic regimes. They are the primary drivers of economic actors. Also, institutions as rules of social relations have a remarkable impact on the path of the development of all other dimensions (e.g., Čiegis et al., 2010; Čičinskas, 2011; Jaźwiński, 2011). As Čičinskas (2011) says, "interest groups and state institutions should be included into the set of economic decision-makers. This is what the institutional approach demands" (Čičinskas, 2011, p. 16).

According to the institutional approach, well defined institutions lower the uncertainty, improve the macroeconomic stability, protect property rights and thus foster investments and innovation which are the proximate determinants of the economic development (Jankauskas, Šeputienė, 2009)

The above scheme is used to analyze the different approaches to the implementation of sustainable development in different regions. Regions follow their own development path which is based on the inherited characteristics of a region. For example, the classical environmental Kuznets curve explains the difference in the approach to environment degradation (thus to sustainable development) based on such characteristic of the region as the level of population incomes (Brock, Taylor, 2005).

Pukelienė and Butkus (2012) provide an analysis of the convergence of the regions, which is a specific aspect of the development path of a region. They use different types of β convergence models to compare the regional development directions. According to the conditional β convergence model, regions are converging towards specific (i.e. unique) long-term equilibria because they have different fundamental structural characteristics (e.g., GDP level, technology, population growth rate, economic policy, etc.).

The next section of this paper provides an analysis of the sustainable development dynamics in both well-developed and less-developed regions from the point of view of both the eco-centered and techno-centered sustainable development.

Sustainable development drivers in a well-developed region

An eco-centered well-developed region has to take transformative actions in its environmental policy when moving towards sustainable development (see Fig. 2). A natural environment is priceless *per se*; thus, any interference of the human culture substantially decreases the ecological value of the nature.

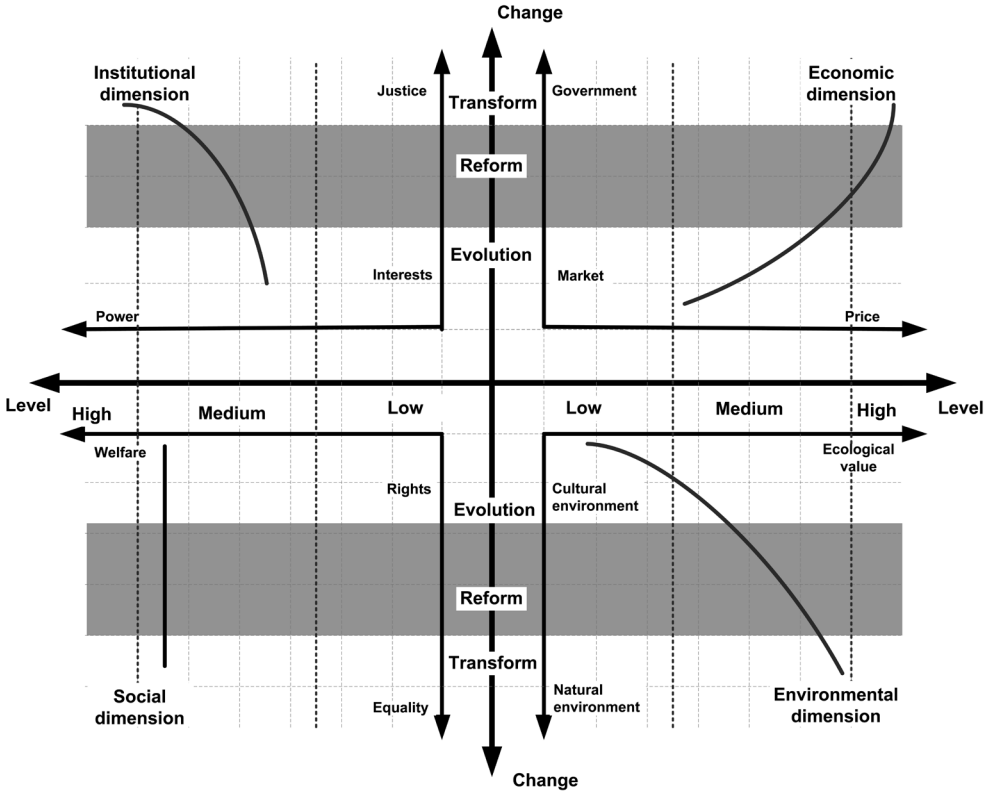

FIG. 2. **Integrated scheme of sustainable development drivers of a well-developed eco-centered region**

Source: compiled by the author.

The evolutionary path towards sustainable development is not fast enough to save the natural environment with insignificant traces of human activities in it. Additionally, the evolutionary way would bring more costs to the environmental policy by changing the global or regional equilibrium of the ecosystem, followed by a substantial decrease in the quality of environmental conditions for living. Thus, increasing the scale of the cultivation of the environment is one of the most important issues sustainable development policies should tackle.

Given transformative actions in environmental policy, an eco-centered well-developed region will not feel any difference in terms of its social development moving towards sustainable development in a more rapid way (i.e. by reforming or transforming the current production or consumption patterns), because their welfare level is not affected by a certain ratio between the rights of the citizens and their equality. The medium or high level of welfare determines a weak influence of inequality on society, and civil rights are protected by a strong institutional system evolved throughout the centuries.

A strong institutional system is determined by the power certain interest groups have in the policy-making process. The neo-pluralistic approach to the participation of all interest groups in the policy-making process endows the institutional system with a sufficient level of justice and efficiency. The population of a well-developed region trusts its institutions. The institutions have a strong legitimacy among the citizens (Hix, 2005). Besides, an eco-centered region understands the arguments for a higher level of justice towardes the non-human species and natural environment.

Society is ready to reform its institutional system with the aim of increasing justice in the system. Jankauskas and Šeputienė (2009) say that the results of the studies support the primacy of institutions over the market or spatial indicators.

A well-developed region has a well-functioning market as a value distribution mechanism. The high level of income in society determines higher prices of commodities and services in the market. The higher prices of commodities and services reveal their quality and value which is defined by the production process sustainability and environment-friendly consumption. Thus, the market is sufficiently sustainable, despite the fact that the market does not reflect the costs of non-marketable goods.

However, the path towards sustainable development requires transformation actions in the environmental dimension, affecting all other dimensions of sustainable development. Reforms for the market mean more standards and regulations aimed at improving the sustainability of the production and consumption processes. The reforms will be accompanied by higher prices.

Synergy among the dimensions would be achieved by reforms in the economic and institutional dimensions in order to increase environmental justice and the ecological value of natural environment. The high level of ethics in an eco-centered region will ensure a stable welfare level. Thus, moving towards sustainable development more rapidly will increase costs because of the rising prices, but the better feeling of the increasing equality and environmental justice in society would compensate for the economic loss caused by reduced consumption.

A techno-centered well-developed region as compared with an eco-centered one has a very different view regarding the value of natural resources. Defenders of the status quo see the root cause of the lack of sustainable development in the lack of knowledge and appropriate mechanisms, rather than in the insufficient priority of the ecological

value. This view allows for trade-offs between environmental and social issues, whether it is that some pollution is acceptable to increase growth, or loss of some pasture land for a park, or jobs for cleaner air (Hopwood et al., 2005).

They presume that the natural environment is not as effective as the cultural environment. Cultural environment creates a higher value for the market. Obviously, man-made capital, human capital, and labour force manufacture products of a higher market value than the value of natural resources. Of course, the scarcity of natural resources is pushing up the market price for the resources, but only to a certain degree. If natural resources are too expensive for the market, the buyers prefer cheaper substitute products.

Usually, a well-developed region has strong institutions, i.e. institutional power is an important determinant for the social and economic actions and their effects on the socio-economic and environmental development (see Fig. 3). Thus, market as an institution is strong and effective, and this is a prerequisite for an efficient economy in which producers produce what consumers want at the least possible costs.

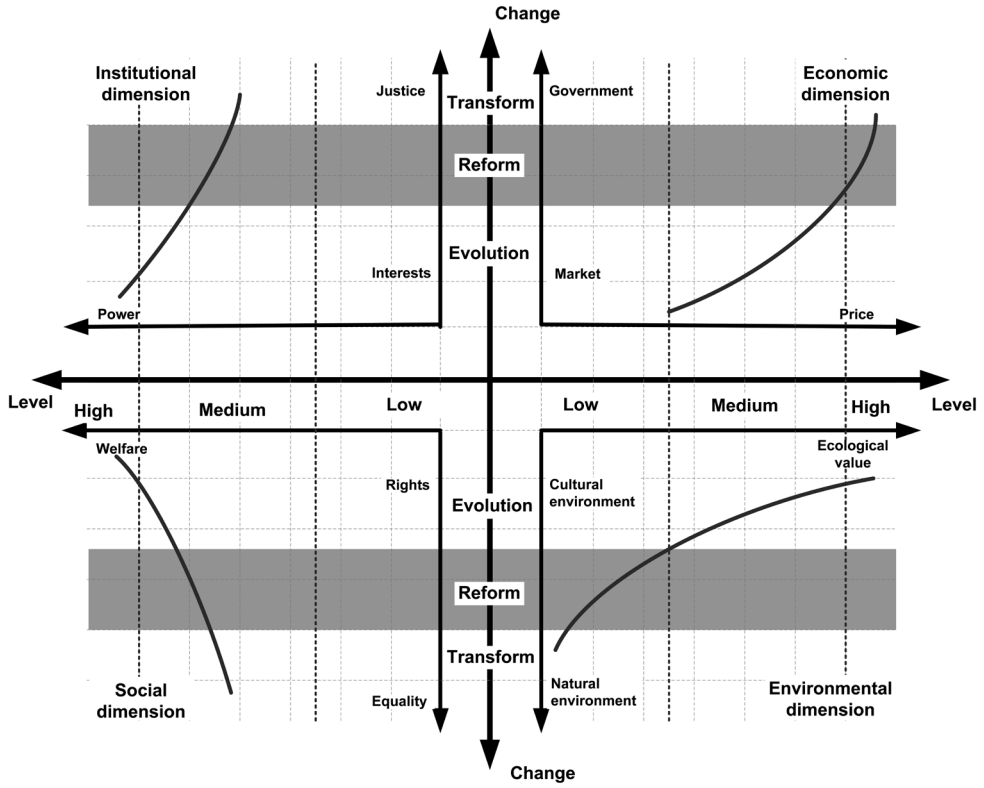

FIG. 3. **Integrated scheme of sustainable development drivers of a well-developed techno-centered region**

Source: compiled by the author.

Having this in mind, market is a fundamental institution which has a real power to determine the value of both marketable and non-marketable goods. The problem, of course, is that non-marketable goods, according to the market, have no value at all, because non-marketable goods are non-rival or non-excludable. So, part of the goods are being ignored by the market mechanism, and this is a threat for the sustainable development of a region. A techno-centered region "trusts" the market and will react in time to the shortage of non-marketable goods, if these goods eventually turn into scarce resources.

On the other hand, society in a well-developed region is concerned with the sustainability of non-marketable goods such as public goods, because they feel enjoyment using them. Society expresses concerns about the quality and availability of these non-marketable goods by making personal choice to consume more expensive products and services which are environment-friendly. They attach a subjective value to these products. The size of the subjective value depends on the social status of society. The more advanced society, the larger subjective value it attaches to consumption products. Thus, the market can move faster towards more sustainable technologies of production and consumption.

According to the techno-centered view, the ecological value is increasing with its contribution to the value creation process. Ecosystem services have a limited productivity. If man-made capital is added to the ecosystem services, the productivity grows. Subsequently, the growing productivity increases the ecological value of the ecosystem services. Simultaneously, a natural environment turns into a cultural environment.

In a well-developed society, the welfare of its citizens is relatively high. Dasgupta (2001) defines welfare as the value an economic actor assigns to a product or service. The assignment depends on the social state of the economic actor. Social state determines a personal or social choice of the usage of the scarce resources. Thus, the higher welfare of the economic actor allows for the better allocation of the scarce resources in society. There is no necessity to harmonize individual developments with the social development, i.e. a high social rationality level is reached.

The policy of moving towards sustainable development reduces the level of the welfare because of additional restrictions on the production and consumption issues. However, this reduction for a well-developed society is insignificant if it is done through the market mechanism.

The power of the institutions (first of all the power of the market as an institution) will decrease while moving towards sustainable development by implementing regulatory rules transforming the current production and consumption patterns. Moving towards a better environmental or inter-generational justice, from the interest groups' point of view, will decrease the institutional power, but institutions will achieve better justice for the ecosystems and for future generations.

The evolutionary path of moving towards sustainable development is preferable for a well-developed techno-centered region, but reforms, or even transformations, will not affect institutional development substantially, either.

Sustainable development forces in less-developed regions

Less-developed regions conventionally are those with a relatively low level of GDP per capita. Of course, it is not just the problem of this economic indicator. There are a lot of drivers and initial characteristics behind the GDP per capita value, but it is obvious that transformative actions should be taken.

Levy (2010) says that it is a long and difficult development process to the formation of an effective and efficient system of modern political institutions. During the process, the population has to accumulate relevant wealth, the middle social class has to induce substantial power into their hands, cultural and ethical aspects have to enter the lifestyle, economic structure has to become productive and flexible, strong and charismatic political leaders with a strong public support have to implement long-term national objectives. This is a model of the trajectory of a developmental state (Levy, 2010).

Economists are in broad agreement that the main elements of transformative action in a less-developed region (e.g., transition from a centralized to a market economy) are price liberalization, macroeconomic stabilization, restructuring and privatization, legal and institutional reforms (IMF, 2000; Starkevičiūtė, 2011).

The institutional dimension is less stable and less powerful in a less-developed eco-centered region as compared to the well-developed one (see Fig. 4). Quite often, the established democratic regime and legal institutions are inefficient and ineffective due to the lack of transparency or a weak control in society. Olson's (1965) "logic of collective action" explains why narrow interest groups achieve more than the interest groups aiming at social benefits. There are better incentives to join an interest group aiming at the benefits for the members of the group rather than the incentives to join an interest group protecting the public interest. The lack of transparency and a weak control of the institutions strengthen the logic of the collective action. Thus, interest groups have a strong power which presupposes a high level of subjectivity in the institutional dimension, i.e. a contrast to justice. The weak institutional justice makes economic, environmental, and social institutions to perform ineffectively.

The market mechanism is functioning ineffectively because of the highly concentrated and weakly regulated market which usually evolves in less-developed regions. Oligopolistic and monopolistic organizations have a strong power to determine the market price of their products and services. Thus, the market does not distribute the value in an efficient way.

A transformation is required to decrease monopolistic profits and subsequently the prices. The transformation should be initiated by the governmental bodies. Regulated markets ensure better conditions for the growth of economy than do self-regulated markets

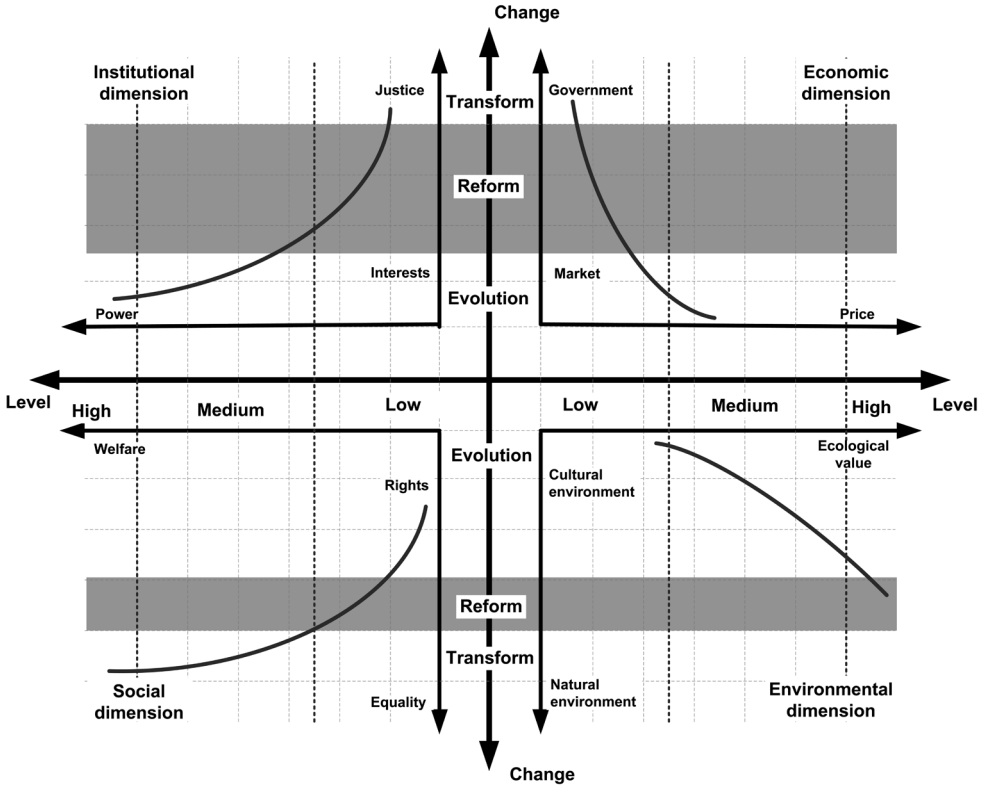

FIG. 4. **Integrated scheme of sustainable development drivers of a less-developed eco-centered region**

Source: compiled by the author.

(Starkevičiūtė, 2011). The better regulation of the monopolies, oligopolies, cartels or other organizations with a strong bargaining power in the market would decrease the prices of the products. Decreasing prices would indicate an increasing efficiency of the market as a value distribution mechanism. Restructuring some loss-making industries takes some time, but the efficiency of investments could be ensured if cost reduction is prioritized and leads to an increase of the productivity (Starkevičiūtė, 2011).

Usually, a less-developed region has large areas of natural environment not cultivated by economic activity. This is very attractive from the ecologists' point of view and a great potential for a less-developed region to save such priceless areas for the future generations. The conservation policy plays an essential role here. The government plays a positive role by expanding the supply and improving the quality of the public goods and services that over time can help to augment the productivity (Starkevičiūtė, 2011).

Public expenditure reviews can help identify opportunities for improving the efficiency of government outlays in each of these areas and for modernization in the social sector

(Starkevičiūtė, 2011). The welfare level is low in the less-developed regions. The low institutional effectiveness and the low productiveness of human and physical capital determine the low income, a rigid labour market and poor consumption as compared with a well-developed region. The fundamental goal for the less-developed region social development is human capital development, which is a long and expensive process. It is doubtful that transformation in human capital could be effectively carried out in a short period. Thus, the evolution of the protection of civil rights, a gradual increase in the power of economic and governmental institutions and constant innovations in the market would increase the human capital and simultaneously improve welfare in the region.

Adamczyk (2009) presents conclusions of an analysis based on data from 1995 to 2006. The results show that the institutional dimension has a great impact on the labour market in reducing distortions in the allocation of the labour force and creating demand for labour (Adamczyk, 2009).

However, from the eco-centered region point of view, the evolutionary way is too long. Immediate actions are required to save the natural environment. Thus, a faster way to improve welfare in a less-developed eco-centered region is to take both fundamental actions: 1) to reform institutions in order to improve their effectiveness, and 2) to reform government–market relations in order to raise the standards of production and consumption processes to make them more compliant with the sustainable development.

Thus, society requires rapid reforms in both the institutional system and market relations. A strong political will of the government towards sustainable development by ignoring the pressure from the narrow interest groups, the efficient market functioning and strong institutions of the democratic regime would provide conditions for a faster sustainable development of the region.

The drivers are different for implementing the sustainable development in a less-developed techno-centered region (see Fig. 5). A techno-centered region believes that the cultivated environment would provide more environmental services which are of critical importance for the economic development of the region. The potential of the natural environment is perceived as the main source of the competitive advantage for a less-developed region and subsequently for its higher welfare. However, reform actions are needed to increase the ecological (and market) value of the natural environment. The strong institutions, long-term government strategy, political will and the high level of equality are needed to reform the environmental dimension of sustainable development in a region.

Also, a challenge here is how the potential of the natural environment is being used in order to achieve a comparative advantage on the market. Cross-country investigations show that the abundance of natural resources is a blessing when the institutions are good and a curse when the institutions are bad (Jankauskas, Šeputienė, 2009; Mehlum et al., 2006).

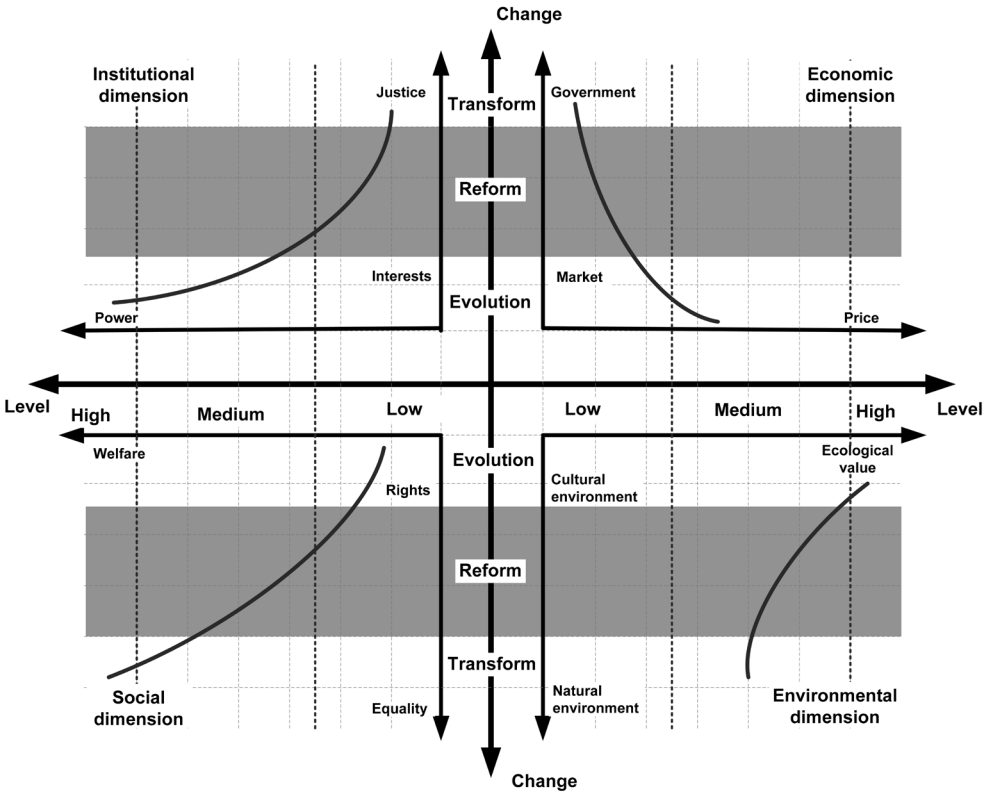

FIG. 5. **Integrated scheme of sustainable development drivers of a less-developed techno-centered region**

Source: compiled by the author.

Market as a value distribution mechanism in a less-developed region does not work efficiently. Benefits from the exploitation of natural resources receive economic actors who have the bargaining or governing power in the market, i.e. the minor part of society. Thus, the rest of society does not get any substantial benefits. Obviously, reform actions are required to improve the market efficiency, aiming at a higher value creation and a better allocation of economic benefits for all society members.

Čiegis says that nowadays less-developed regions have to avoid the development path taken by well-developed countries during green or industrial revolutions 100–150 years ago. The historical development path will put too much pressure on ecosystems, and the development will not be sustainable. A strong environmental policy should be based on the long-term economic development policy (Čiegis, Pareigis, 2010). However, this path of development is very expensive, and the economic potential of less-developed regions is limited. The problem could be solved by foreign direct investments or international development aid programmes, but the weak institutional system implies too much risk.

The institutional dimension of a less-developed region is characterized by a low level of justice and a strong power of small interest groups. Interest groups (usually the "elite" of society) have lots of financial resources, a strong political power, and control over the mass media. These are the main factors for the lack of transparency of the institutions and the lack of control of their effectiveness. Therefore, reform initiation and execution are problematic, and some transformational events or shocks (e.g., a global financial crisis, natural disaster, war, etc.) are required to increase the level of justice under these conditions in the long run. A shock concentrates the public interest, and this concentration could trigger the start of the institutional reform.

A synergy among the dimensions shows that reform actions are needed in all dimensions of sustainable development. That is why the economic development, or social development, or institutional development cannot work independently. All these development dimensions have to work synchronically, i.e. sustainably. Also, some extraordinary events or shocks have to happen to spur the reforms.

However, the very first strategic step should be taken in the institutional dimension. Jaźwiński, (2011) says that the economic dimension "is most favourable" in countries with the most powerful institutions – the Czech Republic and Estonia. "It is crucial to strive after improvement of the quality of institutions (Jaźwiński, 2011; Swatek, 2008). It is a time-consuming process which should result in a faster social and economic development, efficiency of the government and an improved process of the regional development.

Conclusions

The integrated scheme of sustainable development drivers provides with a better understanding of the development process in a certain region. The scheme integrates the dynamics of drivers of the four dimensions of sustainable development with the level of actions (i.e. evolution, reform or transform) needed for the implementation of the sustainable development policy.

The scheme of a well-developed techno-centered region reveals a productive amalgamation among the institutional power, welfare level, and market mechanism. An institutionally driven reform, due to environmental issues, would bring an insignificant loss of the welfare and additional regulations of the markets.

The scheme of a less-developed techno-centered region shows that synchronous reform actions are needed in all dimensions of sustainable development. Otherwise, the development in one dimension would fade due to inefficiency in other dimensions without any substantial effect on moving towards sustainable development. Also, some extraordinary events or shocks have to happen to spur the reforms.

The holistic view of the drivers suggests that a less-developed eco-centered region has to go the evolution path of social and environmental development. However,

the evolution takes too much time. Thus, society requires rapid reforms in both the institutional system and market relations.

Synergy among the dimensions of a well-developed eco-centered region would be achieved by the reforms in the economic and institutional dimensions, aimed at increasing environmental justice and the ecological value of the natural environment. The high level of ethics will ensure a stable welfare level and will increase the prices, but a better feeling of the increasing equality and environmental justice in society would compensate for the economic loss or consumption reduction.

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