CLUSTER STRATEGY FOR THE SUSTAINABLE DEVELOPMENT OF REGIONS AND EVALUATION OF THEIR ECONOMIC PERFORMANCE

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Abstract. Despite growing competition among separate companies, increasing importance of effective supply chains provides another view on the role of clusters in the spatial distribution of social wellbeing. Clustering is considered more and more efficient approach to regional management and economic growth. In turn, we observe growing interest to the principles of the global sustainable development, which are expected to be projected down to the level of regions and areas. Therefore, investigation of how cluster strategy can be used for the purpose of sustainable regional development opens new horizons for introducing innovative regional strategies.

Keywords: cluster strategy, sustainable development, regional economic, regional development.

Introduction

Sustainable development of regions and areas is affected significantly by core elements of external economic environment. Among them are local, national and global trends reflecting changes in economics, society and technology. The actual balance between economic, ecological and social sectors of regional performance and development is influenced by many factors intrinsic to such developing country as Ukraine, for instance. The following impact factors can be outlined among others so that one can evaluate regional economic perspectives. The concept crucially needed for regions to make their transition from resource-intensive economy to sustainable development is not reserved by law. A vertical line between the lowest regional level and the highest national economy level of sustainable development is not introduced yet. Therefore, the instrument of clusters is not implemented into the system of regional managerial techniques for making effective long-term decisions.

Rapid changes of politics that are as unexpected as close to uncertainty usually come with changes of current pattern of stakeholders’ diversity that has negative impact on strategic planning within the regional economy. As a consequence, sustainable development framework needs to be improved for the purposes of regional growth based on clustering mechanisms. In turn, achieving its sustainability requires a new approach to strategic planning, monitoring and reviewing activities of regions and areas as sustainable development includes sustainable management. Therefore, running regions and areas in a sustainable way means that interests of all economic agents across the territory are met optimally subject to constraints on sustainable development principals. The lifecycle of companies working within the region is as long as possible and their profitability is resilient to unfortunate costs.

Results

Exploring the core essence of sustainable development namely its principals and concepts, analyzing relationship of sustainable development and other economic theories, as well as studying current ideas of how to make regions and areas growing sustainably provide some insights into contradictory connection of sustainable development itself and regional economic performance within the market economy. As it is seen, these contradictory challenges remaining untreated prevent regions and areas from adhering to balanced economic, environmental and social interests in practice and disallow to put economic, social and ecologic sectors of internal and external environment together around the regions and areas providing their integration into local and national economies.

The basic graph of sustainable development shows that, in fact, sustainability can be achieved due to clustering industries since interaction of economic, social and environmental components is like a cluster.
The first challenge could be described as fundamental contradiction between postulates of the market economy, according to which regional economy performs, and managers’ estimation of a level of importance and significance that social and environmental projects are of for the region. As a consequence, it mirrors their attitude to such projects, which in such case do not occupy priority positions among regional goals. Saying reverse, sustainable development process is considered by managers and owners of assets in the regions to be of high cost and low benefit.

At the same time the region and companies located in it are committed to the market economy rules and recognize benefit as the only one driver for their performance and activities. Unfortunately, usual results and outcomes of ecologic and social projects benefit society as they are services provided in education, health, culture and rest sectors without direct financial profit for companies and regional budgets.

Not having a clear measurable indicator to evaluate positive effect of their impact on the regional image or market value of regional companies makes sustainable development projects to be evaluated abstractly and subjectively. Rising in market value of sustainably developed company and its climbing up to the top of ranking among different companies are worth moving towards sustainability if the company is actually a corporation, being sold and meets eligible financial criteria to be finally ranked. In this case, regional position in such rankings is also expected to improve. Otherwise, social and environmental projects require to be financed at the expense of the regional companies with reducing the gained profit. By extension, alternative cost of such projects accounted as virtual effect that would be achieved due to financing other economic business may exceed ecologic and social effect as assessed by experts and seen after sustainable development measures. All this pushes risks that the regional and its companies will likely refuse to take social and ecologic projects up especially under conditions of new top management board or new owners being introduced or particularly without any government subsidies being provided.

Thence, the conceptual platform for sustainable development of regions and areas is required to integrate the process of sustainable development itself into market economy model to ensure that the region and its companies benefit from being committed to sustainability principals and that such benefit is clearly measured in money equivalent. Globally, there is a good example of it concerning artificially made world market for quotas on CO₂ emissions according to Kyoto Protocol where a company is able to sell unused quotas to other demanders secured after implementing innovative green technologies. In such case, green technologies become an investment project with certain level of profit.

The second and the third contradictions are relevant to life cycle and basic activities of some companies within the regions. Consider them for mining companies located in the mining regions. In fact, mining company according to the core essence of its activities breaks principals of sustainable development not only during the mining process itself but also after being abandoned and closed. Herewith, closure of the mining company is referred to finished mining process and terminated legal entity status. Then, the dilemma could be found in mining company sustainable development and overall performance. It is offered to consider that dilemma under the name of Sustainability Roll in Transitive Economy. Further description of it may be encapsulated in the following statements.

At the moment of terminating the process of digging resources which is the point of actual transition of the mining company from being a mine to uncertain phase of its life cycle a special phenomenon of changing sustainability roll or such roll’s occurring could be observed in interaction of economic, social and ecological internal and external systems of the company. The economic nature of the sustainability roll allows defining that the mining company is rolled when resources are concentrated to achieve goals of one or two of three balanced sectors of the company. If it is so, economic interests of certain stakeholders are satisfied more or in a better way. During intensive mining development of the mining company cannot be identified as sustainable absolutely because of dramatic impact on environment. It is therefore social and economic sustainability roll. Destroying environment comes to a stop when mining is recessed. But then social and economic shocks of spatial development occur. It is ecological sustainability roll. Thus as mining company activities so its closure does not contribute to absolute sustainability of interaction of internal and external systems. Consequently a principal question arises whether it is possible to achieve sustainable development of a region or territory where such company is situated even after its status of legal entity being terminated.

Sustainability roll is a dynamic feature of regional development that is shown due to its changes occurring at the moment of cutting extraction of minerals off or abandoning certain industries. Hence, sustainability may be supposed to roll over time that is different phases of the regional life cycle can suffer
economic, social and environmental slowing down caused by certain model of production factors’
distribution.

In addition to current theory of providing development of regions and areas according to sustainability
principals, the following items can be delivered. The regional sustainability does not appear and vanish but is
a permanent for it as the region always has internal economic, social and ecologic environment as well as
always is integrated into national equal systems. However, the extent to which sustainable development of the
regions and areas is beneficial economically and efficient socially depends on the level of harmony met by
economic, social and ecologic systems in their interacting. Particularly, this harmonic interaction can be
described by means of sustainability roll that changes during phases of transition. As mentioned above, the
mining company also has sustainability roll even after terminating the process of digging minerals and such
roll is stuck to post closure phase.

Let’s consider in details contradictory challenges arising from mismatch of sustainable development
principals and regional market activities over phases of mining and its stop as well as negative impact of these
contradictions on the company itself and local economy.

Primary activities of the mining company for extracting not renewable natural resources come into
conflict with the sustainability principal to save nature for future generations. But keeping existing reserves of
not renewable natural resources unused that requires a rapid closure of mining company along with complete
their exhausting lead to a necessary closure of mining company identically. As a consequence mining
company closure directly affects spatial depression while sustainable development supposes economic
systems to be developed in a long period to provide high life standards on those territories.

The mining company liquidation requires new investment projects to be found by the owner. For
employees it means losses of their jobs. By extension, environment destroyed through mining need to be
recovered or otherwise it is the company that has sole responsibility for it and nothing excludes liability for its
fraud.

Contradictions pointed out above make risks of shaping or exacerbation of economic, social and ecologic
spatial depression with deprivation of source of financing state and local budgets, pushing up unemployment,
resettlement and reeducation of miners including members of their families, worsening ecology and having
risks of territorial flooding and underground gas methane explosion.

Thus the concept of mining company sustainable development must suggest its life cycle extension
through diversifying its activities in a way that ensures absence of sustainability roll particularly during the
process of transition from digging minerals to its termination.

The forth conflict item is that socially and ecologically important objects of external environment are not
integrated into the model of the mining company particularly into the legal one. But at the same time
sustainable development suggests that economic, social and ecologic systems to be closely related. As rule
social and ecologic objects are local or the state property so they are not included into the model of the mining
company and don’t meet distributed company’s resources. However the company is relatively responsible for
such objects development to achieve its own sustainable development. In this connection a strong factor of
interpersonal agreement between owners of the company and social and ecologic objects is to be found that in
different cases drives or slows down redistribution of resources for these objects.

Consequently uncertainty of organizational hierarchy and lack of rights and liabilities of the company to
run social and ecologic objects located on the nearby territory reserved by law make such objects to be
considered by the company only as ones for sponsorship in case of appropriate profit and owner’s wish.

For regional economy this contradiction means loss of stable finance source for maintaining social
infrastructure and objects of ecologic safety, their destroying and high dependence on decision of company’s
owner. Thus the concept of the mining company sustainable development must suggest that social and
ecologic objects should be integrated into the company model in a certain way.

Discussion

The above stated analysis of existing contradictions between principals of sustainable development and
principals of regional performance allows the way of running regions for the purpose of their sustainable
development based on cluster framework. CBSD is a short name for Cluster Based Sustainable Development.
It must be pointed out that in the context of the article Cluster Based Sustainable Development approach does
not refer to widely used in practice Activity Based Costing, Process Accounting, Responsible Center
Accounting that show methods of cost accounting in a whole.
The main objective of these methods is to monitor production costs for the purpose of their reducing and redistribution of overhead costs. They are used for managing companies wherein, the object of cost accounting (function, process, center of generating costs) is different from the object of cost calculation which is products and services.

Unlike these approaches, the Cluster Based Sustainable Development approach pursues the goal of analyzing economic performance of the region to provide its sustainable development with a view to finding and using reserves of enhancing harmony of economic, social and ecologic systems interaction through eliminating above mentioned sustainability roll.

An option to control costs subject to constraints on companies’ development only according to the principals of Cluster Based Sustainable Development could be a field for further study.

The Cluster Based Sustainable Development consists of two fundamental concepts: cluster and value. And this must be the most debatable point of the research as it is still unclear how to separate objects in a sole clusters in the region. An integration of these concepts for the purpose of adaptation to harmonic regional development may contribute to solving the conflict between sustainable development principals and market economy rules.

References