

IS RURAL ECONOMY SUSTAINABLE?

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Summary, conclusion, proposals

The rural area is a very complex unit of economic, social and natural space with special characteristics. At the same time the heterogeneity of the units of space is very striking.

Problems and difficulties to be addressed or the most effective exploitation of resources in economic, social and environmental terms in the rural economies require also theoretical analysis of different ongoing practices and theoretical abstractions.

The creation of new concepts and adequate theoretical reasoning how rural economies function needs on the one hand interdisciplinary approach and on the other hand – in terms of economics – the explanation and analysis of different phenomena calls for the tools of e.g. spatial economics, ecological economics, and institutional economics.

Challenges of rural economies and their sustainable solutions are analysed and synthesized by applying the tools and categories of spatial, ecological and institutional economics.

EUROPEAN DISPARITIES

Europe is very heterogeneous. The disparities among countries and regions stem from structural deficiencies in key factors of competitiveness—inadequate endowment of physical and human capital, a lack of innovative capacity, creativity, of effective business support and a low level of environmental capital.

In order to eliminate the disparities economic growth needs (*Elekes, 2011*) to be boosted in lagging regions, and catching-up and convergence needs to be promoted. The convergence in the EU during the past decades showed a relatively steady pace. The catch-up process accelerated after the accession. (It is, however, an essential question whether this accelerated process is sustainable or not.) The latest financial and economic crisis imposed, however, a risk of weak potential growth performance and slow recovery in a prolonged period. Furthermore *due to the heterogeneity of rural regions, the growth performance is supposed to differ also by rural areas.*

An analysis carried out by *Sassi and Pecci* (2008) indicates a reduction in the speed of convergence and a widening of the gap between the minimum and maximum value of the parameters of convergence in EU-15 to EU-27 regions. Their empirical analysis taking into account the regional spatial interdependences stressed that territorial units of the New Member States tend to show a divergent process or the lower speed of catching-up¹.

RURAL AREAS IN THE CONTEXT OF ECONOMIC THEORIES

When analysing the entirety of national economies of the European Union – and not only in the context of convergence, a major goal pursued by EU integration - the importance of rural economies - including agricultural, regional and rural development schemes - becomes obvious. “It is now common understanding that a pure sectoral approach is not successful in enhancing and stabilising a region’s performance; all the same, the notion that rural development goals widely overlap with agricultural policy is still immanent.” (*Shucksmith, Thomson, Roberts, 2005:165*). After all: “Progress towards establishing a comprehensive rural development policy with a stronger territorial dimension has been very slow” (*Shucksmith, Thomson, Roberts, 2005:154*)

Hence the creation of new concepts and adequate theoretical reasoning- how rural economies function- is highly required. That needs on the one hand interdisciplinary approach and on the other hand – in terms of economics – the explanation and analysis of different phenomena calls for the tools of e.g. A: spatial economics, B: ecological economics, C: institutional economics.

'Rural areas' in spatial economics

Nowadays theories of spatial economics/ regional economics play an increasingly greater role besides mainstream economic theories. Regional economics, further developed results of the great forefathers or new concepts are discussed in detail by contemporary Hungarian and

¹ The core-periphery model was strengthened by the results of Sassi’s and Pecci’s analysis. The asymmetric nature of the regional problems was explained by geographic proximity and an economic process having roots in the period before accession and in the integration process.

Another study by Gutierrez and Sassi (2011) found that „evidence for convergence and spatial dependence emerges especially when estimations refers to spatial panel models while the effects of spatial heterogeneity and the existence of convergence clubs come out from the geographically weighted regression approach.”

foreign authors such as *Fujita² - Krugman - Venables, 2001; Combes - Mayer- Thisse, 2008; Capello, 2006; Lengyel – Rechnitzer, 2004; Illés I. 2008; Varga, 2006* etc. „Recent contributions to the regional science literature have considered spatial effects in empirical growth specifications. In the case of spatial dependence, following theoretical arguments from new economic geography, and endogenous growth models, this phenomenon has been associated with the existence of externalities that cross regional borders.” (*Fingleton, 2006*)

Based on the statements of regional economics the following levels can be distinguished: supranational economy, national economy and regional/local economy.

A regional or local economy can be urban (even in the form of a city-region) or rural.

The rural area is a very complex unit of economic, social and natural space with special characteristics. At the same time the heterogeneity of the units of space is huge. *Common features of rural areas* are: dispersed population, often agricultural based economy, distance from major urban centres (high transaction costs), lack of access to major services. These features provide a reason for *rural development (RD)* that revitalizes rural areas, reproduces and develops resources. *Aims of rural development³* can be considered: prevention of migration, fight against poverty, boosting employment, promotion of equality both in terms of agriculture and other sectors.

In the European Union rural areas are determined basically by using the OECD terminology.

“In the EU-27, 54% of the territory is classified as predominantly rural (NUTS3) areas and represent 19% of the EU population. The income per inhabitant in these regions represents 68% of the EU-27 average, whereas in intermediate and predominantly urban regions it reached 84% and 126% respectively of the EU-27 average.

In predominantly rural areas the primary sector still represents 4.9% of value added (and more, if related (food) industry is considered) and 15.7% of employment. This is where the

² „Traditionally, there were three areas of economics focusing on geographical space—urban economics, regional economics, and international trade theory. Then, in the era of a borderless economy, a new economic geography, or spatial economics, emerged through the generalization and innovative development primarily of microeconomic theories of cluster formation. This marks a distinct difference from Michael Porter's cluster theory in that general equilibrium theory and a dynamic general equilibrium approach are consistently applied in spatial economics... In order to draw an economic map of a borderless Europe, it was necessary to integrate urban economics, regional economics, and international economic theory. For about a decade thereafter, a number of researchers undertook studies to find a new theory. One of the outcomes of such efforts is *The Spatial Economy*, in which Paul Krugman, Anthony Venables, and Masahisa Fujita developed a systematic theory for explaining economic activity.” (*Fujita, M. 2011*)

³ In the EU rural development policy for 2007 to 2013 is focused on three themes ("thematic axes"). These are: improving the competitiveness of the agricultural and forestry sector; improving the environment and the countryside; improving the quality of life in rural areas and encouraging diversification of the rural economy.

role of agriculture can be particularly important, not only directly but also indirectly - through the generation of additional economic activities. It is estimated that an increase in agricultural output produces an additional 150% increase in output among local purchasers and consumers of that output. Especially strong forward linkages exist with food processing, hotels and catering and trade, all sectors that, in turn, have further high links with the rest of the rural economy.” (EC, 2011)

In rural Europe there is a multiple process of regional differentiation. Spatial diversity is characterized by five extreme poles. (van der Ploeg et al., 2008). The poles are as follows: specialized agricultural area with high degree of specialization, scale and intensity; peripheral areas with agriculture playing a minor role or where the decline of agriculture leads to depopulation; new rural areas – with agriculture focusing on the provision of multifunctional services and intertwining with the regional economy; segmented areas with specialized sectors – agriculture and others – offering a broad range of juxtaposed services and goods; new suburbia – with strong link with the urban economies, and declining agriculture; ‘dreamland’ – falling outside the abovementioned classification, places whose popularity is high e.g. in certain part of the year (summer) but very low in the rest of the year.

’Rural areas’ in ecological economics

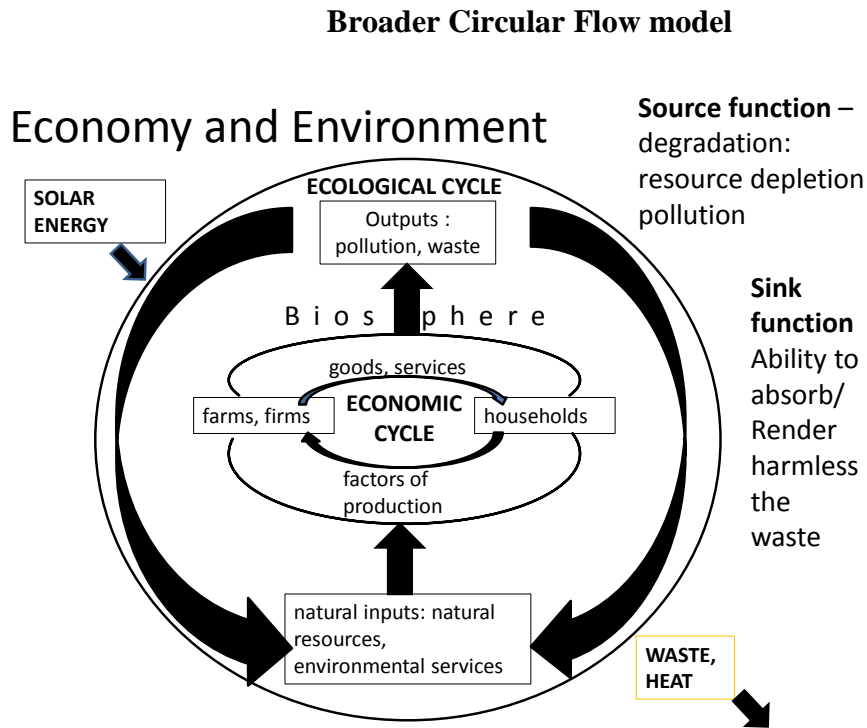
In the framework of ecological economics the economic system must be placed in its ecological context. Figure 1 illustrates the inner circle of economic flows and the outer circle of ecological flows. Due to the environment source function services and raw materials are available for human use. The degradation of the source function occurs because of resource depletion (no time for regeneration) or pollution (contamination). The environment’s sink function means the ability to absorb and render harmless the waste by-products of human activity. (Harris, 2006)

According to different ‘traditional’ growth theories *determinants of increased productivity* are capital, labour and total factor productivity. But ecological economics focuses on three additional factors being *very heterogeneous in different regions – both rural and urban regions*:

- energy supply - During the 1990’s energy intensity per unit of GDP has generally decreased in OECD countries, but the current rate of energy efficiency improvements is not enough to overcome other factors driving up energy use. There is the challenge of

further decoupling energy use and related air and GHG emissions from economic growth.

Figure 1



Source: Harris, 2006

- natural capital (land and natural resources) – The erosion of natural capital is threatening in certain areas.
- the absorptive capacity of the environment.

The balance between economic growth and ecosystem called for the concept of sustainable development. “Forms of economic development that preserve rather than degrade the environment include renewable energy use, organic and low-input agriculture, and resource conserving technologies. “ (Harris, 2006:13) It is important to pay attention to the fact that most ecosystem services and biodiversity are public goods, so they tend to be overconsumed by society. (Kumar, 2010)

'Rural areas' in institutional economics

The approach of institutional economics differs depending on the view of the Old, New or Neoclassical Institutional Economics. The Old Institutional Economics (OIE) emphasizes the

role of informal institutions. Their representatives claim that institutions are not necessarily effective in social and economic terms. Regarding the pure Neoclassical Theory the only allocation mechanism and the only institution is the market, and other ones inhibit the economic performance (*Tridico, 2004*). The *New Institutional Economics* (NIE) is closely linked to the Neoclassical Economics that puts emphasis on individual maximization and marginal analysis. *But at the same time it pays attention to transaction costs, information problems and bounded rationality. Furthermore institutions represent the way in which different economies cope with market failures.*

The importance of institutions is well demonstrated also by the fact that certain rural areas and the agricultural sector itself are not completely able to produce the right environmental effect required by society and needed for the functioning of the ecosystem, and to eliminate market failures, i.e. it is not sustainable. Besides coping with market failures in European Rural Economy competitiveness is needed to be enhanced and growth and sustainable development is needed to be reinforced. *An important tool* for those is considered the establishment of *better regulation, the improvement of regulatory environment*. In the middle of globalization and liberalization the European agricultural sector with less cost-efficiency compared to the Overseas has even relevant disadvantages against the industry or service sector. That is the reason that all cuts in red tape (administrative burdens) following the simplification of the regulatory environment are of substantial importance so that agricultural operators, farmers and traders can become more compatible. Extra burdens imposed on agricultural agents originating from compliance with unnecessary rules or compliance with legislation – e.g. policy-related transaction costs - to an exaggerated level could be considered as not justified *implicit taxation*.

From another point of view – in the context of policies - while studying e. g. the principles for institutional policy the question could be raised whether the quantitative assessments of policy impacts based on standard welfare theory is suitable enough for dealing with the policy packages oriented rather in structural and environmental directions.

While tracing analytically the RD policy two core problems have to be taken into consideration: 1. the problem of delayed structural change in agriculture, 2. the problem of multifunctionality and environmental externalities of agricultural production. As a result the welfare economic principles prove to be inappropriate. *So instead of these principles a normative institutional economics of RD needs to be outlined in order to show a conceptual contribution to the evaluation of RD processes and policies.* The normative institutional economics (having the principles: 1. realization of gains from cooperation, 2, incentive-compatible self-regulation, 3.

institutionalized competition) is an extension of the welfare economic approach (with the principles of 1. optimal resource allocation, 2. opportunity cost, 3. coordination by equilibrium prices). The viability of this approach can be demonstrated through the rural credit policy. (Petrick, M, 2004)⁴

RURAL DEVELOPMENT

By now the sectoral and not sector-specific approaches have been integrated to certain extent. The territorial based rural development ensuring sustainable development of rural areas has become focused on instead of the agricultural policy aiming at food self sufficiency and income parity. The enhancement of competitiveness: the exploitation of competitive advantages of local peculiarities and the promotion of production of rural public goods has become top priority. That is: a paradigm change occurred.

Defensive governmental attitude – tackling the economic decline – as regards the development of rural areas is not typical any longer but the utilization of new possibilities are concentrated on to a great extent. Also the European Commission shares the standpoint according to which *the approaches going beyond the frameworks of agriculture based on partnership, plus being multisectoral and territorial, need to be spurred.*

The topmost *general challenge* for European rural economies can be considered the *development of locally peculiar adaptation practice*. In rural spaces adaptation patterns are usually cumbersome, limited and time-delayed, which calls for speeding up the development of knowledge-based economy and society, establishing the infrastructure needed and implementing measures for modernising the education.

Successful adaptation process resulting in rural development can be assured by developing a ‘web’, that is the pattern of interrelations, interactions, exchanges and mutual externalities within rural societies.

The web interlinks activities, processes, people and resources and it also has an impact on the way in which these interrelations, interactions unfold. The development of such a web – each having different density, multidimensionality, impacts and dynamics - contributes to the performance of regional rural economies. (van der Ploeg et al., 2008)

⁴ “Instead of influencing market outcomes by more or less unspecified subsidy payments, it is recommended to create and/or strengthen an institutional framework that allows the functioning of financial intermediaries operating in the interest of both borrowers and lenders. This would include the prudential regulation of the banking sector without directly interfering with its intermediation tasks hence a form of both ‘governmentally regulated private self-regulation’ and institutionalized competition.” (Petrick, M, 2004)

The web is multi-actor, it involves actors, institutions, enterprises, state agencies and social movements and rural development implies the evolution of the web.

According to van der Ploeg et al. *the web has certain theoretical dimension*: endogeneity – the degree to which a regional economy is grounded on regionally available resources (more developed endogeneity refers to higher competitive advantage); novelty production – the capacity to improve processes of production and patterns of cooperation; sustainability; social capital – cooperation, engagement in networks, institutional arrangements; market governance – institutional capacity to control and strengthen markets and to construct new ones.

In addition it has to be stressed that the role of knowledge valorization - *transfer of knowledge* from one party to another, a transfer that needs to result in economic benefit and knowledge exploitation in rural economies – in the ‘web’ is becoming increasingly important and vital.

Role of agricultural players in the ‘web’

The EU keeps facing a complex set of old difficulties: How to improve social welfare and personal livelihoods in the rural sector and enhance multiplier effects of agriculture? How to empower marginalized stakeholders to sustain the diversity of agriculture and food systems, including their cultural dimensions? How to maintain and enhance environmental and cultural services while increasing sustainable productivity and diversity of food, fiber and biofuel production? How to manage effectively the collaborative generation of knowledge among increasingly heterogeneous contributors and the flow of information among diverse public and private organizational arrangements?

At the same time some *new challenges* have significant impact on rural development, namely: globalisation, trade liberalization, water management, bio-energy and *climate change*.

Mitigation of negative impacts of the climate change and the achievement of positive changes requires solution to questions how to promote public goods, positive externalities and how to cease negative externalities in Europe. Market players are willing and able to act in favour of the climate if the additional costs of public goods are financed.

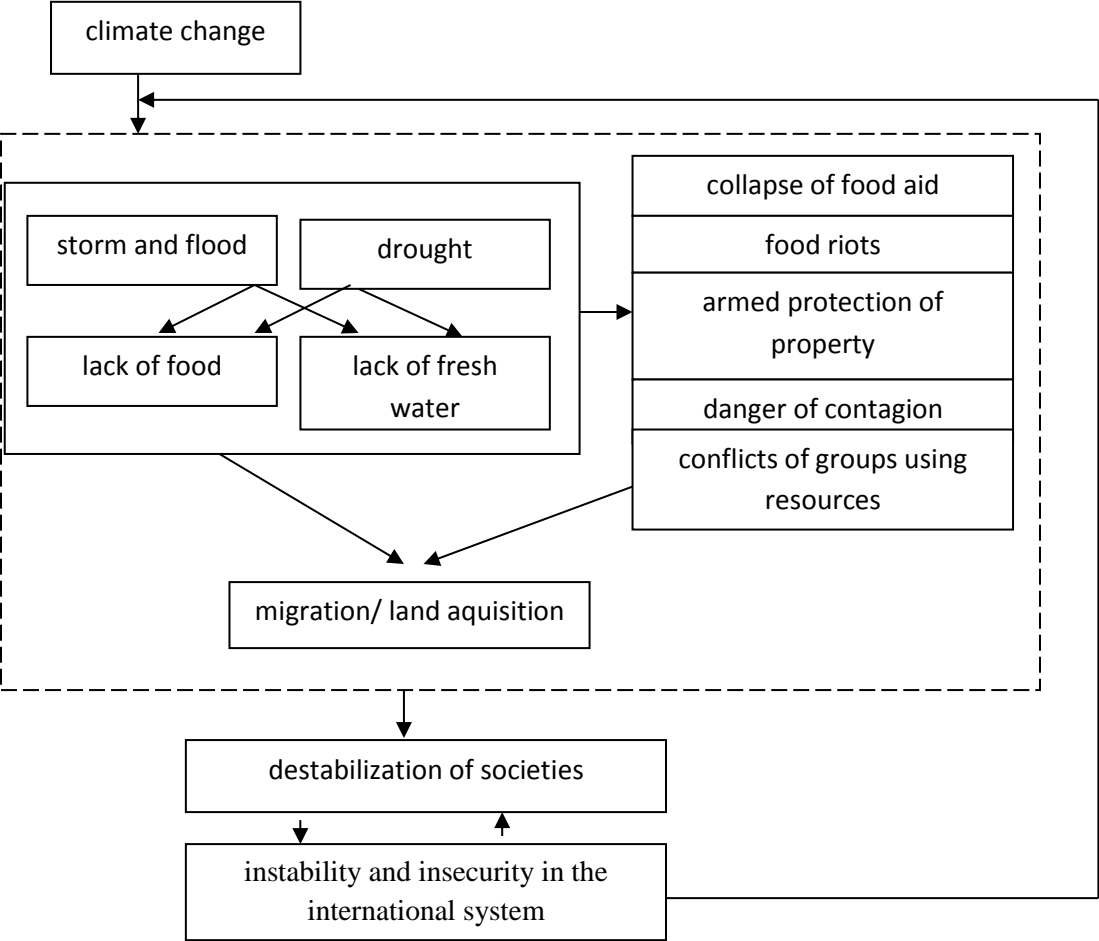
In rural economies the approach to this problem and the different related conflict constellations (Figure 2) *supposed to be integrated and interdisciplinary, but it needs to be stressed that the role and possibilities of agriculture is outstanding*. This can be explained by my following statement: agriculture is not only a victim of climate change, but a prime catalyst of the process as well. Climate conditions (in particular precipitation, the runoff of river waters, sequestration of greenhouse gases, etc.) are strongly affected by agricultural

activity. So ‘tools’ of agricultural players by means of which they can act in favour of positive impacts need to be taken into account and used on purpose.

Furthermore, autonomous adaptation reactions given to new challenges require comprehensive control, and also well managed interventions could be incorporated.

Figure 2

Conflict constellation – driving forces of the international destabilization



Note: conflict constellation in the box with dashed line

CONCLUSION

The rural is the place where man and living nature encounter, interact, and mutually transform each other. Today the rural area is not only a place of production but rather of consumption (let’s think of e.g. recreation). It needs to be stressed, however, that not even agriculture is contributing necessarily to the reproduction of landscape, nature and healthy environment, but it often occurs that this sector is endangering it, too. *New holistic approach to agricultural*

productions need to be developed which focuses on the preservation of large scale ecosystems while boosting food production and protecting environmental services.

Nevertheless agriculture as a sector - on its own - is not able to solve the problems of rural areas. To turn rural economies into sustainable or new rural economies *adequate new rural development policies* are needed. *The new rural development paradigm supposed to be characterized as follows:*

- territorial based, integrated (multisectoral) policies ensure the sustainable development of rural areas;
- rural development is not equal to economic growth or economic development occurring in a certain rural region, as regards the growth of rural economies it needs to be highlighted, that certain forms of economic growth might even cause damage to rural development;
- the improvement of competitiveness is of great importance: local peculiarities (environmental or cultural amenities, traditional products) are transformed into competitive advantage;
- provision of rural public goods is significant as well and revalorisation of rural resources
- the role of agriculture in rural economies remains outstanding: agriculture is the main purchaser of local inputs and the provider of rural public goods, but agriculture on its own is not able to fulfil all functions of rural development;
- developing and strengthening of “new rural economies”;
- developing the web of the new rural economies;
- tackling the vicious circles generated by problems – globalization, climate change, demography, remoteness, education, labour market - of rural areas by means of e.g. ICT technologies
- preserving and enhancing ecosystems.

Rural dimension definitely needs to be integrated into territorial cohesion. A territorial policy – with heterogeneous tools for heterogeneous, sometimes overlapping and interdependent regional and local economic spaces - contributes to developing territorial capital, increasing territorial competitiveness. In the European Union extreme regional heterogeneity can be observed in terms of initial capital endowment, sector structure and EU policy – CAP / Cohesion policy - implementation.

The aims that need to be attained by using different targeted and tailor-made measures in the framework of integrated rural policy cannot be reached simultaneously as these aims are more or less competing aims causing a tension in the future too. *Decision needs to be made which one is of higher priority – economic or environmental goals. The maximized result calls, however, for innovative thinking, and innovative, even creative policy approach and being able to find the golden middle way in terms of competitive economic performance and surviving ecosystems.*

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