THE ROLE OF INNOVATIONS AND INVESTMENTS IN RURAL AREAS: THE CASE OF KOSOVO AND BULGARIA

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Abstract: *Sustainable rural development is vital to the economic, social and environmental viability of each nation. Nowadays, rural areas are facing complex challenges and opportunities: agriculture is no longer the backbone of most rural economies; as the role of non-farm sectors (manufacturing, tourism and industry) is increasing. These new realities require for a new approach to innovations and investments in rural areas. The paper focuses on the role of investments and innovations in rural areas in Kosovo and Bulgaria, and their role for achieving sustainable rural development. The study aims to analyse and assess the implemented approaches of innovations and investments in rural areas in both countries.*

1. Introduction

The last reform of the Common Agricultural Policy (CAP) has kept the structure with two pillars of this policy, with rural development still representing the so-called "second pillar of the CAP". EU rural development policy was introduced as the second pillar of the CAP during the 2000 Program Reform. It is funded by the European Agricultural Fund for Rural Development (EAFRD). The objective of this fund is to contribute to the implementation of the Europe 2020 strategy (European Union's growth and jobs strategy) by promoting the sustainable development of rural areas. The EAFRD should contribute to the development of a climate-balanced and climate-resilient, competitive, and innovative agriculture-friendly territorial and ecological sector.

The six priorities of the new rural development policy for the period 2014-2020 are as follows:

• Stimulating the transfer of knowledge and innovation in agriculture and forestry (developing the knowledge base in rural areas, strengthening the links between agriculture, forestry and the research sector);

- enhancing the sustainability and competitiveness of all types of farming, as well as promoting innovative technologies in agriculture and supporting sustainable forest management;
- promoting the organization of the food chain, animal welfare, and risk management in the agricultural sector;
- restoration, conservation, and consolidation of agricultural and forest ecosystems (biodiversity, water, soils);

• promoting the efficient use of resources (water, energy) and supporting the transition to a low-carbon economy (use of renewable energy, greenhouse gas emissions, carbon capture and storage);

• promoting social inclusion, poverty reduction, and economic development in rural areas (creating jobs, stimulating local development, improving accessibility of information and communication technologies).

The main strategic and planning document for rural development within the EU highlights the importance of investments and innovations in rural areas in order to increase the competitiveness of the economic agents there, as well as to improve the economic and social conditions there. National policies further developed these priorities into concrete measures and programmes.

The paper focuses on the role of investments and innovations in rural areas in Kosovo and Bulgaria, and their role for achieving sustainable rural development. It aims to analyse and assess the implemented approaches of innovations and investments in rural areas in both countries.

The paper is structured in four parts, namely introduction, state of art, state policy and measures for investments and innovations in Kosovo and Bulgaria, conclusions. The authors used for their analysis planning and strategic documents publicly available in both countries (respectively Kosovo and Bulgaria), as well as official data and statistics from the National Statistical Institutes of both countries, Eurostat, and data base from survey conducted in rural areas of Kosovo.

2. State of art

The investments and innovation processes are key priorities for the Common Agricultural Policy (CAP) and have strong financial support in the European Union. Financial instruments are being used to stimulate investment and innovations in rural areas. The investment process in rural areas faces a number of challenges: investment in three areas and two levels, namely: investment in agriculture, investment in economic activities, and investment in non-economic activities and infrastructure. Investments are at the micro and mezzo-level, i.e. business units and municipality/district.

The investment and innovation processes in rural areas reflect the peculiarities of the main sector in those areas - agriculture, its specificities through the influence of natural, technological and biological factors; risk of non-disclosure of varieties and breeds; High share of fixed costs; Mismatch between working and technological processes, The dynamics of investment in agriculture depends on the intersection between these peculiarities and the level of activity of economic operators.

Specifics of rural areas require new approaches and new strategies. Globalisation, changes in the public financing of the agriculture sector and the emergence of important non-farm niche markets put rural areas in direct competition, confronting them with new threats and opportunities. While agriculture is no longer the backbone of most rural economies, emerging sectors include tourism, manufacturing, and energy production among others. Richard Hecklinger describes the new reality as follows: “Rural areas face several new opportunities and challenges which call for appropriate rural development policies and a more effective use of scarce financial resources.” (Richard Hecklinger, OECD). Rural areas are increasingly looked upon as a heterogeneous array of regions where one size fits all policies is no longer suitable to capture the diversity of rural needs and opportunities. This has significant implications in terms of defining and implementing new investment priorities for rural development.

Evidence from across the OECD shows that the capacity of regions, whether urban or rural, to support processes of learning and innovation is a key source of competitive advantage. Innovation in rural areas can be about “doing traditional activities in a new way”, about starting up new businesses or about changing the way government interacts with citizens. In all these cases innovation is strongly linked with social processes such as the creation of networks, the strengthening of local identities, and the creation and dissemination of knowledge.

In the paper it is claimed that the question of innovations is not just a theoretical one, it has strong policy implications and influences on public investments. Traditionally, theories around innovation focus on innovation within firms and innovation is often viewed as a scientific and/or technical sequential process driven by experts. Innovation is thus often, wrongly associated with “high-tech products” and with R&D activities mostly carried out in urban areas. In order to make informed, strategic decisions on investments in rural innovation, the following distinctions must be made:

- First, innovation is not just about new products, it is also about processes. Innovation in a rural context can thus be crucial in terms of opportunities linked with traditional activities such as farming or tourism that thanks to technologies can be carried out in a more productive way.
- Second, innovation is also about the way governments act and interact with other sectors and players. Institutional innovation is thus a key issue in rural development. Innovative governance tools can be key drivers worth investing in for the development of rural areas. Third, a key distinction, having impact in terms of investments, should also be made between the “production” and the “assimilation” of innovation. Evidence shows that while R&D investment has become a paradigm of innovation for some regions, investment in education and training is more important in many rural areas. Frequently, rural development can be triggered more effectively by investing

in the local capacity to assimilate knowledge spillovers generated elsewhere than to actually produce that knowledge.

- Finally, even when talking about the production of technology, one should make a clear distinction between emerging and mature technologies. Analysis of patent applications shows that while urban areas have a competitive advantage in producing emerging technologies because of thicker markets and knowledge spillovers, rural regions can be competitive in the development of mature technologies. There are several examples of world-class innovative rural SMEs in mature technology sectors as it is the case in Finland or Canada. A critical part of the process is the combination of internal and external competences and knowledge.

"*If you invest in human capital first, your chances of being able to generate research and development, create innovation through R&D, as well as assimilate greater innovation are much greater than if you decide to do it the other way around".*

Andres Rodriguez Pose (Spain)

The knowledge-based economy brings a new reality which is only beginning, comprised of telecommuters, home-based businesses, web-based businesses, satellite offices, and relocations. Based on recent research, the discussion focused on the importance that new rural residents and the "creative class" in particular can play an important role in rural development. In fact, the impetus for innovative projects in rural areas often comes from actors external to the locality. A common comparative advantage shared by some rural areas is the ability to support a high quality of life. Research presented at the conference showed that a number of professionals, pertaining to the creative class (such as architects, artists, engineers, software developer, designers etc.), are more and more keen to move to places that are offering a better quality of life. This argument is particularly relevant in countries where most rural areas are relatively well linked to urban centres, and thus that type of individuals can move more easily.

An important implication of these findings is that valorising amenities is not just conducive to the attraction of more tourists and retirees but also to the attraction of younger, talented individuals. Their presence, in turn, can generate relevant positive effects on the rural economy in terms of new firm formation and employment growth. In the context of rural areas, the combined presence of three factors has a more substantial impact on economic growth than either in isolation: entrepreneurship, the creative class, and amenities, such as landscape and recreation.

3. Innovations and Investment in Kosovo and Bulgaria: state, policies and measures

3.1. Kosovo - existing measures, policies, funding, current situation

A) Investments

The **Agriculture and Rural Development Programme (ARDP)** established in 2007 by the Ministry of Agriculture, Forestry and Rural Development (MAFRD) and backed by the World Bank offers a framework for the development of Kosovo’s agricultural sector. It takes into account the current and changing nature of the EU’s Common Agricultural Policy. The MAFRD continued with the grant support scheme, in order to support investment in agricultural households in different sectors as well as to achieve higher standards, improve the quality of various agricultural crops and achieve the overall objectives of RDP. By including measures and submeasures for different agricultural sectors, the RDP is implemented by the division for Approval of Rural Development Project as follows:

Measure 101 - Investments in physical assets in agricultural economies, this measure includes the fruit trees sector (apple, pear, plum and cherry), the small fruits sector (strawberry, raspberry and blackberry), the vegetable sector (greenhouses) and vegetables storage facilities, the meat sector (fattening of calves and broilers), the milk sector (milk cows, sheep and goats), the grape sector, and the egg producing chickens sector.

Measure 103 - Investments in physical assets in the processing and trade of agricultural products, this measure involves the milk processing sector, the meat processing sector, the fruits and vegetables processing sector, and the wine sector.

Measure 302 - Diversification of farm and rural business development, includes submeasures:

- 302.1 Beekeeping, production/processing and marketing of honey;
- 302.2 Collecting and processing of non-wood forest products and their marketing;
- 302.3 Processing of agricultural products (cultivated) and their marketing;
- 302.4 Development of craftsmanship activities and their marketing;
- 302.5 Development of rural tourism and farm tourism.

Measure–Scheme for irrigation of agricultural lands;

Measure 303 - Implementation of local development strategies - Leader approach includes submeasure

- 303.2 The first activity "Functionalizing of the selected LAG 2015 and RDN";

The budget projected for 2015 for the abovementioned measures within the plan for agriculture and rural development is specified in the table below, for each measure and submeasure.

The rural development grant programme is supporting the rural sector to improve competitiveness and productivity in order to eventually be able to compete in the EU. Additionally, it is the ambition that grants will generate sustainable and higher income jobs in the rural areas, although there can be short-term trade-offs between promoting productivity and jobs simultaneously.

Investment projects under Measure 101 were co-financed according to the following rule: National budget (65%) + farmers own funds (35%). The minimum value of eligible expenses for the project within this measure was € 10,000, except for the projects concerning berries, where the minimum value of the project was € 3,000. Maximum value of eligible costs for projects supported by public funds within this measure was € 100,000. The financial support implemented through ARDP in the last three years (2014-2016) was € 183,3 million in total. Out of this amount € 94,4 million were implemented as co-matching/investments grants and € 88,9 million as direct payments. As a result of those investments grants 571 ha orchards, 134 ha wineyards, 62 ha of green houses, 224 new stables, 22 new projects in rural tourism were established, 560 farmers invested in renewable energy, and 2076 ha invested in irrigation systems at farm level (MAFRD, 2016).

Agricultural producers assess the possibility to invest available capital in their farms as moderately important (25.9 % of all respondents). Small percent weighted investment of available capital as important (18.1%) and very important (12.4%). Investment of remittances received in farms is evaluated as a very important from 6.9 % of farmers, while 12.7 % assess this opportunity as an important or moderately important (14.3%). Nearly one-third of farmers do not accept the idea to invest remittances received in farms (8.1 % pointed that this is not important and 20.1% – slightly important). The prevailing part of farmers (64.8 %) stand behind the statement that improved physical structure will lead to increase of likelihood in case of starting non-farm business. The results are illustrated graphically on Figure 1. This is a good sign from the demand side of investments. There are expectations for policy measures, targeting investments in non-farm initiatives, which will improve the level of sustainability of rural areas, and will support competitiveness of different economic activities there (MAFRD, 2016).

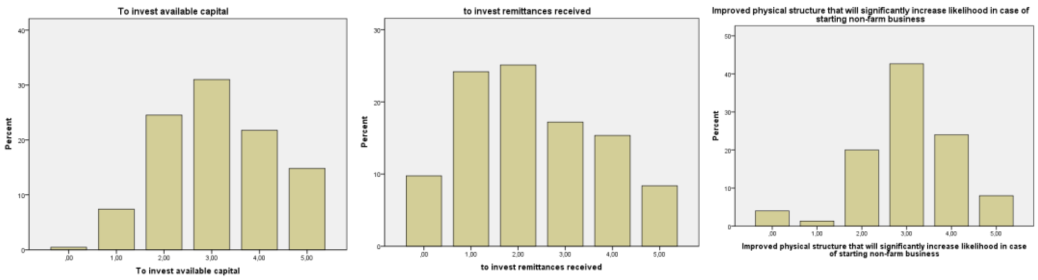


Figure 1. Assessment of possibilities to invest in rural areas

B) Innovations

The role of innovations in economic development has not yet been fully recognised in Kosovo by the general public and especially in rural areas, but government and business structures increasingly reflect the importance of innovation as one of the main pillars of economic growth.

The Ministry of Education, Science and Technology (MEST) and the Ministry of Trade and Industry (MTI) are the main institutions responsible for creating a policy framework and environment conducive to innovation, while the Ministry of Economic Development is gradually increasing its role in the innovation system, and the Ministry of Agriculture, Forestry and Rural Development (MAFRD) is responsible for implementation of innovation in rural areas with special focus on agriculture, forestry and food processing. Still, there is scarce information about the effect of implemented innovations in rural areas.

The innovation infrastructure in Kosovo generally lacks equipment and human resources for research and development (R&D), following years of neglect of R&D activities in Kosovo's higher education system. Institutions have been created to support technology and innovation, mostly oriented towards providing education and consultancy services to entrepreneurs. Science, technology and innovation (STI) policy in Kosovo is in its development phase. Innovation has only recently been recognised as a precondition rather than a consequence of domestic economic development as the current situation is characterised by a lack of basic research and technology statistics.

Although the Law on Scientific Research states that up to 0.7% of the government budget is to be allocated for scientific research activities, the expenditure on R&D in 2015 amounted to approximately 0.1% of GDP. This is significantly below the European average (1.49% in 2015, as reported by EUROSTAT in 2015), and well below the average of the region and many developing countries. However, the overall system is slowly developing and science, technology and innovation are becoming more and more recognised as economic drivers. The Ministry of Education, Science and Technology, together with the universities and non-university research organisations are aware that research and development activities need to be integrated into the higher education system (as outlined in the Higher Education Strategy (MEST, 2004) and, beyond that, should gradually gain importance for the economic and social development of Kosovo.

The government's recognition of innovation as a priority is one of the major strengths of the current institutional framework for innovation. All of the main economic programmes and strategies touch upon the issue of fostering innovation and scientific research activities in Kosovo with varying degrees of intensity. This shows that innovation is starting to be considered as an element of economic growth. A policy framework for developing innovation exists to some extent, albeit in a fragmented and uncoordinated manner, and an innovation strategy is currently being created.

3.2. Bulgaria - existing measures, policies, funding, current situation

The institutional and financial support of business units in rural areas is mainly carried out by two institutions - the Ministry of Economy (MoE) and the Ministry of Agriculture and Food (MAF). The Ministry of Economy (MoE) is supporting its investment and innovation activity and intentions through the Operational Program Innovations and Competitiveness, Measure Technological Development and Innovation. The Ministry of Agriculture and Food implements its policy for technological renovation of the farms and for the sustainable development of the rural areas by improving infrastructure and diversifying economic activities through the Rural Development Program (RDP), Measures: M4 Investments in physical assets ; M6 Farm development and business; M7 Basic services and village renewal in rural areas; M8 Investments in the development of forest areas and improve the viability of forests. At the same time, investment projects and innovations are being implemented in rural areas, which are financed on a market basis through the use of various credit schemes by business units, wholly privately funded, and without the participation of public funds.

A) Investments

Four measures in the Rural Development Programme (RDP) 2014-2020 are focused on investments:

a) ***Measure 4 Investments in physical assets*** (RDP 2014-2020) is allocating the biggest budget within the programme (EUR 777 million public expenditures).

Investments can be made for:

- investment in rural areas in non-agricultural activities;
- tourism development and production;

- development of services in all sectors (e.g. child care, adult care, based IT);
- production of energy from renewable energy sources for own consumption;
- development of crafts.

b) ***Measure 6-Farm development and business*** (EUR 204.4 million public expenditures). Investments can be made for:

- investment in rural areas in non-agricultural activities;
- tourism development and production;
- the development of services in all sectors (e.g. child care, adult care, based IT);
- production of energy from renewable energy sources for own consumption;
- development of crafts.

c) M7- Basic services and village renewal in rural areas (EUR 625.7 million public expenditures) - supports the construction/reconstruction of:

- Roads and squares, water facilities in settlements, social infrastructure, municipal buildings, sports infrastructure, subjects related to cultural life, municipal educational infrastructure of local importance in rural areas, construction of broadband infrastructure for next generation access;
- Also, supports construction, reconstruction and equipment of tourist information centers, tourist attractions that are connected to the local natural, cultural and/or historical heritage, tourist infrastructure - information boards and signposts to tourist sites and routes, safety equipment, bike trails, hiking trails, recovery, restoration, repair and/or reconstruction of buildings of religious significance.

d) ***Measure 8 Investments in the development of forest areas and improve the viability of forests*** covers EUR 63.5 million public expenditures. Main areas of intervention are for:

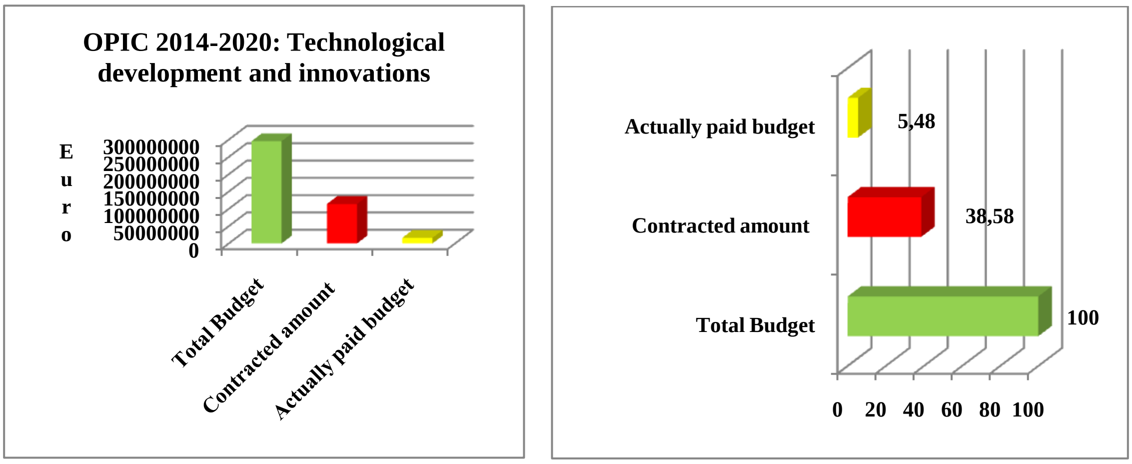
- Afforestation of agricultural and non-agricultural land and maintenance of the newly established forests;
- Introducing preventive activities such as creating mineralized strips, construction of helipads and water sources, construction of watchtowers and roads;
- Reforestation of damaged forests, construction of small-scale tourism infrastructure; conversion of coppice forests into mixed high forest;
- Transforming coniferous plantations in natural stands; restoration and maintenance of shelterbelts;
- Purchase of new machinery and equipment for primary processing of wood, such as sawing, cutting, drying; purchase of specialized forestry

machinery and equipment for logging, hauling, loading, and timber up service.

Almost BGN 6.5 million were paid for investments in agricultural holdings under 36 approved projects. Contracts signed during March 2017 are 49, the subsidy for them amounts to BGN 18.5 million. BGN 1.9 million were also transferred for investments in processing of agricultural products.

In March 2017, BGN 0.5 million were paid to farmers with approved projects for start-up aid for small farms. The subsidy is paid to candidates who have already concluded contracts under the submeasure and have begun the implementation of their projects.

Under the Operational Programme Innovation and Competitiveness (OPIC) Priority Axis 1 ***Technological Development and Innovation***, the majority of beneficiaries are micro enterprises (45%), applying with projects for 36% of the budget for the measure and small enterprises 27% of the applicants for 24% of the budget. This measure provides support to start-ups to enhance innovation, with the implementation of the projects supported by the procedure leading to the development of a product (product or service) or process.



(a) (b)

Source; Ministry of Economy, OPIC, March 2017.

Figure 2. Level of fulfilment of mesure Technological Development and Innovations

There is lack of statistical information (detailed at national and sub-national territorial administrative level) in that number, specifically for rural areas about investments (in total, by types, sources, activities). Thus, the analysis is based on data derived from execution of OPIC and RDP.

B) Innovations

Innovations are priority for Bulgarian national policy on all levels. One of the main strategic goals Bulgaria has set for the last 15 years is enhancing the competitiveness of Bulgarian industry and improving its ability to withstand the competitive pressure of the European and world markets. A couple of strategic documents were drafted and adopted drawing the strategic route. One of the key documents is the **National Reform Programme 2014 – 2020**. It emphasises that innovation policy is one of the key areas, which will improve the competitiveness of the Bulgarian economy and the development of the potential for growth in the post-crisis period. The Programme envisages:

• increased investments for R&D up to 1.5 % of GDP by 2020;

• expanded access to finance for SMEs;

• a targeted state policy to support innovation;

• adoption of a Law on Innovation and development of a new national innovation strategy and amendments to the Law on Investment Promotion to create incentives for investment in high tech production and services;

• more efficient use of OP Innovation and Competitiveness by speeding up the implementation of calls associated with technological modernisation of SMEs and large enterprises, projects for the advancement of applied research, establishment of R&D centres, development of clusters, etc;

• measures to improve the quality of scientific research, strengthen its applied orientation and improve science-business relations.

Another document is the **National Development Programme Bulgaria 2020,** which foresees:

• support for the development of a high performance industrial base;

• encouragement of innovation and scientific research;

• development of human resources for the needs of innovative enterprises;

• advancement of the scientific and innovation infrastructure and environment stimulating cooperation between science and business;

• improvement of the regulatory framework for the agents of innovation processes, as well as more effective organisation and management of the scientific and innovation processes covering all stakeholders in the national scientific and innovation field.

The third document is the **Innovation Strategy**. The Innovation Strategy provides the exact measures to achieve these goals based on the understanding that the industry's competitive advantage could be achieved by developing, implementing and disseminating innovation, providing leading competitive position in the international markets, meeting in advance new needs of national and international consumers.

There is only one measure in the RDP 2014-2020 related to innovations in agriculture - Measure 16: Cooperation" of the 2014 – 2020 Rural Development Programme, directly related to innovations, will enable a recovery of the broken connection between agricultural holdings and science. There is lacking information about the outcomes and impact of this measure up to now.

4. Conclusions

A new holistic approach should be implemented for the role and importance of investments and innovations for rural areas. Agricultural development demands and depends on innovation and innovation systems. Innovation and investments are widely recognized as a major source of improved productivity, competitiveness, and economic growth throughout advanced and emerging economies. Innovation also plays an important role in creating jobs, generating income, alleviating poverty, and driving social development. A modern rural policy should not be built on top of the previous rural (agricultural) policy, because the result would be mixing a legacy of agricultural policy with new approaches but not a strategic vision for the region in question. The new policy framework should be built around the objective of regional competitiveness, since rural and urban regions alike face the same challenge: to build sustained, competitive advantage in global markets. There is a necessity rural policy to be considered as a component of comprehensive regional strategic documents and not as a niche policy.

The new approach has to be about how governments and private actors should spend their resources in the new rural policy. Rural regions contain considerable potential, often not yet fully exploited. Investments should aim at releasing this vast potential. The future prosperity of rural regions will be determined by drivers such as human capital, entrepreneurship, innovation, renewable energy, technology, creative industries, and competitive farming

Public and private investments are needed to make the most out of rural resources. First, they should provide rural regions with appropriate services; second, they should support rural citizens in their capacity to innovate; and third, they should exploit the growing linkages between urban and rural economies. A comprehensive regional policy should be the umbrella for informed, strategic decisions on investments that are able to boost the competitiveness of rural regions and enable them to contribute to national development and growth.

Kosovo and Bulgaria are facing a big challenge in respect of investments and innovations in rural areas. While policy measures for investments are in a more elaborated stage, both countries are more or less on an equal position in terms of innovations in rural areas. Both countries lack comprehensive, detailed, reliable and representative information relevant for the needs of investors and innovation implementers. Rural development policies in Kosovo and Bulgaria are focused on investments – technological modernisation and competitiveness. There is a need for widening the number and scope of policy measures, targeting investments and innovations in rural areas.

References

1. Assessment of the Kosovo Innovation System. OECD. 2013
2. Agriculture Innovation Systems:An Investment Source Book . World Bank. 2012
3. Bulgaria: Operational Programme Innovations and Competitiveness 2014-2020. (Last Accessed on 28 March 2017 : https://www.eufunds.bg/en/programming-period-2014-2020/operational-programmes-2014-2020/operational-programme-innovation-and-competitiveness-2014-2020/item/13783-operational-programme-innovation-and-competitiveness-2014-2020
4. Bugaria: Operational Programme SME Inititative 2014-2020 (Last Accessed on 28 March 2017 : https://www.eufunds.bg/en/programming-period-2014-2020/operational-programmes-2014-2020/operational-programme-sme-initiative
5. Bulgaria: Rural Development Programme 2014-2020. (Last Accessed on 28 March 2017 : https://www.eufunds.bg/en/programming-period-2014-2020/operational-programmes-2014-2020/programme-rural-development-2014-2020
6. Hecklinger, Richard, Global Forum on International Investment: Attracting International Investment for Development, OECD, 2003
7. Kosovo: Agriculture and Rural Development Programme (ARDP), MFRD, Pristina Kosovo.
8. Kosovo: Green report 2016. MAFRD, Pristina, Kosovo.
9. Smart Specialisation and innovations in rural areas. JRC Technical Report. S3 Policy Brief Series . #09/2014.(http:/ipts.jrc.ec.europa.eu/)
10. Methodological handbook for implementing an ex-ante assessment of agriculture financial instruments under the EAFRD. EC Directorate-General Agriculture and Rural Development/EIB - Advisory Services fi-compass. 2016