

How to ensure sustainable development of Serbia: supporting innovation and entrepreneurship?

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Abstract— Author is discussing possibility of sustainable development of Serbia. She is giving overview of existing governmental support to the development of entrepreneurship and emphasizes giving advantages in all sorts of supports to foreign investors comparing to domestic. Thus, policy makers in Serbia have created eco system in the country which stifles selfconfidence of young entrepreneurs and others, too. Author criticizes such state policy and states that only promotion of entrepreneurship and innovative society could bring crossing the economic gap towards other European countries. She presents some case studies which already are implemented and make changes in the society and propose few models which would speed up economic development, increase power of domestic market and bring benefits to all society. The base for such activities is within smart specialization strategy (RIS3) priorities, already developed for the region of Vojvodina. RIS3 is just in the process of development for the national level of the Republic of Serbia. The most, to young generation to empower them that sustainable development of Serbia is possible and is in their hands. The article contributes to understanding of need for policy change which should strengthen selfconfidence of people, specially young generation, to move towards self-employment.

Index Terms — entrepreneurship, innovative, smart specialization, sustainable development, selfconfidence.

I. INTRODUCTION

Research and Innovation Strategy for Smart Specialization (RIS3) is a strategic approach to the economic development of a country or a region through targeted support for research and innovation. To create a good vision for development of a region or a nation is necessary to:

- Identify sectors with greatest strategic potential,
- Develop a management system based on multi-stakeholder participation,
- Set strategic priorities and
- Use smart policies to maximize the development potential based on knowledge.

The origin of the concept is from multiple complementary sources. It was taken over by Dominica Foray and the group: Knowledge for Growth Expert Group within the European

Research Area (European Development Area - ERA). This group of experts explored why Europe is lagging behind the US in competitiveness with emphasis on differences in research and development, R & D capacity and the distribution of new technologies [1]. The group identified that the field of research in Europe is too fragmented and that there is a lack of coordination of investments in research and innovation (R & I) by stakeholders, That there is no critical mass among the stakeholders. It was noticed that there is a "just me" syndrome and investing in similar areas and in what is modern as information and communication technologies (ICT), nano- and bio-technologies [2]. Their recommendation is to support structural change and enable the development of new sectoral areas or industries by investing in R & D in areas that contain strategic potential in each of the European regions, accepting that regions differ in strength and potential [3], [4].

R & D strategies must therefore be different for different regions, taking into account the specificities of the region, for example, in some regions it is more logical to invest in basic research for new technologies, and in others in applied science, which are practically oriented. In addition, regions must be able to see their strategies with the eyes of others, identify niches for themselves and align their policies with policies of other regions [5].

The Cohesion Policy of the European Commission aims to reduce the differences between the regions of Europe and to ensure the development throughout the whole Europe. Structural funds are the main tools to implement such a policy, and within the process, Smart Specialization has been introduced [6], [7].

In the budget period 2007-2013, the average investment of the Cohesion Fund in R & D across Europe was 25%. In the current 2014-2013 programming period, in developed and transition countries, 80% of investments should be channeled into energy efficiency, renewable energy sources, competitiveness of SMEs and R & D. In less-developed regions, the target is 50%. In order to get funds from the EU (ERDF), a strategy for smart specialization (RIS3) must be developed.

Ideas on Smart Specialization are in line with the EU 2020 strategy and the Strategy should be the answer to the current economic crisis. Thus, it identifies niches for a competitive

advantage, solves the main social problems (supply-demand), real innovation partnerships, focusing on greater co-operation among different social stakeholders, and equating public or private resources and strategies.

EU R&D investments were mostly in the northern countries south regions. The EU intention is to move them towards northern countries in order to:

- Strengthen them,
- Find their dominant sectors for development,
- Develop innovation potential and
- Use the dedicated funds [8].

The concept of Smart Specialization is based on accumulated knowledge gathered in the work on Regional Innovation Strategies (RIS and RITTS). It is a successful concept, except that it has been observed that many regions have used external experts to develop strategies, rather than a regional stakeholder group, which led to the problem. Also, in the first group of strategies, the participation of entrepreneurs was lacking, and bottom-up methodology was less used and more regional approach was used. It was too big focus on technology and R & D, which led to the non-recognition of other areas of innovation, such as service innovations and of the need for greater policy integration [9], [10].

Unfortunately, it exists syndrome „Just me“. All regions and countries are investing in similar sectors, in what is modern, such as:

- information and communication technologies (ICT),
- nano- and bio-technology.

RIS3 recommendation is to support structural change and to enable development of new sectors or industries by investing in R & I in areas containing strategic potential in each of the European regions accepting that regions have different strengths and different potentials.

Goal should be to develop different strategies for research and development for various regions, so that they will be taken into account specificities of a region. Example is: in some regions it is more logical to invest in basic research for new technologies, and in others in applied sciences, which are practically oriented.

Actors in regions must be able to see their strategies through the eyes of the others. They must identify a niche for themselves and to harmonize their policies with policies of other regions.

Definition of smart specialization is that its aim is to identify and select a limited number of priority areas for investments based on knowledge, with a focus on own strengths and comparative advantages. It refers to the specialization of the region in research and innovation and can be regional, national or transnational.

Limited natural and human resources in the EU: should be used rationally. It means: Not all the regions should carry out research and innovation activities in all the areas. R&I should be only in those sectors where they can achieve best results that can be used by other regions

and the whole EU.

Process of creating and implementing RIS3 should involve all stakeholders in the innovation process:

- SMEs,
- Large companies,
- Universities,
- Research institutions,
- Advisory companies ...

Actually, in addition, RIS3 focuses on strategic cross-border and transregional networking and cooperation because of need for greater mass of critical resources and diversity.

II. SITUATION IN SERBIA

A. What is going on in Serbia?

Direct foreign investments: DFI are supported by the state administration. When it comes to the amount of investments made in Vojvodina, according to the data of Vojvodina Investment Promotion – VIP agency, Vojvodina today boasts more than 300 foreign companies, over 40 of which come from Germany. They have so far invested more than billion Euros and employed more than 12,000 people. Germany tops the list of countries who invest in Vojvodina.

At the provincial level, the Vojvodina Government offered some investment incentives. Managed by VIP agency, these incentives included the reimbursement of costs for project design or temporary facility leasing (up to one year) while a greenfield facility is being constructed. The maximum reimbursement level was approximately USD 139,000 per business entity. In addition, the Vojvodina Provincial Secretary for Work and Employment awarded incentives for new employment.

Serbia's tax laws offered several tax incentives to new investors. The corporate profit tax rate is a flat 15 percent, one of the lowest in the region. Non - resident investors are taxed only on income earned in Serbia. Companies that invested more than one billion RSD (approximately USD 12 million) in fixed assets and hire at least 100 new employees were exempt from the corporate profit tax for up to ten years.

The Serbian government did not maintain a policy of “forced localization” designed to oblige foreign investors to use domestic content in goods or technology. Similarly, the government does not force foreign investors to establish and maintain a certain amount of data storage within the country [12].

They receive clear priority over domestic investors, like: 10.000 € support for each employed worker in a new set up foreign company in Serbia. Costs for building premises can be covered. Free land with the infrastructure is given without fees.

B. What does it bring to Serbia?

Such companies do not have R&D&I activities in their headquarters in Serbia. They give low wages, human resource price is very low for them. They do not organize education of employed. All these facts cause exhausting of labor power

what brings short average life, low standard of living, many illnesses, human dissatisfaction.

Higher educated people are leaving country which invested a lot into their education, because of lack of qualified jobs. Lower educated live with low salaries. All these as a consequence has that Serbia is not on the road of sustainable development and bring to the country:

- Economic problems
- Ecological problems
- No social responsibility.

C. What makes the difference?

When talking about foreign direct investments: FDI, these are investments into production plants and not into R&D activities. The goal of investors is exclusively profit which should be taken out of Serbia and should be transferred to any foreign country.

Investors who invest into start ups invest into human resource (HR) primarily and R&D. They do these with high risk and they expect high income.

D. What does Serbia need?

Serbia needs, as most important, **SELFCONFIDENCE!!!** This means that Serbian citizens must be convinced:

- That they can develop new products and services.
- That they can start new flexible companies for competitive niches which will be socially responsible.

This will be new entrepreneurship cycle which will restart industrial development.

Serbia does not need FDI! Serbia needs investments in start ups and in developed companies to bring them to the highest level of development! For such roadmap Serbia needs risky capital (domestic and foreign).

As soon as possible Serbia must establish sectoral start up incubators very focused to break through the market.

Their management must consist of:

- top business developers,
- top economists,
- top lawyers,
- top sectoral experts,
- top marketing experts ...

Serbia needs two types of state measures. First is support to beginners to start a business, to set up a start up company. Second are measures which will speed up development of successful entrepreneurial companies and SMEs and bring them to the next phase of companies life cycle with more capital and more employed. Innovation vouchers could be a good financial mean to accelerate joint development of innovative products or services together with scientific research institutions which includes mentoring of this process by experts.

E. Serbia needs:

Recognition by the State of the importance of accredited laboratories and state's measures to support the establishment and development of accredited laboratories. Entrepreneurs and SMEs owners can not afford such big investments. Development of a product must go through process of making prototyping and „zero“ series, than testing and reaching EU standards. Laboratories must be for clusters of companies, in „open-lab“ concept.

Measures to support the development of clusters as network of organizations linked with any common interest.

Measures to support start up incubators.

Measures to support professional practice in companies for students and pupils, possibly through emission of vouchers. This will bring connection with real world and practical knowledge.

Measures which result will be better equipped faculties, universities and established open-labs in them.

F. When to start with activities?

It must be accepted that entrepreneurship and innovativeness must be developed from pre-school age by:

- Raising awareness about entrepreneurship
- Creating Career development centers supported by the State for three groups:
 - for leaders
 - for experts
 - for others.

G. What Vojvodina has?

In the Autonomous province of Vojvodina, there are over 130 successful spin off companies at Faculty of technical sciences in Novi Sad.

One of them, ICT company (Schneider Electric DMS NS d.o.o.) has about 1000 researchers/engineers employed and covers over 1 billion users all over the world in the sector of smart energy management.

In April 2015 the Assembly of the Autonomous Province of Vojvodina has established the BioSens Institute - Institute for research and development of information technology in biosystems! Within H2020 Teaming ANTARES project, in competition with almost 200 European research centers, BioSense Center has been selected as one of 30 potential European Centers of Excellence and this was starting point of it.

Little IT Academy, training for gaming programming of basic school children in organisation of Vojvodina ICT cluster.

Danube business forum which has been organized for 5 times. Each consists of at least 11 panels with experts gathered around different actual topics like:

New technologies, new opportunities and jobs of the future.

For pre-school kids are organized performance with workshops with title: When I grow up, I will have my one company! Special issue of journal „Maštalica“ („Dreamer“)

about entrepreneurship is published.

Bachelor, master and doctoral thesis are created according to companies' demands. Example - ATB Sever Subotica: 7 bachelor and master thesis presented in the production hall and all students employed in this company.

The day of engineering jobs which goal is to increase number of pupils who will study engineering studies by introducing them professors and laboratories at engineering faculties.

To support new technologies a competition for co-financing facilities for the application of new technologies in Vojvodina is organized each year. For the strategic orientation of the Provincial Government on the implementation of a more dynamic economic development of Vojvodina and the launch of new production capacities, based on the application of new technologies, it co-finances application of new technologies (to 49% of the investment value). The approximate amount for each year is about 1 mill EUR. Best Technological Innovation award

Popularization of the science is done through:

- Science festival – which presents research results of universities.

Goal: to promote famous and non-recognized scientists, to encourage interest in science with simple demonstration of just how much is it by itself interesting, inspiring and, above all, fun. The slogan of the Festival is:

And, do not forget: Everything is possible, and the impossible just takes a bit longer.

- Researchers night – presentation of research results in 10 towns
- Teslafest - presentation of innovative products and services

III. CONCLUSION

Serbia should establish Smart Specialization Regional and National Councils which tasks will be to lead operational activities of RIS3. Actually, they will lead innovative development of Serbia which will ensure its sustainable development and successful future.

They will set up monitoring, evaluation, and correction system based on valid and measurable indicators for short and long term outcomes and results. They will publish the annual report and create and maintain Innovation Portal.

Serbia should initiate transnational innovation process through the development of joint cross-border and transnational RIS3 programs within the European Union, especially in the region of the Danube Strategy [11].

Politicians and all stakeholders should promote Serbia as a good place for innovative entrepreneurship and create an eco system for this. Researchers and intellectuals must be involved and responsible to shape new image of Serbia, before all, in eyes of their young citizens.

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