

УДК 330.34

## Политика управления инновациями и региональная инновационная система в Грузии

*Д-р. экон. наук, профессор* **Маридашвили М.** manana.maridashvili@gmail.com

**Мепаришвили Д.** mefarishvili davit@gmail.com

*Кавказский международный университет*

*0192, Грузия, Тбилиси, ул. Чарагли 73*

*В этой статье исследуется концепция и процесс развития Инновационного менеджмента и Региональной инновационной системы (РИС), а также применение РИС в Грузии. Представлены характеристики РИС. Объектом исследования является Региональная инновационная система и инновационная политика в Грузии. Цель исследования – выявить проблемы, которые препятствуют разработке политики управления инновациями в Грузии. Используются дедуктивные и индуктивные методы. Региональная инновационная система (РИС) – это новая модель регионального развития, которая может стать новым средством сбалансированного экономического развития в стране. Региональная инновационная система – это модель группировки различных бизнес-субъектов и институтов на основе сравнительных преимуществ, главная цель которых – неэффективное использование и развитие физической и социальной инфраструктуры, природных и других материальных ресурсов в данном регионе и на этой основе стимулирование инноваций и бизнеса для улучшения экономического потенциала и конкурентоспособности региона. В качестве ключевых элементов Региональной инновационной системы рассматриваются государственные учреждения (центральные, региональные и местные предприятия, университеты, научно-исследовательские институты, специальные фонды и бизнес-инкубаторы, различные вспомогательные структуры), стимулирующие инновационную политику и иностранных инвесторов. В результате исследования было выявлено, что следующие факторы препятствуют развитию инновационного менеджмента в регионах Грузии: отсутствие учета региональной инновационной системы как новой модели регионального развития; Отсутствие координационного отдела, осуществляющего инновационную политику и соответствующее систематическое видение; Отсутствие бенчмаркинга и статистики региональной инновационной политики; Ограничение воздействия чрезмерного вертикального управления. И т.п. В целях развития инновационной системы в Грузии предлагаются следующие рекомендации: совершенствование инновационной инфраструктуры за счет новых технологий, исследований и разработок, развитие современных промышленных кластеров; Стимулирование всех инновационных компонентов, включая инновационные продукты, инновационные процессы и инновационные методы управления организациями; Поддержка инструментов посредника и сотрудничества между высшим образованием, исследовательскими центрами, учреждениями государственного сектора и малыми и средними предприятиями (МСП); Содействие практическому применению результатов исследований и созданию инновационных продуктов / результатов; Повышение эффективности и производительности местных предприятий; и т.п.*

*Ключевые слова:* инновационное управление, региональная инновационная система, инновационная политика, инновационные процессы.

DOI: 10.17586/2310-1172-2018-11-2-81-90

---

## Innovation management policy and regional innovation system in Georgia

*D.Sc., professor* **Maridashvili M.** manana.maridashvili@gmail.com

**Meparishvili D.** mefarishvili davit@gmail.com

*Caucasus International University*

*0192, Georgia, Tbilisi, 73 Chargalistr*

*This article investigates the concept and development process of Innovation Management and Regional Innovation system (RIS), also the application of RIS in Georgia. Characteristics of RIS are introduced. The research object is Regional Innovation System and Innovation policy in Georgia. The purpose of the study is to identify the problems that hinder of development innovation management policy in Georgia. Both, deductive and inductive methods are used. Regional Innovation System (RIS) is a new model for regional development and it could be a new means for a balanced economic development in a nation. Regional Innovation System is the model of grouping of the various business subjects and institutions based on the comparative advantages, the main goal of which, ineffective use and*

*development of the physical and social infrastructures, natural and other material resources in given region and on this basis stimulation of the innovations and businesses for improvement of economic potential and competitiveness of the region. As the key elements of the Regional Innovation System there are regarded the public institutions (central, regional and local enterprises, universities, research institutes, special funds and business incubators, various supporting structures) stimulating innovation policies and foreign investors. The result of study identified that the following factors hinder innovation management development in the regions of Georgia: Non-consideration of the regional innovation system as a new model of regional development; Absence of the coordinating department implementing the innovation policy and relevant systematic vision; Absence of benchmarking and statistics of the regional innovation policy; Restricting effects of excessive vertical management. Etc. For the purpose of development of the innovation system in Georgia the following recommendations are given: Improvement of the innovation infrastructure through new technologies, research and development, development of the modern industrial clusters; Stimulation of all innovation components, including innovation products, innovation processes and innovative methods of organizations' management; Support of instruments for mediator and collaboration between higher education, research centers, public sector institutions and small and medium enterprises (SME); Facilitation of practical application of the research results and creation of the innovation products / results; Improvement of effectiveness and productivity of the local enterprises; etc.*

**Keywords:** Innovation Management, Regional Innovation system, Innovation policy, innovation processes.

---

## Introduction

Today its axiom that to ensure economic growth of the country, improve business environment and ensure national economic security it is necessary to improve competitiveness of the regions implying ability of the regions to attract the capital and direct foreign investments, highly qualified labor – achieve improvement of the growth and employment rates based on effective employment of their competitive advantages and minimization of weaknesses. As innovations and new technologies reduce transaction costs and add value to the goods and services they are regarded as the most important tools for achievement of general national success [1 p. 101].

World globalization posed certain challenges to Georgia as in the conditions of increasing technological progress and competition show that so called «open areas» not containing innovations and technological progress, would inevitably transform into functionless and dependent areas both, in economic and political respects. To ensure economic development and security of Georgia development of regional economic strategy oriented towards knowledge economics, innovations and new technologies should be developed what would allow use of the country's comparative advantages, development of the priority industries and improve competitiveness[2 p. 302].

For dynamic growth of the developing economies, like Georgia, it is of vital significance, to stimulate economic incentives oriented towards introduction of the innovations and new technologies in addition to the traditional factors and for this optimal employment of the comparative advantages of the country is required. It implies, on its side, proper policies implementation both, by the central government and local and regional governments based on the principles of subsidizing, as well as consistent and coordinated implementation of the relevant strategies [3. p 37]

For the purpose of implementation of the mentioned objectives, in late 2008, in Georgia the Regional Innovation System and its components were formed. Regional Innovation System is the model of grouping of the various business subjects and institutions based on the comparative advantages, the main goal of which, ineffective use and development of the physical and social infrastructures, natural and other material resources in given region and on this basis stimulation of the innovations and businesses for improvement of economic potential and competitiveness of the region [4 p. 78].

## The leading subjects of the Regional Innovation System

As the key elements of the Regional Innovation System there are regarded the public institutions, central, regional and local enterprises, universities, research institutes, special funds and business incubators, various supporting structures stimulating innovation policies and foreign investors[4 p. 88].

Innovation and research & development policies are set by the Parliament of Georgia, at a time of consideration of the state budget. It approves funding for development of science and technologies, sets the state policies in the mentioned spheres and provides control of implementation. The relevant proposals and projects are submitted to the Parliament the President of Georgia, who, on his side, relies upon the recommendations prepared by the Academy of Science of Georgia

Government of Georgia plays the most important role in implementation of the state policies of science and technologies development. In this respect, the following ministries and departments play key roles in this respect:

**1. Ministry of Economics and Sustainable Development of Georgia** – through its involvement in the innovation process (as one of the most important factors for economic development), is responsible for the measures supporting innovations and knowledge transfer. Department of the Economic Policy of the Ministry is regarded as the most relevant structure in implementation of the innovation policy.

**2. Ministry of Education and Science of Georgia** – is responsible for regulation of the system of research and development and various innovation and complex education activities; the Ministry implements the innovation-oriented policies through various programs, grants and loans, which are administered by means of the specially established funds.

**3. National Investment Agency** – is responsible for implementation of the measures required for funding of the entrepreneurship-investment programs, their coordination and monitoring, as well as for systematic study and analysis of the situation in this sphere, preparation of the proposals required for decisions by the President of Georgia.

**4. Patent Office of Georgia** – is responsible for the system of protection of the intellectual property rights, what includes various elements required for operation of this system.

**5. Academy of Science of Georgia** – is responsible for preparation of relevant recommendations for development of the innovation activities and initiatives, consideration and evaluation of the innovative projects [5 p. 210].

### **Innovation Management development problems in Georgia**

**Analysis of management and interrelations of the acting subjects of the national innovation system of Georgia existing up to present provide the following picture:**

1. Initial evaluation clearly shows that there is no coordinating institution, which would ensure development and implementation of the integrated innovation policy (e.g. innovation board or national innovation agency as practiced by various countries). This results in the situation where Georgia has no clear statement of the consistent, logically formulated and integrated innovation policy, which would be formalized and implemented by the relevant public institution, on the basis of collaboration of the other institutions and strategies.

As the institutions provided in the scheme comprise separate part of the potential subjects of the innovation system, critical analysis of their current status and their activities in the respective area is required.

2. In addition, we should take into consideration that number of public and other institutions, which should play central role for introduction and coordinated development of the innovation system are not reflected.

**In result of study it was identified that the following factors hinder development of the regions in Georgia:**

**1. Non-consideration of the regional innovation system as a new model of regional development.** The issue of regional innovation system became of significance in Georgia in recent years; currently it is considered at the level of individual NGOs only and up to present, in development an implementation of the regional policy no innovation component and its role was considered in the respective process.

**2. Absence of the coordinating department implementing the innovation policy and relevant systematic vision.** Currently there is no special department, which would ensure coordination required for development and implementation of integrated innovation policy. In result, Georgia has no clearly formulated, consistent, logical and uniform innovation policy, which would be dealt with as the public policy and which would be implemented by the relevant public institution, on the basis of cooperation with the other institutions and the strategies.

**3. Absence of benchmarking and statistics of the regional innovation policy.** In Georgia no special benchmarking of the regional innovation policy takes place. At the same time, the central government has no properly processed information about innovative activities and initiatives in the regions and hence, it is not able to use such information. Up to present there are no exact statistical data about foreign investments in the regions of Georgia, including data about such significant component of assessment of innovation development as R&D costs of the respective business subjects, both, at the national and regional levels.

**4. Restricting effects of excessive vertical management.** Current model of regional development does not provide for possibility of upward development opportunities (social capital, human capital, innovation, networks, infrastructure, finance). Lack of decentralization and practiced vertical management style do not contribute to strengthening of the economic processes and stimulation of the resources, including the investment, in the regions.

**5. Absence of cluster development incentives.** At current stage, cluster development opportunities, as effective instrument for successful introduction of the innovation system and use of the region's competitive advantages are considered in Georgia only at the level of certain private organizations. In this respect exclusions are certain incentives of Tbilisi City Hall, which, currently, are formulated in the form of vision and have no form of specifically formulated strategy.

**6. Weak preconditions for introduction of the innovation systems in the regions.** Low level of development and interrelation of the business entities, research institutes, markets, self-government bodies, training institutions, social partners makes questionable the possibility of building of the regional innovation system.

**7. Minima state support to R&D infrastructure.** Funding of research and development (R&D) by the state is lower than 1% of GDP. In the World Innovation Data Table Georgia is at 149<sup>th</sup> place; per capita R&D costs in Georgia are 500 times less than those in Finland, the country with the same area, 140 times less than those in Slovenia, the country 5 times smaller than Georgia, 40 times less than in Cyprus, 10 times smaller than Georgia and our country is among the last ten countries together with Nepal and Seychelles [6 p 43].

**8. Dynamics of reduction of the scientific potential.** Since 2003, the number of scientific institutions decreased by 17% and number of the scientific staff – by 43 %. In total, number of the scientific-research projects decreased by 14,5% and this does not facilitate growth of knowledge generation capacity. Though, number of the researches is not

directly linked with their quality though this trend scarcely could contribute to improvement of innovations, productivity and competitiveness in the country and in the regions.

**9. Inconsistency of public policies (legal regulations) supporting innovative activities and weak stimulus.** Legislation supporting innovative activities is inconsistent and contradictory an. E.g. amendments to Georgian Law on Science, Technologies and Their Development (2005) clearly show state support to scientific and innovation activities and to the accredited universities, irrespective of their legal status. On the contrary, Rules of Georgian National Scientific Fund (2004) prevent participation of the accredited higher education institutions from participating in the projects, competitions and grant funding announced by them. The fact that legal entity of public law, National Innovation Service (Sakinovatsia) established in 2002 was abolished by the Presidential decree in 2004 with unclear motivation. In addition, the legislative and administrative obstacles cause significant problems for implementation of the local R&D and investment stimulation policies. In particular, this was significant, with respect of cancellation or reduction of the customs duties for the private higher education institutions, even where this was related to import of modern technologies for the technical fleets and technology towns. The same situation is with respect of setting of the tax exemptions for the organizations and private persons investing in the innovative activities [7 p. 59].

**10. Inadequate practice of the technologies transfer stimulated by direct foreign investments.** In Georgia, similar to the most transition countries, transfer of technologies through licensing is at quite low level at this stage. Hence, the role of flexible governmental policies (including local and regional governments) for attraction and stimulation of direct foreign investments is indeed huge.

**11. Low activity of local and regional administrations in attraction of foreign investments.** Zero role/activity of the local and regional governments in development of investment projects and attraction of the foreign investments makes impossible adequate stimulation of the economic processes in the region. They have neither adequate resources nor well formulated and unambiguous legal authorities for implementation of the mentioned activities. In this respect, government of Adjarian Autonomous Republic is the exclusion, which is subject for separate discussion.

**12. Weak role of the governor and ambiguous legal mandate in development of the regions' socioeconomic development plans.** Effective legislation basis makes unclear development and implementation of plans setting general priorities and directions for socioeconomic development of the regions. According to Section 2 of Article 271 of Georgian Law on Structure, Authorities and Activities of Georgian Government, one of the authorities of the governor is implementation of the socioeconomic development programs assigned by the government of Georgia. Though, on the basis of explanation of the mentioned regulation, it becomes clear that in this case, the legislator does not imply the prerogative of the governor to develop and implement independently the specific consistent long or medium-term plans determining the priorities and directions of socioeconomic development of the regions based on clearly formed legal mechanisms [8 p 121].

**13. Imperfect nature and weak implementation of the legislative basis.** Irrespective of existence of separate laws and regulations, Georgian legislative space lacks such legislative instruments for implementation of the general innovation policy, which would meet the requirements of current global competitiveness requirements and standards. In addition, according to the experts' evaluation, effective legislation is characterized by weak implementation.

**14. High degree of dependence upon imports (increasing trade deficit).** Georgian economy mostly depends upon the imports, what reflects the lack competitiveness of the national economy and limited local production. Innovative and export-oriented local production has no legal support and stimulus.

**15. Weak role of the finance institutes in support of small business and innovative activities.** One of the main obstacles to development of innovative activities is demand of industries for innovations and new technologies and absence of funding for such demand. At current stage Georgian banking sector is not ready to make its contribution to development of the innovation-oriented entrepreneurship and small business; in the current crisis period the main goal of our banking sector is achievement of the short-term effects. Even when in the Georgian banking sector the situation was much better, before August war between Russia and Georgia, activities of this sector and other business organizations (special economic zones, business incubators etc.) were basically oriented towards support of the enterprises in general and not towards the goals of support of the innovations [9 p. 54].

**16. Poor ability of knowledge generation.** Complex research conducted within the scopes of INTAC project provides basis for the final conclusion that at this stage, though Georgia has good potential for acquiring knowledge, it has poor ability of knowledge generation.

**17. Georgia with respect of World Bank knowledge parameters measurement index – economic stimulation and institutional regime, innovativeness and development of information and communication technologies is far behind not only EU members but even its nearest neighbors [10 p. 71].**

#### **In addition, there were revealed number of institutional problems requiring special attention**

- Part of the public institutions responsible for implementation of the innovative policies (Ministry of Economics and Sustainable Development, Ministry of Education and Science, Ministry of Agriculture) used the authorities awarded to them by legislation only partially for implementation of the relevant policies up to present. And the other part (National Innovation Agency) has no adequate levers and resources for dealing with the same objectives;



- Non-public subjects of the innovation system make their contributions to better work of the system more or less successfully. In many cases, individual elements of the innovation system (most part of the research institutes) have not the best management systems and in this respect, irrespective of the legal status and novelties, they actually are not properly reformed yet;

- Potential of Georgian universities in formation of the technology towns is used only at mere extent. First incentives (Caucasian School of Business, Tbilisi State University, Georgian technical University) could be seen but in general, because of lack of resources and assets work in this direction can not yield the desired results;

- Level of development of Georgian small and medium business incubators is far from the desired one and it could be said that they are at the level of embryo, or, worse, at the level of idea.

Regarding the above listed problems, the state strategies for regional development of Georgia for period 2011-2017 was developed. Its goal is promotion of accelerated economic growth of the regions based on effective use of the comparative advantages of the regions and consistent cooperation.

One of the most significant conditions for achievement of this goal is active involvement of all subjects participating in development and implementation of the innovation policies and development of the innovation-oriented entrepreneur business.

Consequently, one of the most important objectives of creation of the regional innovation strategy is introduction of the sustainable economic development model oriented towards creation of the innovative products and processes [11 p. 174].

### Conclusion & Recommendations

For the purpose of development of the innovation system in Georgia the following is necessary:

- Improvement of the innovation infrastructure through new technologies, research and development, development of the modern industrial clusters;
- Stimulation of all innovation components, including innovation products, innovation processes and innovative methods of organizations' management;
- Support of instruments for mediator and collaboration between higher education, research centers, public sector institutions and small and medium enterprises (SME);
- Facilitation of practical application of the research results and creation of the innovation products / results;
- Improvement of effectiveness and productivity of the local enterprises;
- Support to cluster-based development on the basis of comparative advantages of Georgian regions;
- Improvement of effectiveness of the regional administrations in the sphere of development of the innovation products and attraction of the investments including direct foreign investments);
- Establishment of the regional centers and institutes, which would promote acquisition of the effective skills and making contacts between different regional subjects, local suppliers and inflow capital, including direct foreign investments.

**For the purpose of overcoming of the problems in Georgian regions it is necessary** to develop the strategies stimulating competitiveness oriented towards long-term results, which would contribute to improvement of productivity and achievement of social welfare both, at the national and regional levels. In this context the regional innovation systems, play special role. Introduction of these systems require thorough understanding if the knowledge economy principles, which, taking into consideration the modern practices, have become the most important priority for the developed countries long ago.

**In our opinion, the strategy of development of the regional innovation policy in Georgia should include:**

1. Improvement of regional governance institutional development;
2. Strategic planning of the innovation-oriented public incentives and policies, as well as innovation systems in each region;
3. Establishment of regional innovation centers and regional information-consultation centers;
4. Development of the stimulus-based programs and projects / incentives supporting local business environment;
5. Creation and development of regional and national R&D infrastructure and establishing the system of stable funding;
6. Development of the communication and network collaboration between business sector and universities;
7. Support of knowledge commercialization in the regions;
8. Attraction of the direct investments (including direct foreign investments) to the region and increase of the local and regional administrations in this respect;
9. Promotion of the contacts between local enterprises and the investors;
10. Stimulation of the finance sector to support innovation-oriented small and medium businesses.

Development of small and medium business, with prevailing principle of bottom to top development and not only from top to bottom, which, in addition to ineffectiveness, contributes to formation of specific corruption mechanisms, should become the necessary condition for economic development of Georgia.

On 24<sup>th</sup> May 2006, Law on Support of Small and Medium Business was cancelled. Currently, definition of small and medium business is provided in Georgian Law on the National Investment Agency. It would be more reasonable to place these definitions in the Tax Code or in the separate law on small and medium business. In preparation of new edition of the same law the changes resulting from establishment of the National Investment Agency at the national level should be taken into consideration, in the context of strategic planning.

At the same time, criteria for funding through cheap credits program should be substantially reviewed. Various legislative changes should contribute to increase of motivation of the banking sector to provide funding by the later of small and medium businesses and innovative startup projects. In the current crisis situation the main goal of our banking system is achievement of short-term effects. Finance institutes are basically involved in various entrepreneurial activities (trade operations, construction and development business) which are more profitable in given economic conditions. This is further supplemented by absence of the stimulus for support of innovation incentives. Respectively, at this stage, identification and offering of such stimulus to the finance sector should become one of the priority directions for support of the innovative projects. In addition, it is necessary to ensure availability of recoverable funding for small and medium innovative enterprises.

**We regard that it would be reasonable to promote innovations through state procurements and creation of the instruments for transfer of the technologies between public and private sectors.** Measures should be planned and implemented to support technologies transfer between public research institutes, private sector and entrepreneurial subjects. This would improve effectiveness and productivity of the public resources invested into researches. Adequate policy and legislative regulation of the technologies transfer would allow evaluation of the innovators' knowledge flow and stimulation of the industries and universities. In Georgia, the issue of innovations and technologies transfer, against the background of poor knowledge of human capital and weak capacities of the innovation systems, is of great significance for resolving of the issue of the country competitiveness and economic development. At this stage, the sound economic and legislative basis for technologies transfer for development of local enterprises should be created and this, on its side, would contribute to transfer of the advanced technologies and innovations through foreign investments. Volume of the mentioned transfers should be calculated by means of the formula:

$$T = S - H_1 + H_2 + H_3$$

Where  $T$  is the volume of the transfers to be provided to the regions by the central budget;  $S$  – Minimal costs to be made by the local budget;  $H_1$  – revenues from local taxes and dues;  $H_2$  – local non-tax revenues;  $H_3$  – revenues from long-term economic regulations.

Where  $S = H_1 + H_2 + H_3$  there is no need for transfers from the central budget for local budgets.

Where  $S > H_1 + H_2 + H_3$  the volume of the necessary costs is more than total of local revenues and the deficit should be covered by the transfers from central budget [12 p. 221].

Employment of this methodology is impossible without preliminary organizational-methodological measures. Primarily, the centers should be clearly distinguished, the property rights of the center and regions should be separated and what is the most important, the accurate, reliable regional statistics and reporting should be put in place.

**Support to establishment of the regional innovation centers.** Consolidation of the regional innovation system is the effective instrument for formation of the regional innovation centers (RIC). The regional development centers would basically perform the following activities: mediatory activities between higher education institutions, research centers and small and medium businesses for the purpose of practical application of the research results; brokerage between innovation needs and research capacities; facilitation of full or partial provision of the required equipment and instruments for the research laboratories, in full or partially. Formation of such centers could be the incentive of the regional administrations, with the significant support from the governmental agencies.

Key direction of the activities of regional innovation centers is support to the institutions, which compose the regional innovation system. The key beneficiaries of the mentioned system are small and medium businesses, new entrepreneurial subjects, innovators and potential entrepreneurs. The major partners of the regional innovation centers should be the sector agencies of the central government and the ministries, Sakpatenti, National Investment Agency, region administrations and local self-government bodies, regional investment funds, regional/local development agencies, chambers of commerce, academies of science, higher education institutions, research and development institutions, business incubators, technological transfer centers, technology towns, small and medium entrepreneurs, risk capital firms, NGOs [13 p. 101].

Priorities of the activities of innovation centers in the specific regions could be adjusted to the specific conditions depending on the number and level of composition of the innovation infrastructure in one or another region (business incubators, innovations and technology centers), level of academic and research potential (higher education institutions, research and development institutes, research traditions), level of education, presence of the finance and consultation institutions, , general entrepreneurship potential.

In the process of creation of the regional innovation centers the situation in this sector in specific regions should be taken into account and this, in addition, is related to development of the economic maps of the regions. Respectively, after implementation of the mentioned preliminary works, the priorities of the regional innovation centers could differ one from another, at certain extent [14 p. 22].

**Main goals of the regional innovation centers are as follows:**

- Development of the database on scientific and technological achievements, patents, prototypes, know-how, licenses etc.;
- Support to innovations-oriented organizations and entrepreneurs;
- Promotion of creation of the networks between the small and medium businesses on one side and the higher education institutions and research and development institutes;
- Promotion of creation of the cooperation ties between the small and medium-scale businesses and large entrepreneurial subjects for implementation of the innovation projects;
- Promotion and support of the links between local small and medium-scale businesses and foreign investors;
- Technological audit of the entrepreneurial subjects operating in the regions and dissemination of information and knowledge about needs of the small and medium businesses;
- Study of possibilities of commercialization of the new technologies and linking and consolidation of the partners;
- Promotion of the joint researches and implementation projects by various entrepreneurial subjects' groups;
- Consultations and training in the sphere of new technologies;
- Initiation of direct inter-regional collaboration in the sphere of innovations and entrepreneurship.

**Promotion of scientific and technological achievements of the region  
(through arrangement of the trade fairs, conferences and seminars)**

Regional innovation centers are able to implement the mentioned goals through delegation of certain functions to the institutions acting in the specific regions and comprise integral part of the regional innovation system. In wider sense, the regional innovation centers perform the functions of the regional innovation system coordinators and promoters [15 p 301].

Regional innovation centers could be established by the regional administrations; the centers operate as the non-profit organizations. Organizational structure of regional innovation centers, their source of funding and the system of evaluation of the regional innovation center activities, as well as their establishment and liquidation shall be determined by the law.

**Support to establishment of the information-consultation centers.** Level of local investment is extremely low for funding of the innovation projects and therefore, the role of foreign funding and investments increases significantly. In this respect, establishment of the information-consultation centers in the regions serve to achievement of the specific investment objectives. Establishment of the mentioned centers imply cooperation and extensive communication with the local governments and regional administrations, local small and medium-scale businesses and potential foreign investment business subjects.

Services to be provided by such centers could include:

- Development of the regional investment projects, seeking of the potential foreign investors, support to attraction of the direct investments, activities at the advertising market;
- Systematization of the information resources and their dissemination; documentation of the resources and dissemination of this resource information; development of the economic website of the region;
- Consultations to the investors on economic potential of the region, optimal legal forms of investing, opportunities of establishment of the joint ventures, real property and various legal issues;
- Arrangement of the special business forums, presentations, marketing analysis and target trainings, representation of the region at international exhibitions;
- Mapping of the region's assets.

Thorough analysis of the regions; economies would allow preparation of the initial reports on potentially profitable segments of the regions' economies and identification of the niche of economic activities which would meet direct interests of the foreign investments (forecasted high rates of return) and priority needs for local services identified by the local population.

The key objective of the centers should be providing of the feedback between local business subjects and potential foreign investors and their stimulation. This, on its side, implies development of so called information banks, local supply resource contacts, by means of which the foreign investors would have access to the to the unlimited (incomplete updatable recommended) and transparent list of local suppliers pr reliable and effective local small and medium business partners.

Other supplementary directions of operation of such centers may be support to R&D for the local business subjects to ensure that with time they would meet the requirements of foreign business partners and become more effective suppliers and partners for the other potential partners. In the long-term the mentioned economic paradigm would secure sustainable development of local economic and commercial subjects and dynamic injections into the country economy and incomes' basket.

Effective operation of the information-consultation centers requires coordination of the mentioned incentives by the relevant central institution and the competences of the same institutions could cover at the initial stage, development of the relevant legislative base and coordination of attraction of inputs required for establishment and operation; as well as arrangement of the consultations with local and regional administrations, other local and regional institutions, donors and potential private investors. In the long term, certain fees as percentage of successfully implemented projects could become one of the sources of funding of the centers and securing their stability.

**Role of the direct foreign investments and stimulation of their attraction to the regions.** Growth and modernization of the country economy, funding of the significant infrastructure and innovation projects, expansion of knowledge and technologies requires significant capital. Regarding low level of savings in Georgia, limited ability of revenues' mobilization and resulting low rate of investment into fixed capital single way for gaining fixed capita and modernization by the country is investing. This, naturally, leads to dramatic increase of the role of foreign funding and investment, which, through providing physical and financial capital, ensure not only generation of the new opportunities, material wealth and jobs but also promote improvement of labor productivity and adding of value on the account of so called extra-financial benefits and technological diffusion. Technological diffusion is sharing and transfer of the new technologies, innovations, advanced managerial experience, ideas stimulating productivity growth and know-how to the host country. The investments of such type are accompanied with the advanced knowledge about products' processing methods, products packaging and designing, communication technologies and market development and strategies. These production resources and flows, as a rule, flow simultaneously with the investments, securing projects' sustainability and providing opportunities for acquiring technical innovations. Technological transfer is accompanied with incentives of foreign investors oriented towards development of human resources of the host country, in particular, arrangement of the trainings improving productivity of local labor, introduction of the best management practices and various organizational innovations.

In 2009, rate of inflow of the direct foreign investments suffered 80% fall compared with the previous year. This means that additional cardinal measures are required for improvement of the situation.

Special tax stimulus should be created for attraction of the direct foreign investments to the regions and promotion of innovations. In particular, two-year tax exemption or introduction of the differentiated tax exemptions should be applied to the foreign investments made to the regions (except for Tbilisi). Necessary precondition for such exemptions would be undertaking of the following obligations by the investors:

- No less than 2% of the investment should be R&D costs;
- No less than 1% of the total investment should be the costs of local HR training and re-training;
- In case of local production, no less than 30% of the output should be intended for exports;
- No less than 70 of the employed labor and HR should be local;
- Investment should provide transfer of the new technologies and close relations with the local market.

As compliance with the mentioned conditions (fully or in part) is proportional with additional, differentiated tax exceptions, it is based only on the principle of corporative discretion and voluntarily. In case of absence of such interest from the investor's side, his activities would remain within the effective investment and tax legislation mode.

Actually, this approach is concerted with the governmental investment policy optimization efforts:

1. To create additional stimulus for attraction of more foreign investments;
2. Increase benefits from direct foreign investments and their added value through promotion of the extra-financial benefits (transfer of the advanced technologies and knowledge, investing and re-investing into R&D and HR development) and implementation of the liberal and proactive governmental policies in this respect.

**Increase of the role of regional administrations and local governments in attraction of the foreign investments.** Poor role of regional administrations and local governments in development of the investment projects and attraction of foreign investments to the regions prevents adequate stimulation of the economic processes in the regions. Currently they have no sufficient resources and well formulated and unambiguous legal authorities for the mentioned activities. Creation of the relevant institutional basis and effective cooperation between regional administrations and regional information-consultation centers to be established would significantly increase the potential of attraction of foreign investments and stimulate feedback with the local enterprises and foreign investments.

In addition, as the local self-governments and regional administrations in Georgia have no adequate experience with respect of attraction of the foreign investments, effective operation of the regional administrations require extensive cooperation with the National Investment Agency. Regarding that currently the National Investment Agency have limited functions and staff (it does not develop the investment projects either at the national or regional levels and performs only mediation between the government and foreign investors, the charter of Agency should be reviewed and relevant institutional reform should be prepared what, together with the other issues, may require establishment of the branch offices of the Agency in the regions.



**Additional stimulation of the investment activities in the regions.** Role of the regions in investment processes is very limited. In many cases the innovation potential of the regions is restricted by the financial-organizational factors. These restrictions could be categorized into three groups:

1. Financial restrictions – most part of the monetary mass generated by the regional economy is controlled by the central government.

2. Territorial restrictions – region is not able to implement the innovation programs for the enterprises located therein but having the center point of the region.

3. Specific regional restrictions – in the current situation the money flows are basically directed towards supporting of infrastructure development.

Necessary element for overcoming of these difficulties is the strategy oriented towards region development results – innovation-investment regional strategy able to effectively use all available resources through special innovation system and tax stimulus. In particular, there are number of opportunities for innovative projects stimulation and tax optimization, including:

- Temporary tax exceptions for the enterprises implementing innovative projects;
- temporary tax exemptions with the financial results of innovative projects; implementation;
- Transformation of the tax expenses into the insurance premium. The latter combine the tax and insurance mechanisms, provides financial basis for insurance support of the innovative projects;
- Operation according to the leasing scheme, allowing more active and flexible transfer and development of the innovative technologies. Development and implementation of such strategies may have substantially positive impact on development of both, small and medium-scale businesses and the region as a whole.

**Export promotion and stimulation of export-oriented small and medium businesses.** Currently, Georgian economy is mostly dependent on the imports pointing to the low competitiveness of the national economy and limited local production. Innovative and export-oriented local production has no legislative support and stimulus.

From the date of gaining of WTO membership Georgian exports unconditionally enjoy preferential supportive regime at the markets of 147 WTO member states. This means that goods imported from Georgia will enjoy the favorable regime provided by the importer country to the imports from any third country. Mechanisms operating within WTO intended for protection of the local goods, production and entrepreneurs from the contingencies and unfair competition practices are of special significance for providing economic security of the country. Respective WTO agreements allow implementation of the measures for protection of local economy in case of worsening of the balance of payments or excessive imports (endangering local production).

On the basis of development of the respective policies and for the purpose of protection from the unfair competition the legislative basis should be put into order facilitating regulation of import and export balance, protect national production from excessive imports and provide for adequate response measures for import of goods with the dumping and subsidized prices according to WTO regulations.

For the purpose of promotion of the export-oriented businesses, among the other measures, the Ministry of Economic Development of Georgia should develop the relevant complex program. In addition, the Ministry of Economic Development of Georgia, on the basis of analysis of exports and imports, should develop the recommendations for development of the list of commodities, which could be replaced by the products produced locally by means of new technologies and innovations and which would provide immediate effect at the domestic market and further, make it competitive at the regional and international markets. Local entrepreneurs should be delivered the information assistance dealing with the new technologies and innovations.

Consistent efforts should be continued for diversification of the export markets. In the conditions of the extensive competition it is necessary to diversify the products and develop the strategies for gaining of the new markets (through analysis of so called value chain, Blue Sea Strategy), both, at regional and global levels. For this the production processes and quality management systems should be updated to allow production of the competitive export products.

**Improvement of the innovation legislation.** Georgian legislation regulating innovative activities does not allow implementation of the innovation policies which would meet the requirements and standards of global competitiveness. In many cases the legislation is inconsistent and contradictory. For example, Georgian Law on Science, Technologies and their Development provides for state support to scientific and innovative activities, including the state-accredited higher education institutions, irrespective of their legal status. Nevertheless, Resolution #81 of 19<sup>th</sup> April 2006 of Georgian Government on Approval of Statute on State Scientific Grants and Criteria for Evaluation of the Projects does not provide for the possibility of issuance of grants to the entrepreneurial legal entities. Legislative and administrative obstacles cause significant problems to implementation of the policies for local stimulation of R&D and investments. In particular, this was of significance, with respect of reduction or cancellation of the customs duties for the private higher education institutions. Even where this is related to import of the modern technologies for technical fleets, scientific fleets and technological towns. The same could be said about introduction of the tax exceptions for the organizations and private persons investing into the innovative activities.

**Development of regional innovation policy benchmarks and improvement of the statistical data collection techniques – harmonization with the international standards.**

In Georgia no special benchmarking of the regional innovation policy takes place. Development of the indicators for recording and evaluation of innovations should provide basis for development of the innovation policy benchmarks. This is related with classification of the relevant parameters at global, national, regional or production levels.

At the same time, the central government has no properly processed information about innovative activities and initiatives in the regions. At the same time, the central government has no and hence, is not able to use information about innovation activities and initiatives in the regions. Absence of the reliable statistical data prevents adequate evaluation of national readiness with respect of innovations, as well as comparison with the international standards and evaluation of the implemented initiatives. Up to present there are no exact statistical data about foreign investments in the regions of Georgia, including data about such significant component of assessment of innovation development as R&D costs of the respective business subjects, both, at the national and regional levels. Department of Statistics of Georgia and the National Investment Agency should cooperate to eliminate the gaps and ensure delivery of complex information about all regions of Georgia.

### References

1. *Saxenian, Ann Lee*, «Regional Networks and Innovation in Silicon Valley and Routs 128» in Acs 2008.
2. *Boekema, F., Morgan, K., Bakkers, S., Rutten, R.* «Knowledge, Innovation and Economic Growth : The Theory and Practice of Learning Regions» Edward Elgar Publishing, 2010.
3. *Braczyk H.J., Cooke P., Heidenreich M.* «Regional Innovation System» Routedge, 2008.
4. Committee for Balanced National Development, RIS in the world, Han Ul, 2014.
5. *Enright, M.* «Regional Clusters : What we know and what we know and what we should know» Paper for the Kiel Institute International workshop on Innovation Clusters and Interregional Competition, 2012.
6. *Jacobs J.* The Economy of Cities, New York: Random House, 1969. *Jaffe, A.B.*, «Real effects of academic research» American Economic Review, 79, (5), 2010, 957-70.
7. *Lee C.M., Miller W.F., Hancock M.G., Rowen H.S.* «The Silicon Valley Edge A Habitat for Innovation and Entrepreneurship» Stanford Business Books. *Lim J.D.*, «Regional Innovation System for Regional Development» Journal of School of Business, Vol 76, 2004.
8. *Rubalcaba-Bermejo L.* «Business Services in European Industry: Growth, Employment and Competitiveness» European Commission, DGIII-Industry, 2009.
9. *Maridashvili. M., Meparishvili. D.* Potential of innovative Management and Georgian Business Culture. Scientific and Practical Conference Strategies and Instruments of Economics Management. University «UTMO», Sankt-Peterburg, Russian Federation, April 14-16, 2016. Pages 54-58.
10. *Shephard Ronald W.* Theory of Cost and Production Functions, Princeton: Princeton University Press, 1970.
11. *Utlerback J.* «Innovation in Industry and the Diffusion of Technology» Science, 183, 1974.
12. *Varga A.* University Research and Regional Innovation. Boston : Kluwer Academic Publishers, 2008.
13. *Lim J.D.* «Structure, Behavior, Governance and Performance of Clusters-Estimate of Performance by Data Envelopment Analysis» Urban and Industrial Agglomeration Workshop, ICSEAD Working Paper No. 23. March 2006, Kitakyushu.
14. *Cooke P., Boekholt P., Todtling F.* «The Governance of Innovation in Europe Regional Perspectives on Global Competitiveness» Science, Technology and the International Political Economy, A Cassell Imprint, Wellington House, NY, 2010.
15. *Schmitz H.* (ed) «Local Enterprises in the Global Economy» Edward Elgar, Cheltenham UK, 2004.

Статья поступила в редакцию 04.03.2018 г.