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INFORMATION AND INNOVATION CENTER AS FACTOR OF NGO DEVELOPMENT AND AS PARTNER IN THE INTELLECTUAL AND PROFESSIONAL ENVIRONMENT OF THE REGION



The relevance of establishing effective public institutions based on self-organization of professionals from different environments during the crisis and the role of regional information and innovation centers in the initiation and maintenance of such processes have been described. Practical experience of the Lviv State Center of Science, Innovations, and IT Development in the foundation and support of NGOs in research and innovation, business and educational fields in Western Ukraine has been showed.

Keywords: NGO, intelligence, innovation, and development.

As the practice [1], a mandatory component of successful reforms in many countries was a priority development of intellectual and professional potential and its active involvement through the non-governmental organizations (NGOs) in carrying out the necessary changes, particularly in science and innovation, entrepreneurial and educational sectors.

The world experience shows that the living standards of all segments of the population and socio-economic situation in the country are determined by the degree of education of society and its attitude to intellectual and spiritual values and innovation. Only intellectually and spiritually rich society [2], which is able to take the path of harmonious innovation development may be a guarantee of building a strong, fair and competitive in the global world state that provides conditions for self-realization and a decent standard of living of every citizen, even in the absence of energy and mineral resources.

To enhance the national intellectual and professional capacity, first and foremost, it is neces-

sary to create in Ukraine at the state level the efficient infrastructure, as well as financial and credit incentives and legal mechanisms to transform new ideas into commercial products and services [3, 4, 5]. On the other hand, today's social and political conditions require a high level of self-organization of scientific and technical intelligentsia, businessmen, teachers and the increase of their impact on the process of reforms in all spheres of public life.

Active enterprises and organizations of all forms of ownership, as well as not indifferent personality and moral authority should be the catalysts forming the non-governmental organizations to support positive changes, particularly in scientific and inventive, as well as in business and education spheres.

The Western Ukraine has accumulated some experience of such activities [6, 7]. Lviv State Center of Science, Innovations and IT Development (LSCSIITD) – hereinafter the Center – played a significant role in this issue.

Since its formation to the present day the Center positions itself as a part of regional inno-

vation system and contributes to the advancement of scientific research and development activities, inventions of Ukrainian scientists and innovators in the domestic and foreign markets.

Taking into account the existing realities and the urgent need to consolidate the Ukrainian society for the necessary socio-economic reforms, the Center initiates creation and partner centers of social and professional activities in science and innovation, entrepreneurial and educational sectors, promotes the processes of self-organization and harmonic innovations of local communities. This work is carried out in close cooperation with research institutions, higher education institutions (HEIs), business associations, NGOs and interested business entities [8].

Supporting the NGOs and cluster structures the Center aims to become the intellectual and organizational core of such partnership that is able to create and implement effective eco-friendly innovation and investment projects to produce and transmit to the economy new knowledge and information thus promoting the education of highly spiritual and highly moral business elite, able to respond quickly to global and local changes, help the Ukrainian scientists and specialists in establishing the international contacts.

With the direct participation of LSCSIITD or its support it in the region there were established 4 business associations, 19 associations, 3 science and technology parks, 3 clusters, 3 private universities. In the nineties of the twentieth century the Center was the founder of the *Galician Contracts* International Exhibition, West- Ukrainian exchanges of scientific and technical production, the regional Association of innovation firms *Lviv-tehnopolis*, permanent exhibition «Innovation and investment projects in Western Ukraine» and became a partner of *Atlas* Association of inventors rights protection and *Lviv Guild* Association of Small and Medium Businesses.

In the first fifteen years of the 21st century, at the expense of own and borrowed resources, in cooperation with the West-Ukrainian Scientific Center of the National Academy of Sciences and the Mi-

nistry of Education and Science of Ukraine (WUSC, the NAS and MES of Ukraine), the industrial and business sector, as well as with the local authorities and the NGOs on the platform of the Center there were created the following organizations:

- ✦ Regional Internet portal *Innovative Entrepreneurship* (<http://www.cstei.lviv.ua>);
- ✦ West-Ukrainian Regional Contact Point in cooperation with the European Union (EU) in the field of science and technology;
- ✦ Contact Point of Polish regions;
- ✦ analytical and informational center on the use of energy efficient technologies with demonstration exposure;
- ✦ center of organizational support of the Lviv regional association *Native School* (<http://www.ridnashkola.lviv.ua>);
- ✦ partner network *Lvivtehnopolis* Regional Business Innovation Center, which rendered useful information and organizational support to small innovation enterprises such as *Aster* (Biotechnology); *Peterson System* (ICT); *Svitavy* Galician Medical and Logopaedic Center; *VEEM* Group of Companies (construction, furniture); Investment (design and survey work); *New Look* (design); *Prologue* (new technology for repair and maintenance of roads) and others.
- ✦ European Innovation Agency, NGO;
- ✦ *SMEs* National Contact Point of *Horizon 2020* Framework Program for Research and Innovation;
- ✦ *Lvivvaleopolis* Consortium;
- ✦ Intelligence Culture Capital, club of inventors and innovators.

The following joint projects with public organizations and innovative structures, implemented with the assistance of the Center:

- ✦ *Laboratory of Ideas*, Student NGO;
- ✦ *Pantheon of Science*, Young Researcher NGO;
- ✦ Institute of Public Leadership, NGO;
- ✦ Lviv Regional Association of Small and Medium Businesses;
- ✦ *Turkivschyna* Society, Lviv, NGO;
- ✦ *Boikovshchyna*, the 21st Century, Ukrainian public organization;

- ✦ *Galician Youth* newspaper;
- ✦ Lviv Regional Small Academy of Sciences;
- ✦ Lviv Children Gallery Charitable Foundation;
- ✦ Research Union, NGO;
- ✦ Drohobych Regional Agglomeration;
- ✦ *Volcano*, agricultural service company (Borynia, Turkiv District, Lviv Oblast);
- ✦ Business Association, Lviv Oblast;
- ✦ Entrepreneurs Committee for Industrial Development and Innovation of Lviv Chamber of Commerce;
- ✦ Fund of Hlyniany Charitable Organization (Hlyniany, Zolochiv District, Lviv Oblast);
- ✦ Stryi Development Agency, NGO;
- ✦ Agency for Economic Development of Turkivschyna, NGO;
- ✦ Local Development Agency, Sambor, Lviv Oblast;
- ✦ Council of Employers of Lviv Center for Vocational Education (State Employment Service);
- ✦ *Rotary – Club* Lviv, NGO;
- ✦ Carpathians-Ukraine Euroregion, local authority association;
- ✦ Agency for Regional Development and European Integration (Lviv).
- ✦ Yavoriv Technopark;
- ✦ Science park of the Uzhgorod National University;
- ✦ Innovation and Investment Cluster Science Park (Ternopil Oblast).

The most important for the region were the following international scientific conferences organized together with partners:

- ✦ Alternative and Renewable Energy as Alternative Primary Energy Sources in the Region;
- ✦ Natural Water Resources of the Carpathian Region: Protection and Regional Use Problems;
- ✦ Development of Scientific and Technological Parks and Innovation Structures of Other Types: Ukraine and International Experience.

In many cases, as a foundation for establishing partnership the Center used the results of the following research: «Updating the Regional Public Innovation and Information Infrastructure to Support the Processes of Integration of Science to In-

dustrial and Socio-Economic Spheres» and «Development of Innovative Infrastructure of Ukraine in the Regional Context» performed by the Center in the recent years. Specifically, the Center was actively involved in the development and implementation of international grant projects «Implementation of Energy Efficient Technologies in the Hlyniany District Hospital» and «Restoration of the Old School and Creation on its Base of Intellectual and Developmental Center, the *Mosaic* Multifunctional Educational Industrial Complex» (BU Hlyniany Development Fund), as well as in the development of the program of Uzhgorod National University scientific park and in preparing the promotion of entrepreneurship in the city (Lviv, 2014–2016) and others.

The offers of LSCSIITD on the application of the mechanism of public-private partnership for regional development have been used to form on the basis of the West-Ukrainian Scientific Center of NAS and MES of Ukraine of scientific organization and expert technological platform of regional innovation systems [8, 9], to prepare and conduct of the 2nd (2005), the 3rd (2010) and 4th (2014) the nationwide educational conferences, organized by *Native School* Lviv regional company, the 5th World *Boiky Festival* (2012) and the third World Congress of Ukrainian ethnic group, *Boikis* (2015), organized by the Ukrainian public organization *Boikovshchyna, the 21st century*.

As an effective model of cooperation to achieve this goal one can refer to the results of cooperation with NGO «European Innovation Agency (EIA)». During 2010–2015, LSCSIITD together with EIA in cooperation with foreign experts and organizations have implemented a number of expert and consulting projects in the field of information and communication technologies, energy efficiency, renewable and alternative energy sector, as well as water and wastewater reform, investments and promotion of small towns. As a result, seminars, consultations, study visits to Poland and other EU countries formed the permanent design teams in various spheres of economic life that have already begun to implement a solid innovative investment projects.

New Polish-Ukrainian project FARADAY (2013–2014) «Building of Long-Term Mechanisms for Cross-Border Cooperation in the Field of Renewable Energy», supported by the CBC program «Poland–Ukraine–Belarus», gave new features for such fruitful cooperation. The overall goal of the project was to improve conditions for the development and use of renewable energy sources in two regions covered by the projects of Krosnyansko Sub-Przemysl in Poland and Lviv Oblast in Ukraine. Establishing on the LSCSIITD building of a pilot plant generating electricity from photo modulus, with a total capacity of 2.0 kW and wind-powered station with a capacity of 0.5 kW has been one of the projects results.

It should be noted that the forms of regional CRIM activities confirmed by the successful practices were reflected in the State target economic program «Creation of innovation Infrastructure in Ukraine for 2009–2013» (Resolution of the Cabinet of Ministers of Ukraine, of May 14, 2008, no. 477) and in the government target program of development of information and analytical support for the implementation of the state innovation policy and monitoring of innovation development of the economy (Cabinet of Ministers of Ukraine, of May 7, 2008, no. 439). [10]

In particular, in the above-mentioned government programs, LSCSIITD planned creation in a number of areas of regional information and analytical business innovation centers (RIABIC) on the European model based on the existing information structures.

However, like many other government programs, these programs have not been met and RIABIC not been established because of the lack of full budget funding.

Centers should cooperate and form joint projects with financially powerful institutions, including the universities of the region, in order to thrive in today's crisis and be effective regional component elements of the national innovation system and solve the problems with the maintenance and operation of property. For example, having regard to the scientific and innovative po-

tential and resource capabilities of the National University *Lvivska Politekhnicna*, its experience, availability of the property complex, as well as organizational and professional competence of the Lviv State Center of Science, Innovations and IT Development, it would be expedient to introduce LSCSIITD in the structure of the university and create on its basis the Regional scientific and innovation center (RSIC).

The RSIC mission would lay with the development of science, technology and innovation in western Ukraine through the effective and efficient use of scientific and innovative potential of the region, especially the *Lvivska Polytekhnicna* National University, its material and technical resources and finance. This can be done by means of production and dissemination of new knowledge, science, technology and business information in the Ukrainian and international markets and their exchange; commercialization of research results and their implementation in the real economy; education of initiative, creative and professionally trained young entrepreneurs with active lifestyle, the desire to succeed and the ability to form a modern innovative economy in order to increase the level of self-organization and human welfare.

It is quite possible to create and develop within the RSIC the following units:

- 1) innovative business incubator;
- 2) regional center of commercialization and technology transfer;
- 3) regional center of scientific, technical and economic information;
- 4) regional educational institute of invention;
- 5) youth educational center.

In addition, to further the development of civil society and to develop innovative culture in professional environments of the region the executive authorities and local governments should be active on a competitive basis to involve in the implementation of national targets and render the financial support to those NGOs which effectively established themselves in the fields of education, science, entrepreneurship and innovation

and to form the regional development Agencies on the basis of partnership between the public, private and community sectors [11].

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ІНФОРМАЦІЙНО-ІННОВАЦІЙНИЙ ЦЕНТР ЯК ЧИННИК ФОРМУВАННЯ ТА ПАРТНЕР ГРОМАДСЬКИХ ОРГАНІЗАЦІЙ В ІНТЕЛЕКТУАЛЬНО-ФАХОВИХ СЕРЕДОВИЩАХ РЕГІОНУ

Обґрунтована актуальність формування у кризовий період дієвих громадських осередків на основі самоорганізації фахівців з різних професійних середовищ та роль регіональних інформаційно-інноваційних центрів в ініціації та підтримці таких процесів. Висвітлено практичний досвід Львівського державного центру науки, інновацій та інформатизації у створенні та підтримці діяльності громадських організацій у науково-інноваційній, підприємницькій та освітянській сферах західного регіону України.

Ключові слова: громадська організація, інтелект, інновація, розвиток..

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ІНФОРМАЦІЙНО-ІННОВАЦІЙНИЙ ЦЕНТР КАК ФАКТОР ФОРМИРОВАНИЯ И ПАРТНЕР ОБЩЕСТВЕННЫХ ОРГАНИЗАЦИЙ В ИНТЕЛЛЕКТУАЛЬНО-ПРОФЕССИОНАЛЬНЫХ СРЕДАХ РЕГИОНА

Обоснована актуальность формирования в кризисный период действенных общественных организаций на основе самоорганизации специалистов из разных профессиональных сред и роль региональных информационно-инновационных центров в инициации и поддержке таких процессов. Освещен практический опыт Львовского государственного центра науки, инноваций и информатизации в создании и поддержке деятельности общественных организаций в научно-инновационной, предпринимательской и образовательной сферах западного региона Украины.

Ключевые слова: общественная организация, интелект, инновация, развитие.

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