

Methodology and Business Background of the Urban Agglomerations Development in the Real Life of Kazakhstan

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Abstract. *In this article, methodology and business background studies of the urban agglomerations development in Kazakhstan are presented. This issue is actualized by the Government of the Republic of Kazakhstan's Resolution on creation of the urban agglomerations.*

There is a lack of sufficient experience to manage development of large cities and development of large urban agglomerations in the market conditions in the modern Kazakhstan. That is why the author, as a result of the study of this problem, has defined a number of practical recommendations.

Keywords: *urban agglomeration, regional management, social and economic system (SES), core city, urbanization.*

JEL classification: *R11 – Regional Economic Activity: Growth, Development, Environmental Issues, and Changes.*

Introduction

Growing interest towards the development of regional problems in the modern world is conditioned by the success of the country's development; competitiveness of its economy secures regions and their sustainable development in a bigger extent. In the world's society, as a phenomenon of the self-organization of communities, the tendency of concentration of the population in urban territorial subsystems – urban

agglomerations (UA) – has formed; UA are built around one or several center-cities (megapolis), influencing all other settlements.

This process is actualized in the context of the sustainable development of the regions, as the balanced development, the ability of the social and economic system of the urban agglomeration to successfully adapt to environmental changes on the basis of the rational usage of all types of resources without ultimate load is a post-industrial trend, changing the character of the connection between settlement and distribution of economic activities.

In the modern Kazakhstan, new economic sectors arise where there is a necessary quality level of population living, stable development of the social and economic system (SES). The core city through the range of innovations provides sustainability of the SES to the urban agglomeration. If the megapolis, around which the urban agglomeration is developed, appears to be noncompetitive, level and quality of living of the whole urban agglomeration population drops, that is why the meaning of “competitiveness” for them is close to the meaning of “sustainable development”. The urban agglomerations currently are not abstractive models of the theoretical research, but real objects, one of the most important tools of social and economic development management in Kazakhstan that requires principal rethinking of their role, place and significance on the country scale.

There is a lack of sufficient experience of management of large cities and development of large urban agglomerations in market conditions. Regional regulative and administrative authorities just accumulate experience in ensuring the structural economy balance in the conditions of the global resources competition, enhanced in the world crisis conditions, therefore, the study of this issue is very important.

In September 2013, during the session of Cabinet of Ministers of the Republic of Kazakhstan (hereinafter – RK), chaired by the Prime Minister Serik Akhmetov, amendments to the Regions Development Program in regards to the development of the urban agglomerations in Kazakhstan were approved [15]. Changes and additions to the Regions Development Program have been made in the context of the President’s message to the nation of Kazakhstan [20], where the following is stated: “the state will support the concentration of the population in the long-term centers of economic growth, which are urban agglomerations under development. Hence, for modern conditions of development of the urban agglomerations, the justification of the methodology of capitalization of competitive advantages, adaptation of the best practices, search of directions and management mechanisms by the sustainable development of the urban agglomerations are relevant for implementation of the positive structural reforms in order to increase strategic long-term regional competitiveness both from scientific perspective and practical end.”

Problems of management of cities' development in Kazakhstan shall be reviewed in the frames of the further development of socially oriented market economy. During the study of this problem, the international and national experience, reflected in the works of M. Alle [4], H. Lampert [13], P. Heyne [11], L.I. Abalkin [1], A.G. Aganbegyan [3] and others, has been considered. However, it is worth mentioning that the majority of scientific works are devoted to problems of development of cities and management of their development in the conditions of the Command and Administration System that conditioned one-sidedness of the analysis.

Problems of competition and competitiveness have been studied in the world science since the 17th century. Their conceptual basis is classical works of A. Smith [18] and D. Riccardo [16]. A huge contribution has been made by I. Schumpeter [17], the author of the theory of innovations, R. Sollow [19], considering the scientific and technical progress as a key determinant of the economic development, M. Porter [14], the author of the theory of the development of the competitive industrial clusters.

Significant attention has been paid by M.V. Glazyrin [8], B.M. Grinchel [9], M.A. Gusakov [10] and others in their works of issues of strategic management of social and economic development of regions.

Issues of development of territories have been studied also by Kazakh authors A. Abzhaliyeva [2], S.Z. Baymagambetov [5], L.N. Burlakov [6] and I. Dauranov [7]. Mainly, there are norms and regulations governing the process of urban agglomerations development, that is why the study of the methodology of this matter is extremely important, besides, a lot of works were published within the last ten years in regards to the issue under the research, but many of the aspects of this problem remain disputable and need further research. The analysis of perspectives of sustainable development, strategic aspects of management in the modern urban agglomerations has not been sufficiently captured in the scientific researches. The published works do not provide undisputable answers to the ways of the development of infrastructure of the urban agglomerations, on ratio of the state role and market mechanisms on its creation, on issues related to sustainable development of social and economic systems of the urban agglomerations on the innovational basis. These questions demand further research and solutions. The above mentioned has defined the purpose and contents of this article.

The works of the national and international scientists related to the issues of territorial competitiveness, regional management have served as a methodological base of the research. In the article, theoretical analysis and synthesis, historical and logical methods, abstraction and concretization, simulation and analogue approach, interdisciplinary system concept were used.

Description and formation of business background for the development of the urban agglomerations in the real life of Kazakhstan

In today's world, city settlements merge with each other, forming territorial structures of Benard's cell types [22] and forming the UA with population of millions of people. Under the territorial social and economic system, the author understands social and economic formation, possessing a certain freedom of selection of activity form and representing integral organizational structure, elements of which are interconnected and co-functioning to achieve common objectives. The biggest part of difficulties in regards to the development of cities is connected with the conflict of interests of the subsystems. The sustainable development of the urban agglomerations is, in the author's opinion, the process leading to the balanced social and economic and ecological development on the basis of the rational usage of all the resources, including manpower, geological and geographical, for resolution of the goals related to citizens' living quality increase.

The largest cities and urban agglomerations are the example of the open systems, which are long away from the balance. Instability is a potential source of the system development, appearance of new structures occurs when nonlinear effects, determining its evolution and conditioned by the external influence, become sufficient for the growth of fluctuations, which are specific for such systems.

The process of urbanization in Kazakhstan has been connected to the quick concentration of the industry in large cities, creation of new large cities in the regions of new developments and, accordingly, with relocation of large masses of population from village to city and its high concentration in large and the largest city settlements [2, p. 5].

Urbanized regions of Kazakhstan play a major role in the social and economic development of the country and take a big part in many economy sectors.

There are 86 settlements in the Republic. 53% of the Republic population lives in cities. During the 80s, urban population prevailed in the Republic. During those years, cities developed along with the development of the natural resources, and urban population totalled 62.2% of the overall population. One of such cities is known to be Karaganda. Today, Karaganda (480 075 people, 2012) [12] has less perspectives in regards to urban growth, as demographic resources of the surrounding territory are being reduced, and the majority of the population is concentrated in the region center together with Temirtau city. The growth of the population from middle and small industrial centers, not only from Karaganda, goes by means of migration of population from villages. The obstacle for concentration of the population in the region appeared to be Astana city, which is more attractive and promising for migrants. Nevertheless, the development of Karaganda region can be reached by means of an upgrade of the economy, enhancement of the relationship between its cities and an upgrade of the manpower qualifications [21, p. 36]. Historically, the modern process of urbanization happens due to the fact that cities have become the main form of settlement of people, since industries are concentrated there.

Settlement of people happened in a form of mosaic: they were located by the mountain regions, close to transit highways. Almaty falls under a mono-centric type of the urban agglomeration (there are mono-centric (formed around one large core city, e.g., New York agglomeration) and polycentric (having several core cities, e.g., accumulation of cities in Ruhr area in Germany) agglomerations. There are decently established social and cultural relations between Almaty and adjacent to it settlements. The suburbs provide the center with human resources, use social and cultural resources of the city, and the city, in its turn, provides the suburbs with ready manpower, i.e. it trains specialists. Thus, there is an interchange. Currently, around 2 million people are living in the urban agglomeration.

Since Kazakhstan has become an independent state, large urban centers started accumulating around the regions of the Republic. Often people move from ecologically unfavorable regions to economically developed, favorable for health and business regions. The state itself finances infrastructural projects that can have the following life cycle, presented in Table 1.

Table 1. City project in stages of the life cycle

Stages of the project	Works	Tools
Project concept development	Collection of basic data and their analysis, analysis of resources, identification of the necessity of the project, alternatives, expertise of offers, concept approval, tender conduct for the concept development.	Monitoring of social and economic status of the city, resources analysis, marketing researches, methods of activation of creativity of the project specialists.
Project development	Assignment of the supervisor and the project manager from the state authority and organization of the team, establishment of contacts, analysis and study of motivations and requirements of the project participants, concept development and main contents (business plan), structural planning, control process development, definition and distribution of risks.	Marketing tools (product development, pricing, promotion, sales channels, positioning), methods of activation of creativity of the specialists, simulation methods, resources analysis, planning of resources and costs, method of functional and cost analysis, quality management, risk management, economic analysis of the project, (calculation of Net Present Value, International Rate of Return and other) and reliability of participants (financial analysis), resource motivation.

Project implementation	Organization and holding of tenders, including placement of orders, conclusion of contracts, works execution organization, implementation of communication methods between participants of the project, implementation of motivation system of the project team, works control, organization and management of works maintenance, works performance, operational control and regulation of the main indicators of the project, resolution of arising problems.	Methods of operational planning of works, time, resources, project monitoring methods, controlling through budgeting, forecasting of project development and control, supply chain management (logistics).
Project completion	Completion process planning, testing of the final product, operators training, commissioning and putting in operation, results assessment, closing of works and resolution of conflicts, sale of leftover resources, release of the team.	Methods of analysis of the project efficiency, methods of development of performance charts and analysis of data on planned and actually completed works on the project, crisis management.

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Following such logic during implementation of infrastructural projects for newly developed industrial centers can assist in formation of the urban agglomeration in the criteria as demographic capacity, logistic and economic potential.

Selection of projects is the final stage of the development of the strategic plan of the urban agglomeration development. Here, achievements of the modern management in regards to the project management may and need to be used. During the stage of projects implementation, standard tools of project management can be used: budgeting, environment monitoring, logistics of management of financial, material and information flows, staff motivation and others.

As a result of the study of urban agglomeration's potential of the cities of Kazakhstan, the urban agglomerations of two types were defined: first – Astana, Almaty and Shymkent, second – Aktobe and Aktau. The definition of the urban agglomerations of the second level is conditioned by the presence of the precise strategy of cities development, and also by the results of implementation of the most important state and industrial programs by the regions. As a whole, it is proposed to define the main task of development of urban agglomerations in Kazakhstan as a foundation of urban agglomerations as long-term growth centers, integrated

with the global and regional markets. In the first type of the urban agglomerations, economic specializations of each urban agglomeration are defined. Thus, Astana agglomeration is suggested to be positioned as the center of high technologies and innovations on the basis of the University named after Nazarbayev, medical cluster and forming industrial zone. It is considered as the network “growth zone”, taking into account proximity and perspective of Karaganda development and Schuchinsko-Borovskaya Resort Zone development.

Almaty urban agglomeration will be developed as a trade and logistical and financial center, innovational cluster on the basis of Park of Innovative Technologies “Alatau” and largest universities, as a tourism center of the Central Asia. This agglomeration is planned to be developed taking into consideration construction of satellite cities under the project G4 City, which includes 4 satellite-cities, that will become one of the components ensuring development of Almaty region and an integral part of the development of the Central Asia region as a whole, and construction of the International Center of Near-Border Cooperation “Khorogos”.

Provision is made to ensure coordinated development of the urban agglomerations infrastructure and zone of their influence. This is the formation of integrated transportation and communication systems, an upgrade of housing and utilities sector using new technological solutions. Besides, the provision is made for elaboration of interregional action plans for the development of the urban agglomerations, approved by the decrees of the Government – for Astana and Almaty, and resolutions of the regional maslikhats – for Shymkent, Aktobe and Aktau, and also elaboration of the long-term agglomeration city construction plan (interregional diagram) of the development of the urban agglomeration and zone of its influence.

Regarding the model of the management of the urban agglomerations in Kazakhstan, the following is offered: as for Astana and Almaty agglomerations, the management is to be carried out on the basis of the contractual relations between akimats of Astana and Akmola region, Almaty and Almaty region, but with the establishment of a commission under the Government, directly responsible for the development of these urban agglomerations. Mechanism of the contractual relations will be further improved. As for Shymkent, Aktobe and Aktau urban agglomerations, it is supposed to carry out interregional coordination at regional akimats’ level. It is required to focus on a more precise understanding of cooperation with investors, development of layers of small and middle businesses and an innovational component.

In the world practice, the development of the urban agglomerations as growth poles allows concentrating economic and labor potentials of a country, achieving scale effect, infrastructural effect. The Government offers to develop them in the following directions:

First. Economic positioning of urban agglomerations on the republican and regional markets.

Second. Coordinated development of infrastructure of urban agglomerations and zones of their influence.

Third. Improvement of city construction and institutional policy of urban agglomerations development.

In Kazakhstan, at the initial stage it is decided to focus on the already formed large urban agglomerations – Almaty, Astana, Shymkent and regional centers, population of which exceeds 250 thousand people [21], which, as per the world practices of spatial development, can become centers of sustainable urban agglomerations. Unfortunately, there is no single megapolis of a global scale in Kazakhstan and the only one megapolis of Kazakhstan scale is Almaty.

The following factors of renewal and further development of urban agglomerations may be noted: Almaty and adjacent settlements with rich natural and labor resources, i.e. favorable demographic conditions, communication system, development of transportation routes, stable development of industry and agriculture, political stability of the population. Thus, with the fundamental resolution of these problems, the condition of all urban agglomerations in the republic will improve.

Formation of the urban agglomerations in Kazakhstan takes place in a sign of depopulation, loss by rural area the ability to replenish urban population, due to social and economic crisis and drop of industrial production. Currently, Kazakhstan incurs a deficit of cities of all categories and mostly large urban agglomerations; it results into problems with proper spatial development, territorial organization and upgrade of remote areas.

In particular, large cities and urban agglomerations must serve as a “driving force”, “growth poles” of the social and economic development of the country and its regions. Innovational development in Kazakhstan can be ensured by means of urban processes, activation of cities’ development and allocation of city-leaders. In this connection, the key form of territorial organization in Kazakhstan with low density of population must be urban agglomerations, where major resources of territories are concentrated: human, natural, ecological, financial, innovational and cultural. Such approach will ensure quality demographic and territorial and spatial growth of Kazakhstan [5, p. 15].

Astana and Almaty cities themselves center economic activity in the country and have an opportunity to act as integration zone of the country with regional and global markets. They are located at the crossroads of axes of the country development and are large innovational and managerial centers.

These cities must become the so-called post-industrial zones – innovational and educational, trade and finance oriented, recreational, transportation and logistical centers, stimulating inflow of the most valuable type of capital – human, and providing high quality living for the population.

It is possible only if the structural diagram of index of competitiveness is upgraded and the following indicators are included into the key indicators of regional development [23]:

- lhp – development of human potential (IDHP);
- lql – quality of living;
- lis – innovation in region.

These indicators are supplemented with the index of infrastructure development I_{ti} , which, according to Yanovsky [23], will allow considering innovational perceptivity of economy in a fuller extent.

Unfortunately, when innovations in the region are discussed, there are a number of barriers to be eliminated if we want to make urban agglomerations competitive. These barriers are as follows:

1. There are relationships with certain entrepreneurs, resulting into limitation of competition;
2. Invalid direct veto to carry out a certain type of activity (monopolization of certain businesses);
3. Invalid fees and licenses;
4. Direct corruption (tenders, participation in various project programs) and excessive bureaucratization of administrative procedures;
5. The aim to occupy property or participate in it is presented as a condition of investments support.

Investment attractiveness of the urban agglomerations is made of three components: investment potential, efficiency of investments usage and level of investment risks. It is proposed to form sources of competitive advantages of megapolis on the innovational basis, using investments for optimization of available resources consumption. Investment climate includes objective capabilities of the region (investment potential) and conditions of investor's activity (investment risk). Favorable investment climate, as a combination of specific for the region factors, forms motivation to realize productive investments, create workplaces and expand spheres and volumes of activity. In the author's opinion, the following can be used as the key indicators of innovational perceptivity of the economic system: a) average labor efficiency in production; b) energy consumption of the regional product (ratio of gross regional product to energy consumed for its production) [23].

Investment policy of the urban agglomerations must ensure maximum efficiency of the economic growth, which means the state strategy of selected investment, implementation of investments, ensuring positive social and economic effect and initiating further investments. Such investments are called qualitative. Policy on attraction of investment is proposed to be built on the basis of assessment of the practicability of investment into specific economy sectors from the population living the quality growth perspective.

Conclusions

As a result of the research, the article contains solutions of various aspects of the actual economic task of search for alternative options and approaches for the implementation of mechanisms of the formation of sustainable development of the social and economic system of the urban agglomerations, oriented to provision of high level and quality of living of population in the real life of Kazakhstan. Such solutions are as follows:

1. Characteristics and description of business basis of the urban agglomerations in the real life of Kazakhstan using project approach are provided.
2. It is recommended to upgrade the structural diagram of the index of competitiveness and supplement the key indicators of region development with the development of human potential (IDHP); quality of living; innovation in the region [23], supplement it with the index of infrastructure development.
3. Investment policy of the urban agglomerations must ensure maximum efficiency of the economic growth. To develop state strategy of the selected investment, ensuring social and economic effect, this will result into further investments.
4. Correction of the economic policy for attraction of the qualitative (ensuring growth of competitiveness – companies/territories) investments for an upgrade of production and services provision on the basis of new technologies and the increase of innovational perceptivity of the regional economy members.
5. Economic support at the cost of the state regional grants and legal motivation by means of introduction of new regulations of science and scientific service, culture and professional education.
6. Enhancement of the positive image of the urban agglomerations through marketing mechanisms (tourism development, branding and others).
7. Promotion by the state of the urban agglomerations development to provide high speed of exchange of big volumes of information and high level of communication of market members for the increase of the innovational potential of the sustainable development.

References

1. Abalkin, L. I. *Russia in Search for Identity*. M.: Nauka, 2002, p. 424.
2. Abzhaliyeva, A. T. *Urbanization and Its Social Consequences (on the Basis of Materials of Republic of Kazakhstan)*. October 15, 2013. Auto-abstract, candidate of social science specialty: 22.00.04. Social Structure, Social Institutes and Processes. Almaty, 2000, p. 23.
3. Aganbegyan, A. G. Economy of Russia at the Crossroads. *All Russia Economic Magazine*. 2007, 9: 7.
4. Alle, M. *Conditions of Efficiency in Economy*. M., 1998, p. 512.
5. Baymagambetov, S. Z. *Local State Authorities and Government*. Astana, 2011, p. 178.
6. Burlakov, L. N. *Modernization of the System of Regional and Local Government in the Republic of Kazakhstan (Business Aspect)*. Astana, p. 150.
7. Dauranov, I. V. Small Business Activity Decline in Kazakhstan [interactive]. [accessed on 2013-09-21]. <<http://www.nomad.su>>.
8. Glazyrin, M. V. *Management of the Social and Economic Development of the City*. Novosibirsk: “Nauka”, Siberian division of AN of USSR, 1983, p. 8-11.
9. Grinchel, B. M.; Schussmann, K., and Kolstyleva, N. E. *Economic Strategies of the Active Cities*. M.: Nauka, 2002, p. 498.

10. Gusakov, M. A. Issue of Research and Directions of Transformation of Scientific and Innovation Space. *Economics and Management*. 2011, 5: 7.
11. Heyne, P. *Economic Way of Thinking*. M., 1994, p. 704.
12. Kazakhstan Statistics Agency. No. 09-03/4312012, November 30, 2012, on change of the population size from the beginning of 2012 up to November 1.
13. Lampert, H. *Social Market Economy*. German Way. M.: Delo, 1993, p. 225.
14. Porter, M. *Competitive Strategy*. Alpina Business Books, 2006, p. 454.
15. Program "Regions Development" 26.07.2011, No. 862. Decree of the Government of the Republic of Kazakhstan as of July 26, 2011.
16. Riccardo, D. *Beginnings of Political Savings and Taxation*. M.: Socekiz, 1935, p. 295.
17. Schumpeter, Y. A. *Theory of Economic Development*. M.: Exmo, 2007, p. 864.
18. Smith, A. *Research of Nature and Causes of the Wealth of Nations*. Book 2. On Nature of Capital, Its Accumulation and Application. M., 1991, p. 149.
19. Sollow, R. *Theory of the Economic Growth*. M., 2007, p. 567.
20. Strategy "Kazakhstan-2050": New Political Policy of the Established State. Astana: Kazakhstanskaya Pravda, 14.12.2012.
21. Strategy of the territorial development of Karagandinskaya oblast up to 2015. Approved by Resolution of 11th session of the oblast maslikhat No. 29 as of October 16, 2007.
22. Van-Dyke, M. *Album of Liquids and Gas Flow*. M.: Mir, 1986, p. 84.
23. Yanovsky, V. V. *Innovational Development of the Large City*. Megapolis Saint-Petersburg: SZAGS, 2007, p. 231.

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Kazachstano miestų aglomeracijų plėtros metodologinės ir komercinės prielaidos

Anotacija

Straipsnis apima Kazachstano miestų aglomeracijų vystymo metodologinius ir verslo aplinkos tyrimus. Šio klausimo aktualumą patvirtina Kazachstano Respublikos Vyriausybės priimtas nutarimas dėl miestų aglomeracijų kūrimo.

Kazachstane įsitvirtinus rinkos sąlygoms, šiuo metu jaučiama didžiųjų miestų ir jų aglomeracijų plėtros valdymo įgūdžių ir patirties stoka. Todėl autorė, išanalizavusi šią sudėtingą situaciją, pateikia nemažai praktinių rekomendacijų.

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