Development challenges of a mining single-industry town in the Russian Arctic: the case of Kirovsk, Murmansk region

Arctic single-industry towns, due to the influence of specific economic and geographic, as well as natural and climatic factors, are settlements of a special type. From the socio-economic development perspective, a specific characteristic of single-industry towns is the fact that because of the mono-profile character of their economies they have higher development risks of the “boom-bust” type and the correspondent social problems. Thus, such towns face huge challenges of their development prospects. How is the situation developing here now? What measures are taken in Russia on federal and regional levels towards single-industry towns and what local governments are doing themselves? How do local communities of single industry towns react on the measures and how do they try to cope with development challenges? This paper intends to briefly discuss the questions, taking the town of Kirovsk in the Murmansk region as an example.

Single-industry towns in the Russian Arctic are quite a typical phenomenon existed as the legacy of large-scale exploitation of natural resources of the North in the Soviet period (1930s – 1980s). One of them is the town of Kirovsk, which was founded in the beginning of the 1930-s, upon the decision of the Soviet government on the development of rich deposits of apatite-nepheline ores discovered in the 1920-s. “Apatit” became the town forming enterprise, which in 1929 started extracting apatite-nepheline ores and since 1931 processing it at the enrichment plant for production of apatite and nepheline concentrates. The concentrates then were delivered to central Russia for production of mineral fertilizers and other products.

During all Soviet period (up to 1992) the state enterprise “Apatit” controlled not only industrial production, but almost all social sphere of the town. Most of social infrastructure organization (housing and communal services, retail trade and catering, health care, sport, and culture) functioned as subdivisions of the enterprise. In 1993 the enterprise was transformed into Joint Stock Company “Apatit”. The period of 1990s was characterized for the company by deep crises, when production fell down almost four-fold. In 2002 the company was included in the PhosAgro group of companies (holding) - a Russian vertically integrated company and one of the world’s leading producers of phosphate-based fertilizers1. Nowadays 100% stocks of “Apatit” are owned by “PhosAgro” holding. By 2012 “Apatit” company, having four open and underground mines and two processing plants, produced more than 90% of the total town’s industrial production and employed 32% of the town’s workforce (6,4 th. out of 20 th. of the working age population). Total number of the company’s employees that time was 11.6 thousand people (Riabova & Didyk 2014), but recently situation changed considerably.

The town of Kirovsk is the administrative centre of the municipality with the same name, having the legal status of an “urban district”. The territory of the urban district is 3.6 thousand

1 For more information see https://www.phosagro.com/about/
km² (2.5% of the territory of the Murmansk region), where besides the town there are two rural settlements - Titan and Koashva. By the beginning of 2014 population of the municipality was 29.9 thousand people, including that in the town of Kirovsk 27.7, and in the both mentioned settlements - 2.2 th. people (Municipalities of the Murmansk region, 2014).

“Apatit” company, besides its crucial role for Kirovsk municipality, historically was the town forming one for the neighboring city of Apatity. The latter got the status of a city in 1968 mainly in connection to the fast growth of population due to construction of the second apatite-nepheline beneficiation plant (ANOF-2) and development of the construction base for further expansion of “Apatit” company’s production facilities. Today population of the city of Apatity is 57.8 thousand people. Despite it is not recognized as a single-industry town, significant part of its workforce (5.6 thousand people, or about 24% of employed in the economy population) work in Kirovsk, mainly at the mining enterprises – “Apatit” company and “North-Western Phosphorous Company” Ltd. (NWPC).

The NWPC is a comparatively new mining company, operating on the territory of Kirovsk municipality and recently weakened the almost monopolistic position of “Apatit” company at the local labor market. NWPC was founded in 2005 as a subsidiary company of JSC “Acron”, a large fertilizer manufacturer and consumer of apatite concentrate in Russia. “Acron” previously consumed the concentrate from “Apatit” and, due to the monopolistic position of the latter at the Russian market, had contradictions with “Apatit” concerning the prices for the concentrate. “Acron” created NWPC to ensure its own source of the raw material. In October 2006, NWPC won a contest for acquiring the state mining license to develop two new deposits of apatite-nepheline ore «Olenyi ruchei» and «Partamchorr». In 2007 construction of the mine and the processing plant at «Olenyi ruchei» deposit for production of the apatite concentrate began. In 2012 their exploitation started. Today NWPC employs about 2 th. people, more than half of them live in the city of Apatity.

Implementation by NWPC of the new mining project caused serious conflicts between several interest groups. Firstly, it was the conflict between the “Apatit” company and the newly appeared NWPC, since they became direct competitors for the production and supply of apatite concentrate in Russia. Moreover, the new competitor started using the ore deposits, which “Apatit” considered its own perspective reserves. Secondly, initiation of the construction of the mine and the new ore processing factory caused the conflict with environmental NGOs since the deposits and the processing plant were located in the close proximity to the National park «Khibiny» planned to be established in 2015 on the territory of Kirovsk municipality. In spite of the conflicts, the new mining project was actively supported by the government of the Murmansk region. The support was provided mainly due to large investments (around 1 billion USD) on the territory of the region and expectations for the additional tax revenues to the regional budget. It was also supposed that implementation of the project would provide benefits to the Kirovsk municipality: additional working places for the locals and good perspectives for the revival of formerly depressed rural settlement of Koashva situated in the vicinity of the newly developed deposits (Riabova & Didyk 2014).

Despite the appearance of the new large mining enterprise (NWPC) on the territory of the municipality, the dominant role of “Apatit” company as the town forming one for Kirovsk is still remained. Being the owner of the big part of social infrastructure in the Soviet period and playing the essential role in the social policy at the local level, “Apatit” used to be the socially responsible

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2 The both settlements were also founded due to “Apatit” operation: Titan in 1930s as agricultural settlement for food supplies of the enterprise and citizens of Kirovsk; Koashva – in the end of 1970s as mining settlement connected to construction and operation one of the “Apatit” enterprise’s open pit mine.

3 By beginning of 1990s the number of population in Kirovsk exceeded 40 thousand people and all following period had permanent trend to decrease.
company not only towards its employees, but for several above mentioned local communities. Even though strategic decisions were taken in the holding’s headquarter out of the region, the company’s operational decision making, including social policies, was greatly locally based and the top managerial staff used to have strong personal attachment to the local community.

In general, up to April 2013 the situation in the Kirovsk municipality remained quite stable, with promising optimistic prospects of future development. The latter was clearly reflected in both interrelated documents of strategic planning – “Comprehensive investment plan of modernization of the monotown of Kirovsk” (CIP 2010) and “Strategy of socio-economic development of the Kirovsk municipality up to year of 2020” (Strategy 2011). Preparation of the strategic documents was mainly conditioned by policy measures and requirements taken by the RF Government in response to the global financial and economic crisis of 2008-2009. They included the measures to stabilize the situation in mono-profile settlements, which involved financial support for the investment projects of single-industry towns. One of the requirements to get such a federal support was the existence of Comprehensive investment plans (CIP) for the settlements’ development in the long term (10 years), prepared according to methodological recommendations suggested by the RF Ministry of Regional Development (Minregion of Russia). In the Murmansk region due to the active position of the regional government all 8 mono-profile municipalities, which were included in the official list of such municipalities, prepared the mentioned strategic documents. CIP of Kirovsk municipality was presented in Moscow, but didn’t get any financial support, probably because of the quite stable position of the town forming “Apatit” company in that time. The main target indicators, which were fixed in the mentioned strategic plans and their conformation by 2015 are presented in the table below.

<table>
<thead>
<tr>
<th>Indicators of socio-economic development of the Kirovsk municipality</th>
<th>Units</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of indicators</td>
<td></td>
<td>Reported data</td>
<td>Planned*</td>
</tr>
<tr>
<td>Population</td>
<td>Thousand of people</td>
<td>30,9</td>
<td>33,0</td>
</tr>
<tr>
<td>Coefficient of natural increase</td>
<td>Per mille</td>
<td>-2,65</td>
<td>-</td>
</tr>
<tr>
<td>Coefficient of migration increase</td>
<td>Per mille</td>
<td>-5,7</td>
<td>-</td>
</tr>
<tr>
<td>Number of people, employed in the economy</td>
<td>Thousand of people</td>
<td>16,4</td>
<td>17,3</td>
</tr>
<tr>
<td>Share of people employed in the mining sector</td>
<td>%</td>
<td>31,8</td>
<td>25,7</td>
</tr>
<tr>
<td>Share of people working at small enterprises</td>
<td>%</td>
<td>8,2</td>
<td>10,1</td>
</tr>
<tr>
<td>Level of registered unemployment</td>
<td>%</td>
<td>3,1</td>
<td>2,9</td>
</tr>
</tbody>
</table>

* From CIP (2010) and Strategy (2011)
** From Forecast (2014)

The data demonstrate that in 2010-2011 the local government regarding prospects of the municipality’s development planned to overcome the previous trend of population reduction and

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4 There are a lot of examples of socially responsible behavior of “Apatit” company toward local communities, including improvement of urban infrastructure, realization of socially significant projects in the spheres of health care, education, and culture.

5 The official list of mono-profile municipalities of the RF had been annually approved by Minregion of Russia since 2009 in accordance with the accepted by the Ministry criteria. The latest version of it – as of July 26, 2013 – contained 342 localities. In 2014 the function of policy formation toward single-industry municipalities was moved to the RF Ministry of Economic Development. The latter suggested new criteria for official recognition of single-industry status to be eligible for federal support measures (Decree of the RF Government of 29.06.2014 No. 709) and the correspondent new list of mono-profile municipalities with 3 categories of such municipalities depending on risks of socio-economic development (Decree 2014).

6 In 2010 financial support from the federal budget was provided to two single-industry towns from Murmansk region – Kovdor and Revda. In total during 2010-2011 federal financial support was provided to 50 single-industry municipalities, out of them 3 are located in the Russian Arctic.
already by 2015 to reach a notable growth (10%). Moreover in both mentioned documents of strategic planning the municipality’s population was anticipated to reach 35.4 thousand people by 2020. The main factor of such growth was planned to become diversification of the economy, primary regarding the tourist industry development. Indeed, Kirovsk has good preconditions and high potential for the tourist industry development, especially related to winter sports and mountain hiking. Due to Khibiny Mountains Kirovsk is a well known alpine skiing resort in Russia and abroad. It has to be noted that despite most of the planned in CIP (2010) investment projects have not been realized yet, one of the key among them was recently completed successfully. It is construction of the new modern multi-place gondola- and chair-type lifts with the related ski service infrastructure. The investment project was realized using the mechanism of public-private partnership with participation of the regional government, “Apatit” company and Kirovsk municipality. Nevertheless, the positive example of the project realization could not ensure achievement of the planned development objectives. The main reason was the dramatic change of the situation at the town forming company “Apatit”.

Since April 2013 “Apatit” company due to the decision of its main owner (holding PhosAgro and its managing company “Phosagro AG”) started the new deep-restructuring program aimed at reduction of operational costs and growth of labor productivity. The restructuring anticipated dismissal of more than 2000 employees in 2013 and 3000 in 2014. Major part of the fired stuff was moved out of the company into outsourced companies or in retirement. As a result, the total number of the company’s employees dropped from 11.6 th. in 2012 to 7.1 th. people by the beginning of 2015.

This led to the decision of the special governmental commission of the RF in 2013 to include Kirovsk in the list of single-industry towns with the most difficult socio-economic situation. This decision was confirmed in 2014 by its inclusion in the first category of the new official list of mono-profile municipalities of RF, i.e. the municipalities with the most difficult socio-economic situation (Decree 2014). Besides, during the last decade the company has been transferring all its social objects (the sport complex, the palace of culture etc.) to the Kirovsk municipality. As a result, the burden for the municipal budget notably increased. It is worth to mention that over the last decade, first, decision making process in regard to the company’s activities, including its social policies, was concentrated outside the Kirovsk municipality. Second, gradually the top managerial staff of the company was replaced by newcomers from outside the community. These obviously led to the weakening of the company’s social responsibility (Koivurova 2015). Such the company’s behavior change, in turn, seriously undermines opportunities and prospects for sustainable development of the local community.

The latest unexpected event, which also would have very negative consequences for the Kirovsk municipality development in case of its realization, is the decision to close Khibiny Technical College. This decision was made in the beginning of 2015 by leaders of National Mineral Resources University (“Gorny”, St. Petersburg), since the college for the last few years functioned as the university’s branch. There is already the rector’s order to stop admission of students for 2015-2016 study year.

The college is the oldest organization of professional education in Murmansk region (founded in 1931 as the mining-chemical college). More than 700 students are currently studying there by 8 specialties. Loss of such an important educational organization in addition to the recent closure of Kirovsk branch of Kostroma University (a higher education institution) unavoidably will hamper development prospects of the municipality.

The above mentioned circumstances both concerning the recent “Apatit” company’s policy and different unfavorable changes in the town’s social sphere obviously generate anxiety among local residents.

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7 Actually the company have started reorganization measure singling out internal service subdivisions into separate companies partly in 2007 and 2011.
8 The data are from annotated part of the Forecast (2014).
9 Beside mentioned events in educational sphere, there a lot of complains on bad organization of medical services (after reforming of municipal health care system in 2012, when it was transferred to submission of regional
people. An example of not only anxiety, but some actions of the local community is collection of signatures under the letter to President Putin to protect Khibiny Technical College against its closure. However, examples of actions of the local community rather exceptional. Usually, due to weakly developed local institutes of civil society, public participation in the urban development process both at the stage of planning and realization of the plans is very low.

Thus, estimating the situation and development prospects of the single industry town of Kirovsk the following main sustainability challenges which the local community faces and which demand responses could be pointed out:

1) The demographic challenge. Demographic situation could be regarded as the main integrated indicator of viability of any community. Despite the fact that achievement of population growth was among the main targets in the acting strategic plans of the Kirovsk municipality development, the negative trend of population reduction due to both natural and migration changes is continued. Taking into account that both major factors of such reduction – emigrational flow and high mortality rate – are now out of the impact of the local authorities (in particular, health care services), most probably the trend will be continued;

2) The challenge of economic development prospects. The crucial role of the mining industry for the economy of municipality in the foreseeable future will be preserved. It is admitted in all long term plans of municipal development, despite they emphasize the need for diversification of the local economy. The effort for the economy diversification, development of the tourist industry as main way of such diversification, has to be promoted even more actively under the current conditions of rationalization and cut of personnel on the town forming mining company. The growing problems of unemployment could be softened only by means of economic diversification.

3) The local social sphere development challenge. The social sphere, including education, housing and communal services, health care, sports, culture, is a key determinant of the local people’s quality of life. Most services of the sphere are under direct control of the local government. It means that despite the chronic shortage of available resources (first of all financial), development of the sphere has to be the highest priority of the local government’s policy.

4) The environmental challenge. The unique nature landscape and other environmental values are an essential resource for the Kirovsk municipality taking into account its ambitions of the tourist industry development. The progress of the National Park “Khibiny” project, which planned to be realized in 2015 (after the long period of its preparation), is one of the important steps towards environmental protection and the tourist destinations formation. The large-scale mining activities on the territory of the municipality inevitably make a harmful environmental impact. Permanent search for compromise decisions regarding interests of economic/mining development and environmental protection has to be done with participation of local government/community to cope with the challenge.

Obviously the above listed challenges cover only part of those, which are faced by the local community in real life. Some of them are defined by external factors, which the local community cannot respond to adequately by itself and independently to achieve sustainability. Most important among them is the economic policy of the town forming mining company. The company’s interest to enhance its own economic efficiency leads to negative social consequences under the conditions of the single-industry town. In case of the Kirovsk municipality capacities of the local government/community to withstand the negative consequences, as shovё trend to worsening of socio-economic situation, are not enough. At the same time the local government can more actively use such internal development resources and success factors as strengthening solidarity of local community, public involvement and participation in local governance decision making, efficient partnership between the public and private sectors. Under the Russian institutional conditions with high level of power centralization the critical role for achievement of sustainability goals at the local level, especially for single-industry municipalities, belongs to the state support from both federal and regional governments. However, taking into account the current economic crisis conditions chances to get a notable state support for single-industry towns are very low. Therefore perhaps the only realistic way of

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government, which merged Kirovsk and Apatity hospitals), as well as housing and communal services (especially problems with organization of current and capital repairing of leaving houses).
Kirovsk municipality development is mobilization of all internal resources and capacities to soften, at least, negative impact of unfavourable socio-economic trends on the local community.

References

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