Risk Management in the Formation of Personnel Providing Investment Development of the Region (on the Example of the Far Eastern Federal District)

Nikolay P. Veretennikov Saint-Petersburg Electrotechnical University "LETI" Saint Petersburg, Russia nveretennikov@mail.ru Ksenia G. Yankovskaya Gorno-Altay state University Gorno-Altaysk, Russia ksysha.78@mail.ru

Olga V. Kulagina Amur State University named after Sholom Aleichem Birobidzhan, Russia belkyl@yandex.ru

Abstract—The article substantiates the need for risk analysis and management when developing educational programs for the training of specialists in newly formed industries in the Far Eastern Federal District. The possibilities of educational institutions to meet the needs of newly formed industries are settled, for example, a mining and processing plant in the Jewish Autonomous Region, a metallurgical plant in the Amur Region and a network of gas and oil pipelines laid across the territory of a number of Far Eastern entities. The main provisions on risk management in the training of personnel for newly formed industries are determined, and how this will affect the investment development of the regions.

Keywords—investment development of the region; risk management; human resources; investments; mining and metallurgical industry; labor migration

I. INTRODUCTION

On today, the development of the Far East is a national priority. The necessary conditions are actively being created in the Far East for launching new industries and attracting investors at the moment. New areas of economic development of the Far Eastern Federal District are such areas as the formation of mining and metallurgy, oil and gas processing complexes. Strategic documents for the development of the mining and metallurgical industry have been developed and are being implemented ("The Strategy for the Development of the Metallurgical Industry of Russia for the Period Until 2020", "The Strategy for the Socio-Economic Development of the Far East and the Baikal Region for the Period Until 2025") [16].

II. THE MAIN PART

The development strategy of the geological industry until 2030 involves the development of mineral resource centers of economic growth. The cluster project in the iron and steel industry of the "Petropavlovsk-Ferrous Metallurgy" group of

companies covers three distinguished mineral resource centers – Stanovoy, Amuro-Bureysky and Khingansky.

The primary resource base of the mining and metallurgical cluster being created in the Amur Region is the Kuranakhskoye titanomagnetite deposit and the Garinskoye iron ore deposit in the Amur region, the Kimkansky and Sutarskoye iron ore deposits – in the Jewish Autonomous Region.

The basis of promising industrial production will be iron ore concentrate of the producers of the Jewish Autonomous Region (Kimkano-Sutarsky mining-and-processing integrated works, Resources of Small Khingan) and iron ore enterprises of the Amur Region. According to preliminary calculations, by 2020 the production volume of these enterprises will be 3.1 million tons of iron ore concentrate, and from 2020 the volume will be increased to 9.6 million tons.

The key risk in the emergence of new industries is the lack of labor resources in the Far Eastern Federal District. Management of this risk is possible by creating a multi-level staff training system.

The development of a new industry in the economy of the Jewish Autonomous Region and the Amur Region, namely, the mountainous region, creates a new demand for qualified personnel in the field of mining. The existing structure of training professional personnel in the region did not imply training in these areas, since this was not necessary. At the beginning of the establishment of new industries for the region, the problem of staff shortages was solved by attracting personnel within the framework of labor mobility, shift work methods and using the capabilities of the "resettlement of compatriots" program.

According to the management of the Kimkano-Sutarsky mining and processing plant, more than 300 workers are required, more than 1,500 employees are employed at the enterprise. Currently, the company carries out labor activities as employees employed on the principles of permanent employment, and on a rotational basis.

The management of the enterprise initiated, with the support of the Ministry of Economic Development of Russia and the Agency for the Development of Human Capital in the Far East, in the Amur State University named after Sholem Aleichem discovered a new specialty "mineral processing".

At the same time, tuition for a new specialty is financed from the funds of the Petropavlovsk-Black Metallurgy group of companies, it is also planned to attract funds from the federal budget to train specialists in the field of mineral processing. At the same time, the company uses additional incentives for students to pay scholarships at their own expense.

At the university, students will study general subjects. They will receive a significant amount of knowledge and practical skills in highly specialized subjects directly in the training center of the plant and on the basis of its chemical and analytical laboratories.

"The Petropavlovsk" group of companies, in order to solve the shortage of personnel for the newly formed industry, is training personnel on the basis of the established mining college in Zeya, Amur Region.

Educational programs are being implemented aimed at training demanded specialties for work in enterprises. Also, in Pokrovsky Mining College (Amur Region), training is being conducted in 46 specialties in demand in metallurgy. In polytechnic school No. 6, Obluchye, training is being conducted in the following specialties: mineral processing and mineral mining equipment repairman.

The current situation in the field of professional training has received the win-win format, that is, the company receives qualified personnel, the local population is guaranteed employment, enterprises are being established in the region that carry out economic activities with investment resources.

At the same time, the Agency for the Development of Human Capital in the Far East is actively contributing to the solution of the problem of attracting personnel by regulating the target numbers for admission to budget-funded places in higher and secondary vocational schools.

Another priority area for the economic development of the Far Eastern region is the construction and operation of gas and oil pipelines oriented for export to the Asia-Pacific Region.

Therefore, there also arises the need for training specialists in this field. At the first stage, workers from other territories of Russia are attracted on the basis of shift working methods, but at the same time conditions are created for training Far Eastern youth in the vocational education system. So, the Institute of Oil and Gas was created on the basis of the Far Eastern Federal University. At the Institute of Oil and Gas, students are trained in three specialties, graduates work at the main oil and gas facilities in the Russian Far East: ESPO-1, ESPO-2, LLC "RN-Primorsky Oil Refinery", LLC "Gazprom invest Vostok" and many others [15].

That is, the existing need for training the required specialties is conducted and fully provided for this industry by local personnel.

When substantiating the development of new industries, there is a risk of providing them with specialists; for the Far East region with its negative migration balance, this is the most acute problem. During the period of economic reforms, the Far East ceased to be an attractive territory for young people and highly skilled specialists. And to initiate the process of "new" development of this territory, program documents were developed, and specific measures were developed to attract personnel to the newly formed industries.

The main problem in providing personnel for new industries was the inconsistency of the existing system of training specialists with the needs that were formed in the labor market.

To solve these goals, the vocational training system, including higher and secondary institutions, was tasked with opening new areas of training. In the process of training new specialists, the enterprises themselves expressed their interest, providing financial support to students through a targeted training system, career guidance, scholarships for students, and financial assistance to educational institutions in creating production and training complexes.

Thus, enterprises contributed to reducing the risks of insufficient qualified personnel for their own production. The coordinating body was the Agency for the Development of Human Capital in the Far East, whose main functions are to analyze the needs of the region's labor market with the necessary personnel, and provide their training.

III. CONCLUSION

The creation of new industries in the Far East, which began as a result of the application of new development mechanisms, put the issue of attracting and retaining the necessary labor resources in the macroregion, which requires changing existing approaches to creating social infrastructure and a comfortable environment for people's live. New points of economic growth in the Far East will not have the expected multiplier effect for the development of the macroregion, if their environment does not simultaneously provide for the comprehensive development of the territory - the construction of housing, kindergartens, schools, medical institutions, cultural centers, etc. [8].

Consequently, the creation of new industries will create conditions for attracting investment in the prospective development of this strategically important region for Russia.

Also, the Strategy for socio-economic development of the Far East and the Baikal region spells out the achievement of such a goal as the formation of the population and labor resources in the volumes necessary to solve the economic problems facing the region, improving the quality of human capital. And just the creation of new jobs in the open industries will achieve this goal.

REFERENCES

[1] Veretennikov, N.P., Mikulenok, A.S., Bogachev, V.F. Management of the System for Russian Arctic Region Logistics and Information Support. Proceedings of the 2018 International Conference "Quality Management, Transport and Information Security, Information Technologies", IT and QM and IS 2018, P. 271-273.

- [2] Veretennikov N.P., Bogachev V.F., Gorenburgov, M.A. Development of Transport Infrastructure in the North-West of Russia. Proceedings of the 2018 International Conference "Quality Management, Transport and Information Security, Information Technologies", IT and QM and IS 2018, P. 277-279.
- [3] Andryushina E.V., Oparina N.N., Panova E.A. The Far Eastern region in the development strategy of the Russian state Public administration. Electronic bulletin Issue No. 56. June 2016 Moscow. URL: https://cyberleninka.ru/article/n/dalnevostochnyy-region-v-strategiirazvitiya-rossiyskogo-gosudarstva
- [4] T.I. Moneyless, I.R. Kormanovskaya, I.I. Yakimenko. Problems of improving the balance of the regional labor market (on the example of the Novgorod region) *Teoriya i praktika servisa: ekonomika, social'naya sfera, tekhnologii* [Theory and practice of service: economics, social sphere, technologies]. No. 2. 2014. (In Russian)
- [5] Bogomolova EV, Bogomolova A. A. Problems of resource support for enterprises of the metallurgical industry // Economic policy and resource potential of the region [Electronic resource]: collection of articles. articles vseros. scientific-practical conf. Bryansk: Bryansk. state engineering technology. University, 2018.S. 55-61
- [6] Veretennikov N.P., Yurkin M.O. Monitoring and risk management of the socio-economic system of the region. *Ekonomika i upravlenie* [Economics and Management]. 2010. No 3. S. 30-35. (In Russian)
- [7] Veretennikov N.P., Yankovskaya K.G., Bochkareva N.D. Comparative analysis of methods for assessing the investment climate of the territory. Economics and Entrepreneurship, Moscow URL: http://intereconom.com/archive/359.html (In Russian)
- [8] The state program "Socio-economic development of the Far East and the Baikal region". Government of Russia [Official site]. URL: http://government.ru/programs/232/about/ (In Russian)
- [9] Krasnikova E.I. Belkina A.E., Hovhannisyan V.M. Investing in territories of advancing socio-economic development of the Far Eastern Federal District. *Finansy i kredit* [Finance and Credit], 2017, vol. 23, no. 43, pp. 2592–2606. (In Russian)

- [10] Kulagina O.V. The territory of the advanced development of the Jewish Autonomous Region: results of the first stage of implementation. *Vlast' I Upravlenie Na Vostoke Rossii* [Power And Management In The East Of Russia]. 2019. No. 1 (86). S. 68-76. (In Russian)
- [11] Kulagina O.V. Monitoring the implementation of the state program "Formation of a favorable investment climate in the Jewish Autonomous Region for 2014 - 2020" Vlast' I Upravlenie Na Vostoke Rossii [Power And Management In The East Of Russia]. 2019. No. 2 (87). S. 52-64. (In Russian)
- [12] Lygdenova T.B., Vanchikova E.N., Moshkin N.I. Prognozirovanie social'no-ekonomicheskogo razvitiya regiona: uchet neopredelennosti i upravlenie riskami [Prediction of the socio-economic development of the region: accounting for uncertainty and risk management], M.: Rusyns Publ., 2016. 352 p. (In Russian)
- [13] Message from the President of the Russian Federation V.V. Putin to the Federal Assembly of the Russian Federation of December 3, 2015. Guarantor [Legal Information Portal]. (In Russian)
- [14] Popkov S.Yu., Smirnov V.M. State regulation of the development of regions of the Russian Far East: modern approaches. *Biznes v zakone* [Business in law]. 2015. No 6. S. 240-245. (In Russian)
- [15] Ryazantseva M.V. Stimulating the influx of labor resources on the territory of the advancing socio-economic development of the Far East. *Rossijskoe predprinimatel'stvo* [Russian Journal of Entrepreneurship]. 2015. V. 16. No. 18. P. 3091-3102. URL: https://creativeconomy.ru/lib/9344 (In Russian)
- [16] The strategy of socio-economic development of the Far East and the Baikal region for the period until 2025 was approved by order of the Government of the Russian Federation dated December 28, 2009 No. 2094-r (In Russian)
- [17] Yankovskaya K.G. The influence of innovative potential on the formation of human capital. Uroven' zhizni naseleniya regionov Rossii [Living standards of the population of the regions of Russia]. 2012. No.6. S. 70-74 (In Russian)