

Improving Human Capital Competitiveness in Rural Areas of Kazakhstan

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Abstract— This article provides a brief analysis of the development of human capital in Kazakhstan. The purpose of this study is to identify the main trends in the development of human capital in rural areas of Kazakhstan. The objective is to show the role of state programs and the importance of education in the development of human capital. The relevance of this issue lies in the fact that we need to determine the most effective directions for increasing the competitiveness of rural areas on the basis of the centuries-old theoretical and empirical basis for the development of human capital abroad. This article presents key indicators of the state program “Digital Kazakhstan” in the agricultural sector; the role of digitalization with an emphasis on the development of human capital is studied in detail and target indicators by 2022 are presented. It is indicated that the prevailing foundations and traditions, historical background and measures, currently being taken by the state, impact the development of human capital competitiveness in rural Kazakhstan. In the field of education in Kazakhstan, an important role is played by the wide distribution of massive open online courses dictated by the characteristics of the information society. This article describes the main challenges in higher and postgraduate education in Kazakhstan. Particular attention is paid to education and modern teaching technologies for the country’s farmers. Examples from international practice on the effective development of human capital are presented.

Keywords—human capital, competitiveness, digitalization, agricultural sector, information and communication technologies.

I. INTRODUCTION

Human capital is one of the main stimuli of the country's economic and social development. Human capital is people who have certain knowledge and work for the benefit of themselves, their families and make their specific contribution to the development of the country. There is no doubt that the higher the quality of human resources, the higher the opportunities for high-quality economic growth of the country.

Our country makes innovation development, therefore, the development of highly effective human capital is a priority, and is becoming one of the most important tasks. International statistics show that the share of human capital in the national wealth of the United States is 78%, in Western Europe – more than 70%, in Russia – 47% and in Kazakhstan – 42% [1].

In terms of this indicator, Kazakhstan is similar to Russia in terms of social and economic character, from which it can be concluded that the level of domestic capital is at least one third below that of developed countries, which provides all the

necessary prerequisites for focusing on the development and highly efficient use of human capital in our country.

Theodor Schulz's remark that “all human resources and abilities are either innate or acquired” is very valuable [2]. A person at birth has his own specific set of genes that form human capital. In the process of his life, he can strengthen this capital.

One can completely agree with this remark; moreover, one can add that the genes available from birth create the prerequisites for mastering any particular profession or field of activity and form the basis of human capital. Here is a notable example of the presence or absence of musical hearing in a person and his ability to achieve positive results in the field of music.

The situation is more complicated when the activity is not public and it is difficult to reveal the professionalism of a person. To do this, there are various techniques and technologies, primarily related to the concept of management and management.

Also, one of the main factors in making an important management decision is the availability of reliable information, which Senge, Derby, Dunnigan, and Masterson have indicated in their writings.

In relation to Kazakhstan, the level of management in companies and organizations is not effective enough due to the presence of such negative factors as protectionism or nepotism, corruption.

These factors strongly affect the effectiveness of the system of development and use of human capital, which is reflected in the final indicators in any organization.

After the USSR collapse, our country suffered significant losses of professional personnel in connection with the migration of a significant part of the population. About 2 million people left Kazakhstan in the 90s. These people were highly educated, competent specialists of various vital sectors of the economy.

Over the past decade, there has been a trend in the growth of emigration of people of working age (more than 70%) with higher education. Also, there is an excess of emigration over migration by 25% [3].

To date, the task of making up for such a loss has not been achieved, and the trend of the outflow of competent specialists to other countries continues.

For its implementation, effective approaches are needed to develop competition in the Kazakhstan market in general and in the labor market in particular, as well as to use an effective system of labor motivation in the country.

II. RESEARCH METHODOLOGY

The methodological basis of the study was the research of economists of Kazakhstan, the CIS countries and foreign countries, devoted to the problems of the development of human capital and rural areas. The paper used documents of the legislative bodies of various countries, international financial organizations and consulting agencies, statistical data, data of ministries, departments, regional government bodies, and also used methods: economic-statistical, comparative, structural-logical, expert, grouping method, calculation-analytical and comparative research methods.

III. RESULTS

A. Digitalization is a necessary element in the human capital development

With the adoption of the state program for digital development in December 2017, the era of digitalization of the activities of various sectors of the economy and the state apparatus began in Kazakhstan.

The main goal of the program is to increase the rate of economic development of the country and the quality of life of the population using digitalization technologies in the medium term, as well as creating the conditions for the country's economy to transition to a completely new development path, which will ensure the creation of a digital future economy in the long term [4].

One of the five main directions of the program implementation is the development of human capital, which includes changes aimed at creating a creative society and the transition to a knowledge economy.

At the same time, special emphasis is placed on information and communication technologies and distance education.

In pursuance of the instructions of the head of state, the sectoral program "E-APK" was developed. The target indicator of its implementation is the increase in labor productivity by 45% in 2022.

The main directions will be concentrated in the segments G2B (state to business) and B2B (business to business).

Important features of the "E-APK" program will be the use by the line ministry of the principles of project management, the creation of a project office and the consolidation of specific results and personal responsibility of project managers.

As part of the digitalization of the agro-industrial sector, at least 20 digital farms and 4000 advanced farms across the country will be created and full automation of processes and public services will be provided. Everything will be focused on the farmer and the simplification of his activities from agricultural production to marketing.

In accordance with the "E-APK", due to measures, the GDP growth of more than 3 trillion tenge is planned, in which the effect of the digitalization of the agro-industrial sector will be 30% or about 1 trillion tenge [5].

An important tool for implementing the "E-APK" program is online training and consulting for Kazakhstan farmers. According to the implementation plan, it is planned:

- prepare online learning content in July 2019;
- fully form the training resource by December 2019;
- start online training for farmers in 2020.

Pilot consultations were launched in August 2018 at the Agrarian University of our capital. A full launch of online consultations is scheduled for the fall of 2019.

B. Massive open online courses – a new direction in the human capital development in Kazakhstan

One of the qualitatively new phenomena in the field of education, dictated by the characteristics of the information society, is the widespread dissemination of massive open online courses (MOOCs). Education experts named MOOCs among the 30 most promising areas for its development.

In Kazakhstan, MOOCs are used only in national universities, which have substantial state funding and a developed material and technical base.

Here, the development of MOOCs is also necessary in small towns and rural areas, providing the necessary infrastructure.

2019 is declared the Year of Youth in Kazakhstan, which makes the need to introduce innovative and popular digital educational technologies in the market across the country attractive.

It is appropriate to cite the words of Mark Shucksmith – a scientist of youth and social exclusion in rural areas; he emphasizes that flexibility in education systems to meet diverse individual needs would benefit those young people whose life has changed unexpectedly, as well as those who want to return to education, to expand their knowledge at a later stage in their lives [6].

Also, the effective introduction of digital educational technologies in Kazakhstan will be facilitated by the cancellation of part-time studies in higher educational institutions from January 1st, 2019.

Application of foreign experience in order to increase the level of information technology in society and opportunities through the use of MOOC technologies will provide high-quality education for farmers in a constantly changing external environment.

Consequently, it should be concluded that it is indisputable that the application of innovative approaches to pedagogy in e-learning will allow higher education institutions to improve the quality of educational services, including for farmers.

C. Competition is the foundation of progress

The development of human capital competitiveness in rural areas of Kazakhstan is influenced by the existing foundations and traditions, historical background and measures currently being taken by the state.

If you look in retrospect on the development of competition, presenting it as perfect and imperfect, then over time you can see how these or those countries developed.

For example, if we take one of the basic laws of dialectics on the negation of negation, then the monopoly in the

economy denies the possibility of competition. However, monopoly is ultimately denied by competition. The centralized monopoly nature of the development of the USSR economy did not allow it to compete with the market economies of foreign countries.

This case is not an isolated one. The example of Korea and Germany also demonstrates the effectiveness of competition over monopoly and centralization.

The creation of a competitive economy is facilitated by the presence of such prerequisites as: a developed society, stable laws, progressive regulatory decisions, transparency of legislation and the absence of corruption.

Competition leads to the improvement of all processes of creating a product or service. The more competition, the more quickly market participants respond to any changes in the environment. Competition provides an incentive for all manufacturers or creators of a product or service in a better and more dynamic development of their activities.

Unlike monopoly, competition leads to the creation of more advanced, high-tech products or services.

The essence of economic competition was successfully revealed by T. L Azoev, who understood it as rivalry between companies or individuals who are interested in achieving the same goal, that is, maximizing profits and increasing the number of consumers [7].

The main driving goal of any company is profit. This is what gives the company impulses in creating a competitive product and further progress. At the same time, competition is an indisputable external factor in the company's activities and makes manufacturers comply or go ahead of their competitors.

Summarizing, we can conclude that the fact of the presence of competition in any market directly affects the development of the country's economy as a whole, and the development and highly efficient use of human capital is one of the main factors in increasing the competitiveness of a company.

D. Human capital competitiveness - analysis of foreign experience and recommendations

Over time, the theory of human capital has not undergone fundamental changes, the main characteristic of which was the definition and assessment of the socio-economic role of man.

In the works of famous scientists, the founders of various economic theories, such as: W. Petty, A. Smith, D. Ricardo, K. Marx, the main idea is outlined: how to add value to human abilities.

The whole process of creating and improving human capital is directly related to the investment process. The company increases the level of professionalism of the employee, directs him to study, stimulates the acquisition of new knowledge, that is, spends certain financial resources in order not only to raise his level of qualification, but also ultimately reduce some other expenses and increase the company's profit.

Expenditures in human capital may include the costs of maintaining health, obtaining an education, advanced training, and caring for children.

Innovations and the introduction of new technologies and forms of production also make human capital keep up to date, acquiring and improving the necessary knowledge and skills.

The main characteristics of human capital:

- present-day human capital is the main measure of the development of society and the main driving force of economic growth;

- creation of human capital represents the essential efforts of the individual and society as a whole;

- human capital, like technology, can have depreciation and price, depending on various conditions;

- person's choice for the application of accumulated own human capital, as well as sources of enrichment, is independent, regardless of the methods of its formation.

The main challenges in higher and postgraduate education in Kazakhstan [8]:

- insufficient funding;

- inefficiency of educational process management;

- lack of professional staff, especially in the technical environment;

- continuous reforms of the education system;

- constant review of previously adopted norms and standards in the educational process;

- low focus on the development and implementation of innovations, the quality of research and the commercialization of scientific developments;

- unwillingness of enterprises and organizations to apply scientific developments due to their incompleteness or lack of a mechanism for their implementation;

- ineffective government education policy and creation of incentives in the development of knowledge and innovation.

These factors strongly affect the effectiveness of the system of development and use of human capital, which is reflected in the final indicators in any organization.

The creation of a competitive economy is facilitated by the presence of such prerequisites as: a developed society, stable laws, progressive regulatory decisions, transparency of legislation and the absence of corruption.

The fact of the presence of competition in any market directly affects the development of the country's economy as a whole, and the development and highly efficient use of human capital is one of the main factors for increasing the company's competitiveness.

The difference between Kazakhstan's human resources and foreign ones is a high turnover, frequent work interchange, and the absence of a succession mechanism at enterprises.

In international practice, there are many examples of the effective development of human capital.

In the post-war period, Germany and Japan made a significant breakthrough in the use of new technologies and the modernization of existing industries. The competent policy of the state and the desire of the people themselves, aimed at developing a highly effective potential of human

capital, were one of the main reasons for the current dominance in the field of high technology and technological production.

The main distinguishing feature of Kazakhstanis from Germans is their goal-setting. So, we look more at prestige and wages, or just getting a higher education diploma. The Germans are more meticulous in the selection and acquisition of knowledge. Thanks to their special feature – pedantry, they step by step achieve their goal – to become a professional in their field.

Superficiality and lack of knowledge leads to criticism of the system of Kazakhstani education from year to year.

This is evidenced by numerous publications in the Kazakh press relating to higher and special education. Domestic and foreign companies are dissatisfied with the quality of education of university graduates. At the 32nd meeting of the Council of Foreign Investors, it was stated that 70% of Kazakh employers are not satisfied with the skills of graduates of vocational colleges [9].

The head of state and legislative bodies are constantly tasked with the relevant ministry to strengthen work on educational programs and improve the quality of secondary, vocational and higher education.

The approaches and mentality in determining what a professional activity should be are also different. If most of us dream of a managerial career, competence in the technical field is valued in Germany.

Such competencies and skills have become the main driving force in the development of new industries and innovations.

In Germany, dual education is widely used, where, along with the theoretical foundations of a future specialist, practical skills are taught.

At the same time, the need for a continuous process of advanced training is one of the distinguishing features of the German educational system and national mentality.

The main emphasis of education in Germany is a systematic approach, reliance on a practical base, stimulation of new research and innovation, close relationship with production and the desire to improve human resources in industry.

Great emphasis in the German education system is placed on production technology, information and communication technologies, business and economics, and social management. Most managers have technical or higher education.

Starting from an early age, children are determined by their abilities to one or another science and then these abilities pass into the professional qualities of each individual employee.

There is a division of schools where gifted children, students with average knowledge and children with disabilities study. All this gives incentives, both for parents and children, to receive a quality education, which also creates competition for the right to receive a decent education. This ultimately affects the quality and development of highly efficient human capital.

Another difference between Kazakhstan's human resources and German is the high turnover, frequent work interchange, and the absence of a continuity mechanism in enterprises. In Germany, on the contrary, the managerial staff is stable, there are no team movements.

The same situation is observed in Japan with its concept of "lifelong hiring" of employees [10].

The constancy of the managerial staff brings clarity and ensures long-term duration in the company's business processes, which allows an ordinary employee to plan his career, improve his qualifications and, accordingly, increase the resource and human capital in the company.

The industry-specific managers gain knowledge within the company, and general aspects of management and business development (strategic planning, human resources management, psychology, etc.) are held at trainings and continuing education courses outside the company.

German experience in creating trade unions and centers of competence in each industry is also interesting.

This model of knowledge transfer and enrichment is planned to be created in Kazakhstan by the Ministry of Agriculture and the National Chamber of Entrepreneurs.

Dual education also provides incentives not only in the production environment, but science is also among the leaders in development. So in joint-stock companies, 30% of management personnel have doctorates.

The education system in Germany can be characterized by the following features:

- competition for knowledge begins at school;
- specialization and acquisition of knowledge in the school is carried out in accordance with the natural abilities of each student;
- dual education;
- goal is to become a highly professional employee in your industry;
- ongoing training and continuing education;
- science is closely linked to the production process and innovation;
- high commercialization of scientific inventions.

All of the above characteristics of the German education system are very relevant for Kazakhstan and are of practical interest in the development and highly efficient use of human capital as the main factor in increasing the competitiveness not only of rural areas, but of Kazakhstan as a whole.

IV. CONCLUSIONS

The main results of the study are as follows:

- brief analysis of the human capital development in Kazakhstan is presented;
- key indicators of the state program "Digital Kazakhstan" are given;
- role of digitalization in the agricultural sector with an emphasis on the human capital development has been studied and target indicators have been presented;

- it was indicated that the development of human capital competitiveness in rural areas of Kazakhstan is influenced by the existing foundations and traditions, historical background and measures currently being taken by the state;
- it was emphasized that in the field of education in Kazakhstan, an important role is played by the widespread adoption of massive open online courses dictated by the characteristics of the information society;
- main challenges in higher and postgraduate education in Kazakhstan are presented;
- special attention is paid to education and modern educational technologies for the country's farmers;
- examples from international practice on the effective human capital development are presented.

Over time, the theory of human capital has not undergone fundamental changes, the main characteristic of which was the definition and assessment of the socio-economic role of a man.

The Republic of Kazakhstan makes the innovation development and highly effective human capital development a priority, and that is becoming one of the most important tasks.

The level of domestic capital is significantly lower than the level of developed countries, which provides all the necessary prerequisites for focusing on the development and highly efficient use of human capital in our country.

The level of management in domestic companies and organizations is not effective enough due to the presence of negative factors such as protectionism or nepotism, corruption.

Over the past decade, there has been a growing trend of emigration of people of working age. We need effective approaches to develop competition in the Kazakhstan market

in general and in the labor market in particular, as well as the use of an effective system of labor motivation in the country.

Digitalization and massive open online courses are becoming integral elements in the human capital development in Kazakhstan.

The main challenges in higher and postgraduate education in Kazakhstan are presented; an analysis of international experience in the field of human capital development is carried out.

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