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Қазақ ұлттық аграрлық университеті

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Қазақстан Республикасының
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COMPONENTS OF SUSTAINABLE DEVELOPMENT

Abstract. Global problems associated with climate change, the threat of depletion of both replicable and non-replicable natural resources (raw materials, food, energy sources). They demanded an immediate solution.

The concept of sustainable development, adopted in 1992 at the UN Conference on Environment and Development in Rio de Janeiro, was recognized as an inappropriate model of economic growth, according to which countries developed, endangering the existence of life on our planet. Currently, this concept has an impact on the state of international relations, becoming a unique way of developing the world economy.

Sustainable development includes optimally managed development, which is based on the highest achievements of modern science, sustainable biosphere, aimed at the preservation and improvement of human being.

In 2016, the 17 sustainable development goals identified in the 2030 Agenda for Sustainable Development, which was adopted in September 2015 at the United Nations Summit, started to operate.

In the future, countries should apply the goals of eradicating poverty to climate change for future generations.

Sustainable development involves the neutralization of external and internal threats.

External and internal threats of Kazakhstan include global climate change, natural disasters, soil degradation. Reducing the quality of life of the population. Commodity dependence of the Kazakhstan economy.

The basic components of sustainable development are social, economic and environmental areas, the corresponding activities that ensure their development. Each of the components is based on the general principles of sustainable development, but at the same time it has its own goals as part of a unified sustainable development policy.

It is necessary to use all the components together to achieve sustainable development.

Keywords: sustainable development, social area, human development, socio-economic development, ecological situation.

Global problems associated with climate change, the threat of depletion of both reproducible and non-reproducible natural resources (raw materials, food, energy sources). They demanded an immediate solution.

The concept of sustainable development, adopted in 1992 at the UN Conference on Environment and Development in Rio de Janeiro, was recognized as an inappropriate model of economic growth, according to which countries developed, threatening the existence of life on our planet. Currently, this concept has an impact on the state of international relations and is becoming a unique way of developing the world economy.

Sustainable development includes optimally managed development, the basis of which is the highest achievements of modern science, the sustainable biosphere, aimed at preserving and improving man [1].

The paradigm of the concept is based on taking into account the long-term social and environmental consequences of decisions currently being made or adopted [2].

In 2016, the 17 Sustainable Development Goals entered into force as set out in the 2030 Agenda for Sustainable Development, which was adopted in September 2015 at the United Nations Summit, entered into force.

Subsequently, countries must apply the goals of poverty eradication and climate change for future generations.

The basic principles of sustainable development goals are becoming a paradigm for the millennium development goals. As all countries strive to prosper and protect the environment, these goals are unique.

They combine the eradication of poverty, which is inextricably linked to the implementation of economic growth strategies, as well as job opportunities.

Sustainable development goals are not legally binding; it is envisaged that countries will provide mechanisms for achieving the goals [3].

The basic components of sustainable development are the social, economic and environmental spheres, the corresponding types of activities that ensure their development. Each of the components is based on the general principles of sustainable development, but at the same time has its own goals within the framework of a single sustainable development policy.

Sustainable development involves the neutralization of external and internal threats.

Kazakhstan's external and internal threats include global climate change, natural disasters, and soil degradation. The decline in the quality of life of the population. Raw dependence of the Kazakhstan economy.

Human capital as the main factor in the sustainable development of society. Human capital is a combination of knowledge, skills and abilities of people in a country to solve problems. Human capital includes knowledge, competence, intuition and the ability of a person to achieve goals and objectives that create value. Human capital is the property of individuals.

The indicators of human capital include:

- Literacy Rate;
- the number of schools per capita;
- number of students per capita;
- the number of university graduates per capita.

According to Snezhanka Ovcharova, it is necessary to expand indicators of human development and include:

- population in different age groups;
- the quality of education and the results of standardized tests;
- training time and duration of the school year;
- mathematics, reading and basic sciences.

Intellectual capital represents a latent national potential for future growth [4].

The national education system of the Republic of Kazakhstan includes pre-school, primary, primary secondary, secondary (general secondary or technical and vocational) education, as well as post-secondary and tertiary (higher and postgraduate) education.

Preschool education and training are the main form of organization of preschool education of children. The main goal of preschool education and training is to ensure equal starting opportunities for children in obtaining education by gradually increasing the coverage of children with preschool educational programs.

In recent years, the republic has seen an increase in the number of pupils of preschool organizations. In 2017, it amounted to 862.3 thousand children compared to 758.8 thousand in 2015. There is an increase in preschool organizations and the number of pupils in them. In 2017, 9828 pre-school organizations operated here, while in 2015 their number was 8834 (figure).

For the period from 2015 to 2017, the number of preschool organizations increased by 11.2%, the number of children in preschool organizations increased 1.1 times.

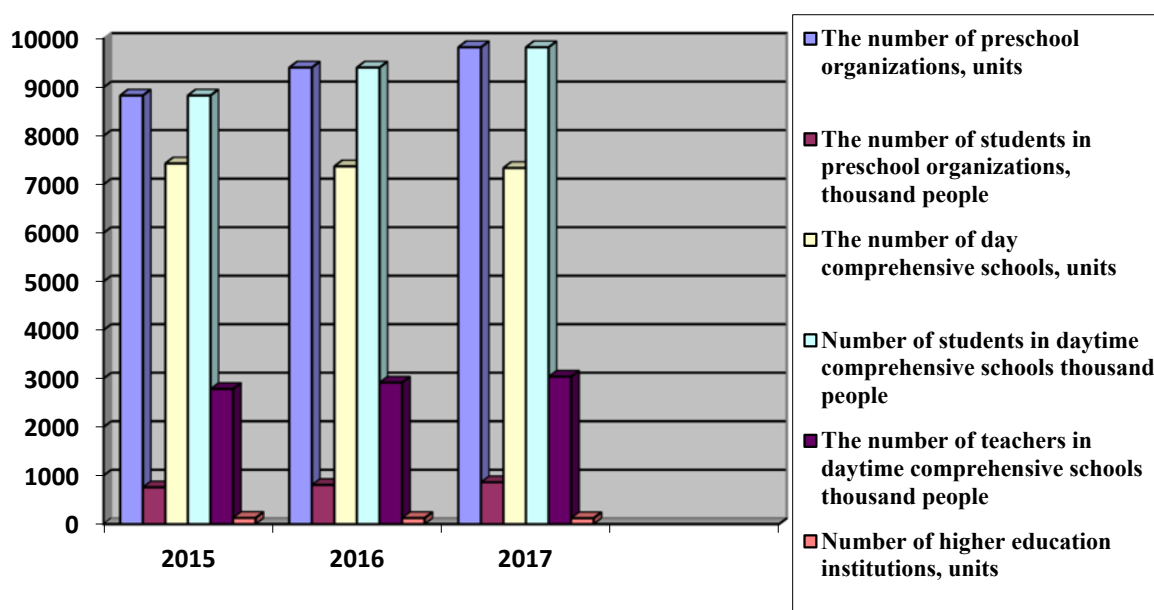
Structurally, there is a tendency to increase the number of children in preschool organizations, as well as the number of preschool educational organizations, mainly due to the development of a network of mini-centers.

Secondary education for citizens of the Republic of Kazakhstan is compulsory and the state guarantees the receipt of free secondary education in state educational institutions.

Secondary education includes:

- average total;
- primary vocational;
- secondary vocational education.

In Kazakhstan in 2017, there were 7,339 full-time secondary schools. The number of state day comprehensive schools from 2015 to 2017 decreased by 93 units.



Source: compiled by the author according to statistical data [5].

Education in Kazakhstan in 2015/2017

Higher education in Kazakhstan is acquired on the basis of secondary education. In 2017, 124 higher education institutions functioned.

To acquire postgraduate professional education in Kazakhstan, a specialist or master's degree is required.

In the future, there may be a reduction in professions that can be automated and robotic. For example, the profession of lawyer, accountant, financier, librarian and other specialties. In this regard, professional retraining will be in demand.

According to forecasts in Kazakhstan in 2019, life expectancy will reach 73 years (table 1) [6].

Not only education, but also the health of the nation contributes to economic growth [7].

The necessary investments in the health sector should be those expenses that can affect life expectancy, strength, physical health, stamina and vitality of people. The result should be the security and accessibility of medical services. The health of citizens should become an important new socio-economic factor in modern economic conditions, since public health is an indicator of the state of the economy and the degree of well-being of the population. The ways of implementing state guarantees for protecting public health in different countries and the level of responsibility may be different [8].

In connection with population growth, problems such as a lack of kindergartens arise. The implementation of public-private partnership projects will solve the following problems:

- in healthcare (construction, maintenance of medical centers);
- in education (construction, maintenance of kindergartens);
- in sports (construction of sports facilities);
- in the construction of roads;
- in housing and communal services (reconstruction of water supply) [9].

As can be seen from table, in 2019 the population amounted to 18395660 people. Compared to 2015, the population increased by 979945 people or 5.6%.

The problems of the social, demographic and migration situation are brewing in the country. Although the population is growing slowly, the deficit of new jobs is increasing every year.

There are 125 nationalities living in Kazakhstan preserving their linguistic, historical, cultural values. These include: Russians, Ukrainians, Uzbeks, Tatars, Uyghurs, Germans, as well as representatives of other nationalities [10].

Socio-economic development of the Republic of Kazakhstan, 2015-2019

No.	The name of indicators	2015 year	2016 year	2017 year	2018 year	January 1, 2019 of the year
1	GDP, million tenge	40884133,6	46971150,0	53101281,8	58785737,7	
2	Index of physical volume of gross domestic product by production method as a percentage of the previous year	101,2	101,1	104,1	104,1	
Volume Index of Gross Value Added by Industries						
3	Gross output of agricultural products (services) mln. Tenge	3 307 009,6	3 684 393,2	4 070 916,8	4 388 637,2	
4	Manufacturing industry	5 949 728	8 046 845	9 400 848	10 427 356	
5	Volume of construction works (services) mln. Tenge	2 896 877	3 258 031	3 509 296	3 842 923	
Balance of payments indicators						
6	Export of goods, mln. USD	45955	37294	53215	61947	
7	Import of goods, mln. USD	30567	33645	33851	34789	
8	Trade balance, mln. USD	15388	3649	19364	27158	
Social indicators						
9	Population, thousand people	17415715	17669896	17918214	18258120	18395660
10	Life expectancy at birth, years	71,97	72,41	72,95	72,96	73
11	Number of employed population, thousand people	8433,3	8553,4	8585,2	8 530,5	
12	The number of unemployed, thousand people	454,2	445,5	442,3	439,5	
13	Average monthly wage per employee, tenge	126021	142898	150827	162 075	166 111
14	Living wage, tenge	19 647	21 612	23 783	28 284	29 698

Source: compiled by the author according to statistical data [5].

The average monthly salary as of January 1, 2019 amounted to 166 111 tenge. The unemployment rate on January 1, 2019 is 4.8%.

The problems associated with providing employment also include an increase in youth unemployment [11]. The level of education in rural areas does not allow young people to form their competitiveness in accordance with the requirements that apply to them in the labor market and which are necessary for the development of new management technologies in the agricultural sector.

The volume of gross domestic product in 2018 amounted to 58785737.7 tenge.

The main contribution to GDP growth was made by industry, construction and agriculture.

The gross output of agricultural products (services) in million tenge in 2018 amounted to 4,388,637.2 increased compared to 2015 to 32.7%.

In the context of globalization, the balance of payments of Kazakhstan in 2018 was affected by such factors as uneven economic development of the country in international competition, cyclical fluctuations in the prices of commodities exported by Kazakhstan negatively affected the overall result of the country's foreign economic activity.

The development of the commodity-oriented economy is associated with a decrease in incentives for its diversification, innovative development due to the significantly lower profitability of these areas.

To move from a raw material orientation it is necessary:

To increase the effectiveness of the personnel component of scientific and technological potential.

First of all, to create conditions for working in science by equipping it with modern means of labor -

instruments, equipment, materials, information and communication technologies, and also to increase the level of remuneration for researchers.

The development of continuing and distance education.

The introduction of digital technology.

In 2017, 77% of the population reached the Internet in Kazakhstan.

According to the World Economic Forum, Kazakhstan has risen in the ranking of the number of Internet users, ranking 36th in the world.

The problem of the slow development of digitalization is the lack of personnel, the development of domestic technologies and competencies, as well as a lack of understanding of the purpose and use for many entrepreneurs and citizens of our country.

In Kazakhstan, adverse environmental conditions, for example: Corporation Kazakhmys LLP submitted information to the State Register of Pollutant Emissions and Transfer: in the section "Information on production and consumption waste generated at the production site, the amount of actual and placed waste on the industrial site for 2017 is 970351, 138 tons, the amount of recycled, disposed of waste by the owner of the waste at the industrial site in 2017 882233.396 tons. Not reclaimed waste 88,117,742 tons [12]. A constant accumulation of waste leads to various diseases of people, the manifestation of morbidity in newborns, the occurrence of various allergic reactions of the human body to chemicals, their toxic properties, toxicological hazard with accumulated debris pollution, biological and microbial soil pollution [13]. Municipal solid waste is both an epidemiological and an environmental hazard.

An unfavorable ecological situation is taking shape in the Caspian region, on the lands of the Semipalatinsk test site, on the Kazakhstan part of the Aral Sea and in the Balkhash region.

The Caspian region is not suitable for farming. About 77% of hayfields and pastures of the Atyrau region have signs of anthropogenic impact. The development of oil fields leads to pollution of the Caspian soils with oil products.

The Semipalatinsk test site is still a region of environmental disaster, which resulted in the Soviet Union testing its nuclear weapons. Radioactive fallout spread to the territory of 304 thousand square meters. km, where 1.7 million people live.

The Aral Sea region occupies 59.6 million hectares of land, including the land of Kyzylorda (22.6 million hectares), Aktobe (19.7 million hectares), Karaganda (8.7 million hectares) and South Kazakhstan (8, 6 million hectares) of regions, or 22% of the total area of the republic. At the center of environmental stress is the Aral region, Kazalinsky district and the valleys of the Syr Darya River.

Balkhash suffers from the hydrological regime of rivers, where many rivers are degraded by vegetation and replaced by weed grass, salinization, secondary salinization, and pollution with toxic chemicals and heavy metals.

This implies the need to relocate the local population to a more favorable area, therefore, calculations of the need for funds for resettlement, lending for equipping, buying livestock and implements, and the amount of land required for agricultural activities in the new area are required. It is also necessary to increase the level of environmental education, education and culture of the population; increase investment activity due to the high degree of depreciation of fixed assets; expand environmentally-friendly industry related to the processing of accumulated waste; completeness in the production complex of technological cycles for the complete processing of raw materials.

These measures will lead to an increase in the quality of life of the population.

It is necessary to use all the components in a complex to achieve sustainable development.

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ТҰРАҚТЫ ДАМУ КОМПОНЕНТТЕРІ

Аннотация. Климаттың өзгеруіне байланысты жаһандық мәселелер, қалпына келтірілетін және қалпына келтірілмейтін табиғи ресурстардың (шикізат, азық-түлік, энергия көздері) сарқылу қаупі. Дереве шешім талап етті.

1992 жылы Рио-де-Жанейродағы БҰҰ-ның Қоршаған орта және даму жөніндегі конференциясында қабылданған орнықты даму Тұжырымдамасы экономикалық өсудің сәйкес емес моделі деп танылды, ол бойынша елдер дамып, біздің планетамызда өмір сүру қаупін төндіреді. Қазіргі уақытта бұл тұжырымдама халықаралық қатынастардың жай-күйіне әсер етеді, әлемдік шаруашылықты дамытудың бірегей жолы болып отыр.

Орнықты даму оңтайлы басқарылатын дамуды қамтиды, оның негізі заманауи ғылымның жоғары жетістіктері, тұрақты Биосфера, адамды сақтау мен жетілдіруге бағытталған.

2016 жылы Біріккен Ұлттар Ұйымының саммитінде 2015 жылғы қыркүйекте қабылданған 2030 жылға дейінгі кезеңге арналған тұрақты даму саласындағы Күн тәртібінде көрсетілген тұрақты даму саласындағы 17 мақсат күшіне енді.

Кейіннен елдер кедейшілікті жоюға, болашақ ұрпақ үшін климаттың өзгеруіне байланысты мақсаттарды қолдануы тиіс.

Тұрақты даму сыртқы және ішкі қатерлерді бейтараптандыруды болжайды.

Қазақстанның сыртқы және ішкі қатерлері климаттың жаһандық өзгерістерін, дүлей апаттарды, топырақтың тозуын қамтиды. Халықтың өмір сүру сапасының төмендеуі. Қазақстан экономикасының шикізаттық тәуелділігі.

Орнықты дамудың базалық құрамдас бөліктері әлеуметтік, экономикалық және экологиялық салалар, олардың дамуын қамтамасыз ететін оларға сәйкес келетін қызмет түрлері болып табылады. Компоненттердің әрқайсысы орнықты дамудың жалпы қағидаттарына негізделеді, бірақ сонымен бірге орнықты дамудың бірыңғай саясаты шеңберінде өз мақсаттарына ие.

Тұрақты дамуға қол жеткізу үшін кешенде барлық компоненттерді пайдалану қажет.

Түйін сөздер: тұрақты даму, Әлеуметтік сала, адам дамуы, әлеуметтік-экономикалық даму, экологиялық жағдай.

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КОМПОНЕНТЫ УСТОЙЧИВОГО РАЗВИТИЯ

Аннотация. Глобальные проблемы, связанные с изменением климата, угроза истощения как воспроизводимых, так и не воспроизводимых природных ресурсов (сырья, продовольствия, источников энергии). Требовали незамедлительного решения.

Концепция устойчивого развития, принятая в 1992 году на конференции ООН по окружающей среде и развитию в Рио-де-Жанейро, была признана несоответствующей модель экономического роста, по которой страны развивались, ставящие под угрозу существование жизни на нашей планете. В настоящее время данная концепция оказывает влияние на состояние международных отношений, становится уникальным путем развития мирового хозяйства.

Устойчивое развитие включает в себя оптимально управляемое развитие, основой которого являются высшие достижения современной науки, устойчивой биосферы, направленные на сохранение и совершенствование человека.

В 2016 года в силу вступили 17 целей в области устойчивого развития, указанные в Повестке дня в области устойчивого развития на период до 2030 года, которая была принята в сентябре 2015 года на саммите Организации Объединенных Наций.

В последующем страны должны применить цели, связанные с искоренением нищеты, с изменением климата для будущих поколений.

Базовыми компонентами устойчивого развития являются социальная, экономическая и экологическая сферы, соответствующие им виды деятельности, которые обеспечивают их развитие. Каждый из компонен-

тов основывается на общих принципах устойчивого развития, но в то же время имеет свои цели в рамках единой политики устойчивого развития.

Устойчивое развитие предполагает нейтрализацию внешних и внутренних угроз.

Внешние и внутренние угрозы Казахстана включают в себя глобальные изменения климата, стихийные бедствия, деградация почвы. Снижение качества жизни населения. Сырьевая зависимость казахстанской экономики.

Необходимо использовать все компоненты в комплексе для достижения устойчивого развития.

Ключевые слова: устойчивое развитие, социальная сфера, человеческое развитие, социально-экономическое развитие, экологическая обстановка.

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