#### ҚАЗАҚСТАН РЕСПУБЛИКАСЫ ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

## ХАБАРШЫСЫ

### **ВЕСТНИК**

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК РЕСПУБЛИКИ КАЗАХСТАН

## THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN

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# ECONOMIC MECHANISMS OF PROVIDING OF SUSTAINABLE DEVELOPMENT OF THE REPUBLIC OF KAZAKHSTAN IN THE CONDITIONS OF GLOBAL WARMING

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Abstract. Results of global climate change concerneduniversal world community, the changes of the environment, whichstrictly influenced on some regions, catastrophic consequences. Around the world, irrespective of recognition of presence of global warming of climate, research scholarshave the purpose of timely forecasting of all consequences and peculiarities of climate change; they are conducted (ecological, economic and social aspects) with the concepts and strategy of response between them. The negligent relation of mankind to the natural resources and nature are included; moreover, it led to the fact that at the beginning of the XXI century economic and social situation of mountain territories has worsened, becauseitwas caused to the negative problems (tension interethnic, poverty, degradation of lands and ecosystems, etc.). Change of ecology and all important support systems of mankind (ecological, social, political, economic and cultural), caused by global warming, and allows discovering close interrelation of climate change and growth of national economy. The problem of global warming hasn't lainonly among the states of Central Asia. Now many scientists make attempts to explainworld crisis, developing various strategies and programs for social and economic development, however, unfortunately, these problems can arise, in case of climate changes subsequently.

**Keywords:** globalization, climate change, environment, global warming, natural resources, degradation of lands, ecosystem, life support systems, bio resources, ecological safety.

The purpose of this article is carrying out the analysis of economic mechanisms of ensuring sustainable development of economy of the Republic of Kazakhstan in the conditions of global warming. Studying of the stability in social and economic aspect, it is possible to note that this concept is closely connected with category "sustained economic growth". The model of sustainable development assumes coherence of the social, economic and ecological parts of public life as the basis of formulation of approaches to the solution of large-scale problems of territorial educations. Such approach is urgent in modern conditions as all economic reforms occur in regions of the country, their role in implementation of economic policy of the state increases. It is impossible to call the region steadily developing, proceeding from increase in economic indicators. Steady growth of the region has to be aimed at achievement of worthy quality of life and be followed by positive dynamics of a complex of various indicators.

Works of domestic and foreign scientists-economists, and also set legislative, regulatory legal acts, data of statistical bodies of areas and areas formed a theoretical and methodological basis of article. At the same time the following methods were used: monographic, system analysis, complex assessment, method of expert evaluations, abstract and logical, economic-mathematical, etc.

Analyzing fundamental forms of stability of the region, it is possible to allocate the following: unstable development, hyper stability, global stability, sustainable development and steady system.

Summarizing, it is possible to note that the former concept of interaction of the society and nature focused on environmental protection which didn't provided stabilization of ecological-economic situation.

The dominating paradigm of "the economic growth" has undergone revision decades. In the Republic of Kazakhstan a number of key strategy, concepts, the action plans directed to the solution of the strategic directions on adaptation and mitigation of the climatic changes.

At the time of global warming of the climate and urgent development, the specification and advance policy of the republic, promoting rising of efficiency in water resources management, is represented by the following:

- declaration of girdles of production of nodal water outflows of the republic by separately guarded natural territories;
  - introduction of technologies of water conservation and improvement of irrigating systems;
  - expansion of the forests territory around the main and minor arteries of the country;
- restoration and construction of modern irrigational systems for the purpose of improvement ofwater irrigation in the mountainous areas.

Thus, it is possible to refer improvement of management of water resources to the number of the main ways of use of water management. In our opinion, in the short term it is necessary to take the following measures for the purposes:

- 1. to carry out decentralization of management due to increase in responsibility of water users;
- 2. to achieve reduction of risk of deterioration in a condition of physical infrastructure of water management due to government subsidizing of part of expenses.
- 3. development of the hydro energy sector of the country, which remains the priority direction of the model of sustainable development of economy of the republic. It is necessary for development of hydropower of the country:
  - 1. energy efficiency and energy saving.
  - 2. use of renewables.
  - 3. Improvement of tariff policy.

Development of agriculture remains the main priority direction of the formation of modern economy of the state, and the organization of the relevant agreements for fast increase of the production, in particular, will render assistance in agriculture to growth of number of plants and reduction of poverty in rural areas. For regions of Kazakhstan from the point of view of investment appeal it is necessary to improve activity of agrarian sector that is connected with a package of measures, including both improvement of market mechanism, and improvement of production and trade appeal [1, p. 238]. For example, it is important to create the civilized market of the earth, effective structures of producers. The main ways of improvement of activity in agrarian sector are: increase in fertility of soils, involvement unused resources, use of new technologies of agriculture and innovative methods of the organization of production. The republic needs strengthening of the available material and technical resources in the development of agriculture, training and retraining of workers of the village in high-performance work, holding various marketing actions. So, for the organization of modern state policy in the field of agriculture of the state it is necessary:

- 1) formation and improvement of the available legislative, standard and legal base of agriculture;
- 2) foundation, advance and the adjusted functioning of the repeated market of the earth and the organization of farmer manufacturing farms of goods;
- 3) improvement of financial, credit and monetary system in the development of agriculture of the republic;
- 4) development of branch by the creation and development of territorial and branch farmer associations:
- 5) substantial and functional reforming of system of the Ministry of Agriculture and its regional departments;
- 6) formation of the civilized, corresponding to the market sequence the producer (farmer) the purchaser (system of preparation) the processor the off taker (trade) the consumer (population);
- 7) formation of educational advice center, information supply of agricultural branch, training in new knowledge and innovative technologies;
  - 8) improvement of scientific supply of branch;
  - 9) entry of branch into structure of regional economy and finding of own niche;
  - 10) creation and development of fully operating market infrastructure in branch, etc.

For ensuring food security of the state it is necessary to resolve three key issues - the problems connected with production of food, solvency of the population and also the problems connected with conservation [2, p. 17].

In our opinion, there would be rather effective following short-term measures of state regulation of the food market:

- 1. Increase in the sums of subsidizing of grain crops, cultivation of beet, oil-bearing crops and meat livestock production. Granting credits on favorable terms. It is necessary to enter subsidizing of meat production and production of forages. Supply and preparation about 1 thousand tons of foodgrain on the contract basis and 0,5 thousand tons of root crops of sugar beet require allocation of financing from the budget of the republic.
- 2. Give the chance of decrease in expenses of the grain processing enterprises and productions which are engaged in release of bakery products by means of the organization for them, reduced rates for payment of electric energy, using stocks of the power enterprises monopolists.
- 3. Improve the customs and tariff market of food production. Important at the initial stage, generally, to admit the minimum customs duties on import to the state of grain and other agricultural products, at the same time legislatively to accept system of an assessment of quality of the brought production. Introduce export restriction to separate food products by increase in various customs tariffs.
- 4. Improve the mechanism of purchases of agricultural and food production for satisfaction of the state requirements. Important at the legislative level to take the form of preparations (on a contract basis) with local producers, to open the commodity and raw exchanges, with appropriate trade and purchasing bases. It is necessary to supply inviolability of the state reserve of fuels and lubricants and to legalize this process.
- 5. It is necessary to stock up at the expense of other republics of not less than 100 thousand with wheat tons, create reserve fund. To organize the realization to flour mills, at rather preferential prices, as required, to produce the condition to sell flour of bakeries at such cost, which will provide their profitability about 6-9%, and will allow to gain income from sale of bread not above maximum prices which will be established by the state for wholesale shops.
- 6. Every year the state needs to finance from the budget of farmers who have opportunities for expansion of acreage for landing of wheat, obligatory increase of the volume of cultivation of qualitative grain. At the same time, it is important to meet the condition of realization, established by the government procurement, the conclusion of the coordinated contracts, providing stage-by-stage financing of 51-65% prior to field works. The main line in this case has to become a first priority of providing farmers with seeds of grain crops, fuel and lubricants products, the necessary agricultural machinery, etc.
- 7. Improvement of state regulation on advance of the main food products from the producer to directly consumer in this connection it is necessary to organize clusters, to create the state and private purchasing cooperatives, ensuring safety of products and goods, and their realization for the aid to trade enterprises, retail sellers and productions of public catering at the prices in the % allowing profitability up to 7-9. Certainly, it will allow to destroy the speculation in food products among the dealers, who generally specialize in the wholesale purchase at farmers of meat dairy products, fruit, vegetables, grain, etc. Finally dealers overstate the prices many times, it promotes that retail sellers can take the large income; at the same time farmers are doomed to the forthcoming losses.

Besides, we consider that increase in efficiency of nature protection activity of users of nature will be promoted by financial eases, by introduction of economic tools on stimulation of protection of ecology. To stimulate users of nature and to hold nature protection events for rational use of material and mineral resources with use of various economic mechanisms of environmental management, which provide system of ecological payments.

As it was noted in the Report of the World Bank, "introduction of the form of payment for environmental pollution will allow to provide the economic incentives on decrease in pollution of ecology by means of the mechanism of increase in interest rates for top standard use of resources or the emission exceeding norms and dumping of pollutants" [3].

It is necessary to reconsider percent of rates of payment for pollution of ecology; their size needs must be established, making start from volumes and different types of some substances. The rates of payment for pollution of ecology and the environmental sphereare established in especially protected territories or nearby.

These economic tools will promote determination of strict norms and standards on inaction of economic entities by introduction of innovative and rational methods of use of natural and mineral resources, to the organization and introduction of very effective and low-waste technologies. At the same time, the damage will be caused to ecology as the result of performance of the nature protection legislation and the subject to compensation in absolute volume. In the Concept of transition of the Republic of Kazakhstan to sustainable development for 2007-2024 was stressed: "It is necessary to reveal extent of pollution and the caused damage, to fill all costs of their restoration, further reproduction and other expenses and losses" [4].

We believe, the introduction of ecological statistics will allow to exercise the control over execution of the state strategy and indicative plans, various programs and actions, the state documents, defining the level of development of the Republic of Kazakhstan, to promote its occupation of the certain place in the world, development of important activities of public authorities and the public. At the same time there is no system basis for formation of the main indicators, and trends of transformations of state of environment and the natural available resources don't allow estimating their small number for certain.

We think that for this purpose it is necessary to develop the program of evidence-based system of indicators and indicators in the field of protection of ecology. This system will be unambiguously involved in the practical activities of productions on realization of indicative socio-economic planning and state policy.

The level of the development of the human capital remains an absolute national priority of the Republic of Kazakhstan. We consider that when developing strategies of our country during formation of the market relations accent will need to develop the cumulative human capital of the creative type, conforming to requirements of innovative production. Also foreign authors hold the same opinion [5, p. 411]. As adaptation of the saved-up human capital to market conditions is much more effective and more real, than its full recreation, and corresponds to the level of expenses, feasible for economy of Kazakhstan. It is quite necessary the following:

- carrying out the policy of the state in the field of the human capital, the retraining promoting allround development of intellectual potential of labor by the development and implementation of programs of the professional, focused education and by increase and retraining of personnel, at the same time corresponding to the compensating character;
- influence of the state tools by the means of the educational focused taxes of the enterprises for the purpose of increase their activity in the field of preparation, retraining and adaptation to new conditions of labor:
- carrying out active market development, focused on the educational policy of the state, promoting formation of the improved model of the employment of the population, essential decrease in expenses of transition process, easing existing social and psychological to the intense period in the society to suspend disqualification of the cumulative human capital.

Personnel potential remains decisive in fight for competitiveness. First of all, it is necessary to solve the problem of professional retraining of labor. For this reason state policy in the field of training of intellectual labor plays the significant role. Public authorities of management define the product of the market of knowledge (providing it with the standard and legal basis, regulating functioning of educational institutions, enrollment and training, degree of their independence on hand financial and material resources, etc.), influence requirements of labor market and are external main regulators.

The regulating role of the state in this case, in our opinion, is explained by the maximum efforts of rapprochement of demand for the labor (from employers), but also the proposal of able-bodied population not only on the number of workers and their qualitative structure, but also in time and space, on macroand microlevel.

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At the microlevel regulation of the labor market contains legislative and other standard and legal regulation, financial stimulation, tax maintenance of the population and the movement in labor market of the organizations, enterprises, the personal registered and unregistered businessmen and households. Moreover, the labor market is affected also by the private business, the indirect regulator of the market of knowledge. But we know that in many respects the component of branch structure of public sector is similar to private structure, at the same time, without replacing and supplementing activity of the private capital, realizing the functions, social necessary, and number of reasons isn't shown by objects of use of the personal capital.

The households, which were traditionally found in the republic in recent years, consumer cells of the state have nowadays restored the production functions. Economic and separate other enterprise households arise, along with the state enterprises, figures of restoration of jobs. The final offer of work in the country and regions depends on welfare of families, in our opinion osupport the economic activity of households has to become the main direction in labor market regulations.

At the same time we consider, that the state policy has not only capture preparation and big release of highly educated and production of the active labor potential, but also to supply with its high employment in labor market. It is possible the important way of implementation of this approach development of additional jobs.

Thus, the model of the balanced sustainable development of the national economy has to be focused:

- on improvement of the quality of life of citizens of the state by the creation of economic conditions for them of worthy work;
  - on effective democratic management;
- on development favorable accommodation and health of the population in the ecological environment;
  - on enhancement and preservation of the available cultural and moral values of the population;
  - on protection of the civil rights.

In the conclusion we would like to note, that full support by multilateral creditors on sustainable development and adaptation to the climate changes is necessary for decrease the main threats of the sustainable development in the Republic of Kazakhstan. For the purpose of the development of infrastructure of different regions it is quite necessary:

- to improve the normative legal acts and the national legislation, concerning investment and the taxation;
- stimulations of attraction of the foreign and domestic capital, taking into account climate, political and social risks;
  - simplification of customs and visa formalities, etc.;
- maintenance and distribution of image of Kazakhstan as the country, favorable for tourism and business;
  - training of qualified personnel.

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#### ЖАҺАНДЫҚ ЖЫЛУ ЖАҒДАЙЫНДАҒЫ ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ТҰРАҚТЫ ДАМУЫН ЖҮЗЕГЕ АСЫРУДЫҢ ЭКОНОМИКАЛЫҚ МЕХАНИЗМДЕРІ

Аннотация. Климаттың жаһандық өзгеруінің нәтижелері әлемдік қоғамдастықтың арсында кеңінен таралған алаңдаушылыққа әкеліп соқтырады, өйткені қоршаған ортаның өзгеруі бірқатар түбегейлі, ал кейбір аймақтар үшін апатты салдары болуы мүмкін. Бүкіл әлемде, жаһандық жылынудың бар екендігін мойындауға қарамастан, климаттың өзгеруінің барлық әсерлерін (олар: экологиялық, экономикалық және әлеуметтік) уақтылы болжау және оларға жауап беру тұжырымдамалары мен стратегияларын әзірлеу мақсатында зерттеулер жүргізілуде. Адамзаттың табиғи ресурстарға және тауларға немқұрайлы қатынасы, басқалармен қатар, ХХІ ғасырдың басында таулы аудандардың әлеуметтік-экономикалық жағдайының нашарлауына әкеліп соқтырды, бұл жағымсыз проблемаларға (этносаралық шиеленіс, кедейлік, жер және экожүйенің тозуы және т.б.) әкелді. Ғаламдық жылынудан туындаған экологияны және адамзаттың тіршілігін қамтамасыз ететін барлық жүйелерін өзгерту (экологиялық, әлеуметтік, саяси, экономикалық және мәдени) климаттың өзгеруі мен ел экономикасының өсуі арасындағы тығыз байланысты көруге мүмкіндік береді. Жаһандық жылыну мәселесі Орталық Азия мемлекеттерін шетте қалдырмады. Қазіргі уақытта көптеген ғалымдар дағдарысты еңсеруге тырысады, әлеуметтік-экономикалық дамудың түрлі стратегиялары мен бағдарламаларын әзірлейді, бірақ олардың барлығы климаттың өзгеруі салдарынан туындауы мүмкін проблемалардың маңыздылығын ескермейді.

**Түйін сөздер:** жаһандану, климаттың өзгеруі, қоршаған орта, жаһандық жылыну, табиғи ресурстар, жердің деградациясы, экожүйе, өмірді қолдау жүйесі, биоресурстар, экологиялық қауіпсіздік.

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#### ЭКОНОМИЧЕСКИЕ МЕХАНИЗМЫ ОБЕСПЕЧЕНИЯ УСТОЙЧИВОГО РАЗВИТИЯ РЕСПУБЛИКИ КАЗАХСТАН В УСЛОВИЯХ ГЛОБАЛЬНОГО ПОТЕПЛЕНИЯ

Аннотация. Результаты глобального изменения климата вызывают повсеместную озабоченность мировой общественности, и это, понятно, поскольку, изменение окружающей среды может повлечь за собой ряд кардинальных, а для некоторых регионов, катастрофические последствия. Во всем мире, независимо от признания присутствия глобального потепления климата, проводятся исследования, с целью, своевременного прогнозирования всех последствий изменения климата (экологических, экономических и социальных) и разрабатываются концепции и стратегии реагирования на них. Небрежное отношение человечества к природным ресурсам и к горам в том числе, привело к тому, что в начале XXI века социально-экономическое положение горных территорий ухудшилось, что повлекло за собой негативные проблемы (напряженность межэтническая, бедность, деградация земель и экосистем и др.). Изменение экологии и всех систем жизнеобеспечения человечества (экологических, социальных, политических, экономических и культурных), вызванных глобальным потеплением, позволяет увидеть тесную взаимосвязь изменения климата и роста экономики страны. Проблема глобального потепления не оставила в стороне и государства Центральной Азии. В настоящее время многие ученые предпринимают попытки выхода из данного кризиса, разрабатывая различные стратегии и программы по социально-экономическому развитию, однако, не все из них учитывают всей серьезности проблем, которые могут возникнуть впоследствии из-за изменения климата.

**Ключевые слова:** глобализация, изменение климата, окружающая среда, глобальное потепление, природные ресурсы, деградация земель, экосистема, системы жизнеобеспечения, биоресурсы, экологическая безопасность.

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