

Foreign Experience and Kazakhstani Direction to Sustainable Development of the Economy

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Abstract: The article reviews foreign experience of transition of countries' economies to sustainable development. Appearance of the notion "sustainable development" economists connects for the first time with International UN commission on environment and development (1987) at the head of Norwegian Prime Minister, Brundtland, who study them in trinity: economic, social and ecological development. In the former Soviet Union transition to sustainable development is connected with the development of the law about labor protection. However many issues remained unresolved in connection with collapse of the Soviet Union. In conditions of globalization demands Kazakhstan has not remained aside and has taken a number of strategic documents and programs. The article has also represented problems on the way of transition to sustainable development of Kazakhstan.

Key words: Sustainable development • Social and economic development • Ecological development • Foreign experience • Kazakhstan

INTRODUCTION

In conditions of globalization and intensification of competition taking firm stands by countries, which commonly called in economics as sustainable development, becomes actual. Sustainable development supposes trinity: economic, social and ecological development. Interrelationship of components: ecological sustainable development, sustainable social development and sustainable economic development, is evident. In conditions of rapid implementation of the results of scientifically technical progress the scales of influence of people's activity on environment are rapidly increased. Ecologically sustainable development is determined by people's needs and their social concernment in scales of biosphere resource consumption.

The most "popular", well-known definition of "sustainable development" is the definition, made by International UN commission on environment and development (1987) at the head of Norwegian Prime Minister, Brundtland: "Sustainable development is a development that satisfies needs of the present time but does not jeopardize future generations' ability to satisfy their own needs. It includes two key notions:

- The notion of needs, particularly needs, which are necessary for existence of the poorest layers of population that should be a subject of paramount priority;
- The notion of restrictions, imposed by the technology condition and society organization, applied to ability of environment to satisfy present and future needs" [1].

The number of preparatory measures has preceded the conference in Rio-de-Janeiro that is reflected in accordance with Figure 1.

The UN conference on environment was in Stockholm (Sweden) in June 1972. There was firstly declared about inclusion measures on solving problem of environment changes into programs of governments' actions. The following documents have been taken:

- Program statement of the participants (declaration of 26 principles);
- Plan of actions, that included 109 recommendations;
- Recommendations for UN General Assembly about creation of UN program on environment.

“Rio+20”, Summit in Rio-de-Janeiro		2012
World Summit on Sustainable Development (Johannesburg)		2002
Conference in Rio-de-Janeiro (Agenda on XXI century)		1992
		1989
		UN preparation of Conference on development and environment
		1987
		Report of WCED “Our common future”
		1983
		World Commission on environment and development (WCED)
		1972
		Stockholm conference on human environment

Note: Made by the author

Fig. 1: International level events on achieving of sustainable development

June 5, 1972 Was Declared as World Environment Day:

In December 1983 World Commission on environment and development (WCED) was organized in the report of which “Our common future” in 1987 the definition “sustainable development” was used. In the report the concept of sustainable development was named as a base of integrated approach to development of economic policy for the coming decade [2].

1989 was preparation to the conference of 1992 during which the principles of sustainable development were formulated.

In 2002 in Johannesburg (SAR) attention was devoted to environment protection, social and economic issues (poverty, water and sanitary, energetics, climate changes, natural resources and biodiversity, trade and globalization, pollutants). Two documents were accepted: Political declaration – Johannesburg declaration on sustainable development and Plan of decisions implementing of World meeting at the highest level on sustainable development [3].

In June 2012, 20 years later after the conference on environment and development in Rio-de-Janeiro, once again there was meeting of countries at the summit “Rio+20” where risen problems of “green” economy, sustainable development and eradication of poverty were discussed.

The most success showed countries where sustainable development was supported by national governments: Austria, China, Denmark, Finland, Japan, Netherlands, Norwegian, South Africa, Great Britain and Sweden. In most countries of Western Europe at the present time there has been accumulated the huge experience on realization of Agenda 21 on the base of which Local Agendas are developed [4].

Steps to sustainable development were also taken in former Soviet Union countries. Table 1 shows dates and main actions held in Soviet Union on environment protection and sustainable development.

However it is necessary to mention that primary developed programs for a number of reasons frequently remained on the “paper” and a part of them was realized. Today there is no time for experiments and ineffective programs. It is necessary to develop particular actions, mechanisms, national strategies of sustainable development and plans of their realization.

Fundamental principles of sustainable development were taken in Declaration in 1992 at UN Conference on environment and development:

- Countries, carrying out their policy in issues of environment and development, have responsibility for the fact that the actions under their control will not damage environment in other countries or regions. It is referred to the principle of economic responsibility for trans-border pollution of environment;
- Right for development should be realized in the way to satisfy needs in development and conservation of environment of present and future generations;
- To strive for sustainable development, environment protection should become an integral part of development process and can never be considered in isolation of it. This principle can be indicated as a principle of organic unity and interrelation economy and ecology;
- Countries should cooperate in the spirit of world partnership with the aim to save, protect and reconstruct health and unity of the Earth ecosystem;

Table 1: Main actions on environment protection and sustainable development in Soviet period [5]

Years	Actions
1957-1963	Adopting republican laws on nature protection
1968-1977	Adopting legal acts of SSR Union and union republics:
1968	foundation of land laws
1970	water laws
1977	forest laws
1972	USSR preparation to Stockholm conference of UN on environment
1974	Special section about nature conservation is being introduced into the state plan of development of national economy (with subdivisions for rational usage of land, mineral and forest resources, about exploitation cleaning constructions). In the section volume of the state investments for carrying out concrete environmental measures by sectors is set for separate indices.
1976	Main proposals of standards system in the sphere of nature protection and natural resources usage (water, land, forest and atmospheric air) are Confirmed. Penal sanctions for breaking of norms and rules of nature protection are introduced.
1986	Chernobyl tragedy makes the government redouble its attention to problems of environment protection and rational nature management
1988	Decree of the CPSU Central Committee and Council of Ministries of the USSR "About cardinal reconstruction of action of nature protection in the country"
1988	Organization of the first independent authority on nature protection – USSR Goscompriroda
1990	Introducing fees for environment pollution
1991	Adoption law "About environment protection"

- To achieve sustainable development and high life level, countries should decrease and exclude models of production and consumption not contributing sustainable development ("principle of warning");
- Principle of ecological costs compensation or principle of damages compensation is that it is necessary to make internalization of costs on environment protection and refund expenses connected with damage, using economic instruments;
- Principle of assessment of influences on environment condition is in necessity to estimate possible consequences for environment condition that might negatively influence it [6, 7].

Consider examples how foreign countries have reached sustainable development.

Germany as the largest EU country (it is responsible for percent of total volume of greenhouse gas emission around EU) plays a leading role in carrying out obligations within Kyoto Protocol.

Germany is an example for imitation for countries with energetic potential. Policy of economy ecologization is evidently observed here. Measures of transition to usage of ecological cars, lower energy consumption and ecological heating are taken. Today 12% of all consuming energy in Germany is accounted for wind, sun, water and etc [5].

Germany acts according to "National strategy of sustainable development". Here great attention is given to innovations.

A distinctive feature of the United States of America is the fact that private and state structures within realization of sustainable development policy are involved here.

Conception of the USA sustainable development was developed in 1996. The paper "Conception of environment protection for today's prosperity of country and saving of resource possibilities for future generations" draws attention for natural resources usage in the way that they will not decrease.

Plan of actions on environment protection in Central and Eastern Europe is realized under the Commission of the European Communities. During the process of financing preference is given to the programs that are direct continuation of existing programs or fully suitable for them [8].

In Poland as in many countries there is a strained ecological situation. However rich ecological heritage has been retained in one of the country's districts – between Bug and Narev in the north and Vistula in the east. Ecological sustainable development of this region supposes conservation of high level biodiversity and creation "green lungs of countries" there.

It is necessary to note that ecological council in Poland consisting of 50 specialists and independent persons in the sphere of environment protection works very deeply, touching all issues, connected with sustainable development particularly the strategy of sustainable development, economical instruments, education, science, legal issues. Structurally it is represented with three problem groups: sustainable

development strategy and economic instruments, education and scientific researches, legal issues and realization of initiatives by self-government organs.

In India Strategic program there are reflected issues of improvement of ecological laws, education in the sphere of ecology, measures on conservation of biodiversity, controlling actions on pollution of water and air and etc.

In China modern ecological problems are characterized with global character, complexity and socialization of consequences. For last decade, Chinese authorities assisted implementation about 1 mln. environmental protection technologies imported from other countries to the amount of 100 bln. yuans.

Principal turn from general tasks of environmental protection to sustainable development concept is carried out at this stage. First of all it is characterized with a new way of people's thinking in informative community. Theoretical bases of such development are principle of co-evolution of socially economical and natural systems, complex approach and ecological sustainability.

Beijing ecological policy (as well as the USA) is directed to maximum conservation of own natural resources. However its realization is negatively reflected on bordering countries. For example, limitation and prohibition of timber cutting in China oriented timber cutters to Russian forests.

System character is used in PRC, i.e. 3 main components of sustainable development are taken into account: economy, ecology and social sphere. The main aim of China is conservation of own natural resources.

A number of legal acts were developed in the sphere of environment protection within ECE: Convention on transboundary transfer of pollutions on big distance (1979). As a result European countries reached significant reduction of sulfur emission in comparison with 1980, some of them – on 30% and more. Conventions were taken: on transboundary influence of industrial accidents and on protection and usage of transboundary water ways and lakes (1992). ECE planed ways of energetic development for Europe till 2020.

EU program “On the way to ecological sustainability” consists of the following: improvement of resource usage, informational provision of ecologically defensible consumption, common norms for production processes and goods for EU. Structures (controlling and consulting bodies) aimed to provide practical realization of the program actions in the sphere of environment protection were organized.

European community took concrete steps on controlling climate changes. European actions plan foresees organization of more competitive, ecological, reliable, effective and independent energy supply. The aim – “Triply 20” (till 2020) has been set. It means reduction of greenhouse gas emission on 20% in comparison with 1990, increasing the share of renewable source of energy to 20% and rise energy efficiency on 20%.

Kazakhstan being a full participant at the global economic space and in political life has not remained aside from consciousness and taking decisions of transition to the way of sustainable development. Main steps of achievement of economic and ecological balance were taken in “Agenda – 21” (Rio-de-Janeiro, 1992) on the basis of which the impulse to development of local Agendas was given.

Conception of transition of the Republic of Kazakhstan to sustainable development on 2007-2024 was accepted in 2007. Issues of efficiency resource and energy usage, balanced demographical policy, providing ecological sustainability are marked as priorities. In May 2007 the Conception was presented in UN [9].

While developing countries adopt experience of leading developed countries, developed countries determine new horizons for themselves, reflecting in strategic plans of development. For example, China has determined for itself the horizon of strategic planning till 2050. A global prognosis of civilization development till 2050 has been developed in UN. Prognostic report till 2050 has been publicized by Food and Agriculture Organization. In view of this the circumstance has determined a new strategic course of Kazakhstan “Strategy – 2050” [10].

The conception “Strategy – 2050” is a continuation “Strategy – 2030” of Kazakhstan, dictated by realias of modern world. For 15 years since the moment of accepting “Strategy – 2030” the country entered into five the most dynamically developed countries of the world. In the rating of World Economic Forum Kazakhstan has already taken the 51 place.

In the Strategy “Kazakhstan – 2030” the accent was shifted on economic growth. For 15 years the volume of national economy has grown since 1,7 trillion tenge in 1997 to 28 trillion tenge in 2011. GDP of the country has grown more than 16 times. Since 1999 annual GDP increase in Kazakhstan has been 7,6% and outrun leading developing countries. GDP per capita has increased more than 7 times – from 1,500 US dollars in 1998 to 12 thousand US dollars in 2012 [11].

Table 2: Sources of pollutants emissions into atmosphere

Name of index	Years			Changes, %	
	2000	2006	2011	2006 r.	2011 r.
Quantity of enterprises, having pollutants emissions, units	163	190	584	116,6	307,4
Quantity of emissions sources, pollutants into atmosphere, units	3 661	4205	8060	114,9	191,7

Table 3: Emissions of the most widespread harmful substances produced by stationary industrial sources of atmospheric air pollution

Name of index	2008	2009	2010	2011	2012
Total, thousand tons, including	597	561	572	632	676
Solid substances	246	220	205	196	180
Gaseous and liquid substances	351	341	367	436	496
- sulphurous anhydride	222	216	231	276	292
- nitric oxides	72	69	75	81	97
- carbonous oxide	30	31	34	53	75

Table 4: Number of died people in working age on separate reasons of death

Name of index	2008	2009	2010	2011	2012
Number of died people from all reasons, persons including:	3242	2965	3239	3000	3117
From new growths	471	429	405	388	491
From diseases of the circulatory system	987	978	1105	982	972
From diseases of the respiratory systems	119	111	119	145	187
From accidents, poisonings and injuries	987	883	954	882	839
From inflectional and parasitic diseases	194	142	139	110	111

Moreover, a number of strategic documents have being realized, such as: Strategic Plan of RK Ministry of Environmental Protection for 2011-2015; Strategic Plan of Ministry of Environmental Protection of RK for 2010-2014; Program to Combat Desertification for 2005-2015; Sectoral program “Zhasyl Damu” for 2010-2014; State program of forced industrial and innovative development for 2011-2014 (within the program of forced industrialization since 2010 397 investment projects total amount 1,797 bln. tenge have been realized and more than 44 thousand working places have been organized); Industrialization Map; “Business road map – 2020”.

Understanding of meaning of environmental compatibility of productions has been dictated with existing consequences from industrialization. For example, in Kazakhstan one of the leading industrial oblasts are: Pavlodar, Karaganda and Eastern Kazakhstan oblasts.

Pavlodar oblast is characterized with progressive and diversified structure of economy. 6,9% of total industrial production of the country, 4,7% of gross products production of agriculture are concentrated here.

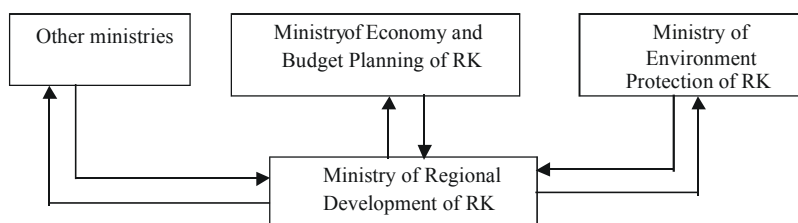
Negative moment in these conditions is the fact that transition to the direction of forced industrially innovative development of economy increased the load on environment. In the result of increasing the quantity of enterprises producing pollutants emissions in the oblast since 2006 till 2011 quantity of emission sources, pollutants into atmosphere for this period has increased on 91,7% (Table 2).

Gaseous harmful substances, produced by stationary industrial sources of atmospheric air pollution are increased at the average on 14% per year (Table 3).

This circumstance has negative consequences: the quantity of died people in working age from new growths and diseases of the respiratory systems is increasing (Table 4).

Sustainable economy development from the position of ecological component should include:

- Providing qualitative economic growth, parameters of which are the growth of real welfare, growing of production and human capital;
- Integration of ecological and economical policy that gives new understanding of sustainability. It is reached at the expense of registration of ecological factor in the process of taking by business groups those or others decisions, gradual implementation into life ecologically ideal industrial structure, development of ecologically clean technologies;
- Wide usage of economic regulating tools in the spheres of price formation, taxing, foreign commerce and etc.;
- Providing fair rights for usage of common natural asset of mankind on the base of international agreements;
- Primary accounting of human capital role, i.e. knowledge and experience and also health condition and social standard of living [12].



Note: Made by the author

Fig. 2: Interrelation of sustainable development management at macro and mezzo levels

Forthcoming exhibition EXPO 2017 in Astana should give a powerful impulse to country's transition for "green" way of development. The best world scientific and techniques achievements will be presented in the capital. Many Kazakhstanis will have an opportunity to see "energy of the future".

It is necessary to note that indicator system of assessment of economy sustainable development and methodology of their determination is absent in the country. Moreover, in connection with specifications of separate regions development it is necessary to determine standardized values or criteria of level of sustainability.

In light of the message the president set a task to organize the Ministry of regional development. This Ministry was confirmed with presidential decree of 16 January 2013. Ministry of regional development got functions and powers of ministry of economic development and trade in the sphere of forming and realization of state policy in the sphere of regional development. Particularly the department will work with issues of entrepreneurship support and coordinate the work of socially entrepreneurial corporations (AEC). Committee for construction and housing and public services affairs has been organized at the ministry; committee entrepreneurship development and committee on land resources management were given into the ministry.

Ministry of regional development becomes united coordinator for realization of socially oriented state programs.

Interrelation of management of sustainable development at macro and mezzo levels is presented according with Figure 2.

In Kazakhstan and its regions the model of sustainable development can be developed and realized, this model is able to consider natural and climate, resource, national, ethnic, cultural and other peculiarities of regions. Such model of sustainable development can base on the following principles: complexity; systemacity; priority of activities realization on storage and

improvement conditions of existence; development of separate territories at the same time problems, elements of the structure, priorities and directions of development are taken as a base.

Thus, Kazakhstan is on the way of economy sustainable development and there are a number of strategic documents. However, there are not enough measures for ecological component in conditions of dynamic economic development. In view of this in short perspective it is necessary to carry out improvement of tools for management of economy sustainable development.

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