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### **Sustainable development: myth or reality?**

The meaning, content and main components of sustainable development are represented in the paper. The necessity of sustainable development principles, implementation of «Green» economy standards is shown in the paper. Author represents analysis of transition to new model of sustainable development in the Republic of Kazakhstan. Main difficulties and problems on this way are described in the paper. The necessity of sustainable development principles, implementation of «Green» economy standards is shown in the paper. Author represents analysis of transition to new model of sustainable development in the Republic of Kazakhstan. Main difficulties and problems on this way are described in the paper.

*Key words:* sustainable development, ecological regulation, society, economic growth, «Green economy», state regulation, governance, infrastructure, transition economy.

Definition „Sustainable development» is used nowadays in different aspects and refers to different objects: nature, human being, region, economy, society, ecology and etc.

This definition became very popular after 1987 when International commission on environment and development which was created by General Assembly UNO (Commission Brundtland) has given the following definition of sustainable development: «Sustainable development — development that meets the needs of the present without compromising the ability of future generations to meet their own needs» [1].

Word «Sustainable» means «viable», «vital» and «lasting». Sustainable development can be understood as development that vital and lasts. We can interpret sustainable development as development which can be continued due to simple and expanded reproduction process.

Thus, this definition maybe used in global, country, region, business aspects. In the report «Our common future» you can see that strategy of sustainable development is aimed to achieve harmony between people, society and nature. The mentioned above definition is the basic definition of sustainable development. But there are many other interpretations of sustainability and sustainable development.

World Bank gives the following definition: «Sustainable development is management of society overall capital in favor of saving and accrual of human possibilities».

Danilov-Danilyan determines sustainable development as development in which influence on environment stays in frames of biosphere's economic capability so that the nature basis for human life is not ruined.

Biosphere's economic capability is marginal anthropogenous influence beyond which in biosphere degradation processes used to start.

Sustainable development is improvement of living standards which saves potential capability of ecological systems for life saving [2].

Herman Daly defines sustainable development as «development without growth». Sustainable development is socially stable development where total economic growth should not be more than environmental support system's capability [3].

Under sustainable development Granberg mean the following: «Sustainable development is balanced socio-economic development which does not ruin environment and provide continuous society progress».

According to all these definitions sustainable development consist of three main parts: social, economic and ecological components.

Sustainable development is development where the levels of welfare and living standards per capita broadly defined, are not decreasing over time.

Sustainable development in practice means development that achieves a balance among economic, social and environmental objectives for both present and future generations.

Each country has its own strategy of sustainability and development. The sustainable development strategy process offers an opportunity to build on the complementarities of programmes in the economic, environmental and social spheres to improve the long-term effectiveness of government policy. In practice many strategies reflect ecological components and economical as well. Social component is used to be neglected.

Such countries as Belgium, Germany, New Zealand, and Sweden are very successful in implementing social objectives in their national strategies. But the main focus of the Danish strategy is on integrating environmental considerations into a number of specific sectors. The Australian Strategy for Ecologically Sustainable Development focuses on environmental concerns such as coastal zone management. Japan's strategy is basically an environmental plan focused on materials recycling, global warming and biodiversity, while Korea's strategy is based on the National Environmental Vision for the New Millennium. Canada has developed departmental strategies according to «A Guide to Green Government» to pursue the environmental health of the country [2; 16].

Thus, Norway — in 2003, in Switzerland — in 2004, in the UK — 2005, Sweden — 2006 presented their models of sustainable development. In 2001, the European Union also developed a sustainable development strategy for its Member countries (under revision in 2006), while a Nordic Strategy for sustainable development (Denmark, Finland, Iceland, Norway and Sweden) was revised in 2005. Though each country at the national level will try to solve the problems of sustainability sustainable development is a global aim and need actions at the global level. Strategy of each country will contribute to sustainable development globally.

There are many indicators for measuring sustainable development. Thus, Sustainable Society Index was developed in 2006 by the Sustainable Society Foundation and shows at a glance the general level of country sustainability. This index reflects many aspects (Figure 1).

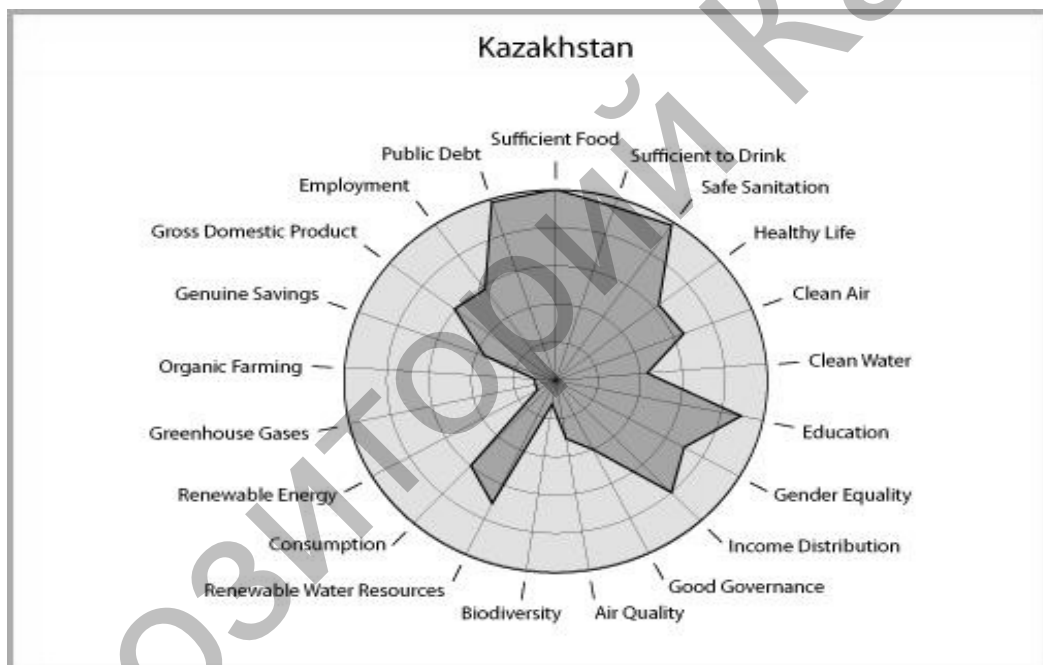


Figure 1. Sustainable society index in Kazakhstan Source [4]

As can be seen from the Figure 1 our strengths are: «Sufficient food», «Sufficient drink», «Safe sanitation» — basic needs — due to good productivity of land (in case of grain) and available water resources. But still we do not use the whole land capacity for crops production and farming.

We have some weak points in Environmental wellbeing and Human wellbeing: «Good governance», «Renewable energy», «Organic farming» and «Clean air». Air quality is rather low. This is mostly because of the emission trading system in Kazakhstan. For many enterprises it is much easier to pay than to care about the environmental issues seriously. We think that environmental regulation should be stricter. Figure 2 shows the environmental performance in Kazakhstan. You can see that it is very low.

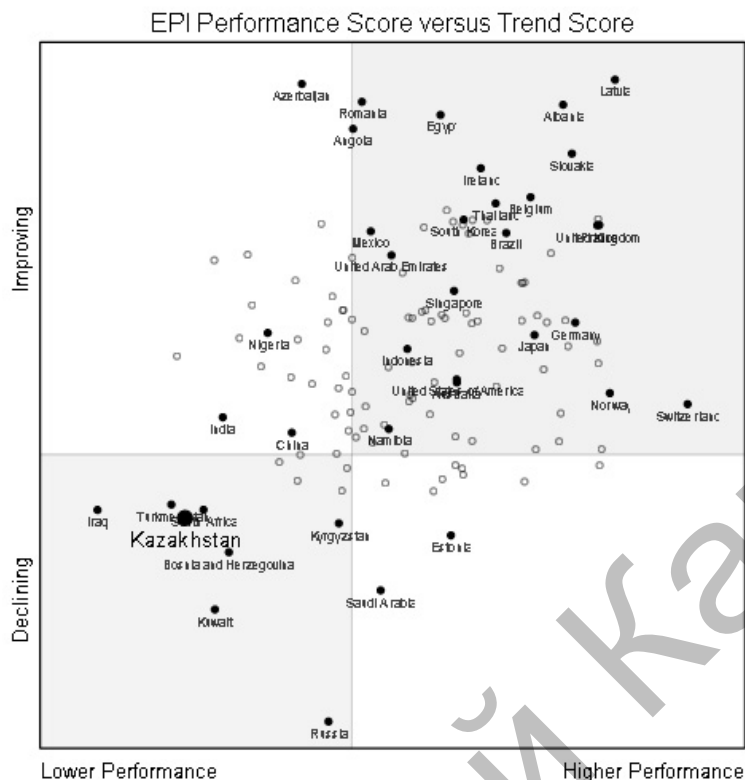


Figure 2. Environmental performance of Kazakhstan Source [5]

Sustainable development supposes to combine three components: economic, social and ecological. Concept of «Green economy» is aimed to achieve more harmonious concordance between these components which is acceptable for all countries- developed, developing and countries with transition economy.

Concept of «Green economy» includes many ideas from different spheres: economy, philosophy and other sciences connected with sustainable development problems: climate crises, biodiversity crises, fuel crises, food crises, water crises, financial and economic crises. The idea of sustainability is to prevent mentioned above crises, to achieve sustainable growth. GDP and other quantity indicators are useless in this case. Model of «Brown economy» where natural resources are widely used for achieving economic activity and wellbeing without thinking about environmental issues does not work anymore. We need to find new model and new method of economic development which will be able to recover economic growth after crises, taking into consideration environment, rational use of resources and creation conditions for sustainable development.

«Green economy» is defined as economic model which can improve people lives, ensure social justice, and decrease ecological risks. Using this model we change existing attitude to the nature, people, business.

Definition «Green economy» is not yet defined. There are many interpretations. Developed countries using term «Green economy» mean «green» economic model, developing countries — «green» strategy of growth. In China they call it as «Green» development and ecological building. But all these words describe the one — sustainable development which includes three components: economic, social and ecology. Other different name and terms can be used, but they all aimed at description of sustainability.

The experience of foreign countries has shown that «Green» economic policy help to achieve economic and social benefits through energy technologies, resource efficiency, food security, good governance and many other methods.

Such countries as the USA, Germany, Great Britain, France, Japan and South Korea are the pioneers in «Green» economy creation. They increase invest expenditures in different sectors of «Green» economy, make people aware about «Green» economy and sustainable development; increase governance potential; expansion of ecologically clean food products using eco-marking; decreasing state expenditures on non-

renewable natural resources; development of institutional framework (institutions, NGOs, private companies) which are working in the field of «Green» economy and ensure transition to sustainable development; tax instruments; international cooperation. [6]

Thus, expenditures in different sectors of economy will help to create the needed infrastructure, develop national economy and market. Expansion of ecologically clean food products using eco-marking will lead to social wellbeing, increasing quality of life, living standards. It is very interesting to mention that the first programme of eco-marking in the world was created only in 1997 in Germany for popularization of eco-friendly products among people [7].

For getting this eco-friendly mark producers have to go for special expertise with their products by Committee on environment protection. In turn the final decision of Committee on environment protection depends on ecological jury which consists of branch members, ecological organizations, church and public authorities. In turn it will not only help in achieving good living standards but also for popularization of «Green» economy. It is very important to change mentality of people, make them think more environmental friendly.

We find that this experience is very positive and can be used in Kazakhstan as well.

In Kazakhstan sustainable development strategy was implemented in 2006. In May 2013 Concept of the Republic of Kazakhstan on «Green economy» transition was adopted. These strategic documents define the following sectors of economy for sustainable development: water resources, agriculture, and energy saving and increase of energy efficiency, waste management, increasing air pollution, saving and management of ecosystems.

Nowadays we have many problems in these sectors. In all main economy sectors we can see not efficient usage of natural resources. According to expert estimation lost profit of it is more than 4–8 billion US dollars per year [8].

Economic losses as a result of low earth productivity are 1.5 — 4 billion US dollars per year, and by 2030 they can be more. It can lead to social consequences for agricultural sector of Kazakhstan where more than 30–45 % of people used to work.

Kazakhstan faced with a problem of serious natural resources and environment deterioration. Almost one third of all farmlands are degenerated. More than 10 million hectares of potential plow land was neglected. According to the forecast in 2030 there will be deficit of sustainable water resources for satisfaction of economic needs at the amount of 13–14 billion cubic meters.

Environment pollution has significant effect on health of people in Kazakhstan. According to the international researches more than 40 000 children until 10-years old age have neurological deficits as the result of lead (plumbum) overexposure.

Kazakhstan has the second place accordant with general volume of environment pollution by organic substances among Central Asia and East European countries.

Air pollution in Kazakhstan is the main reason for more than 6 thousand deaths per year. Lack of integrated waste management system has lead to uncontrolled waste deposits with more than 97 % of municipal solid waste. Toxic and radioactive industry waste is serious problem in Kazakhstan.

Economic activity in Kazakhstan is concentrated on usage of natural resources: oil, gas, metals and other. Extractive orientability of the Kazakhstan economy, weak downstream sector, influence on oil prices, and lack of modern technology, weak agricultural sector and insufficient human resource potential (especially engineers) create many barriers in achieving sustainable development.

For solving many of the mentioned above problems we need a lot to be done. Thus, to our point of view, it is very important to create effective institutions in the sphere of sustainable development. We need a good network of institutions working on these three basic components of sustainable development. They should be interconnected.

In Kazakhstan we have infrastructure deficit — lack of special unique institutes for «Green economy» development that can be a linking parts between public authorities, NGOs, private companies, ecological organizations and others to ensure environment sustainability as well as social and economic sustainability.

The experiences of developed countries highlight how a temporary boost in investment and infrastructure spending has been necessary to move to the next stage of economic growth on the way to sustainable development and creation of new institutions. The figure below compares the rates of gross fixed capital formation for a selection of countries over time. A significant increase in gross fixed capital formation was observed during these countries' growth periods before returning to lower levels [9].

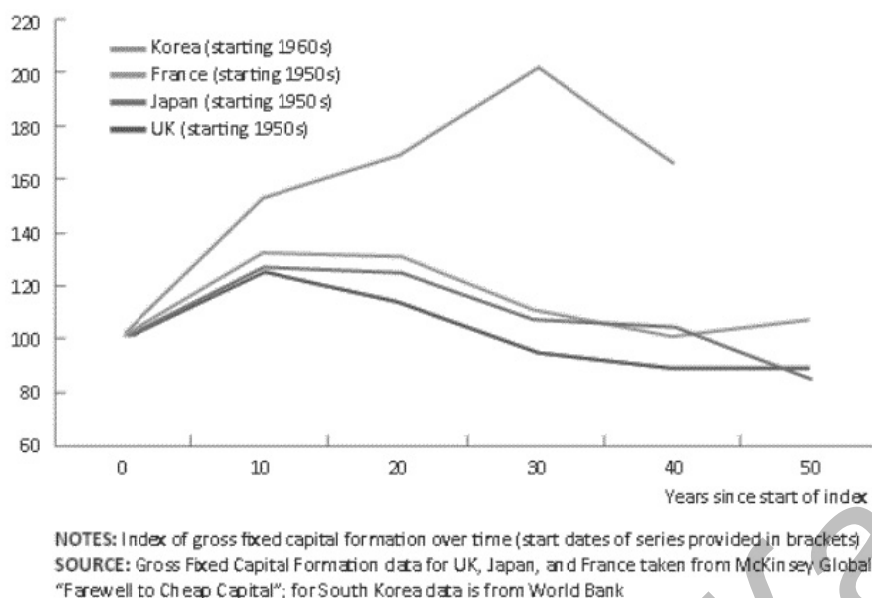


Figure 3. Comparison of rates of Gross fixed capital formation across countries Source [10]

As you can see from the Figure 3 Korea has invested a lot in developing its infrastructure. They have created special institution for «Green» growth. The name of this institute is Global Green Growth Institute which has already shown very good results at the moment.

Founded in June 2010 and headquartered in Seoul, the Global Green Growth Institute (GGGI) is an international organization that helps developing and emerging countries pioneer a new green growth paradigm — economic growth with environmental sustainability.

GGGI is a new kind of international organization — interdisciplinary, multi-stakeholder and driven by the needs of emerging and developing countries. It has been established by several forward-thinking governments to maximize the opportunity for «bottom up» (i.e., country- and business-led) progress on climate change and other environmental challenges within core economic policy and business strategies. The Institute is designed to be an open, global platform to support experimentation and collective learning by developing countries seeking to leapfrog the resource-intensive and environmentally unsustainable model of industrial development pioneered by advanced economies in an earlier era [10].

Experience of Korea can be very useful for Kazakhstan. The government of Kazakhstan has launched the Astana Green Bridge Initiative, which aims to promote green economic policies through knowledge sharing and green investment facilitation by bridging Europe and Asia. Strategy for Kazakhstan's Transition to Green Economy will be a good instrument for sustainable development implementation.

The experience of foreign countries has shown that «Green» economic policy helps to achieve economic and social benefits through energy technologies, resource efficiency, food security, good governance and many other methods.

Concept of «Green economy» includes many ideas from different spheres: economy, philosophy and other sciences connected with sustainable development problems: climate crises, biodiversity crises, fuel crises, food crises, water crises, financial and economic crises. The idea of sustainability is to prevent mentioned above crises, to achieve sustainable growth. GDP and other quantity indicators are useless in this case. Model of «Brown economy» where natural resources are widely used for achieving economic activity and wellbeing without thinking about environmental issues does not work anymore. We need to find new model and new method of economic development which will be able to recover economic growth after crises, taking into consideration environment, rational use of resources and creation conditions for sustainable development.

We would like to study national's models of sustainable development with focus on governance and institutions efficiency. For this reason the experience of developed countries was carefully studied.

Norway being a highly developed country with high living standards and good environmental governance is one of the most interesting countries for us.

The governance structure of the Norwegian Model of sustainable development is:

- The Minister of Finance is politically responsible for the National sustainable development strategy. This ministry coordinates long term development policies.
- Statistics Norway is responsible for regularly updating and presenting National Wealth estimates and the national core Sustainable development indexes set.

Approach to assign responsibility for national sustainability strategies to Finance Ministries, which can assure the strategic management is linked to fiscal priority setting, national expenditure and revenue generation is considered very useful approach. Comparing to Norway the Czech Republic, the Governmental Council for sustainable development is chaired by the Deputy Minister for Economic Affairs, and in Italy, the Interministerial development, is chaired by the Minister of Economy and Finance.

The forces driving development in Norway are the main categories of capital: produced, human, natural and social combined with population and technological developments.

Main policy areas in the Norwegian sustainable development strategies are:

- ✓ International cooperation and fight against poverty;
- ✓ The climate, the ozone layer and long transports of air pollution;
- ✓ Biological diversity and cultural heritage
- ✓ Natural resources;
- ✓ Hazardous chemicals;
- ✓ Sustainable economic and social developments [11; 14].

So, you can see that the main component in Norwegian strategy is ecological, although they pay a lot of attention to social affairs. Without rational usage of natural resources, development of renewable energy, effective environmental regulation, implementation of «Green economy» it is not possible to speak about sustainability and development.

Such countries as the USA, Germany, Norway, Great Britain, France, Japan and South Korea are the pioneers in «Green» economy creation and in «Green» models. They increase invest expenditures in different sectors of «Green» economy, make people aware about «Green» economy and sustainable development; increase governance potential; expansion of ecologically clean food products using eco-marking; decreasing state expenditures on non-renewable natural resources; development of institutional framework (institutions, NGOs, private companies) which are working in the field of «Green» economy and ensure transition to sustainable development; tax instruments; international cooperation.

All described above positive experience can be used in the Republic of Kazakhstan.

On the institutional level there are several authorities which work on sustainable development topic in Kazakhstan:

- Ministry of Environment Protection;
- Ministry of industry and new technologies;
- Kazakhstan Public-Private Partnership Center;
- European Bank for reconstruction and development.

Also there are some institutions at the regional level: Ministry of regional development, ecological organizations, special banks and other financial institutions which realize sustainable development initiatives.

But we need to create institute in order to be a linking part and coordinating center for many «green growth» initiatives. In Kazakhstan we have a lot of institutions dealing with development initiatives at all levels. But they all work in their own specific areas.

One of the main criteria for institutional framework in sustainable development is strategic implementation of sustainable development, international cooperation (number of ratified global agreements).

At the modern stage of development in Kazakhstan we should invest a lot in infrastructure creation, institutions of development and cooperate with the world using positive foreign experience and taking into account Kazakhstan specific.

Governance structures need to be improved so that they can serve as a basis for the development and implementation of green growth initiatives. This will involve, first of all, enhanced efforts for procedural integration of environmental issues into national development planning processes. Secondly, establishing governance structures at the highest levels of government and ensuring co-ordination between different areas

and levels of government will be needed. The goal should be to integrate green growth into policy processes rather than create stand-alone policy documents or agencies.

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### **Тұрақты даму: миф әлде шынайылық пе?**

Мақалада тұрақты дамудың маңызы, мазмұны, негізгі компоненттері қарастырылған. Тұрақтылық принциптеріне көшу қажеттілігі және «жасыл» экономика стандарттарын енгізу негізделген. Сондай-ақ Қазақстан Республикасының тұрақты дамудың жаңа моделіне өтуіне талдау жасалған. Қазақстан Республикасының тұрақтылыққа өту жолында кездесетін негізгі кедергілері мен мәселелері көрсетілген.

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### **Устойчивое развитие: миф или реальность?**

В статье рассмотрены сущность, содержание, основные компоненты устойчивого развития экономики страны. Обоснована необходимость перехода к принципам устойчивости, внедрения стандартов «зеленой» экономики. Представлен анализ перехода Республики Казахстан к новой модели устойчивого развития. Авторами обозначены основные трудности и проблемы, с которыми сталкивается Казахстан на пути к устойчивому развитию экономики.