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Journal of Environmental Management and Tourism is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

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Programmed - Aimed Approach to Sustainable Development Management. Regional Experience

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Abstract:

Author explores the management of the developing, implementation, monitoring and evaluation of Program on the territory development based on the regional materials to measure sustainability.

The analysis the problem areas of all stages of management of the state program of territory development was used as starting point in assessing the effectiveness of public policy. The study reveals the attempt to solve theoretical and practical problems of increasing the efficiency of public administration in sustainable development of the region by improving the methodological support of the state program of development of the territory.

The New Methodology of public Management which is results-oriented, the issue of cost-effectiveness while balancing the interests of society and nature becomes relevant for governments implementing policies for sustainable development across the regions. State program being a sophisticated tool of state regulation, is a set of projects (measures) and regulatory instruments. It requires the cooperation of a large number of different levels of actors in the development, organization and coordination of the efforts of participants in the program, monitoring and evaluation of interim results for the feedback and adjustment programs, and finally, evaluation of outcomes, which allows you to judge the effectiveness of the program and the achievement of its goals.

Keywords: ecologic policy, sustainability, development, regional development, state program, project management, management tools, effectiveness, public management, green economy.

JEL Classification: O15, Q01, Q56.

Introduction

As a part of the administrative reform in Kazakhstan, the system of public management is undergoing significant changes. One of the main criteria of New public management is an indicator of economic efficiency. The successful solution of problems of regional development to a certain extent depends on the transformation of the regional socio-ecological-economic system into a sustainable, balanced and, at the same time, developing system.

At the same time, the official methodology on the development of territorial development program and processes of program management has significant weaknesses.

1. Literature Review

Questions of spatial development of the country's economy are the most difficult in the theory and practice of public administration. This is due both to objective reasons for the uneven distribution of resources across the country, and subjective reasons for a concrete historical stage by factors relations in issues of management and self-government. The subsidiary principle, involving the transfer of a number of administrative powers to the level where they will be implemented with maximum efficiency, requires a constant search for the relationship between the industry and the territorial administration.

The first experience in the development and implementation of the Programme on territorial development for 2010-2014 showed that there is a problem in the methodical support of the programs, as their content are ultimately can be defined as a set of strategic plans of sectoral departments. In fact, the sectoral principle of management remains a priority, and the section of territorial development includes individual tasks of strategic plans of regional administrations: the economy (survival and development of the villages in border areas), urban planning and architecture and other. The program has no project-based approach.

Today, the territory development program is actually not managed. Thus there has been accumulated a lot of problems in this area: in the process of development of state programs the efforts of different sectoral departments are not coordinated, the quality of the analysis of the current state of development of the region is rather low, target indicators are blurred and difficult to quantify, there is no targeted funding programs, there is no evaluation of the effectiveness of interventions, and other problems that make the territorial development program inflexible and inefficient instruments of state regional sustainable development management policy (Grossman and Krueger 2011).

In view of the above, methodological support of the Programme on territorial development and its management does not fully meet the international experience on the development of such programs and it needs to be improved.

Savchenko P.V., Pogosova I.A., Zhiltsova E.N., Artemov A.V., Brykin A.V., Shumaev V.A., Kovalevsky A.R., Gusarova M.V., Ovchinnikova M.A., Dombrovskaya I.A., Behn R. D., Kettl D. F., Lee P. N., Wing C. L., Olsen JP, Frederickson H. G., Bocharova A., Yakobson L.I., Persky Ju.K., Zyryanova E.V., Kalgin A.S., Yang K. F., Dobrolyubova E.I., Zhigalov D.V., Percov L.V., Chalaya Yu.Yu., Kulyanitsa A.L., Soboleva M.Yu. and others have made a significant contribution to the study on New Public management and development of its basic postulates and directions.

Research in the field of regional development in the context of the paradigm of sustainable development deals a number of national scientists: Aimagambetov Y.B., Alimbaev A.A., Pritvorova T.P., Kalkabaeva G.M., Zhetpysbaev S.K., Kuatbaeva G.K., Yemelina N.K. and others.

Researchers Krutikov V.K., Dorozhkina T.V., Zaitsev Yu.V., Fedorova O.V., Zhukovsky A.I., Vasiliev S.V., Shtreys D.S., Grodzka G.N., Glotova E.I., Petrova E.A., Voronin A.A., Kalinina A.E., Shevandrin A.V., Reznik G.A., Malyshev A.A., Sankovets N.A., Ryakhovskaya A. N., Kryukova O.G., Erhov M.V., Gutman G.V., Miroedov A.A., Fedin S.V., Koptiug V.A., Matrosov V.M., Levashov V.K., Shalmuev A.A., Uskova T.V., Kuznetsov O.L., Bolshakov B.E., Rosenberg G.S., Krasnoshchekov G.P., Krylov Yu.M., Ahmetshina A.R., Alferova T. V., Tretyakova E.A., Pikovsky A.A., Orlova I.A., Kalinchikov M.Yu., Danilov-Danielyan V.I., Singov I.I., Daily G., Ursul A.D., Kuvshinov M.A., Davydova N., Timofeeva O., Moiseev N.N., Pchelintsev O.S., Tsvikilevich A.V. and others also contributed significantly to the development of methods for solutions of the problems on stability and balance in a region.

Without belittling the importance of the scientific works of the mentioned above authors, we note that, despite the existence of numerous works devoted to the management of the development of the region and the use of program-target method, greater attention is paid to the economic component, whereas the administrative

aspect remained unstudied until the end. Many of the development and implementation of government programs in the course of the state regional policy are not fully justified.

2. The aim and objective of the study

The aim of the research is to study the methodology and practice of the implementation of programs for sustainable development of the region to develop proposals to improve the methodological support of program management.

3. Materials and methods of research.

For this research, the authors use state program on territory development in the Republic of Kazakhstan or, more precisely, program on territorial development of Karaganda region.

State program being a sophisticated tool of state regulation, is a set of projects (measures) and regulatory instruments. It requires the cooperation of a large number of different levels of actors in the development, organization and coordination of the efforts of participants in the program, monitoring and evaluation of interim results for the feedback and adjustment programs, and finally, evaluation of outcomes, which allows you to judge the effectiveness of the program and the achievement of its goals. It includes the subjects of management and measures for the development of object properties, including through the implementation of projects (including investment), as well as directly the program management process as a set of measures. Without using an effective control system, the state program can be quite formal, that does not allow all the subjects of the program to achieve its interests (Buletova 2013).

Theoretical and methodological bases of research are the theory of sustainable development, the theory of state regulation and the theory of the public sector of the economy, a methodology for assessing the effectiveness of governance, institutional economics.

The study was conducted using a systematic and institutional approach to regional economic system management.

In the course of the study the theoretical and empirical methods: induction, deduction, methods of systematic and comparative analysis, methods of economic and statistical analysis (dynamics and variations), economic-mathematical modeling, as well as statistical data processing methods were used. Descriptive method was used for analyzing the foreign and domestic experience of state regulation of sustainable development in a region. Systematic approach served as a methodological basis for the whole thesis and to address the major part of the study. In the analysis of legal acts the system and analytical method was used.

Information base of research is the data of Department of statistics of the Karaganda region of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, the Committee on Statistics of the Ministry of National Economy, Akimat of Karaganda region, the United Nations, the World Bank.

4. Methodology

Within the paradigm of sustainable development economic, environmental and social sub-systems are the fundamental ones in state activity, in the development of regional development programs and strategic documents.

In the process of management of sustainable development in the region within the framework of New public management, which is characterized by the orientation on customer, responsibility for the results, effectiveness the issue of economic efficiency, which implies savings of public funds becomes more important for the government agencies that implement sustainable development policies and provide management of programs on regional development.

One of the most effective elements of state planning system of regional development are the programmes on areas development, which allows public authorities to take into account regional specifics and solve problems in the field of sustainable development of regions most effectively.

State program of territory development is aimed at ensuring the country's transition to the «rails» of sustainable development and contributes to the realization of the following objectives: mitigate economic disparities across regions; ensuring the quality of life in a given territory; improvement of the environment.

The experience of developed countries confirms that the targets of the program are really able (subject to available resources and the rational organization) to become a tool for solving social, ecological and economic problems at the state and regional levels (Antonova 2013).

Today the main challenge in management of programs on region development, even in the frames of the management of natural resources is a complex organization of the program management process for sustainable development of the region and their multi subjects.

Established in many developed and developing countries, government regulation system does not allow organizing the management of social, ecological and economic development of the region and the country on the principle of «one window».

Key point in the management of sustainable development in the region in the Republic of Kazakhstan is to improve the practice of development and management of the Program on territory development of the Republic of Kazakhstan (PTD RK), which operate on the basis of the Decree of the President of Kazakhstan dated 18-th June, 2009 № 827 «On the system of state planning in the Republic of Kazakhstan».

PTD RK includes goals, objectives, main directions of development of the region, a number of indicators in the economic, environmental, social and other spheres. This five-year program of territorial development accommodates all the previously existing regional programs in a single policy document.

Implementation of the program approach method in the process of territory development management based on the selection of the priority objectives of economic, social and environmental development, the development of interrelated measures for their achievement in the given time frame with maximum efficiency while providing the required resources.

This approach is reflected in the Programme of territory development, which include «comprehensive description of the main problems, risks, constraints, competitive advantages and opportunities for sustainable socio-economic development of the area in the medium term; analysis of the current policy of state regulation of social and economic development of the territory, including the characterization of the existing legal framework, existing practices and implementation of the results of measures to ensure sustainable socio-economic development» .

Programs are developed from the specific features of each region. So, every region of the Republic of Kazakhstan has its own program on territorial development, which, in essence, is a program of sustainable development of the region, since it is designed to solve the problems in the social, economic, environmental and other areas, i.e., that is the basis of the sustainable development paradigm.

The current national policy of the Republic of Kazakhstan takes into account existing environmental problems, to which budget funds are allocated (Table 1). Thus, the Sustainable Development Strategy and the Concept of the Republic of Kazakhstan "On the transition to a green economy", which was adopted in 2006, determined the following sectors of the economy important for achieving "Green Growth": water resources, agriculture, energy conservation and energy efficiency, waste treatment, air pollution and ecosystem management. At the moment there are so many problems in these sectors. According to experts, the lost profit is more than 4-8 trillion. dollars per year. Economic losses are the result of low productivity and are reflected in a cash equivalent of 1.5 to 4 trillion. dollars per year, and by 2030 and more. This can lead to social consequences in the agricultural sector of Kazakhstan, where more than 40-50% of the population is employed.

Thus, in 2017, KZT 196,142.5 million was allocated to finance environmental protection measures, which is KZT 61390.8 million less than in 2016 (Table 1).

In 2017, the following areas were more financed: air protection and climate change problems (KZT 59,752,426 thousand), sewage treatment (54,294,549 thousand KZT), waste management (KZT 50,568,900 thousand).

In the context of the regions, Atyrau Oblast is the leader in obtaining budget funds for financing environmental protection measures.

Desertification of territories is another important problem, from the solution of which depends the stability of the country's development. The Aral and Ile-Balkash regions with a population of 5.4 million people are most prone to desertification. The regulation of river flow led to the cessation of floods, lowering the level of groundwater, increasing the number of saline lands and reducing the number of livestock. The water shortage had a negative impact on the development of the economy and the living conditions of the population. Deteriorated conditions of habitat of wild animals and fish. In the Northern and Central Kazakhstan, 5.6 million hectares of arable land have suffered from water erosion and yields of grain crops have decreased by 20-30%. In the Caspian Sea, the sea was flooded with 357,000 hectares of fertile coastal pastures and hayfields. Around the industrial centers there was a pollution of the earths by emissions of the enterprises. About 10 million hectares of pastures and arable land are withdrawn from circulation at the sites of the military-industrial complex.

Table 1 - Dynamics of the main environmental indicators

Indicators	2013	2014	2015	2016	2017
Investments in environmental protection, mln. tenge	75148,7	77500,4	103492,2	82883,2	43936, 9
Costs for environmental protection, mln. tenge	196458,9	218908,7	243063,4	257533,3	196142,5
Number of stationary sources of pollution, units.	197650	202334	214913	235049	252564
Emissions of pollutants emitted from stationary sources into the atmosphere, thousand tons	2384,3	2282,7	2256,7	2180,0	2271,6
Emissions of pollutants emitted from stationary sources, per capita, to the atmosphere, kg	142	134	131	124	128
Captured and neutralized pollutants, thousand tons	31012	33378,7	29673,5	27949,7	27485,8
Disposed of polluting substances, thousand tons	8774,9	10730,1	8167,1	7391,1	6773,9
Emissions of solid pollutants, thousand tons	593,8	551,2	494,2	466,0	460,6
Emissions of liquid and gaseous pollutants, thousand tons	1790,5	1731,5	1 762,5	1714,0	1 811,0

Source: compiled by the author according to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

The amount of damage from desertification in Kazakhstan is estimated at tens of millions of US dollars. Depletion of water resources caused a decline in production, reduced jobs, lowered the standard of living of the population and caused migration of people from areas of environmental crisis.

Of the 14 regions of the Republic of Kazakhstan, only five (Aktyubinsk, Mangistau, North Kazakhstan, Karaganda and Kostanay), 30% of fodder lands were subjected to desertification. In other areas, degradation is 50% or higher.

Erosion of soils and dehumification intensified everywhere in arable lands. The humus content decreased by 25-30%. In this regard, the fertility of soils, the yield of grain crops decreased. 17 million hectares of arable land are harvested in the field, in pastures. But the weedy deposits, overgrown with high-weeds, contribute to an increase in the number of pest insects. Soil salinity, water and wind erosion, humus decrease, secondary sanitization during water discharges after irrigation to neighboring territories are marked by more than 90% of the soils of the republic.

Problems of irrational land use in livestock and pasture management are exacerbated at the present time by the large number of small agro-industrial and cattle-breeding units that can not provide profitable use, purchase of machinery, fertilizers, veterinary maintenance of livestock, cattle distances, provide insurance stocks of feed, processing of agricultural products. There are socio-economic problems of reorientation of farms. Under these conditions, the unsystematic use of full-fledged natural lands increases, without taking into account the norms of resource extraction, i.e. their degradation, the degree of desertification are increasing.

Under a strong anthropogenic press is Karaganda region, which is located within the boundaries of the Central Kazakhstan region and covers an area of 4220.9 thousand hectares. Specificity of the region consists in the features of geomorphologic characteristics - allocation of a special area of the Kazakh shield - Sary-Arka and high biodiversity of ecosystems. The region is unique in terms of the variety of soil types caused by zonal-provincial features of climatic conditions and relief, which determines the specificity of the diversity of flora, fauna and ecosystems. In Central Kazakhstan, 67 ecosystems have been identified, which characterizes a significant natural diversity. At the same time, the areas of disturbed territories and ecological risk zones, including habitat loss of rare plant species and ecosystems, are more than 50%. A high degree of danger in Central Kazakhstan, according to the data of ecological zoning, was noted for 32 ecosystems, on an area of 22,457.2 thousand hectares. The analysis of the ecological risk zones of the Republic of Kazakhstan demonstrates a rather complex and diverse situation of ecosystem degradation in terms of hazard and risk of loss of species, ecosystems, tree and shrub

thickets, the degree of internal danger of desertification of ecosystems, their soil cover under intense anthropogenic impact. In general, for Kazakhstan, according to the analysis of the developed map of ecological zoning, five degrees of danger have been identified, in principle corresponding to the degree of desertification - land degradation, ecosystems and, especially, soil and vegetation cover.

As a result of the ecological zoning of Kazakhstan, the general picture of the current situation of desertification of ecosystems and the degree of danger in the further destabilization of the environment underlines the prevalence of a moderate degree of danger - 42.3% of the area of the republic. But even this is the ultimate limit of anthropogenic impact and further withdrawal of resources (soil and plant in particular) should be limited in a number of ecosystems. Reduction of the norms of use up to 10-20% is necessary for self-regulation of ecosystems and preservation of the reproducibility of resources. Moderate hazard conditions represent the limit of ecosystem resilience to a number of anthropogenic impacts. For example, to the removal of plant biomass. And with the additional factor of drought in arid years and seasons of rare species, the drying up of soils, the reduction of the species diversity of ecosystems, productivity and the change of ecosystems.

Table 2 - Basic indicators characterizing the use of water, 2013-2017

Indicators	2013	2014	2015	2016	2017	Average growth rate, %	Average rate of increase, %
The abstraction of water from natural water sources,	21389	22530	23266	22852	24623	103,58	3,58
million cubic meters. meters	2986	2467	2854	2490	2517	95,82	-4,18
Loss of water during transportation, million cubic meters. meters	18403	20063	20411	20352	20213	102,37	2,37
Water consumption (use of water) - total, million cubic meters. Meters	5240	5477	5592	5385	5228	99,94	-0,06
including production needs, million cubic meters. Meters	8308	8355	8415	8620	8256	99,84	-0,16

Source: compiled by the authors according to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

The results of the ecological zoning of Kazakhstan confirm the poor environmental conditions in a significant territory of the regions (19.05%). Moderately deserted ecosystems - moderate hazard level (57.82%) are classified as relatively disadvantaged, since their operation already requires strict rationing and seasonal monitoring of the environment, especially during the drought period.

Water supply of economic sectors in the Republic of Kazakhstan is an important problem, the solution of which is necessary to ensure sustainable environmental development.

Based on the data in Table 2, we can draw the following conclusion:

- During the period under review, there is a tendency for a smooth growth in water co
- In terms of water loss during transportation, 2013 turned out to be the least expensive, and in general, when compared with 2013, there is a tendency to reduce losses when moving water resources, which indirectly indicates the improvement of the quality of water pipes in the territory of the Republic of Kazakhstan.

Thus, the production and economic development of Kazakhstan and its individual regions determine the level and quality of water resources use.

All these environmental indicators are taken into consideration when the public authorities implement the regional policy. In addition, it has become obvious that to achieve the goals of sustainable development programs on territorial development should be managed. The management process involves several stages: 1) development of program on territorial development and coordination the efforts of different subjects in the development process; 2) realization of the program, its monitoring and evaluation of the interim results for the feedback and adjustment of the program; 3) estimation of final outcomes.

Analysis and evaluation of program management on territory development in the Republic of Kazakhstan from the standpoint of the development of the methodology and the content has been made on materials of the Karaganda region.

Karaganda region development program for 2011-2015 is a programmatic document of the regional government planning system, which is based on the Republic of Kazakhstan President's Decree of June 18-th, 2009 № 827 «On state planning system in the Republic of Kazakhstan». The program includes five areas: «The economy of the region»; «Social services and human potential»; «Infrastructural Complex»; «Territorial (spatial) device»; «The system of public administration and local self-government».

As a result of our study and the study of the Program of territorial development it may be noted that most problems in the social, economic and environmental spheres in the region constituting the paradigm of sustainable development, were not reflected in the program of territory development of the Karaganda region for 2011-2015. Although these problems require coordinated and concerted action from regional governments and civil society, representatives from business, NGOs and other organizations, which, in essence, are aimed to promote the program on territory development program in a region.

Also, the study revealed deficiencies in the management of the program on region development.

The program contains a number of methodological and managerial flaws and shortcomings. Today the program, in fact, is a completely inflexible, unchanging based on an assessment of public management tool, with which, in our opinion, it is difficult enough to achieve the objectives of social, ecological and economic development of the region.

Conclusion

Based on the results of the study, the following theoretical and practical conclusions can be drawn:

1. Sustainable development is development that meets the needs of the present, but does not compromise the ability of future generations to meet their own needs (Janicke 2016).

2. The relationship between economic processes and the economic has been studied for a long time. And to date it is obvious to all that it is impossible to talk about sustainability without addressing environmental issues (Kuznets 2015). However, not all scientific views on sustainable development have passed through the prism of environmental problems. In the process of evolution of economic thought, the relationship between public administration and sustainable development has often been studied from the economic and social aspects (Hong 2013).

3. The model of the country's development management is a purposeful influence of the state on micro- and macroeconomic processes of the economy development in order to maintain its stability or change in the direction necessary for society (Kotler 2008). At the same time, the subjects of management, in the person of the relevant ministries and committees, contribute to the implementation of the goals and manage this process. The content of the environmental-economic mechanism or the model of the management of environmental and economic development in the Republic of Kazakhstan (the model of sustainable development) is revealed by us through a system of institutions in the environmental, economic, and partly in the social sphere that counterbalances all aspects of the concept of "sustainable development".

4. Management of sustainable development of the economy of foreign countries is based on the model of "green" growth and suggests a triune of "ecology", "economy" and "social sphere" (Romani and Bhattacharya 2015). At the same time, the issues of ecology are priority and require a decision on the part of state authorities. State policy should be aimed at promoting the improvement of environmental quality and ensuring the transition to a green economy (a green growth model) to improve the quality of life of the population while minimizing the environmental burden and integrating economic, social and environmental aspects, i.e. implementation of the sustainable development model.

5. The Soviet model of economic management is characterized by a departmental and sectoral approach to solving environmental protection and resource use problems, ignoring factors of interaction between the

environment and non-military areas of national security; which, in turn, led to a serious underestimation of the significance, feasibility of the economic consequences of environmental decisions, damaging the economic and environmental security of the state.

6. Kazakhstan's model of sustainability management includes several levels: the state level; regional level; micro level (enterprise). At each level, its management mechanisms and management tools are applied, which together has an effect on the resulting indicators. As the resultant indicators are the following: a reduction in the level of pollution; development of recycling and neutralization of production wastes; development of recycling and neutralization of production wastes; increasing the level of economic development; increasing the financing of socially significant activities of the state; rational and integrated use of raw materials; improving the quality and living standards of the population; improvement of the sanitary and epidemiological situation; increasing the effectiveness of the management of institutions.

7. The above analysis of the socio-economic development of the Republic of Kazakhstan shows that the republic has achieved significant economic growth and significant results in the country's socio-economic development. However, the implementation of the programs for Forced Industrial-Innovative Development, the Roadmap for Business 2020 and others within the framework of the traditional production and consumption scheme causes a multiple increase in anthropogenic pressures on the regions, including an increase in the seizures of mineral, hydrocarbon, water, land, energy resources, emissions and volumes polluters, the growth of new industries and infrastructures, determining their uneven development and increasing the degree of desertification of territories. This leads to the need to update the approach and mechanism for managing sustainable development and developing modern environmental policies.

8. In our work, we attempted to analyze the relationship between the level of environmental pollution and the volume of GDP in Kazakhstan. The prediction of the transition to "sustainable" development made by our macroeconomic model is very favorable for the Republic of Kazakhstan from the economic, ecological, and social point of view. In our model, it was shown that "sustainable development" not only leads to economic development of the country as a whole, but also provides higher GRP growth rates, smooths unevenness in regional development, and promotes self-development - one of the main indicators of the country's well-being.

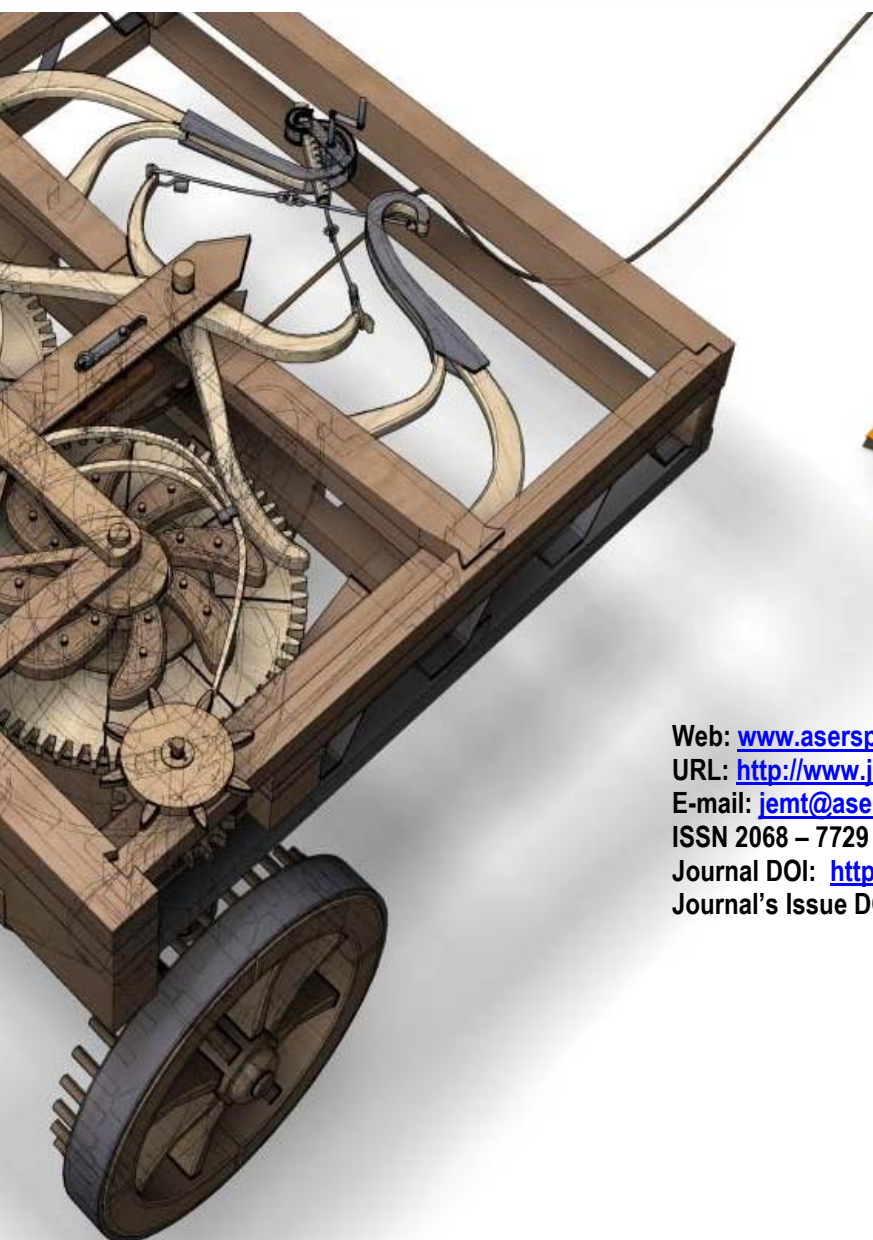
9. To improve the economic component in public policy management of sustainable development, it is necessary to understand that GDP and other quantitative indicators are useless in assessing the sustainability of the economy. The model of the "Brown economy", where natural resources are widely used to achieve the goals of economic growth and welfare, not caring about the environment, is not perfect. There is a need to search for a new model and new methods of economic development that would help achieve economic growth in the post-crisis economic development, taking into account the concern for the environment, the rational use of natural resources and the creation of the necessary conditions for sustainable development. The Green Economy model is an economic model that can improve people's well-being, quality of life, social justice and help reduce environmental risks.

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