



Problems of Ecological and Economic Transformation of Natural Management Systems and Territories: Example of the South of Russia

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ABSTRACT

This paper shows the crucial importance of taking into account ecological factor in the economic development of modern countries and territories. Through the example of the southern regions of Russia the issues of ecological and economic transformation of natural management systems and the development of the economic mechanism taking into account the threshold of ecological safety are explored. The main problematic areas of natural resource use in the southern regions of Russia are identified, and the author's vision of the conceptual model of the mechanism of rational use of natural resources with regard to ethno-cultural traditions such as natural management of the territory, as well as international experience is proposed. The ways of improving the organizational-economic mechanism of natural resource use on the basis of system accounting of natural resource rent and stimulation of rational use of natural resources are offered.

Keywords: Ecological and Economic Transformation, Natural Resource Use, Ecological Safety, Green Economy, Sustainable Development

JEL Classifications: Q57, Q56, Q58, O13

1. INTRODUCTION

As it is known, in recent decades the global economy is in a difficult situation, within existing environmental constraints and current model of unsustainable development. Therefore, an important feature of the new model of the global economy must become an ecological and economic transformation and stimulation of integration of the ecological factor in the economy, that is, in fact, the question is forming economy which we call "green." It is fair to say that in recent years many states have been actively involved in the process of forming a green economy. Thus, the expenditures by federal agencies of the USA for preservation and restoration of ecosystem services, conducting necessary reduction in the budget at the expense of defense expenditures

and socio-economic programs are estimated at 10 billion dollars even during crisis (The President's Council of Advisors on Science and Technology Executive Report "Sustaining Environmental Capital: Protecting Society and the Economy," 2011). Among the latest works in this field we should mention "the report on the measurement of economic performance and social progress" of two Nobel prize laureates in economics Stiglitz et al. (Stiglitz et al., 2010). In particular, in this work it is noted that GDP does not cover various social processes and changes in the environment which has a very negative impact on ecological and economic development of modern countries. Experts predict that the next decade will be years of rapid growth in world output of products and technologies related to the environment and alternative energetics. It is expected that by 2020 the global market for "green" products will increase

more than twice (from 1.4 to 3.1 trillion euros). However, already now environmentally-friendly technologies and products occupy a prominent place in the economies of several countries. For example, according to the data of Clean Edge Company, the total amount of the industries in “clean” energetics in 2011 was 246.1 billion USD; by 2021 it is expected to rise to 385.8 billion USD (Clean Energy Trends 2012 (Report), 2012). But it is evident that government efforts are clearly insufficient: For the last 50 years about 60% of the world’s ecosystem services have been disrupted by anthropogenic impacts, and they soon will not be enough in the continuing economic growth and the exhaustion of natural resources (Millennium Ecosystem Assessment, 2005). The downturn of the past few years has caused many researchers to begin to search for innovative development models which ensure harmonious development of man and nature, and to this problem the present article is devoted.

2. METHODOLOGY

At the present stage stifling of innovative development of economies of various countries, including Russia, is becoming an ecological factor which covers almost all types of resources and technological systems based on their use. In this regard, we’ll note that one of the crucial tasks for the successful transition of Russian economy to environmentally sound development is the use of state methods of regulation, improving the efficiency of use of natural capital and creation of conditions for realization of the market of ecologically safe production. Thus, in the Concept of Long-term Socio-economic Development of the Russian Federation for the Period up to the Year, 2020 it is stated that “forming an innovative economy refers to the transformation of intelligence, of human creativity into the leading factor of economic growth and national competitiveness, along with a significant increase of efficiency of use of natural resources” (The Concept of Long-term Socio-economic Development of the Russian Federation for the Period up to the year, 2020 2008). In scientific literature, the researchers note that “the threat of environmental crisis will escalate, if there remain resource-wasteful economy and society based on the use of natural resources and environmental pollution” (Yakovets, 2011).

It should be noted that methodologically, in constructing ecologically oriented innovative development strategy the main problem today is not already finding an answer to the question of why the market, as an economic system, in relation to the environmental component of development is manifested as a system with a very substantial degree of entropy. The probability, unreasonable use, diseconomy and inefficiency of the environmental component of the market are adequately explained by the “failures” of the market, which is covered in detail in the famous works of Coase and Pigou (Pigou, 1985; Coase, 1960). However, the aspects of the global economy development taking into account the ecological factor in new conditions prevailing in the financial and economic crisis of the end of the first decade of the 21st century haven’t been virtually explored yet. The issues of application of new approaches and tools for ecological and economic policy in modern crisis conditions of the global economy have been insufficiently covered.

In our opinion, research on the integration of the ecological factor in the system of economic relations should be conducted not only in the explication of the causes of ecological inefficiency of the current economic mechanism of natural resource use, but also in the formulation of principles of ecology-oriented development paradigm, focusing on accounting and reproduction of environmental assets. We’ll note that currently the ideas of ecologically safe development are increasingly moving from the sphere of theory into practice. For example, the World Business Council for Sustainable Development has been working for more than 10 years, and according to its prediction, based on the study of the world’s largest companies, the sustainable development opens business opportunities, which are estimated at 6.2 trillion dollars, for dealers of the market. Launched in 2008, the global economic crisis has exposed the exhaustion of the potential of export commodity Russian economy. Estimated by the Economic Expert Group, Russia spent on anti-crisis measures most of all in the world – more than 11% of GDP, and ended up below in the “20” – by 7-9% of GDP. Compared to these indicators, for example, the USA has spent on anti-crisis measures 8.4% of GDP, and the entire world – 7% (Bobylev and Zakharov, 2011).

At the present time research on the integration of the ecological factor in the economic mechanism of natural resource use is conducted in the explication of the causes of ecological inefficiency of the current market mechanism, in the formulation of economic principles of constructing ecology-oriented economic mechanism and consideration of ecological systems as the capital. In particular, in the work of Pagiola von Ritter and Bishop “assessing the economic value of ecosystem conservation” it is proposed to consider ecosystems as a form of the capital (Pagiola et al., 2004). We believe that in this case, the focus of research should be the economic aspects of ecosystem services, their economic assessment and benefits. It is evident that the global economy is in a difficult situation, within existing environmental constraints and current model of unsustainable development. Therefore, an important feature of the new model of the global economy should be ecological sustainability.

3. RESULTS

Therefore, for the formation of ecologically safe development of the countries and territories the ecological factor must be considered both at the micro level, in the development of various technologies of natural capital use, and at the macro level, in the choice of socio-economic direction of the country development. However, today in the Russian economy many important components of natural capital use are taken into account not in full, both in the development programs and macroeconomic indicators (GDP, GRP), which is a serious obstacle for the formation of innovation strategy. This problem is enhanced by the fact that the Russian economy has a strong natural resource and raw roll. For example, the researchers revealed that the mineral extraction between 2005 and 2012 was accounted for as much as 33-39% of the consolidated budget, as reflected in Figure 1.

It is fair to say that at the level of the Russian Federation government in recent years certain steps have been taken in the development of programs for rational use of natural resources. To ensure achieving

the strategic objective of the state policy in the field of ecological development in the solution of socio-economic problems, providing ecologically oriented economic growth, preservation of favourable environment, and in the field of ecological safety, the Government of the Russian Federation approved the “bases of the State Policy in the Field of Ecological Development of the Russian Federation for the Period till 2030.” This document identifies a number of measures for improving state administration to prevent, limit and minimize the negative impact on the environment in all the Russian Federation, as well as in its regions. It is gratifying that in the Russian economy, the costs for environment protection are, though slowly, but rising, as it is shown in Table 1 (State Report “On Condition and Protection of Environment in Russian Federation in 2013,” 2014):

It should be mentioned that in Russia the total costs for environment protection, % of GDP remain quite low – at 0.7-0.8%. Negative is the fact that in the total receipts of payments of taxes, fees and regular payments for using natural resources in the consolidated budget of the Russian Federation 99% of payments is the tax on mineral extraction. This means that all other types of taxes and charges in natural resource use account for only 1%. Referring to the experience of natural resource use in Russia, we'll note that we've conducted a number of studies confirming the necessity of improving the process of natural resource using in Russia (Dovgot'ko et al., 2014; Dovgot'ko et al., 2014). The natural-adaptation vector of the Russian economy transformation orients and fills substantially economic practices in the country regions, including Southern Russia. For the South of Russia in the conditions of high economic reclamation of steppe and coastal lands, landscape and biological diversity of mountain areas, paucity and patchiness of specially protected natural territories the creation of a green economy is extremely important, first of all, in ensuring the sustainability of ecological systems themselves, maintaining the mechanisms of self-regulation and compensating

for the effects of anthropogenic activities. Primarily, the natural-adaptation development determinants of managerial natural resource use in the southern part of Russia should be associated with preservation and maintenance of structural and functional integrity of the unique steppe ecosystems, allowing in the long term to ensure their high economic efficiency and ecological value. Currently, in economic practices of using steppe ecosystems, inconsistency of the situation is, on the one hand, their exclusive role as a factor of production through which “... the bulk of Russian agriculture is based nearly two centuries” and “not <85% of the total Russian grain harvest, more than 70% of the cattle population,... more than 90% of sheep and goat wool” is produced (Sobolev, 2011), on the other hand, due to high economic reclamation the steppe biomes of the temperate zone, not only in Russia, but all over the world, as the studies show (Henwood, 1998), were the least protected of all fifteen terrestrial biomes.

Turning to the question about the economic mechanism of natural resource use in the southern regions of the Russian Federation, we believe that the preference should be given to the stimulating type of the economic mechanism, a central place in which the tax and credit methods should take. For example, such Russian resort region as the Caucasian Mineral Waters may become a pilot site, on which a possibility of introducing a resort fee in Russia will be tested. The feasibility of introducing the resort fee is due, above all, to the need to maintain and improve the infrastructure of recreational areas and to expand tourist services. In this regard, the Ministry of North Caucasus Affairs is proposed to set a fixed rate of the resort fee – from 50 to 100 roubles per day of stay on the territory of resort towns (which corresponds to the average rate of the fee in international practice). And the resort fee will not be included in the package tour, it may be paid by the tourists in the property, for example, at check-in or check-out. Of course, the benefit-entitled citizens (children, pensioners, veterans, etc.), who are exempted from payment of the fee fully or partially, will be privileged. According to the calculations of the Stavropol Territory, annually, the resort fee can bring up to 700 million roubles in the region budget. Using the funds of this fee should be strictly targeted – for development of resort towns in the Caucasian mineral waters, for improvement of infrastructure of recreational zones, in particular, public baths and thermal baths not repaired since the soviet times. However, for this fiscal tool to work effectively the federal and regional laws must be adopted, the various regulatory documents must be developed and approved, so its introduction is planned not earlier than in 2017. In this regard we'll remind that there have already been attempts of introducing the resort fee in Russia. Thus, in 2009 the Governor of St. Petersburg Valentina Matviyenko proposed to introduce a fee for the repair

Figure 1: Mineral extraction, % of consolidated budget revenues (Pavlov and Kerimov, 2015)

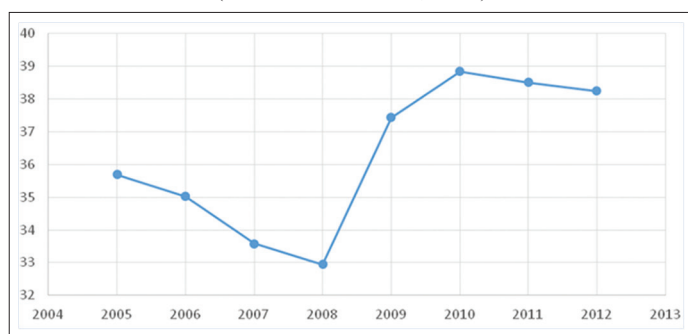


Table 1: The costs for protection of the environment (in actual prices, million roubles)

The costs for protection of the environment, million roubles	2010	2011	2012	2013
Costs: For protection of the environment	372,382	412,014	445,817	479,384
For protection of atmospheric air and prevention of climate change	80,071	88,362	89,236	93,251
For collection and treatment of wastewater	169,152	197,073	186,445	204,351
For waste management	41,510	44,172	41,022	51,612
For protection and rehabilitation of lands, surface and ground water	17,219	23,435	36,498	33,486
For conservation of biodiversity and protection of natural areas	22,975	13,381	28,091	28,082
Other costs	41,455	45,591	64,525	68,602
The total costs for environment protection, % of GDP	0.8	0.8	0.7	0.7

and maintenance of monuments (the rate is 2 € per tourist), but the federal government did not support this idea (The Introduction of the Tourist Tax in Russia is Possible not Earlier than, 2017). If to refer to the world experience, a positive example of supporting the tourist infrastructure and monuments at the expense of the resort fee is Italy, where the municipalities establish it at their discretion (but the amount cannot be more than 5 euros per night), and in Catalonia (Spain) such fee is 1-3 euros per night depending on the level of the hotel. In our opinion, in the case of introduction of the resort fee in the recreational areas of the Russian Federation it is very important not to create additional burdens for business, and also the mechanism of charging and using this tax should be economically reasonably determined. Without reducing the value of tax methods for resort areas support, we associate ourselves with the position of some researchers who insist on the fact that primarily for the economy of the resort regions of Russia the market oriented and rent forms of stimulation of rational use of natural resources should be developed. In this respect, we believe that in the recreation areas it is advisable to collect not only the resource rent but also the assimilation one, which we understand to mean an income derived from the carrying capacity of the natural environment. In this case, the natural resource users-pollutants will be exempted from having to pay taxes on the reproduction of the natural environment quality. Unfortunately, currently there is no developed scientific approach to accounting and assessing the assimilation rent, but in the long term, in our view, it should occupy a central place in the mechanism of “green” economy.

4. DISCUSSION

Meanwhile, numerous works (Belelli et al., 2007; Smelansky and Tishkov, 2012; Wang et al., 2009) demonstrate convincingly that the ecosystems of the territories hold not only huge economic, but not less important ecological meaning, providing the global community with carbon-depositing, water, climate regulating, erosion preventing, life-supporting, cultural and genetic services. Their importance is especially great in the southern steppe regions of Russia, such as the Stavropol Territory, the Rostov Region, the Republic of Kalmykia, the areas of which are characterized by low,

<3% forest cover, by high, more than 90% agricultural development (A Report on the Status and Use of Lands of Agricultural Purpose), as well as by belonging to semi-natural agro-ecosystems – steppe and meadow pastures, hayfields and fallow lands by one quarter.

Such goals can be served by organizing nature reserves such as “micro reserves” on agricultural lands, withdrawn from circulation, using fallow lands, formed in the period of mass reduction of farmland in the 1990s, for grazing, increased using conservation easements and encumbrances which limit either plowing of potential plowed land, or the access of livestock to grazing areas with the purpose of ensuring protection of the areas or restoring natural habitats of wild fauna species and/or self-renewing natural vegetation, etc.

In this respect we believe that to encourage the production of ecosystem services in the South of Russia it is necessary to provide preferential taxation of agricultural producers in the case of, for example, withdrawal of lands from economic circulation to microreserves, preservation (restoration) of natural pastures and reforestation. The constructive practice of such and other stimulating initiatives can be based on the EU, where within the framework of implementation of the common agricultural policy for 2014-2020 more than 100 billion euros are supposed to be allocated, mostly, in the form of direct payments, to farming households to stimulate ecologically clean directions of farming. These ones include organic crop diversification, maintenance of natural pastures productivity and conservation of 5%, and in the future of 7% of the agricultural lands to obtain environmental benefits (EU: In 2014-2020 – with a New, Fair, Agricultural Policy, 2013).

Meanwhile, the world statistics shows (Willer and Lernoud, 2013) that the bulk of 63% of agricultural land falls on pasture husbandry and 17% – on grain, i.e. the core sectors of the southern Russian regions. Therefore, we believe that their bioorganic re-orientation is justified, referring to the natural-adaptation development determinants. For example, the implementation of natural-adaptation principles in grazing management may have the following form (Table 2).

Table 2: The natural-adaptation determinants of grazing management

Parameters	Traditional techniques of management		
	Allowable	Restrictedly allowable	Unallowable
Grazing	Moderate grazing, mainly, of horses, camels	Moderate grazing, including pigs	Unregulated grazing
Type of pasture	Natural pastures, phytomelioration with grass mixtures of local species	Artificial cultivated pastures	Fully artificial cultivated pastures
Plowing	Not desirable	In the framework of necessary cultures – technical measures	Widespread plowing, agricultural activities which violate the soil and vegetation cover
Phyto- and forest melioration	Phytomelioration with grass mixtures of local species and forest melioration are not desirable	Afforestation of places of mixing ravine and valley forests, in recreation areas and watering places, green belts around the settlements	Phytomelioration with grass mixtures of introduced species Widespread forest melioration
Arrangement of pastures	Haying (1 every 2-3 years) adjustable pala (1 every few years, in early spring, immediately after snow) or in late autumn	Improvement of pastures: Interplanting forage grasses, cutting of tussocks, spot hydro amelioration, irrigation	Haying of seed material, not adjustable pala, not equipped cattle driving

We'll note that for the southern regions of the country such natural formations, spanning from 26.8% (the Krasnodar Territory) up to 98% (the Karachay-Circassian Republic) of their territory, form a distinct historically developed type of natural management relations and, of course, determine the development vector of natural resource use in the South of the country. The exceptional economic importance of such areas in several southern regions is correspondingly institutionally formed and is increasingly becoming an object of regulation by the authorities. We believe that generally the natural-adaptation vector of development of the agricultural sector ensures, among other things, agricultural biotechnologies. By their contents for southern Russian regions in compliance with the "comprehensive program of the development of biotechnology in the Russian Federation for the Period till 2020" (Approved by the Government of the Russian Federation 24.04.2012 No.1853 p. 8): The creation of new varieties of agricultural plants and animals using modern post-genomic and biotechnological methods; biotechnologies for soil improvement and production of biofertilizers; development and implementation of methods for genomic certification to improve the efficiency of breeding work, the technologies for animals-producers cloning; the production of biological preparations for plant growing; recycling of agriculture and food industry wastes based on the technology of microbiological conversion; the production of feed additives for livestock and veterinary biopreparations should be considered.

It is obvious that the formation of bioindustrial systems of managing rural economy on the basis of these technologies in the South requires an appropriate organizational infrastructure. At the regional level this is about the legislative, program maintenance, cluster initiatives, special status territories. For example, the projects on creation of biocluster for deep processing of grain and livestock production being implemented now in the South of Russia, in the Stavropol Territory (Budennovsky Area), Industrial and Investment Concern "Vel" (Moscow), the operating network of the Don Industrial Parks, "Evrodon" (production of turkey meat) (Don Industrial Parks) are pioneer in this direction. Equally the natural-adaptation determinants of development of natural resource use should be focused on the specifics of economic activities in mountain territories. Thus, in the Republic of Dagestan the Law "On Mountain Territories of the Republic of Dagestan" (No. 72 of December 16, 2010), regulating the framework of the state policy in the sustainable development of mountain territories, was adopted. Such constructive practices can be observed in the Republic of North Ossetia-Alania, in the strategy of socio-economic development of which for the period up to 2030 (the Law of North Ossetia-Alania No. 6-RZ of March 31, 2008) with reference to the positive experience of cheese-making cooperatives in the mountainous areas of France are mini-enterprises of the Carpathian region.

Obviously, implementing such large-scale cluster projects in the mountainous regions of the North Caucasus highlights the issues of ensuring ecological safety, and that's fair enough, because, on the one hand, the natural resources and environment, environmental benefits (climate, water areas, mineral waters, therapeutic muds, vegetable, mountain landscapes, etc.) are a significant component of recreational systems as factors of production and natural

resource use is an important part of recreational activities, on the other hand, the uniqueness and large limitation of the natural resource recreational potential determine their particular ecological status and the specific mode of natural resource use.

We believe that the concept of "green" economy, which in the South of the country should be realized in the integrated mega-project "Sustainable "Green" South metaregion," covering the green directions in all spheres of life of the local community, can serve for these goals. Such green projects could serve as the basis for innovative development of Southern Russia stimulating business and research in such promising "green" fields as pharmaceuticals, natural cosmetics, organic farming, agroecotechnologies, energy saving, Smart technologies, recycling, green design, etc. Besides, the remoteness, inaccessibility and relatively small infrastructure capacity of mountain resorts open the possibilities for testing energy- and resource-saving technologies for major Russian infrastructure companies (JSC "Gazprom," JSC "Russian Railways," JSC "RusHydro," FGC "UES," MRSK "the North Caucasus") implementing their own investment programs in the tourist-recreational complex of the South territories. Meanwhile, the mountains of the South of Russia are not only the area of culture genesis and ethnogenesis of the peoples of the North Caucasus, but along with foothill and plain landscapes form unique natural-adaptation ethnoeconomic practices. There is terracing of mountain slopes in the upper reaches of the Cherek, Chegem, Baksan, Kuban and Bolshoy Zelenchuk Rivers and constructing irrigation systems among the Balkars and Karachays, Adyghe gardens phenomenon. In this regard, speaking about the natural-adaptation development determinants of managerial natural resource use in the South of Russia, greater emphasis should be placed on mobilizing the productive capacity of the ethnic economics. The existing natural management base of mountain landscapes, the need for the flexible economic development of small agricultural and forest ecosystems and for the differential use of resources based on the experience, proven by centuries, in land use stimulate a number of small-scale industries and types of ethnic environmentally-oriented entrepreneurship presented in Table 3 (Pigou, 1985).

Obviously, this kind of natural-adaptation economic practices of the ethnic population of mountain latitudes of the Northern Caucasus should be adequately institutionalized. In this respect, we agree with the authors' position that the specifics of such a process in the South of Russia is incorporation of positive ethnocultural natural management traditions into formal regional and federal institutions (Medyanik, 2014). To this end it is necessary to develop a number of model projects, within which it is necessary to regulate the property and economic status of (generic) ethnocultural territories, natural objects, activities, and also to provide economic preferences in the natural management practices of autochthonous communities. We think that resolving these issues should involve the local population, a key role of which should be to identify generic natural management territories, objects of traditional nature use, tourist attractions, as well as to develop, implement and control special modes of natural management. Not less effective tool for promoting eco-innovations in the South of Russia is a mechanism of public-private partnership.

Table 3: Natural management structure of the economy of the South of Russia

Industries	Subindustries	Natural resources	Ethnic groups
Production sector	Production of construction and finish materials from the mineral raw materials; stone-cutting craft	Common minerals	Ingushs, Avars, Darghins, Lezgins, Chechens, Ossetians
	Production of dyes from the natural raw materials (madder making)	Wild and/or cultivated flora	Lezgins, Tabasarans, Azerbaijanis
	Joinery production	Wood	Ingushs, Avars, Adygeis
	Production of down and wool articles	Faunal resources	Balkars, Karachays, Chechens, Nogais, Ingushs, Kumyks
	Carpet-weaving	domesticated animals	Chechens, Lezgins, Rutuls, Tabasarans, Tats, Kumyks, Ingushs, Avars, Darghins, Laks
	Processing of leather and manufacture of leather products, including saddlery		Balkars, Karachays, Chechens
	Souvenir production	Show wood, wood wastes, nonferrous metals, precious and semi-precious stones	Avars, Darghins, Tabasarans, Balkars, Chechens, Adygeis
	Jewelry and bijouterie making	Nonferrous metals	Kubachins, Avars, Abazins, Laks
	Art of metalwork, jewelry craft		Laks, Chechens, Ingushs
	Armory art	Faunal resources	Balkars, Ingushs, Karachays, Ossetians, Adygeis, Circassians Kabardians
	Manufacture of bedding items filled with down and feather	Domesticated animals	Laks, Lezgins, Tabasarans, Darghins
	Pottery	Clays	Ingushs, Circassians, Kabardians, Karachays
	Bottling mineral and well water	Hydromineral resources, glaciers	Karachays, Balkars, Nogais, Ossetians, Kalmyks
Agricultural	Milk processing, cheese production	Faunal resources – wild and domesticated animals	Kumyks
	Processing of meat, manufacture of meat products		Circassians, Kabardians
	Fish breeding		Adygeis, Chechens
	Horse breeding		Adygeis, Kumyks
	Beekeeping	Floral resources – Wild and domesticated plants	Adygeis, Lezgins, Tabasarans, Kabardians
	Winemaking		Lezgins, Tabasarans, Adygeis, Circassians
	Cultivating and processing of fruits		Adygeis, Lezgins, Tabasarans
	Collecting and processing of fruits and berries of wild plants		Adygeis
	Collecting and processing of nuts		Adygeis, Lezgins, Tabasarans
	Growing and harvesting of medicinal raw materials		Adygeis
Collecting and processing of mushrooms		Adygeis	
Services	Plantation forestry	Forest resources	Ingushs, Adygeis, Karachays
	Extreme tourism	Recreational resources	Karachays, Balkars, Ingushs, Chechens
	Equestrian tourism		Circassians, Kabardians, Karachays
	Ethnic tourism		All ethnic groups
	Ecological tourism		All ethnic groups

For example, in its framework JSC “Federal Grid Company of Unified Energy System” together with the administrations of municipalities of cities of Gudermes (the Chechen Republic), Magas (the Republic of Ingushetia) and Kaspiysk (the Republic of Dagestan), implements pilot projects on the basis of energy-saving Smart Grid systems related to the list of critical technologies of the federal level.

5. CONCLUSION

It should be assumed that the considered in the paper and other similar initiatives constitute innovative phenomenon as one of the

significant development factors of natural management system of the southern Russian regions. The adverse ecological and economic processes, occurring now in the South of Russia, can upset the balance of development, if in the process of using nature and changing the economic structure, to the ecological factor will not be given due importance. The authors of this paper believe that taking into account the mentioned circumstances, the innovation-oriented paradigm of the natural management system development will allow building economically, socially and environmentally effective way of managemental appropriation of natural resources and environmental assets different from the existing form of primitive distribution of the expropriated natural resources,

adding a new territorial and sectoral impetus to the development of natural management system of the territory in the South of Russia. As a consequence, the development of this research in the future we see in the development of a model for ecologically safe development of regions and formation of a “green” economy in them, which, on the one hand, should maximally satisfy the material and other needs of people, and, on the other hand, – protect and improve the environment as a source of meeting these needs. The achievement of such results may be contributed by different directions of institutional and economic transformations in the sphere of natural resource use, the means and methods of which are subject to further development, improvement and effective implementation in the Russian regions.

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