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THE PROBLEMS
OF THE PROTECTION
OF THE BALTIC SEA
IN THE REGIONS
OF THE RUSSIAN FEDERATION:
THE EXAMPLE
OF THE KALININGRAD REGION

This article examines solutions to the environmental problems of the Baltic Sea in the Kaliningrad region. The authors focus on the implementation of the HELCOM recommendation, which stipulates the elimination of all sources of eutrophication (the so-called hot spots) as well as the construction of modern waste water treatment facilities. The study is based on the interviews with local experts and the analysis of regulatory documents.



Key words: Kaliningrad region, environmental policy, Baltic Sea, HELCOM, anthropogenous eutrophication, hot spots.

Introduction

The principal aim of this article is to define the societal conditions for the protection of the Baltic Sea in the Kaliningrad region. The article describes the first results of the international research project “Improving societal conditions for the Baltic Sea protection”.

The project rests on the assumptions that the relatively unsuccessful actions aimed to protect the Baltic Sea cannot be explained only by the lack of scientific knowledge of the existing ecological problems. Here, an important role is played by the sociocultural factors that influence the course of environmental policy at different levels: supranational, national, and subnational. Special attention is drawn to the problem of eutrophication or enrichment of water bodies with the so called biogenic substances (phosphates, nitrogen, etc), which leads to massive algae bloom and lack of oxygen for marine organisms.

The Russian part of the project consists in the analysis of Russia’s participation in international Baltic Sea protection projects, the examination of measures for the Baltic Sea protection taken by the federal bodies, and the analysis of the actions undertaken by regional authorities. The main task is to determine how the society and authorities of different level can influence the course of environmental policy at the federal and regional levels. The empirical examples for the analysis of public participation in the Baltic Sea protection at the regional level include three constituent entities of the Russian Federation: the Kaliningrad and the Leningrad regions and the city of Saint-Petersburg. This article will focus on the situation in the Kaliningrad region only. In the framework of the research, 12 semi-structured interviews were held in the region. The respondents included representatives of 1) federal,

regional and local authorities responsible for environmental policy; 2) regional media; 3) NGOs; 4) scientific community¹. The interview structure differed within each group; however, all interviews contained questions pertaining to:

- the environmental problems of the Baltic Sea in the region;
- the solutions to those problems and their efficacy.

The structure of the research determines the structure of the article. The overview of Russia's participation in the protection of the Baltic Sea is followed by the research-based analysis of the assessment of environmental problems and the triggers for their recognition in the Kaliningrad region. The emphasis is placed on the understanding of the problem of eutrophication of the Baltic Sea in Kaliningrad, the existing and potential solutions, and the assessment of the efficacy of solutions and obstacles to their implementation.

The participation of the Russian Federation in the protection of the Baltic Sea

Environmental problems of the Baltic Sea came to the fore in the 1960s. As phosphate and nitrate discharge into the Baltic Sea drastically increased, the issue drew international attention [8]. The first attempts to join the efforts of the countries of the Baltic Sea region aimed to protect the Baltic Sea environment were made in the early 1970s. In 1974, all Baltic States signed the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area, which stipulated principal measures for the prevention of further pollution. The executive authority of the Helsinki Convention is the Helsinki commission (hereinafter referred to as HELCOM), which took the role of the environmental coordination centre for monitoring and assessing the condition of the Baltic Sea [7]. In 1988, HELCOM adopted a political declaration at the level of ministers of the Baltic Sea region states, which stipulated the reduction of nutrient discharge by 50% over a ten year period. In 1992, in the light of the new international situation, the Commission prepared a new convention on the protection of the marine environment of the Baltic Sea area. It was supplemented by the Baltic Sea Joint Comprehensive Environmental Action Programme, which listed the main sources of the pollution of the Baltic Sea [6, p. 100]. Russia ratified the Convention on October 15, 1998, and the government decree No. 1202 "On the approval of the Convention on the protection of marine environment of the Baltic Sea area" was adopted in 1992. The Convention came into effect in 2000; the Russian Federation as a member of HELCOM shared the responsibility for the protection of the Baltic Sea [2, p. 93, 94].

The actual Russia's participation in the solution to the problems of the Baltic Sea resolved into the federal budget financing of a number of objects, the construction of which led to the elimination of 'environmental hot spots', for example, the new waste water treatment facilities of Saint-Petersburg, the restoration of water control structures and the repair of eroded banks in the

¹ The authors thank all respondents who kindly agreed to give expert interviews.

Kaliningrad region, the "Ecology and Natural Resources of Russia (2002—2010)" federal target programme. However, the funding did not cover the actual expenditure needed to fulfil the obligations [2, p. 95, 96].

By 2004, all Baltic countries, except Russia, had accessed to the EU. Thus, HELCOM set to the drawing up and adoption of a new strategy for the protection of the Baltic Sea — the Baltic Sea Action Plan (BSAP). The plan was approved by all HELCOM members on November 15, 2007. Its main priorities are the eutrophication control, conservation of biological diversity and environmentally friendly maritime activities. The main objective of the plan is anthropogenic eutrophication control by means of reducing discharge into the sea. This approach is based on the *adaptive management strategy*, the backbone of which is the reduction of negative human impact on the natural processes of the Baltic Sea ecosystem [1, p. 26, 27].

Expert assessment of the crucial environmental problems in the Kaliningrad region

Despite the industrial downturn and agricultural recession following the collapse of the USSR, the environmental situation in the region is still unfavourable. Experts believe that the main threats to the environment are solid waste disposal sites, lack of modern waste water treatment facilities, air pollution, and the overfertilisation of rivers and water bodies with nutrients.

Although, the shoreline of the Kaliningrad region is not of great length, the Baltic Sea is much polluted in that area. A serious problem is the vessel-source pollution of sea waters and coastal zones. The Department of sea and continental shelf supervision and offshore operation control of the North-western federal district, being a branch of the Federal Supervisory Natural Resources Management Service was founded in 2006 in order to tackle this problem. In 2006—2009, the principal area of activity of the Department was the establishment of control over the use of vessels and natural resources.

One of the respondents claimed that the Department had managed to deal with water pollution and illegal discharge of ballast water and sewage in the harbour and protected water areas: "They stubbornly pushed for the implementation of all international agreements and all Helsinki recommendations regarding the vessel-source pollution. I have to say, there is some success in this field. The vessel-source oil product discharge was ongoing; bilge was leaking out all the time. But today, thanks to the efforts of the maritime authorities, ship-owners are kept under control" (regional authorities). "The marine inspection does a lot, I think. They are good at establishing control" (NGO).

A regional level structure — the Environmental Control and Supervisory Service — was established in 2009, and it is still early to estimate its efficacy. Thus, the experts mentioned the activity of the Kaliningrad Supervision department as an example of the only consistent implementation of the HELCOM recommendations by the authorities.

Triggers for the recognition of environmental problems in the Kaliningrad region

The analysis of expert interviews showed that the main triggers for the recognition of the anthropogenous eutrophication problem in the Kaliningrad region were the international factor and the unique geopolitical position of the region. It was international specialists who stimulated the discussion on solving the regional environmental problems: "Great help with environmental projects in the Kaliningrad region has been always offered by the Swedish and Danish partners. Today, Germans help a lot too" (regional authorities).

In the framework of the EU TACIS and INTERREG programmes, the BERNET (Baltic Eutrophication Regional Network) and BERNET Catch projects were implemented in the Kaliningrad region. They were aimed to improve and maintain the quality of water in the Baltic Sea area. An action plan for the Baltic Sea eutrophication reduction for the Kaliningrad region was drawn up on the basis of the results of the joint activities. However, it was not approved by the regional government [5, p. 170—173].

The scientific community played an important role in the recognition of environmental problems. For the Kaliningrad region, it is a typical situation when scholars formulate the main problems related to marine protection. A number of research projects, the results of which were later published, were supported by international foundations. Partially, the research was financed by the Russian federal and regional administrative authorities. Besides, the LUKOIL company has actively supported environmental research. As one of the respondents mentioned, "as to the environmental assessment, there is only one project I know of; it's fairly good. It's the environmental activity of LUKOIL" (scientific community).

The assessment of anthropogenous eutrophication in the Kaliningrad region

Anthropogenous eutrophication affects, first of all, the Curonain and Vistula Lagoons, where the concentration of nutrients constantly exceeds the maximum acceptable value. The increase in peat concentration in lagoons results from the high level of pollution of the largest regional rivers — the Neman and the Pregolya — the two rivers untreated city sewage water is discharged to and then brought to the Baltic Sea. It has already affected the Baltic Sea ecosystem, in particular, the biota of the Curonain Lagoon [2, p. 100].

Nevertheless, not all of the Kaliningrad experts considered anthropogenous eutrophication a major regional problem. For instance, the respondents mentioned that "the region does not heavily contribute to the nutrient pollution of the sea" (regional authorities). At the same time, they added that the problem of eutrophication "is more environmentally-political than purely political" (scientific community).

Predominantly, experts point out that the lack of a modern sewage water treatment system in most regional towns and in Kaliningrad is the main reason for eutrophication. The role of agriculture in the generation of nutrient waste was considered insignificant by most respondents, since there are neither large farms, nor cultivated areas in the region.

The solutions to the problem of anthropogenous eutrophication

Most experts believe that the solution to the problem lies in the construction of modern waste water treatment facilities. Most representatives of the authorities and scientific community saw this approach as a technical task to be handled by specialists: "Of course, it's for specialists to decide... if the sewage from detached buildings carries nitrogen and phosphorus, a specialist should deal with it: there is a need for waste water treatment facilities" (federal authorities). An important outcome of this approach is that the respondents approved of the Baltic Sea Action Plan: "the HELCOM plan is a victory of the scientific approach, it is written in the language of clear recommendations. It says by how many per cent and which territory or which country should reduce the discharge... It is not just the political motto of the 1990s: everybody should reach the 50% reduction!" (scientific community).

The assessment of the governmental measures for the protection of the Baltic Sea

Today, two principal target programmes of the federal and regional levels are in effect in the region, one of the objectives of which is to prevent further pollution of the Baltic Sea. The Federal target programme for the development of the Kaliningrad region until 2014 stipulates that waste water treatment facilities should be put in operation and both sewage treatment and water supply system modernised. According to the programme, the towns and villages of the region are just 5—8% equipped with biological sewage treatment systems. However, the principal objective of the treatment facility construction and the sewage and water supply system modernisation, from the perspective of the authors of the programme, is to boost the investment appeal of the region rather than to respond to the concerns of the citizens [3]. The experts said that the programme could significantly contribute to the solution to the problem of anthropogenous eutrophication through the construction of waste water treatment facilities. Nevertheless, the economic crisis may become a serious obstacle: "Today, the solution is being put off, there is a good excuse: we're facing the crisis. Less federal money is being allocated" (regional authorities).

"The environmental improvement of the territory of the Kaliningrad region in 2008—2012" programme more clearly outlines the ways to do away with anthropogenous eutrophication. It is worth mentioning that the region does not take full responsibility for handling this problem. On the contrary, all measures should be introduced in the framework of cross-border coopera-

tion, one of the principal avenues of which, according to the Programme, is the implementation of the recommendations of the Helsinki Convention on the Marine Environment of the Baltic Sea Area of 1992. It means that the elimination of environmental hot spots should be funded either from abroad or in the framework of cross-border cooperation, or from the federal budget through subventions. This situation owes a lot to the fact that the "all obligations within the Helsinki Convention are the government's responsibility". Moscow has always emphasised the fact that it is them, people in command, who decide what and where to finance... Territories just did not have the right to develop their own programmes to fulfil the Helsinki obligations" (regional authorities).

The programme includes all nine hot spots in the Kaliningrad region listed in the HELCOM plan (clause 95). Their elimination requires: 1) the monitoring of the environmental situation; 2) the development and adoption of a set of measures to stimulate economic entities to improve the environmental situation; 3) a more active use of joint forms of cooperation with cross-border partners, namely, conferences, workshops, round tables, and forums in order to discuss the efficacy of the implemented measures for the elimination of pollution spots (clause 96) [4].

The prospects for the federal subsidies raise the same concerns as the federal target programme does. Lack of attention to the environmental problem may negatively affect the development of certain areas of cross-border cooperation. On the other hand, Russia, as well as other Baltic countries, is developing a national plan for the protection of marine environment, which should be presented at the ministerial HELCOM meeting in Moscow in May 2010. It was initially planned to draw up a special strategy for the Kaliningrad region alongside the national one. However, it did not take place due to two reasons. Firstly, in 2008, at the beginning of the development of the plan, the system of the executive bodies of the Kaliningrad region lacked a body responsible for the environmental policy. Secondly, the Environmental Control and Supervisory Service established in the Kaliningrad region, with its limited number of employees, considers the drawing up of a regional plan an impossible and unnecessary task: "It's a totally unworkable thing and an unnecessary too" (regional authorities).

In general, representatives of the scientific community and NGOs are quite critical of the executive bodies of the Kaliningrad region. The level of criticism varied from accusing the government of their total idleness: "I've never heard about the regional government touch the topic of the pollution of the Baltic Sea in Kaliningrad and other cities" (NGOs), to regrets that "I don't know of any comprehensive improvements like the construction of waste water treatment facilities" (scientific community).

So, the Kaliningrad region does not have a clear action plan aimed to solve the problems of the Baltic Sea. The regional administrative bodies think that, since Russia assumed the obligations within the Helsinki Convention, it is the federal centre that has to develop a set of measures and finance their implementation. It is possible that this factor determined the long-standing absence of a specific body responsible for environmental issues on

the regional level. Secondly, the shifting of responsibility to the federal centre affected the relations of the principal actors involved in solving the environmental problems of the Kaliningrad region.

Conclusions

- Among the environmental problems of the Kaliningrad region, the most successful solution was found to be the establishment of effective control over the use of vessels and natural resources of the Baltic Sea. The control function is carried out by the Department of sea and continental shelf supervision and offshore operation control of the North-western federal district branch of the Federal Supervisory Natural Resources Management Service.

- Main triggers for the recognition of environmental problems in the region were the activity of international organisations and the unique geopolitical position of the Kaliningrad region. At the same time, a large contribution was made by the scientific community, NGOs and large business (LUKOIL).

- The problem of anthropogenous eutrophication is not considered by most experts as the most crucial for the region. The construction of a new sewage treatment system in Kaliningrad and towns of the region is seen as the best solution. Experts highly value the HELCOM plan aimed to reduce the nutrient discharge into the Baltic Sea, since it is based on thorough calculations and specialist expertise.

- The efficacy of the executive bodies as to the solving of environmental problems is negatively assessed by most of the respondents. To a greater degree, it is related to the lack of involvement of the regional administrative bodies into the process. Believing that the HELCOM obligations are the national rather than the regional responsibility, the Kaliningrad authorities do not participate enough in solving the problems of the Baltic Sea.

- The shifting of responsibility to the federal centre, typical of the executive bodies of the Kaliningrad region, firstly, hampered the establishment of a body responsible for the environmental policy and, secondly, negatively affected the relations of the principal actors involved in solving the environmental problems of the region.

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