

THE BALTIC SEA AS A GREAT POTENTIAL AREA FOR BIOPOLITICS

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The Baltic Sea Region

There is no clear political structure known as the "Baltic Sea Region" despite the fact that there are quite well-defined natural geographical boundaries distinguishing this region (Figure 1). The Baltic Sea Region constitutes about 15% of the European land area and 10% of its total population.

The Baltic coast is 7,200 kilometres long. About 90 million people are settled in the entire Baltic drainage area. Approximately 16 million people inhabit the Baltic coastal areas of Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden (Figure 2).

Pollution of the Baltic Sea was not recognised until the 1950's, however in the late 1960's and early 1970's, drastic changes were observed in the Baltic Sea ecosystem. These changes were manifested in the deterioration of some coastal areas, changes in the marine ecosystem structure, contamination of organisms, and unacceptable sanitary conditions in some bathing areas.

Recognising a serious environmental threat and despite important political differences, the Baltic Sea States signed the Convention on the Protection of the Marine Environment of the Baltic Sea Area in 1974, the so-called Helsinki Convention, which was extended to coastal waters of the sea and the protection of biodiversity of species in 1992.

In 1990, the Baltic Sea Environment Summit established an ad hoc Task Force for preparing the Joint Comprehensive Environmental Action Programme. The intentions of this programme are to support the existing Convention and to speed up the restoration of the Baltic Sea.



Figure 1. Drainage area of the Baltic Sea



Figure 2. The political situation in the Baltic Sea area
Hydrographic Conditions

The Baltic Sea is the world's largest body of brackish water with its own specific hydrological and biological features. It can be regarded as a post-glacial lake, relatively young in geological terms (about 12,000 years old), connected to the Atlantic Ocean through narrow and shallow sounds. Water exchange between the North Sea and the Baltic Sea is limited and the water retention time in the Baltic is long; it lasts about 25-40 years. Due to the weak water exchange and significant river water inflow, the salinity in the Baltic ranges from 2‰ to 22‰ (with an average of 7.5‰). Water masses in the Baltic are divided into differentiating horizontal density layers, which prevent vertical mixing throughout the water column. The Baltic Sea is also a shallow water body with an average depth of 55 metres. In fact, the Baltic Sea consists of a series of basins separated by sills. The Baltic Sea drainage basin is approximately 1,600 square kilometres; about four times bigger than the Baltic itself (Figure 1). Water discharges from agriculture and industry strongly influence environmental conditions of the sea. As a brackish water body, the Baltic Sea has an extremely sensitive and fragile ecological balance.

Pollution Problems

There are various anthropogenic sources of nutrients, heavy metals and organic pollutants that range from vast water discharges to indirect inputs such as atmospheric deposition and river runoff. Nutrient discharges result in eutrophication. Since the turn of the century, the Baltic Sea has turned from an oligotrophic - nutrient-poor - clear water body into a polluted and eutrophic - nutrient-rich - water body. The load of nitrogen and phosphorus in the Baltic Sea increased dramatically during the last 30 years, leading to unfavourable conditions and significant changes in the biocenosis. Decreased light penetration resulted in a reduction of biomass and biological variability of benthic macroalgae communities. Also certain fauna species populations decreased. Intense blooms of blue-green algae (cyanobacteria) are regularly reported in many areas of the Baltic Sea. Certain levels of contaminants are present in tissues of all organisms, however top predators, such as seals and eagles, are the most affected by contamination. In addition bad sanitary conditions of the coastal areas of the southern and eastern part of the sea is a result of direct inputs of municipal waste waters to the sea.

Important Political Structures and Attitudes for Biopolitics

The Helsinki Convention and Ministerial Declarations

The most important political structure for the Baltic region is the Convention on Protection of the Marine Environment of the Baltic Sea Area - the Helsinki Convention - signed in 1974 and which entered into force in 1980. At the time of its signing, the Helsinki Convention was probably the most comprehensive international treaty in the field of the environment. Looking back at the political situation in the Baltic region in the 1970's, it is understandable, however, that such an agreement could not meet all the needs with regard to environmental problems in the area. Therefore, after political changes in the 1990's, a "new" Helsinki Convention was signed in 1992. It contains new elements and provisions, as well as a new approach to principles of environmental protection policy. National and internal waters were included into the new Convention, as well as the catchment area. Relevant measures shall be taken by each Contracting Party in the catchment area of the Baltic Sea. The fundamental principle of this new Convention is still the obligation to prevent and eliminate pollution discharges in the Baltic in order to preserve the natural environmental balance of the Sea. Contracting parties should also apply the "polluter-pays" principle. The Convention also stipulates that environmental impact assessment work will be implemented by the contracting parties. According to the provisions of the 1992 Helsinki Convention, a new policy should be developed with respect to nature conservation issues and the protection of natural ecological processes. In addition, detailed regulations were elaborated for the contracting parties with regard to pollution from marine transport and discharges of sewage and garbage from ships. Finally, dumping into the Baltic Sea waters is also prohibited.

In 1988, a special attempt was made to speed up the implementation of the Helsinki Convention provisions and its recommendations. Baltic Environment Ministers declared that the anthropogenic load of the nutrients and the most harmful pollutants to the marine ecosystem of the Baltic Sea should be reduced by at least 50% by the year 1995. Unfortunately, presently, it is apparent that the pollution load reduction will not be achieved.

Another attempt to reduce the amount of pollution entering the Baltic Sea water was undertaken in 1990. The Baltic Sea Joint Comprehensive Environmental Programme was launched by the heads of governments of the Baltic states. In addition, representatives from multilateral financial institutions were included in the preparation of this programme. There were pre-feasibility studies conducted in order to investigate sources of pollution in the Baltic Sea drainage area. A total of 132 so-called "hot spots" were identified, 47 of which were regarded as high priority. Investment action focused on bringing pollution under control at these hot spots.

The Gdansk Convention

In 1973, the Gdansk Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts was signed in order to solve the most urgent problem of co-operation in the field of sustainable use of natural marine resources. The Gdansk Convention addressed problems associated with the fishing industry. This Convention was a step towards close co-operation in order to "maintain the maximum stable productivity of the living resources of the region" and to provide general guidelines for co-operation on fishing.

Other International Conventions and Agreements

International co-operation for the Baltic Sea is not only limited to the Helsinki and the Gdansk Conventions. There are also other important conventions and treaties which can be a good basis for biopolitical principles:

- convention on long-range transboundary air pollution
- convention on the control of transboundary movements of hazardous wastes and their disposal
- convention on biological diversity
- convention on wetlands of international importance
- convention on environmental impact assessment in a transboundary context, especially regarding waterfowl habitats

There are also other forms of association in the Baltic Sea Region, such as meetings of foreign ministers, The Council of the Baltic States, meetings of national and regional ministers of spatial planning, "Vision and Strategies around the Baltic Sea 2010," Parliamentary Meetings for the Clean Baltic Sea and cross-border co-operation.

Comments and Conclusions

It is widely recognised that environmental protection of semi-enclosed seas such as the Baltic, are most effective when carried out in very close co-operation among all the countries of the region. Remedies to improve the environmental condition of the Baltic Sea and to protect its natural treasures are relatively easy to identify. Principal provisions and recommendations elaborated by the Helsinki Convention are a good basis for environmental actions that should be taken within the Baltic Sea drainage area. A ban on dangerous pollutants, reduction of water and air emissions in the whole catchment area of the Baltic, as well as activities to protect nature should be mentioned as basic measures to be undertaken by all nations in the Baltic region. Pressure should be placed on changing the public attitude towards environmental issues. Baltic nations must sacrifice their aggressive economic development on behalf of sustainable development. The principles of the best environmental practices and the best environmental technologies and sustainable use of natural resources are to be taken seriously and implemented in full. There are both positive and negative circumstances for biopolitical development.

Positive

Well-defined political and physical boundaries of this region allow for a clear determination and localisation of pollution sources and help in the setting up of restorative/protective measures for those regions. There are no major conflicts and differences among the Baltic states as far as religious and political issues are concerned. Positive political changes in this region can be generally regarded as conducive towards biopolitical development. Public fear of environmental catastrophes exists and public interest, within the Baltic catchment area often focuses on environmental topics.

Negative

Important economic differences between nations of this region, as a result of differing political systems, still exist. There are two distinct groups with dissimilar biopolitical priorities: the Western countries like Denmark, Finland, Germany and Sweden on the one hand, and the former communist countries like Estonia, Latvia, Lithuania, Poland and Russia on the other. The countries with economies in transition, very often, lag behind the other Baltic states in many aspects of environmental protection. In their search for rapid economic development, former communist countries may sometimes contradict the concept of sustainable development. It is anticipated that swift industrial development and intensive agriculture will get out of hand resulting in many negative and destructive consequences. Privatisation of large land areas threatens the basic aims of nature conservation and preservation of natural biodiversity due to the destruction of natural habitats and ecosystems. Anthropogenic pressure in countries in transition is constantly building. Because the pressure is so unpredictable, it should be monitored and subsequently brought under control. It is clear that much attention should be paid to these "new" States in the context of biopolitics.

Helsinki Convention activities over the past twenty years have resulted in some improvements in the Baltic Sea environment, however these efforts are not sufficient as of yet. Baltic Sea restoration efforts must be expanded into new areas of activity. There is a growing understanding that the Baltic Sea cannot be saved without close international co-operation and the implementation of biopolitical principles in the entire Baltic drainage area.

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