

National Integrated Coastal Zone Management strategy and initiatives in Poland

Kazimierz Rabski

Society for the Coast (EUCC-Poland), Szczecin/Czarnocin, Poland

Abstract

Integrated Coastal Zone Management in Poland is not existing so far. There are also no a clear legal background for this procedures, however there are a quite good law system connected with coastal management. The State plays still a significant role in decision making here, also because of financial instruments connected for example with coastal defence and protection against the erosion. Still valuable Polish coast, as a typical soft and young type of coast, is more and more popular for tourism and recreation and these kind of activities seams to be the most important sectors to realise ICZM. Boundaries changes till 1945, political changes and lack of democracy mechanisms in former time as well as lack of coastal education, actual short-time political influences make ICZM procedures very difficult. Still the spatial planning on the level of local communities is not clear in the coastal zone. There are some drastic examples illustrated the results of such a situation: wrong seawalls localisations, destruction of parts of valuable coasts because of too intensive tourism development. On the other hand there are some positive examples, where compromise is possible and NGOs (as EUCC-Poland) can be a good platform to realise many aspects of ICZM in Poland.

1 Introduction

In Poland, as in all CEEC end of the XX century has brought dramatically new situation in mostly from the sectors of human activities. In Poland economical crisis, political un-stabilities, lack of the experience of democratically functioning of the State had to be observed also in coastal zone management.

From the other hand should not to be forgotten, that after 1945 the "location" of the country has been significant changed. Poland lost its traditional eastern part, but new boundaries covered part from the former Prussian properties, including coastal zone. From less then 200 km before 1939 to more then 800 km in 1945 of coastline.

For creation national policy, administration structure and simple land using these aspects had and have a very important role.

Integrated Coastal Zone Management, understand as an on-going process, system of compromises, need a long-term procedures and common acceptation of the evident factor that for longer perspectives only the nature can regulate human activities and needs in this area.

2 Characteristic of the Polish coastal zone

2.1 General description of the Polish Coast

Since over one hundred years the Polish coast of Baltic Sea has been investigated by a number of scientists and scientific institutions, so the scientific recognising can be define as good, special in the light of coastal management needs.

Actually the total length of the coast is around 843 km, where about 500 km is an open sea coast, 241 km is coast if Szczecin Lagoon and 102 km is Vistula/Wisła Lagoon. This typical soft coast consists of about 52% of dune coast, about 28% of flat, organic coast and about 20% of cliff coast.

The Polish coast was formed at the end of the Pleistocene and modified up to now from Holocene period. For the shape of the landscape and current or on-going coastal processes the most important influence took place during Litorina transgression in the Atlantic period. As typical soft coast its shape is a result of numerous factors:

- > hydrodynamics factors (as water level oscillations connected with air circulation)
- wind waves
- ➤ long shore currents and coastline exposure in connection with prevailing wind direction and velocity.

Of course morphology and geological structure has made a great impact to actual coast stage. The Polish coast includes:

- > coastal dunes, partly with sandbars,
- > coastal cliffs mostly active,
- > delta plains,
- > coastal lakes and lagoons,
- > rivers estuaries
- > urban areas

It is worth to mention, that nearly 90% of coast belt is covered by forests, of course out of the human developed areas.

According to existing data (f.e. published by Maritime Office) about 50% of dune area and more then 65 % of cliff shores as well as more then 70 % of other coastal formation have been changed and devastated thanks to the man activities.

Coast is protected against erosion with using traditional methods and techniques. On the total length of about 120 km can be found: groins, seawalls, bulkheads and in some parts (as popular summer villages and resorts) coast is protected by artificial beach nourishment.

From the other hand a very important part of Polish coast still represents a high biodiversity and landscape values characteristic for soft coast of un-tidies sea.

From XIX century human activities started to change and disturb natural balance and coastal dynamics. It is special clear to study near mouth of rivers as Wisła/Vistula, Łeba, Słupia, Parsęta, Rega and Odra (as a complex of Dziwna, Świna and Penne in German part of Szczecin Lagoon). Here are located not only harbours and shipyard industry (special active till late 80. of XX century), but the most popular and developed tourism centres.

2.2 Historical aspects

To understand actual problems with coastal management a glimpse to the historical aspects must be done. As has been mentioned, Polish coast in actual boundaries has existed since 1945. Before Second World War boundaries had been changed many times, according to historical and political changes in the country, wars and alliances. Generally however, there is no tradition reflected to the coastal management or rather lack of historical aspects.

Nearly revolutionary changes connected with economic development observed from the beginning of XX century, understand in the coastal zone also as a modern administration, till 1945 was reduced to the area of Gdańsk Gulf and about 50 km of the open sea area of the coast in Poland. Later, political system of communism did not got any chances for development of coastal management on local level administration and local individual initiatives. This aspect could have a positive reflection for actual situation.

2.3 Administration and responsibility authorities

Poland is from the administration point of view divided into 16 voivodships (provinces), from which 3 are located on the coastal area: West-Pomeranian, Pomeranian, Varmian-Masurian. The regional administration is represented by counties, which place a key role in self-governing system of Polish democracy. Among 370 counties 18 from them are connected with coastal areas.

For the coastal management a very important role should play local community. There are about 2.480 local communities, and 52 are located along Baltic Sea coast.

But according to existing law and because of actual state ownership of the coastline, and adjacent narrow strip there is one organisation responsibility for coastal zone management. On behalf of State and under Ministry of Infrastructure, Maritime Office is a body realising state policy and responsibility for administration, spatial planning protection and possible development here. Maritime Offices are located in Szczecin (west part of the coast and Szczecin Lagoon), Słupsk (middle coast) and Gdynia (east coast, Gdańsk Bay and Vistula Lagoon).

3 Basis for Coastal Zone Management: existing law

3.1 Definition of the coastal zone

There is no legal definition of the coastal zone, as well as there is no legal definition of ICZM. But in the group of Acts and State Regulations there are some definitions which can be very helpful in any kind of works connected with coastal zone management. The most important definition connected with coastal zone has been given in The Act on Marine Areas of the Polish Republic and Maritime Administration (1991). In this Act a protected coastal strip is established. It comprises:

- > Technical Belt
- Protective Belt

Technical Belt extends up to 200 m inland. It depends of the type of coast and can be more narrow in active moraine cliffs, but also can be increased to 1.000 m in some from the flat part of the coast. The specific situation of urban areas forces to reduce Technical Belt to the area of beach and narrow strip of dunes (or rather in many places the rests from them). All kind of investments here must have approval from the Maritime Office, responsibility on behalf of State

Protective Belt can be wide up to 2.000 m inland and on some areas can be increased to 5.000 m. Of course in urban areas Protective Belt is significantly reduced or even practically is not existing. Here any kind of investments must be consult with Maritime Office.

3.2 Legislation

As there is no specific legal definition of the coastal zone and there is no separate national legislation for the ICZM. In that case any works connected with possible strategies and any from the planned and undertaken activities and initiatives must take into the consideration a group of Acts and Regulations. The list of the most important contains the following:

- > The Act on Marine Areas of the Polish Republic and Maritime Administration (1991)
- ➤ The Act on Establishing Long-term Coastal Defence Programme (2003)
- ➤ The Act of Nature Conservation (1991, with changes made 2000 and new Act 2004)
- The Water Law Act (1974, under revision)
- ➤ The Environmental Law Act (2001)
- ➤ The Act on The Environmental Protection and Development (1994)
- ➤ The Act on The Forests (1991)
- ➤ The Act on the Protection of Agricultural and Forest Lands (1995)
- ➤ The Act on Access to Information on the Environment and its Protection and on Environmental Impact Assessments (2000)

- ➤ The Geological and Mining Law Act (1994)
- ➤ The Hunting Law (1995)

The other group of regulations and legislation is relevant to the spatial planning and it can have an important influence for ICZM. Here should be listed the following:

- ➤ The Act on Municipal Self-Government (1990)
- ➤ General Building Regulations (1997)
- ➤ The Physical Development Act (1994)
- ➤ The Concept of National Spatial Development Policy (2000).

4 Basis for the Coastal Zone Management: spatial planning in the coastal zone

The political changes in the beginnings of 90. of XX century have made a new possibilities to create "down – top" system of the spatial planning. However lack of financial sources and experiences among local stakeholders of local communities reduced these chances. For the coastal zone influence of the Maritime Office in the boundaries of urban area since about 1990 also has been thanks to the new law system reduced for the spatial planning on the local or county level.

The existing law as: The Act on Municipal Self-Government (1990), General Building Regulations (1997), The Physical Development Act (1994) and The Concept of National Spatial Development Policy (2000) regulated the system of planning, but in practise on the level of local communities has been usually not implemented yet. Local communities have prepared a basis for local spatial plans, called "Local Development Spatial Strategies" or "Studies and Conditions for Local Spatial Plans". For the coastal zone the most important functions and development restrictions are described here. For some such a studies the zoning of the coastal area have been also prepared.

5 Basis for the Coastal Zone Management: coastal nature conservation

5.1 Structure and organisation of coastal nature conservation

Generally the provincial governor ("Wojewoda") is on behalf of State responsible of the introduction of various forms of nature conservation and for their management. Only national parks are straight under management of Ministry of Environment. On the level of local community some forms (as ecological uses) can be held, but they must have a State approval.

Mostly from forests covering coastal zone are the property of State Treasury and for their management are responsible Regional Forests Authority. It is very important, that all forests in that zone are called as "protective forests", what means reduces of their economical uses.

They will be also possibilities to create NGOs private protected areas, but legal position of this form is not described by law so far.

All protected areas should have their "Nature Conservation and Management Plan" and for mostly of the areas such documents have been prepared or they are under preparation. The plans for national parks must be approved by Ministry of Environment.

5.2 Protected areas in the coastal zone

Various forms of protected areas in the coastal zone in Poland cover in total more then 154.000 ha, what is almost 0,5 % of the country's area.

There are two National Parks:

- ➤ Słowinski National Park with total area of nearly 33.000 ha, including 11.100 ha of the Baltic Sea waters,
- ➤ Woliński National Park with total area of nearly 11.000 ha, including 2.200 ha of the Baltic Sea waters.

There are five Landscape Parks:

- > Szczeciński Landscape Park with total area of 9.000 ha
- Nadmorski Landscape Park with total area of 15.500 ha
- Trójmiejski Landscape Park with total area of 20.100 ha
- ➤ Vistula Spit Landscape Park with total area of 4.400 ha
- ➤ Elblag Upland Landscape Park with total area of 13.500 ha

The other form of protection is Protected Landscape Area. There are 5 such areas in the coastal zone:

- ➤ Koszalin Coastal Belt (48.300 ha)
- Coastal Belt west of Ustka (7.500 ha)
- Coastal Belt east of Ustka (3.300 ha)
- ➤ Area of Protected Landscape of Vistula Lowlands (5.300 ha)
- Area of Protected Landscape of the River Bauda (2.100 ha)

Many nature reserves with different kind of flora and fauna species, as well as plant communities are also located in the coastal zone.

There is also planned to be established a first private protected area in Poland, called preliminary as "Odra Delta Nature Park" and covering approximately 2.000 ha on the east part of Szczecin Lagoon. The main owner of the grounds is EUCC-Poland.

6 New instrument for coastal zone management in Poland

In 1996 started a discussion connected with new strategy for the coastal protection, which should be an important law instrument in planned coastal zone management strategy.

At the beginning was planned that this document will describe relations between nature values, possible development and sources needed to coastal protection against erosion. After couple of years has been quite clear, that such a document will have only a technical character, as a long-term coastal technical guidelines.

In 2003 Parliament approved a new law called: "The Act on Establishing Long-term Coastal Defence Programme". Unfortunately this act is only for describing the investments which are necessary to realise protection of the coast only against erosion. It is very important that this "strategy" has been prepared for all-long Polish coast, but its weak point is, that is only a technical guidelines for many areas not sustainable at all. The artificial nourishment seems to be the most important method to reduce erosion, which is recommended by this guidelines. For many places however, there are not enough sandy material to be deposed on the destroyed beaches. There are too many heavy constructions planned in guidelines too. The places which have been left to the succession of natural processes covers about 200 km from the whole coastline, including the area of national parks of course. The planned financial sources for years 2004 - 2023 will come from National Budget and has been calculated on the range of 200.000.000 EURO.

This document has not be consulted with larger group of experts, as: nature conservation managers, scientists and practitioners connected with coastal zone.

7 Tourism and recreation

Even from the XVII century in some parts of Polish coast tourism and recreation have been known as a possible income generation for the local inhabitants. But as a part of local economy tourism and recreation have started to be understand as important element since late 50 of XX century. The rapidly growing of investments as hotels, summer houses, camping areas and all connected facilities have a

significant influence for any kind of policy in local level and regional level. Till now sustainable development is as the last point to be discussed in spatial planning procedures. There are many examples that even Generals Architects from Provinces Offices trying to make changes in conservation and management plans connected with nature valuables area, where could be a good location for new hotels or pensions. The number of not legally built summer houses in the coastal zone is even every year higher.

As the result is worth to mention that about 30% of tourist investments in Poland are located in coastal zone and every year the open sea beaches of Polish coast (about 500 km) are visited by more then 10 million guests, mostly between middle of June till end of August.

8 Case studies

Integrated Coastal Zone Management in Poland is not existing so far. Moreover: there is no clear strategy how to achieve ICZM as a long-term process. That is a result of first of all weak democracy mechanisms in decision making procedures, but also result of very low education which in practise is not given to the local actors and stakeholders. Some case studies can also illustrate how ICZM is realise in practise.

8.1 Heavy constructions and their influence for coastal zone management

There are some examples of investments realise during even last 10 years, when there have been started a lot of discussion around integrated coastal zone management. The most drastic is location of seawall in Jastrzębia Góra. Here is located a very interesting example of he moraine cliff, eroded since thousands years. Till late 90. of XX century a delicate compromise between nature and human development has been "established". Some locations of the hotels however (special built between 1970 and 1980) was not sufficient prepared in the stage of collecting documentation or because of the political aspects have been realised without necessary permissions and morphological documentation. At the end of the day, after about 20 years one of the hotels (belongs to the Ministry of Treasure) found itself at the zone possible to be eroded by natural sea processes. There was no any discussion with specialist representing nature science and practise, there was no discussion with local community and there was no respectation to the existing law. The heave construction has been built, but probably it will not stop erosion at this place and for sure will increase erosion, special west from the built seawall.

The questions are: how far one institution can decide about such an incidents and how political influence can destructively influence for coastal management?

8.2 Active nature conservation a new challenge for ICZM

There are special areas located on Polish coastline zone with still very high nature values, but also very attractive to create new forms of local development in sustainable way. From 1996 EUCC-Poland has started a unique long-term project to protect the most valuable parts of Szczecin Lagoon (Odra Delta) and to promote ecologically sustainable development. The goal is to integrate environmental protection with economic development. For that reason the strategically located land have been bought (1.000 ha so far), which are representing typical coastal meadows and wetlands. For these areas a management visions and the backgrounds for management plans have been prepared, including nature inventory and feasibility studies for sectoral local economical development. Some parts of the areas have been actually prepared for extensive agriculture, what can be understand as revitalisation of the area. Here are again implemented various breeds of primitive cattle and wide horses and hay production was started. The area is under preparation for ecological tourism and education not forgetting about nature reserve places, special focused for wetland birds.

The plans and results are couple of time a year discussed with local stakeholders and local community managers, scientists and local inhabitants. The social actions is also provided to improve "post-colhos" life style.

It is important that area is designated to NATURA 2000 European Network.

9 Conclusions

The problems of Integrated Coastal Zone Management in Poland can be concluded in several points.

- 1. The historical importance of Maritime Office as responsible body for coastal conservation is undisputed. Thanks to activities lead by this institution many from the Polish coast is still valuable.
- 2. There are a good law background for nature conservation, special in the particular areas designated to be protected or which are protected.
- 3. Establishing "The Act on Establishing Long-term Coastal Defence Programme" State has got a very important financial document and technical guidelines to keep position of Maritime Offices as the most important actor for coastal zone management, however this act and guidelins can not be understand as ICZM document.
- 4. There are lack of coastal education on the level of local communities, which could be very helpful in implementation of integrated coastal zone management procedures.
- 5. The role of NGOs as a partner is still very low. Some of such a bodies as EUCC-Poland decided to create a model areas of sustainability as examples of ICZM in local scale, close to the particular types of the coasts.

Address

Dr. Kazimierz Rabski Society for The Coast (EUCC-Poland) Ul. Wąska 13 71-415 Szczecin Poland

E-mail: krabski@wp.pl