14. Final Reflections

Since ancient times the Albanian coastal zone has been the roots of many civilizations. They all have left their traces in numerous sites. We find them today in rich archeological collections at antique sites and in museums. The whole coastal area continues up to now to play a key role for nature and the life but as well for the economy and the sustainment of the present generation. Some main sectors of the Albanian economy are concentrated within the coastal area, namely tourism and industry, agriculture and livestock, fishing and aquaculture, as well as more recently oil extraction and its processing.

Before World War II, wide plains in the Adriatic Coastal Lowland along the coast of more than 400 km² were marshlands, like Velipoja, Balldreni, Zadrima, Kakarriqi, Thumana, Durresi, Rrushkulli, and many more. At that time marshland was of little value and a clear symbol of poverty. These were sites where contagious diseases, especially malaria, shortened the life of people. Between 1960 and 1970, a large part of the coastal plains were reclaimed in a State program and converted to cultivated fertile land. Despite this extreme retrogression the State of Albania inherited after the political transition in 1990 the still remaining natural transitional habitats in a reasonably good natural condition. Some of the sites had been previously protected as Hunting Reserves or as National Parks, which in fact is comparable today to a Strictly Protected Area.

The overall values of the different transitional habitats in all their aspects, namely nature, biodiversity, climate, tourism and recreation, have been extensively described and discussed in the preceding chapters. In addition, from the economic view the transitional waters have always been a fundamental source of income for the country with respect to fishery and aquaculture, and they will remain if exploited in an expert and sustainable way.

Unfortunately during the past two decades, the period of the Albanian economic and political transition, anthropogenic pressure strongly increased on many natural ecosystems in Albania, like forests, pastures and rivers, and in particular on the coastal zone and the wetland systems along the coast.

For this reason the Albanian Parliament and the Government have recently enacted several modern laws and issued regulations concerning conservation and protection of natural and historical values. Unfortunately, the management in the coastal area by the different authorities lacks the necessary sustainable care. Authorities and responsibilities are often shared between various corporate bodies. separated e. g. for territory planning, tourism, water management, fishing, hunting or forestry. The ecological and functional values as an entity are hardly considered. Furthermore experience in integrated management and interdisciplinary teamwork is largely lacking. Since 1990 uncontrolled immigration to the lowland in general and into the coastal areas increased and is still going on. According to the last population census in 2011, about 61% of the Albanian population lives in the Adriatic coastal lowland, compared to 48% in 2001. While the population density for the whole country is 98.5 inhabitants per km², the density in the urban areas in the prefectures of Tirana and Durresi reaches up to 340 inhabitants per km².

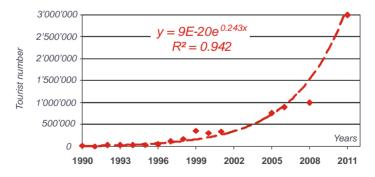


Figure 14-1: Number of foreign visitors in Albania since 1990 (*Anonymous*, 2006 b; http://travelvideo.tv/news/more.php?id=10879_0_1_0_M84).

In the new economical system tourism is receiving high priority. Seaside holidays with seaside tourism became a main choice for the Albanian population in recent times. Also the number of foreign tourists increased exponentially in the past years, most of them visiting in summer Albanian coastal areas with its seaside resorts (Fig. 14-1) and its antique relicts. As a consequence, the coastal area started to get overgrown by broad touristic infrastructures, like hotels and restaurants, roads and parking lots (Fig. 14-2). Sustainable rules in land use planning and urbanization are lacking. The urbanization continues often without taking care of the sensitive nature of the coastal habitats. Also the cultivated pine forest in the dunes and even valuable agriculture land in the coastal plains have not been saved. These days a new touristic town has been built at the Velipoja beach. Touristic infrastructures extend from Shengjini town towards the Kune protected area and the pine forest in Lalzi beach is competing against touristic buildings. The coastal zone between Durresi and Kavaja (about 20 km) represents now a tightly packed continuum of touristic buildings. A similar development is now seen at the coastal zone from Vlora to Orikumi (about 20 km). A most striking view are Saranda and Ksamili where the density of concrete buildings is far above their carrying capacity of seaside beaches.



Figure 14-2: Golemi beach (Durresi) seen from the Kavaja Rock; the former dune pine belt has faded away (Photo: A. Miho).

The destructive land use practices are apparent in many watershed areas throughout the Albanian territory. Wide deforestation, overgrazing, firing or gravel mining in river beds are not without effect on the coastline and its wetlands. The erosion of the coast in Velipoja, Shengjini, and Rrushkulli are good examples. Moreover, a complicated drainage system with pumping stations is mandatory to maintain the normal functioning of the whole coastal system, e.g. in Nenshkodra, Lezha, Lushnja, Fieri, or Vlora. Inadequate attention of the drainage system and the pumping stations combined with the poor land use and mismanagement of the river cascades is a main cause of the frequent flooding observed in Shkodra, Lezha and elsewhere. More about human impact in coastal zone see also the discussion made in paragraph 5.5 (Chapter 5) and data reported there (Tab. 5-10 and Figs 5-4, 5-5 and 5-6).

The attitude of missing care towards nature is mainly based on a low awareness for nature and the lack of education in environmental understanding and nature protection. A first shock for many visitors of the country is often the apparent absence of waste management heavily impacting especially natural areas like the coastal zones. Solid waste is dumped on riverbanks or burned, polluting air, water, soil and biota, and also impairing human health. The insufficient management of waste disposal has massively downgraded the beauty of many landscapes in coastal areas.

Increasing industrial and harbor activities have started along the coast. Areas for the marketing and storage of fuels have been built in Shengjini, Porto Romano, Durresi and Vlora. An energy park has been established in Vlora with a thermo power plant combined with fuel storage. Recently it has been discussed to build an energy park in Porto Romano and a wind park in Karaburuni. Another project is a Liquified Natural Gas (LNG) terminal in the Semani coastal zone connected to the Trans-Adriatic Pipeline (TAP) that will transport natural gas from the Caspian Sea and the Middle East to Europe.

Increasing energy demand in Albania may also be achieved by water energy. More than 290 hydropower stations have been built in the rivers. Furthermore the Ministry of Energetic has arranged contracts for the construction of about 300 additional hydropower stations. All the new dams or river course deviations will certainly act as further pressure on the coastal zone, increasing erosion, flooding or interrupting biocorridors.

In addition to technical interventions, uncontrolled hunting and fishing has massively affected biodiversity and especially the size of the remaining pools of globally endangered species. Considering all these facts the transitional areas in Albania continue to be under serious pressure. This is easily illustrated by the population dynamics of the Dalmatian pelican in the Divjaka wetlands (see Fig. 10-35) or of the herons in the Kune wetlands (Fig. 14-3; see also Fig. 7-26). In both the bird population has decreased exponentially during the past 20 years. *Posidonia* meadows along the Adriatic are stretched and not healthy as they are in undisturbed parts of the Ionian coast.

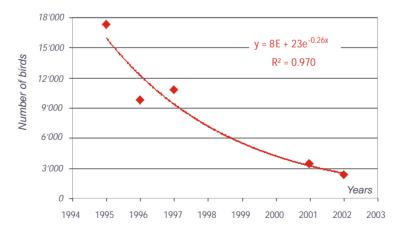


Figure 14-3: Number of wintering birds between 1995 and 2002 in the complex of Kune and Vaini (Lezha) (https://docs.google.com/viewer?a=v&q=cache:t18FJ0bCUTQJ: archive.rec.org/albania/Projects/LEAPs/ER Improved Final English.doc)

Are the leaders of the economic development of Albania able to respect the large sum of natural values along the coast with its transitional wetlands? Will the present and future population appreciate the natural and cultural treasures and accept restrictions and regulations imposed by the government and managing authorities?

On the economic side, in spite of severe rules and restrictions growth may continue. Based on both the natural and cultural factors in the coastal region we propose an ecologically oriented tourism instead of the simple seaside bathing tourism present in many sites in Albania and in other Mediterranean countries leaving behind a heavy ecological footprint. This will not only assist the conservation of the crucial sites of transitional water and their biodiversity but even create new economic opportunities for the local communities. We also hope to wake up the concerned people and authorities in their responsibility and awareness towards 'the preservation of a healthy environment as the basis for a sustainable development, as it is stated in the Albanian Supreme Law. Moreover, to follow the requirements imposed by the EU Water Framework Directive (WFD) is fundamental for Albania, a country seeking EU membership. It stipulates that all aquatic systems, including the transitional waters, must be preserved and/or reach at least a 'healthy' state, as it is the case in most other European countries.

The Rio-2012 Conference indicated some progress in reaching sustainability goals anticipated decades ago. What has been reached in climate programs should also be possible for biodiversity: more presence and more impact in political decisions, more international and concerted research with shared scenarios and goals.

A positive development in the conservation of Albanian natural beauties is based on the behavior and the activities of each single individuum and its environmental education and discipline. Let us hope that the present eco-guide opens the eyes of the young generation in our university as well as of the tourists visiting the coastal region.

410

Aknowledgements

The authors acknowledge the contribution given by the following institutions, colleagues and friends:

- =>Prof. A. Basset, Salento University, Italy, who promoted first the preparation of this publication, supported by the RiverNet Project INTERREG IIIA.
- =>The printing of the book became possible through the financial support of the Swiss National Science Foundation (SNSF).
- =>Prof. R. Bachofen, University of Zurich, Switzerland, kindly offered his assistance to get the support form SNSF. Prof. Bachofen and his colleagues Prof. H. Brandl and Prof. J. Schneller gave enormous assistance on the revision of the original manuscript both concerning its scientific content and the English language.
- =>All contributors of photographs listed on page 4 kindly offered their best photos from their individual galleries.
- =>Prof. as. F. Bego, University of Tirana, for the careful reading of the manuscript and valuable comments and scientific suggestions.
- =>Mr. E. Imeri, Publishing House and Typography Julvin 2, Tirana, for the care on the quality of printing.