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Geographies of the Anthropocene
IL Sileno Edizioni

21st Century Landscape Sustainability, Development and Transformations: Geographical Perceptions

Giovanni Messina, Bresena Kopliku (Eds.)

Preface by Elena dell'Agnese

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Editors

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Ervis Krymbi

8. Natural resources and landscape conservation in Velipoja administration unit

Ervis Krymbi [1]

Abstract

Velipoja lies along the Adriatic coastline in the North – West of Albania, near Buna River. River Buna discharges at the Adriatic Sea close to Montenegro boarder. The coastal area of Velipoja is characterized by a sandy shore and covers approximately 694 ha. The Buna River-Velipoja Protected Landscape is a protected landscape area in northwestern Albania, encompassing the estuary of Drin, the Lagoon of Viluni, the River of Buna with its estuary, and the Gulf of Drin that runs across the area of Velipoja alongside the Adriatic Sea. During the transition process is not given much importance of territorial planning initiatives. The whole area is distinguished for its biodiversity values, such as a wide variety of terrestrial and aquatic flora and fauna species. Since 2005, the Albanian part of Velipoja wetlands including Viluni Lagoon and the Shkodra Lake hold the protection state of a Managed Natural Reserve (IUCN Category IV), and since 2006 the zone is included in the RAMSAR list. Velipoja coast is subject to dynamic geomorphologic changes, including accumulation, erosion in different segments. These geomorphological littoral changes have impacted the landscapes and economic activities. Dynamic urbanization process without a certain strategy was associated with a total negligence on the coastal environment of Velipoja. Thus, construction, urban and territorial development in the transition years has not been the result of the implementation of previously approved territorial and urban planning instruments. The Velipoja administration unit territory has a very good location but the remaining coastal developments uncontrolled speculative and far from administration and planning in accordance with the principles of sustainable urban development.

Keywords: ***Velipoja administration unit, Buna Delta, Anthropogenic, Erosion, Urban planning.***

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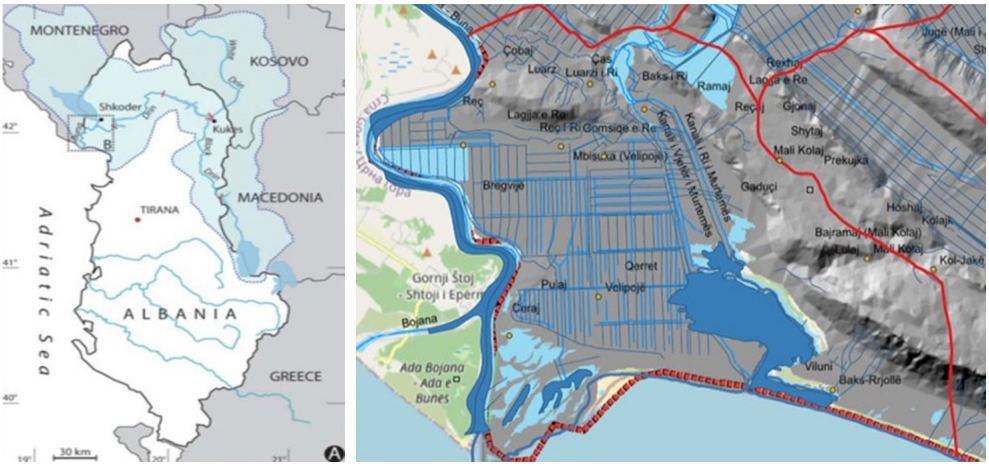
1. Introduction

The administration unit of Velipoja is part of the Shkodra municipality. The town borders on the northwest with Montenegro along the Buna River, on the East with the Region of Lezha, on the North with the administration unit of Dajç and on the South with the Adriatic Sea. The total surface of the administration unit is 72.4 km². The whole zone is a vast field surrounded by the hills of Baks, Ças, Shtiqen and Maja e Zezë. The administration unit has a vast spread along the Adriatic coast in and a beach which dates to about 300 years. The concept of the coast is ambiguous. The coast is often defined as the "land next [or close] to the sea" or as a more general "land next to the shore" (American Heritage Publishing Company, 2015; Cambridge University Press, 2013). The actual number of populations in the entire administration unit of Velipoja is 8270 inhabitants. The tendency is for the population to grow at fast rate due to various factors such as internal migration, the desire to invest in tourism, etc. The administration unit is made up of 10 villages which are: Velipoja, Reç-Pulaj, Luarz, Gomsiqe e Re, Baks-Rrjoll, Pulaj-Plazh, Reç i Ri, Baks i Ri, Ças, Mali Kolaj. Velipoja is characterized by Mediterranean climate, with hot and dry summers, wet and mild winters. The wind of Murlan, which is very characteristic of the area, makes the winters harsh; whereas in the summer the wind of Shiroku brings humidity The greatest part of the population is employed in the private sector as in agriculture, retail shops, construction sector, etc (Krymbi et. al., 2014). The coast […] is intended as harmonious interpenetration in continuous visual, material, functional, interactive, and dynamic transformation between the action of man, sea, and land. The coast represents the edge where to intervene. With its porosity and open boundaries, it can respond to climate change and functioning as a resilient device (Porfido & Sani, 2018, p.105). The area is also characterized by recent rapid development, particularly along a narrow strip within 5 km of the coastline and highways. A construction boom, mainly affecting the coastal zone and the urban centres, in the 1990s was followed by increased informal development, of which there is insuficient control and inadequate mechanisms for the sanctioning of illegal buildings. Anthropogenic activities in the region, mainly through the uncontrolled coastal development, population growth, increased economic activities and poor management of urban waste and wastewater are adding pressure on the watershed of the Buna/Bojana watershed, affecting both the environment and human wellbeing. The Viluni draining station discharges its waters directly to the Velipoja Beach, very close to the Viluni Lagoon.

Viluni draining station is situated between the buffer and transition zone of the Shkodra Lake, Buna, Velipoja forest, Domni wetland and Viluni Lagoon Protected Landscape. Each of the sites mentioned has the third protection level or is the IV protection category of IUCN, Nature Managed Reserve.

2. Geographical position and boundaries of Velipoja administration unit

The administration unit of Velipoja is part of Shkodra municipality, it is located in the southwest of the city of Shkodra at a distance of about 24 km from it, in the northwest it is bordered by Montenegro along the Buna river, in the east by the district of Lezha, in the north by Dajçi administration unit and to the south by the Adriatic Sea. The total area of the Velipoja administration unit is 72.4 km2. The whole area is a large plain surrounded by the hills of Baksi, Çasi, Shtiqni and Maja e Zeze. The area of Velipoja has a wide extension along the coast of the Adriatic Sea and a beach with a natural age of about 300 years. Velipoja beach has a length of 14.5 km and a width of 200-500 m, hypsometry of the territory 0.0-5.0 m, average slope 0.1-0.5 0, horizontal fragmentation 0.0-1.5 km/km^2, vertical fragmentation 0.5-5m/ km^2 with unused sand with a high percentage of sodium and potassium salts and there is an extremely high percentage of iodine in the sand. The stretch of the beach in a condition of such parameters creates numerous and inexhaustible opportunities for tourist use from the mouth of Buna to the edge of the field of Zunkthi (or as it is called Rëra e Hedhur). At a distance of 1-3 km from the sea coast, there is the hill of Rrenci, which is almost parallel to the coast with an average height of 300-500 m above sea level. The river Buna dominates the water regime of the whole area. After joining with the Drini river, the Buna is rather shallow, especially some km upstream, where even small islands have been formed. Further down towards its mouth the depth increases to 3 m which makes the river nearly navigable for small boats. Between the villages of Samrisht in Albania and Gorica in Montenegro and the mouth, the river is shared between Albania and Montenegro and defines the border (Miho *et. al*., 2013).



(a) (b)

Figure 1: Location map of the study area.

(a) Areal extension of the Buna–Drin drainage basin (in light blue) and position of the dams (in red) interrupting the Drin River course. **(b)** Detailed view of the study area, Velipoja administration unit. (Source: the author , 2023)

Regarding the hydrogeological profile, three formation complexes could be distinguished: i) Quaternary deposits, ii) flysch deposits, and iii) limestone rocks (Muceku *et. al.*, 2005). Both the lower and upper part of Quaternary deposits are composed of coarse sands with a fine sand layer in the middle. Underground water in the study area Quaternary complex was mainly related to sand formations, creating a rich aquifer Some springs flowing out from these formations are met south of the investigated area. River Buna and Reçi i Ri stream are the main water resources of these formations.

In the study area the latter consist of alternating sandstones and mudstones of turbiditic origin and Maastrichtian-Eocene age. These sedimentary rocks are involved in SW verging folds parallel to the main chain and represent the rocky substrate, only locally exposed, of the Buna River alluvial plain sediments between Shkoder and the westernmost carbonatic reliefs (Pazzi *et. al*., 2015).

The river has a meandering trend, and it is characterized by one single channel for most of its course. The alluvial plain is poorly drained and during the wet season (November-January) it is typically waterlogged. Terrains are widely used for agricultural aims and houses are concentrated in small villages dispersed along the riverbeds or not far from them. The Buna River Quaternary alluvial sediments unconformably cover the

Cretaceous-Eocenic rocks. The alluvial succession, 20-50 m thick, consists of unconsolidated deposits and is composed of a basal interval of sandy gravel (5-30 m thick) overlaid by a silty sand interval (10-20 m thick).

Velipoja coastline comprises quaternary marine sands and silts. Flysch rocks extend to the east overlying limestone rocks where a tectonic boundary separates these rocks from one another. Flysch rocks, a combination of sandstones, siltstones and claystone's layers comprise the northern part of the hill in the area. Quaternary swamp deposits of loams, clayey silts and sands are found at the eastern and northern ends of Viluni Lagoon. The formation of the Lagoon of Viluni is closely connected with the evolution of the whole Field of Velipoja. Centuries ago, all this space, from the outpour of Buna up to the hill range of Rrenci, appeared as a system of water ponds of various dimensions, separated by little fields and strips of land.

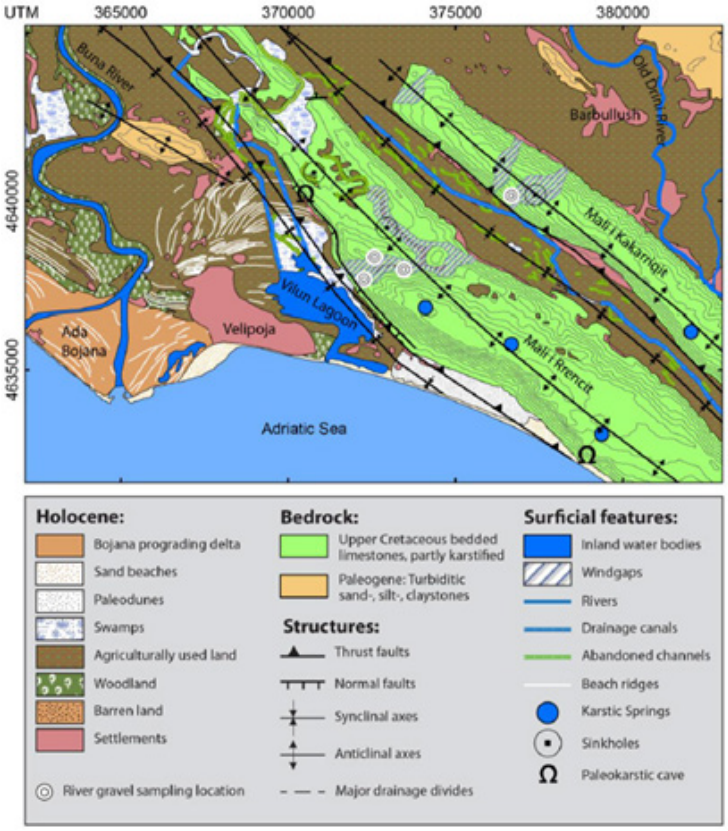


Figure 2: Map combining geological and geomorphological characteristics for the Albanian part of the study area. The map is based on the Geological Map of Albania (2002), the Tectonic Map of Albania (1999), and the Geohazard Map of Albania (2000) and is extended and revised by our own data from field mapping and remote sensing. (Source: Biermanns *et. al.*, 2019)

3. The potentials and the management of landscape in Velipoja administration unit

Tourism has been identified as one of the main economic drivers for Velipoja administration unit based on its high potentials to offer a high variety of activities. The area has an enormous natural potential that makes it very attractive for tourism and it is not a casualty that it is very preferred by citizens and tourists as well. Velipoja is also a touristic center with a wide range of accommodation, both to visit the natural values of the region but also as a relaxing place especially during summer. The Velipoja complex consists of Buna delta, Velipoja Managed Reserve, Viluni Lagoon, Baks Rrjolli coastal zone. The freshwater marshes of Domni and Mërtemza extend along the road to Velipoja. The river Buna is an important natural resource of the Velipoja administration unit and the surrounding area. It flows through two states: Albania and Montenegro. In this way, it connects Shkodra Lake and the Adriatic Sea. Its length is 44.45 km, of which the upper part of about 20 km belongs to Albania, and the lower part of about 24 km to Montenegro and forms the border between Montenegro and Albania. The sediments carried by the Buna have an important role for the morphology of the seashore and of the coastline, which is subject to strong coastal erosion in the Velipoja area. According to old descriptions (Reiser & Fuhrer, 1896; Kárpáti & Kárpáti, 1961; Kárpáti, 1962), the Buna delta was an impressive wilderness area. However, like other Mediterranean wetland areas, it has been strongly transformed during the last decades. Between 1947 and 1980 about 36 km^2 of agricultural lands were reclaimed or ameliorated from swamps and marshes, compared to only 2 km^2 of agricultural land that existed before then.

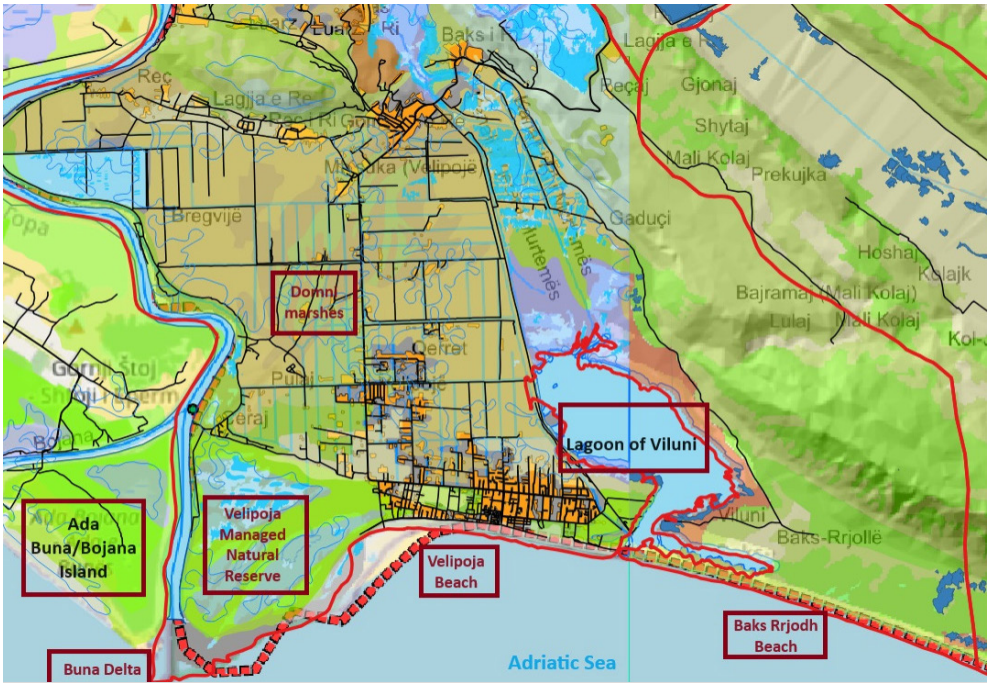


Figure 3: Velipoja landscape complex 1.Buna/Bojana delta 2. Velipoja Managed Reserve 3. Viluni Lagoon 4. Baks Rrjolli coastal zone 5. The freshwater marshes of Domni and Murtemza (Source: the author., 2023)

The Albanian part of the Buna/Bojana basin part is an Important Plant Area (IPA) (Plant life International, 2021). "Protected Landscape of Buna River – Velipoja" is designated as an EMERALD candidate site (Directorate of Democratic Participation EU, 2021). Despite its high natural values, the area is significantly threatened by unsustainable, unplanned, and illegal activities, as well as a lack of integrated management and shared values for joint planning. Stakeholders are many and from different fields and levels (tourism, fisheries, agriculture, infrastructure, pollution, nature protection, water management, disaster risk reduction), often independently and individually developing sectors and realizing interests. Practices of opportunism in planning of protected areas as well as proclaiming protected areas with no substantial de facto outcome are common for the region and here. It is evident that the processes of effective protection and integrated management are not yet in place and that synergies need to be enhanced and mainstreamed. The Velipoja Managed Reserve, an alluvial coastal forest and a wetland complex created by Buna delta and the Adriatic Sea, is well-known for the high diversity of flora and fauna, including rare and

threatened species at national and regional scales (Dhora *et. al.*, 2010). The Buna/Bojana delta offers important food sources for fish, spawning grounds, nursery and migration paths on which fish stocks depend (either within the wetland or other habitats connected to them). This area is also very important hydrographically and is well-known for its high ecological sensitivity. The so called "hydrologic junction" Shkodra Lake - River Buna - River Drin determines the hydrological regime of Shkodra Lake, River Buna itself, and their tributaries, and has an important impact on the morphology and water regime in Buna delta in the south-eastern Adriatic (Beqiraj *et. al.*, 2010).

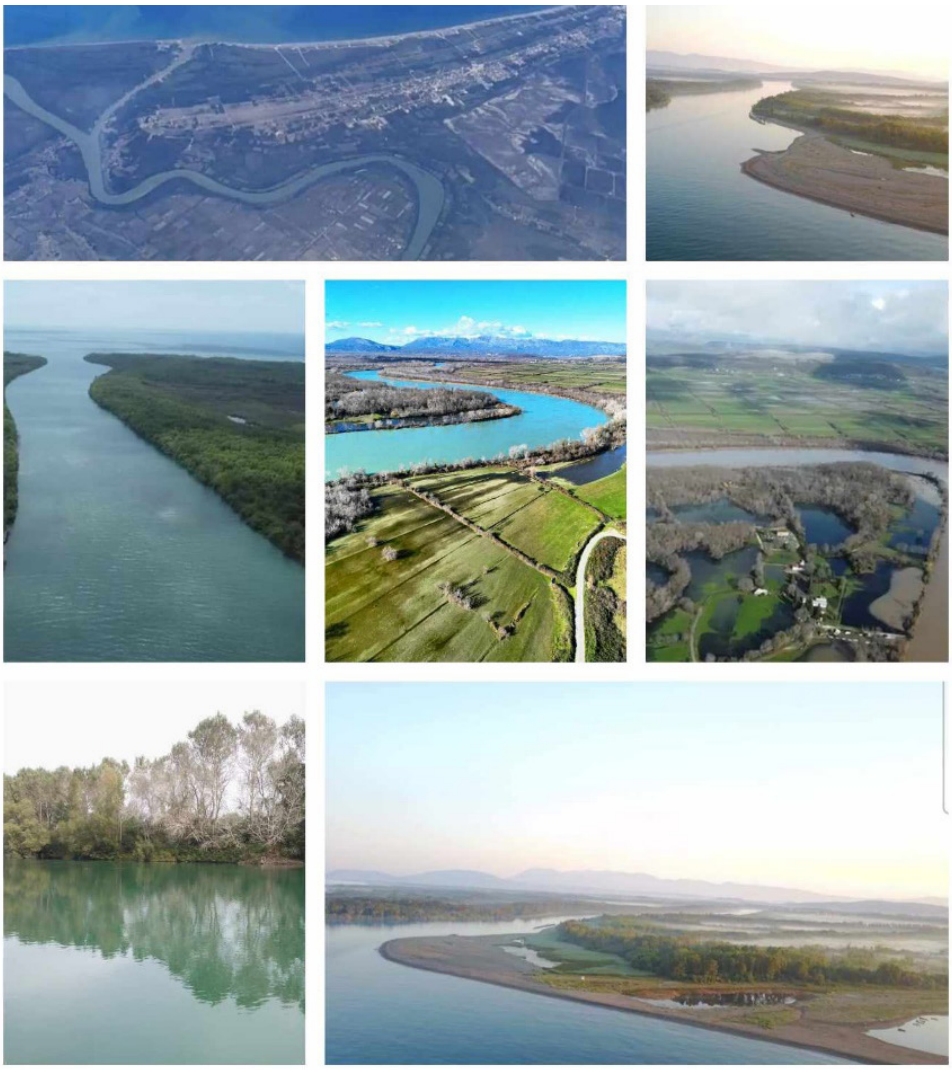
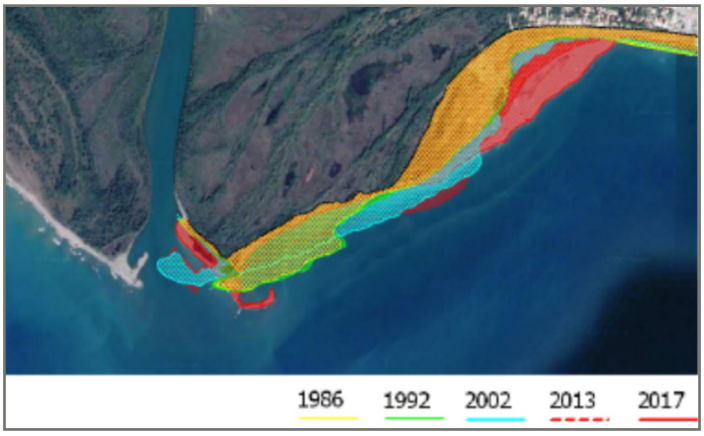


Figure 4: River Buna/Bojana delta (Source: the author., 2023)

On the Albanian coast, erosion has become a major problem in the last 3 decades, mainly related to human activity and especially to hydrological changes and river damming. In the Buna/Bojana delta, the Velipoja coast is one of the areas highly impacted by coastal erosion. Accumulation during the period 1950–1984 is estimated to be from 5 to 10 m yr-1. Erosion during 1986–2017 was extensive in some parts, occurring at a rate of 3 m yr-1 in Ada area (Montenegro) and 4 m yr^{-1} in Albania (Drin Corda., 2019). Franz Jozef Island disappeared entirely in 2016. The morphology of the Buna/Bojana deltaic complex is believed to be affected by a combination of factors:
- alteration of the water flow regime in the Drin – Shkoder/Skadar – Buna/Bojana system due to the construction of the cascade of dams on Drin;
-entrapment of sediment in the upper part of the watershed by the dams;
-reduction of the sediment transport capacity of the Drin in combination with the natural low gradient of the channel of Buna/Bojana River resulting in the deposition of alluvium (coming from erosion in the tributaries of Buna/Bojana and Drin) preventing this from reaching the Buna/Bojana mouth at the Adriatic Sea. The sediment deposition in Buna/Bojana River causes reduction of the speed of water further resulting to additional deposition of sediment;
-variability of the wave activity and sea level in combination with short-term events (storm waves and tides) and long-term processes (sea transgressions).



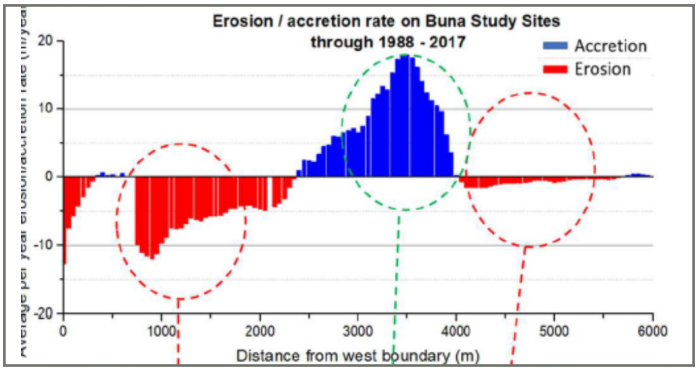


Figure 5: Erosion rate on River Buna delta through 1986-2017 (Hermes project., 2019)

Morphologic transformation in River Buna Delta over the recent years, analyse the endogenic and exogenic causes having dictated the dynamics of the coastline. There has been briefly examined the role of the geologic factor in this spatial change, by mentioning in order of importance the lithologic and structural composition, as well neotechnic movements. Velipoja beach, which is also one of the largest in the country, has generally preserved the same conditions since 1980, but the dynamic change of deposition and erosion south of Buna outlet has triggered a chain phenomenon alternating deposition and erosion in narrow sections even on Velipoja beach. Over the recent 10 years, the coastal segment that stretches between the communicating channel of Viluni lagoon and as far as Rana e Hedhun, has been eroded at a value of 1.5-3 m/year. The coastal segment belonging to the Rrenci SW edge remains stable because of strong rocky composition. The Velipoja wetland complex with a surface of 8.2 km has the shape of a triangle in the Buna delta east of the Buna River. About 6.4 km^2 are fenced and protected as Managed Natural Reserve. The Velipoja beach and the dunes form the coastal profile of Velipoja, where large sandy beaches of about 10 km length and up to 200 m width extend along the coast. The adjacent prodelta areas on both sides of the river cover 8 km^2 with a depth reaching 25 m. Velipoja Managed Natural Reserve were created in 1958. In it, vegetation and birds are in their very best natural state. This reserve has in its interior four forest belts as well as four marshes, which are connected by land to each other. Through this reserve, by road between dense forests, the mouth of the Buna River is reached. This point has a rare beauty, as there are three islands, a large one called Ada and the other two that are smaller (Dhora *et. al.*, 2010). The reserve, for its part, in the southern part of its territory, is bordered by the Adriatic Sea Coast, from the western part, it is bordered by the Buna River, while in the northern and eastern parts, and it is bordered by land.

Figure 6: Velipoja Managed Natural Reserve (Source: the author., 2023)

The marshes are strongly influenced by the dynamic processes of the Buna water regime with seasonal changes in the water flow as well as by the tides and waves of up to 3.5 m caused by strong winds. Several drainage channels link the marshland with the Buna allowing the control of the hydrological regime through special ports. Four roads starting from the main entrance facilitate the visitor to attend the different marshes and forest habitats. However, urbanization of the coast between the Reserve and the Lagoon increased rapidly during the past decade, especially focused on tourism infrastructures - all this pressure with obvious negative effects on the erosion of the coast, deforestation and destruction of the sandy dunes, water pollution and resulting ultimately in a loss of biodiversity.

Velipoja/Pulaj Beach (the southern extreme of the beach is only 10 m. far from the Viluni draining channel). This beach is considered the most important tourism site for North Albania, as thousands of visitors come to this site during the summer holidays. The beach, 3700 ml long, is situated between Velipoja forest and Viluni Lagoon. Currently, the beach of Velipoja (the oficial name of the village of Pulaj) has a population of 1082 inhabitants, of which 50 per cent have arrived in the last 15 years. On Saturdays and Sundays, the number of visitors exceeds 60,000 people. Given the reputation of tourism as a reputable business, several hotels have been built with rooms ranging from 6-30 complete with other service facilities. In addition,

there are about 120 bars and restaurants all newly constructed made on the preference and personal plans for growth with no coordination at all and without any development perspective for making Velipoja an area of quality tourism.

Figure 7: Velipoja/Pulaj Beach (Source: the author., 2023)

The Lagoon of Viluni is one of the major lagoons in our country and represents a special geographical object in the system of the lagoons of the Albanian shore of the Adriatic. This lagoon is situated about 7 km away from Buna River, 2 km away from the Velipoja beach and about 12 km away from Shëngjin (CARDS., 2006). Its surface of 2.96 km^2 changes throughout the year especially during winter and summer, depending on the amount of water accumulated by rainfalls. It is 3 km long and 0.9 km wide and represents the remaining part after the drainage of the former large wetland complex of Pentari – Domni – Mërtemza - Velipoja. Viluni is the most important transitional habitat in the whole Velipoja complex. The typical coastal lagoon is separated from the sea by two long shore barriers. It is characterized by mostly shallow water of 0.8 to 1 m depth, in a few parts occasionally rising

to 2 to 3 m. It relates to the sea by a channel, 300 m long and 30 to 40 m wide, and of 2 m depth, by which the brackish water exchanges with the seawater with a periodicity of the tide The waters of the channel of Mërtemza pour into the lagoon. This channel accumulates all the waters of the whole field of Shkodra lowland of 6 hours. The Viluni area is a most sensitive ecosystem but disturbed by environmental factors. The Domni and Mërtemza marshes collect large amounts of freshwater from the marshes of Buna in the eastern part, from where nutrients rich water from large agricultural and industrial areas is continuously discharged into the lagoon. In the past decades, the afforested zone around the lagoon has been heavily damaged by human action, thus only about 0.37 km^2 of a sea-pine forest still exists.

Figure 8: The Lagoon of Viluni and the wooden bridge overthe Viluni, connecting Baks Rrjolli with Velipoja (Source: the author., 2023)

Baks Rrjolli Beach, extending along the coastline to the east of Viluni Lagoon. Here the beach tends to be narrower and has the spectacular backdrop or the southern part of the Renci hills in the near background. The zone extends along 11 km of the coast, from Viluni to Rana e Hedhun (blown sand) and passes the Baks Rrjolli village to the southern part of the Rrenci hills. It forms a specific combination of habitats along the coast with karstic caves, mountain slopes, sandy dunes, alluvial forests, tamarisk marshes, interstitial pools combined with a fine beach.

Figure 9 (left): Dune near Rrjolli (Source: the author., 2023)
Figure 10 (right): Renci hills and dune (Source: the author., 2023)

4. Velipoja coastline facing the challenges on territory and local infrastructure

In global scale, the coastline is under the constant pressure of the concentration of population, buildings, and economical activities. The year 1990 brought radical changes in the political, economic, social, and environmental system for former communist Albania. These changes were necessarily reflected and affected the coastal area of Velipoja. The dynamic and chaotic developments of the territory in this space turned out to be informal in most cases after the 1990s, which brought about increasing social problems that in many cases still exist today as a legacy. In the early 1990s, an influx of construction (light construction) for commercial purposes began. All cases of construction in Velipoja are cases of development on a single plot, where the builder tried to achieve the highest possible profit from the investment. After the nineties, the administrative territory of Velipoja commune, unlike the other communes of Berdica, Dajçi and Ana e Malit, was declared "the area with the priority for tourism development" with the decision of Council of Ministers nr.81, dated 1.3.1993. For the territory of Velipoja commune, by an Italian company (in 1994), was designated, the master plan for tourism development, which was endorsed by the Council for Territory Adjustment of Republic of Albania (CTARA), with the Decision nr. 31, dated 23.8.1994. In the beach area, was planned to be developed approximately 3700 beds, in the accommodation structures such as hotels, touristic villages, camping, touristic residential buildings, etc, in a total surface of 99,000 m^2.

Aiming the accommodation of the development demands, and the adjustment of the informal settlements, with the decision no.1 dated 18.06.2003 by the

Council for Territory Adjustment of Republic of Albania (CTARA) have been endorsed another urban study, prepared by the Urban Institute of Albania.

Figure 11: Remake- urban study for tourism development in Velipoja, endorsed by the Council for Territory Adjustment of Republic of Albania, with the Decision no.1 dated 18.06.2003 (National Urban Institute)

In 2008, in the framework of the "Community Works III" program, the Albanian Development Fund (ADF), assisted Velipoja commune in preparing the Local Development Plan and Spatial Plan, with the main objective, of tourism development, as part of the SCRD. The framing process of the plans, involved mainly the commune staff and inhabitants, excluding the participation of the central government as responsible part for administration and endorsement of territorial plans for the area. The project on spatial plan, is focused on the revitalization of the Buna river delta, through the setting up of an recreational place (harbor, villas, restaurants, bars, view-points, etc) which is integrated with Velipoja beach area, through road network for pedestrians, bicycles, waterways, and automobiles. This

plan is called “spatial plan”, but the content and the components are related with an detailed plan for Buna river Delta (Albanian Development Fund – Program “Community Works III” – 2008-2011) (Paloka .,2012). According to the law no. 10119 of 2009, Buna River protected area, being under the administration of the MEFWA (Environment Protection) and the Ministry of Tourism, Culture, Youth and Sports for the tourism development area, can be categorized as a “territory of national importance” where the interests of national and local authorities have to be harmonized in the Integrated Territorial Plan (ITP). The ITP, will be based on the national, regional and local strategies, plans and regulations. The integrated plan, will be a cross-sectorial one, coordinating vertically and horizontally all the national sectorial strategic documents and the local strategic development documents. The existing documents at national and regional level, to be considered in the planning process, are:

- The strategy documents and environmental protection laws;
- The strategy documents and law on tourism development and other regulations;
- Strategic Regional Development Concept for the period 2010-2015 of Shkodra county;
- The Local Development Plan of Velipoja commune.

Infrastructure provision is generally poor with low levels of maintenance of local roads and an inadequate water supply. The villages supplement the potable water needs with individual drilled wells, and for the sewage there are solutions of individual septic tanks creating a health hazard for the inhabitants. The informal settlement/buildings, and the formal settlements are partially or not at all served by the infrastructure services. The existing networks of power, potable water, and sewage are completely worn out. There are no plans for their development, or management plans for the existing services.

In the field of the territorial planning, it is very important that the central and local government strength planning and development control system. There is a need for a strong planning system which has the capacity to initiate the planning processes, endorse plans and control the territorial development. The local authorities in cooperation and coordination with the responsible ministries

have to initiate immediately the framing of:

• Integrated Territorial Plan for the protected area of Buna river (integrating the local interest for future development, and other aspects of environment protection, and tourism development);
• Detail Territorial Plan for the urban integration of informal settlements (consolidation areas), after the legalization process is finished.

The government have to be engaged seriously to finish as soon as possible the two most important processes: legalization of the informal settlements/ buildings, and restitution of the properties to the historicowners (Paloka .,2012).

5. Conclusions

The organization of the coastal space of Velipoja is an important and complex process. The territory of Velipoja has a very good coastal location. This is an important premise for the development of marine economy, transport, trade, and tourism, especially when the coastal area of Velipoja is valued more than ever. Velipoja coastline has been affected by many negative phenomena such as: abrasion, damage of sandy dunes, vegetation. Planning processes and policies either do not consider the biodiversity and natural values of the area (suficiently for its sustainable use), or do not create an enabling environment for cross sectoral planning. They rather put everybody's interests together and the power of influence prevails. Plans are very often made without clear strategic directions and vision, and often based on interests. The administration unit rapid urbanization including apartment buildings, hotels and potential resorts is regularly not supported by satisfactory planning documentation. The potential for developing ecotourism all year in Velipoja is enormous. For start is important to identified some elements establishing it: - health tourism – would require mapping of health-related resources (medicinal plants, recipes – e.g. cooking pomegranate peel, etc., creation of "health trails" etc.) - immersion in old customs (demonstration of tradition to tourists through direct experiences, such as cooking traditional food.) - ecological facilities – locals identified an important element of eco-tourism is sustainable use of resources and consumption, with one of their main ideas being using restaurant bio waste to create compost on farms or to use as feed to animals

- promotion – through use of information boards, websites, marketing using social media etc.

The zonation of the Buna River Ramsar Site in Albania is a good example of how the proposed zonation can be transformed into a legal protection. The Velipoja tourist destination will profit in future from the strict protection of the beaches, the Velipoja Reserve and the Viluni lagoon. The priority would be the construction of the sewerage network in Ças, Reç i Ri and Sektor and in the future in other villages of the area. Improving the cleaning and environmental protection service would be a recommendation regarding the coastal area of the Velipoja. The continuous growth of the population, the increase of constructions and the large attendance of the beach during the summer period makes it necessary to improve the cleaning service and the protection of the environment. The priority is the placement of garbage bins in every village of the area and the cleaning of the protected area from the thrown garbage. Being a tourist area also makes necessary the improvement of other services such as the public lighting system, the construction of sidewalks, the construction of public bathrooms in the beach area, the development of the telecommunications system and the increase of the electricity supply.

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Territories continue to transform due to endogenous and exogenous development drives. The thickening of logistics and transport networks, large commercial hubs, energy supply options, agricultural and industrial policies, tourism and migrations constitute then, individually and in a systemic sense, some of the lenses available to read the transformative dynamics of territories in the crucial current geopolitical context. In addition, the increasing reach of digital technologies in the spaces and practices of our daily lives, has changed the way we perceive and use the landscape. These transformations find a reified outcome in landscape transitions, becoming a foothold for a trans-scale geographical reflection. We therefore want to insert this volume on this horizon. In fact, we have wanted to stimulate the geographical community to try their hand at landscape analysis to identify, through methodological and/or applied research contributions, problems, practices and trajectories inherent in the transformative dynamics of territories, compressed between the urgency of development and the need to change the energy and consumption paradigm.

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