MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM

ICZM and IWRM: IRMP for the Bojana/Buna area, Montenegrin experience

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IMF: Pilot project for Buna/Bojana area

ICZM Strategy of Montenegro and CAMP

- Vulnerability assessment based on environmental components and natural risks
- Natural hazards assessment – **CC**, seisimic and erosion
- Attractiveness (agriculture) and suitability for agriculture assessment – open space concept
- Land use assessment

Adopted by the Government in 2015

- Socio-economic studies
- Tourism carrying capacity assessment
- Institutional – legislative assessment
- Capacity building and public participation process

- **ICZM Strategy with Management plan and Action plan**

ICZM Protocol

ICZM PROTOCOL
Signed in 2008
Entered into force 2011

ART 18 – NATIONAL COASTAL STRATEGIES, PLANS AND PROGRAMMES

ART 5 – OBJECTIVES OF ICZM are to:
c) ensure the sustainable use of natural resources, particularly with regard to water use;
d) ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology;

ART 6 – GENERAL PRINCIPLES OF ICZM
b) All elements relating to hydrological, geomorphological, climatic, ecological, socio-economic and cultural systems shall be taken into account in an integrated manner, so as not to exceed the carrying capacity of the coastal zone and to prevent the negative effects of natural disasters and of development

ICZM Protocol

ART 9 – ECONOMIC ACTIVITIES
(e) UTILISATION OF SPECIFIC NATURAL RESOURCES

iii) To monitor coastal aquifers and dynamic areas of contact or interface between fresh and salt water, which may be adversely affected by the extraction of underground water or by discharges into the natural environment.

I(CZ)M PLANS AND STRATEGIES IN MONTENEGRO:

- ICZM STRATEGY FOR MONTENEGRO
- TRANSBOUNDARY MANAGEMENT PLAN FOR BUNA/BOJANA (Albania/Montenegro)

IMF: Pilot project for Buna/Bojana area

CHALLENGES

Integrating management approaches (IWRM, ICZM)
Integration among domains/sectors responsible for natural resources / spatial areas
Integration of regional legal instruments (WFD and ICZM Protocol; additionally MSFD)
Transboundary integration

ISSUES

- Lack of information and data / different sets of information and data formats
- Responsibilities of institutions within and among countries

OPPORTUNITIES

- Answering to requirements of different legal obligations with single approach
- Rationalization of approach (resources, time)
- “Holistic” planning
- Learning from each other – basis for joint management of resources
- Building national capacities
- Replication to other areas

Box 1: Integrative Methodological Framework

As part of the MedPartnership project, the Priority Actions Programme/Regional Activity Centre (PAP/RAC), the UNESCO International Hydrological Programme (IHP) and the Global Water Partnership – Mediterranean (GWP-Med) jointly proposed the use of a comprehensive Integrative Methodological Framework (IMF) for the sustainable management of the ecological continuum, comprising the coastal zone, the river basin and the coastal aquifers. The framework encourages and facilitates planners, practitioners and interested parties to make shared, efficient and effective use of the relatively limited resources. The IMF is intended to support better coordination, integration and involvement of all stakeholders at all stages of the decision-making process. It also integrates climate change as an important cross-cutting issue for planning and implementation processes in the coastal zone.

Source: GWP-Med, PAP/RAC and UNESCO-IHP, 2015.

Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, 2015

Figure 7: Transboundary zone: sub-basin, aquifer and marine zone

Figure 11: The administrative boundaries of the plan area

Table 1: SWOT analysis from the Scoping Report for the Buna/Bojana area

Strengths	Weaknesses
Environment ▪ Rich biodiversity; area of particular importance for migratory wintering waterfowl and water birds *Socio-economic factors* ▪ Significant economic development potential in eco-tourism (and related services), agriculture ▪ Cultural identity and traditional ways of living preserved (although under pressure) *Institutional and legal framework* ▪ Harmonization with EU legislation for a number of policy areas is ongoing ▪ General commitment to sustainable development in policy documents *Cross-border cooperation* ▪ Scope of cross-border cooperation is growing ▪ Mechanisms for joint management of shared natural resources are becoming accessible ▪ New funding sources are becoming accessible	*Environment* ▪ Inadequate pollution control, in particular water pollution (from urban development and tourism, navigation) and waste disposal ▪ Recorded biodiversity loss (habitat destruction and species decline) ▪ Environment is rarely prioritized in development and implementation of spatial and other plans ▪ Management of natural hazards (climate change, flooding, earthquakes, weather extremes, erosion) *Socio-economic factors* ▪ Quality of tourism offer is dissatisfactory with short seasonal visitation peaks exhibiting characteristics of mass tourism *Infrastructure* ▪ Underdeveloped transport and environmental infrastructure; some problems with energy supply networks ▪ Capacity to attract funding and management of infrastructure remains limited *Institutional and legal framework* ▪ Weak implementation and enforcement ▪ Insufficient institutional capacities, including coordination among relevant institutions, sectoral policies and different levels of government *Cross-border cooperation* ▪ Formal cooperation agreements are not always followed by operational measures ▪ Development planning is not coordinated ▪ Poor infrastructure connections
Opportunities	**Threats**
Environment ▪ Alignment with EU standards and strengthened implementation to improve environmental quality are priorities for EU accession *Socio-economic factors* ▪ EU and international support available for sustainable development of the area ▪ Support is available for innovation, development of a knowledge-based economy and competitiveness ▪ Growing interest from foreign tourists in natural and cultural values of the area *Infrastructure* ▪ Favourable funding becoming available from a larger number of sources (e.g. IPA funds) *Institutional and legal framework* ▪ EU integration (as a vehicle to upgrade legal and institutional systems) ▪ Synergetic effects of integrated approaches to management of human activities ▪ Consensus building *Cross-border cooperation* ▪ International donors favouring cross-border cooperation, in particular in the fields of environment and transportation	*Environment* ▪ Consequences of natural hazards (flooding in particular) exacerbated by climate change ▪ Continued improper waste and wastewater management, decreasing the attractiveness of the area ▪ Lack of investment in natural resource management *Socio-economic factors* ▪ External economic shocks and potential new crises affecting local prospects ▪ High susceptibility of the tourism sector to economic contraction ▪ Impacts of climate change on the economy *Infrastructure* ▪ Lack of funding hinders further development *Institutional and legal framework* ▪ Prolonged inability to implement laws and policies, discontinuation of institutional reforms ▪ Change in political priorities *Cross-border cooperation* ▪ Bilateral agreements implemented in an ineffective manner ▪ The countries do not capitalize on outcomes from internationally supported projects

Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, 2015

4. Developing the plan: identifying drivers, pressures and impacts

A DPSIR framework has been employed to structure analysis of the complex interplay between topic areas and responses, which is directly linked to the measures and priority activites. The DPSIR provides a systemic insight into the ways in which, for example, social and economic **driving forces**, such as the attractiveness of coastal zones, act in conjunction with weak institutional capacities leading to the creation of **pressures** on the environment such as unplanned urbanization. The **state** refers to the quantification of that issue (e.g. widely dispersed unserviced development and number of illegal constructions). This in turn leads to **impacts** on ecosystems, landscapes and water pollution or the cost of infrastructure services. The **responses** (or lack of) might include, for example, measures to improve regulation or financial instruments to deter such development. In turn, these responses affect the driving forces, pressures, state and impacts. In reality, the relationships are not so linear and the driving forces, pressures, state and impacts interrelate in complex and overlapping ways (Figure 5).

Figure 5: The DPSIR cycle

Plan objectives

- **Improve transboundary governance and cooperation**

• Establish an appropriate mechanism to ensure that relevant issues of transboundary importance (e.g. tourism based on cultural and natural heritage, sustainable use of natural resources, environment protection, climate change adaptation and mitigation, risk prevention and
management) are considered and acted upon bilaterally. Establishment of the mechanism shall be based on a formal transboundary cooperation arrangement, negotiated and agreed between the two countries

• Strengthen cooperation through joint actions for the management of the transboundary area, in particularly through the increased use of appropriate EU (or other) funding programmes, such as the Instrument for Pre-accession Assistance (IPA II) 2014-2020 with the objective of contributing to economic development and reducing regional imbalance

• Raise awareness and improve communication of the natural and cultural values of the plan area, including potential threats and development opportunities

- **Support policy changes at the national level**

• Change and/or improve national regulation(s) including better enforcement, with priority accorded to sectors linked to water use and consumption, protected areas, coastal management, fisheries, hunting, waste management, sand extraction and similar

• Improve the spatial planning system

- **Develop and make better use of the knowledge base for management of the transboundary area**

• Establish an observation mechanism to assess and regularly update information on the built and natural environment. The mechanism should take the form of two mutually cooperating separate national-level monitoring systems using commonly agreed parameters and techniques or the collection and analysis of information. An agreed (in terms of characteristics and volume) a minimum set of data should be defined according to international standards (e.g. WFD, Barcelona Convention, UNECE, EEA) and shared between the two countries

• Support the integration of scientific data into the (spatial) planning process

• Improve the human and technical capacities of local administrations to implement the plan

Plan objectives

➢ Improve the ecological and chemical status of water bodies

• Improve the quality of inland surface and marine waters

• Secure the availability of good quality water for all uses, including ecosystems and sustainable water use and consumption

• Maintain the natural quality and hydrological conditions of small wetlands

• Improve groundwater status in terms of quality and maintain the function of coastal aquifers to prevent or reverse salinization trends

• Decrease eutrophication and improve the ecological quality of transitional and coastal waters

➢Protect and enhance the area's high biodiversity value

• Protect and enhance the biodiversity and natural values of the transboundary Buna/Bojana area

• Improve the management of protected areas

• Reduce and/or eliminate the impacts of hunting on biodiversity

• Promote sustainable fisheries

➢ Help raise the economic and social wellbeing of the area's communities

• Support the greening of economic activities

• Promote sustainable economic development of the plan area through tourism that respects the area's high natural values and valorizes its natural and cultural heritage – maximizing its economic value to local communities. Realizing this objective requires the implementation of objectives and related measures to improve sanitation, water quality, biodiversity, protection and waste management that influence tourism development. The area's ability to accommodate visitors to acceptable standards should be developed in parallel

• Improve waste management in the area

➢ Increase the plan area's resilience to climate change and natural disaster impacts

- Decrease flood risks
- Protect the coastline from climate change impacts and natural hazards resulting from unsustainable development

➢ Improve the quality of the landscape

Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, 2015

Figure 6: Integration of drivers with policy areas and corresponding objectives and measures for their achievement

Key activities for the implementation of the IRMP

Framework Agreement for the Sustainable Management of Skadar/Shkodra Lake Basin and Buna/Bojana Area

-there is no permanent body to enable functional transboundary cooperation in all areas of importance for the two countries or areas that have been identified in this plan - initiate the process to adopt the cooperation agreement and establish a coordination mechanism
- based on the agreement, project proposals to ensure further funding (including national allocations) should be prepared, highlighting the plan priorities

✓ The National Council for SD, CC and ICZM of Montenegro on its 30 Session held in June 2016 had considered the Plan and the related Framework Agreement

➢ The Agreement hasn’t been signed yet

Sustainability of results

1. Replication of vulnerability mapping in other coastal aquifers
2. Replication of mapping of groundwater dependent wetlands in other areas, application of management guidelines
3. Key prerequisite for long-term sustainability is public awareness!
4. Internalisation of the costs of the environmental degradation leads towards long-term sustainability!
5. Clear responsibilities and resources with an adaptive approach to management lead towards long-term sustainability! As for the ICZM, National ICZM Strategy should secure recommendations for sustainable institutional framework with its financial requirements
6. Economic instruments are among key instruments for sustainability

Lessons learned/challenges

Responsibility for water issues spread among many different ministries; there is a need to ensure good communication between all, in particular to improve coordination between Ministries in charge of Water Resources and Environment

Poor consideration of groundwater and coastal aquifers in national legislation, general need for improvement regarding requirements of Barcelona Convention and related protocols

Groundwater resources are essential to human livelihoods in the region and a healthy Mediterranean ecosystem. Coastal aquifers need further characterization and monitoring to reduce the risks of pollution, seawater intrusion and over-extraction.

Lessons learned/challenges

- Analysis of the national legal and institutional framework is a strong support for the ICZM Protocol ratification and opens the door for its implementation

- Participatory approach highly increases chances for the implementation of the policy documents and contributes immensely for raising awareness; but may slow down the process

- ESA provides clear indications for internalisation of the costs of environmental degradation and secures strong and direct support to the implementation of the article 9 of the ICZM Protocol

- Preparation of National ICZM Strategy is appropriate first task for the countries that have ratified the ICZM Protocol

- Inspired and motivated national coordinators are among the keys of success

- When acting in partnership, lead institution needs to be agreed

- Wide governmental involvement is possible only when dealing with the key actual, relevant and important national issues!

Thank you

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