

# ICZM Strategy for Georgia (Draft, 31 July 2008)

## Introduction

Integrated Coastal Zone Management is a dynamic, multi-disciplinary and iterative process (see box below) to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense) and decision making, management and monitoring of implementation. ICZM uses the informed participation and co-operation of all stakeholders to assess the societal goals in a given coastal area, and to take actions towards meeting these objectives. ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics.

"Integrated" in ICZM refers to the integration of objectives and also to the integration of the many instruments needed to meet these objectives. It means integration of all relevant policy areas, sectors, and levels of administration. It means integration of the terrestrial and marine components of the target territory, in both time and space<sup>1</sup>.

The origin of Integrated Coastal Zone Management (ICZM) in Georgia can be traced back to the initiation of the regional Black Sea Environmental Programme (BSEP) in 1993. In 1995 Georgia responded to the recommendations of the BSEP and initiated the National Integrated Coastal Zone Management Program (GICZMP). In implementing the provisions of the regionally agreed Black Sea Strategic Action Plan (BS-SAP, 1996), Georgia has committed to producing National ICZM Strategy and Action Plan and this was mandated by Presidential Decree 608 in 1998 – an important development step in the preparation and the implementation of the GICZMP.

Georgia's Integrated Coastal Management Project (GICMP) was initiated in 1999 and funded by the World Bank and the Global Environment Facility in order to provide assistance in the preparation and implementation of Georgia's ICZMP as well as the implementation of the regional Black Sea Strategic Action Plan (BS-SAP). Presidential Decree 608 also established the State Consultative Commission (SCC) for ICZM, to manage the process of ICZM development in Georgia, which stopped functioning in 2006.

The ICZM Working Group for Georgia was reinitiated in 2007 by the EuropeAid project "Environmental Collaboration for the Black Sea", aiming to continue the work of the SCC. It has coordinated the process of developing this Draft National ICZM Strategy for Georgia.

### ICZM – an iterative, circular approach

As illustrated in this graph, the stages of ICZM (Initiation/information collection; Planning/decision making; Implementation/management; Monitoring/Evaluation) must be considered as an iterative and circular approach. Iterative because during any stage it may become clear that the former stage was not done properly. Circular because during the ICZM process improves the understanding of the Coastal System and new development opportunities and threats will come into being. These will have to be addressed through all stages again. Such a new cycle might be a 'project' handled within the existing ICZM process, or a "policy" if the scope of the existing ICZM program must change, or anything between.



<sup>1</sup> Source: Communication 2000/547 from the Commission of the European Communities to the Council and the European Parliament On Integrated Coastal Zone Management: A Strategy For Europe

Much of Georgia's coastal zone is subject to significant anthropogenic pressures causing the decrease of forest areas, pollution of marine waters, degradation of wetland habitats, and overfishing. Waste is not being managed sufficiently, which is due to inadequate planning of human settlements and absence of adequate standards.

Today, there is widespread poverty on the coast. This not only increases pressures on coastal environmental resources (e.g. for fuel and food) but severely restricts the availability of finance to undertake necessary investments (e.g. in infrastructure or coastal defences). However, the coastal zone is still significant not just because of its environmental assets; it is important to national identity and to links with Europe, and has the potential of playing again an important role in the national economy, with tourism development rapidly picking up.

Georgia's Tourism Development Plan and Strategy of March 2008 states that nature-based tourism in rural areas has great potential as a source of job creation and income generation for local communities and that consequently the protection of environmental assets can be regarded as protection of job-creation and income-generating assets. It concludes, however, that "without planning for environmental impacts and pressures on infrastructure of tourism, a destination can easily become a victim of its own success. The attractiveness and aesthetic appeal of the destination is diminished, thus driving down the value and quality of the place". The document furthermore warns that the current fast-paced development on the Black Sea Coast is overwhelming the infrastructure capacity, particularly the sewage system and water supply.

Integrated Coastal Zone Management is being promoted by the European Union as an approach to achieve sustainable development along the coast, thus profiting both nature and people. An evaluation of ICZM activities since the European Council and Parliament issued their ICZM Recommendation in 2002 concluded that the approach indeed contributes to reconciliation of economic, social, environmental interests and improves livelihood of coastal citizens.

Georgia is signatory to the Convention on the Protection of the Black Sea against Pollution (Bucharest Convention, 21 April 1992) as well as the Odessa Declaration, a ministerial declaration on the protection of the Black Sea signed in April 1993, which recognised the need to elaborate and implement national coastal zone management policies, including legislative measures and economic instruments, in order to ensure the sustainable development in the spirit of Agenda 21.

So far, Romania is the only Black Sea country that has an ICZM Law, a Draft ("Outline") ICZM Strategy and a National Committee for ICZM, which coordinates coastal planning and management. In Ukraine, an ICZM Law is under preparation. Bulgaria has also developed ICZM legislation in the past but it is not in force yet. Several pilot projects have been implemented around the Black Sea, e.g. in Russia in the resort town of Gelendzhik and in Turkey in Agcakoca District.

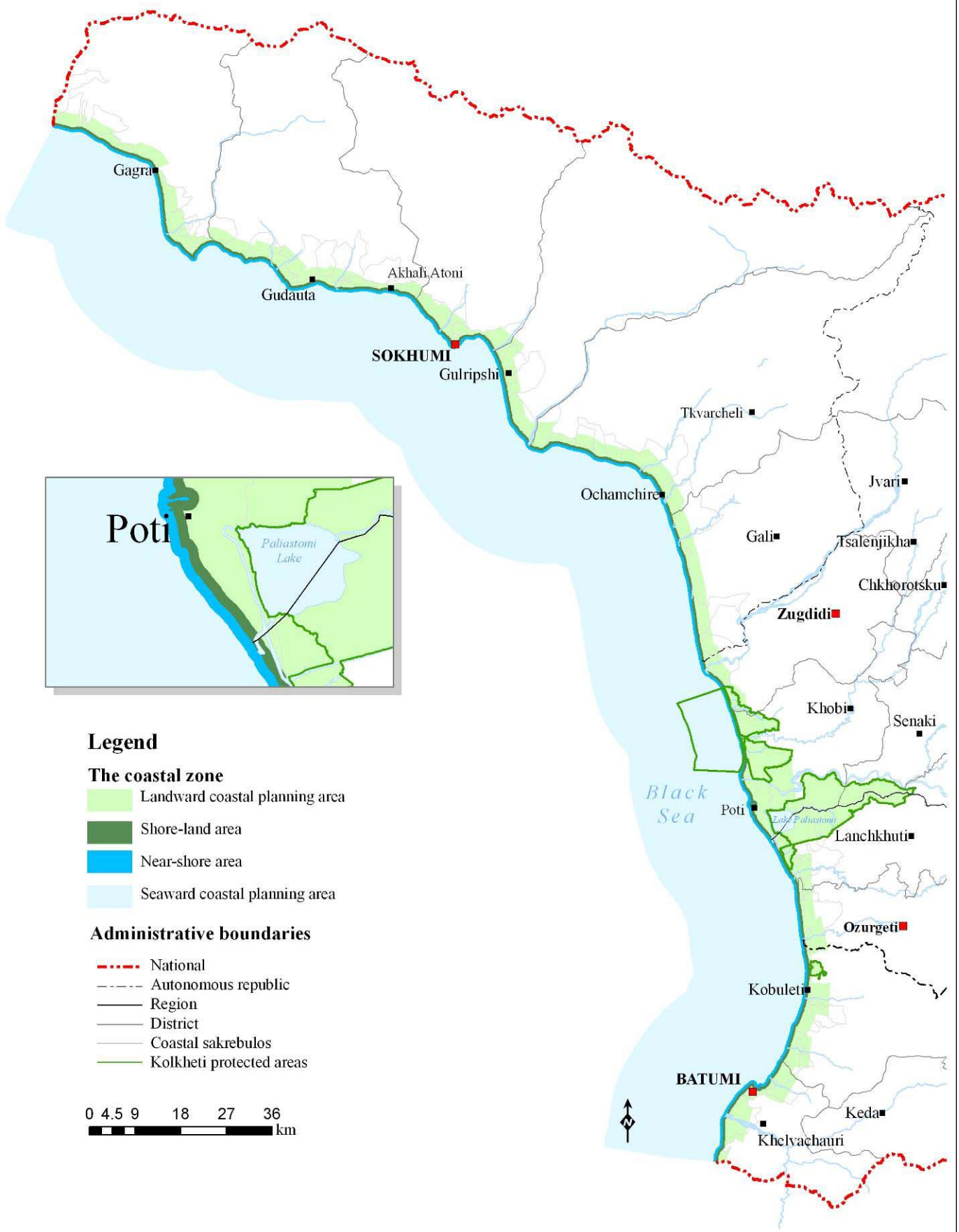
In Georgia, although a Draft Law has been prepared for intersectoral consultation, there is currently no strategy for managing coastal and marine resources or planning for socio-economic development and environmental protection in the coastal zone on an integrated basis, although a number of sector initiatives have commenced. These include the Ports Policy, the Tourism Concept and Government of Georgia Ordinance #15 of April 2004, "On the measures to restore order in land use and construction (development) activities at the Black Sea coast of Georgia". All of these refer to the requirements for ICZM in Georgia. A 15 year Poverty Reduction and Economic Growth Programme for Georgia has also been approved by Government and the international funding community. A National Tourism Strategy is underway which has been integrated as far as possible with this ICZM Strategy<sup>2</sup>.

The definition of the Coastal Zone for this ICZM Strategy is based largely on boundaries administrative units to aid interpretation, but also taking account of those habitats and ecosystems that are directly affected by the marine environment – such as coastal dunes or wetlands, and other key environmental assets in the coastal area (see illustrative Map below and the Appendixes).

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<sup>2</sup> There is a long list of other laws and regulations that need to be taken into account when managing coastal resources such as the above-mentioned Government of Georgia Ordinance No 15 of April 2004, the Law of Georgia on Recognition of Titles to Land Plots of Natural and Legal Persons Owning (Managing) Such Plots, and the Ordinance of President of Georgia No 525 of September 15, 2007 on Approval of the Rules for Recognition of Titles to Land Plots of Natural and Legal Persons Owning (Managing) Such Plots and Form of Certificate Confirming Ownership.

# The Coastal Zone (an illustrative map)



## Legend

### The coastal zone

- Landward coastal planning area
- Shore-land area
- Near-shore area
- Seaward coastal planning area

### Administrative boundaries

- National
- Autonomous republic
- Region
- District
- Coastal sakrebulo
- Kolkheti protected areas

0 4.5 9 18 27 36  

0
4.5
9
18
27
36
 km

## ICZM issues

Ten priority issues have been defined that need to be addressed by the ICZM Strategy:

### ***Governance***

Decision making in Georgia is still quite centralised, which means that it is difficult for coastal stakeholders to shape and take decisions of relevance to the coast. The policy basis for decisions on coastal issues is lacking and policies that apply to the coast are insufficiently coordinated and often poorly enforced.

### ***Decline of Agriculture and Fisheries***

Traditional economic sectors on the coast include agriculture and fisheries. Both have been impacted by the serious recession experienced in Georgia since independence. Despite the general decline in agricultural production, agriculture remains the predominant land use in the coastal area and plays a vital role in livelihood security.

Fishing activity is suffering from years of over-fishing and neglect and there has been a widespread reduction in the diversity and abundance of species and stocks. The species that have been most adversely affected are the demersal spawning and purely coastal species. It is difficult to assess the contribution of fishing to the local economy as official figures tend to be combined with the Agriculture and Forestry Sector, but an estimated 13% of households in the coastal zone engage in fishing, although this activity is the main source of income for only 1% of adults. The number of people engaged in fishing is reportedly increasing because of the absence of alternative sources of income. A law regulating fisheries (and aquaculture) does not exist.

### ***Tourism seasonal and uncontrolled***

The sub-tropical climate of the coastal zone, the beaches and the other natural attractions, led to the development of a successful tourism industry on the Georgian Black Sea Coast. During Soviet times, numerous resorts, hotels and sanatoria were constructed, particularly between Batumi and Kobuleti, but most of it has fallen into disrepair. However, recent trends are positive; private investment is returning and small scale guest-houses are an important means of income generation for coastal residents, albeit that this income is highly seasonal, generally limited to only two months of the year, and lacks forward looking planning. Tourism is one of the four sectors targeted for growth in the National Poverty Reduction Strategy and is a high priority for the Government of Georgia and the authorities of the Autonomous Republic of Adjara (2008-2011 Development Plan; Department of Tourism and Resorts Strategic Plan).

### ***Solid Waste – Litter Pollution***

Stream and nearshore born litter is a pervasive issue throughout much of the coastal zone and increases considerably during the tourist season. In 2007, the coastal regions of Adjara AR, Guria, and Samegrelo-Zemo Svaneti generated about 350.000 m<sup>3</sup> of solid household waste, a substantial portion ended in illegal landfills. Both the Batumi and the Poti landfills are of outdated technology and situated next to a river, causing severe surface water pollution. Eroding and/or improperly sited and/or improperly maintained landfills are also a major source of litter pollution of beaches. At least in Kobuleti, the European Bank of Reconstruction and Development is financing the construction of a new landfill and rehabilitation of the old one in order to stop the ongoing pollution of the valuable wetlands.

Litter has a negative impact on a wide range of coastal interests including tourists and visitors to the coast, who value the visual appearance of the coast – particularly the beach and nearshore waters. Litter pollution of nearshore waters adversely affects the recreational enjoyment of swimmers and visitors to the coast, and degrades marine species and populations.

### ***Coastal Pollution***

Pollution of coastal waters may derive from a variety of sources including industrial outfalls, sewage, storm water, chronic oil spills, runoff from agriculture, dredging, and discharge of ballast water from ships. Inadequate or non-existent industrial and municipal wastewater treatment is clearly a major source of pollution, particularly for organic matter. The use of pesticides and fertilizer is widespread throughout the coastal zone, and the agriculture sector is a major contributor to non-point source

pollution and high nutrient loadings. Coastal pollution has significant adverse impacts on the tourism industry and degrades marine and coastal resources and environments. Consistent and reliable pollution monitoring data do not exist, which makes it difficult to identify priority measures and assess progress.

### ***Decline of Biodiversity***

A large proportion of the coastal zone consists of wetlands that include large areas of peat bog, mire and marsh. These are the most ecologically significant habitats on the coast, but other important habitats include coastal dunes, rocky shorelines and pine groves. The most valuable habitats enjoy a degree of protection and are included within the Kolkheti National Park and Kobuleti Nature Reserve, but important environmental assets exist outside these areas which are not protected.

Human activities have caused dramatic changes to natural ecosystems; areas of forest and vegetation have significantly decreased, correspondingly areas of secondary meadows and agricultural land have increased. More than three quarters of the Kolkheti Lowland and surrounding foothills have changed completely, mostly due to the drainage of wetlands for agriculture. The main reasons for loss of biodiversity and negative environmental impacts are drainage, deforestation, peat extraction, overfishing, solid and liquid waste disposal, urban expansion and ad hoc development pressures. At present, illegal fishing of endangered migrating fish species (sturgeon!) in river deltas is the most urgent problem from a biodiversity point of view.

### **Preserving coastal nature – a matter of culture and survival**

On the territory of the coastal community of Tskhaltsminda in Guria, some natural treasures remain. The oak-alder forest which used to dominate the Georgian coastline of that region, has nearly vanished and Tskhaltsminda features one of the very few patches that remain. Local people have used it as a source of firewood due to a lack of alternative and knowledge of its natural and historical value. When informed of its value and promised alternative fuel sources, local people showed great interest in not only preserving what is left but also regenerating this habitat. Furthermore, near Tskhaltsminda beach, a small pond has survived surrounding development, featuring vegetation once abundant along the coast. It is playing an essential role as resting ground for migrating birds in spring and fall. The forest further inland, which shades village houses, is another natural treasure worth preserving, not only for rarity, but also because it protects local drinking water sources that once gave the village its name: Clean Water!

### ***Inadequate Infrastructure and Services***

There has been very little investment in municipal infrastructure during the past decades. Inadequate infrastructure not only leads to a poor quality of life for coastal residents, but increases pressures on the environment – e.g. from pollution and from fuel wood gathering. The major coastal settlements are served, in principle, by sewage and wastewater treatment facilities but lack of investment and deferred maintenance has meant that pipelines have deteriorated and silted up, many pumping stations are out of commission and treatment facilities have fallen into disrepair. The release of sewage into the streets represents a considerable threat to public health. Some progress has been made with funding provided by the Municipal Development Fund and foreign donors, but much more remains to be done.

### ***Port/Harbour Development and Utilization***

The ports of Batumi, Poti and, to a much lesser extent, the Oil Terminal at Supsa, are major local employers and the ports sector plays an important role in the national economy. Further port development is likely given that ports are also targeted for growth in the National Poverty Reduction Strategy, while the establishment of a Free Economic Zone is under discussion for Poti.

Much of the traditional port activity (e.g. ship building, fish processing and naval operations) has declined since Georgian independence. However, since 1998 the port sector has recovered and the growth of turnover is mainly related to the handling of transit cargoes, notably oil that is transported to the port terminals by rail and pipeline. Georgia's ports sector is becoming highly competitive with internal competition between ports (and pipeline alternatives) as well as other regional port locations – for example in Turkey.

Compelling arguments have yet to be made for the increasing number of ports along the coastline, since existing facilities appear to have spare capacity. Duplication of such facilities uses investment capital that could be used to strengthen and consolidate existing facilities and infrastructure, places additional burdens on the environment (e.g. the access channel of Kulevi Terminal affects migrating routes of fish), and creates competition between facilities in the same country. Currently, plans are being discussed for privatisation of the ports.

### ***Insufficiently planned and Illegal Coastal Development***

Spatial planning is a critical instrument in ICZM but there is currently no functioning planning system in Georgia. Spatial territorial planning is a central government responsibility (currently part of the Ministry of Economic Development) but most detailed planning controls are exercised by poorly resourced Municipalities and other agencies of local self government. Government departments still retain ownership over large parcels of land and there are very few controls on the management and disposal of this land.

The characteristics of the Soviet planning system reflected a highly autocratic and centralized form of government that is not relevant to the social, economic and environmental needs of present day Georgia. At the same time the land privatisation process has accelerated and there is a widespread perception that the privatisation process is neither transparent nor fair. There are many examples of insensitive and unsuitable developments in the coastal zone resulting from this lack of planning. These include poorly sited and abandoned physical infrastructure projects, unsightly apartment blocks in resort areas and widespread development of illegal dachas, particularly in the Guria Region. The pine forests and coastal hinterland in the area south of Ureki to Natanebi are rapidly being developed. At Ureki itself unplanned tourism development of bars/restaurants and tourism accommodation, as well as the lack of beach and coastal setbacks, are beginning to detract from the area's environmental qualities.

Another example is the development of the Kulevi Oil Terminal, which was sanctioned by Presidential Decree in 1999 without prior Environmental Impact Assessment. This led not only to the destruction of valuable wetlands protected under the Ramsar Convention, but also to negotiations about considerable compensation payments. Proper planning could have avoided both the loss of valuable habitat and financial resources.

Illegal and unplanned development encroaches onto the beach, increases the risk of human accidents from flood events, hinders, and in some cases physically blocks, public access to the coast and adds to the general pressure on rare and endangered species as well as important coastal habitats. It is clear that effective management of natural resources must be combined with proper controls over land use and planning in the coastal zone.

### ***Coastal Erosion and Exposure to Flood Risk***

Earlier studies have examined coastal erosion issues at Poti and Batumi and analysed river morphology and sediment transport in the Rioni and Chorokhi rivers. Modelling of coastal processes was also undertaken in the context of development proposals on the coast (e.g. Yacht-club development in Natanebi mouth and Poti port expansion).

Several significant areas of erosion have occurred over time along the Georgian coastline. Much of the erosion that has occurred or is still occurring is due to man made influences. These include rerouting of the Rioni River system at Poti, construction of the Port facilities at Batumi, siting of the rail line too close to the coastline, and extraction of building material from river beds. Considerable efforts have been made to redress the effects of these changes including very large-scale coastal defence and beach replenishment projects.

Coastal erosion and flooding issues affect all coastal residents and businesses in low-lying areas and are likely to get worse over time with long term climate changes and sea level rise. There are records of flood events (e.g. at the Coastal Dynamics Institute and in satellite images) but no current topographic surveys and maps of flood prone areas. Land and property is damaged by flooding, human life is endangered and livestock and crops are destroyed. Conversely, regular flooding of wetland areas is necessary to maintain traditional habitats and species. Coastal engineering is likely to remain the responsibility of the Coastal Dynamics Institute (currently incorporated into the Monitoring

and Prognosis Center) but it will have to be undertaken after careful analysis and thorough evaluation of all the environmental implications. ICZM has a key role to play in the prevention of increased flood risk through definition of flood plains in undeveloped areas and appropriate coastal set backs for development or exclusion of development.

### **Tskhaltsminda´s tourism development needs integrated planning**

In the village of Tskhaltsminda on the Gurian coast, some families have started opening guest houses and would like to develop more. However, there is currently no plan how to develop tourism. The biggest obstacles to tourism development are currently

a) the lack of municipal infrastructure, in particular a functional sewage system and provision of drinking water to people´s homes. Infrastructure established during Soviet times has deteriorated beyond repair.

b) litter, which is only partly collected due to a private initiative, but mainly burnt or deposited illegally. Plastic bottles, waste and other forms of non-biodegradable wastes is being transported downstream by River Supsa, washed up on Tskhaltsminda beach and floating in nearshore waters – a common picture all along the Georgian coast and certainly a problem to be solved if tourism is to develop.

c) no public access to the beach due to insufficient planning and short-sighted privatisation of near-shore property

d) coastal erosion, managed in an ad-hoc, unprofessional manner.

While individual citizens can do little or nothing to solve these problems, forward looking, integrated planning could focus resources on solutions and provide opportunities for everyone.

## **Vision**

This ICZM Strategy aims to make the following vision come true:

The vision for Georgia´s coast is to develop in a sustainable manner, the land and water resources on the Black Sea Coast of Georgia, in order to create a more prosperous economy and a healthy and safe environment for the benefit of present and future generations.

## **Goals and Objectives**

The ICZM Strategy has the goal of creating a solid framework for decision making which ensures that development along the coast is sustainable and that investors feel confident.

Rational resource use is to be ensured by avoiding the duplication of facilities and wasteful practices. Land for (necessary) coastal development needs to be allocated in suitable locations, while infrastructure and services (including community facilities) are to be provided in parallel. The Strategy also aims at identifying and protecting important environmental resources, including biodiversity. Development in hazard prone areas (e.g. lands prone to flooding or coastal erosion) is to be prevented. Responsibilities between national and local government are to be shared fairly and wisely.

The ICZM Strategy has the following goals:

- Provide a logical and rational basis for decision making which will give investors confidence, and help protect the value of existing investments
- Avoid duplication of facilities and waste of resources
- Ensure sufficient land is available for development, particularly coastal development, in suitable locations
- Ensure infrastructure and services (including community facilities) are provided in parallel with necessary development
- Identify and protect important environmental resources
- Prevent or control development in hazard prone areas (e.g. lands prone to flooding or coastal erosion)

- Create a framework for achieving sustainable development and use of resources in the coastal zone (e.g. sustainable tourism development and a rational framework for shoreline management) with a sharing of responsibilities between national and local government.

The objectives of Georgia's Integrated Coastal Zone Management Strategy are follows:

### **1. Governance**

- 1.1. To establish an effective institutional and legal framework for integrated coastal zone management, with better enforcement of decision making;
- 1.2. To encourage integrated and rational decision making amongst all sectors and levels of government with a significant involvement in coastal issues;
- 1.3. To support transparent processes and involvement of local stakeholders and resource users in coastal decision making;
- 1.4. To establish the long term sustainability of integrated coastal zone management through external assistance, revenue generation and cross sector support.

### **2. Economy**

- 2.1. To improve livelihoods, incomes and the quality of life for coastal residents;
- 2.2. To encourage and provide for sustainable socio-economic development in the coastal zone and reduce or eliminate adverse impacts on coastal environment and resources and on cultural features.

### **3 Coastal Development**

- 3.1. To ensure that all development is sited, designed, and operated according to best international practices;
- 3.2. To ensure that land privatisation takes place in accordance with transparent and agreed plans and procedures, and does not generate adverse environmental or socio-economic impacts;
- 3.3. To prevent the privatization of the shore-land area except for the purpose of redeveloping land that has already been developed;
- 3.4. To protect and provide for open and unhindered public access to and along the shore-land and near-shore areas;
- 3.5. To provide suitable and attractive public and private recreational facilities and development in the coastal zone;
- 3.6. To protect the scenic qualities of undeveloped coastal landscapes, particularly in the shore-lands;
- 3.7. To actively promote and facilitate the demolition of derelict structures and removal of debris within the shore-land area;
- 3.8. To prevent conflict between mutually incompatible or mutually detrimental uses of the coastal zone's environment and resources, planning documents shall provide for appropriate zoning so that compatible activities can be carried out together and incompatible activities kept separate;
- 3.9. To provide maximum long-shore and cross-shore public access to shore-land and near-shore areas and to encourage the provision of public recreational facilities, consistent with sound conservation principles and no significant conflicts with existing private property owners;
- 3.10. To the maximum extent feasible, create a Black Sea trail that provides long-shore access all along the shore-lands area.

### **4. Port and harbour development**

- 4.1. To ensure that the adverse environmental impacts of port and harbour development and operation (and related infrastructure) are prevented or mitigated to the maximum extent that is technically feasible;
- 4.2. To secure the maximum economic benefits of port and harbour development and utilisation for coastal businesses and residents;
- 4.3. To ensure that existing port capacities are fully utilised before new port locations are developed elsewhere. Existing port capacities include re-development and extension of existing port facilities, where there are no significant effects on coastal environments and resources;
- 4.4. To ensure that the planned Free Economic Zone for Poti will promote sustainable development.

## **5. Infrastructure**

5.1. To ensure that reliable and affordable drinking water<sup>3</sup> and electrical supplies are available to all coastal zone residents.

## **6. Coastal erosion and flood risk**

6.1. To reduce the risk of flooding to coastal residents and businesses from all sources;

6.2. To control sand and gravel extraction and dredging in river beds and nearshore waters;

6.3. To ensure that the potential impacts on coastal erosion and deposition processes of coastal and river engineering structures and other coastal interventions are thoroughly assessed prior to the issuance of a construction permit.

## **7. Coastal pollution**

7.1. To reduce point and non-point pollution of estuarine and coastal waters to comply with international standards or to levels which no longer pose a threat to coastal environments or human health;

7.2. To ensure that all sewage is treated according to international standards, prior to disposal at a suitable location;

7.3. To ensure that bathing, fishing and drinking<sup>4</sup> water quality standards comply with international standards and are harmonised among all relevant government bodies;

7.4. To ensure that integrated coastal zone management activities are properly integrated with, and take full account of, all relevant integrated river basin management programmes and activities.

## **8. Solid Waste**

8.1. To reduce and ultimately eliminate solid waste pollution of shore-lands and coastal waters;

8.2. To support sustainable waste management practices, involving waste reduction, reuse and recycling.

## **9. Biodiversity**

9.1. To protect and rehabilitate rare, endangered, and important habitats and species

9.2. To achieve levels of natural resource use that is within environmental capacities in order to maintain sustainability;

9.3. To reduce, eliminate, and prevent invasive alien species that have, or could have, adverse effects on coastal environments and resources.

## **10. Fisheries**

10.1. To increase fish stocks in order to attain a sustainable yield level as well as protect critical fish spawning, nursery areas and migratory routes;

10.2. To re-establish fishing as a viable and attractive source of income for coastal residents;

10.3. To ensure that fisheries are managed on a sustainable basis in accordance with strategies and plans that are based on sound environmental, scientific and economic policy principles.

## **The ICZM Principles**

For achieving the goals and objectives outlined in the previous chapter, the following principles will rigorously be applied in coastal management:

a) *Sustainability principle* - Integrated coastal zone management shall be carried out in a sustainable manner so as to meet the needs of both present and future generations and in order to preserve or enhance essential ecological processes and biological, landscape and cultural diversity.

b) *Precautionary principle* - Absence of scientific certainty shall not prevent authorities from acting to prohibit or regulate activities whose impacts could possibly cause serious or irreversible damage to coastal environment or resources.

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<sup>3</sup> In compliance with the new Action Programme of President of Georgia – Sufficient Quantities of Adequate Quality Drinking Water for Every Village and Settlement.

<sup>4</sup> To support the enforcement of the Decree on Technical Regulations for Drinking Water of Minister of Labour, Health and Social Security of Georgia No 349/n dd. December 17 2007

- c) *Forecast principle* - Forecast shall be made of the short and long-term changes and trends in global warming and sea level rise and of natural and human induced calamities.
- d) *Principle of restitution (restitutio in integrum)* - Degraded natural environment shall, to the maximum extent feasible, be rehabilitated and restored to their former condition with a view to regenerating the ecosystems.
- e) *Polluter pays and user pays principle* - Expenses to repair or restore damage to the coastal zone's environment and resources shall be born by those responsible for causing the damage. In addition, government bodies shall endeavour to promote the internalisation of the costs incurred in conserving the coastal zone's environment and resources by charging those costs to public and private investors and users.
- f) *Principle of best available technology and best environmental practices* - The most advanced and most effective technology and environmental practices shall, to the extent feasible, be used in order to mitigate or prevent adverse impacts on coastal resources, environment and communities.
- g) *Information for the public and public participation principle* - Government bodies shall facilitate access to information on the status and use of the coastal zone's environment and resources, and shall promote broad public participation in the planning and decision-making processes.
- h) *International co-operation principle* - International co-operation arrangements for the monitoring, management and protection of the coastal zone's environment and resources shall be developed, particularly in relation to the contiguous coastal zones in Russia and Turkey.
- i) *Equitable distribution and sustainable management of common resources principle* - Common environment and resources, including marine and terrestrial flora and fauna and ecosystems, shall be sustainably used and managed in a manner which takes account of habitat fragility and guarantees their equitable distribution for the benefit of local communities.
- j) *Principle of socio-economic assessment* - Proposals for coastal-dependent development and hotel development in the coastal zone shall be subject to a socio-economic needs assessment that is incorporated in a cost-benefit analysis.
- k) *Biodiversity protection principle* - Areas that have exceptional biological or landscape diversity and therefore constitute a part of the country's common heritage shall be preserved by special protection measures. Fragile areas, ecosystems, habitats and threatened species shall be similarly protected.
- l) *Marine aquaculture development principle* - Marine aquaculture development in the coastal zone shall be promoted by supporting research and demonstration projects.
- m) *Scenic protection principle* - In scenic areas, no new development shall be allowed that is visually obtrusive or not subordinate to its setting. Development shall be sited so as not to interfere with coastal views from coastal roads, trails and public recreation areas. Development shall be sited, designed and landscaped in order to soften its visual impact, and construction materials shall be used that blend with the natural setting or adjacent structures.
- n) *Principle of protection of the shore-land area* - The shore-land area shall be used for public purposes only (such as parks or nature reserves) except in situations when privatisation is required to provide for a necessary coastal-dependent development. The subdivision of lawfully privatised land shall not occur in the shore-land area except for the purpose of redeveloping land that has already been developed.
- o) *Principle of integrated river basin management* – Taking into account the linkages between river basins and the coastal zone's environment and resources and ensuring that pollution of coastal waters from riverine sources is minimised, as well as that the activities and developments in watershed lands which are likely to have a direct and significant adverse effect on the coastal zone's environment or resources shall be planned and regulated in accordance with the objectives and principles of integrated coastal zone management.

- p) *Principle of vertical integration* - Policies and enforcement at all levels (national, regional, local) of government and non-government organisations which significantly influence the planning and management of coastal resources and environments shall be harmonised.
- q) *Principle of horizontal integration* - Coherence shall be achieved among separate economic sectors and the associated units of government which significantly influence the planning and management of coastal resources and environments
- r) *Principle of land-sea integration* - For an effective management, initiatives shall include both the seaward and the landward portion of the coastal zone.

## **Monitoring and Revision of the ICZM Strategy**

The National ICZM Strategy shall be reviewed within 5 years of its commencement and at least every five years thereafter, and shall be amended or replaced as necessary in order to ensure that it is effective, efficient, equitable and up to date. The amendment or replacement of the National ICZM Strategy shall be subject to the same procedures as the preparation and approval of the initial ICZM Strategy.

The amendment or replacement shall be undertaken on the basis of the results of the application of the ICZM Progress Indicator adopted by the Advisory Group on ICZM for the Black Sea countries as well as annual progress reports prepared by Georgia.

## ***Appendix 1: A) Definition of the Coastal Zone***

The environmental and socio-economic assessment has also been used to help define a coastal zone boundary. The coastal zone may be defined by a variety of different criteria, including land use, topography, ecology, sedimentary conditions, water quality, hydrodynamic conditions and coastal processes. No single criterion is adequate to deal with all of these varied components of coastal systems and invariably the boundaries of these sub-systems do not coincide. The definition of the coastal zone therefore involves judgments and a combination of different factors. After various different iterations and widespread consultations, the recommended coastal zone boundary has been drawn tight in to the coast and has been based largely on administrative boundaries (Sakrebulo) to aid interpretation, but also taking account of the following factors:

- In ecological terms the inland boundary includes all those habitats and ecosystems that are directly affected by the marine environment – such as coastal dunes, wetlands etc.
- The inland boundary extends inwards to include all key environmental assets in the coastal area – therefore the boundary encompasses Kolkhetti National Park and Kobuleti Nature Reserve
- In Poti and Batumi the inland boundary is defined as the shore-land area, which effectively limits the definition to a maximum distance of 500 metres inland. This has been taken as a proxy for that area within which human activities may significantly affect coastal resources, particularly in terms of drainage, pollution and discharges to the environment, whilst leaving discretion to the relevant authorities to deal with other non-coastal issues in these settlements. The division of responsibilities between coastal and non-coastal issues in these urban areas is not straightforward and the relationships between the various stakeholders will need to be managed with care. In Poti in particular, it is difficult to separate coastal and environmental issues from wider urban planning policies since the town is situated on an eroding coastline, is very low lying and prone to fluvial and marine flooding and is surrounded by the National Park. Within these developed areas the Coastal Management Authority will need to work in close consultation with the relevant Municipalities and other agencies responsible for urban planning. Similar consultation arrangements will be required for defined watershed areas in river basins.
- The inland boundary includes those areas for which management is necessary to control uses that may have direct and significant impacts on water and coastal resources. It therefore extends 5 km into the river valleys draining to the coast. Where no Sakrebulo exists, or where the boundary of the Sakrebulo extends inland for a greater distance, the inland boundary of the coastal zone has been set at 3 km. The coastal boundary extends outwards to the territorial sea's 12-mile limit.

## **B) Coastal Zone Boundaries**

1. The coastal zone shall comprise the following areas:

- a) the “seaward coastal planning area”, which shall extend seaward from the mean high water mark to the outer limit of the territorial sea and shall include the whole of Lake Paliastomi, all other estuaries and all coastal lagoons;
- b) the “near-shore area”, which is part of the seaward coastal planning area, shall include the whole of Lake Paliastomi, all other estuaries and all coastal lagoons. Elsewhere, the near-shore area shall extend seaward from the mean high water mark to a minimum distance of 25 metres and a maximum distance of 500 metres, the extent of which shall be determined by the Central Coastal Management Authority in consultation with the Regional Coastal Management Authorities according to the characteristics of the coastal environment and in accordance with the objectives and policy principles of integrated coastal zone management in this Strategy;
- c) the “shore-land area”, which is part of the landward coastal planning area, shall extend inland from the mean high water mark to a minimum distance of 25 metres and a maximum distance of 500 metres, the extent of which shall be determined by the Central Coastal Management Authority in consultation with the Regional Coastal Management Authorities according to the characteristics of the land and adjacent waters and the state of existing development, and in accordance with the objectives and policy principles of integrated coastal zone management in this Strategy;
- d) the “landward coastal planning area”, which shall comprise:
  - d.a) the self-government administrative-territorial units (or coastal districts in places where there is no self-government administrative-territorial unit) to a maximum distance of three kilometres inland from the mean high water mark;
  - d.b) the cities out of jurisdiction of districts, to the inland extent of the shore-land area as determined by the Central Coastal Management Authority;
  - d.c) the Kolkheti Protected Areas within the boundaries defined in accordance with the Law of Georgia “On Establishment and Management of Kolkheti Protected Areas”.

2. In the case of rivers and estuaries flowing into the sea, the seaward coastal planning area, the near-shore area, the shore-land area and the landward coastal planning area shall be measured from the mean high water mark along both banks for a distance of five kilometres upstream from a line drawn across the mouth, except that in the case of the Rioni river the distance shall be 10 kilometres from the mouth.