

PROJECT: “ Identification of problems and measures for analysis of the possibilities for wetland restoration in the confluence of Calmatui river with the Danube”

Master Plan and Action Plan - wetland restoration in the confluence of Calmatui river with the Danube

For Romanian Waters / Buzau-Ialomita Directorate

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1 The Nature of the Plan

1.1 Introduction

The development process of regions, as in the area of the confluence of Calmatui river with the Danube, will be characterized by continual change, driven by a variety of forces – delta resources over exploitation, government policies, actions of private companies, infrastructure standards, safety of a place to work, and many more. When the change leads to unsatisfactory conditions for the people of the region, the need arises for carefully planned interventions to produce the desired results. A key to successful regional and local planning will be to understand why current unedifying conditions are the way they are, what factors affect them, and what interventions could positively influence these factors. Traditionally, “master planning” at regional and local levels has addressed the land-use or physical aspects of development; for example, the scale, nature and location of housing and main community facilities, or the zoning of recreation areas. However, in keeping with more enlightened thinking on the role of regional plans, the Area of the confluence of Calmatui river with the Danube Regional Master Plan will focus on a much broader and more appropriate definition of development: **Planning to manage the process of regional and local change for accelerated growth and improvements in the quality of life in a sustainable way.** It covers not only the physical manifestation of development but also all the other elements that have a bearing on the well-being and welfare of the people of the Area of the confluence of Calmatui river with the Danube, including infrastructure development as well as social, cultural, community revering the environmental aspects. All these matters are interwoven in the complex concept of sustainable development. The Area of the confluence of Calmatui river with the Danube Regional Development Master Plan adheres to the principles of sustainable development, within the definition championed by the United Nations and subscribed to worldwide by most national governments. Expressed in its most basic form, this will be support for: "...development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). A principal tenet of the concept of sustainable development will be ‘intergenerational equity’, meaning that the degree of access to the resources which the planet can provide should be no less in the future than it will be for the present population. Alongside this will be the notion of ‘intra-generational equity’, that will be equity amongst the present population and the view that the consumption of resources by some should not deny the needs of others.

1.2 Integrated Development Planning

Life in the real world will be not confined to neat little boxes. The socio-economic, cultural, environmental and physical development of the Area of the confluence of Calmatui river with the Danube Region comprises a complex set of relationships between different factors. These inter-relations between various aspects of rural and urban life need to be fully understood before the nature of any intervention can be determined. For example, how anticipated change in

one aspect such as increasing fishermen personal, might affect changes in other aspects (such as the pressure to the resources and other goods). Planning to intervene independently in the operation of a given 'sector' will be likely to be ineffective or cause undesirable results to other sectors. For most interventions in a regional system, therefore, a package of cross-sectorial, mutually supportive measures has to be defined and pursued. At the heart of the 'integrated' or 'holistic' approach adopted for the Area of the confluence of Calmatui river with the Danube Regional Master Plan will be a determination to understand and take account of the relationships between different aspects of life and between different agencies and other stakeholders, to involve them in the planning process and to create a shared view amongst diverse stakeholders while planning for coordinated programs of change.

The concept and practice of planning as adopted in this Master Plan, with the participation of stakeholders and the monitoring and evaluation procedures, introduces a high degree of transparency and accountability that would also contribute to the goals of value re-orientation and the battle against pollution.

1.3 The Perspectives of Integration

A holistic view and an integrated plan are therefore as relevant to geographic areas as to administrative hierarchies and to 'sectorial' activities. There are several elements to an integrative outlook, the main ones being:

Geographic Aspect. Economic and social activities are not confined to administrative boundaries. One clear example of this will be the Region's travel patterns, which will be in Delta for commercial, employment, tourism and family purpose. Attainment of a better understanding of the special attributes of geographic areas and the inter-relationships between areas has been a key facet in the preparation of the Master Plan.

Institutional Aspect. Current conditions in the Region and future changes are affected by decisions taken at Central, Regional and Local Government levels, in which other public and private sector organizations, as well as the NGOs can sometimes be involved. These bodies do not have identical agendas or expertise and they experience conflicts of interest, conflicts through competition, and conflicts over authority. Sharing information and perceptions of problems and considering together the implications of alternative solutions, which has featured in the stakeholder consultations during plan preparation, will be considered as an essential step towards agreed programs and coordinated action.

Sectoral Aspect. Some different sectors or aspects of the Area of the confluence of Calmatui river with the Danube will be studied separately due to different interests and different involved stakeholders. The final moulding of the Master Plan has involved integration of these different aspects, stakeholders with regard to the dynamic linkages between various sectors. The analysis of interrelationships between sectorial areas of study and their implications for the content of regional scenarios is, therefore, another key facet of the integrated planning approach. This analysis can serve to highlight the range of options

available to address the range of different effects, positive and negative, that any particular action may trigger.

1.4 Sectorial Linkages

At the centre of the inter-relationships between different sectors and aspects of development in both the Region and the States are the key human demographic aspects: depopulation of the Delta, household structure, employment and income, maintain the existing biodiversity. The main factors that influence human and economic development, or are affected by human and economic demand and their core inter-relationships can be summarized as follows:

Human health will be affected by the quality of water and of sanitation, by health care provided by the State. It also creates demand for health care provided by private sector for those who can afford to pay;

Life expectancy of people as they move through life will be affected by water, sanitation and health care; but it will be also affected by income and the ability to buy food and housing. Therefore improving sanitation and access to clean water and reducing human morbidity, unless the ability to produce or buy more food and housing will be also increased;

Household structure will be affected by culture, and also by economic circumstances: can the young generation afford to live separately; or conversely do they have to live elsewhere to find a job. These considerations create a demand for housing of particular types in particular areas;

The labour force will be a product of life expectancy and of education and skill training. It offers a potential for income

Income levels depend on employment, which depends on business enterprise (in manufacturing, agricultural and service industries)

Business enterprise will be very strongly affected by regional and local physical infrastructure (electricity, communications, water, drainage, etc.); by telecommunication and transportation which are essential for production and distribution as well as for access of employees to the work place, and for access of customers to products; enterprise will be also affected by financial infrastructure (banking, loans, taxation etc); and human infrastructure (skills, economic demand, migration, ability to travel, etc) and by settlement size (availability of local labour force, supporting services, markets, etc) and by the state of 'the economy' in general;

The state of the economy will be subject to both national and global influences over which the Beneficiary of the study have little control, as well as on good management of all the above at the regional level

Aggregate income, following increased productivity and enterprise, then generates demand for particular housing standards and demand for a variety of goods, services and leisure, which in turn support manufacturing, agriculture and service industries

Housing demand will be affected by household structure, by culture and by income, but the choice of houses will be affected by the supply and also by

environmental quality (access roads, sewerage, refuse disposal, proximity to services etc)

Housing supply will be affected by current regulations and practices governing property purchase and the means of financing, and by regional and local planning. The section above will be illustrative of the linkages in just one particular subject area, namely human and economic development. Clearly, there will be also a vast array of other inter-relationships in a wide range of community and commercial services (education, retail, tourism and leisure etc). This Master Plan takes full cognizance of these dynamic inter-sectorial linkages in proposing interventions.

1.5 Stakeholder participation and Involvement

'Active' and 'Passive/reactive' Stakeholders

The vast majority of the inter-relationships described above come about through actions of people – 'active stakeholders' such as politicians, administrators, service providers, investors and consumers, and 'passive/reactive stakeholders' who experience the outcomes of the others' decisions or actions and benefit or suffer as a result. Understanding the motivations and constraints of people as stakeholders will be therefore an essential part of good planning and of the approach, which the STUDY AREA has adopted in concert with other stakeholders and participatory processes throughout the plan preparation process.

Process

From the outset the planning process supported by the STUDY AREA has embraced the involvement of as wide a range of stakeholders as possible. Stakeholder involvement even predates the start of the preparation of the Master Plan. There was a Discussion Forum with Local Councils, DDNI, STUDY AREA and County Council representatives, which was followed by a series of working meetings with development agencies and practitioners and with NGOs and community leaders, helped confirm the need for a Master Plan for the Area of the confluence of Calmatui river with the Danube and the sectors and issues that the Plan should address. More information about this stakeholder process will be provided in Chapter XXX. Subsequently, thematic seminars will be held with Government representatives. During the public participation process the activities should cover five core areas:

Executive level briefings. The aim was to ensure that the trends and hopes for development in Area of the confluence of Calmatui river with the Danube will be fully recognised in the approach adopted for the Master Plan;

Needs Assessment. This aimed to identify the needs of the people of the Delta.

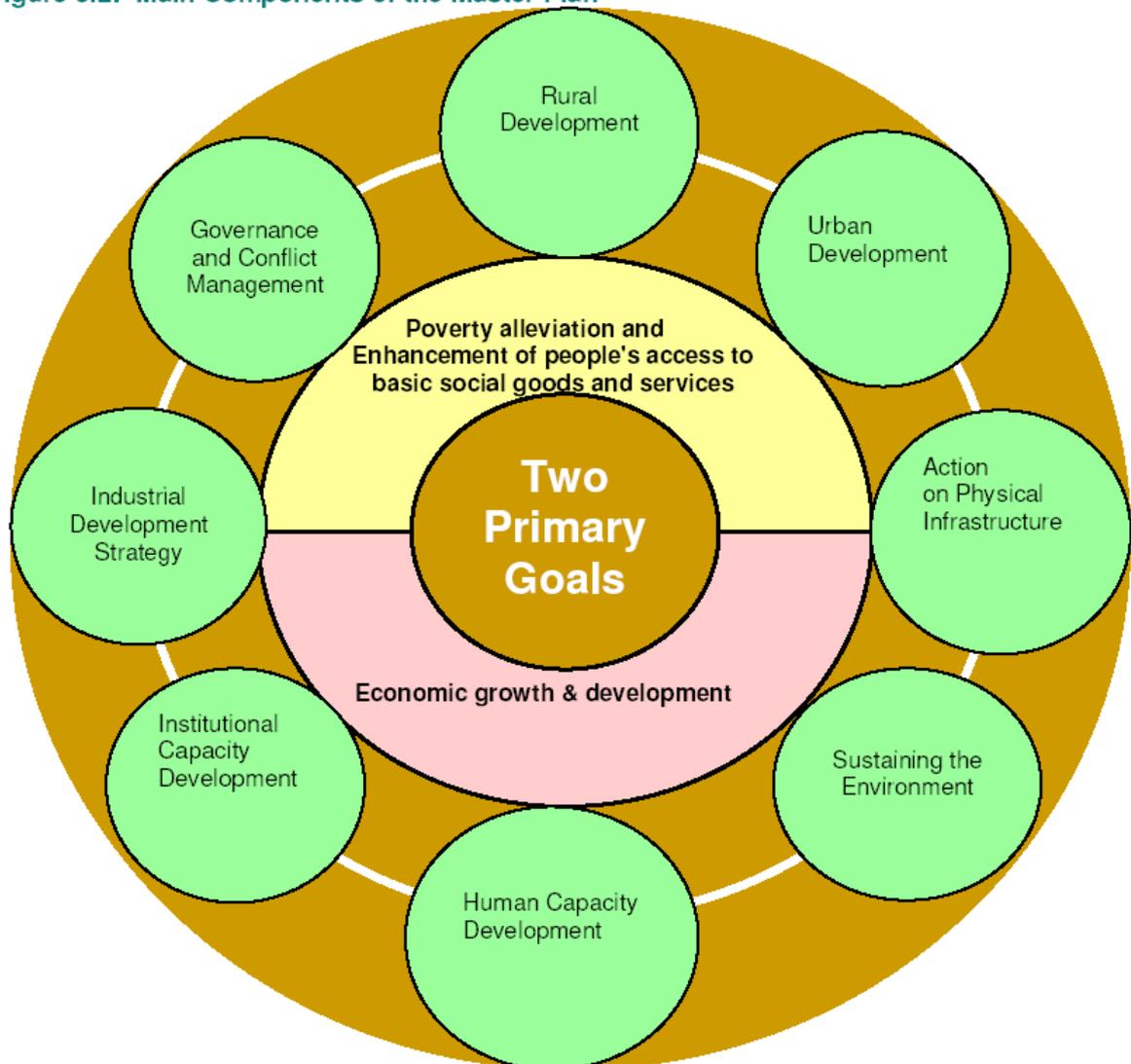
Participatory Rural Appraisal. The exercise was designed to alert the communities to the purpose of the Master Plan and to identify their needs and priorities. It was also intended to assess the capacities of the rural communities to help prepare community development plans.

Capacity Building. To help develop stakeholders' abilities to contribute to the evolution and implementation of the Master Plan in the longer term.

Stakeholders' Involvement. Where the aim was to highlight stakeholders' preferred development scenario and strategic path for addressing the needs identified in each Senatorial District.

1.6 The Master Plan – A Framework for Regional and State Development

Figure 3.2: Main Components of the Master Plan



To achieve the desired wealth creation and reduction of pollution, the Master Plan has to tackle many spheres of activity. These involve active stakeholders in the private sector (e.g. large corporations, would-be entrepreneurs, ship operators, house builders etc.) as well as in the public sector (e.g. providers of health and education services, cleaners). All these have clearly visible products. Part of the Master Plan strategy will be to pursue good governance at all levels, starting with the Master Plan itself and its implementation strategy Good

planning and management of change depends not only on a plan of what to do but also on knowing how to do it. In summary the development of this Master Plan has followed a process of close consultation and sharing information, perceptions, ideas and evaluations with the relevant “active stakeholders” (whose decisions and actions determine future change) and with “passive stakeholders” (who are likely to experience the beneficial and adverse outcomes of any change that takes place), and it fosters transparency and accountability all round. It will be expected that similar efforts at Government and Local levels will generate regional, local plans that are fully harmonious, very transparent, and position the region for sustained improvements in the quality of both urban and rural dwellers. It will be noteworthy that midway through the development of the Regional Master Plan the Government introduced the National Economic Empowerment and Development Strategy (NEEDS). Recognizing the efficacy of this plan, DDNI has taken the initiative to harmonize the Regional Development Master Plan with the national strategy (NEEDS). The Master Plan envisages that it will also move ahead in concert with EU and other partners to pursue the preparation of Local Government Economic Empowerment and Development Strategies (LEEDS). The Regional Master Plan has a 15 years time frame: 2005 to 2020, this needs to be established (Fig 3.2)

1.7 The Preparation of the Master Plan

This Regional Master Plan will be a framework and a strategy for future development, based on the evaluation of different scenarios and the choice of a preferred scenario. It describes the general shape and structure of things to come, and sets out in greater depth the process by which the Calmatui mouth area and all the Region’s stakeholders should progress towards that future. To return to a point made earlier, this will be clearly a far cry from traditional land use

Terminologies

Scenario – description of the future of the Area of the confluence of Calmatui river with the Danube Region as it may be unfolding from the existing scene into the future - due to current trends and in response to planned interventions. The scenario may also be affected by external factors (e.g. changes in the rate of fish supply, rising sea levels). The purpose of a scenario will be to help understand the **process** of change, rather than depict the ‘end state’ picture.

Stakeholders – all those who are involved and have an interest in the changing Regional scene. They include *Active Stakeholders* - people and agencies whose decisions or actions bring about the changes (e.g. policy makers, investors, community leaders, providers of services) and *Passive Stakeholders* – those who will experience the outcomes of change without having an active part in bringing it about) in the scene.

Intervention – any initiative taken to introduce change in the Area of the confluence of Calmatui river with the Danube, whether through policies, programs or projects, and whether acted upon by STUDY AREA or by other stakeholders.

Action-Resources– financial or human resources required to implement the proposed intervention and that can be distributed between different categories of intervention. These are distinct from “natural resources” like land or minerals.

Categories of intervention – the allocation of action-resources to interventions requires choices between different types of intervention. These are differentiated by grouping them into broad categories or ‘themes’, then into sub-categories by ‘sectors’, and finally into specific policies, programs, and projects.

Enabling Conditions – existing situations or different interventions that are essential for successful implementation of the main intervention target. For example, providing access from the villages and training health workers are essential to enable the effective operation of newly built or reconditioned health centres.

Consistency of interventions – planning a targeted intervention (e.g. better health) in coordination with “up-stream” enabling conditions. Equally important are coordinated interventions to cater for impacts of the main intervention “down stream” (e.g. providing work condition and social protection policies for the population that will be located in Area of the confluence of Calmatui river with the Danube).

Dynamic planning – an approach to planning that will be based on understanding ongoing processes of change and the motives and capabilities of the ‘active’ and ‘passive’ stakeholders involved in that process. This leads to a holistic view of the world and to an integrated plan, in which there will be consistency between the different interventions.

Strategy – a concise but well considered view of how to use the available resources, where and in what order, so as to overcome the obstacles to success.

Master Plan – an overall plan that shows the relationships between diverse interventions. It provides a general framework and guidance to active stakeholders on planning their respective interventions. The implementation of the proposed interventions must be monitored alongside other changes in the Region, and the Master Plan must be reviewed periodically and its time horizon extended planning which focuses on the physical picture of an end-state This Master Plan will be an integrative development plan. It focuses on real life processes of change which inherently involve physical, economic, social, legal and institutional aspects, an understanding of what resources and delivery mechanisms would be required to make the change and which people would be involved and/or affected. (See Figure 3.3).

1.8 Time Horizon

The time horizon of the Regional Master Plan looks ahead for two phases: for short term and for long term to involve infrastructure projects and legislative changes that have a long lead-time. This matter will be therefore addressed in two ways:

(I) **Phasing**: the Regional Plan will be divided into two periods. The first phase includes short time actions and it will be detailed in the form of an ‘action plan’ with specific targets, resources and delivery mechanisms. It covers implementation of changes that require immediate results (such as improvements to legislations for resources overexploitation decreasing, the integrated waste management facilities) as well as initiating projects that

inherently require a long lead-time (such as roads). For a period, the Master Plan will be progressively more flexible, leaving decisions to be made nearer the time of implementation. However, given the progressive and cumulative nature of socioeconomic development, the long term of the Plan will have actions that can accomplished in many years.

(II) **Monitoring:** The Master Plan will be accompanied by a monitoring, review and evaluation mechanism, which will assesses not only the performance and outputs of implementation, but also its outcomes (for example, has the planned increase in the output of agricultural production improved the welfare of the many or the profits of the few? Has it had unintended consequences?). Equally important, the original assumptions will be monitored and assessed periodically (for example, have the anticipated financial resources materialized? will be the sea level changing as predicted?). The details of how the Master Plan's policies and proposals are to be taken forward over the next fifteen years are given in the specific chapter.

This must fit with chapter 5 and ch 6 conclusions and recommendations

2 SUGGESTED CONTENT FOR THE MASTER PLAN

3 Institutional Context

Region Institutional framework

In the Master Plan elaboration process the starting point will be the institutional framework establishing for the Area of the confluence of Calmatui river with the Danube (STUDY AREA) perimeter, which was accomplished by identification of institutions those are involved in Area of the confluence of Calmatui river with the Danube management. Due to the high complexity of the situations they are arranged in two classes:

Entities with regional level interests,

Entities with local level interests such as: private people, private commercial societies, local councils etc.

3.9 Stakeholders collaborations and attributions

3.9.1 Agriculture, forests and rural development ministry

Agriculture and Rural Development Department – Braila

Waters Management System – Buzau – Ialomita directorate

FORESTS NATIONAL DEPARTMENT – ROMSILVA

Forest Administration – Braila

3.10 Existing programs and projects in the area

3.11 Development planning (General Urbanism Plans (GUP))

For each locality from the Area of the confluence of Calmatui river with the Danube, after studying the GUPs, it had been distinguished some bad-functioning, environment problems, development priorities, organizing measures, measures for natural risks areas as follows:

Bertestii de Sus

Bertestii de Jos

3.12 Other development activities of the main financetors

3.13 Non Governmental Organizations

3.14 Financial regulations and the resources accounting process

NATIONAL ADMINISTRATION "ROMANIAN WATERS", Buzau-Ialomita WATERS DEPARTMENT

Waters Management System – Buzau

Ongoing and to be ongoing projects for Area of the confluence of Calmatui river with the Danube list:

NR	FINANCE	PROJECT/PROGRAM	Amount	STAGE
.				
1				
2				
3				

ROMSILVA

Braila Forestry Department

No	ROMSILVA, Braila Forestry Department	PROJECT NAME	PROIECT VALUE (Euro)	STAGE
.				

4 The State of the Area of the confluence of Calmatui river with the Danube

Physical – geographical description

3.1.1. The Region

3.1.2 The natural environment

Area of the confluence of Calmatui river with the Danube Genesis

Hypsometric configuration

Morphohydrographic configuration

Hydrological risk

Physico-chemical characteristics and water quality

Biodiversity status of Area of the confluence of Calmatui river with the Danube

Current structure of flora and fauna relying on general geographic habitat

Types of ecosystems in the Area of the confluence of Calmatui river with the Danube biosphere reserve

A. WATER BODIES

Running water

Standing freshwater

B. WETLANDS

C. Forest, shrubs and herbaceous vegetation

D. Open places with little or no vegetation

E. Agricultural and artificial areas

3.1.4 Climate

3.2 Demography and social characterization

In this chapter will be used statistic data from the last census realized in 2002 but for a general demographic image about demographic evolution have been used data from previous census.

3.2.1 The people

3.2.2 Ethnic diversity and demographic structure

3.2.3 Settlements pattern

Socio-economical profile of population

4.15 Economy

4.15.1 Regional economy

4.15.2 Household income levels

Significance of natural resources to household livelihoods

Changes in livelihoods

Households' benefits from the environment

Unemployment

3.3.4 Key sectors of the economy

Agriculture

Infrastructure

Water supply situation

The situation of sewerage systems

Garbage management – summarizing situation –

Services

5 General view over the development objectives

Biodiversity conservation

General objective: the extending of water habitats for fish and birds species through the wetlands restoration.

6 Strategic plan for ecological rehabilitation in Area of the confluence of Calmatui river with the Danube – period 2012 – 2015

Subsidiary objectives

The protection of some populations species and of habitats

The reintegration of some economical agricultural areas and fishponds in the natural hydrologic circuit

The restoration of the wetland specific functions

Reestablishment of the ecological and hydrological balance

The achievement of new habitats for fish and bird species

Renewing the traditional activities - fishing, reed harvesting, animal breeding and ecotourism

Actions

Creating a wetland biotope using the surface waters in the area;

Restoration of some areas used as agricultural zones

6.1. Action 1: Creating a wetland biotope using the surface waters in the area

Purpose:

Proposed works:

6.2. Action 2: Restoration of some areas used as agricultural zones

Purpose:

Proposed works:

7 CONCLUSIONS

