

# DANUBE POLLUTION REDUCTION PROGRAMME

## NATIONAL PLANNING WORKSHOP BOSNIA AND HERZEGOVINA

Sarajevo, November 2 - 5, 1998



**Ministry of Agriculture,  
Water Management and Forestry**

*in cooperation with the*

**Programme Coordination Unit  
UNDP/GEF Assistance**









## Preface

The present report is based on the results of the National Planning Workshop, held in Sarajevo, Bosnia-Herzegovina from 2 to 5 November 1998. The main goal of the workshop and its report is to provide a comprehensive presentation of analysis concerning problems and solutions for reduction, as well as control of water pollution and its effects. The result is a national contribution to the development of the Danube Pollution Reduction Programme and a revision of the Strategic Action Plan (SAP) of the ICPDR.

The workshop has been supported by the Ministry of Physical Planning and Environment. It was prepared by the Country Project Coordinator Prof. Dr. Mehmed Saric, with the assistance of the facilitators Mrs. Anda Hadziabdic and Mrs. Esena Kupusovic. A team of national experts, who elaborated National Review Reports, was present to guide the participants in scientific and technical matters.

The National Planning Workshop was attended by participants from various sectors. There have been representatives of ministries, institutes, universities, NGOs etc. The list the organizations and participants is attached to this report in Annex.

The present report was prepared by:

- Chapter 1: Introduction      Prof. Dr. Mehmed Saric, Country Project Coordinator
- Chapter 2: General Frame  
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A team of international experts from UNDP/GEF, Maxime Belot and Marcela Fabianova, gave assistance and guidance in the methodological approach and report writing. Overall conceptual guidance and technical advice was given by Joachim Bendow, UNDP/GEF Project Manager, to reinforce national initiatives.











## Executive Summary

In the frame of the Environmental Danube Programme of the ICPDR and with the assistance of UNDP/GEF, a team of Bosnia-Herzegovina experts has elaborated National Reviews, providing information on water quality, analyzing financing mechanisms, describing social and economic framework conditions and developing projects and programmes for pollution reduction, improvement of water quality, sustainable management of aquatic ecosystems and protection of resources. These elements, as well as the results of the National Planning Workshop shall constitute a national contribution to the development of the Danube Pollution Reduction Programme and shall provide elements for the revision of the Strategic Action Plan (SAP) of the ICPDR.

This present report shows the results of the National Planning Workshop, which took place in Sarajevo, Bosnia and Herzegovina, from 2 to 5 November 1998. It is one of 11 national workshops, which have been organized in all the participating countries, signatories of the Danube River Protection Convention or adhering to its principles.

The Danube River receives water from 76% of the whole Bosnia and Herzegovina territory. This region is one of Europe's richest areas in available water resources.

The most important river in the Danube River catchment area is Sava River, which flows along the boundary between Bosnia and Herzegovina and Croatia with its main tributaries as follows: Una, Vrbas, Bosna, Drina. Improper water management and insufficient environmental protection significantly influence quality conditions in the Bosnia and Herzegovina tributaries of the Danube River. Some of these rivers carry high pollution loads, however, it is noted that, practically, there is no difference between the entering and leaving water quality in the Bosnia and Herzegovina sector of Danube River. Transboundary adverse impact on the river morphological status can be identified - the intensive river bed and bank erosion because no activities on the river banks protection were undertaken in the last 7 years, i.e. during the war and up to now.

Bosnia and Herzegovina sector of the Danube River Basin (DRB) actually has not been divided into geographical regions, but politically into two entities: the Federation of Bosnia and Herzegovina and Republic of Srpska according to Dayton Agreement. Catchment area of the river Sava and catchment areas of its tributaries are cut by the boundary between entities. For example: the upper course of the river Drina belongs to the Republic of Srpska, middle course of the same river belongs to the Federation of Bosnia and Herzegovina as well as to Republic of Srpska, downstream belongs to the Republic of Srpska. The similar situation is with other rivers. The rivers in the Federation of Bosnia and Herzegovina are also cut by the cantonal boundaries.

Particular causes and effects of pollution from point and diffuse sources, as well as transboundary water pollution have been analyzed in a sector approach, considering land management and agriculture, industry and urban settlements sector. Based on the sector analysis, the core problem of ***"Inadequate activities leading to water pollution and degradation of resources in Bosnia-Herzegovina part of the Danube River Basin"*** was identified.

Direct causes of the core problem were described as "inadequate land management and inappropriate agricultural practices", for the sector of land management and agriculture; "pollution of water through re-launching of obsolete industrial technologies" for the industry sector and "improper disposal of solid waste and wastewater in urban areas" for the urban settlements sector.

A number of effects of activities leading to decrease of environmental quality in the Sava River Basin with negative transboundary effects were identified, including pollution of ground and surface waters, soil, eutrophication, degradation of structure and composition of biocenose and toxic substances in food-chain. Consequently, these effects result in reduced availability of water for different purposes, damage of fauna and flora and health risk.































































































































































# **Annex 1. Description of the Sava River Basin Area**

## **1.1. The Sava River Basin Area**























## **Annex 3. Problem Analysis**

### **3.0. General Problem Hierarchy**

#### **3.1. Land Management and Agriculture**

#### **3.2. Industry**

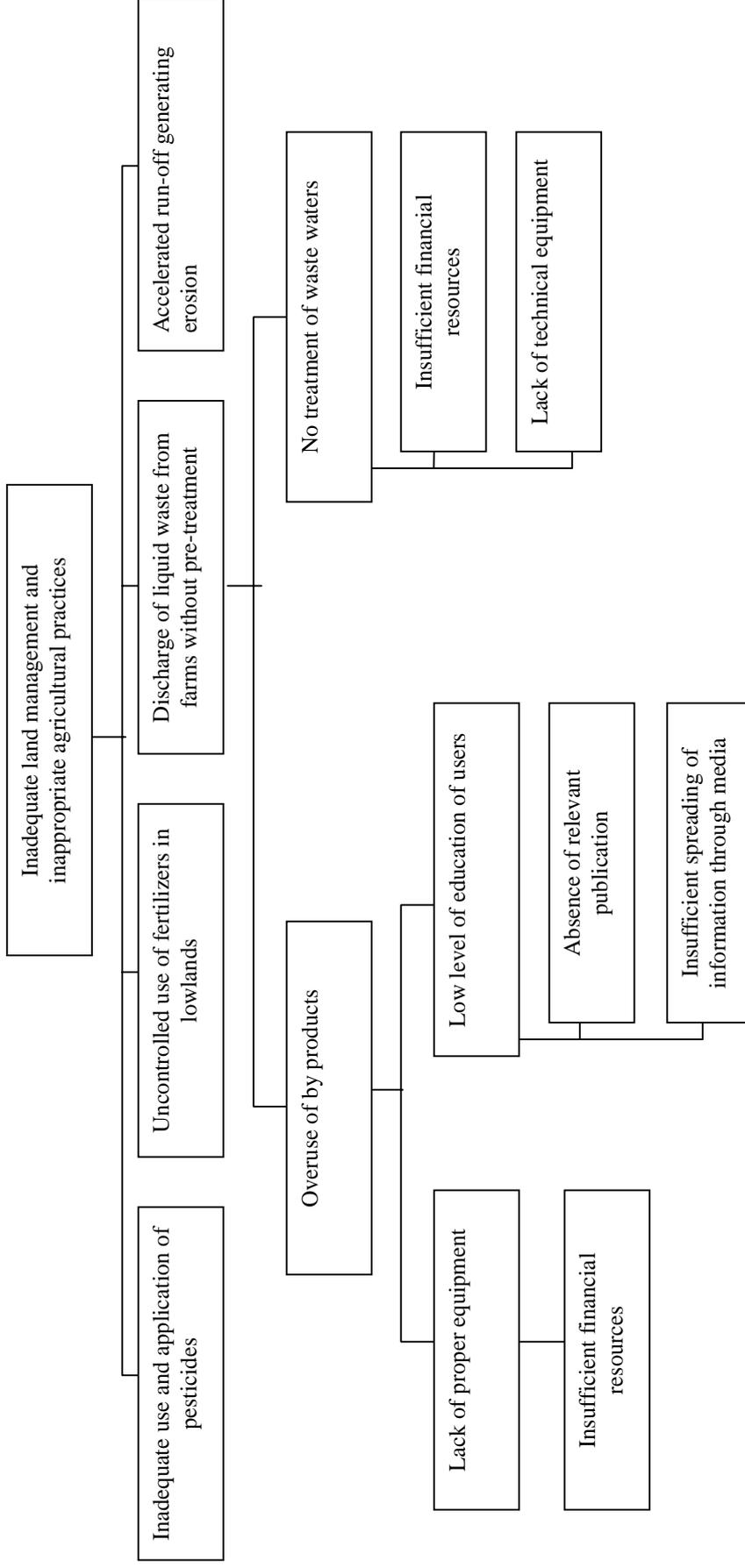
#### **3.3. Urban Settlements**







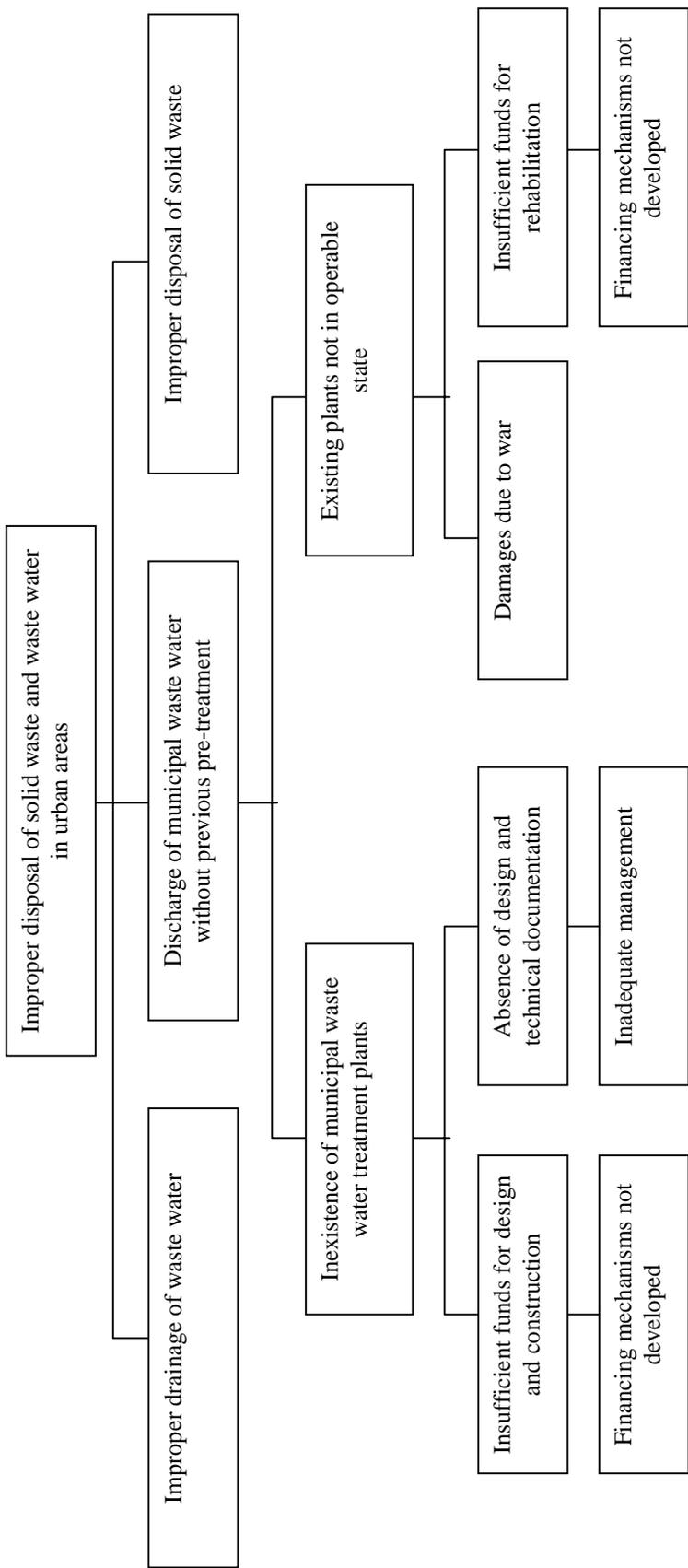
















## **Annex 4. Objective Analysis**

### **4.0. General Objective Hierarchy**

#### **4.1. Land Management and Agriculture**

#### **4.2. Industry**

#### **4.3. Urban Settlements**

























































































