



# Protection and Sustainable Use of the Dinaric Karst Transboundary Aquifer System

## Collaboration Mechanisms in the framework of the DIKTAS Project

### Information Note



<http://diktas.iwlearn.org>

## Table of Contents

The DIKTAS project.....	1
The TDA – SAP process.....	1
Key elements of TDA and SAP.....	2
DIKTAS Project Outcomes/outputs.....	3
DIKTAS Project Results.....	3
Collaboration mechanisms.....	4
Operation and decision making of the Collaboration Mechanisms.....	5

## List of abbreviations

CIE	Consultation and Information Exchange
GEF	Global Environmental Fund
IW LEARN	International Waters Learning Exchange and Resources Network
NAP	National Action Plan
NIC	National Inter-ministerial Committee
SAP	Strategic Action Programme
TDA	Transboundary Diagnostic Analysis
UNDP	United Nations Development Programme
UNESCO-IHP	UNESCO’s International Hydrological Programme

## The DIKTAS project

Karst is a special type of geologic environment that is formed when soluble rocks, such as limestone and dolomite, are corroded and dissolved by percolating water. Karst hydrogeology is characterised by high fracture controlled permeability, almost total absence of surface water, high infiltration rates and rapid underground flows of groundwater. Because of this high permeability, Karst aquifers are highly vulnerable compared to other groundwater systems, as potential pollutants can easily and quickly reach the groundwater.

Groundwater of the Dinaric Karst form some of the world's largest karst aquifer systems. The system extends from NE Italy through Slovenia, Croatia, Bosnia & Herzegovina, Montenegro to Albania. Karst formations connected with the Dinaric carbonate chain outcrop also in Serbia, FYR Macedonia, and possibly in NW Greece. For the most part, this region is still pristine characterised by a variety of geo-morphological environments.

The DIKTAS Project (2010 – 2014) is initiated by the aquifer-sharing states and is a full-size GEF regional project, implemented by UNDP and executed by UNESCO. The activities of the project focus on Albania, Bosnia-Herzegovina, Croatia and Montenegro. Several other countries, scientific institutions, and international and non-governmental organizations have also joined this challenging project and provide valuable contribution to the realisation of its objectives. The project is addressing the issue of sustainable management of karst groundwater and ecosystems. It is the first ever attempt globally to introduce integrated management principles in a transboundary karst freshwater aquifer of such magnitude.

The DIKTAS project is a collective effort to:

- facilitate the equitable and sustainable utilization of the transboundary water resources of the Dinaric Karst Aquifer Systems, and
- protect the unique groundwater dependent ecosystems that characterize the Dinaric Karst region of the Balkan Peninsula.

DIKTAS is a full-size GEF ([www.thegef.org](http://www.thegef.org)) regional project, implemented by UNDP ([www.undp.org](http://www.undp.org)) and executed by UNESCO-IHP ([www.unesco.org/water/ihp](http://www.unesco.org/water/ihp)).



## The TDA – SAP process

“To produce global environmental benefits, international waters projects must address transboundary water-related environmental concerns” (GEF Strategy 1996). In many cases, like

the one of the Dinaric Karst Aquifer, these transboundary concerns, and the actions needed to address them are not adequately defined.

A joint, transboundary effort needs to be undertaken to identify priority issues of environmental concern and to formulate an agreed Strategic Action Programme (SAP) prior to development of any technical assistance, capacity-building, or investment project. The countries sharing the aquifer, work together to produce a Transboundary Diagnostic Analysis (TDA) to identify the priority environmental concerns regarding transboundary waters and the causes to the problems arising from policies in the different economic sectors. Subsequently then formulate a Strategic Action Programme (SAP) to outline the actions needed to resolve the priority problems. The SAP contains necessary actions (including country commitments for implementation); it contains actions addressing transboundary issues that require funding through national commitments or by other means such as bilateral or multilateral assistance, loans, or through regular Implementing Agency programs; finally it contains additional actions needed to resolve the transboundary environmental concerns that have incremental costs that the GEF might fund.

### Key elements of TDA and SAP

A TDA is an objective assessment and not a negotiated document. It uses the best available verified scientific and technical information to examine the state of the environment and the root causes for its degradation. The analysis is carried out in a cross-sectoral manner, focusing on transboundary problems without ignoring national concerns and priorities.

A key element of the SAP is the well-defined baseline case of needed interventions so that there is a clear distinction between actions with simply national benefits and those addressing transboundary concerns with their global benefits. Another key element involves the institutional mechanisms chosen at the regional and national levels for implementing the SAP.

**Transboundary water-related environmental analysis.** The process for cooperatively preparing a Strategic Action Programme (SAP) among countries starts with an analysis of priority transboundary environmental problems (through a TDA). Which drivers cause the actual degradation? What sectoral activities cause the degradation and how serious is this degradation? What are the information gaps on the existing environmental state, policy distortions and institutional deficiencies? Stakeholder analysis and public involvement are essential so that economic and social aspects will be included.

**Relationship with national environmental planning and economic development documents.** Responses included in national environmental documents and plans provide input in this analysis at the transboundary level. The analysis of the causes of degradation and the needs for capacity building include examination of national economic development plans and sectoral economic policies.

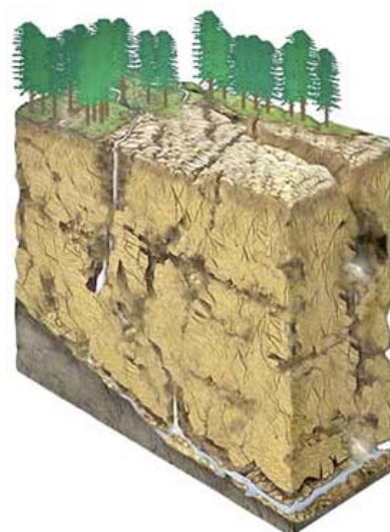
**Establishment of clear priorities.** The SAP will establish clear priorities for action; the actions will

be endorsed at the highest levels of government and related information will be widely disseminated. The SAP will provide for a balanced program of preventive and remedial actions, support both investment and capacity-building activities, and identify key activities in the following areas: Priority preventive and remedial actions; Cross-cutting issues and linkages to other focal areas; Institutional strengthening and capacity-building needs; Stakeholder involvement and public awareness activities; Program monitoring and evaluation; Institutional mechanisms for implementation.

**Establishment of a realistic baseline.** The DIKTAS countries should agree on the baseline environmental commitments (which should be funded domestically or through donors or loans) and the activities necessary for solving the transboundary priority problems. It is important for activities included in the SAP to be realistically budgeted and consistent with projected availability of domestic and international funding. International, including European Union oriented, assistance may be appropriate when the SAP is in the draft stage to facilitate international commitments to action.

### DIKTAS Project Outcomes/outputs

The Project aims at improving the knowledge of the resource and reaching consensus on the causes of its degradation (TDA). Further, it facilitates the establishment of a consultation mechanism among the countries sharing the aquifer, formal agreement on corrective actions including policy, legal and institutional reforms, and investments, to be taken jointly (SAP), and improved awareness and sustained international support. Results are measured in terms of the achievement of key benchmarks (establishment of national inter-ministerial committees, approval of TDA, endorsement of SAP, establishment of a joint permanent consultation mechanism).



### DIKTAS Project Results

The project results include the following:

- (i) A Transboundary Diagnostic Analysis developed and approved.
- (ii) Baseline conditions identified, and environmental status indicators agreed upon and adopted.
- (iii) A multi-country consultative body established and operational
- (iv) Through SAP process, water resources and environmental quality targets adopted and a joint harmonized monitoring program of the environmental status established.

- (v) A mechanism for coordination and exchanges with other relevant projects and initiatives, including the GEF supported Mediterranean Partnership and others, established and operational.
- (vi) Countries establish ad hoc inter-ministerial committees focused on harmonization of existing frameworks, and on priority reforms.
- (vii) A partnership conference consolidates international support for the implementation of the priority actions.
- (viii) Regional SAP (and NAPs) adopted at high level.
- (ix) Selected media events to highlight project's progress and achievements.
- (x) Targeted capacity building programs to encourage replication of new practices, behaviours and technique.
- (xi) Participation to IW LEARN activities, and establishment of website.

## Collaboration mechanisms



In the framework of the DIKTAS project, the four DIKTAS project countries (Albania, Bosnia and Herzegovina, Croatia and Montenegro) have agreed to create two mechanisms in order to facilitate enhanced consultation and exchange of information between the governmental entities that are involved in water resources management: National Inter-ministerial Committees (NICs) in each of the project countries, and a Consultation and Information Exchange (CIE) body at the regional level.

The **NICs** are aiming to:

- (i) Involve all relevant governmental institutions in an effort to implement integrated land and water resources management and harmonise existing policy frameworks at the national level, and
- (ii) Contribute to the preparation, review and adoption of key DIKTAS outputs.

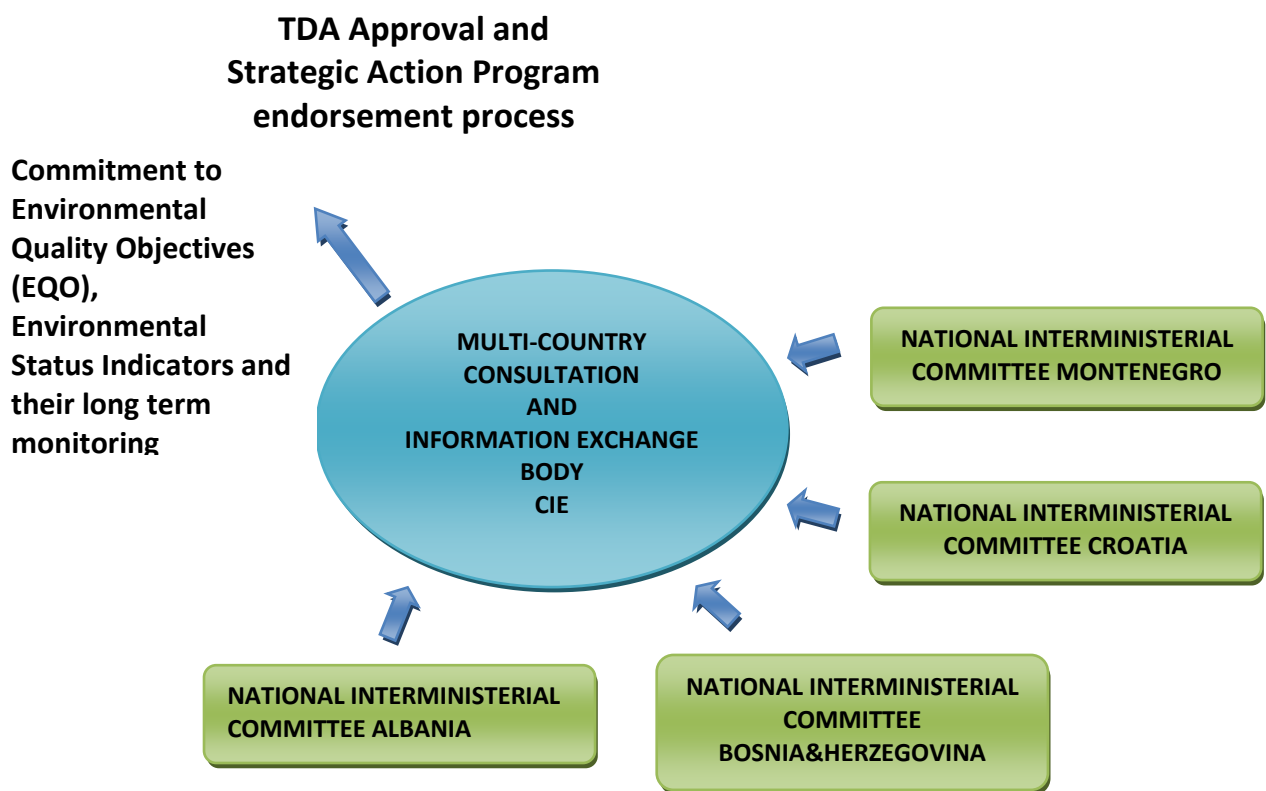
It is proposed that if any such governmental level bodies with similar inter-ministerial functions already exist in project countries, they may be used instead and expanded as necessary.

The **CIE** will be composed of senior government officials of the four countries. It will represent a first step along the way of a systematic commitment to transboundary cooperation in water resources management. Other countries sharing the Dinaric karst groundwater may join the CIE upon their request. NICs and CIE together will represent the key technical-political interface of the project that will discuss, comment and approve the project products such as Transboundary Diagnostic Analysis (TDA), the Environmental Quality Objectives, Environmental Status Indicators and their long term monitoring. Both mechanisms will have a leading role in guiding the process of harmonisation of existing policy and institutional frameworks mainly through the process of endorsing the DIKTAS Strategic Action Programme (SAP).

### Operation and decision making of the Collaboration Mechanisms

Each NIC will be composed of senior specialists of the ministries and government agencies that are involved in water resource management, land use planning and/or policy development for karst aquifers. The NIC members will be invited to participate in the mechanism by the national DIKTAS Steering Committee and the national DIKTAS project focal point. Additional institutions can join the NIC upon request.

Each NIC will propose a member to the CIE body that will represent their respective country at the regional/international level. Once the four CIE members have been nominated, the body will convene and will hold regular annual meetings. The decisions of the CIE body will be taken by consensus between the members.



# DITAS

