

KATER II EVALUATION

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Abstract

The article evaluates the implementation of KATER II (KArst waTER research program II), a multi-regional initiative financed from ERDF and coordinated by the Municipality of Vienna. The evaluation methodology is in accordance with international good practice. The program deals with increasing demand by citizens and environmental organizations for cleaner rivers and lakes, groundwater and coastal beaches. In many European countries, karstic areas are important and acutely essential for public water supply. These areas are at the same time highly sensitive and valuable natural environments. Conversely, exploitation pressure on these areas is increasing. This mainly relates to fields such as tourism, settlements, transport infrastructure, forestry and pasture management. KATER II aims to safeguard co-existence of land-use activities, water management and environmental protection in sensitive areas by developing a Geographic Information System (GIS) designed to improve decision-making.

1. Introduction

This article presents an evaluation case-study using the standard tools used as international good practice (*i.e.* the European Commission Guidelines for Project Cycle Management and the Logical Framework Approach). The importance of choosing for evaluation a project from the water sector resides in the increasing demand by citizens and environmental organizations for cleaner rivers and lakes, groundwater and coastal beaches, which has been evident for considerable time. Recent Eurobarometer opinion polls show that, when asked to list the five main environmental issues that Europeans are worried about, nearly half of the EU respondents are worried about water pollution (47%), with figures for individual countries going up as far as 71%.

In many countries, both EU Member States and Accession Candidates, karstic areas¹ are important and acutely essential for public water supply. These areas are at the same time highly sensitive and valuable natural environments. Conversely, exploitation pressure on these areas is increasing. This mainly relates to such fields as tourism, settlements, transport infrastructure, forestry and pasture management. Due to the fact that competing land-uses cause heterogeneously distributed consequences regarding space and time, unplanned disparities can appear (resulting in the reduction of water quality).

KATER II (*KArst waTER research program II*) aims to safeguard co-existence of land-use activities, water management and environmental protection in sensitive areas by developing a Geographic Information System (GIS) to support decision-making. The underlying idea is to reach a partial equilibrium between the various interests – and then to develop an integrated decision-making process in the domains which affect the karst areas.

A central factor for the success of the project is raising the level of awareness both amongst the public at large and amongst selected target groups (relevant stakeholders). The relevant activities derived from the project therefore do not merely address the public at large (film, folders, permanent media work, expansion of the current website www.kater.at into a web portal), but also, and in particular, the competent political decision-makers (kick-off workshop, final workshop, conference), scientists, regional planners, water supply companies and administrators (conference), students and university teachers (excursions) as well as schoolchildren and their teachers ('weeks in the country').

Benefitting from ERDF financing, KATER II is listed by DG REGIO on its homepage as Best Practice. Therefore, the article aims to provide useful insights for similar initiatives in the water sector, as well as for other projects which benefit from EU funding.

1 Limestone landscape, characterized by caves, fissures, and underground streams.

2. Evaluation Design

2.1. Project background

The project is run by a Matrix² type of organization, composed of one Project Coordinator, one Project Manager, one Financial Manager, one Project Steering Committee, one Core Working Group, 20 Territorial and 3 Thematic Working Groups with their corresponding Leaders, representing joint interests (administrative, industry, policy-makers, environmental) from 4 European countries: Austria (region Vienna – coordinator, plus Hochschwab/Rax/Schneeberg /Schneealpe), Italy (region Veneto, region Molise), Slovenia (region Krvavec), and Croatia (region Lika).

Table 1: Overview of the project

Objectives (Fundamental: Safeguard clean water)	Integrated processes designed	Activities
Optimize the decision-making process relating to the problems of: <ul style="list-style-type: none"> land use water management environmental protection 	Develop and implement an integrated <i>Decision Support System</i> (DSS)	Data collection System update Forecasts Workshops (12) Semi-annual steering meetings (8)
Raise awareness about sustainable resource management	... for the competent political decision-makers	Kick-off workshop Final workshop Conference
	... for scientists, regional planners, water supply companies and administrators	Scientific Publications Conferences
	... for students and University Professors	University Excursions
	... for schoolchildren and their teachers	'weeks in the country'
	... for the public at large	Expansion of the current website into a web portal Permanent media work Folders, films

Source: <http://www.kater.at/>

² <http://www.kater.at/index.php?module=ContentExpress&func=display&btittle=CE&mid=&ceid=60>

Table 2: Information about project implementation

Budget and manpower involved	Total cost	3.246.400 Euros • Partners: 58 % • EU contribution ³ : 42 %
	Initial timeframe ⁴	4 years (April 2003 - March 2007)
	Manpower	Project Coordinator Project Manager Project Steering Committee Core Working Group Territorial & Thematic Working Groups Territorial Working Group Leaders Thematic Working Group Leaders

Source: <http://www.kater.at/>

2.2. Methodology

The methodology of evaluating the KATER II project is based on the European Commission Guidelines for Project Cycle Management. The evaluation steps are inter-correlated, since the entire logic of the Logical Framework Approach (LFA) relies on following the Evaluation Sequence. The evaluators begin – after identifying the background and the institutional map – with mapping the research into theoretical evaluation questions (the most relevant have been selected after a process of brainstorming). After assessing the necessity of this project, the evaluator will select the most relevant evaluation criteria – to be used as a filter for the project, during the monitoring process, in accordance with the evaluation questions. At each moment in time, the counterfactual (the alternative scenario – situation without KATER II intervention) will represent a point of comparison for the development of the project.

LFA will provide the tools for the next steps of the evaluation: Stakeholder Analysis, Problem Analysis, Analysis of Objectives and of the Strategies to reach these objective; then the Logical Framework Matrix can be used as a powerful tool for showing the dynamics of the different types of relations between the Overall Objective, Purpose, Results and Project Activities.

Using the Tree-Structure, we identify in the graph below the main configuration of the analysis:

3 Financed through the European Regional Development Fund. The project is part of the Community Initiative (96/C200/07) Interreg III B Project in Central, Adriatic, Danubian and South Eastern European Space (CADSES).

4 The duration of 4 years is necessary for the correct recording of the initial project data because environmental data collection and monitoring in karstic areas should be done over a period of at least 4 to 5 years (several hydrological years) in order to obtain reliable results.

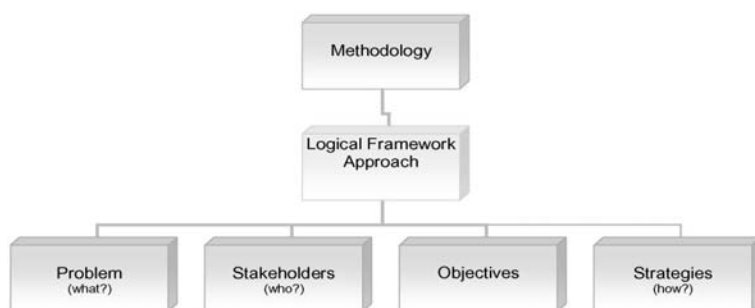


Figure 1: Methodology

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

As a normal continuation of the previous steps, the Evaluation Results will offer a synthesized picture over the current state of affairs, in accordance with the criteria selected in advance – and the evaluation will conclude with Recommendations for further research and for specific areas of policy improvement.

The main dimensions analyzed are reflected in the following evaluation questions:

Table 3: Dimensions and evaluation questions

DIMENSIONS	EVALUATION QUESTIONS
Impact on employment and economic sectors	What is the economic short-term effect of KATER? In which fields will the project generate long-term investments?
Environmental impact	Is the positive effect of the project sustainable?
Spatial development approach	How does the project increase the efficiency of the spatial development planning?
Transnational approach	What is the enforcement mechanism of this international project?
Equal opportunities	Does KATER ensure equal opportunities?
Innovative character	Is the project an innovation?
Improvement in institutional setting	Can local and regional governmental organizations work together with water authorities and institutions engaged in spatial and regional planning?
Transfer of the projects results	Can the KATER results, methods and instruments be applied worldwide?

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

2.3. Needs Assessment

The needs assessment is realized in concordance with the following guidelines:

- a. Nature, magnitude and distribution of the problem:
 - karstic areas serve the purpose of drinking water supply;
 - 35% of the European area is covered by karst;
 - in Vienna 100% of population is supplied with drinking water from karstic areas.
- b. The extent to which there is a need for intervention:
 - specificity of karst (Darcy’s Law on permeability does not apply);
 - contamination (the karstic areas are very predisposed to contamination, affecting the quality of water from these sources) – mainly from industrial sources, but also from irregular, non-planned land-use activities.

2.4. Evaluation Criteria

KATER II is evaluated in relation to the following criteria, which reflect the dimensions and questions mentioned at point 2.1:

- Relevance;
- Effectiveness (capacity to reach the objectives);
- Efficiency (cost-benefit ratio);
- Sustainability;
- Transparency (with regard to the difficulty of obtaining the information needed for evaluation).

3. The Logical Framework Approach

3.1. SWOT Analysis

For a full overview of the interests involved in KATER II (as well as for the rest of the steps), this evaluation makes use of *triangulation*. We depart from the Barrier model (different actors with different types of interests), arriving at the following SWOT Analysis:

Table 4: Summary of SWOT Analysis

STRENGTHS	WEAKNESSES
Water authorities, which represent one of the main users of the DSS, support the project. Social interests are protected.	Political interests (searching for further support) listen to economic voices.
OPPORTUNITIES	THREATS
Regional administrations see the potential for regional development. Spatial planners obtain support for their projects. Ecologic interests are taken into consideration.	Industry owners (economic interests) have the tendency to defect from voluntary agreements.

3.2. Problem Analysis

Before KATER was designed, the main problems needed to be identified. The key-element in analyzing the problem is the design of the relevant Problem Tree. The main condition taken into account was causality. Considering the cause-effect relationship, the Problem Tree serves as a very powerful tool for the evaluation of the type of situations that KATER II is addressing: the fundamental challenge is represented by the continuous deterioration of water quality, due to irresponsible use of land. This can be further detailed:

- On the onehand, there is a low coordination of planning activities (caused by the lack of a DSS or methodology);
- Doubled by no pilot actions (common DB) and low networking (low inter-regional cooperation) which aggravates the problem;
- On the other hand, the general awareness to the environmental aspects treated by KATER II is still low (no trans-regional training).

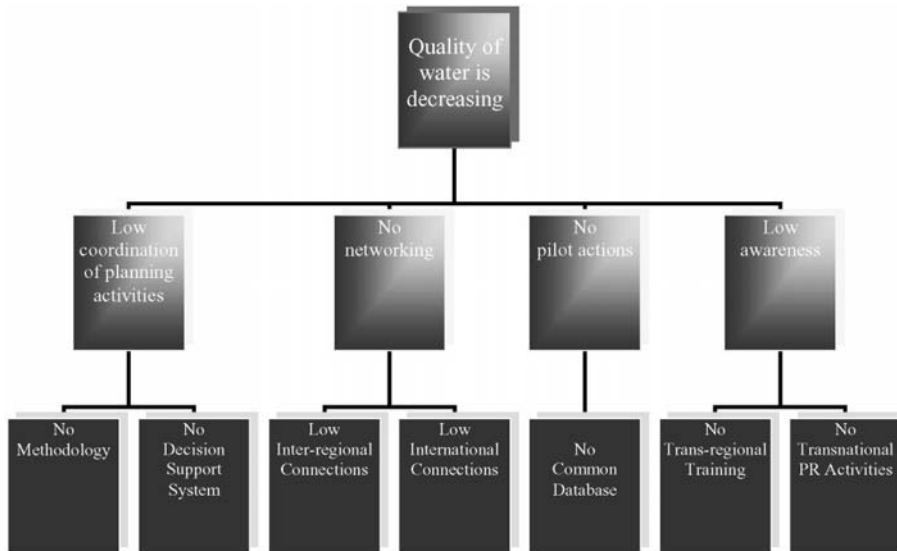


Figure 2: Problem Tree

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

Causality represents the main condition in evaluating the type of problems faced by the project. Therefore, the graph is to be read bottom-up. The top-down approach offers a view centered on the degree of importance of the issues (upper levels are more important and encompassing).

3.3. Analysis of Objectives

The problems described above represent the challenges that KATER II had to face when it was conceived. It started by designing an Objective Tree that mirrors the Problem Tree, in case that all the water management aspects are taken into account (the project focuses on karst areas, not on eg. river surfaces, for instance). The objectives in reaching the main project goal are listed as:

- Increased coordination in planning activities;
- Increased networking;
- Pilot actions;
- Increased awareness.

These objectives can be tracked down to policy sub-targets (for instance, following a lead on the implementing of the Decision Support System and going up in the objective tree, this will lead to better coordination in planning activities, which at its turn will contribute to the overall objective – of safeguarding clean water).

3.4. Analysis of Strategies

This step has required synthesizing a significant amount of information and then making a complex judgment about the best implementation strategy to pursue.

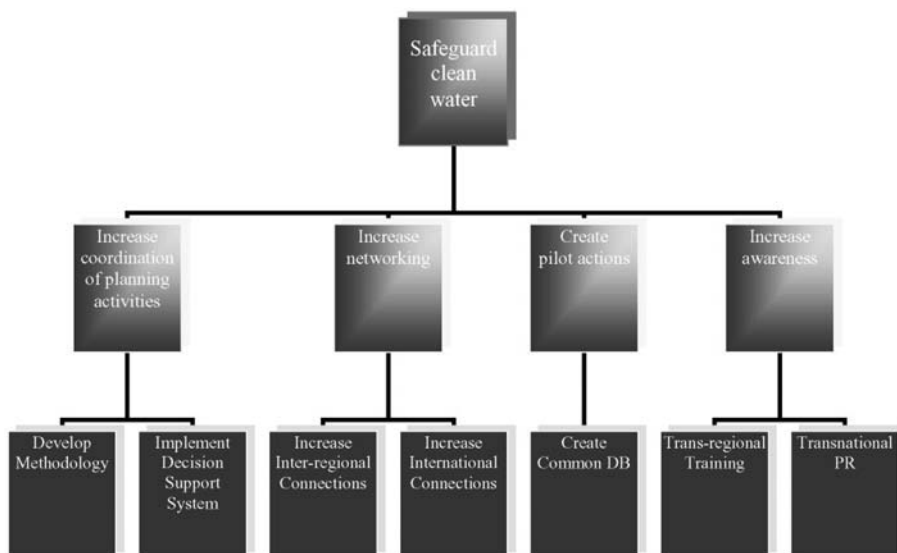


Figure 3: Objective Tree

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

In the case of KATER II, the selection of the main strategy of action has been made in order to establish the focus of the project primarily on a karstic area strategy, due to:

- the positive cost-benefit analysis of improving the quality of water from karstic areas;
- another planned project working with river surfaces;
- the openness of regional administrations and water management authorities towards the overall project objectives.

3.5. Logical Framework Matrix

The Logical Framework Matrix provides a useful and fast overall image of the project. It is a 4x4 matrix in which the columns provide information about the overall objective of the project (safeguard clean water), detailed into outcomes (purposes) which are based on the accomplishment of the project results, based on the principle of causality, that works, in this case, bottom-up. According to the Project Cycle Guidelines, ‘in general, it is recommended that the matrix only includes the project Overall Objective, Purpose and Results – and that Indicative Activities be described separately (i.e. using an activity schedule)’⁵.

In order to read the matrix easier, the next step after skimming the first column is to analyze the assumptions, from the bottom to the top – and the way in which they influence the elements mentioned in the first column. The next logical step for completion – and for reading the matrix – is to select, row by row, the indicators and their sources of verification.

⁵ <http://www.kater.at/index.php?module=ContentExpress&func=display&ceid=21&meid=-1>

Table 5: Logical Framework Matrix

Project Description	Indicators		Source of Verification	Assumptions
	For Monitoring	General		
<p>Overall objective: Safeguard Clean Water</p> <p>Purpose (Outcomes): Environmental impact studies in the fields of forestry, settlement, transport infrastructure, tourism and pasture management describing the impact on groundwater and the natural environment.</p> <p>Environmental monitoring systems: water quantity and quality (physical, chemical and bacteriological parameters); meteorology (precipitation, snow, rain, snowmelt, temperature, global radiation, wind, air pressure, humidity); soil (structure, temperature, humidity, compaction, erosion, decomposition); vegetation (natural disasters, changes, deterioration of the vegetation canopy);</p>	<ul style="list-style-type: none"> % increase in purity of water (30% chemical and 50% bacteriological) 5 studies describing the impact of land use activities (forestry, settlement, transport infrastructure, tourism and pasture management / agriculture) on groundwater and natural environment. 4 main topics for environmental monitoring: manual for the installation and maintenance of monitoring stations (water, meteorology, soil and vegetation) as well as guidelines for the interpretation of data collected by these stations (this is also useful for similar investigations in other karstic regions); setting-up of about 25 monitoring stations for various parameters; 	<ul style="list-style-type: none"> Quality of water Decision Support System Pollution Monitoring Systems Early Warning Systems 	<ul style="list-style-type: none"> Specialized measurement instruments (MCI) Integrated Data Bases, shared by the participants in the project Specialized studies Project reports 	<ul style="list-style-type: none"> Baseline scenario: the quality of water drops by 2%/year, if action is not taken The 3 different types of activities (land-use, water management, environmental protection) have the tendency to collide, without coordination

Project Description	Indicators		Source of Verification	Assumptions
	For Monitoring	General		
<p>Monitoring of potential sources of pollution: livestock and game; settlement (solid and fluid waste treatment, sewage system, waste disposal); transport infrastructure; tourism activities (skiing, hiking, artificial snow production, etc.); immission load from the atmosphere</p> <p>Data Implementation: implementation of collected data into databases developed in former KATER project</p> <p>Decision support system: Development of a decision support system based on the data collected using the results of the environmental impact studies</p> <p>Quantified Results: Best-practice examples in the fields of forestry, settlement, transport infrastructure, tourism, and pasture management</p> <p>Development of new technologies in the fields of meteorology, hydrology, data transfer from remote measuring stations, data processing in decision support system</p>	<p>5 main topics for monitoring of potential pollution sources; documentation and reporting of potential pollution sources using different methods (regular standardized field observation, data and statistics from other private and governmental institutions)</p> <p>enhancement and extension of existing databases with possibilities of visualization and analyses of information</p> <p>software application for the support of decision makers in the fields of spatial planning, water management and environmental protection</p> <p>5 implementation handbooks including suggestions and examples for managing land use activities</p> <p>4 fields for new technologies remote sensing technologies and satellite imaging, application of high-tech sensors for the detection of water contaminants, wireless data transfer, metadata based modeling of decision processes</p>	<p>Speed of decision making</p> <p>Remote sensing techniques, Satellite imaging</p>	<p>Auditing of reports</p> <p>Feed-back forms</p>	<p>The coordination of activities will create stabilization – followed by an increase in – the quality of water</p> <p>Awareness with regard to the subject can be 100% reached at the level of the target population</p>

Project Description	Indicators		Source of Verification	Assumptions
	For Monitoring	General		
<p>Workshops for the exchange of experiences and know-how transfer</p> <p>Application of decision support system by the responsible institutions.</p> <p>Transnational interdisciplinary excursions for university students and teachers</p> <p>National excursion ('weeks in the country') for schoolchildren aged 10 to 14</p> <p>International conference</p> <p>Web platform for internal communication and presentation of project results to a broad public</p> <p>Film illustrating problems and solutions related to KATER II project</p> <p>Folders and other media work</p> <p>Presentation of project activities and results at various national and transnational meetings and conferences</p>	<p>12 reports</p> <p>The implementation of the European Water Framework Directive, NATURA 2000 and the Alpine Convention will be executed with the help of the decision support system by the governmental authorities involved</p> <p>3 excursions with about 50 participants each;</p> <p>6 'weeks in the country' with about 25 participants each;</p> <p>200 participants expected</p> <p>1 web platform</p> <p>5 versions (in 5 languages) to be broadcast (at least) in all partner countries</p> <p>4 folders, one per year (in 5 languages), with a circulation of 10,000 copies/ year</p> <p>15 presentations</p>	<p>Amount of awareness - web, folders, pres., nr. of excursions</p>	<p>Check-counter</p> <p>Audience ratings</p>	<p>Once developed, awareness will influence the behavior of the target group → % increase in quality of water (reduction in the use of chemicals and in the bacterial level)</p>

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

With regard to the process of *selection of the best indicators*, a powerful and simple statistical tool used in econometrics is represented by the probabilities error matrix, in which α (“*relevant and selected*”) and β (“*irrelevant and not selected*”) are the most desirable outcomes and they should be maximized: if α is increased up to the optimum number of indicators, the KATER II evaluation works fine – and if the probabilities of $1-\alpha$ and $1-\beta$ are decreased, then the bias created by selecting erroneous indicators is reduced. The “ α indicators” are further filtered, using the *sensitivity analysis*.

Table 6: Selection of indicators

α (relevant and selected)	$1 - \beta$ (irrelevant and selected)
$1 - \alpha$ (relevant and not selected)	β (irrelevant and not selected)

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

Another *killer assumption* is that statistics can explain the entire realm encompassed by the KATER II project. Statistics only show correlation, not causality – and as a further counterargument, Gresham’s law on money can be generalized to the relationship between variables, stating that as soon as pressure is applied on one economic variable, the relationship breaks.⁶ Also, the intervening variables⁷ are not fully covered – and their effect increases the bias (ϵ) in the project forecasts.

The reporting system⁸ generally can be divided into progress reporting and financial reporting. Therefore at each milestone two types of reports have to be made and handed over by the Project Co-ordinator to the Programme Managing Authority: a Transnational Progress Report and a Transnational Financial Report. These two parts, which have to be combined to one Project Report are the basis for monitoring and evaluation of the project by the Programme Managing Authority.

The payment of ERDF funding is strictly related to these Project Reports. This is also the reason, why the time schedule has to be kept strictly by all project partners during the whole runtime of the project. The time schedule is based on the project milestones.

6 This holds true, for instance – in the relationship between long-term inflation and unemployment (the Phillips Curve).

7 E.g. a relation type $x \rightarrow y$ does not take into account indirect variables, like seasonal effects and their effect on industry decision to choose location, in which case a correct representation would be $x \rightarrow z \rightarrow y$.

8 <http://www.kater.at/index.php?module=ContentExpress&func=display&ceid=25&bid=27&btile=Project>

4. Evaluation results

Potential problems of monitoring have resulted from the fact that the project team is a mixed one:

- Financial managers have less experience in karstic hydrogeology.
- The well-experienced tracers are less familiar with advanced economic notions.

These challenges have been diminished by common training activities – in karstic hydrogeology for the economists – and in economics for the engineers.

In providing the evaluation results of the project KARST II, the evaluator followed the criteria previously described in section 2.3 of this paper:

- **Relevance:** the project is justified from the social and environmental points of view and it is in accordance with the European policy framework;
- **Effectiveness:** KARST II has a well-defined target and clear objectives and it possesses the possibility to reach them. The gains in relation to the current situation consist in the stabilization of the decrease in the water quality;
- **Efficiency (cost-benefit ratio):** KARST II has a pragmatic budget; it uses adequate, qualified human resources, involved in a realistic and detailed work plan;
- **Sustainability:** KATER II represents the follow-up of KATER I and it is intended to continue valorizing its results after the project completion;
- **Transparency:** the project design includes a wide range of information activities; the information is easily accessible and the project team is fast in replying to enquiries.

In order to apply the evaluation criteria, we designed a 5-level scale, in which 1 represents the best grade. The maximum number of points goes to the *Relevance* criterion of project evaluation – since KATER II touches upon a fundamental aspect of life: the safeguarding of drinking water. The marketing of the project itself leads to an excellent level of *Transparency* as well: all the financial aspects of the project, together with detailed forecasts of the planned results, costs and benefits – are published for public use on the website⁹, in specialized reports for scientific use, as well as in management reports, for the use of the decision-makers. From the point of view of economic cost-benefit analysis (*Efficiency*), the project also scores very well, due to the high level of specialization and productivity of the manpower.

Looking at the way in which KATER II has managed to raise awareness about the deteriorating water quality – and to put useful tools at the disposal of the policy makers from the water authorities and land administrations – the *Effectiveness* of the project is graded as good. Since KATER II represents already the result of KATER I and there exist the premises of continuation through similar projects in this category (that will increase the quality of tap water), *Sustainability* is also qualified as good.

9 www.kater.at

5. Recommendations and conclusions

The main topics in this final section of the paper are the following:

1. Application of the evaluation criteria and the use of a score table to grade;
2. Summary of findings and conclusions – and formulation of the final judgment;
3. The strong and weak points of the research and suggestions for further research;
4. Formulation of policy recommendations.

Table 7: Summary of conclusions (I)

1. Application of the evaluation criteria and the use of a score table to grade	1: Excellent	Relevance; Transparency
	2: Very good	Efficiency
	3: Good	Effectiveness; Sustainability
	4: Medium	-
	5: Fail	-
2. Summary of findings and conclusions – and formulation of a final judgment	+ Innovative project + Positive impact + Good practice + Counterfactual – No enforcement mechanism (voluntary agreement → industry has tendency to defect)	

Going into more detail, the project proves to be innovative in its field and means of action, its implementation having a positive impact on the decision-making with regard to water management – and also on the level of awareness on the issue of environmental-friendly land-use activities. KATER II provides a set of new tools that could be used in similar circumstances in different regions of the world, creating a *Set of Best Practices*.

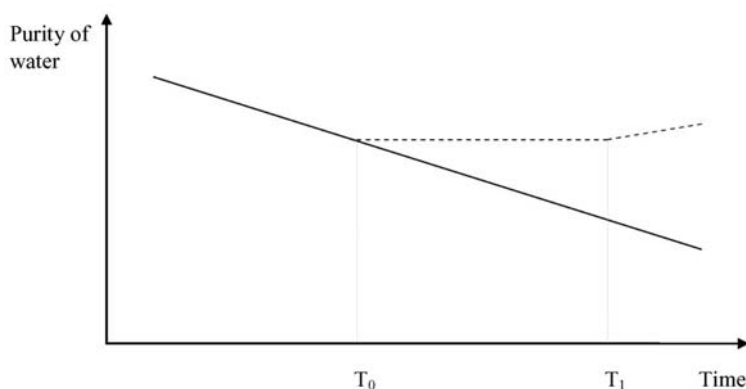


Figure 4: Counterfactual

Source: Adapted from European Commission, Project Cycle Management Guidelines, 2004

Comparing the results of the project with the situation – in a theoretical setting (the *Counterfactual*) – provides a useful long-term vision on the positive effects of the

project: taking into account the current statistics, that show a deterioration of 2% per year in the level of water purity (i.e. a 2% increase in chemical and bacteriological components), the blue down-sloping line represents the involution of the level of water purity over time. The main target of KATER II is represented by the *stabilization* of this purity level (T_0) – visualized in the dotted black line. Whether the intervention level will remain constant – or whether it will be favorably adjusted to an upper level (second intervention point, T_1) – followed by an increase in the water purity level, remains to be seen and it is suggested to make this part of a different project, since the limited time span of KATER II only allows for stabilization.

Potential biases associated to this counterfactual derive from the fact that the *elasticity* of the water purity to the intervention measures is not fully known – creating difficulties in the exact forecasts on long term and creating the “laboratory” setting in which KATER II develops only the framework for a multi-regional experiment. The project faces also *path-dependence*: the change at T_0 is not sudden – it takes time to adapt and to educate new mentalities.

One aspect not mentioned in the project is the existence of an enforcement mechanism: the entire process is based on voluntary agreement, from which some stakeholders will have the tendency to defect, motivated by short-term gain. Yet the feasibility of such a mechanism has to be further researched – and it will be subsequently analyzed in the following section.

Considering all these aspects mentioned, the project is judged in a positive manner for its current achievements – and the points to be further developed are mentioned beneath.

Table 8: Summary of conclusions (II)

3. The strong and weak points of the research and suggestions for further research	SWOT Analysis of the research:	
	S	W
	It attracts attention to a fundamental aspect of life	Due to the large amount of work, the degree of synthetisation is very high
	O	T
	Selection of the best practices and their use in Eastern Europe	Lack of interest Potential scarce financing

The main quality of this research on the water quality is represented by the fact that it attracts attention to a fundamental aspect of life, which is deteriorating unless action at multiple levels is being taken. In order to provide a comprehensive view on the project, the main structure of the project has been identified and underlined, creating a solid foundation and a strong need for further research, which will be able to fill the gaps and update the current version. The outcomes of the research could be

selected as Best Practices and put to good use in Eastern Europe – which also shares large areas of karst surfaces. The level of interest from the industry creates a potential for public-private partnerships.

Table 9: Summary of conclusions (III)

4. Formulation of policy recommendations	<ul style="list-style-type: none"> • Continuation of KATER II activities • Necessity of an enforcement mechanism • Extend the results of trans-regional cooperation to the other water management institutions (e.g. rivers) • w.r.t Counterfactual: continue the KATER program, with the main aim to increase the level of purity of water
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The recommendation to continue the project at the same – or faster – pace is conditioned by the design of the enforcement mechanism; this will need to take into account the dynamic nature of this domain – and to create a flexible structure that will not remain obsolete over time. Studying the feasibility of implementing such a mechanism over a voluntary agreement, risk analysis shows the possibility of withdrawal of industry participants from the project, unless an incentive mechanism is put in place.

Since KATER II covers only a part (karstic areas) of the problem (*i.e.* clean water), its methods and techniques may be easily transgressed to other forms of trans-regional cooperation between the other water management institutions (*i.e.* rivers).

Since the economic rationality of KATER II fits the initial policy design, KATER manages to prove its *feasibility*. KATER II represents the direct follow-up of KATER I, which has managed to fully accomplish its objective (*i.e.* develop the software for a Decision Support System). Through all these aspects, KATER II carries a high degree of potential to which it can achieve its objective of safeguarding clean water by ensuring an optimum division of land-use activities.

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