





FINAL EVALUATION

of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies"

(Project 48480 - PIMS 3334)

Final Report



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TABLE OF CONTENTS

LIST	Γ OF ΤΔ	ABLES		II			
LIST	OF A	BBREVIA	ATIONS AND ACRONYMS	III			
ACK	NOW	LEDGEM	ENTS	IV			
EXE	CUTIV	/E SUMM	IARY	V			
1.	INTRO	DUCTIO	N				
2.	THE P	ROJECT	AND ITS DEVELOPMENT CONTEXT				
3.	FIND	NGS ANI	O CONCLUSIONS	5			
	3.1	PROJECT	FORMULATION	5			
		3.1.1	Development priorities at the national and regional level				
		3.1.2	Analysis of the Log-Frame	6			
		3.1.3	Stakeholder participation				
		3.1.4	Country ownership/Driveness				
		3.1.5	Cost-effectiveness				
		3.1.6	UNDP comparative advantage				
		3.1.7	Management arrangements	9			
		3.1.8	Replication approach	9			
	3.2	PROJECT	MANAGEMENT	9			
		3.2.1	Implementation approach				
		3.2.2	Use of the Log-Frame as a management and M&E tool				
		3.2.3	Financial Planning and Management				
		3.2.4	Fund Leveraging / Co-financing				
		3.2.5	Monitoring and Evaluation				
		3.2.6	Management Support Provided by UNDP				
	3.3	PROJECT	Results				
		3.3.1	Achievement of Project Outcomes				
		3.3.2	Contribution to Capacity Development				
		3.3.3	Attainment of Project Objective				
		3.3.4	Global Environmental Benefits				
		3.3.5	Sustainability of Project Achievements				
		3.3.6	Synergies				
		3.3.7	Replication of Project Results				
4.	CONC	LUSION	/ RATINGS SUMMARY				
5.	LESSC	ONS LEAD	RNED				
6.	RECO	MMEND	ATIONS				
ANN	VEX 1:	TERMS	OF REFERENCE				
ANN	VEX 2:	EVALUA	ATION MATRIX				
ANN	VEX 3:	LIST OF	DOCUMENTS REVIEWED				
ANN	VEX 4:	EVALUA	ATION MISSION AGENDA				
ANN	VEX 5:	LIST OF	PEOPLE INTERVIEWED	61			
ANN	VEX 6:	CO-FINA	ANCING TABLE				
ANN	ANNEX 7: COMPONENTS OF THE LAKE BALATON MONITORING SYSTEM						
ANN	VEX 8:	LIST OF	PROJECTS FUNDED BY THE SMALL GRANT SCHEME				
ANN	VEX 9:	LIST OF	CLIMATE CHANGE RELATED PROJECTS SUBMITTED BY LBDCA				
ANN	VEX 10	: RATIN	G TABLES				

List of Tables

Table 1:	Summary of Risks at Project End	
Table 2:	UNDP/GEF Fund Disbursement Breakdown	
Table 3:	Co-financing from Project Partners	15
Table 4:	List of Performance Indicators Used to Monitor the Project	16
Table 5:	Achievement of Project Outcomes	17
Table 6:	Attainment of Project Objective	
Table 7:	Status of Objective/Outcome Delivery as per Measurable Indicators	
Table 8:	Project Ratings	

List of Abbreviations and Acronyms

ALM	Adaptation Learning Mechanism
APF	Adaptation Policy Framework
APR	Annual Progress Report
CLIME	Climate Impacts on Lake Ecosystems
ĊD	Capacity Development
	Division of Early Warning and Assessment
	Environment Impact Accomment
EU	
EURURALIS	A Scenario Study on Europe's Rural Areas
GEF	Global Environment Facility
GDP	Gross Domestic Product
GEO	Global Environment Outlook
GIS	Geographical Information System
GRID	Global Resource Information Database
GPRS	Global Positioning Resource System
HUF	Hungarian Forint
IISD	International Institute for Sustainable Development
IMS	Internet Man Server
IPCC	Intergovernmental Panel on Climate Change
KEP	Development of Regional Sustainable Development Indicators Project (Hungary)
	Lake Balaton Development Council
	Lake Balaton Development Coordination Agapay
	Light Emitting Diodo
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NUUS	National Climate Change Strategy
NEX	National Execution
NGO	Non-Governmental Organization
PIR	Project Implementation Review
PRODOC	Project Document
PMB	Project Management Board
PSC	Project Steering Committee
QCS	Quarterly Consultant Schedule
QPS	Quarterly Partner Schedule
RBEC	Regional Bureau for Eastern and Central Europe
RBM	Result-Based Management
SMART	Specific Measurable Achievable Relevant Time-bound
SWAT	Soil Water Assessment Tool
TOR	Terms of Reference
	Tri Partite Deview
	Histod Nations Development Programme
	United Nations Development Programme
	United Nations Environment Programme
	United States Dollar
USDA	United States Department of Agriculture
VAHAVA	Getting Prepared to (combat) Climate Changes in Hungary
VITUKI	Hungarian Water Resources Research Centre

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DISCLAIMER

This report is the work of an independent consultant and does not necessarily represent the views, or policy, or intentions of the United Nations Development Programme (UNDP).

EXECUTIVE SUMMARY

The project "*Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies*" was a joint initiative of the United Nations Development Programme (UNDP) and the Lake Balaton Development Council (LBDC). It was implemented by the Lake Balaton Development Coordination Agency (LBDCA) as the national implementing agency, in partnership with the International Institute for Sustainable Development (IISD) and the Division of Early Warning and Assessment (DEWA) of the United Nations Environment Programme (UNEP). The project had a total budget of USD 4,075,000 that were financed by a GEF contribution of USD 985,000 and by co-financing commitments of about USD 3,080,000. The project started in January 2006 and closed on December 31, 2008.

The objective of the project was to contribute to a better understanding of the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change and build capacity for more effective policy making and adaptation measures in response. The project strategy included five outcomes: (1) Strengthened ecological and socio/economic resilience by increased understanding of lake and watershed processes viewed through the lens of vulnerability and adaptation; (2) Strengthened capacity for formulating and implementing adaptive strategies compatible with sustainable development; (3) Strengthened the policy framework conducive to adaptive management with particular interest to institutional mechanisms and economic incentives and disincentives; (4) Facilitated adaptation to the impacts of climate change through direct action in the form of pilot initiatives funded through LBDC's existing small grants facility and innovative financing mechanisms; and, (5) Enhanced public and policymaker awareness of integrated vulnerability and adaptation approaches locally, nationally and internationally, including contribution to the GEF's project on the Adaptation Learning Mechanisms.

UNDP Bratislava as the GEF Implementing Agency initiated this final evaluation. It was intended to assess the relevance, performance and success of the project and looks at signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global and national environmental goals. This evaluation is based on a desk review of project documents and on interviews with project staffs and key project informants during a 4-day mission to Hungary. The methodology included the development of an evaluation matrix to guide the entire data gathering and analysis process and the findings were triangulated with the use of multiple sources of information when possible. This final evaluation report is structured around 6 chapters including introduction, overview of the project, evaluation findings, conclusion/rating summary, lessons learned and recommendations.

The main findings of this final evaluation are:

<u>The overall project achievements and impact are rated as satisfactory</u>. The project was highly relevant both at national and regional levels. It was implemented during the time that Hungary developed its National Climate Change Strategy and its related 2-year Action Plan. The project was instrumental in providing inputs to these two processes. However, despite a good concept, the scope of the project was not in line with its timeframe. A 30 months timeframe was too short to be able to develop the necessary capacity for scaling up project achievements. Nevertheless, most project achievements were institutionalized and should be sustainable in the long run. Considering the pioneer nature of this project, it played an important catalytic role in the Lake Balaton region to develop and mainstream adaptive capacities for improving the management of the Balaton Lake system, including its watershed. The local development organizations including the municipalities are now more aware about the Lake Balaton ecological and socioeconomic system's vulnerability and resilience and capacities were developed with the support of this project.

The implementation approach was rated as satisfactory. After a slow start-up phase and given the time constraint, the implementation team was under pressure to deliver what was expected in the project document. The review of the log-frame indicated also that the set of expected results had an inherent sequence embedded into these results guiding the implementation. The project needed to complete outcome 1 before any other major activities could be undertaken. As a consequence, the critical implementation path of the project was somewhat rigid, adding pressure on the implementation team to deliver on time. Any delay in one activity was affecting the entire project timing. Nevertheless, given these constraints, the project management team did adapt the implementation of the project to find ways to keep the implementation

within the planned schedule.

The sequential implementation of the project contributed to focus more on the assessment of understanding the natural system of the Lake Balaton and its vulnerability, rather than on developing the capacity of local organizations to adapt to climate change. The project was born out of the necessity to understand better the hydrology of the lake and its vulnerability following the decrease of the water level observed during the period 2000-03. Assessment was the first objective and despite a change during the approval of the project to add the capacity development in its objective much of the focus of the project stayed on the assessment. We also need to recognize that the project needed first to understand the natural system of the lake and its vulnerability before any actions could be taken to address the issue of adapting to climate change.

The national ownership of the project was mostly limited to LBDCA with limited "connections" with other organizations such as the Ministry of Environment and Water and the Water Management Authority. The limited participation of stakeholders in the implementation of the project, other than being consulted, was also a result of the tight implementation schedule and the need to focus foremost on the research to understand the natural system of the lake and its vulnerability.

The overall delivery of project outcomes and objective are rated as satisfactory. The project delivered tools and instruments to better understand the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local changes. The project was also able to contribute to mainstream climate change adaptation into several policies and strategies, including the recently developed Lake Balaton Long Term Development Concept, which will guide the development of the region for years to come.

Finally, the review indicates that the long term impact and sustainability of project achievements is satisfactory. Some results were institutionalized and as a consequence should be sustainable in the long run. This is the case for key policies and strategies in which climate change adaptation was integrated. These documents were approved by the corresponding level of government (national or regional) and are now guiding the programmes of relevant organizations. The same can be said for local development plans at the municipal and micro-regional levels. Sustainable development indicators were integrated to some of these local development plans and are used through the development process. No particular issue exists with regard to the long-term sustainability of these results.

The project also developed tools and instruments to help the local decision-making process for climate change mitigation and adaptation measures such as the SWAT instrument and its related datasets, and the web-based information tool "BalatonTrend". These products are of high quality; however, despite some attempts to transfer this know-how, the uptake of these achievements by local agencies/organizations is not certain and as it was noted by the project management team in their last PIR-2009, the risk exists that the *"full and sustained utilization of tools and policies developed might need further actions"*. This is the main challenge of the project to ensure its long-term success.

The main lessons learned are:

- The small grant facility to fund small projects in the Lake Balaton area was part of the project deliverables and was a good opportunity for local stakeholders to demonstrate what and how local communities can adapt to climate change.
- Offering direct grants for specific adaptation measures to climate change is more effective than adding climate change adaptation criteria in the evaluation system of a small grant scheme.
- A 30-months project is too short to develop capacity of local stakeholders. Additionally, the time constraint is even greater when assessments need to be conducted before any capacity development actions can be implemented.
- Partnering with international organizations can be very effective and beneficial for local organizations/stakeholders; however, the project should maximize the transfer to this know-how to ensure that local stakeholders benefits from this knowledge and know-how.
- When project activities respond and support/reinforce existing processes and systems, the achievements are well integrated and the long term sustainability is ensured through good ownership of these achievements by the stakeholders.

• Acquisition of datasets is often underestimated during the formulation of projects and may hamper project progress if these datasets are not available when needed.

Recommendations are:

- 1. Projects of this nature should be developed at least for periods of 4 to 5 years minimum; 2.5 years is too short. It does not allow a project to, first, assess/analyze, second, identify what to do, and finally third, engage and develop the capacity of local stakeholders.
- 2. It is recommended that the review of this type of project during the approval stage should not only be technical and financial but also managerial. The managerial aspects of these projects should be assessed and should include the scheduling of project implementation; including its "critical path" to identify possible "bottlenecks" and possibly alternative implementation paths.
- 3. When projects involve international partner(s), it requires an agenda focusing on the transfer of know-how to maximize the transfer of knowledge to local stakeholders.
- 4. When implementing projects with an extended assessment component, it is recommended that the project work closely with the national scientific community. It would contribute to develop the local capacity of this community over the long run, validate better the project findings nationally and as the custodian of the accumulated knowledge, the national research community should be able uptake the findings.
- 5. Implementing a climate change adaptation project requires the participation of all key stakeholders; not only for consultation but also for participating in an efficient project decision-making process.
- 6. It is recommended for projects that include the capacity development of stakeholders, to conduct a capacity development strategy. The strategy allows the identification of the current existing capacities of the various groups of stakeholders, the capacities needed to implement the project strategy, the capacity gaps and a strategy to address these gaps.
- 7. These projects should be flexible in their implementation and be adaptable to local realities. As often, the timing of GEF funded projects are difficult to predict. As a result, a particular context during the formulation of a project may be completely different during the implementation stage.
- 8. The main language of a project should be the language spoken in the country hosting the project and it is advisable to translate key documents in English to give access to the project knowledge to a greater audience.
- 9. It is highly recommended to package a small grant scheme in projects of this nature. They allow local stakeholders to demonstrate what and how local communities can adapt to climate change.
- 10.In addition to a small grant scheme targeting local stakeholders, a climate change adaptation project of this nature should also include a grant scheme to support the implementation of techniques to be implemented by related government institutions to demonstrate the adaptation to climate change.
- 11.It is recommended that this type of project be developed as "add-on" to existing structures and procedures and seek to reinforce what exist such as an agency to manage water or an existing monitoring system.
- 12. When a project involves the acquisition of datasets it is recommended to conduct a full assessment of their availability during the formulation of the project, to avoid surprises during the implementation that may hamper project progress if these datasets are not readily available.
- 13.As the lead regional development agency, it is recommended that LBDCA pursue its interest and engagement in climate change adaptation for the Lake Balaton area.

1. INTRODUCTION

1. This report presents the findings of the Final Evaluation of the UNDP/GEF Project "*Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies*". This evaluation was performed by an independent Consultant Mr. Jean-Joseph Bellamy on behalf of the United Nations Development Programme (UNDP).

2. This final evaluation report includes five sections. Chapter 2 presents an overview of the project; chapter 3 presents the findings and conclusions of the evaluation. Lessons learned, and recommendations are presented in Chapters 4 and 5 respectively and relevant annexes are found at the back end of the report.

3. This final project evaluation (a requirement of UNDP/GEF procedures) was initiated by UNDP Bratislava - as the GEF Implementing Agency. It was intended to assess the relevance, performance and success of the project and looks at signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global and national environmental goals. This final evaluation provides an assessment of the project to achieve its project objective, the affecting factors, the broader project impact, the contribution to the general goal/strategy and the review the project partnership strategy used. It also identifies/documents lessons learned and makes recommendations that project partners and stakeholders might use to improve the design and implementation of other related projects and programs.

Methodology

4. This evaluation was conducted in accordance with the "*GEF Monitoring & Evaluation Policy* (2006)", the "*Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations* (2007)" as well as the "*UNDP Evaluation Policy* (2006)" of UNDP. The Evaluator also applied the "*Ethical Code of Conduct for UNDP Evaluation*", which implies that evaluation activities are independent, impartial and rigorous. The methodology used is compliant with international criteria and professional norms and standards, including the Standards and Norms for Evaluation in the UN system.

5. The evaluation was undertaken in line with GEF monitoring and evaluation principles, which are: *independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility* and *utility*. It considered the two GEF evaluation objectives at project level: (i) promote accountability for the achievement of GEF objectives; including the global environmental benefits; and (ii) promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners.

6. In addition to the GEF guiding principles, the Evaluator applied to this mandate his knowledge of evaluation methodologies and approaches and its particular expertise in global environmental issues. He also applied several methodological principles such as (i) *Validity of information*: multiple measures and sources were sought out to ensure that the results are accurate and valid; (ii) *Integrity*: Any issue with respect to conflict of interest, lack of professional conduct or misrepresentation were immediately referred to the client when needed; and (iii) *Respect and anonymity*: All participants had the right to provide information in confidence.

7. The evaluation was conducted around the GEF five major evaluation criteria, which are also the five internationally accepted evaluation criteria set out by the Development Assistance Committee of the Organization for Economic Co-operation and Development:

- *Relevance* relates to an overall assessment of whether the Initiative addresses national and local needs and priorities, as well as donor and partner policies.
- *Effectiveness* is a measure of the extent to which formally agreed expected results (outcomes) have been achieved, or can be expected to be achieved.
- *Efficiency* is a measure of the productivity of the intervention process, i.e. to what degree the outcomes achieved derive from efficient use of financial, human and material resources. In principle, it means comparing outcomes and outputs against inputs.

- *Impacts* are the long-term results of the Initiative and include both positive and negative consequences, whether these are foreseen and expected, or not.
- *Sustainability* is an indication of whether the outcomes (end results) and the positive impacts (long term results) are likely to continue after the Initiative ends.

8. The evaluation provides evidence-based information that is credible, reliable and useful. The findings were triangulated through the concept of *"multiple lines of evidence"* using several evaluation tools and gathering information from different types of stakeholders and different levels of management. To conduct this evaluation the Evaluator used the following evaluation instruments:

Evaluation Matrix: The evaluation matrix (*see Annex 2*) was developed on the basis of the evaluation scope presented in the TOR, the log-frame and the review of key documents. The matrix is structured along the five GEF evaluation criteria and includes all evaluation questions. The matrix provided the overall direction for the evaluation and helped to structure the interviews, the document review, and the evaluation report.

Documentation Review: It was conducted in Hungary and in Canada by the Evaluator. In addition to being a main source of information, all documentation was used as preparation for the mission of the Evaluator. A list of documents was provided in the TOR and the Evaluator searched other relevant documents through the web and contacts (*see Annex 3*).

Mission Agenda: An agenda for the 4 working day mission to Hungary was developed during the preparatory phase (*see Annex 4*). The process was to review the list of Stakeholders to be interviewed and to ensure that this list represents all project Stakeholders. Then, in collaboration with the Lake Balaton Project Manager and the UNDP-Bratislava Office, the interviews were planned during the weeks prior to the mission. The objective was to have a well-organized and planned mission to ensure a broad scan of Stakeholders' views during the time allocated to the mission.

Interviews: Few Stakeholders were interviewed (*see Annex 5*). The semi-structured interviews were conducted using the interview guide and adapted to each interview. All interviews were conducted in person with some follow up using emails if needed. Confidentiality was guaranteed to the interviewees and the findings were incorporated in the final report.

Field Visit: As per the TOR, field visits were conducted during the mission of the Evaluator in Hungary; it ensured that the Evaluator had direct primary sources of information from the field and project end-users.

Achievement Rating: The Evaluator rated the project achievements according to the GEF project review; using the ratings as Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Unsatisfactory (U) and Not Applicable (NA).

9. The project success was measured based on the log-frame and the project achievements. The evaluation proceeded with an assessment of the project design and its relevance in relation to development priorities of Hungary, Stakeholders, country ownership/driveness and UNDP mission to promote sustainable human development. It also assessed the performance of the project by looking at the progress that has been relative to the achievement of its objective and outcomes and the management arrangements what were used to implement the project. Finally the overall success was reviewed with regards to overall impact, global environmental benefits, sustainability of achievements, contribution to capacity development, replication of results and synergies with other projects.

Evaluation Users

10. The audience for this evaluation is the project management team, the members of the Project Steering Committee and the staff at the national implementing agency (LBDCA), UNDP-Bratislava and UNDP/GEF Headquarters. The findings provides these managers with complete and convincing evidence in determining the achievements of the project and in providing lessons learned and recommendations, which could be further taken into consideration during the development and implementation of other similar GEF projects in Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies"

Hungary and elsewhere in the world. It also provides the basis for learning and accountability for managers and stakeholders.

11. The main Stakeholders of the project are the members of the project steering committee, the LBDCA, the LBDC as the local government body and its members as representatives of the national institutions and organizations. A sample of these Stakeholders was interviewed during the mission of the Evaluator in Hungary as well as UNDP, UNEP, IISD representatives and any other potential stakeholders.

12. This final evaluation report will be disseminated for review to the executing and implementing agencies, and other partners. The Evaluator is fully responsible for this independent evaluation report; which may not necessarily reflect the views of LBDCA, UNDP or GEF. The circulation of the final report will be determined by UNDP.

Limitations and Constraints

13. The findings and conclusions contained in this report rely primarily on a desk review of project documents, a mission to Hungary and about 15 interviews with project key informants. Within the given resources allocated to this final evaluation, the independent Evaluator conducted an assessment of actual results against the set of expected results.

14. This evaluation report successfully ascertains whether the project is meeting its main objective - as laid down in the project design document - and whether the project initiatives are, or are likely to be, sustainable after completion of the project. The report also presents the main lessons learned and best practices obtained during the implementation of this project and make recommendations which could be further taken into consideration during the development and implementation of other similar GEF projects in Hungary and elsewhere in the world.

2. THE PROJECT AND ITS DEVELOPMENT CONTEXT

15. The project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" is a joint initiative of the United Nations Development Programme (UNDP) and the Lake Balaton Development Council (LBDC). The project is executed with standard UNDP national execution (NEX) modalities, the UNDP is the GEF implementing agency, the LBDC is the national executing agency and the Lake Balaton Development Coordination Agency (LBDCA) is the national implementing agency. The LBDCA is implementing the project in collaboration with the International Institute for Sustainable Development (IISD¹) and the Division of Early Warning and Assessment (DEWA²) of the United Nations Environment Programme (UNEP) – both as project partners, which have each a representative on the project steering committee and project management board. The project had a total budget of USD 4,075,000 that were financed by a GEF contribution of USD 985,000 and by co-financing commitments of about USD 3,080,000; including LBDC for USD 3,000,000, UNEP for USD 50,000 and IISD for USD 40,000. The project started in January 2006 and closed on December 31, 2008.

16. Lake Balaton is the largest lake in Central-Europe and is located in the Transdanubian region of Western Hungary. The Lake Balaton catchment area, including the lake itself is 5775 km2. With a surface area of 593 km2, 78 km in length, 7.6 km width and an average depth of 3.2 m, it is one of the shallowest large lakes of the world. Most of tributaries of Lake Balaton are short, steep watercourses with intensive flash floods in case of storm events. Lake Balaton is a critical site for migratory species. Several bird species use the site as a staging area. The lake itself contains about 2,000 species of algae, 1,200 species of invertebrates and 51 species of fish. The flora and fauna of the surrounding landscape are particularly diverse due to the mild, Mediterranean like climate; it includes a large number of rare and protected plant species. In recognition of its importance for biodiversity, Lake Balaton has been designated a seasonal Ramsar site between October 1 and April 30 each year, while the adjoining Kis-Balaton, a reconstructed wetland and water pollution control structure in the westernmost end of the lake received year-round designation and protection (Ramsar Convention 2003a and 2003b).

^{1 &}lt;u>http://www.iisd.org/</u>

² http://www.grid.unep.ch/

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 3

17. Lake Balaton now has a decades-long history of eutrophication. The first definite signs of eutrophication were observed in 1972, while in 1982 the first mass bloom of algae occurred, forcing the government into action. The most severe algal bloom in the history of Lake Balaton occurred in 1994. Post-1994 water quality stabilized and somewhat, though probably not irreversibly, improved due to the temporary drastic reduction in fertilizer use after the collapse of state farms and agricultural cooperatives in the early 1990s. However, a new and potentially more damaging threat, decreasing water level started to emerge in 2000. The water budget was negative through the years 2000, 2001, 2002 and 2003 resulting in a zero-outflow situation for more than 4 years. By late 2001 the situation was approaching crisis proportions and prompted the LBDC to call for proposals to explore possible solutions to the water deficit.

18. This raised serious sustainability concerns in the Lake Balaton area, Hungary and the region. Due to these trends sensitivity of Lake Balaton to climate change and its impacts came to the fore both for policy and science. Because of Lake Balaton's high profile and the relative immaturity of the vulnerability and adaptation policy agenda, there was a strategic opportunity to influence the way this agenda unfolds in Hungary and other countries of the region. Besides Lake Balaton there are also many other shallow lakes and reservoirs of significant economic and ecological importance in Hungary and the region facing similar vulnerability and adaptation problems where lessons from this initiative can be applied.

19. Lake Balaton's internationally unique vulnerability situation is the combined result mainly of its very shallow profile and the fact that through heavy reliance on tourism as a primary source of livelihoods, the socio-economic consequences of ecological deterioration can be severe and immediate. If the frequency of years with negative water balance indeed increase in the future - as indicated by applicable climate change scenarios - Lake Balaton and the coupled socio-economic system is expected to emerge as a highly sensitive and internationally unique indicator of vulnerability to global change. On a more positive side, it could also serve as a high profile example of adaptation measures consistent with sustainable development. In recognition of this potential UNEP's Division of Early Warning and Assessment designated this project Lake Balaton as a pilot under its Early Warning Strategy.

20. In the face of considerable uncertainties and lack of understanding related to the expected trajectories and impacts of climate change and both ecological and socio-economic acceptability of such measures, there was a need not only for strengthening research on vulnerability and adaptation, but also for connecting its results to policymaking and the emerging social discourse on the condition and future direction of the lake systems. Forward looking integrated assessment, involving the participation of science and a wide range of stakeholders, was a recognized essential next step in order to review existing knowledge in light of new concerns, assess policy implications and options, and to engage affected stakeholders in constructive dialogue about adaptation.

21. As a result of a multi-year cooperation between LBDCA, UNEP and IISD, the concept of the project was to complement ongoing policy initiatives and scientific research, and to have a clear niche by focusing on better understanding of the vulnerability of the Lake and its watershed from an integrated perspective. Climate change is seen as one of the emerging important determinants of vulnerability, but its impacts are considered in the broader context of sustainable development. The project aimed to build on the results and significant tradition of scientific work in the Lake Balaton region, initiated research in Hungary focusing on adaptation to climate change, as well as innovative approaches to integrated assessment of vulnerability to global change and the formulation of adaptive measures. The ultimate goal was to facilitate the development and implementation of effective adaptive strategies.

22. The objective of the project was to contribute to a better understanding of the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change and build capacity for more effective policy making and adaptation measures in response. The project had five outcomes:

- It will strengthen ecological and socio/economic resilience by **increased understanding** of lake and watershed processes viewed through the lens of vulnerability and adaptation.
- It will **strengthen capacity** for formulating and implementing adaptive strategies compatible with sustainable development.

- It will strengthen the **policy framework** conducive to adaptive management with particular interest to institutional mechanisms and economic incentives and disincentives.
- It will facilitate adaptation to the impacts of climate change through **direct action** in the form of pilot initiatives funded through LBDC's existing small grants facility and innovative financing mechanisms.
- It will enhance **public and policymaker awareness** of integrated vulnerability and adaptation approaches locally, nationally and internationally, including contribution to the GEF's project on the Adaptation Learning Mechanisms.

3. FINDINGS AND CONCLUSIONS

3.1 **Project formulation**

3.1.1 Development priorities at the national and regional level

23. The project was <u>highly relevant</u> to the national and regional development priorities of Hungary; particularly within the context of the policy development on climate change adaptation and in the context of the development of the Lake Balaton area. As per its objective, it contributed to a better understanding of the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change and build capacity for more effective policy making and adaptation measures in response.

National Climate Change Policy

24. In 2008, the government of Hungary approved the Climate Change Strategy (CCS) for Hungary for the period 2008-2025, which includes adaptation measures and public awareness on climate change as its two main lines of actions; it was approved in parallel to the Energy Efficiency Strategy. This CCS was developed following some research done under the VAHAVA research project to "*Getting Prepared to (Combat) Climate Changes in Hungary*". This research looked into the climate changes, their potential impacts and the possible responses with the focus on climate change adaptation. Based on this research, the CCS for Hungary was developed. It focuses on climate change mitigation with an objective of a reduction of emission by 2020 of 20% under the 1990 level; which is the same objective as the EU commitments.

25. Following the development of the CCS, the government elaborated its national climate change action plan, which includes mitigation and adaptation measures for a two-year period 2009-2010, corresponding to the EU Operational Programmes cycle. Being in communication with the Ministry of Environment and Water, the project submitted some input during the preparation of this action plan.

26. The Lake Balaton project was developed within the context of the development of the CCS. The main aim was to understand the drought of 2000-2003 and its impact on the water level of the Lake Balaton, which decreased drastically during this period. The main stakeholders knew that something needed to be done; hence the design of this project, which is contributing to the body of knowledge to better understand the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change.

Lake Balaton Regional Development

27. The lake Balaton resort area encompasses 164 municipalities and a population of about 260,000 permanent inhabitants and about 500,000 additional vacationers during the summer months. The area contributes an estimated 2.5% to the national GDP of Hungary.

28. Since 2000, the region has its own independent area development plan and regulation; referred to as the Balaton Act. The Act on Regional Development created the LBDC as the body responsible for the development of the lake Balaton resort area. In January 2000 the LBDC created the LBDCA – a non-profit organization – as the implementing arm of the LBDC to "*perform professional and operative duties promoting the development of the Lake Balaton area and in relation to the activities of the LBDC*".

29. The LBDCA focuses on the implementation of the Regional Development Strategy (2007-2013) and is

managing a portfolio of projects to implement their sustainable development agenda. The development strategy states the following development objectives for the area and for the period 2007-2013:

- Establishment of favorable environmental conditions
- Tourism: revival of the Lake Balaton tourism and the improvement of its quality
- Development of human resources
- Transport: development of the Lake Balaton sustainable transportation system
- Development of the natural and built environment

30. As the agency responsible for the development of the Lake Balaton area, LBDCA is the key agency to address the most recent issue of the Lake that is its water level. It was part of a multi-year cooperation with UNEP and IISD and interested in exploring and understand better the vulnerability of the Lake and its watershed. After three of implementing project activities, the project contributed to a constructive dialogue about climate change adaptation within LBDCA. As a result, the theme is now completely integrated within the agency and in the last 18 months climate change adaptation was part of multiple project proposals submitted by the LBDCA for funding (*see Annex 9*).

3.1.2 Analysis of the Log-Frame

31. The Evaluator reviewed the conceptualization of the project summarized in its log-frame; including the analysis of the set of expected results and their corresponding indicators, baseline values and targets. Despite a good logic, the conceptualization is found overall as <u>marginally satisfactory</u>. The project is well detailed in the PRODOC, the concept well described and justified and the design is logical, addressing the capacity gaps identified during the design phase. However, the planned timeline (30 months³) to achieve these expected results was way too ambitious.

32. As presented in Section 2, the log-frame included one goal, one objective and a set of five outcomes. The objective was formulated as a project with a dual focus: first to understand better the Lake Balaton ecological and socio-economic system's vulnerability and resilience; and second to build capacity for more effective policy-making and adaptation measures. Five outcomes were identified as key expected results to achieve this objective, which can be summarized as follows:

- Outcome 1 focused on understanding of vulnerability and adaptation options for the sustainable development of the Lake Balaton;
- Outcome 2 focused on strengthening the organizational and individual capacity to interpret these emerging vulnerabilities;
- Outcome 3 focused on the adaptation of the policy framework to be more conducive to climate change adaptation;
- Outcome 4 focused on the implementation of climate change adaptation pilot initiatives in the Lake Balaton area; and
- Outcome 5 focused on the dissemination of knowledge generated by the project.

33. The review of the log-frame indicates a good logic. The conceptualization of the project through the set of five outcomes has also an inherent sequence for its implementation built in the project. Outcome 1 needed to be implemented before any other outcomes could be implemented. The capacity of the main stakeholders and the strengthening of the policy framework could only be done once there was a good understanding of the vulnerability and adaptation options for the Lake Balaton area. Moreover, the pilot initiatives to facilitate adaptation to the impacts of climate change (outcome 4) could only be implemented once the knowledge and the capacity to understand the vulnerability and adaptation options for the area were acquired. In other words, there was a sequential logic embedded into the conceptualization of the project, which to some extend dictated the implementation of the project.

34. This last point brings the main weakness in the conceptualization of the project that is its planned duration. It was anticipated that the expected results would be achieved in 30 months that is 2.5 years. Considering the set of anticipated results and the complex management arrangements (*see Section 3.1.7 below*), it was far too ambitious for the project to achieve these targets within the given timeframe for the implementation. As a result, the lack of time during implementation may impact the long-term sustainability

³ The project was then extended for a 6-month period to end in December 2008.

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 6

of some project achievements. A better understanding of the vulnerability and adaptation options for the sustainable development of the Lake Balaton were delivered but the long-term capacity to formulate better policies and integrate climate change adaptation into the sustainable development of the Lake Balaton area may not be fully ensured (*see Section 3.3.2*).

35. This particular point can also be illustrated by the timing to implement outcome 4. Originally, this outcome was to be implemented through the small grant programme existing within LBDCA and funded by LBDC. However, for budget reason, the small grant programme was not operational during the implementation of the project. Instead, the LBDCA seek alternative funding sources and found a grant with the Norwegian government to fund the next phase of the LBDCA small grant programme. Climate change adaptation was added within the call for proposal, selection of proposals conducted and pilot projects implemented. Due to these changes, the implementation of these pilot projects took place during 2009, which was after the project ended. As a result, since the project ended in December 2008, the project management team was not able to analyze the results and recommend how to improve the local climate change adaptation policies and programmes. Nevertheless, the LBDCA as the implementing agency of these pilot projects and the main custodian of the UNDP/GEF project results monitored these pilot projects and will follow up with the results and lessons learned.

3.1.3 Stakeholder participation

36. Ultimately, the end-users beneficiaries of the project are the population of the Lake Balaton area and particularly the municipalities representing this population. This is an area that relies heavily on tourism as a primary source of livelihoods and there is a long-term tradition for communities to take part in local development. The socio-economic consequences of ecological deterioration of the Lake Balaton area can be severe and immediate. For instance, if the frequency of years with negative water balance indeed increase in the future - as indicated by climate change scenarios - *Lake Balaton and the coupled socio-economic system is expected to emerge as a highly sensitive and internationally unique indicator of vulnerability to global change*⁴. The contribution of the project is therefore, <u>relevant</u> to the risks associated with the livelihoods of the local population.

37. The key Stakeholders involved in the implementation of the project were mostly the LBDC and its associated agency the LBDCA. The LBDC was the National Executing Agency of the project and the LBDCA was the National Implementing Agency. The LBDC is a territorial development council created by national law in 1996. It is composed of 15 regular members representing the region and the government representative chairs the Council. The LBDC is mandated to tackle problems specific to the Lake Balaton region by harmonizing and coordinating regional development put forward by 164 municipalities, the three counties, and the three regional development councils in the area. The LBDCA was established by LBDC as its executive arm on January 1, 2000. One of the most important tasks of LBDCA is the co-ordination of regional development activities and projects. It also has a decision support function to LBDC. Considering the regional development mandate of these two organizations, there involvement in the project was key.

38. As a result, the LBDCA, as the National Implementing Agency, benefited greatly from the project. Its participation to most project activities allowed the agency to integrate the concept of climate change adaptation into its development activities in the Lake Balaton area. As a result, the LBDCA has now integrated climate change adaptation into its activities and projects. During the past two years alone (2008-09), the LBDCA submitted about 11 projects that are related to climate change adaptation.

39. Other national, regional and local stakeholders were also involved in the project through the steering committee and also through an expert working group. It included the various related local/regional governmental institutions such as the Environmental Inspectorate and the Water Management Directorate. The latter is the government agency in charge of water management in the region; including water management of the Lake Balaton. Its involvement has been critical, considering that this project dealt with understanding the Lake Balaton ecological and socio-economic system's vulnerability and resilience and that it was based on the decreasing water level that started to emerge in 2000, where the water budget was negative through the years 2000, 2001, 2002 and 2003 resulting in a zero-outflow situation for more than 4

⁴ Project Document, page 14

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 7

years. In retrospect, this Water Management Directorate should have been more involved in the project development and implementation; including being a key partner when we consider that it is ultimately the beneficiary of the SWAT model for the Lake Balaton water catchment area.

3.1.4 Country ownership/Driveness

40. The central government, local authorities and local leaders were part of the project development process and there was a good country ownership of the project. The project was born out of a multi-year cooperation between LBDCA, UNEP and IISD. The initial concept started to emerge in 2002 with a two-day international workshop during the 2002 Annual Meeting of the Balaton Group. Supported by grants from UNEP and LBDC as well as in-kind contribution by IISD, a project Steering Committee was established in Siófok, Hungary in April 2003. Then a workshop and consultation involving local and international experts, including a representative of the Living Lakes network of which Lake Balaton became a candidate in 2003 was convened by LBDCA in July 2003.

41. Throughout this process, local experts and local organizations were involved; including NGOs and their networks through consultations and workshops. Local and national governments were officially briefed through LBDC, a political entity with supervisory duties for LBDCA and broad responsibility for regional development. LBDC members include representatives of several ministries, regional and county councils, local governments and chambers of commerce and industry as well as agriculture. It also includes representatives of several local organizations including NGOs and the Lake Balaton Alliance, an association of the local governments in Lake Balaton region.

42. However, it was noted that this project was originally focused mostly on a full assessment of understanding the natural system of the Lake Balaton and its vulnerability as opposed to <u>also</u> develop the capacity of local organizations to adapt to climate change. It is only during the approval process that the overall objective was broadened to "contribute to a better understanding of the Lake Balaton ecological and socio-economic system's vulnerability and resilience arising from multiple forces of global and local change, including climate change, <u>and build capacity</u> for more effective policy-making and adaptation measures in response"; whereby a focus on capacity building was added. Despite this change, the project was still very much focused on assessing and modeling the vulnerability of the Lake Balaton (see Section 3.3.1).

3.1.5 Cost-effectiveness

43. Cost-effectiveness of the project was taken into account at the formulation stage through several factors. First, the project was designed in a way to maximize the synergies between the project goal and national priorities. It was anticipated that the project results would stand to influence policy and resource allocations, causing a multiplier effect. Second, cost-effectiveness of pilot initiatives would be built on the same criteria built in the existing small grant of LBDC that is known to be cost-effective; including the necessity to demonstrate the availability of secured co-financing. Third, expenditures were to be monitored carefully for an effective use of the project resources.

44. Overall, the uses of project resources have been cost-effective. The GEF financial resources have been used to finance the incremental cost and other project costs were funded by a considerable amount of co-financing of over \$3M.

3.1.6 UNDP comparative advantage

45. UNDP was the Implementing Agency of the project through its Regional Support Centre based in Bratislava, Slovakia. It supported the launch of the project, participated to Steering Committee meetings, monitored the implementation of work plans and timetables, ensured financial management and accountability, conducted some field visits and oversaw the preparation of project reports (APRs, TPRs, PIRs) and the realization of independent evaluations.

46. It also provided a technical backstopping through its Capacity Development and Adaptation Cluster; which was established in response to the new opportunities and challenges represented by GEF-3 in relation

to cross-cutting areas of Adaptation and Capacity Building. As a strategy, UNDP has been placing national policy at the centre piece of climate change adaptation by matching global and national agendas and benefits.

47. Within the context of the Country Cooperation Framework, this project was also implemented as part of UNDP's commitment to strengthen Hungary's capacity to comply with global environmental objectives.

3.1.7 Management arrangements

48. The management arrangements as formulated in the project document were somewhat confusing; there are rated as <u>marginally satisfactory</u>. The formulation of the management arrangements in the project document indicates that the main organizations involved in the implementation were UNDP as the GEF implementing agency, LBDC as the national executing agency and LBDCA as the national implementing agency. A clear line of authority is visible as described in the figure 5 of the project document (page 50). The project was implemented using the NEX modality with LBDCA to maintain a separate bank account in USD for UNDP/GEF financial resources. However, on page 5 of the project document it is mentioned that IISD and UNEP will work closely with LBDCA as project implementation partners and that there are also members of the project steering committee and project management board. More detailed terms of reference for these two partner organizations were presented in Part III of the project document. Therefore IISD and UNEP were also important partners for the implementation of this project. However, this partnership was not mentioned in the Section C-5.2 of the project document defining roles and responsibilities of relevant stakeholders in the implementation of the project.

49. Nevertheless, this partnership was the result of a multi-year cooperation between LBDCA, UNEP and IISD. These same partners designed the project and they continued their partnership through the implementation of the project. IISD and UNEP brought their international expertise and methodology such as the EIA methodology underlying the Global Environment Outlook (GEO) for vulnerability assessment.

50. As a result, this implementation arrangement was a partnership of three partners, which provided the necessary set of skills to implement the project. Each partner received a share of the UNDP/GEF funds through two agreements: (1) IISD and LBDCA and (2) UNEP and LBDCA. The LBDCA remained the national implementing agency accountable to LBDC and to UNDP; and UNEP and IISD – as international project partners – reported to LBDCA. However, the two international partners were not as accountable to LBDCA as typical sub-contracted parties and the line of authority to implement the project was blurred with the sharing of the project decision-making process, the performance monitoring and the reporting of project progress (*see also Section 3.2.1*).

3.1.8 Replication approach

51. The replication strategy identified during the development of the project was mostly seen as a transfer of knowledge; it was <u>satisfactory</u>. In order to maximize this transfer, a set of specific activities was planned to be implemented throughout the life of the project. It included: an engagement and influencing strategy, stakeholder forums, training, innovative financing mechanisms and knowledge transfer through conference organization and presentations.

52. It is also to be noted that this replication strategy was also embedded into the project strategy -Outcome #5 was about managing the knowledge generated by the project and transfer this knowledge to stakeholders. This is a valuable approach; being part of the overall project strategy ensures that it is addressed throughout the implementation of the project. However, knowledge alone is not sufficient for raising capacity of local stakeholders. Information (knowledge) may be disseminated throughout the local "actors" but in itself it does not ensure the replication of the project findings and more importantly it does not ensure a better consideration of climate change vulnerabilities of a natural system such as Lake Balaton and the necessary adaptation measures to be implemented. More capacity development would be needed (*see Section 3.3.2*).

3.2 Project Management

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 9

3.2.1 Implementation approach

Implementation Modalities

53. LBDCA as the national implementing agency was the key organization to mobilize the project resources and ensure that progress would lead to the achievement of expected results. Using its own management capacity to manage projects, LBDCA was able to efficiently manage the project; its management performance is rated as <u>satisfactory</u>. Progress was monitored and when needed the project management team applied an adaptive management approach to secure project outcomes while maintaining adherence to the overall project design. The project has been implemented using a Results-Based Management (RBM) approach which is illustrated by the management reports that have been focusing on the progress made to achieve the set of expected results using a set of results-based indicators.

54. The UNDP/GEF financial resources were mobilized by LBDCA using the NEX modality. LBDCA also followed the existing UNDP rules and procedures for procuring project assets and equipment and to recruit short-term consultants. All project transactions were promptly recorded and properly classified; showing good internal controls mechanisms to manage and control project resources. Financial resources were also used prudently and overall the project has been cost-effective. An amount of USD 103,000 has been used for procuring project assets, which have been audited in December 2007. The list includes some equipment, computers, software, water quality sensors, GPRS and data such as a soil database.

55. As discussed in Section 3.1.7, LBDCA was the national implementing agency accountable to UNDP-RBEC for the disbursements of the UNDP/GEF funds. LBDCA collaborated with two international partners: IISD and UNEP to implement the project. The management arrangements for this collaboration were formalized through two agreements: a "*Contract for Partnership*" signed between LBDCA and UNEP-DEWA-GRID and a "*Contract for Consultancy*" signed between LBDCA and IISD. These agreements detailed the collaboration among these partners for the implementation of the UNDP/GEF Lake Balaton project. Following discussions to identify who is responsible of what, a verbal agreement concluded the UNDP/GEF budget split as follows: 20% for administration by LBDCA, 40% for activities to be implemented by LBDCA and 40% for activities to be implemented by project partners (UNEP and IISD). The project resources used by UNEP and IISD were mobilized through quarterly partnership/consultancy schedules (QPS and QCS), which were issued quarterly by each partner. These schedules laid out the work plan for the coming quarter and the associated costs to conduct the related project activities. At the end of the quarter, the partners sent a progress report to LBDCA indicating the progress made during the quarter, accompanied by an invoice. LBDCA reviewed the progress and paid the partners accordingly.

Implementation Partners

56. Despite good management arrangements and a relatively clear line of authority, the collaboration among the three implementing partners has been marked with issues and limited synergies occurred between the international partners and LBDCA. From a management point of view, UNEP and IISD were directly accountable to LBDCA; however, the partner agreements that were put in place established a different accountability framework with LBDCA than typical sub-contracted parties. They were more "equal" implementing partners with LBDCA to implement the project with one key person from each organization who acted as project manager for their related responsibilities. As a result, it diluted the project decision-making process, the performance monitoring and the reporting of project progress. The impact was a management capacity slow to react and adapt project activities when it was needed. For instance, it was recognized in 2007 that the project was falling behind schedule (*see tripartite review report – November 14, 2007*); however, no decision to adjust the implementation was taken in order to address the issue.

Management Monitoring and Reporting

57. The modalities to monitor the project progress included a series of management meetings accompanied by management reports. Quarterly and ad-hoc meetings were held among the three project partners and UNDP. Monthly meetings among the three project partners where held for most of the implementation period; either in person or through teleconferences. A tripartite review meeting (LBDC, LBDCA and UNDP) took place in November 2007 to review the project progress for the period 2006 and 2007; discussions were summarized in a Tripartite Review Report (November 2007). Quarterly progress reports were produced by the project management team and sent to UNDP. Finally, Project Implementation Review (PIR) reports were produced in 2007, 2008 and 2009.

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 10

58. The review of these management reports indicates a good recording of management processes. Each quarterly report presents a summary of the major tasks conducted during the quarter, followed by a review of activities and accomplishments as per work plan, a review of the risks linked with the implementation of the project, a review of the issues faced by the implementing partners, lessons learned and an update on the monitoring and communication plan. It was noted that the last quarterly reports for 2008 (Q3 and Q4) included a review of the long-term sustainability and replication of project achievements; both major recommendations made in the mid-term evaluation report. It was noted the high quality of the PIRs; particularly the 2008 and 2009 reports. The last PIR is very complete and describe well the status of the achievements at project end.

Project Oversight

59. The project was to be overseen by two management bodies: a Project Steering Committee (PSC) as the main coordinating body and a Project Management Board (PMB) to exercise operative control over the project. The PMB met regularly over the implementation of the project to review the progress and address issues at the time. Regarding the PSC, discussions during the inception phase ended up with the decision not to have a separate PSC committee from the LBDC but to use this committee (LBDC) as the PSC of the project. It was thought that the membership of LBDC (voting and consulting roles) represented a broader forum of Stakeholders for the project. As a result, project progress was reported regularly in LBDC meetings as part of the meeting agendas and LBDC resolutions were made when needed.

Technical Assistance Used

60. The quality of technical assistance used by the project was excellent. Through the international partners (IISD and UNEP), the project had access to a high quality range of skills and knowledge. It benefited the project; particularly for the implementation of outcome 1 that was to improve the understanding of integrated vulnerability and adaptation options in the context of sustainable development in the Lake Balaton watershed. However, despite some workshops and seminars to transfer the know-how, most of the skills and knowledge accumulated over the lifetime of the project still reside with each implementing partner. Any effort to develop the local capacity in climate change adaptation was also dampened by the lack of a well-defined capacity development strategy, which was planned under outcome 2 (*see Section 3.3.2*). As a result, the capacity of local stakeholders has not been fully developed as anticipated; limiting the uptake of project achievements and ensure their long-term sustainability.

61. The Project Manager was the Executive Director of LBDCA. Apart from his regular duties as the Executive Director to manage LBDCA, he was in charge of coordinating the implementation of the project. It was noted that he was not remunerated by the project. From an organizational point of view, the Lake Balaton project work plan was fully integrated within LBDCA work plan, which should contribute to the long-term sustainability of project achievements. Once the project ended, the LBDCA continues to carry out its duties benefiting from the skills and knowledge acquired through project activities and adding climate change adaptation into its local development agenda. However, despite a good integration of the project within the LBDCA organization, a full time Project Manager would have been beneficial for the project.

Stakeholders participation

62. The implementation of the project involved stakeholders; particularly for the development of tools and instruments; it is rated as <u>satisfactory</u>. Stakeholder consultations took place to provide inputs to the process. It was the case with the development of a set of sustainable development indicators, the development of scenarios and the development of an integrated watershed management model based on the SWAT methodology. Information was also disseminated to the public such as the Conference on "*Ecological Problems of our Days – From Global to Local*" co-organized by LBDCA at Keszthely in November 2006 for regional, national and international audience and the publication of peer reviewed articles published in Hungarian in the 2008 Autumn issue of "*Comitatus*" a journal on municipal and regional policies.

63. However, despite a good participation of stakeholders in project activities, it was mostly consultations as opposed to participation and sharing of project decision-making. LBDC as the national executing agency and LBDCA as the national implementing agency were the local partners and the "*owners*" of the project; they are now the custodians of all project results. However, some products delivered by the project should ultimately be taken over by other organizations such as the Water Management Authority to continue the

application of the SWAT model for the Lake Balaton watershed or the local municipalities to use the sustainable development indicators used by the project. Activities took place – particularly in the last part of the project – to transfer this know-how. It included the training of two officers from the Water Management Authority who went to UNEP-Geneva for being trained on how to use the SWAT model. Due to a lack of stronger participation, the project ended up much in a situation whereby the project management team had to "sell" the products delivered by the project to some stakeholders. There is a limited ownership of project results by local stakeholders other than with LBDC and LBDCA.

64. As discussed in Section 3.1.4, the project was conceptualized based on a multi-year cooperation between LBDCA, UNEP and IISD. The project was born out of this partnership and not from a stakeholder driven process. Stakeholders were consulted along the way but their participation were limited to being consulted as opposed to partnering with the leading organizations to develop and own the project design. Nevertheless, a stronger involvement of other institutions would have increased the national ownership and "connect" the project with more existing processes; increasing its *raison d'être* and the expectations from Stakeholders.

Management of Risks and Risks Mitigation

65. An initial list of 6 major risks was identified during the formulation of the project. For each risk, the type, the degree and the management of this risk was identified and documented in the project document. During the implementation of the project, one other risk was added to the list. This list was then reviewed and updated quarterly and reported in quarterly reports and also in PIRs. The last "Risk Log Matrix" presented in the last quarterly report (Oct.-Dec. 2008) is reproduced in the table below.

Type of risk	Risk	Degree	Risk management
Political	Changing government priorities or approach to the Lake Balaton region	Medium	Government representatives on Steering Committee, regular updates for key ministries; lobbying by LBDC members for continuous funding for the Lake Balaton region.
	Changing legislative framework due to EU accession	Low	Constant monitoring for implementation of the EU Water Framework Directive at the national level, monitoring of legislation at the national level and making adjustments as required.
	Weak stakeholder interest in participation	Low	Introduction of capacity building workshops; implementation of influencing strategy.
Financial	Uncertainty related to funding commitments	Low	Despite a delay in obtaining the co-financing funds from LBDC as planned, the LBDCA was able to secure the funding for the pilot initiatives form the Norway government. The small grant scheme was implemented near the end of the project and was completed in mid- 2009.
Operational	Unavailability of high quality data	Low	Use of multiple data sources, gap filling, extrapolation from existing data sets, use of relevant proxy measures. Data quality and availability is variable among datasets; delays and increased costs were encountered.
	Inaccuracy or inconsistency of models and scenarios	Low	Peer review, verification of results across a range of projections, stakeholder involvement in consistency analysis.
Institutional	Sustainability difficulty regarding the utilization of tools and policies developed	Medium	Agreements with Water Authorities as well as VITUKI Kht. (Water Research Institute Public Interest Company), Agreement with the Ministry of Environment and Water; Cooperation with regional institutions and stakeholders to share data of installed online monitoring stations, Master student from the University of Geneva working on Balaton SWAT application.

Table 1: Summary of Risks at Project End

66. The review of quarterly reports indicates that the project management team managed the project risks properly. When needed, corrective actions were taken and followed up in the successive management review(s) until the particular risk was mitigated. In addition to risk management, the project management team also maintained an issue log matrix listing the major issues at the time potentially delaying project implementation. Each issue was also reviewed once a quarter and the management response updated if

needed.

67. Overall, two major risks and issues dominated the implementation. The first one was a delay in the identification of sustainable development indicators under outcome 1; which delayed the overall implementation of the project due to a sequential approach (see Section 3.1.2). No other project activities could take place until the indicators were finalized. The second major risk was the acquisition of high quality data. At the formulation of the project it was anticipated that the project would use technical inputs from other related projects and programmes; such as: (i) the KÉP project on sustainable development indicators: the objectives were to identify a core indicator set and to produce time-series data for the Lake Balaton region. The project was not completed due to funding cuts; (ii) the VAHAVA project: its outputs were rather general and qualitative and thus had less than expected usefulness in the analytic phase of the Lake Balaton project; and (iii) the CLIME project: its results were useful but not directly applicable since the watershed model generally applied to most of the lakes in the study was not accepted for Lake Balaton, given the lake's special characteristics. As a result, the project had to adapt and it is illustrated by the management response in the last quarterly report that states how this issue was mitigated: "Use of multiple data sources, gap filling, extrapolation from existing data sets, use of relevant proxy measures. Data quality and availability is variable among datasets; delays and increased costs were encountered".

68. By the end of the project, one risk was still identified as critical: "*Full and sustained utilization of tools and policies developed might need further actions*". This risk is linked with the long term sustainability of project achievements (*see Section 3.3.5*). This risk was identified at the time of the mid-term evaluation and recommendations were made in this evaluation to emphasize the institutionalization of project achievements within the relevant organization such as the Water Management Authority for the SWAT model developed/adapted by the project. In the last PIR-2009, the management response against this risk was as follows:

- Agreements have been concluded between LBDCA and Water Authorities as well as LBDCA and VITUKI Kht. (Water Research Institute Public Interest Company) in order to utilize the developed watershed modeling tool;
- Further improvement of SWAT model database and prediction quality is being carried out with the cooperation of VITUKI Kht. and University of Geneva, financed through international projects, such as the EU FP7 Black See program;
- Data of installed online monitoring stations is shared with regional institutions and stakeholders;
- Being a multi-stakeholder organization, Lake Balaton Development Council serves as the end user of all the other tools and policies developed in the project. To this end, LBDCA is the responsible organization to provide appropriate information and prepare initiatives for LBDC.

69. Finally, an underlying risk that was not included in the list was the tight schedule for this ambitious project, coupled with a short project implementation cycle (30 months) and three partners that were geographically dispersed (LBDCA in Hungary, UNEP in Switzerland and IISD in Canada). The review indicates that for a successful project of this nature no delay, no errors were allowed. In other words, any delay affected the long term sustainability of project achievements, which is illustrated by the critical risk presented above. The project did not have sufficient time to adequately ensure the transfer of know-how and the institutionalization of project achievements with relevant organizations.

3.2.2 Use of the Log-Frame as a management and M&E tool

70. As discussed in Section 3.1.2, the log-frame provided a good logic, which included a certain sequence for the implementation of the five outcomes. However, this log-frame presented also an ambitious project for a period of only 30 months; it is rated as <u>marginally satisfactory</u>. As presented in Section 3.3.1, the products and services were delivered; however, the capacity of local organizations to uptake and institutionalize these results may be limited in the long term.

71. Nevertheless, the log-frame was a good management tool used by the project management team to guide the implementation of the project and to track its achievements. From the stated set of expected results (outcomes and outputs), it provided a clear implementation path (sequence) to achieve these results. The structure of these expected results was used to report progress through the quarterly reports and PIRs. Additionally, indicators with their baseline values and target values provided a good monitoring tool to

monitor the progress in the implementation of the project. These indicators were also used in reporting progress annually in the PIRs.

3.2.3 Financial Planning and Management

72. As the national implementing agency, LBDCA managed the project financial resources using the NEX modality for the UNDP/GEF funds. Advance payments were made by UNDP to LBDCA, which in turn justified the money expended with proper financial documentation. Request for direct payments (when needed) were approved and processed by UNDP and recorded in the corporate UNDP ERP system. The management of the project finances is rated as <u>satisfactory</u>.

73. The financial records were consolidated into the UN-ATLAS system as the accounting and financial system for all UNDP projects. Once updated, the ATLAS system could produce financial information for the project team. The system was set-up by Activity and further broken down by items such as local consultant fees, travel tickets, printing and publications, utilities, etc.

74. The financial records indicate that 100% of the original budget was spent (USD 985,000) during the 36 months implementation period. An estimated amount of \$394k (about 40% of the total budget) was spent by IISD and UNEP through transfers from LBDCA to each organization. The breakdown of the project expenditures by outcome is presented in the table below.

Item	FY 2006	FY 2007	FY 2008	FY 2009	Total	% of Total	Budget	% Spent
Outcome 1	280,837	81,389	27,712	5,000	\$394,938	40%	\$355,000	111%
Outcome 2	43,656	44,132	39,805	-	127,593	13	130,000	98
Outcome 3	22,142	10,763	50,331	6,000	89,236	9	80,000	111
Outcome 4	5,961	3,042	5,183	-	14,186	1	25,000	57
Outcome 5	30,990	30,426	62,832	11,000	135,248	14	165,000	82
Mgmt+M&E	73,444	57,283	72,738	20,334	223,799	23	230,000	97
Total	457,030	227,035	258,601	42,334	\$985,000	100%	\$985,000	100%

Table 2: UNDP/GEF Fund Disbursement Breakdown

(*) Source: Data obtained from LBDCA

75. The financial figures presented above indicate that 40% of the financial resources have been spent on outcome 1 that was to improve the understanding of integrated vulnerability and adaptation options in the context of sustainable development in the Lake Balaton watershed; it confirms the focus of the project on assessment (*see Section 3.1.4*). Another 23% was spent on management and monitoring and evaluation and the rest (about 37%) was spread over the other outcomes. If we compare the actual figures with the budget figures presented in the project document, the only major variance is the expenditures for outcome 4 that represent only 57% of the allocated budget; however, the amount represents only a difference of \$11,000.

76. The project has been audited in 2006 and in 2007 as per UNDP guidelines; however, 2008 was not audited. For both years, the auditor's reports stated that the financial schedules of the project presented *"fairly, in all materials respects the expenditures of the project"* – including the cash position; in accordance with the accounting instructions of UNDP. The audit also reviewed the statement of assets and equipment (procurement); it was said to be adhering to UNDP procedures.

3.2.4 Fund Leveraging / Co-financing

77. The budgeted co-financing at the formulation stage totaled the amount of USD 3,090,000; which was confirmed by letters presented in the project document. As shown below, this amount was effectively contributed as planned; representing a ratio of 3:1 over the amount funded by UNDP/GEF. It is rated as satisfactory.

78. In the last PIR (PIR-2009), it is reported that USD 3,090,000 of co-financing was actually disbursed by the partners by the end of the project. The table below indicates the breakdown of this co-financing (*see also Annex 6 for more detailed information*):

Partner	Commitments (US\$)	Actual(*) (US\$)	% Spent
LBDC	3,000,000	300,000	10%
LBDCA		2,700,000	n/a
UNEP	50,000	50,000	100
IISD	40,000	40,000	100
Total (US\$)	\$3,090,000	\$3,090,000	100%

Table 3: Co-financing from Project Partners

(*) Source: Project Document, UNDP-PIR 2009 (As of the end of June 2009) and updates from LBDCA.

79. The main co-financing contributor for this project was supposed to be the LBDC with a budget of USD 3M. This sum was to be the funding for climate change adaptation pilot projects (outcome 4) and was confirmed by a commitment letter from LBDC to UNDP (*see project document*) stating that in exchange of the funding, the project must "provide the essential interdisciplinary scientific and policy insight that is needed to start reorienting and making the grant-aid scheme more forward looking and compatible with adaptation to global change and sustainable development".

80. As indicated in the table above, this funding from LBDC did not materialize as planned. Due to budget constraints during the implementation period of the project as a result of the economic crisis in Hungary, the LBDC was only able to contribute the sum of USD 300k. Nevertheless, the LBDCA as the implementing arm of LBDC was able to obtain equivalent funds from Norway in 2007. As a result, the pilot initiatives planned under outcome 4 was able to go forward; though most pilot projects were implemented later in 2009. An estimated amount of USD 2.7M was contributed by LBDCA to climate change adaptation projects (see Annex 8), achieving the expected results under outcome 4 and also fulfilling the co-financing commitment of LBDC.

81. Regarding the co-financing from the two project partners: UNEP and IISD, their co-financing commitments were fulfilled through mostly in-kind contributions: staff time and for IISD the use of interns for project activities such as GIS database development and field activities in the Lake Balaton area.

3.2.5 Monitoring and Evaluation

82. A monitoring and evaluation plan was presented in the project document detailing three categories of monitoring and evaluation functions: (i) monitoring of project implementation; (ii) monitoring and evaluation of project impacts; and (iii) monitoring of the allocation and use of the project budget. Overall, the monitoring and evaluation of the project was done according to UNDP and GEF procedures; it is rated as satisfactory.

83. For each of these functions, responsibilities were clearly identified in the project document. As the national implementing agency, LBDCA was the main entity responsible for monitoring the implementation of the project and the use of the project resources. The PSC as the oversight body for the project was to provide the primary monitoring functions for monitoring project progress. It was also anticipated that independent monitoring would be carried out by the monitoring committee of LBDC.

84. The monitoring and evaluation function plan was then reviewed during the implementation of the project. Performance indicators were reviewed during the inception phase and documented in the inception report (*see below*). Day-to-day monitoring of project implementation was ensured by LBDCA but also by the representatives from the international partners regarding their respective involvement in the implementation of the project. Monthly meetings of the Project Management Board took place during most of the project lifetime. These meetings were documented in minutes. Quarterly reviews were conducted and documented in

quarterly progress reports that were sent to UNDP. Annual reviews were also conducted and documented in the PIRs for the year 2007, 2008 and 2009. The review of these reports indicates that the monitoring process was on-going and properly documented in the management reports listed above. The process was also well internalized at LBDCA as the national implementing agency.

85. Project progress was monitored/measured against a set of performance indicators. A first set of 6 indicators were identified during the formulation of the project and presented in the project document. These indicators were reviewed during the inception report and this list was modified as well as their respective baseline and target values. The list of indicators used to monitor the progress and the project impacts is presented in the table below:

	Performance Indicator				
Objecti	ve:				
•	Regional development frameworks across the relevant sectors integrate adaptation to climate change				
•	Allocation of financial resources for vulnerability studies and adaptation measures by local governing bodies				
•	Elements of Lake Balaton ecosystem management system fully integrate adaptation approaches				
Outcom	ne 1:				
•	Information system for systematic vulnerability assessment introduced and institutionalized				
•	Changes and response model developed for better understanding of vulnerability and best option scenarios for adaptation.				
Outcom	Outcome 2:				
•	Regional Development Council and other relevant institutions adopt and employ adaptation and vulnerability indicator framework for socioeconomic development planning				
•	LBDCA integrates adaptation in the organizational structure and mandate				
Outcom	ne 3:				
•	Regional, national and sectoral development frameworks integrate adaptation approach				
Οι	utcome 4:				
•	Observable changes of improved adaptive management and risk reduction against vulnerability indicator framework				
•	LBDC grant facility integrates adaptation into the funding eligibility criteria				
•	LBDC fund allocation schemes will increase funding for adaptation by 30%				
Outcom	ne 5:				
•	"Influencing strategy" and knowledge products developed and employed according to the replication plan				
•	Number of local initiatives introducing adaptation approach				
•	Good practices disseminated through GEF Adaptation Learning Mechanism				

Table 4: List of Performance Indicators Used to Monitor the Project

86. This list of indicators is comprehensive to monitor project progress. The review indicates that they were well aligned with the SMART principle. They capture well the essence of the expected results, are achievable, easily measurable and traceable over the lifetime of the project. However, it is noted that through the changes of performance indicators a greater focus was put on the capacity of LBDC and LBDCA to uptake the project achievements as opposed to all relevant organizations. This is particularly illustrated by the change of indicators for outcome 2.

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 16

87. At the formulation of the project, two indicators to measure the "strengthening of organizational and individual capacity for interpreting emerging vulnerabilities, and increasing resilience by implementing adaptive measures" were: (i) the development of a capacity development strategy and (ii) the formulation and the delivery of a training tool-kit. It would have allowed the project to explore the capacity of relevant organizations and identify how to incorporate climate change adaptation strategies into their work programmes. It would have broadened the involvement of stakeholders in the implementation of the project and maximized the long-term sustainability of project achievements.

88. Instead, these indicators were modified during the inception phase. Due to the project scope and duration (short), there was not enough time to develop a Capacity Development (CD) strategy and implement it during the project lifetime. It was decided <u>not</u> to develop a capacity development strategy. Instead the project management team decided that to measure the capacity being developed by the project under outcome 2 would be measured through two indicators: The outcome indicator (1) *"Regional Development Council and other relevant institutions adopt and employ adaptation and vulnerability indicator framework for socio-economic development planning"* was kept as is; and a second outcome indicator was added as (2) *"LBDCA integrates adaptation in the organizational structure and mandate"*. The targets for these two indicators to demonstrate that the LBDCA capacity had been strengthened are respectively: (i) the vulnerability indicator system is adopted and applied by the end of the second year of the project; and (ii) the [climate change adaptation] tasks are defined in job description and mandate [of the organization].

3.2.6 Management Support Provided by UNDP

89. The efficiency of the UNDP-RBEC Regional Support Centre (based in Bratislava, Slovakia) - as the GEF implementing agency of the project - to support the implementation of the project is rated as <u>satisfactory</u>. It provided the necessary project management support to the project team to ensure an efficient use of the GEF resources; a professional progress reporting system through the PIR process reflecting the progress made but also if there are any issues to be dealt with; and the efficient use of UNDP procedures such as procurement, hiring and contracting procedures. As the GEF implementing agency, UNDP participated with LBDC and LBDCA in the tripartite review meetings to review project progress and address any implementation issues faced by the project.

90. The capacity of the UNDP-RBEC Center to provide project management support/advice is a comparative advantage in delivering this type of project. It provides an additional project management layer to this type of project for an efficient use of project resources. It also provides a global link to access international experiences and resources, which are beneficial to the project when well chosen.

3.3 Project Results

3.3.1 Achievement of Project Outcomes

91. As presented in Section 3.2.5 above, the project progress was measured against a set of five expected outcomes with a set of 11 indicators (*see Table 4 above*). Every year these indicators were reviewed and the current status updated. The PIR-2009 (as of June 2009) indicates the following achievements at the end of the project:

Performance Indicator	Target	Current Status		
Outcome 1: Improved understanding of integrated vulnerability and adaptation options in the context of sustainable development in the Lake Balaton watershed				
1. Information system for systematic vulnerability assessment introduced and	 Information system with set of vulnerability indicators defined by end of first year of 	 BalatonTrend portal, with comprehensive indicators, was presented at several forums and its use in the context of other projects is being considered in Canada and Brazil. An analysis of inter-linkages of key indicators has been prepared and published. 		

Table 5: Achievement of Project Outcomes

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 17

Performance Indicator	Target	Current Status
institutionalized	the project	 The life after-project plan for this IMS is to integrate it into the Black Sea catchment observation system being built in the new FP7 European project led by Anthony Lehmann from UNEP-GRID. The on-line Balaton monitoring system is operating. The operation and maintenance costs are provided annually by LBDC.
 Changes and response model developed for better understanding of vulnerability and best option scenarios for adaptation 	Changes and response model developed and introduced by end of the project	 The SWAT database and tool was presented at the local water authorities that are now planning to integrate it in their own toolbox with the help of the National Hydrological Institute (VITUKI). Following the workshop a trilateral user agreement was signed by LBDCA, the Central- Transdanubian Water and Environmental Management Directorate and the National Hydrological Institute. Corresponding to the agreement, a four-day course was given to two Hungarian GIS experts in Geneva in March 2009 to teach them how to build and calibrate SWAT models. A master student from Geneva is helping improving the calibration of the model with newly provided data After the course a joint workshop was organized by LBDCA and the Central-Transdanubian Water and Environmental Directorate in Siófok.
Outcome 2: Strengthe	ned organizational and in / implementing adaptive n	dividual capacity for interpreting emerging vulnerabilities, and neasures in response
3. Regional Development Council and other relevant institutions adopt and employ adaptation and vulnerability indicator framework for socioeconomic development planning	Vulnerability indicator framework adopted and applied by at least 5 micro- regions by the end of the second year of the project (impact timeline 6- 18+months	 Adaptation indicators have been incorporated into important documents of municipalities of the Lake Balaton Region: Local and micro-regional Environmental Management Programs: 1. Balatonszentgyörgy, 2. Balatonalmádi, 3. Hévíz, 4. Balatonederics, 5. Nemesvita, 6. Lesencetomaj, 7. Lesenceistvánd, 8Lesencefalu, 9. Szigliget, 10. Uzsa, 11. Hegymagas, 12. Balatonmáriafürdő, 13. Ábrahámhegy, 14. Balatonrendes, 15. Sávoly, 16. Főnyed, 17. Szegerdő, 18. Szőkedencs Local and micro-regional Waste Management Plans: 1. Hévíz, 2. Balatonalmádi, 3. Balatoberény, 4. Balatonederics, 5. Nemesvita, 6. Lesencetomaj, 7. Lesenceistvánd, 8. Lecal and micro-regional Waste Management Plans: 1. Hévíz, 2. Balatonalmádi, 3. Balatoberény, 4. Balatonederics, 5. Nemesvita, 6. Lesencetomaj, 7. Lesenceistvánd, 8. Lesencefalu, 9. Szigliget, 10. Uzsa, 11. Hegymagas, In progress: Environmental Management Program for: 1. Sármellék, 2. Szentgyörgyvár, 3. Siófok, 4. Zalavár, 5. Hollád, 6. Balatonfűzfő In addition, the development of climate change and adaptation strategies for Balatonalmádi and Balatonfűzfő is in progress.
4. LBDCA integrates adaptation in the organizational structure and mandate	Tasks defined in job description and mandate	 Adaptation was incorporated into the Terms of Reference of the environmental program director of LBDCA
Outcome 3: Policy fram	nework conducive to adap	ptive management strengthened
5. Regional, national and sectoral development frameworks integrate adaptation approach	 At least 2 regional scale frameworks integrate adaptation by the end of the project APF has been formulated for the Lake Balaton watershed by end of the project (timeline of impact 6-30+ months) 	 In accordance with the adaptation measures determined by the project, several programming documents were supervised and commented with suggestions: 2 years action plan of the National Climate Change Strategy 3rd Environmental Protection Plan of Hungary River Basin Management Plan for Lake Balaton catchment Findings from the project are being incorporated into discussions with the Environmental Committee of the Hungarian Parliament as Hungary prepares to hold the rotating Presidency of the European Union and considers having water as one of the focal areas.
Outcome 4: Pilot initiat	tives to facilitate adaptatic	on to the impacts of climate change through direct action implemented
6. Observable changes of improved adaptive	The response system to	Through engagement with stakeholders and experts, there have been efforts throughout the project to increase the understanding
Final Evaluation of the L		Deleter later and Male webilts Assessment Fight Marian and Adaptation

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 18

Performance Indicator	Target	Current Status
management and risk reduction against vulnerability indicator framework	vulnerability at local levels shows improvements against vulnerability indicator system (by the end of the project)	 and awareness of climate change and vulnerability, and nature of potential adaptation options. LBDC provided grant facilities for villages for on-site small scale sewage treatment facilities, in which climate change adaptation played significant priority. Currently pilot actions are under implementation at 2 settlements (Nyim and Gétye). Moreover, fund was also provided for the rehabilitation of green plantation at lakeshore areas as well as improvement of reed management. Funded adaptation activities concerning water protection: (i) Removal of polluted sediment from some lake areas (improving water quality); (ii) Restoration of river mouth sedimentation and filtration area (elimination of waste disposal, prevention of the spread of weeds); (iii) improving rainwater-drainage system; and (iv) Lakeshore control and regulation (improving water circulation conditions). Funded adaptation activities concerning landscape management: (i) Rehabilitation of shore areas: Establishment of green spaces and public parks at lake shore areas (dredged sediment disposal areas); Establishment of coastal promenades through the reclassification of unsettled resort territories; and Afforestation at suitable lake shore areas; and (ii) Establishment of lake shore zones (land filling of small bays)
7. LBDC grant facility integrates adaptation into the funding eligibility criteria	•	 The call for proposals for adaptation project has increased awareness on climate change and adaptation measures. The efficiency of incorporating adaptation issues as eligible criteria for funding is under evaluation.
8. LBDC fund allocation schemes will increase funding for adaptation by 30%	• At least two adaptation pilot projects implemented by the end of the project	 The implementation of the projects, approved in the framework of the Norwegian Grant Programme, started on November 2008 and completed by July 31, 2009. The closing and evaluation of projects are in progress.
Outcome 5: Knowledg locally, nationally and in strategy.	e generated and awarene nternationally enhanced th	ess raised of integrated vulnerability and adaptation approaches arough knowledge management, dissemination and replication
9. "Influencing strategy" and knowledge products developed and employed according to the replication plan	• "Influencing strategy" and knowledge products developed and employed for scaling up and replication by the end of the project (impact timeline 6- 30+months)	 The overall project strategy, methods and parts of the results have been published in a special issue of the Hungarian language journal "Comitatus" whose primary audience is municipal governments. A similar article with emphasis on approach has been prepared for a Hungarian journal of regional planners and landscape architects.
10. Number of local initiatives introducing adaptation approach	At least 5 end-user agreements to undertake adaptation approach	• In the framework of the pilot projects 7 environmental cooperation agreements between municipalities and local NGOs have already been signed and other 8 agreements are expected to be signed soon. The agreements are to ensure the sustainability of the pilot projects' achievements.
11. Good practices disseminated through GEF Adaptation Learning Mechanism	At least one knowledge product produced and disseminated through ALM project	 Climate Change Adaptation Experience Template was prepared and submitted by UNDP Bratislava office to the ALM for broader lessons learned sharing

92. The review of these achievements indicates that the progress of the project was <u>satisfactory</u>. In a short timeframe, the project was able to achieve most of what it was intended to achieve. Considering that when this project was formulated, it was a pioneer climate change adaptation project for UNDP, a risk existed that the project would not achieve its outcomes due to lack of similar experiences and lessons learned. Nevertheless, the project management team was able to deliver what was expected in 36 months. The

LBDCA is left with the knowledge accumulated by the project and UNEP, IISD and UNDP will also benefit from this experience. For instance, UNEP has been leading a project in the Black Sea area and is using the SWAT model developed under this project. IISD is also building on the BalatonTrend portal with a comprehensive set of indicators in Canada and in Brazil.

93. However, as we discussed in Section 3.2.1, a challenge remains with the institutionalization and the transfer of know-how to local relevant organizations. Some activities took place during the lifetime of the project but more is needed for these organizations to really benefit from the project. UNEP already provided some support to train the Water Management Authority in using the SWAT model and the organization as well as National Hydrological Institute (VITUKI) are partners with UNEP in the implementation of the Black Sea project funded by the EU. The review indicates that in 36 months it would have been difficult to achieve greater results from a local capacity development point of view. The project needed first to develop some products (indicators, model, etc.), then applied them to the Lake Balaton context and finally to ensure that the relevant local organizations had the necessary capacity to uptake the project results. More capacity development is needed but the project was too short to accomplish that. This aspect will also be discussed in the next Section 3.3.2.

94. As mentioned earlier, the project had a strong scientific and technical background. Project activities were based on internationally recognized approaches such as the Integrated Water Resources Management (IWRM) and adaptation strategies identified at the 3rd World Water Forum (Japan – March 2003). It used the USDA Agricultural Research Service supported Soil, Water Assessment Tool (SWAT) model/methodology to develop the Lake Balaton basin/watershed model. The vulnerability assessment borrowed the EIA methodology underlying the Global Environment Outlook (GEO) developed by UNEP. The climate modeling for forward-looking analysis was built on the results of the global IPCC Special Report on emissions scenarios. An engagement and influencing strategy was developed on the basis of a strategy template developed by IISD. The project was also supposed to closely follow the guiding principles outlined in the UNDP/GEF guidebook "Adaptation Policy Frameworks for Climate Change: developing strategies, policies and measures"; including its five stages⁵. These guiding principles were not used as the main methodology to implement the project; but most of the project achievements are fitting into this approach. A greater use of this methodology would have provided a stronger framework to formulate an adaptation strategy for the Lake Balaton region.

95. Following the review of the performance of the project, a summary of key accomplishments in term of products and services is presented below⁶:

Development of an Internet Map Server (IMS) for the Lake Balaton Region

This instrument was developed by UNEP-GRID-Europe. The two main providers of data have been the Lake Balaton Regional Development and Coordination Agency (LBDCA) for Regional data, and UNEP/DEWA/GRID-Europe for publicly available datasets. After a difficult process to select and obtain the required geo-datasets, these were organized into an ArcGIS database. This work represented the base element of the project to assess Lake Balaton integrated vulnerability, early warning and adaptation strategies. The data gathered was also used in other activities such as the development of indicators and to feed data to the SWAT instrument to model the watershed hydrology.

Prepare Climate and Land Cover Change Scenarios for the Lake Balaton Watershed

The development process included a review of the IPCC, GEO and EURURALIS scenarios and how they converge towards four different future scenarios named: BalaHot, BalaPol, BalaLone, BalaCool. UNEP-GRID used existing data from different European project to create these regional scenarios. For land cover change, they explored the use of outputs from EURURALIS that created scenarios for Europe in 2010, 2020, and 2030 at a 1km resolution. They also extrapolated extreme land cover changes from the CORINE LAND COVER 2000 dataset at a 100m resolution. For climate change, they used the outputs from the PRUDENCE project that created - based on global scenarios - regional climatic models at the European scale at a 50 km resolution. Both outputs from climate and land cover changes scenarios served as inputs in the hydrological model SWAT.

⁵ http://www.undp.org/climatechange/adapt/apf.html

⁶ Most of the information presented below is a summary of information presented in the project Mid-Term Evaluation (July 2008) Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 20

Customization of the SWAT Instrument to the Lake Balaton Watershed

The SWAT (Soil and Water Assessment Tool) model is a continuation of nearly 30 years of modeling efforts conducted by the U.S. Department of Agriculture (USDA), Agricultural Research Service. The SWAT instrument has gained international acceptance as a robust interdisciplinary watershed modeling tool. It has proven to be an effective tool for assessing water resource and non-point pollution problems for a wide range of scales and environmental conditions across the globe. It is a basin-scale, continuous-time model that operates on a daily time step and is designed to predict the impact of management on water, sediment, and agricultural yields in non-monitored watersheds. It is using the data sets developed for the Lake Balaton region under the previous two initiatives presented above. It allows the users to conduct simulation/scenarios in the future to help the decision-making process.

Development of an Indicator System for the Lake Balaton Region

- As a key part of the Lake Balaton project, there was a need to address the following questions:
- What is happening to the environment and socio-economic system in the Lake Balaton region?
- What are the main forces of change?
- How do global and local forces of change combine to contribute to the region's vulnerability?

To answer these questions, IISD developed a new system of quantitative indicators (about 23 indicators) that use existing data to describe trends that reflect sustainable development priorities of both the expert community and key stakeholders in the region. The methodology to develop this indicator system included: participation of local experts and members of the civil society, use of precedents (literature review), indicator selection criteria, selection of issues, identification of a conceptual framework, collect and process data and analyze the indicators to assess how well they adequately provide information to the system. In order to give a greater access to these indicators and data, the collected data and the analysis results were put into a database called BalatonTrend described below.

Development of a Web-based Information Tool "Balaton Trend"

BalatonTrend is a web-based information tool aiming at facilitating informed social dialogue about the region's future by bringing the facts together on key socio-economic and ecological trends. The information aims to help answer the following questions:

- What is the state of the region in light of key trends over time?
- What causes or contributes to these trends?
- How should society, on all levels, respond to move towards a sustainable future?

Data is provided both on a regional and community level, where applicable. For most indicators both a time series chart and a related data table is shown, and in a few cases maps or time series maps. For selected indicators a short video commentary is posted where local experts and stakeholders explain in their own words the significance of the issue and trend.

Completion of the LIFE Balaton Project

This project was to implement an integrated decision support system for the sustainable management of tourism in the Lake Balaton Region. The project budget was 1.5M euros with a contribution of 745k euros from the EU-LIFE programme. At the start of the UNDP/GEF Balaton Project, the information system was further developed with the addition of some equipment to measure additional indicators such as the monitoring of additional water quality parameters: Chl-A and dissolved oxygen; integrated water level measurements; and hydro-meteorological parameters. The system monitors three types of information: (i) information on tourists; (ii) information on vehicle traffic; and (iii) information on water quality and quantity and meteorology. Information is accessible on line (http://bir.webeye.hu) through a controlled access. It is also accessible from three interactive webterminals in the Lake Balaton area and is linked with few roadside LED screens (*see Annex 7*).

Mainstreaming Climate Change Adaptation Measures within LBDCA Strategies and Programmes Based on the products and services developed by the project and summarized above, the strategy was

for LBDCA to uptake these achievements by mainstreaming vulnerability assessment and climate change adaptation measures within its programmes and projects such as the Balaton Regional Development Strategy process and its small grant scheme (*see below*). It also includes the change of the job description of the LBDCA Environmental Program Director, which now includes climate change adaptation as part of its mandate. According to the new TORs for this position, the LBDCA Environmental Program Director is now responsible for all tasks related to climate change strategy and climate change adaptation, as well as for supporting the elaboration of local climate change strategies for settlements as well as their implementation and monitoring.

From a policy point of view, the project contributed to several policy development processes. In particular, it commented and provided suggestions for the following strategies and action plans:

- The Lake Balaton Long Term Development Concept, which includes climate change adaptation as a horizontal issue. The Lake Balaton Development Council accepted this concept on May 8, 2009;
- The National Climate Change Strategy;
- The 2-year Action Plan of the National Climate Change Strategy;
- The 3rd Environmental Management Plan of Hungary;
- The River Basin Management Plan for the Lake Balaton catchment being completed within the context of the EU Water Framework Directive;
- Participated to discussions of the Environmental Committee of the Hungarian Parliament as Hungary prepares to hold the rotating Presidency of the European Union and considers having water as one of the focal areas;
- Locally, climate change adaptation indicators had been incorporated into several municipal and micro-regional environmental management programmes, waste management plans and climate change adaptation strategies.

Now the LBDCA is better equipped for implementing programmes and projects incorporating climate change adaptation measures. As a result, the agency integrated climate change adaptation into its business of developing projects. Annex 9 indicates the type of climate change related projects that LBDCA is bidding on.

Revision of the LBDC Grant Facility Scheme

The process of the LBDC grant facility scheme that is implemented by LBDCA was revised. Adaptation measures were added to the list of eligibility criteria and the selection of projects submitted includes now climate change adaptation measures as a criterion for the evaluation (scores). Despite some delay in securing the funds by LBDC due partly to the economic crisis faced by Hungary, the LBDCA was able to secure funds with the Norwegian government to support activities of NGOs in the Lake Balaton area, using the LBDC small grant facility modalities. The focus of these grants was on two areas: (i) improving the quality of the environment; and (ii) eliminating the illegal waste sites. The finalists were selected in 2008 and the implementation occurred between the end of 2008 and July 2009. A list of projects, which received funding from this small grant scheme, is presented in Annex 8.

The guidelines for NGOs (applicants) to access these funds include the compliance with climate change adaptation criteria. In the call for proposal conducted in 2008, it was stipulated that applicants must implement adaptation measures in addition to other planned project activities. Applicants had to describe their adaptation activities in the submitted project proposals. Information on climate change and adaption was given in the "*Guidelines for Applicants*", which was attached to the application package, in order to help applicants to submit compliant proposals. These guidelines included detailed information on potential adaptation measures, which were developed by the UNDP/GEF Project.

96. Overall, the project achievements can be summarized as follows. The project provided tools and instruments to better understand the vulnerability and the adaptation options for the Lake Balaton area (mostly outcome 1). Along the development of these tools and instruments, capacity was developed through on-the-job training, workshops and training seminars (outcome 2). Based on results from outcome 1, the project was able to contribute to several related policy development process and integrate climate change adaptation strategies. Then the small grant scheme of LBDCA was reviewed to integrate climate change adaptation measures as a criterion and funding was provided to 32 projects (outcome 4). Finally the knowledge generated by the project has been disseminated through conferences, publications and through the

respective networks of the project partners (outcome 5).

3.3.2 Contribution to Capacity Development

97. Capacity development was "embedded" in the project strategy. The overall development objective was "to build capacity and generate knowledge for increased understanding of the adaptability and vulnerability of human and natural systems on the example of the Lake Balaton and improve preparedness for climate change and enhance adaptive capacity elsewhere through lessons learned and dissemination". Then, the five expected outcomes contributed to developing the capacity of local development actors. Under outcome 1, knowledge on the vulnerability of the Lake Balaton area and the potential for adaptability was accumulated. Under outcome 2 that was to "strengthen capacity for formulating and implementing adaptive strategies compatible with sustainable development", capacities were developed through workshops and seminars, which led to the integration of sustainable development indicators into several local development plans. Outcome 3, provided resources to change and improve key policies and strategies related to climate change adaptation. Outcome 4 supported the revision and implementation of the LBDC grant scheme to integrate climate change adaptation as a criterion. Finally outcome 5 provided resources to disseminate knowledge and transfer know-how to local development actors.

98. Despite the project strategy focusing on capacity development, the project achievements in developing capacity are rated only as <u>marginally satisfactory</u>. A review of the literature on capacity development indicates that capacity development encompasses the acquisition of skills and knowledge for individuals, but also the improvements of institutional structures, mechanisms and procedures and finally the strengthening of an enabling environment with adequate policies and Laws. In the case of this project, efforts focused on the acquisition of knowledge, on improving the policy framework, on revising some institutional structures and mechanisms and on transferring knowledge and know-how to relevant audiences through workshops and seminars. However, due mostly to lack to time, the project did not have a clear and coherent capacity development strategy.

99. During the formulation stage, the project included a planned set of activities to develop the capacity of local development actors. It included a capacity development strategy for climate change adaptation and a training programme to implement the strategy. This part of the project strategy was dropped during the inception phase and replaced mostly with the development of LBDCA's capacity as the local development agency. As discussed in Section 3.2.5, the change was due mostly to the project scope (broad) and duration (short); there was not enough time to develop a CD strategy and implement it during the project lifetime.

100. Nevertheless, the change resulted in no capacity assessment conducted to define what are the required adaptive capacities to improve the management of the Balaton Lake system, including its watershed, what were the adaptive capacity gaps and how the project could have strengthened the existing adaptive capacities. For the most part, the project delivered what it was supposed to deliver, however, the review indicates that a more holistic capacity development approach for improving the management of the Balaton Lake system, including its watershed would have let the project to better develop the "overall ability of a system to perform and sustain itself". Instead, the approach taken due to time constraint runs the risk that effective tools and instruments developed by the project may not be sustainable in the long-term. As discussed in the Section 3.2.1, the risk exists that "Full and sustained utilization of tools and policies developed might need further actions".

3.3.3 Attainment of Project Objective

101. Similar to the measurement of the project to achieve its outcomes, a set of 3 indicators was used to measure the progress of the project in attaining its objective. The PIR-2009 (as of June 2009) indicates the following achievements at the end of the project:

	Table 6: A	ttainment of Project Objective	
Performance Indicator	Target	Current Status	
Objective: To contribute to a better understanding of the Lake Balaton ecological and socioeconomic system's			

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 23

Performance Indicator	Target	Current Status			
vulnerability and resilie capacity for more effec	vulnerability and resilience arising from multiple forces of global and local change, including climate change, and build capacity for more effective policy-making and adaptation measures.				
1. Regional development frameworks across the relevant sectors integrate adaptation to climate change	Adaptation Policy Framework (APF) for Lake Balaton basin has been developed to integrate adaptation into sectoral and regional development plans and programmes	 The Lake Balaton Long Term Development Concept was accepted by the Lake Balaton Development Council on May 8, 2009. A resume of the concept is currently on public consultation. Afterward, the concept will be proposed to the government for approval. In addition some specific measures, adaptation is a horizontal issue in the concept. A list of recommended adaptation measures developed in the project has been forwarded to the Ministry of Environment and Water in the development phase of the National Climate Change Strategy (NCCS). Some elements have been built in to the document. NCCS is a strategic document and does not allocate funds. Based on the project result the team also supported the preparation of a 2-years action plan of NCCS. The action plan is being finalized. Input to the Hungarian Parliament's Environmental Protection Committee as it works towards Hungary's EU presidency, on the issues of water and climate change is ongoing (ongoing as of July 2009). Input to the River Basin Management Plan of the Lake Balaton catchment prepared corresponding to implementation of the EU Water Framework Directive. (in progress). 			
 Allocation of financial resources for vulnerability studies and adaptation measures by local governing bodies 	Balaton region local governing bodies and development organizations allocate funding for adaptation measures	 In order to initiate pilot projects, call for proposals was published in the framework of the Norwegian Grant Programme. The 370 million HUF fund was established by the financial contribution of the EEA and Norwegian fund co-funded with the financial contribution by the local governments (almost 60 million HUF) The main objectives of the pilot project initiatives were to improve resilience of the Lake Balaton ecosystem by improving shoreline management and reducing the population pressures. The project applications submitted were evaluated in two steps: after the administrative compliance check (formal requirements), the technical adequacy of the project (technical requirements) was evaluated by independent experts in July-August 2008. The final beneficiaries were selected by a Professional Committee in September 2008. 32 project applications were granted and 5 applications were rejected. After signing the grant contracts, the implementation of the approved projects started on November 2008 and they have to be completed before July 31, 2009. In the course of revisions, section on climate change and adaptation is included in 18 local environmental management programmes. The elaboration of 2 municipal climate change and adaptation strategies is in progress. 			
3. Elements of Lake Balaton ecosystem management system fully integrate adaptation approaches	Adaptation measures have been undertaken	 A list of adaptation measures has been developed and introduced in the report "Investigating Stakeholder Decision Priorities for Adapting to Climate Change in the Lake Balaton Recreational Area of Hungary". Adaptation measures are incorporated into the Long-term Regional Development Concept (approved by LBDC) and being integrated into the River Basin Management Plan of the Lake Balaton catchment being developed in accordance with the EU-WFD. 			

102. The review of these achievements indicates that the progress of the project to attain its objective is good; it is rated as <u>satisfactory</u>. Based on the review of project achievements, the project contributed "to a better understanding of the Lake Balaton ecological and socioeconomic system's vulnerability and resilience arising from multiple forces of global and local change, including climate change, and build capacity for more effective policy-making and adaptation measures". Considering these achievements, it is clear that the project will have a long-term impact on the development of the Lake Balaton region and also on other similar climate change adaptation projects and programmes.

103. Through project activities, climate change adaptation strategies were integrated into several key policies. It was also integrated into municipal and micro-regional development plans. These policies and plans will be used for years to come. Micro projects were implemented in municipalities around the Lake

Balaton area within the context of climate change adaptation guidelines. The LBDCA is also finalizing the Lake Balaton Long Term Development Concept, which includes climate change adaptation as a horizontal issue. Around the Lake Balaton, the local development includes now the reality of climate change and the need to adapt. More capacity is needed for most local development actors but the debate is on and it will not go away.

104. These achievements have been attained within the context of a short duration project (36 months). As discussed in other Sections above, the lifetime of this project was too short to develop a greater capacity of local development actors. At the closure of the project, the project management team raised the risk of "*Full and sustained utilization of tools and policies developed might need further actions*", that is to say that the long-term impact and sustainability may be hampered if no further actions are taken. The review confirms this risk but also recognize that within the project parameters the achievements are good and that there was no sufficient time to develop more fully the capacity of local development actors. The project is now close and it is now up to LBDCA to carry forward the project achievements. As the local development agency they benefited greatly from this project and has the capacity to mitigate this risk by "pushing" its development agenda with climate change adaptation integrated within this agenda.

3.3.4 Global Environmental Benefits

105. This project is to help the Balaton development agencies to adapt to the risks of climate change. Its global environmental benefits relates to building resilience of the Balaton Lake ecosystem by improving its watershed management practices and by improving the observation and monitoring of the Lake in order to timely inform an effective management decision-making process.

106. Over the last century, the Lake Balaton has seen various threats to the globally significant biodiversity of the Lake Balaton region; including pollution, eutrophication and the impacts of tourism; however, these threats are currently largely under control. Yet, a new and potentially more damaging threat started to emerge in 2000: decreasing water level. The water budget of the lake was negative through the years 2000, 2001, 2002 and 2003 resulting in a zero-outflow situation for more than 4 years. By late 2001 the situation was approaching crisis proportions. Climate-related changes in hydrology would have a major impact on the vegetation and a consequent catastrophic impact on the biodiversity of the region. The bird and insect fauna are dependent both on the lake surface itself, and particularly on the surrounding vegetation; which depends also on the water level of the Lake. The recent water crisis increased the vulnerability of both ecological and socio-economic subsystems of the region.

107. The Lake Balaton's global biodiversity significance has been recognized through its designation as a Ramsar site. The westernmost bay of Lake Balaton - Kis-Balaton - is a water protection system consisting of two main parts. Phase I is characterized by open water surfaces with relatively narrow reedbelts along the dikes, while Phase II contains vast reedbeds and sedgy marshes, and less open water. The Kis-Balaton holds one of the highest concentrations of waterbirds in the migration period in Transdanubia, (the western part of the Pannonic biogeographic region) and supports important populations of plant and animal species for maintaining the biological diversity of the Pannonian Biogeographic region. The Kis-Balaton uplands National Park since 1997 and has been under the protection of the Ramsar Convention since 1979. Almost the whole area of the Kis-Balaton was designated according to the EU-Habitats Directive and the Birds Directive.

108. In addition to understanding better the vulnerability and resilience of the Lake Balaton ecological and socioeconomic system, it was anticipated at the formulation stage of this project that the project would also play a catalytic role in the Central and Eastern European region where vulnerability and adaptation initiatives with a sustainability and climate change focus have not generally started. This is the case for instance with UNEP which is now leading a large integrative project under the FP7-EU research framework to literally upscale the Balaton project to the entire Black Sea watershed. Knowledge accumulated by the project has also been disseminated through the UNDP-ALM network sharing the lessons learned and best practices.

3.3.5 Sustainability of Project Achievements

Sustainability Strategy

109. The project long-term sustainability strategy described in the project document is <u>marginally</u> <u>satisfactory</u>. The strategy was mostly based on "*building to the extent possible on the existing, but inadequately implemented policy framework and local capacity the project will seek to both reinforce positive trends and introduce new ideas*". At the formulation stage, it was anticipated that the sustainability of project results would be accomplished at two levels: (i) on the human resources level sustainability would be achieved through increased local expertise in carrying out forward looking, place-based or sectoral analysis and policy work integrating adaptation measures into the local development planning; and (ii) on the resources side sustainability would involve the identification of specific policy measures that can help revenue stay in the region and being spent in ways more compatible with successful adaptation to existing or emergent vulnerability.

110. It was a brief sustainability strategy, which did not address fully the needs for project achievements to be sustainable in the long run and which – however - are key for the long-term success of the project. As per the critical risk identified at project end, the "full and sustained utilization of tools and policies developed might need further actions".

Sustainability of Results Achieved by the Project

111. Considering the results achieved during the short timeframe of the project, the potential of these results to be sustainable in the long run is <u>satisfactory</u>. A closer look at these results indicates that some of them were institutionalized and consequently should be sustainable in the long run. This is the case for key policies and strategies in which climate change adaptation was integrated. These documents were approved by the corresponding level of government (national or regional) and are now guiding the programmes of relevant organizations. In these cases, the sustainability of project results is already ensured. The same can be said for local development plans at the municipal and micro-regional levels. Sustainable development indicators were integrated to some of these local development plans and are used through the development process. No particular issue exists with regard to the long-term sustainability of these results.

112. Regarding LBDCA as the regional development agency, its capacity to address climate change adaptation issues was greatly improved through the implementation of the project. As an organization, it embraced the subject and integrated it within its mandate and programmes. For instance the Lake Balaton Long Term Development Concept - in its final steps of being approved - includes climate change adaptation as a horizontal issue; the terms of reference of the Environmental Program Director now include climate change adaptation as part of his mandate (*see Section 3.3.1*); and the LBDC small grant scheme implemented by LBDCA includes now climate change adaptation criteria (*see Section 3.3.1*). The climate change adaptation concept has been institutionalized within LBDCA and there is no long-term sustainability issues to report.

113. However, the project developed key tools and instruments to help the decision-making process for climate change mitigation and adaptation measures such as the SWAT instrument and its related datasets, and the web-based information tool "BalatonTrend". These products are of high quality to assess the vulnerability due to climate change, analyze adaptation scenarios and give information access to the public. However, despite some attempts to transfer this know-how, the uptake of these achievements by local agencies/organizations is far from being certain. Some steps to maximize the long-term sustainability were taken but they may not be sufficient for a "*full and sustained utilization of tools*".

114. One of the products with the greater long-term sustainability concern is the SWAT instruments and its related datasets. UNEP already provided some training in Geneva and in Siofok for two officers from the Water Management Authority in early 2009. The review also indicates that the SWAT instrument was used by relevant organizations (Water Management Authority and VITUKI) to prepare the River Basin Management Plan for the Lake Balaton catchment within the context of the EU Water Framework Directive. Additionally, these two organizations are also part of the integrative large Black Sea watershed project under the FP7-EU research framework led by UNEP and which seek to literally upscale the Balaton project to the entire Black Sea watershed. The exposure to this project should also contribute to the development of capacity of the Water Management Authority in undertaking hydrology scenario analyses using the SWAT instrument as a tool.

Financial and Human Resources Sustainability

115. Considering the nature of the project and of its achievements, the financial and human resources sustainability of the project do not present any particular issues. The project results are mostly institutionalized and/or are with LBDCA and no major recurrent costs are anticipated after the closure of the project; it is rated as <u>satisfactory</u>. The LBDCA - as the national implementing agency of the project - is the custodian organization for most project achievements.

116. The only question that remains is the need for more actions to sustain the SWAT instrument. Initial training was provided in early 2009 by UNEP but more would be needed to ensure the uptake of this instrument by the Water Management Authority. A first step to fulfill this need is the potential for the large Black Sea watershed project under the FP7-EU research framework led by UNEP that is refining the tool and also which could provide additional training in using the tool for the Lake Balaton area.

Enabling Environment – Policy, Legislation and Institutions

117. The project contributed greatly to improve the enabling environment in the policy, legislation and institutional areas with regards to climate change adaptation. As discussed in Section 3.3.1, the project contributed to the mainstreaming of the climate change adaptation measures into several key policies, strategies and action plans. At a national level, the ministry of environment benefited from the project through contributions to several policies and strategies such as the National Climate Change Strategy and its related 2-year Action Plan. At the regional/local level, LBCDA as the regional development agency in the Lake Balaton area was also strengthened in addressing climate change issues. The same can be said for other local organizations such as the Water Management Authority and several municipalities but to a lesser degree.

118. The region is now better equipped to address climate change impacts on the Lake Balaton region. More capacity development of local organizations, particularly municipalities, would be needed but a big step forward was made with the support of the project. As discussed in Section 3.3.1, several municipalities have or are in the process of developing their environmental management programmes and/or waste management plans, which includes indicators identified by the project. Additionally, two municipalities - Balatonalmádi and Balatonfűzfő – are in the process of developing their specific climate change and adaptation strategies. A strengthened enabling environment for climate change adaptation is now supporting these processes and the meetings with few local leaders indicate that it is just the beginning.

3.3.6 Synergies

119. The project did not benefit directly from synergies with other projects or programmes funded by the government of Hungary or external donors. As discussed in Section 3.3.1 the formulation of this project was to pioneer activities in climate change adaptation; in itself it was a project to lead to new avenues and play a catalytic role. GEF made the decision to fund the project and UNDP, UNEP, IISD and LBDCA partnered together to implement the planned activities, which, at the time, were "forward looking" activities. No magic solution existed and the few sequences of the project were unavoidable at the time of implementation. The project needed to identify indicators, gather datasets, adapt analytical tools in order to understand better the vulnerability of the Lake Balaton area and, then be able to develop a greater local capacity to understand this vulnerability.

120. The UNDP/GEF project did complement the LIFE Balaton project that was to implement an integrated decision support system for the sustainable management of tourism in the Lake Balaton Region. Limited synergies were found between the 2 projects; mostly due to the fact that these 2 projects were implemented at two different periods with only 6 months of overlap. The UNDP/GEF supported the addition of some equipment to measure additional indicators such as the monitoring of additional water quality parameters, integrated water level measurements and hydro-meteorological parameters. As a result, this system was further enhanced and provides up-to-date information to the public through three interactive web terminals and few roadside LED screens in the Lake Balaton area (*see also Section 3.3.1*).

121. Nevertheless, the progress made by the project will be continued through different channels. Locally, the LBDCA will lead climate change adaptation through its strategies and programmes. UNEP and IISD are already applying some results from this project to other projects in their respective networks and UNDP

benefits from this experience to share the lessons learned in the region.

3.3.7 Replication of Project Results

122. As discussed in Section 3.1.8, at the time of the formulation of the project, replication of project results was mostly seen as a transfer of know-how. The project strategy included replication of project results through outcome 5 that was to "*raise knowledge generated and awareness of integrated vulnerability and adaptation approaches locally, nationally and internationally through knowledge management, dissemination and replication strategy*". Replication was to be accomplished through engagement and influencing strategy, stakeholder forums, training, innovative financing mechanisms and knowledge transfer through organization of conferences and presentations.

123. The achievements of the project provide the Lake Balaton region with effective tools and instruments to assess the vulnerability of the region to climate change, analyze future scenarios and address the need to adapt to climate change. The project was closed at the end of 2008. However, the project will continue to impact the local development and other projects for years to come. The replication of the project results will be two-fold: (i) results will be scaled up regionally in the Lake Balaton area; (ii) some project achievements will be replicated nationally in Hungary and internationally through other projects and programmes. The review indicates that the potential for scaling-up project achievements and replicating the project results is good; it is rated as <u>satisfactory</u>.

124. Locally, LBDCA will take the lead for scaling-up project results throughout the region; particularly once the Lake Balaton Development Concept will be under implementation. Scaling-up is already taking place in several municipalities where they have or are in the process of developing their environmental management programmes and/or waste management plans, which includes indicators identified by the project. Additionally, two municipalities - Balatonalmádi and Balatonfűzfő – are developing their own climate change and adaptation strategies. Scaling-up will also take place through the LBDC small grant scheme, which now incorporates climate change adaptation as a criterion for selecting projects to be funded. Finally, initial results with the SWAT instrument and the capacity of the Water Management Authority to use it should expand in the months and years to come. The authority may end up using a different instrument to conduct hydrology scenario analysis but the process of developing their capacity has started and should continue. As planning and management of water resources increase, the need for this type of analysis will increase; it is expected that this scaling-up process will continue within the Water Management Authority.

125. Replication will take place at national level. The project already provided valuable inputs to national processes such as the National Climate Change Strategy and its 2-year Action Plan. It also contributed to the recently developed River Basin Management Plan for the Lake Balaton. Now that LBDCA has a capacity in climate change adaptation, it is expected that the knowledge accumulated through the project will be used for other regions in Hungary within, for instance, the context of implementing the 2-year Action Plan. It is also worth mentioning that knowledge about project methodology and achievements have been published in a special issue of the Hungarian language journal "*Comitatus*" whose primary audience is municipal governments. A similar article with emphasis on approach has been written for a Hungarian journal of regional planners and landscape architects.

126. Similarly, replication is taking place globally. As mentioned earlier, UNEP-GRID is now leading a 6M euros integrative project under the FP7-EU research framework to literally upscale the Balaton project to the entire Black Sea watershed. Knowledge accumulated by the project has also been disseminated through the UNDP-ALM network sharing the lessons learned and best practices. Finally, IISD is using the "BalatonTrend" information tool with its comprehensive set of sustainable development indicators in other projects in Canada and in Brazil.

4. CONCLUSION / RATINGS SUMMARY

127. In conclusion, the overall project achievements and impact are rated as <u>satisfactory</u>. The project was highly relevant both at national and regional levels. It was implemented during the time that Hungary developed its National Climate Change Strategy and its related 2-year Action Plan. The project was instrumental in providing inputs to these two processes. However, despite a good concept, the scope of the
project was not in line with its timeframe. A 30 months timeframe was way too short to be able to develop the necessary capacity for scaling up project achievements. Nevertheless, most project achievements were institutionalized and should be sustainable in the long run. Considering the pioneer nature of this project, it played an important catalytic role in the Lake Balaton region to develop and mainstream adaptive capacities for improving the management of the Balaton Lake system, including its watershed. The local development organizations including the municipalities are now more aware about the Lake Balaton ecological and socioeconomic system's vulnerability and resilience and some capacities were developed with the support of this project.

128. After a slow start-up phase and given the time constraint, the implementation team was under pressure to deliver what was expected in the project document. The review of the log-frame indicated also that the set of expected results had an inherent sequence embedded into these results guiding the implementation. The project needed to complete outcome 1 before any other major activities could be undertaken. As a consequence, the critical implementation path of the project was somewhat rigid, adding pressure on the implementation team to deliver on time. Any delay in one activity was affecting the entire project timing. Nevertheless, given these constraints, the project management team did adapt the implementation of the project to find ways to keep the implementation within the planned schedule. The implementation approach was rated as satisfactory (*see Annex 10 – Table 8*).

129. The sequential implementation of the project contributed also to focus more on the assessment of understanding the natural system of the Lake Balaton and its vulnerability, rather than on developing the capacity of local organizations to adapt to climate change. The project was born out of the necessity to understand better the hydrology of the lake and its vulnerability following the decrease of the water level observed during the period 2000-03. Assessment was the first objective and despite a change during the approval of the project to add the capacity development in its objective much of the focus of the project stayed on the assessment. We also need to recognize that the project needed first to understand the natural system of the lake and its vulnerability before any actions could be taken to address the issue of adapting to climate change.

130. The national ownership of the project was mostly limited to LBDCA with limited "connections" with other organizations such as the Ministry of Environment and Water and the Water Management Authority. The limited participation of stakeholders in the implementation of the project, other than being consulted, was also a result of the tight implementation schedule and the need to focus foremost on the research to understand the natural system of the lake and its vulnerability.

131. Nevertheless, the project delivered tools and instruments to better understand the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local changes. The project was also able to contribute to mainstreaming climate change adaptation into several policies and strategies, including the recently developed Lake Balaton Long Term Development Concept, which will guide the development of the region for years to come. As indicated in Annex 10 - table 7, the overall delivery of the project outcomes and objective are rated as satisfactory.

132. Finally, the review indicates that the long term impact and sustainability of project achievements is overall good. Some results were institutionalized and as a consequence should be sustainable in the long run. This is the case for key policies and strategies in which climate change adaptation was integrated. These documents were approved by the corresponding level of government (national or regional) and are now guiding the programmes of relevant organizations. The same can be said for local development plans at the municipal and micro-regional levels. Sustainable development indicators were integrated to some of these local development plans and are used through the development process. No particular issue exists with regard to the long-term sustainability of these results.

133. However, the project also developed tools and instruments to help the decision-making process for climate change mitigation and adaptation measures such as the SWAT instrument and its related datasets, and the web-based information tool "BalatonTrend". These products are of high quality to assess the vulnerability due to climate change, analyze adaptation scenarios and give information access to the public. However, despite some attempts to transfer this know-how, the uptake of these achievements by local agencies/organizations is far from being certain. Some steps to maximize the long-term sustainability of

these results were taken but they may not be sufficient. As it was noted by the project management team in their last PIR-2009, the risk exists that the *"full and sustained utilization of tools and policies developed might need further actions"*. This is the main challenge of the project to ensure its long-term success.

5. LESSONS LEARNED

134. Based on the review of project documents, interviews and meetings with key informants, and analysis of the information collected, the Evaluator collated the following lessons learned:

- The small grant facility to fund small projects in the Lake Balaton area was part of the project deliverables and was a good opportunity for local stakeholders to demonstrate what and how local communities can adapt to climate change. It is a valuable channel to "connect" the assessment of climate change, the possible adaptation measures and the related policies with what can be done locally. Additionally, a grant scheme seeking local NGOs and municipalities to cooperate is beneficial for the local communities and ensure a greater long-term sustainability and institutionalization of project achievements as demonstrated by the project experience.
- Offering direct grants for specific adaptation measures to climate change is more effective than adding climate change adaptation criteria in the evaluation system of a small grant scheme. It compels the grantees to focus exclusively on adaptation measures to climate change as opposed to being just one incentive among others to submit projects for funding. Therefore, the impact of a grant scheme focusing on adaptation measures is greater than for instance modifying an existing environmental small grant scheme.
- A 30-months project is too short to develop capacity of local stakeholders. Additionally, the time constraint is even greater when assessments need to be conducted before any capacity development actions can be implemented. The result is an accumulation of knowledge and tools, which may not be effectively used in the future due to lack of capacity development of local stakeholders to uptake this knowledge within their own strategies and programmes.
- Partnering with international organizations can be very effective and beneficial for local organizations/stakeholders. International partners bring quality knowledge and know-how; however, the project should maximize the transfer to this know-how to ensure that local stakeholders benefits from this knowledge and know-how.
- When project activities respond and support/reinforce existing processes and systems, the achievements are well integrated and the long term sustainability is ensured through good ownership of these achievements by the stakeholders. Supporting activities well integrated with existing processes and systems has a greater long-term impact by responding to a demand for capacity development.
- Acquisition of datasets is often underestimated during the formulation of projects and may hamper project progress if these datasets are not available when needed. As a result, an entire project may be delayed waiting for the data to be available.

6. **RECOMMENDATIONS**

135. Based on the findings of this final evaluation, the following recommendations are made:

- 1. Projects of this nature should be developed at least for periods of 4 to 5 years minimum; 2.5 years is too short. Projects focusing on assessing a particular environment could be conducted in a shorter period of time. However, the ultimate achievements of projects of this nature rely on the development of capacity of local stakeholders. Hence, a period of 2.5 years does not allow a project to, first, assess/analyze, second, identify what to do, and finally third, engage and develop the capacity of local stakeholders.
- 2. It is recommended that the review of this type of project during the approval stage should not only be technical and financial but also managerial. The managerial aspects of these projects should be

assessed and should include the scheduling of project implementation. A strong review of the "critical path" of the implementation should be emphasized to identify possible "bottlenecks" and possibly alternative implementation paths. "Bottlenecks" could affect the delivery of expected results and often limit the development of capacity of the custodian organization to uptake and scale-up project results due to lack of time and resources near the end of the project when the focus is on handover and transfer.

- 3. When projects involve international partner(s), it requires an agenda focusing on know-how transfer to maximize the transfer of knowledge to local stakeholders. Partnering with international organizations can be very effective and beneficial for local organizations/stakeholders; however, long-term impact and sustainability of project achievements rely primarily on this transfer happening throughout the project.
- 4. When implementing projects with an extended assessment component, it is recommended that the project work closely with the national scientific community. It would contribute to develop the local capacity of this community over the long run, validate better the project findings nationally and as the custodian of the accumulated knowledge, the national research community should be able uptake the findings.
- 5. Implementing a climate change adaptation project requires the participation of all key stakeholders; not only for consultation but also for participating in the project decision-making process. Key stakeholder organizations should particularly be part of the decision-making process such as the related government agencies (for instance the Water Management Directorate) including the national level, Research Institutes, Municipalities, etc. The project should be targeting them and they should be involved into decision-making during the implementation in order to develop a strong ownership of the project by these stakeholders.
- 6. It is recommended for projects that include the capacity development of stakeholders, to conduct a capacity development strategy. The strategy allows the project implementation team to identify the current existing capacities of the various groups of stakeholders, the capacities needed to implement a climate change adaptation agenda and through a participative analysis to identify the capacity gaps. Then, based on these gaps an effective capacity development strategy can be developed with a set of activities seeking to address these capacity gaps.
- 7. These projects should be flexible in their implementation and be adaptable to local realities. As often, the timing of GEF funded projects are difficult to predict. Therefore, a particular context during the formulation of a project may be completely different during the implementation stage and may necessitate some revisions of its implementation modalities.
- 8. The main language of a project should be the language spoken in the country hosting the project. It would be advisable to translate key documents in English to give access to the project knowledge to a greater audience. However, all information produced with the support of project resources, should be archived in the local language and made accessible to the public at large through a project web site. This is particularly true when projects are implemented with international partners where the tendency is to publish/disseminate project information in English for a global reach.
- 9. It is highly recommended to package a small grant scheme in projects of this nature. They allow local stakeholders to demonstrate what and how local communities can adapt to climate change. It provides a kind of grounding scheme to translate policy development into real actions on the ground. It is also recommended to set-up a specific climate change adaptation grant scheme to target adaptation projects.
- 10. In addition to a small grant scheme targeting local stakeholders, a climate change adaptation project of this nature should also include a grant scheme to support the implementation of techniques to be implemented by related government institutions to demonstrate the adaptation to climate change. For instance, in the case of the Lake Balaton area where water management is key to the adaptation to climate change, the Water Management Directorate could have piloted some actions in the Lake Balaton watershed including the Kis-Balaton area to improve water management flowing to the lake.
- 11. It is recommended that this type of project be developed as "add-on" to existing structures and procedures and seek to reinforce what exist such as an agency to manage water or an existing

monitoring system. It obliges the project to take into consideration the current capacity and build on this; hence preventing the development of concept, tools and instruments that cannot be uptake by the relevant organizations due to lack of capacity, which could include lack of budget, skills and knowledge and structures.

- 12. When a project involves the acquisition of datasets it is recommended to conduct a full assessment of their availability during the formulation of the project. Often this acquisition (access, quality, etc.) is under estimated at the front-end of the project for expediency reason and may hamper project progress if these datasets are not readily available. As a result, the component of a project or the project in its entirety could be jeopardized; preventing the project to move ahead and deliver what it is supposed to deliver.
- 13. As the lead regional development agency, it is recommended that LBDCA pursue its engagement in climate change adaptation for the Lake Balaton area. The theme is already mainstreamed within strategies, programmes and projects developed by LBDCA. Local municipalities have started to integrate climate change adaptation into their local development strategies. As described in Section 3.3.5, the sustainability of project achievements in the long run should be ensured but it will require the continued commitment from LBDCA and its local/regional partners.

Annex 1: Terms of Reference

for Project Final Evaluation of UNDP/GEF Project of the Government of Hungary

Project Title:	Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies, Hungary
Functional Title:	Consultant for Independent Evaluation
Duration:	estimated 15 working days over the period of: 12 October – 4 December 2009
Terms of Payment:	Lump sum payable upon satisfactory completion and approval by UNDP of all deliverables, including the Evaluation Report
Travel costs:	The costs of in-country mission(s) of the International Consultant are to be included in the lump sum.

1. INTRODUCTION

In accordance with UNDP/GEF M&E policies and procedures, all regular and medium-sized projects supported by the GEF should undergo a final evaluation upon completion of implementation.

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

- i) to monitor and evaluate results and impacts;
- ii) to provide a basis for decision making on necessary amendments and improvements;
- iii) to promote accountability for resource use; and
- iv) to document, provide feedback on, and disseminate lessons learned.

A mix of tools is used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project - e.g. periodic monitoring of indicators -, or as specific time-bound exercises such as mid-term reviews, audit reports and final evaluations.

The evaluation is to be undertaken in accordance with the "GEF Monitoring and Evaluation Policy" (see http://thegef.org/MonitoringandEvaluation/MEPoliciesProcedures/mepoliciesprocedures.html).

The Final Evaluation is intended to assess the relevance, performance and success of the project. It looks at signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global and national environmental goals.

The Final Evaluation also identifies/documents lessons learned and makes recommendations that project partners and stakeholders might use to improve the design and implementation of other related projects and programs.

2. **PROJECT DESCRIPTION**

The UNDP/GEF Medium-Size Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" was implemented in the period of March 2006 – December 2008. The original duration was planned for 30 months, a 3 months non-costs extension has been granted. The project underwent a mid-term evaluation in 2008, with Report submitted in July 2008.

The objective of the project was to contribute to a better understanding of the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change and build capacity for more effective policy/making and adaptation measures in response.

The project had five outcomes. The first was to strengthen ecological and socio/economic resilience by *increased understanding* of lake and watershed processes viewed through the lens of vulnerability and adaptation. The second outcome was to strengthen *capacity* for formulating and implementing adaptive

strategies compatible with sustainable development. The third outcome was to strengthen the *policy framework* conducive to adaptive management with particular interest to institutional mechanisms and economic incentives and disincentives. The fourth outcome was to facilitate adaptation to the impacts of climate change through *direct action* in the form of pilot initiatives funded through LBDC's existing small grants facility and innovative financing mechanisms. The fifth outcome was to enhance *public and policymaker awareness* of integrated vulnerability and adaptation approaches locally, nationally and internationally, including contribution to the GEF's project on the Adaptation Learning Mechanisms.

The designed total project budget was 4.075.000 USD, including 985.000 USD GEF funding.

The National Executing Agency (NExA) for the project was the Lake Balaton Development Council (LBDC). The National Implementing Agency (NIA) was the Lake Balaton Development Coordination Agency (LBDCA).

The geographical scope of the project is the Lake Balaton Resort Area of Hungary as defined in the Lake Balaton Act of 2000.

2. OBJECTIVES OF THE EVALUATION

The objective of the Evaluation is to assess the achievement of project objective, the affecting factors, the broader project impact and the contribution to the general goal/strategy, and the project partnership strategy.

Project success will be measured based on Project Logical Framework (see <u>Annex 1</u>), which provides clear performance and impact indicators for project implementation along with their corresponding means of verification.

The Evaluation will focus on the following aspects:

- <u>Project design and its relevance</u> in relation to:
 - a) Development priorities at the national level;
 - b) Stakeholders assess if the specific needs were met;
 - c) *Country ownership / drivenness –* participation and commitments of government, local authorities, public services, utilities, residents;
 - d) UNDP mission to promote sustainable human development (SHD) by assisting the country to build its capacities in the focal area of environmental protection and management;
- <u>Performance</u> look at the progress that has been made by the project relative to the achievement of its objective and outcomes;
 - a) *Effectiveness* extent to which the project has achieved its objectives and the desired outcomes, and the overall contribution of the project to national strategic objectives;
 - b) *Efficiency* assess efficiency against overall impact of the project for better projection of achievements and benefits resulting from project resources, including an assessment of the different implementation modalities and the cost effectiveness of the utilisation of GEF resources and actual co-financing for the achievement of project results;
 - c) *Timeliness* of results,
- <u>Management arrangements</u> focused on project implementation:
 - a) *General implementation and management* evaluate the adequacy of the project, implementation structure, including the effectiveness of the National Steering Committee and Consultative Forum, partnership strategy and stakeholder involvement from the aspect of compliance to UNDP/GEF requirements and also from the perspective of "good practice model" that could be used for replication
 - b) *Financial accountability* extent to which the sound financial management has been an integral part of achieving project results, with particular reference to adequate reporting, identification of problems and adjustment of activities, budgets and inputs
 - c) *Monitoring and evaluation on project level* assess the adoption of the monitoring and evaluation system during the project implementation, and its internalization by competent authorities and service

providers after the completion of the project; focusing to relevance of the performance indicators, that are:

- Specific: The system captures the essence of the desired result by clearly and directly relating to achieving an objective and only that objective.
- Measurable: The monitoring system and indicators are unambiguously specified so that all parties agree on what it covers and there are practical ways to measure it.
- Achievable and Attributable: The system identifies what changes are anticipated as a result of the intervention and whether the result(s) are realistic. Attribution requires that changes in the targeted developmental issue can be linked to the intervention.
- Relevant and Realistic: The system establishes levels of performance that are likely to be achieved in a practical manner, and that reflect the expectations of stakeholders.
- Time-bound, Timely, Trackable and Targeted: The system allows progress to be tracked in a cost-effective manner at desired frequency for a set period, with clear identification of particular stakeholders group to be impacted by the project.
- <u>Overall success</u> of the project with regard to the following criteria:
 - a) *Impact* assessment of the results with reference to the development objectives of the project and the achievement of global environmental goals, positive or negative, intended or unintended changes brought about by the project intervention, (number of households benefiting, number of areas with the new technology in place, level of sensitization and awareness about the technology; any change at the policy level that contributes to sustainability of the tested model, impact in private/ public and/ or at individual levels);
 - e) Global environmental benefits reductions in green house gas emissions.
 - b) *Sustainability* assessment of the prospects for benefits/activities continuing after the end of the project, *static sustainability* which refers to the continuous flow of the same benefits to the same target groups; *dynamic sustainability* use and/or adaptation of the projects' results by original target groups and/or other target groups;
 - c) *Contribution to capacity development* extent to which the project has empowered target groups and have made possible for the government and local institutions (municipalities) to use the positive experiences; ownership of projects' results;
 - d) *Replication* analysis of replication potential of the project positive results in country and in the region, outlining of possible funding sources; replication to date without direct intervention of the project;
 - e) *Synergies* with other similar projects, funded by the government or other donors.

In addition to a descriptive assessment, criteria should be rated using the following divisions: Highly Satisfactory, Satisfactory, Marginally Satisfactory, and Unsatisfactory with an explanation of the rating. Also the Overall Rating of the project should be indicated.

Issues of special consideration:

The Evaluation Report will present the experience and recommendations for the benefit of design and implementation of other GEF-funded adaptation projects. Especially the aspects of building capacity for adaptation, communication and awareness-raising to support climate change adaptation, integration of climate change risk considerations and adaptation into policy and planning processes, as well as the specific management practices for natural resources to support adaptation to climate change, shall be assessed.

For future development support in the region, UNDP is especially interested in the assessment of the support model applied in the project, its implications for the long-term impact and sustainability of the project results.

The Evaluation Report will present recommendations and lessons of broader applicability for follow-up and future support of UNDP and/or the Government, highlighting the best and worst practices in addressing issues relating to the evaluation scope.

3. PRODUCTS EXPECTED FROM THE EVALUATION

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 35

The key product expected from this final evaluation is a comprehensive analytical report in English that should, at least, follow minimum GEF requirements as indicated in <u>Annex 2</u>.

The Report will include a table of planned vs. actual project financial disbursements, and planned co-financing vs. actual co-financing in this project, according the table attached in <u>Annex 3</u> of this TOR

The Report will be supplemented by Rate Tables, attached in <u>Annex 4</u> of this TOR.

The length of the final evaluation report shall not exceed 30 pages in total (not including annexes).

4. EVALUATION APPROACH

An outline of an evaluation approach is provided below; however it should be made clear that the evaluator is responsible for revising the approach as necessary. Any changes should be in-line with international criteria and professional norms and standards. They must be also cleared by UNDP before being applied by the evaluation team.

The evaluation must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and applicable to the remaining period of project duration.

The evaluation should provide as much gender disaggregated data as possible.

The evaluation will take place mainly in the field. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with the government counterparts, the National Project Manager, Steering Committee, project team, and key stakeholders.

The evaluator is expected to consult all relevant sources of information, such as the project document, project reports – incl. Annual Reports, project budget revision, progress reports, Mid-Term Evaluation Report, project files, national strategic and legal documents, and any other material that s/he may consider useful for evidence based assessment. The list of documentation to be reviewed is included in <u>Annex 5</u> of this Terms of Reference

The evaluator is expected to use interviews as a means of collecting data on the relevance, performance and success of the project. S/He is also expected to visit the project sites.

The methodology to be used by the evaluation team should be presented in the report in detail. It shall include information on:

- Documentation reviewed;
- Interviews;
- Field visits;
- Questionnaires;
- Participatory techniques and other approaches for the gathering and analysis of data.

Although the Evaluator should feel free to discuss with the authorities concerned, all matters relevant to its assignment, it is not authorized to make any commitment or statement on behalf of UNDP or GEF or the project management.

The Evaluator should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

5. **REQUIRED QUALIFICATION**

- University degree in technical, economics or environment related issues;
- Recent experience with result-based management evaluation methodologies;
- Recent experience in evaluation of international donor driven projects;
- Recognized expertise in the field of natural resource management and vulnerability and adaptation

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 36

studies (V&A), including water and watershed systems;

- Familiarity with Water management in public sector
- Familiarity with Water management policies in CEE, especially in Hungary;
- Work experience in relevant areas for at least 8 years;
- Conceptual thinking and analytical skills;
- Project evaluation experiences within United Nations system will be considered an asset;
- Fluency in Hungarian will be considered an asset;
- Excellent English communication skills;
- Computer literacy;

6. IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation lies with UNDP Regional Center for Europe and CIS (Bratislava). UNDP will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. UNDP and the Project Manager will be responsible for liaising with the Evaluator to set up stakeholder interviews, arrange field visits, coordinate with the government counterparts, etc.

The evaluation will be conducted within the period of **12 October – 4 December 2009**.

Activity	Timing	Estimated
		duration
Desk review	12-23 October 2009	2 days
Briefings for evaluators by UNDP and the	Till 23 October 2009	1 day
Project manager		
Field visits, interviews, questionnaires, de-	week of 26-29 October	5 days
briefings	OR	-
	week of 2-6 November 2009	
Drafting of the evaluation report	Within 8 working days after the	3 days
	mission, but	
	latest on 18 November 2009	
Validation of preliminary findings with		2 days
stakeholders through circulation of draft reports	Till 30 November 2009	
for comments, meetings and other types of		
feedback mechanisms		
Finalization of the evaluation report		2 days
(incorporating comments received on first	Till 4 December 2009	
draft)		
		15 days

The activity and timeframe are broken down as follows:

The report (draft and final version) shall be submitted to the UNDP Country Support Team (Ms. Klara Tothova, address: Grosslingova 35, 811 09 Bratislava, Slovakia, tel.: 00421-2-59337 220, e-mail: klara.tothova@undp.org)

Prior to approval of the final report, UNDP contact person will circulate the draft for comments to government counterparts and project management: project manager, National Project Director, LBDC, UNDP Country Support Team and UNDP/GEF RTA.

UNDP and the stakeholders will submit comments and suggestions within 5 working days after receiving the draft.

The finalised Evaluation Report shall be submitted latest on 4 December 2009.

If any discrepancies have emerged between impressions and findings of the evaluation team and the

aforementioned parties, these should be explained in an annex attached to the final report.

7. APPLICATION PROCESS

Applicants are requested to apply online on http://jobs.undp.org by 5 October 2009, 12:00 CET

The application should contain current and complete C.V. in English with indication of the e-mail and phone contact.

Shortlisted candidates will be invited to present a price offer indicating the total cost in USD of the assignment (including the daily fee, per diem and travel costs) preferably according the template attached in Annex $\underline{6}$)

UNDP applies fair and transparent selection process that would take into account the competencies/skills of the applicants as well as their financial proposals.

Qualified women and members of social minorities are encouraged to apply.

UNDP is a non-smoking work environment.

Due to large number of applicants, UNDP regrets that it is unable to inform the unsuccessful candidates about the outcome or status of the recruitment process.

TOR - Annex 1

Project Strategy	Objectively verifiable indicators				Assumptions
	Indicator	Baseline value	Target value and date		
Project objective is to contribute to a better understanding of the Lake Balaton ecological and socio-economic system's vulnerability and resilience arising from multiple forces of global and local change, including climate change, and build capacity for more effective policy-making and adaptation measures	Regional development frameworks across the relevant sectors integrate adaptation to climate change Local governing bodies allocate financial resources for vulnerability studies and adaptation measures Lake Balaton ecosystem management system fully integrates adaptation approaches	There has been number of forums for scientific and expert discussions about the current vulnerabilities of the Lake Balaton to the climate change. There is regular monitoring of many key ecosystem variables but the more profound understanding of the dynamics of change is missing. Local governments are fully aware of the impacts and through LBDCA supported the project to acquire better understanding that will subsequently be translated into policy change and local action. There are limited capacities to understand and act on the climate change induced impacts ecosystem	APF for Lake Balaton basin has been developed to integrate adaptation into sectoral and regional development plans and programmes Balaton region local financing schemes allocate funding for adaptation measures have been undertaken	Project reports. Mid term and final evaluation	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change. The commitments will include financial commitments in order to sustain the results of the project.
Outcome 1: Improved understanding of integrated vulnerability and adaptation options in the context of sustainable development in the Lake Balaton watershed	Information system for systematic vulnerability assessment introduced and institutionalised	and the local economies Even though necessity of adaptation measures is well recognized and extensive research conducted, there has not been any concerted effort placed on vulnerability assessment and adaptation strategy formulation. There is no sustainable mechanism in place to exchange data for the purpose of assessing the impacts of	Information system with set of vulnerability indicators defined by end of first year of the project	Project reports;	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change.
	Changes and response model developed for better understanding of vulnerability and best option scenarios for adaptation	climate change and analyzing sensitivities of ecological and socio- economic sub-systems	Changes and response model developed and introduced by end of the project	Project reports	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change.

Logical Framework and Project Performance Indicators

Project Strategy	Objectively verifiable indi	icators		Sources of verification	Assumptions
	Indicator	Baseline value	Target value and date	vermeuton	
Outcome 2: Strengthened organizational and individual <i>capacity</i> for interpreting emerging vulnerabilities, and increasing resilience by implementing adaptive measures	Regional Development Council and other relevant institutions adopt and employ adaptation and vulnerability indicator framework for socio- economic development planning	The Lake Balaton Development Coordination Agency provides a strong governing body for regional policy formulation, stakeholder coordination and fund allocation to the communities, but has very limited capacity to understand and formulate adaptation policy framework	Vulnerability indicator framework adopted and applied by at least 5 micro-regions by the end of the second year of the project (impact timeline 6-18+months)	Documents of micro-regions	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change
	LBDCA integrates adaptation in the organizational structure and mandate	Currently there are no tasks defined in relation to global change, particularly climate change impacts and need for adaptation. This need has been increasingly recognized but there are some capacity gaps to accommodate adaptation as a well established function within the LBDCA	Tasks defined in job description and mandate	LBDCA organigram TOR	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change
Outcome 3: Policy framework conducive to adaptive management strengthened	Regional, national and sectoral development frameworks integrate adaptation approach	Currently needs of adaptation have been recognised especially for the Balaton basin where the impacts are so much vivid and tangible. But due to capacity limitations adaptation to climate change as it appears in the broader context of other interacting forces of global and local change has not been an integral part of sectoral development planning or programming	At least 2 regional scale frameworks integrate adaptation by the end of the project APF has been formulated for the Lake Balaton Watershed by end of the project (timeline of impact 6-30+ months)	Reports; policy documents; records of amendments. APF	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change
Outcome 4: Pilot initiatives to facilitate adaptation to the impacts of climate change through <i>direct</i> <i>action</i> implemented	Observable changes of improved adaptive management and risk reduction against vulnerability indicator framework	LBDC operates a grant facility to local municipalities and communities to support local development in the region of Balaton but there is no criteria or incentives to promote local actions to address the impacts of global change, particularly climate change through local adaptive capacity building	The response system to vulnerability at local levels shows improvements against vulnerability indicator system (by the end of the project)	Project reports. Mid term and final evaluation reports	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change

Project Strategy	Objectively verifiable indicators				Assumptions
	Indicator	Baseline value	Target value and date		
	LBDC grant facility integrates adaptation into the funding eligibility criteria LBDC fund allocation schemes will increase funding for adaptation by 30%	There is no fund allocation that specifically targets adaptation to global change, particularly climate change	At least two adaptation pilot projects implemented by the end of the project;	Pilot project evaluation reports.	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change. The commitments will include financial commitments in order to sustain the results of the project. LBDC receives funds for grant scheme
Outcome 5: Knowledge generated and awareness raised of integrated vulnerability and adaptation approaches locally, nationally and internationally enhanced	"Influencing strategy" and knowledge products developed and employed according to the replication plan	There is very poor knowledge and understanding of local communities and policy makers of integrated vulnerability and adaptation approaches.	"Influencing strategy" and knowledge products developed and employed for scaling up and replication by the end of the project (impact timeline 6-30+months)	Strategy; replication plan; knowledge products.	All key stakeholders of the project remain committed and aware of importance of current impacts of and vulnerabilities to climate change.
	Number of local initiatives adapting adaptation approach		At least 5 end-user agreements to undertake adaptation approach.	End-user agreement, survey results	
	Good practices disseminated through GEF Adaptation Learning Mechanism		At least one knowledge product produced and disseminated through ALM project		

EVALUATION REPORT: SAMPLE OUTLINE

Minimum GEF requirements¹

Executive summary

- Brief description of project
- *Context and purpose of the evaluation*
- *Main conclusions, recommendations and lessons learned*

Introduction

- *A* Purpose of the evaluation
- ✤ Key issues addressed
- Methodology of the evaluation
- *Structure of the evaluation*

The project(s) and its development context

- Project start and its duration
- Problems that the project seek to address
- *Immediate and development objectives of the project*
- ✤ Main stakeholders
- *Results expected*

Findings and Conclusions

(In addition to a descriptive assessment, all criteria marked with (*) should be rated⁷)

- Project formulation
 Implementation approach (*)(i)
 Analysis of LFA (Project logic /strategy; Indicators)
 Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation
 Country ownership/Driveness
 Stakeholder participation (*)
 Replication approach
 Cost-effectiveness
 UNDP comparative advantage
 Linkages between project and other interventions within the sector
 Management arrangements
- θ Implementation

Implementation approach (*)(ii) The logical framework used during implementation as a management and M&E tool Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region Feedback from M&E activities used for adaptive management

- Financial Planning
- Monitoring and evaluation (*)
- *Execution and implementation modalities*
- *Management by the UNDP country office*
- Coordination and operational issues
- ө Results
 - Attainment of objectives (*)
 - ♣ Sustainability (*)

¹ Please refer to GEF guidelines for explanation of Terminology

⁷ The ratings will be: Highly Satisfactory, Satisfactory, Marginally Satisfactory, Unsatisfactory

Contribution to upgrading skills of the national staff

Recommendations

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to follow up or reinforce initial benefits from the project
- *A Proposals for future directions underlining main objectives*

Lessons learned

Best and worst practices in addressing issues relating to relevance, performance and success

Annexes

- ♣ TOR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Questionnaire used and summary of results

Explanation on Terminology Provided in the GEF Guidelines to Terminal Evaluations

Implementation Approach includes an analysis of the project's logical framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management.

Some elements of an effective implementation approach may include:

- The logical framework used during implementation as a management and M&E tool
- Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region
- Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation
- Feedback from M&E activities used for adaptive management.

Country Ownership/Driveness is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements where applicable. Project Concept has its origin within the national sectoral and development plans

Some elements of effective country ownership/driveness may include:

- Project Concept has its origin within the national sectoral and development plans
- Outcomes (or potential outcomes) from the project have been incorporated into the national sectoral and development plans
- Relevant country representatives (e.g., governmental official, civil society, etc.) are actively involved in project identification, planning and/or implementation
- The recipient government has maintained financial commitment to the project
- The government has approved policies and/or modified regulatory frameworks in line with the project's objectives
- Project's collaboration with industry associations

Stakeholder Participation/Public Involvement consists of three related and often overlapping processes: information dissemination, consultation, and "stakeholder" participation. Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the GEF-financed project. The term also applies to those potentially adversely affected by a project.

Examples of effective public involvement include:

- Information dissemination
- Implementation of appropriate outreach/public awareness campaigns

Consultation and stakeholder participation

Consulting and making use of the skills, experiences and knowledge of NGOs, community and local groups, the
private and public sectors, and academic institutions in the design, implementation, and evaluation of project
activities

Stakeholder participation

- Project institutional networks well placed within the overall national or community organizational structures, for example, by building on the local decision making structures, incorporating local knowledge, and devolving project management responsibilities to the local organizations or communities as the project approaches closure
- Building partnerships among different project stakeholders
- Fulfilment of commitments to local stakeholders and stakeholders considered to be adequately involved.

Sustainability measures the extent to which benefits continue, within or outside the project domain, from a particular project or program after GEF assistance/external assistance has come to an end. Relevant factors to improve the sustainability of project outcomes include:

- Development and implementation of a sustainability strategy.
- Establishment of the financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the GEF assistance ends (from the public and private sectors, income generating activities, and market transformations to promote the project's objectives).
- Development of suitable organizational arrangements by public and/or private sector.
- Development of policy and regulatory frameworks that further the project objectives.
- Incorporation of environmental and ecological factors affecting future flow of benefits.
- Development of appropriate institutional capacity (systems, structures, staff, expertise, etc.).

- Identification and involvement of champions (i.e. individuals in government and civil society who can promote sustainability of project outcomes).
- Achieving social sustainability, for example, by mainstreaming project activities into the economy or community production activities.
- Achieving stakeholders consensus regarding courses of action on project activities.

Replication approach, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated or scaled up in the design and implementation of other projects. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated by other sources). Examples of replication approaches include:

- Knowledge transfer (i.e., dissemination of lessons through project result documents, training workshops, information exchange, a national and regional forum, etc).
- Expansion of demonstration projects.
- Capacity building and training of individuals, and institutions to expand the project's achievements in the country
 or other regions.
- Use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions.

Financial Planning includes actual project cost by activity, financial management (including disbursement issues), and co-financing. If a financial audit has been conducted the major findings should be presented in the TE.

Effective financial plans include:

- Identification of potential sources of co-financing as well as leveraged and associated financing8.
- Strong financial controls, including reporting, and planning that allow the project management to make informed
 decisions regarding the budget at any time, allows for a proper and timely flow of funds, and for the payment of
 satisfactory project deliverables
- Due diligence due diligence in the management of funds and financial audits.

Co financing includes: Grants, Loans/Concessional (compared to market rate), Credits, Equity investments, In-kind support, other contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries. Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6.

Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector. Please briefly describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective.

Cost-effectiveness assesses the achievement of the environmental and developmental objectives as well as the project's outputs in relation to the inputs, costs, and implementing time. It also examines the project's compliance with the application of the incremental cost concept. Cost-effective factors include:

- Compliance with the incremental cost criteria (e.g. GEF funds are used to finance a component of a project that would not have taken place without GEF funding.) and securing co-funding and associated funding.
- The project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of Global Environmental and Development Objectives according to schedule, and as cost-effective as initially planned.
- The project used either a benchmark approach or a comparison approach (did not exceed the costs levels of similar projects in similar contexts)

Monitoring & Evaluation. Monitoring is the periodic oversight of a process, or the implementation of an activity, which seeks to establish the extent to which inputs, work schedules, other required actions and outputs are proceeding according to plan, so that timely action can be taken to correct the deficiencies detected. Evaluation is a process by which program inputs, activities and results are analyzed and judged explicitly against benchmarks or baseline conditions using performance indicators. This will allow project managers and planners to make decisions based on the evidence of information on the project implementation stage, performance indicators, level of funding still available, etc, building on the project's logical framework.

Monitoring and Evaluation includes activities to measure the project's achievements such as identification of

⁸ Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6. The following page presents a table to be used for reporting co-financing.

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 45

performance indicators, measurement procedures, and determination of baseline conditions. Projects are required to implement plans for monitoring and evaluation with adequate funding and appropriate staff and include activities such as description of data sources and methods for data collection, collection of baseline data, and stakeholder participation. Given the long-term nature of many GEF projects, projects are also encouraged to include long-term monitoring plans that are sustainable after project completion.

TOR - Annex 3

Co-financing Table

Co financing (Type/	IA (Fina	ncing	Gover (mill	nment US\$)	Other S (mill	Sources* US\$)	To Final	tal ncing	To Disbur	tal sement
Source)	(mill	US\$)					(mill	US\$)	(mill	US\$)
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant										
Credits										
Loans										
Equity										
In-kind										
Non-grant Instruments *										
Other Types										
TOTAL										

- Other Sources refer to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector etc.
- "Proposed" co-financing refers to co-financing proposed at CEO endorsement.
- Describe "Non-grant Instruments" (such as guarantees, contingent grants, etc):
 - Source/amount/in-kind or cash/purpose.
- Explain "Other Sources of Co-financing":
 - Source/amount/in-kind or cash
 - o ...
 - o ...

RATE TABLES

Table 1: Status of objective / outcome delivery as per measurable indicators

OBJECTIVE	MEASURABLE INDICATORS FROM PROJECT LOGFRAME	END-OF-PROJECT TARGET	STATUS OF DELIVERY*	RATING**
Objective :				
OUTCOMES		END-OF-PROJECT TARGET	STATUS OF DELIVERY	RATING
Outcome 1:				
Outcome 2:				
Outcome 3:	-			
Outcome 4:				
Outcome 5:				
Succine 5.				

STATUS OF DELIVERY COLOURING CODES:

Green / completed – indicator shows successful achievement

Yellow – indicator shows expected completion by the end of the project

Red – Indicator show poor achievement - unlikely to be complete by end of Project

** Rating:

*

Highly Satisfactory = HS Satisfactory = S Marginally Satisfactory = MS Unsatisfactory = U

Table 2: Project ratings

PROJECT COMPONENT OR OBJECTIVE	RATING SCALE				RATING		
	HU	U	MU	MS	S	HS	
PROJECT FORMULATION							
Conceptualization/Design							
Stakeholder participation							
PROJECT IMPLEMENTATION							
Implementation Approach							
The use of the logical framework							
Adaptive management							
Use/establishment of information technologies							
Operational relationships between the institutions involved							
Technical capacities							
Monitoring and evaluation							
Stakeholder participation							
Production and dissemination of information							
Local resource users and NGOs participation							
Establishment of partnerships							
Involvement and support of governmental institutions							
PROJECT RESULTS							
Attainment of Outcomes/ Achievement of objectives							
Achievement of objective							
Outcome 1							
Outcome 2							
Outcome 3							
Outcome 4							
Outcome 5							
Outcome 6							
Outcome 7							
OVERALL PROJECT ACHIEVEMENT & IMPACT							

List of documents to be reviewed by the Evaluators

Document	Description
Project document	Project Document
Project reports	Inception Report
	Quarterly Progress Reports
	TPR Reports
	SC meeting minutes
	Mid-term Evaluation Report
Annual Project Report to GEF	Project Implementation Reviews - PIRs
Other relevant materials:	Financial Audit Reports
	Climate Change Adaptation Experience Report for
	ALM
	Articles in magazines and newspapaers
	Expert studies and research results

The following documents can be used as a basis for evaluation of the project:

	Units*	Rate / USD	Total / USD
Home office			
Desk review			
Briefings by UNDP and PM			
Drafting of the evaluation report			
Validation of preliminary findings with			
stakeholders through circulation of draft reports			
for comments, meetings and other types of			
feedback mechanisms			
Finalization of the evaluation report			
(incorporating comments received on first draft)			
Mission			
Field visits, interviews, questionnaires, de-			
briefings			
International travel to and from Hungary			
Local travel (to be arranged and covered	n/a	n/a	n/a
by the project)			
DSA (overnights)			
TOTAL			

Cost breakdown template

* Estimates are indicated in the TOR, the applicant is requested to review and revise, if applicable.

Annex 2: Evaluation Matrix

The evaluation matrix below served as a general guide for the evaluation. It provided directions for the evaluation; particularly for the collect of relevant data. It was used as a basis for interviewing people and reviewing project documents. It also provided a basis for structuring the evaluation report as a whole.

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method					
Evaluation criteria: Relevance - How does the Project relate to the main objectives of the GEF and to the development challenges faced by the Government of Hungary for adapting to climate change?									
Is the Project relevant to GEF objectives?	How did the Project support the climate change adaptation priority area objectives of the GEF?Was the GEF incremental cost principle being respected?	 Level of coherence between project objectives and those of the GEF Degree of coherence between the project and nationals priorities, policies and strategies in the area of climate change adaptation UNFCCC status in Hungary Extent to which the project is actually implemented in line with incremental cost argument 	 Project documents National policies and strategies to implement the UNFCCC or related to environment more generally Key government officials and other partners UNFCCC web site 	 Documents analyses Interviews with government officials and other partners 					
Is the Project relevant to UNDP objectives?	 How did the Project support the objectives of UNDP in this sector? 	 Existence of a clear relationship between the project objectives and sustainable development objectives of UNDP. Existence of a clear relationship between the project objectives and UNDP Strategic Results Framework 	 Project documents UNDP strategies and programmes National policies and strategies to implement the UNFCCC or related to environment more generally Key government officials and other partners 	 Documents analyses Interviews with government officials and other partners 					
Is the Project relevant to Hungary development objectives?	 How did the Project support the development objectives of Hungary? How did the Project support the climate change adaptation priorities and objectives of Hungary? How country-driven was the Project? Did the Project adequately take into account the national realities, both in terms of institutional framework and programming, in its design and its implementation? To what extent were national partners involved in the design of the Project? Were the GEF criteria for Project identification adequate in 	 Degree to which the project supported national environmental objectives Degree of coherence between the project and nationals priorities, policies and strategies Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities? Level of involvement of Government officials and other partners into the project Coherence between needs expressed by national stakeholders and UNDP-GEF criteria 	 Project documents National policies and strategies (PRSP and NEP) Key government officials and other partners 	 Documents analyses Interviews with government officials and other partners 					

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 52

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
	view of actual needs?			
Is the Project addressing the needs of target beneficiaries?	 How did the Project support the needs of target beneficiaries? Was the implementation of the Project been inclusive of all relevant Stakeholders? Were local beneficiaries and stakeholders adequately involved in Project design and implementation? 	 Strength of the link between expected results from the Project and the needs of target beneficiaries Degree of involvement and inclusiveness of beneficiaries and stakeholders in Project design and implementation 	Beneficiaries and stakeholdersNeeds assessment studiesProject documents	 Document analysis Interviews with beneficiaries and stakeholders
Is the Project internally coherent in its design?	 Was there a direct and strong link between expected results of the Project (log frame) and the Project design (in terms of Project components, choice of partners, structure, delivery mechanism, scope, budget, use of resources etc)? Is the length of the Project conducive to achieve Project outcomes? 	 Level of coherence between Project expected results and Project design internal logic Level of coherence between project design and project implementation approach 	Program and Project documentsKey project stakeholders	Document analysisKey Interviews
Future directions for similar Projects	 What lessons have been learnt and what changes could have been made to the Project in order to strengthen the alignment between the Project and the Partners' priorities and areas of focus? How could the Project better target and address the priorities and development challenges of targeted beneficiaries? 		 Data collected throughout evaluation 	 Data analysis
Evaluation criteria	a: Effectiveness – To what extent were the expect	ed outcomes of the Project achieved?		
How was the Project effective in achieving its expected outcomes?	 Was the Project being effective in achieving its expected outcomes? Ecological and socio/economic resilience by increased understanding of lake and watershed processes viewed through the lens of vulnerability and adaptation strengthened; Capacity for formulating and implementing adaptive strategies compatible with sustainable development strengthened; Policy framework conducive to adaptive management with particular interest to institutional mechanisms and economic incentives and disincentives strengthened; Adaptation to the impacts of climate change through direct action in the form of pilot initiatives funded through LBDC's existing small grants facility and innovative financing mechanisms facilitated; Public and policymaker awareness of integrated vulnerability and adaptation approaches locally, nationally and internationally, including contribution to the GEF's project on the Adaptation Learning Mechanisms strengthened. 	 Adaptation strategies through alternatives economic development activities Change in climate change adaptation practices Change in capacity for information management: Knowledge acquisition and sharing; Effective data gathering, methods and procedures for reporting on vulnerability assessment, early warning and adaptation strategies. Change in capacity for awareness raising Stakeholder involvement and government awareness Change in local stakeholder behavior Change in capacity in policy making and planning Policy reform for climate change adaptation Legislation/regulation change to improve climate change adaptation Development of national and local strategies and plans supporting climate change adaptation Change in capacity in implementation and enforcement 	 Project documents Key stakeholders Research findings 	 Documents analysis Meetings with main Project Partners including UNDP, Project Team, Gov. of Hungary and other Partners Interviews with project beneficiaries

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 53

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
		 Design and implementation of risk assessments Implementation of national and local strategies and action plans through adequate institutional frameworks and their maintenance Monitoring, evaluation and promotion of pilots Change in capacity in mobilizing resources Leverage of resources human resources appropriate practices mobilization of advisory services 		
How were risk and risk mitigation managed?	 How well were risks and assumptions managed? What was the quality of risk mitigation strategies developed? Were these sufficient? Were there clear strategies for risk mitigation related with long term sustainability of the project? 	 Completeness of risk identification and assumptions during Project planning Quality of existing information systems in place to identify emerging risks and other issues? Quality of risk mitigations strategies developed and followed 	 Project documents and evaluations UNDP and project staff and Project Partners 	Document analysisInterviews
Future directions for similar Projects	 What lessons have been learnt for the project to achieve its outcomes? What changes could have been made (if any) to the design of the project in order to improve the achievement of the project's expected results? How could the Project be more effective in achieving its results? 		 Data collected throughout evaluation 	 Data analysis
Evaluation criteri	: Efficiency - How efficiently was the Project imp	lemented?		
Was Project support channeled in an efficient way?	 Was adaptive management used or needed to ensure efficient resource use? Did the Project logical framework and work plans and any changes made to them use as management tools during implementation? Were the accounting and financial systems in place adequate for Project management and producing accurate and timely financial information? Were progress reports produced accurately, timely and responded to reporting requirements including adaptive management changes? Was Project implementation as cost effective as originally proposed (planned vs. actual) 	 Availability and quality of financial and progress reports Timeliness and adequacy of reporting provided Level of discrepancy between planned and utilized financial expenditures Planned vs. actual funds leveraged Cost in view of results achieved compared to costs of similar projects from other organizations Adequacy of project choices in view of existing context, infrastructure and cost Quality of RBM reporting (progress reporting, monitoring and evaluation) Occurrence of change in project design/ 	 Project documents and evaluations UNDP, Gov. of Hungary and Project personnel Beneficiaries and Project partners 	Document analysisKey Interviews

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies"

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method			
	 Was the leveraging of funds (co-financing) happened as planned? Were financial resources utilized efficiently? Could financial resources have been used more efficiently? How was RBM used during program and Project implementation? Were there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons learned and recommendations pertaining to Project design and implementation effectiveness were shared among Project stakeholders, UNDP and GEF Staff and other relevant organizations for ongoing Project adjustment and improvement? Did the Project mainstream gender considerations into its implementation? 	 implementation approach (ie restructuring) when needed to improve project efficiency Existence, quality and use of M&E, feedback and dissemination mechanism to share findings, lessons learned and recommendation on effectiveness of project design. Cost associated with delivery mechanism and management structure compare to alternatives Gender disaggregated data in project documents 					
How efficient were partnership arrangements for the Project?	 To what extent partnerships/linkages between institutions/ organizations were encouraged and supported? Which partnerships/linkages were facilitated? Which one can be considered sustainable? What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP/GEF, the Government of Hungary, IISD and UNEP) Which methods were successful or not and why? 	 Specific activities conducted to support the development of cooperative arrangements between partners, Examples of supported partnerships Evidence that particular partnerships/linkages will be sustained Types/quality of partnership cooperation methods utilized 	 Project documents and evaluations Project Partners Beneficiaries 	Document analysisInterviews			
Did the Project efficiently utilize local capacity in implementation?	 Was an appropriate balance struck between utilization of international expertise as well as local capacity? Did the Project take into account local capacity in design and implementation of the Project? Was there an effective collaboration with scientific institutions with competence in climate change adaptation? 	 Proportion of total expertise utilized taken from Hungary Number/quality of analyses done to assess local capacity potential and absorptive capacity 	 Project documents and evaluations UNDP, Project Team and Project partners Beneficiaries 	Document analysisInterviews			
Future directions for similar Projects	 What lessons can be learnt from the Project on efficiency? How could the Project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements etc)? 		 Data collected throughout evaluation 	 Data analysis 			
Evaluation criteria	Evaluation criteria: Impacts - What were the potential and realized impacts of activities carried out in the context of the Project?						
How was the Project effective in achieving its long term objective?	Will the project achieve its long term goal that is to build on the results and significant tradition of scientific work in the Lake Balaton region, recently initiated research in Hungary focused on adaptation to climate change, as well as innovative approaches to integrated assessment of vulnerability to global change and the formulation of adaptive measures; in order to facilitate the development and implementation of effective	 Change in use and implementation of sustainable alternatives Change in capacity: To pool/mobilize resources For related policy making and strategic planning, For implementation of related laws and 	Project documentsKey StakeholdersResearch findings; if available	 Documents analysis Meetings with UNDP, Project Team and Project Partners Interviews with project beneficiaries and other stakeholders 			

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 55

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
	 adaptive strategies? Will the project achieve its objective that is to contribute to a better understanding of the Lake Balaton ecological and socio/economic system's vulnerability and resilience arising from multiple forces of global and local change, including land use, demographic, economic and climate change and build capacity for more effective policy making and adaptation measures in response? 	 strategies through adequate institutional frameworks and their maintenance, Change to the quantity and strength of barriers such as change in Knowledge about climate change and national incentives for climate change adaptation Cross-institutional coordination and intersectoral dialogue Knowledge of climate change adaptation practices by end users Coordination of policy and legal instruments incorporating climate change adaptation strategies Climate change adaptation economic incentives for Stakeholders 		
Future directions for the Project • How could the Project build on its apparent successes and learn from its weaknesses in order to enhance the potential for impact of ongoing and future initiatives?			 Data collected throughout evaluation 	 Data analysis
Evaluation criter	ia: Sustainability - Were the initiatives and result.	s of the Project allowing for continued benefi	ts?	
Were sustainability issues adequately integrated in Project design?	 Were sustainability issues integrated into the design and implementation of the Project? 	 Evidence/Quality of sustainability strategy Evidence/Quality of steps taken to address sustainability 	 Project documents and evaluations UNDP personnel and Project Partners Beneficiaries 	Document analysisInterviews
Financial Sustainability	 Did the Project adequately address financial and economic sustainability issues? Are the recurrent costs after Project completion sustainable? 	 Level and source of future financial support to be provided to relevant sectors and activities in Hungary after Project end? Evidence of commitments from government or other stakeholder to financially support relevant sectors of activities after Project end Level of recurrent costs after completion of Project and funding sources for those recurrent costs 	 Project documents and evaluations UNDP and project personnel and Project Partners Beneficiaries 	Document analysisInterviews
Organizations arrangements and continuation of activities	 Were the results of efforts made during the Project implementation period well assimilated by organizations and their internal systems and procedures? Is there evidence that Project partners will continue their activities beyond Project support? What degree is there of local ownership of initiatives and 	 Degree to which Project activities and results have been taken over by local counterparts or institutions/organizations Level of financial support to be provided to relevant sectors and activities by in-country actors after Project end 	 Project documents and evaluations UNDP and project personnel and Project Partners Beneficiaries 	Document analysisInterviews

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 56

Evaluated component	Sub-Question	Indicators	Sources	Data Collection Method
	results? Were appropriate 'champions' being identified and/or supported?	 Number/quality of champions identified 		
Enabling Environment	 Were laws, policies and frameworks addressed through the Project, in order to address sustainability of key initiatives and reforms? Were the necessary related capacities for lawmaking and enforcement built? What is the level of political commitment to build on the results of the project? 	 Efforts to support the development of relevant laws and policies State of enforcement and law making capacity Evidences of commitment by the political class through speeches, enactment of laws and resource allocation to priorities 	 Project documents and evaluations UNDP and project personnel and Project Partners Beneficiaries 	Document analysisInterviews
Institutional and individual capacity building	 Is the capacity in place at the national and local levels adequate to ensure sustainability of the results achieved to date? 	 Elements in place in those different management functions, at the appropriate levels (national, district and municipal) in terms of adequate structures, strategies, systems, skills, incentives and interrelationships with other key actors 	 Project documents and evaluations UNDP and project personnel and Project Partners Beneficiaries Capacity assessments available, if any 	InterviewsDocumentation review
Replication	 Were Project activities and results replicated elsewhere and/or scaled up? What was the Project contribution to replication or scaling up of innovative practices or mechanisms that support the GEF and UNFCCC objectives? 	 Number/quality of replicated initiatives Number/quality of replicated innovative initiatives Volume of additional investment leveraged 	 Other donor programming documents Beneficiaries UNDP and project personnel and Project Partners 	Document analysisInterviews
Challenges to sustainability of the Project	 What are the main challenges that may hinder sustainability of efforts? Have any of these been addressed through Project management? What could be the possible measures to further contribute to the sustainability of efforts achieved with the Project? 	 Challenges in view of building blocks of sustainability as presented above Recent changes which may present new challenges to the Project 	 Project documents and evaluations Beneficiaries UNDP and project personnel and Project Partners 	Document analysisInterviews
Future directions for the Project	 Which areas/arrangements under the Project show the strongest potential for lasting long-term results? What are the key challenges and obstacles to the sustainability of results of the Project initiatives that must be addressed? How can the experience and good accumulated project practices influence the strategies for climate change adaptation in Hungary? Are the Hungary decision making institutions (Parliament, Government etc.) ready to improve their strategy for climate change adaptation? 		 Data collected throughout evaluation 	• Data analysis

Annex 3: List of Documents Reviewed

ASL, LEBA, August 14, 2006, Lake Balaton Watershed - Water Resources Indicators

Bellamy Jean-Joseph, July 18, 2008, Mid-Term Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies"

Bizikova Livia, July 2, 2009, Scenario-building Workshop - Summary

Bizikova Livia, Pinter Laszlo, Karoly Kutics, Vari Anna, April 2008, Indicator System for the Lake Balaton Region

Bizikova Livia, Pinter Laszlo, April 2008, Investigating Stakeholder Decision Priorities for Adapting to Climate Change in the Lake Balaton Recreational Area of Hungary – Summary of Workshops Held in Siofok, Balatonalmadi and Keszthely, Hungary during October 2007 – February 2008

Cassa Auditor Ltd., Auditor's Report (2006)

Chatenoux Bruno, Richard Jean-Philippe, Lehmann Anthony, April 30, 2008, 1. Internet Map Server (IMS) & Related Meta-Database

Chatenoux Bruno, Lehmann Anthony, April 28, 2008, *Hydrological Modelling of the Lake Balaton Watershed Surface Waters*

Chatenoux Bruno, Lehmann Anthony, April 28, 2008, Course Material – SWAT Step by Step Project Creation

Cieleszky Istvan, March 31, 2008, Auditor's Report (2007)

EEA/Norwegian financial Mechanism, Brochure on Pilot Projects implemented by LBDCA

EnviroGRIDS, Building Capacity for a Black Sea Basin Observation and Assessment System Supporting Sustainable Development

Giuliani Gregory, Chatenoux Bruno, Lehmann Anthony, April 30, 2008, 2. Land Cover / Land Use & Climate Models

Karoly Kutics, February 2008, Indicators and Complex Modeling

Karoly Kutics, March 31, 2008, Integrated Model and Indicators

Karoly Kutics, Indicator Analysis - Working Paper

Karoly Kutics, June 2, 2006, Concepts of Vulnerability Analysis of Lake Balaton

Karoly Kutics, July 2, 2008, Scenario Workshop - Results of Indicators Analysis

Karoly Kutics, September 15, 2006, Vulnerability of the Water Quality of Lake Balaton – Impact on Climate Change (some results of model analysis)

K+F Consulting Kft, 2006, Monitoring and Modeling in the Lake Balaton Region – Working Paper

Lake Balaton Project, Lake Balaton (Hungary) – Modelling Vulnerability to Climate Changes to Guide Regional Adaptation Projects

Lake Balaton Project, August 2008, Special Edition of the Comitatus magazine on the Lake Balaton Project.

Lake Balaton Project, May 2006, Inception Report

Lake Balaton Project, Annual Work Plans - 2007 and 2008

Lake Balaton Project, PIR 2007 - 2008 - 2009

Lake Balaton Project, Quarterly Progress Reports from Jan. 2006 to Dec. 2008

Lake Balaton Project, Tripartite Review Report

Lake Balaton Project, Project Management Board Meeting Minutes (2006 to 2008)

Lake Balaton Project, October 2006, Indicators Teleconference Minutes

Lake Balaton Project, October 2006, IMS e-conference Minutes

Lake Balaton Project, June 2006, Conceptual Framework and Indicators Meeting Minutes

Lake Balaton Project, Final Indicator List

Lake Balaton Project, September 2007, Presentation of Project to Ministry of Environment and Water

Lake Balaton Project, Capacity Building Workshop in the Balaton Region

Lake Balaton Project, Lake Balaton – Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies Brochure

LBDC, LBDCA, Balaton Regional Development Strategy, 2007-2013 - Summary of draft version

LBDCA, March 2008, Call for Proposal: Encouraging the involvement of non-governmental organizations in environment protection in the Lake Balaton Region" financed by the EEA/Norwegian Financial Mechanism

Life, Life Balaton Project – Layman's Report (2003-2006)

Ministry of Environment and Water, March 2007, *Getting Prepared to (Combat) Climate Changes in Hungary – Changes – Impacts – Responses – The Project "VAHAVA"*

Pintér László, Bizikova Livia, Commentary on the Lake Balaton Region's Long-Term Regional Development Plan until 2020

Pintér László, Bizikova Livia, Kutics Károly, Vári Anna, Developing a System of Sustainability Indicators for the Lake Balaton Region

UNDP, November 3, 2009, ALM: Hungary's adaptation project - Snap Shot Stories of United Nations Actions on Climate Change, to be run in the weeks before Copenhagen Conference.

UNDP, Success Story Questionnaire: Annual Report 2009

UNDP, GEF, UNDP Project Document: UNDP-GEF Medium-Size Project (MSP) - Government of Hungary - United Nations Development Programme - Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies - PIMS 3334

UNEP/DEWA/GRID, June 2007, Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies - Quarterly Progress Report – April-June 2007

UNEP/DEWA/GRID, Lake Balaton (Hungary) - Modelling vulnerability to climate changes to guide regional adaptation projects

UNEP/DEWA/GRID, Adaptation Framework: SWAT

UNEP/DEWA/GRID, December 2006, Presentation of Project Progress to Steering Committee

Main Web Sites Consulted:

Balaton Information Web Site: http://bir.webeye.hu/

BalatonTrend: http://test.balatontrend.org/

GEF: http://www.gefweb.org

GEF Evaluation Office: http://gefweb.org/MonitoringandEvaluation/MEAbout/meabout.html

Lake Balaton Project on UNEP Web Site: http://www.grid.unep.ch/activities/sustainable/balaton/index.php

Lake Balaton Project on IISD Web Site: http://www.iisd.org/measure/knowledge/national/balaton.asp

Lake Balaton Project Web Site: <u>http://www.chrome.hu/bft/bam/public/home.php?m=0</u>

LBDCA IMS: http://balaton.grid.unep.ch/ims/viewer.htm

LBDCA Web Site: http://www.balatonregion.hu/public/home.php?m=0

Ministry of Environment and Water (Hungary): <u>http://www.kvvm.hu/index.php?lang=2</u>

National Development Agency: http://www.nfu.hu/?lang=en

UNDP-GEF Adaptation Policy Frameworks: http://www.undp.org/climatechange/adapt/apf.html

Annex 4: Evaluation Mission Agenda

JANUARY 11 th	
Morning	Pick up from hotel in Budapest and meeting with Gábor Molnar
15:00	Phone conference with Klara Tothova and Keti Chachibaia
Afternoon	Review of documents available in English with Eva Varga

JANUARY 12 th	FIELD TRIP – VISITING THE EEA/NORWEGIAN GRANT PROJECT SITES ACCOMPANIED BY MS. EVA VARGA AND MS. LABÁT MÁRTA
9:00-10:00	Park reconstruction at Balatonalmádi:
	Mrs. Németh (Júlia Kovács) – representative of the municipality
	Mr. Tamás Z. Agg- representative of the municipality
10:30-11:30	Waste compressing machine at Tihany (+ recycling)
	Mr. Balogh Lajos – representative of the municipality
12:30-13:30	Lunch at Tapolca
	Mr. Tamás Parapatics – representative of the municipality
13:30-14:30	Park construction at Tapolca
	Mr. Tamás Parapatics
15:00-17:00	Park construction at Gyenesdiás
	Mrs. Gál (Ildikó Németh) – Head of the civil organisation called "Forrásvíz
	Egyesület"
	Adaptation and development plans of the municipality
	Mr. Lajos Gál – Mayor of Gyenesdiás

JANUARY 13 th	
Morning	Meeting with Mr. Károly Kutics
	Project External Consultant
Afternoon	Meeting with Mrs. Bernadett Koltai
	Micro-Regional Coordinator
	Financial grants under the New Hungary Development Plan funded by the EU
	Meeting with Mr. Attila Magyarfalvi
	Head of the "Local Rural Development Office"
	Financial grants under the New Hungary Rural Development Programme
	Waster water treatment – pilot projects at two micro-settlements (Nyim and
	Gétye) funded by the EU

JANUARY 14 th	
Morning	Meeting with Mrs. Gabriella Kravinszkaja
	Water Management Authority
	Utilisation of the SWAT and the online monitoring system
Afternoon	Meeting with Dr. Tamás Suchman
	Chairman of LBDC
	Review of documents available and identification of missing information to be forwarded by Eva Varga
	Wrap-up mission with Gabor Molnar

Annex 5: List of People Interviewed

Name	Position / Contact	Organization
Agg Z. Tamás	Representative of the Municipality	Municipality of Balatonalmádi
Balogh Lajos	Representative of the Municipality	Municipality of Tihany
Chachibaia Keti	Regional Technical Advisor	UNDP-RBEC, Bratislava
Gál Lajos	Mayor	Municipality of Gyenesdiás
Koltai Bernadett	Micro-Regional Coordinator	Financial grants under the New Hungary Development Plan funded by the EU
Kovács Júlia (Mrs. Németh)	Representative of the Municipality	Municipality of Balatonalmádi
Kravinszkaja Gabriella	Head	Water Management Authority - Siofok
Kutics Károly	Consultant	K+F Consulting
Labát Márta (Mrs. Horváth)	Project Manager	EEA/Norway Grant
Leehman Anthony	Head Environment Monitoring and Modeling Unit	UNEP
Magyarfalvi Attila	Head	Local Rural Development Office funded by financial grants under the New Hungary-EU Rural Development Programme - Waster water treatment – pilot projects at two micro-settlements (Nyim and Gétye) funded by the EU
Molnár Gábor	Project Manager and Executive Director	LBDCA
Németh Ildikó (Mrs. Gál)	Head	Forrásvíz Egyesület (civil organization) in Gyenesdiás
Parapatics Tamás	Representative of the Municipality	Municipality of Tapolca
Pinter Laszlo	Director, Measurement and Assessment	IISD
Suchman Tamás	Chairman	LBDC
Tothova Klara	CST Environmental Officer	UNDP-RBEC, Bratislava
Varga Éva	Project Assistant	LBDCA

Annex 6: Co-financing Table

CO-FINANCING

Co financing (Type/	IA o Fina	own ncing	Gover (mill	nment US\$)	Other S (mill	ources* US\$)	To Finar	tal 1cing	To Disbur	tal sement
Source)	(mill	US\$)					(mill	US\$)	(mill	US\$)
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant			3.000	0.300		2.700	3.000	3.000	3.000	3.000
Credits										
Loans										
Equity										
In-kind					0.065	0.065	0.065	0.065	0.065	0.065
Non-grant Instruments					0.025	0.025	0.025	0.025	0.025	0.025
Other Types										
TOTAL			3.000	0.300	0.090	2.790	3.090	3.090	3.090	3.090

(*) Source: Project Document, UNDP-PIR 2007 (as of the end of June 2007) and updates from LBDCA

- Other Sources refer to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector etc.
- "Proposed" co-financing refers to co-financing proposed at CEO endorsement.
- Describe "Non-grant Instruments" (such as guarantees, contingent grants, etc):
 - UNEP: \$25k in direct financial resources for fieldwork, meetings and travel costs.
- Explain "Other Sources of Co-financing":
 - o LBDCA: \$2.2M (small grant programme)
 - LBDCA: \$0.5M (monitoring system funded by LIFE)
 - o IISD: \$40k (in-kind)
 - UNEP: \$25k (in-kind)
 - UNEP: \$25k (cash for project related costs)

Annex 7: Components of the Lake Balaton Monitoring System

Tourist counting units:

Rotating gates and ticket booking system: These methods are placed at beaches. The number of people who go through the rotating-gate can be accurately estimated by the number of gate rotations. The gate is equipped with solar-powered counting system for statistical processing and sending to the central database. Locations: Hévíz, Balatongyörök, Keszthely, Balatonfüred, Gyenesdiás, Balatonszemes, Vonyarcvashegy

Infrared gates: There are three high-traffic area equipped with infrared gates to estimating cycle path use The gates are powered by solar panels and count each time a cyclist passes through it. Locations: Keszthely, Siófok, Balatonfüred

Ferryboat: The ferryboat running between the northern and southern shores of Lake Balaton enhances significantly the circulation of passenger and motor-vehicle traffic in the region, being the only ferry that transports motor-vehicles. Each station sends data directly to the central database. Locations: Tihany ferry terminal, Szántód ferry terminal

Video estimating system: The image-making instrument is a high resolution CCD camera. Which assures sufficient images at night (with ordinary town lights) and in the morning. The cameras are attached to a computer that detects silhouettes of passengers-by and then creates statistical data. Locations: Siófok: Petőfi sétány, Tihany: András square next to Tihany Abbey

Vehicular traffic measuring units

In-road traffic detection units: There are four instruments placed in the road pavement to measure road use. These locations were determined with input from county road works experts. GPRS modems were added to stations at the following locations: Balatonfüzfő 71/28, Siófok 7/110, Öskü 8/35, Keszthely 71/101

Speed monitoring units: These units are small size equipped with solar cells. They monitor vehicle speed. Vehicles are notified of their speed and when they exceed the speed limit. Locations: 3 places in Siófok, 2 places in Keszthely, Csopak

Traffic hazard signals: The Comguard-system is implemented at hazardous spots along the road. With road signs these give a audible signal and display images on screens. They are put in place at roundabouts and railway crossings.

Water quality and environment monitoring equipments

Stations in the Lake Balaton: The most advanced monitoring station is in Keszthely Basin on stilts monitored by the Lake Balaton Water Management Directorate. Two other measuring stations are in Szigliget and Siófok Basins. These stations are powered by solar energy and transfer data via GPRS units.

Water-level and inlet monitoring stations: Ongoing water-level monitoring is very important due to the significance of Lake Balaton to the area. The Lake Balaton Water Management Directorate had offline monitoring stations, which got equipped with online data-collection units.

Hydro-meteorological stations: The Lake Balaton Water Management Directorate has developed a special monitoring area in Balatonszemes to monitor hydro-meteorological parameters.

Meteorological stations: Weather can change drastically at Lake Balaton, giving need for ongoing monitoring. These stations monitor air-temperature, water-temperature and relative humidity. Locations: Balatonaliga, Balatonalmádi, Balatonfüred, Zánka, Szigliget, Balatonmáriafürdő, Balatonöszöd

Information stations at beaches: The goal is to place storm signals in areas out of sight from existing warning systems. These stations give storm-signals with flashing lights showing the warning levels.

Manual storm-signal units: Manual, portable tools were developed, which use radio-communication to inform tourists and residents. These units are small and responsive.

Orientation and information module

Data display options:

- Web (WAP, optimised for web)
- Interactive Web-terminals (Siófok, Keszthely, Balatonfüred)
- Road-side screens (LED signs that can display different messages)

No.	Applicant	Project title	Project activities	Adaptation aspects	Budget (EUR 1 = HUF 266,51)
1.	Marcali Városért Alapítvány (foundation for local development)	Purchase of equipments for the professional maintenance of parks and urban green areas in Marcali	Purchase of equipment for the maintenance of green areas: e.g. leaf blower, grass scythe, chainsaw, hedge trimmer, etc.	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important factor for tourism as well, which represents the main source of living in the region.	13 897
2.	Paloznaki Civil Egyesület (association for local development)	Complex green area development in Paloznak	 The aim was to improve the vegetation of the public park (0.2 ha) located in the village centre: Purchase of brush cutters Place 20 bird houses and feeders Purchase of PET bottle press Purchase of a waste oil container and ensure its constant pick-up and removal Organise paper collection days 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation. Moreover, placing 20 bird houses and feeders contributes to the protection of biodiversity. The other important activity of the project was the purchase of brush cutters, which contributes to maintain green areas and to grub up allergen plants (e.g. ragweed).	12 605
3.	Balatonedericsért Alapítvány (foundation for local development)	Collaboration for a more liveable environment in Balatonederics	Purchase of equipments for the maintenance of green areas: e.g. hedge cutter tractor, mulching and cutting equipment.	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important factor for tourism as well, which represents the main source of living in the region.	15 759
4.	Aszófői Polgárőr	Purchase of equipments	Purchase of equipments for the	The project has contributed to take environment and nature	18 123

Annex 8: List of Projects Funded by the Small Grant Scheme

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 64
					Budget
No.	Applicant	Project title	Project activities	Adaptation aspects	(EUR 1 = HUF 266,51)
	Egyesület (association for public safety)	for improving the quality of activities related to environment improvement and waste management	maintenance of green areas: e.g. communal mini tractor and adapters.	protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important factor for tourism as well, which represents the main source of living in the region.	
5.	Szentgyörgyvárért Egyesület (association for local development)	Transformation of the disused area lot number 451 to a recreational park	 Create a recreational park with native, local species. Locate waste containers made of local wood. Purchase of equipments for the maintenance of green areas: e.g. lawnmower mini tractor, branch chipper. 	The project implementation involved two main activities: to establish a recreational park and to purchase the required equipments for the appropriate maintenance (to ensure clean environment, to eliminate allergen plants, etc.). Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity. Other significant element of the project was to utilize local wood (gained from cutting out local old trees) to make waste containers. Placing these bins also promotes waste collection and recycling.	11 308
6.	Kötcséért Közalapítvány (foundation for local development)	Purchase of communal work equipments for protecting and managing the environment in Kötcse	Purchase of equipments for the maintenance of green areas: e.g. communal tractor and trailer, grass scythe, mulching scythe, branch chipper.	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important factor for tourism as well, which represents the main source of living in the region.	27 763
7.	Dörgicséért Közalapítvány (foundation for local	Increase and quality preservation of green areas in Dörgicse	 Create new flowerbeds from perennial plants. Improve old flowerbeds. 	Planting native species is an important adaptation measure. Thereby, significant attention was dedicated on planting local, as well as perennial plants in order to create new flowerbeds	10 927

No.	Applicant	Project title	Project activities	Adaptation aspects	Budget (EUR 1 = HUF 266,51)
	development)		 Plant new tree alleys. Purchase of equipments for the maintenance of green areas: e.g. grass scythe, bush cutter 	and tree alleys. The purchased equipments contributes to grub up allergen plants (e.g. ragweed); thereby, preserving human health and improving life quality.	
8.	Buzsákért- Somogyért Alapítvány (foundation for local development)	Improve the environment of the "White Chapel" monument in Buzsák	 Clean the forest located in the neighbourhood of the Romanesque chapel. Cut out the shrivelled trees. Remove tree stubs. Plant new trees. Place benches and waste bins. Purchase of equipments for the maintenance of green areas: e.g. mini tractor, trailer and lawnmower. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The project implementation involved two main activities: to clean the forest and its neighbourhoods and to purchase the required equipments for the appropriate maintenance (to ensure clean environment, to eliminate allergen plants, etc.). Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity. Placing these bins also promotes waste collection and recycling.	28 727
9.	Vonyarcvashegyi "Arany Híd" Horgászegyesület (association of local anglers)	Anglers for cultivated and tidy environment	Purchase of equipments for the maintenance of green areas: e.g. communal tractor and adapters.	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important factor for tourism as well, which represents the main source of living in the region.	53 736
10.	Nők a Balatonért Egyesület-Zamárdi csoport (association of women for the development of the Lake Balaton)	Promoting more attractive and tidier Zamárdi	 Place 36 waste bins at the beach area. Purchase of equipments for the maintenance of green areas: e.g. high-performance tractors, branch chipper, lawnmower tractor. 	The project has contributed to ensure a clean and attractive living environment. Placing waste bins promotes waste collection and recycling. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality.	54 177
11.	TelePont Közhasznú Információs	Youth for the renewal of the environment of	 Plant trees and bushes at the streets. 	The project has focused on planting native species; thereby, enhancing the local biodiversity. Moreover, waste collection	17 544

				Budget	
No.	Applicant	Project title	Project activities	Adaptation aspects	(EUR 1 = HUF 266,51)
	Egyesület (association specialized on public information)	Sármellék	 Establish rainwater drainage ditch in the street Arany J. Organise 3 waste collection campaigns along the main streets of the settlement (~17 km). Approx. 30m3 waste was collected. 	campaigns contributes to the long-term sustainability of the natural values of the area. Special feature of the project was the establishment of a rainwater drainage ditch, which facilitates better water management in the region. In addition, special focus is paid on cleaning the existing rainwater drainage system too.	
12.	Ezüst Fenyő Nyugdíjas Egyesület (association of local retired residents)	Replacement of waste bins in Balatonfenyves	Locate and replace 80 public waste bins at the beach and the neighbouring streets.	Placing waste bins promotes waste collection and recycling, as well as contributes to the protection of natural values. The clean environment also increases the life quality of the permanent population and tourists.	12 007
13.	Zalakarosi Vállalkozók Szövetsége (allience of local entrepreneurs)	Create a public park behind the new church in Zalakaros	 Plant 3,100 plants in the new public park. Locate waste bins. The new public park represents an element of a complex plan, which aims to develop a health care park. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation. Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity.	20 645
14.	Alsóörsért Közalapítvány (foundation for local development)	Increase and development of urban green areas in Alsóörs, purchase of equipments	 Plant 35 trees at the municipality-owned campsite. Locate waste bins. Purchase of equipments for the maintenance of green areas: e.g. lawnmower tractor, electric brush cutter, branch cutter and leaf blower. Waste collection campaign with the involvement of volunteers (8 m3 waste was collected). 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation. Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity.	12 570
15.	Balatonfüred Városért Közalapítvány (foundation for local development)	Development and increase of the natural environment and green spaces in Balatonfüred	 Plant 350 trees at public streets. Establish a 0.47 ha green area. Purchase of equipments for the maintenance of green areas: small truck with watering equipment. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human	207 338

No.	Applicant	Project title	Project activities	Adaptation aspects	Budget (EUR 1 = HUF 266,51)
			 Organise 2 waste collection campaigns with the involvement of local schools. 	health and improving life quality. Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity. Natural values are protected by organising waste collection campaigns.	
16.	Tihany Fejlesztésért Alapítvány (foundation for local development)	Improvement of green areas and waste management in Tihany	 Purchase of a waste compressing equipment (the volume of the waste is reduced to ¼ of the original volume; thereby, the transport costs are also reduced). Purchase of 20 waste containers (1.1 m3 per each) for recycling. Renovate and clean rainwater drainage system (1,240 m) 	One of the most important elements of the project was the purchase of a waste compressing equipment, which provides a more economic, and more efficient waste management in the settlement. Moreover, the new waste bins promote recycling, and ensure cleaner environment, besides protecting the natural values. Special feature of the project was the cleaning and renovation of the rainwater drainage system, which promotes better water management in the region.	59 408
17.	Szentkirályszabadja Baráti Egyesület (association for local development)	Re-cultivation of illegal landfill in Szentkirályszabadja, establishment of recreational park	 Eliminate the illegal inert landfill located at the settlement area. Plant trees and grass. Special attention to the protection of sand martin nests. 	The re-cultivation of the inert landfill contributed to take environment and nature protection aspects into account in the course of the management of green areas. In the course of the project implementation special attention was paid to the protection of the nests of sand martin; thereby protecting the local biodiversity. Moreover, planting native tree species also enhances the biological diversity, as well as improving air quality. During the second phase of the project, a sport field will be established, which is aimed to improve life quality.	74 376
18.	Balatonberényi Községi Sportegyesület (local sport associationt)	Purchase of branch- chipper equipment	 Purchase of a branch-chipper equipment compatible with the existing tractor. The chopped branches are recycled (composting and mulching) 	Previously, the tree and vine branches, that were cut, were burnt: this polluted the air and it had no benefit neither. Therefore, utilizing the cut-down branches for composting and mulching contributes to an environmental-conscious management. The compost provides nutrient for plants, while mulching improves water-retention of the ground. Thereby, plants can resist better against droughts and warmer temperature.	14 949
19.	Tiszta-Település Tiszta Környezet Egyesület	Environmental management activities at Siófok-Kiliti	 Renovate and clean rainwater drainage system. Remove waste from public 	The project has contributed to take environment and nature protection aspects into account in the course of establishing new green area. The adequate land use management was	207 338

					Budget
No.	Applicant	Project title	Project activities	Adaptation aspects	(EUR 1 = HUF 266,51)
	(association for environmental protection)		 areas. Establish public park, locate waste bins and benches. Purchase of grass scythes. 	ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, the new waste bins promote recycling, and ensure cleaner environment, besides protecting the natural values. Special feature of the project was the cleaning and renovation of the rainwater drainage system, which promotes better water management in the region.	
20.	Podmaniczky-díjas Fonyód Városvédő és Szépítő Egyesület (association for local development)	Developments improving the natural environment of Fonyód	 Purchase of equipments for the maintenance of green areas: leaf blower, grass scythe and branch chopper. Purchase of 12 waste containers and locate them at the main promenades. Plant perennial plants. 	The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Natural values are protected by planting native, perennial species; thereby promoting adaptation to climate change and enhancing the local biodiversity. Clean and maintained living environment is ensured by the purchase of new waste bins.	13 840
21.	Balatonlellei Fürdőegyesület (tourism association)	Improving the natural environment of Balatonlelle	Plant 400 (native) trees at public areas.	Planting a significant number of native tree species ensures environmental-conscious management. In addition, tree planting promotes adaptation to climate change and enhances the local biodiversity. Trees contribute to defecate dust from the air and to eliminate harmful gases; thereby, improving air and life quality.	11 774
22.	Nagy Gyula Művészeti Alapítvány (artistic association)	Management of green areas at Lovas	 Improve public green areas: playgrounds, church and its surroundings, medicinal spring and its surroundings, stream bank and bus stops. Plant trees and flowers. Locate waste bins and benches. Purchase of electric bush- cutters. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Moreover, the new waste bins promote recycling, and ensure cleaner environment, besides protecting the natural values. Natural values are protected by planting native tree and flower species; thereby promoting adaptation to climate change and enhancing the local biodiversity.	10 367
23.	Nők a Balatonért	Old Park of	• Revitalize the 10 ha public park.	Environmental-conscious management is ensured through	211 409

					Budget
No.	Applicant	Project title	Project activities	Adaptation aspects	(EUR 1 = HUE 266 51)
	Egyesület (association of women for the development of the Lake Balaton)	Balatonalmádi, Revitalization of urban green areas and the Old Park in Balatonalmádi	 Cut out old trees (100 trees) and plant native tree species (230 trees). Pave the former ground-paths. Locate waste bins and benches. 	planting significant number of new tree species and revitalizing a large green area. In the course of the project, special attention was paid to plant local native species that prefer higher ground-water level (e.g. willow, taxodium, etc.) The new waste bins promote recycling, and ensure cleaner environment, besides protecting the natural values.	1101 200,01
24.	Falunkért Egyesület 99. (association for local development)	Establishing a new public park at Litér	 Establish a new public park at the area of the former stone mine (1 ha). Plant native trees and flowers. Create pavements for visitors. Locate benches and tables. Provide bicycle parks. Locate information signs. Ensure public lights. Create sledging area for kids in wintertime. Purchase of lawnmowers for the maintaining of the park. 	The re-cultivation of the unused stone mine contributes to introduce an environmental-conscious management Natural values are protected by planting native tree and flower species; thereby promoting adaptation to climate change and enhancing the local biodiversity. Establishing a new public park also contributes to preserve human health and increase life quality. The purchased equipments ensure the sustainability and adequate maintenance of the project measures.	161 345
25.	"Csopak" Nyugdíjas Klub (association of local retired residents)	Managing green areas at the neighbourhood of the "Truncated Tower" in Csopak	 Establish a public park in the centre of the settlement. Plant 1500 plants. Locate benches, waste bins and information signs. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. Natural values are protected by planting native tree species; thereby promoting adaptation to climate change and enhancing the local biodiversity. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. The new waste bins promote recycling, and ensure cleaner environment, besides protecting the natural values.	65 888
26.	Tapolcai Városszépítő Egyesület (association for local development)	Developments for luring more tourists to Tapolca	 Establish a public park (0.5 ha) at the edge of the city centre (the area was unused before). Locate recycling waste containers (for paper and plastic). Create resting place at the bicycle path between Tapolca and Diszel. Establish bicycle parks. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. In relation to the protection of natural environment, the	138 971

NT-	A		Descient anti-sition		Budget
N0.	Applicant	Project title	Project activities	Adaptation aspects	(EUR I = HUF 266,51)
			Locate waste bins and benches. Plant trees. 3) Eliminate an illegal landfill. Organise waste collection days. 4) Purchase of equipments for the maintenance of natural and built environment: e.g. 4 electric bush cutters, 2 leaf blowers, 1 lawnmower tractor and 1 snow blower.	elimination of an illegal landfill and the organisation of waste collection days were important elements of the project implementation. Special feature of the project was to plant native species; thereby promoting adaptation to climate change and enhancing the local biodiversity. Last, but not least, the project has also contributed to improve the bicycle path; thereby promoting climate-conscious transportation in the area.	
27.	Forrásvíz Természetbarát Egyesület (association for environmental protection)	Promoting floral settlement center in Balatongyörök	Establish a park at the public area located between the municipality hall and the health centre. Plant native trees.	Planting a significant number of native tree species ensures environmental-conscious management. In addition, tree planting promotes adaptation to climate change and enhances the local biodiversity. Trees contribute to defecate dust from the air and to eliminate harmful gases; thereby, improving air and life quality.	12 508
28.	Forrásvíz Természetbarát Egyesület (association for environmental protection)	Establishing a new park called "Kárpáti Korzó" at Gyenesdiás	 The project represents the 1st phase of an overall development Main activities of this project was to: Create a 300 m long promenade (pavements and paths). Locate recycling waste containers. Locate benches. Plant native trees. 	Planting a significant number of native tree species ensures environmental-conscious management. In addition, tree planting promotes adaptation to climate change and enhances the local biodiversity. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation.	24 320
29.	Forrásvíz Természetbarát Egyesület (association for environmental protection)	Collaboration for a green settlement at Keszthely	 Eliminate the former oil- container from a public square Szent Erzsébet, and establish there a rose arbour and resting place. Cut out old trees from the street Széchenyi, and plant new native species. Purchase of equipments for maintaining the environment: e.g. lawnmower, bush cutter, branch cutter, etc. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Special feature of the project was to plant native species at the park; thereby promoting adaptation to climate change and enhancing the local biodiversity. Moreover, clean and smart living environment is more attractive for the population than weedy and wild areas. Therefore, the maintenance of green areas is an important	16 676

No.	Applicant	Project title	Project activities	Adaptation aspects	Budget (EUR 1 = HUF 266,51)
				factor for tourism as well, which represents the main source of living in the region.	
30.	Balatonfűzfői Vállalkozások és Civil Szerveződések Egyesülete (association of local entrepreneurs and civil initiatives)	Increasing the quality of the natural and built environment at Balatonfüzfő	 Renovate and clean rainwater drainage system. Cut grass (and thereby also ragweed) at public areas. Locate waste bins. Purchase of equipments for maintaining the green areas: 6 grass scythes. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. Special feature of the project was the cleaning and renovation of the rainwater drainage system, which promotes better water management in the region. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation.	30 573
31.	Ábrahámhegyi Fürdőegyesület (tourism association)	Preserving and improving the natural and built environment at Ábrahámhegy	 Improve the surrounding areas of the look-out tower: Change the soil. Plant grass as well as native trees and bushes. Provide pavements and paths. Locate waste bins and benches with tables. Establish resting place on the way of the bicycle path: Collect waste. Plant grass, trees and bushes. Locate waste bins. Purchase of equipments: lawnmower mini tractor, electric bush cutter and compost shredder. 	The project has contributed to take environment and nature protection aspects into account in the course of the management of green areas. The adequate land use management was ensured by the purchase of equipments. By the help of the purchased equipments allergen plants (e.g. ragweed) can be grubbed up; thereby, preserving human health and improving life quality. In relation to the protection of natural environment, waste collection and recycling are important elements of the project implementation. The project has also contributed to improve the bicycle path; thereby promoting climate-conscious transportation in the area.	27 242
Tota	1				1 598 110

Annex 9: List of Climate Change Related Projects Submitted by LBDCA

On-going Project:

CHAMP

Climate Change response through Managing Urban Europe-27 Platform

(LIFE+)

Response to the climate change challenge, which is of considerable size and complexity, requires a highly integrated approach by local and regional authorities. However, few local and sub-regional authorities have sufficiently integrated structures in place.

The principal objective of the project is to raise the awareness on the IMS as an effective instrument to combat climate change among national authorities, EMAS competent bodies, EMAS auditors, sub-regional and local authorities as well as the public.

Approved project, but still under final negotiations

(Some financial and administrative requirements of the JTS have to be met. Modifications are completed; we are waiting for the JTS's feedback)

EULAKES:

European Lakes Under Environmental Stressors (Supporting lake governance to mitigate the impact of climate change)

(Interreg IVB – Central Europe)

The project specific objective is to achieve to a better understanding of ecological vulnerability of Central European Lakes in response to the potential effects of climate change in order to enhance mitigation and adaptation strategy. Harmonisation of methods, development of best practices and dissemination will improve the existing lake management systems.

The project will create a permanent network and new model of environmental governance. It will support planning and policy formulation through multi-stakeholder participation applying an integrated approach with the results from vulnerability and risk assessment. This approach will include the analysis of stakeholders, the creation of stakeholder platforms at regional and transnational level and achieving general stakeholder agreements to participate in a joint planning process. The project focuses on linking local communities, governance and researchers in environmental and lake management within a European context. The project will significantly increase awareness of climate change impacts, lake vulnerability and adaptation issues locally, nationally and internationally.

Submitted projects, which were rejected:

CLIMEWET CHANGE!

Manage the effects of the Global Climate Change in European protected wetland areas: monitoring, intervention planning and awareness raising

Interreg IVB - Central Europe

(Submitted: March, 2009)

SPECIFIC OBJECTIVES to achieve this purpose are: (A) Increased capacity of the partner institutions to intervene against the threats of climate change effects, also through an active involvement of local/regional stakeholders, and by preparing scenarios, intervention plans and pilot actions and (B) Improved compensation or mitigation of climate change effects in wetlands through pilot actions (habitat protection) and raised awareness of stakeholders, citizens & visitors of protected wetlands, through innovative communication techniques and information on "virtuous" activities to avoid the Climate Change.

The CLIMEWET CHANGE! specific objectives contribute to the aims of the area of intervention (reduce risks and impacts of natural and man-made hazards) by

- improving, integrating and harmonising risk assessments and risk management standards
- '- coordinating practices of integrated risk management between various fields and sectors and by
- - applying communication strategies/tools for increasing risk awareness.

The partners will precisely proceed following these 3 steps: risk assessment (through improved monitoring systems) and risk management standards will be harmonised and defined by common protocols, including a

monitoring data exchange system. Then, for the elaboration of intervention plans and executive pilot projects (to be implemented during or after the project), the partners will recur to integrated management practices, involving relevant stakeholders and finally - based on the monitoring data - more "impacting" and innovative (technological/visual) awareness raising tools will be prototyped and build.

CLIMAGE21

Integrated policy to incorporate climate protection plans into the Local Agenda 21s: Methodology and Implementation (climage21)

Interreg IVC

(Submitted January 2009)

The main objective of the project is to establish the basis for the development of a common policy among the local and regional authorities referring to the climate change through the introduction of climate protection plans in the action plans of the LA21s.

The sub-objectives of the project are:

- To amend the current LA21 in order to include a specific chapter for the climate protection in the action plans.
- To extend the Forum 21 (participatory organism, for the debate and development of the LA21) to the stakeholders of the climate change, specially the consumers and producers of energy.
- To deduce from concrete experiences a model for an Action Plan to the LA21s that has the climate protection as its nucleus of intervention.
- To develop supralocal action plan to replicate the model among all city councils from the supralocal regions participants in the project.
- To disseminate the model among all city councils from the supralocal regions participants in the project
- To constitute a stable cooperation space among all supralocal organisations with capacity to extend the integration of sustainable policies in their city councils.
- To develop a shared indicator system for the climate protection that will provide permanent information of the action plan efficacy.

SUCCOUR: Sustainable Climate Change Policies for Urban Areas

Interreg IVC

(Submitted January 2009)

The project aims to build capacity for local and regional decision-makers in order to integrate adaptation aspects into local policies and planning processes. The project enhances the exchange of knowledge and best practices of the partners, and it aims to strengthen their cooperation.

RCAP-SEE

Regional Climate Change Adaptation Pilot programs-SEE

Interreg – South East Europe

(Submitted: June 2008)

Climate change is considered a fact and seemingly it is accelerating. This transnational project contributes to make the target groups (civil society, local decision-makers) aware and motivated through a more practical than theoretical approach. Therefore, following a concise analysis of the knowledge and awareness level, in each partner country pilot areas will be selected where actual and/or possible consequences of climate change are identified. Taylor made to them, through local consultations adaptation projects (i.e. water, biodiversity, agriculture and climate) will be drafted and implemented involving local NGO and/or local authority. In the next component the outputs obtained from the pilots are reviewed, analyzed and built into a knowledge building format taking into consideration the current EU state of art as well. All the above are followed by an active climate change knowledge building and adaptation capacity building of target audiences and following strategies and curricula developed.

Mutual Dialogue – Local Adaptation Campaign for Tourism

Toyota Environmental Activities Grant Programme

(Submitted: June 2008)

This project is an innovative approach to community involvement in addressing climate change and its effects on local lake ecosystems. The project will begin with curriculum and program development at Lake

Balaton (Hungary) in the first year. Following successful implementation at Lake Balaton, the program will be disseminated to other lakes in Central and Eastern Europe through existing partnerships such as the Living Lakes Network. The project will address the need for locally-focused environmental education for students in schools and local community groups while supplementing water quality monitoring by local environmental authorities. In addition to learning about climate change, the water cycle and lake ecosystems, the participants will receive hands-on field experience in terms of gathering and analyzing water samples to glean data for input into decision support systems and water monitoring programs. These samples will complement existing monitoring sites for calibration and will extend the network. The project will provide an adaptable case for other lake regions that would benefit the global community.

AGRICLIMATE

THE CLIMATE CHANGE IN AGRICULTURE: Strategies for prevention, compensation and adaptation to climate change in the agricultural sector and landscape

Interreg IVB - Central Europe

(Submitted: April 2008)

In the last years LP was facing a rising warning connected to climate change consequences on agriculture by local stakeholders involved in the agricultural sector. After meetings with stakeholders, in 2007 LP discussed with P2 P3 P6 and P7 the possibility of a joint strategy able to face climate change in agriculture, feeling necessary to involve partners at European level in order to exchange experiences, best practises and acquire new information and knowledge based on a wider climate area. In order to propose and discuss the project idea the LP contacted also P3 because it was developing an interesting project on climate change and agriculture (INTERREG II B CADSES "ACCRETe: Agricultural and Climate Changes: How to Reduce Human Effects and Threats"). All the partners had some consultations with local stakeholders and then agreed with the proposal because they share common problems and needs. Subsequently they contributed in the definition project aims, actions and expected results.

The project is aimed to:

- increase knowledge on the main damages caused or catalysed by climate change in each partner region through studies and interregional meetings,
- define priority actions and to analyse possible scenario for agricultural production changes (economic and environmental evaluations) in each partner region,
- test possible adaptation and mitigation measures,
- increase awareness on local public opinion, farms and stakeholders on the topics analysed and decide jointly adjustments and transformation strategies.

Promoción de medidas de adaptación al cambió climatico para turismo terapéutico sostenible en la región de Mar Chiquita, Argentina

EuropeAid

(Submitted: April, 2008)

The overall idea of the project is the promotion of actions in the fields of development, education and fostering cooperation and synergies amongst stakeholders at local and international levels. The main task of the project is to develop an overall assessment of the ecological and socio-economic systems of Mar Chiquita in order to determine the vulnerabilities and resilience to the effects of climate change; and therefore protecting the biodiversity and promoting the sustainable tourism in the region.

A similar integrated assessment has been developed and implemented at the Lake Balaton Region in Hungary from 2006 (Balaton Adaptation Project: Lake Balaton Integrated Vulnerability Assessment; Early Warning and Adaptation Strategies) financed by UNDP-GEF. As the result of this project, led by the Lake Balaton Development Coordination Agency (LBDCA), an integrated assessment model has been developed in order to study the dynamics of environment-economy-society interactions. The model is supported by a suite of indicators covering ecological, social and economic aspects of vulnerability; while including an integrated assessment of historic and current problems.

CLIC-A-MAN Climate change adaptation on water management and land use Interreg IVC (Schwitted Journany 2008)

(Submitted: January 2008)

The awareness of the future impact of cc is increasing in all EU countries but while the mitigation strategies are better known at international/national level, the local authorities face difficulties in finding concrete solutions in connection with adaptation and decision processes since they depend from local knowledge. The 5 regions in Italy, Ireland, Spain, Hungary and Greece involved in the mini-programme represent a varied typology of climate zones; facing different climate change impacts (water scarcity, drought, erosion, desertification etc), this difference is suitable for studying adaptation and mitigation solutions for decision making. The mini-programme goals is to provide local authorities with adaptation strategies for climate change impacts, elaborate regional adaptation policy framework and strategies for local economies, build up a shared vision with stakeholders and decision makers, enhance the knowledge transfer and best practice exchange within the partnership.

CLIC-A-MAN will finance 8 sub-projects dealing with 3 fields identified by the regions as priorities for their territories: 1) water and energy efficiency; 2) water management and tourism; 3) land use/territorial management. The sub-projects results will be integrated in the documents issued by the involved regions in order to give examples of concrete solutions to decision makers and transfer them to other European context. A Decision Support System model aimed at strengthening decision-making to achieve a better alignment between national policies and local adaptation needs will be used.

EnviroGRIDS

Gridded Management System on Environmental Sustainability and Vulnerability

FP7-ICT-2007-2

EnviroGRIDS will develop a collaborative management system to store, analyze, visualize and disseminate crucial information on past, present and future states of the environment to assess its sustainability and vulnerability. It is based on an ultra-modern technology using the largest gridded computing infrastructure in the world. It will serve as a benchmark for the development of the directive on Infrastructure for Spatial Information, and its global counterparts. It will improve spatially-explicit scenarios of drivers of changes such as climate, demography and land cover. Realtime sensor data will be integrated into the modelling process as well as OpenMI model interface. The impacts of expected changes will be evaluated through socio-economic and environmental indicators with innovations in the development of procedures to account for feedbacks. Finally, a web-based system will warn target populations about environmental risks and help them to prepare the most adequate responses. Results will be made available in a state-of-the-art e-learning format on the Internet and on DVD, together with four-dimensional visualisation tools.

Annex 10: Rating Tables

Results		Measurable Indicators from Project Log-frame	End of Project Target	Status of Delivery ⁹	Rating ¹⁰
Objective:	1.	Regional development frameworks across the relevant sectors integrate adaptation to climate change	 Adaptation Policy Framework (APF) for Lake Balaton basin has been developed to integrate adaptation into sectoral and regional development plans and programmes 		S
	2.	Allocation of financial resources for vulnerability studies and adaptation measures by local governing bodies	 Balaton region local governing bodies and development organizations allocate funding for adaptation measures 		S
	3.	Elements of Lake Balaton ecosystem management system fully integrate adaptation approaches	 Adaptation measures have been undertaken 		S
				-	
Outcome 1:	4	Information system for systematic vulnerability assessment introduced and institutionalized	 Information system with set of vulnerability indicators defined by end of first year of the project 		S
	5	Changes and response model developed for better understanding of vulnerability and best option scenarios for adaptation	 Changes and response model developed and introduced by end of the project 		S
Outcome 2:	6.	Regional Development Council and other relevant institutions adopt and employ adaptation and vulnerability indicator framework for socioeconomic development planning	• Vulnerability indicator framework adopted and applied by at least 5 micro-regions by the end of the second year of the project (impact timeline 6-18+months		S
	7.	LBDCA integrates adaptation in the organizational structure and mandate	 Tasks defined in job description and mandate 		S
Outcome 3:	8.	Regional, national and sectoral development frameworks integrate adaptation approach	 At least 2 regional scale frameworks integrate adaptation by the end of the project APF has been formulated for the Lake Balaton watershed by end of the project (timeline of impact 6-30+ months) 		S
Outcome 4:	9.	Observable changes of improved adaptive management and risk reduction against vulnerability indicator framework	 The response system to vulnerability at local levels shows improvements against vulnerability indicator system (by the end of the project) 		S
	10	LBDC grant facility integrates adaptation into the funding eligibility criteria			S
	11	LBDC fund allocation schemes will increase funding for adaptation by 30%	 At least two adaptation pilot projects implemented by the end of the project 		S

 Table 7:
 Status of Objective/Outcome Delivery as per Measurable Indicators

Indicator shows expected completion by the end of the project

^{9 &}lt;mark>Green</mark> Yellow <mark>Red</mark>

Completed - indicator shows successful achievement

Indicator show poor achievement - unlikely to be completed by end of Project

¹⁰ Rating: Highly Satisfactory = HS; Satisfactory = S; Marginally Satisfactory = MS; Unsatisfactory = U

Final Evaluation of the UNDP/GEF Project "Lake Balaton Integrated Vulnerability Assessment, Early Warning and Adaptation Strategies" Page 77

Results	Measurable Indicators from Project Log-frame	End of Project Target	Status of Delivery ⁹	Rating ¹⁰
Outcome 5:	12. "Influencing strategy" and knowledge products developed and employed according to the replication plan	• "Influencing strategy" and knowledge products developed and employed for scaling up and replication by the end of the project (impact timeline 6-30+months)		S
	13. Number of local initiatives introducing adaptation approach	 At least 5 end-user agreements to undertake adaptation approach 		S
	14. Good practices disseminated through GEF Adaptation Learning Mechanism	 At least one knowledge product produced and disseminated through ALM project 		S

Table 8: Project Ratings

Project component or Objective		Rating Scale					
roject component or objective	HU	U	MU	MS	S	HS	Kating
PROJECT FORMULATION				✓			
Conceptualization/Design				✓			
Stakeholder participation					✓		
PROJECT IMPLEMENTATION					\checkmark		
Implementation Approach					\checkmark		
The use of the logical framework				\checkmark			
Adaptive management					\checkmark		
Use/establishment of information technologies					\checkmark		
Operational relationships between the institutions involved				✓			
Technical capacities					✓		
Monitoring and evaluation					✓		
Stakeholder participation					✓		
Production and dissemination of information					✓		
Local resource users and NGOs participation				\checkmark			
Establishment of partnerships					\checkmark		
Involvement and support of governmental institutions				\checkmark			
PROJECT RESULTS					\checkmark		
Attainment of Outcomes/ Achievement of objectives							
Achievement of objective					\checkmark		
Outcome 1					\checkmark		
Outcome 2					\checkmark		
Outcome 3					\checkmark		
Outcome 4					\checkmark		
Outcome 5					\checkmark		
OVERALL PROJECT ACHIEVEMENT & IMPACT					\checkmark		