Directorate General Environment, Unit E.4. LIFE

Ex-Post Evaluation of Projects and Activities Financed under the LIFE Programme

Country-by-country analysis Slovenia

July 2009







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1 Executive summary

Slovenia has been involved in the LIFE Programme since 2000 and joined the programme before gaining full EU membership. A total of 14 projects have received support, and all projects (3 Environment and 11 Nature) fall within the period covered by the present evaluation (1996-2006). Several projects were finalised later in 2007 and 2008. Two Nature projects are still ongoing with deadlines in 2009 and 2011.

Although the number of projects is limited, the projects are technically effective and successful in achieving the intended results. Regarding sustainability, criteria have been fulfilled, but precise data is lacking. Slovenian LIFE Environment projects have only covered a few subjects: two projects address issues resulting in the reduction of green house gas emissions, while one addresses the improvement of water quality and energy conservation. Slovenian LIFE Nature projects have focused on habitat restoration and nature protection and have had a significant impact on biodiversity preservation.

2 Introduction

This country report on the implementation of the LIFE Programme in Slovenia is part of the overall expost evaluation of the LIFE Programme. The evaluation was commissioned in July 2008 and covers all LIFE projects initiated during the period 1996-2006. The overall objective of the evaluation is to assess the relevance and impact of the activities and projects financed under the LIFE Programme. The evaluation comprises country studies in all Member States except Bulgaria, which has never had any LIFE projects. This report documents the analysis carried out concerning the implementation of the LIFE Programme in Slovenia. The ex-post evaluation assesses the effect of the LIFE Programme on Europe's nature and environment through analysing the results and impacts of LIFE projects implemented under the Nature (NAT) and Environment (ENV) components. These results and impacts have further been assessed along three main evaluation criteria:

- Effectiveness, i.e. the extent to which planned objectives have been reached;
- Sustainability, i.e. the extent to which positive impacts have continued or are likely to continue;
- Utility, i.e. the extent to which impacts address key environmental needs and priorities in the EU and for the stakeholders concerned.

3 Environmental policy overview

According to the "State of the Environment Report" for Slovenia, the results of the measures carried out during the report period are partly satisfactory.

The **river water quality** in Slovenia has slowly improved since 1992 with the construction of waste water treatment plants in major cities (Ljubljana, Maribor, Celje) as well as in coastal areas. Additional treatment capacity will contribute towards further improvement of the water quality. Collection, treatment and discharge of urban waste water will be in place by 2015, which is the transitional period for the enforcement of the Urban Waste Water Treatment Directive (91/271/EEC). The nitrate and pesticide content in groundwater has fallen over a decade, but is still too high when compared with the requirements of the Nitrate Directive (91/676/EEC). In light of this, Slovenia adopted stricter measures in 2008.



Sulfur dioxide emissions have been reduced, thus improving **air quality**, particularly in the case of nitrogen oxide emissions from transport. The consumption of substances depleting the ozone layer has been reduced by around 90 per cent.

Of special concern is the increase in **waste** generation, i.e. municipal and hazardous waste, coupled with an increase in the population using the system for the regular collection and removal of municipal waste.

Biodiversity in Slovenia will also be preserved through enhancing the nature protection system through the establishment of Natura 2000 sites. The majority of other indicators, such as the number of species and habitats, recorded a favorable trend. New operational programmes are being adopted in those areas with negative trends as supplementary measures to the improvement the environment.

Climate: Under the Kyoto Protocol, Slovenia has taken measures to reduce greenhouse gas emissions by 8 per cent in the period 2008-2012 as compared to 1986 levels. In 2005, however, emissions were 0.4 per cent above the 1986 level. The most recent projections indicate that with the existing measures, greenhouse gas emissions are likely to exceed the Kyoto target by 3.5 per cent. However, the country would meet commitments through planning additional policies and measures.

The three major environmental problems in Slovenia currently of concern are **waste**, **agriculture** and **transport**. Agriculture involves bad practice regarding the use of fertilizers causing high level of nutrient emissions. Once treatment of urban waste waters have been implemented, good water quality (as defined by the EU Water Directive) will be realized by good practice on the fields.

4 Overview of LIFE projects in Slovenia

During the period from 1996 to 2006, the LIFE Programme co-financed 12 projects in Slovenia including 13 Nature projects and one Environment project. According to interview data, only one out of three **LIFE Environment** projects initially proposed was actually co-financed by the LIFE Programme. The two other projects mentioned in the BUTLER register were never realised because the local community withdrew participation. A full overview table of the projects is provided in Appendix 1. Appendices 2 and 3 provide additional summary tables.



	Number of projects	Total LIFE contribution (million EUR)	Main themes covered ¹	Average LIFE contribution per project (million EUR)	Average project duration (years)
Environment	3 (1 realised)	0.6	Waste	0.2	3
Nature	11	6.2	Habitats (82%)	0.5	3.8

Table 4.1 Overview of LIFE projects 1996-2006 in Slovenia

Source: Butler

The **LIFE Nature** projects co-financed by the LIFE Programme during 1996-2006 comprise habitat restoration projects (river basins, lakes, freshwater meadows and marshes) and species protection. In most cases the status of the habitats themselves was the focus of the projects, but in some projects the restoration was carried out in order to improve the conservation conditions of selected species (e.g. otter and bear) or a group of species (e.g. meadow birds). Three of the projects were implemented by Park Reserve Authorities, three by other authorities, and another three by NGOs or research institutions.

5 Effects of projects implemented

Slovenian **LIFE Nature** projects were highly focused on the restoration of habitats and conservation of species. The partnerships set up in order to carry out the projects are one of the most interesting features: the local authorities, the companies and the local nature protection agencies were all involved either technically or financially. Lack of cooperation was the main bottleneck to achieving results.

In Slovenia, there are 286 areas designated for Natura 2000, of which 260 pertain to the Habitats Directive (pSCI) and 26 to the Birds Directive (SPA). A total of eight LIFE projects have affected Natura areas. Six of these eight projects are based in both Directives, while the other two are based in either of the Directives involved. The total Natura 2000 area in Slovenia is 639.735 ha and 461.819 ha, Habitats and Birds Directive respectively. LIFE projects area amounts to 17.190 ha, which does not represent a significant share. Despite this fact, LIFE inputs had a strong effect on the approach of Natura 2000 introduction in Slovenia. Natura 2000 qualifying species were included in all LIFE Nature projects. Two of the most characteristic species were Crex crex and Lutra lutra, for which LIFE projects for both species aimed at long term protection. In numerous cases the LIFE projects successfully reversed the degradation and deterioration of biodiversity.

LIFE funding provided intensive support in transferring know-how to national administration when establishing Natura 2000 designated areas. The need for funding basic research and inventorying of species and habitats has been clearly recognised by authorities. It would be too ambitious to state that some best-practice has been achieved by the realisation of LIFE projects, but at an early stage a lack of data was recognised.

The implementation of LIFE Nature projects in Slovenia strengthened the capacity and professionalism of the beneficiary, especially in multi-country arrangements. In many cases this also had an effect on other projects realised by the Nature Protection Agency. Significant habitats and species mapping that

¹ For the purpose of this evaluation, the LIFE projects were categorised according to the thematic structure of the LIFE+ Programme (ref. Regulation EC No. 614/2007, Annex II). The themes included for LIFE Nature: Habitat Directive, Birds Directive and Biodiversity. For LIFE Environment: Climate change, air, water, soil, forests, natural resources and waste, chemicals, urban environment, strategic approaches.

resulted from LIFE projects have had an effect on the long-term policy of the Nature Protection Agency as well.

The project outputs are being disseminated at local, national and international levels. In addition, several scientific and practical papers were published. The implementation of the projects is expected to lead to monitoring arrangements which would be considered as a role model for other non-LIFE projects in Slovenia.

Projects mainly succeeded in restoring and safeguarding the ecosystem, the promotion of alternative forms of recreation and tourism, and in helping regional development. Some sites are visited often by school children and others, where they are introduced to the natural features of the species there, so the potential long-term educational effects of the projects should not be under-estimated. However, long-term results are not yet discernible.

The one **LIFE Environment** project realised in Slovenia concerned alternative methods for effluent treatment testing wetland treatment and proved to be economically feasible. Results of effluent treatment from landfill in a wetland were satisfactory, however the level of treatment differed throughout the year so it proved to be complementary measure. The project applied unknown technology under Slovenian conditions, and the realisation of this work gave reference for realisation of similar measures. There was no other institution except LIFE that was prepared to fund such an experiment. The dissemination of results showed positive reactions by the professional community.

6 The effectiveness of projects

Effectiveness can be assessed at two levels: the project level, which compares achievements with project objectives, and at programme level, which compares achievements with LIFE Programme objectives².

The **LIFE Nature** projects consisted of several practical actions which gave rise to immediate and visible results in nature protection. National focal points and monitoring experts rated the effectiveness of LIFE Nature projects at 3-4 out of five point scale, where five is the highest. Projects have generally been technically successful and have achieved their goals. The thematic rather than site-specific approach of many of the nature projects has ensured relatively high effectiveness. Nature projects involving public lands have generally achieved a higher effectiveness than those involving private lands. In general, buying out private land for nature protection has proved to be very effective compared to the previous practice of enforcement by law.

The effect of Nature projects at the programme level was very high, due to the fact that at an early stage it provided inputs for the implementation of Habitats and Birds Directives. The projects also resulted in amendments of Slovenian legislation governing the protection of several species of interest in Europe.

The **LIFE Environment** project that was completed provided results which demonstrated that these types of measures offer possibilities not explored previously. In this sense, the project has been highly effective.

² Specific objective for: LIFE Nature: To contribute to the implementation of Council Directive 79/409/EEC (Birds Directive) and Council Directive 92/43/EEC (Habitats Directive); LIFE Environment: To contribute to the development of innovative and integrated techniques and methods and to the further development of Community environmental policy.



7 The sustainability of projects

The completed **LIFE Environment** project is still in operation after its finalisation as a LIFE project in 2006 and is thus assessed as sustainable.

All **LIFE Nature** projects had a public entity involved and mainly involve public lands, which provided safe mechanisms for securing the long-term effects of the projects. Management actions were conveniently incorporated into national agency plans which are related to budgetary funding, so ensuring very high sustainability. In some cases, LIFE Nature projects were incorporated into existing nature protection projects which were funded locally, thus strengthening these activities. In a few cases, where local authorities are responsible for project management, there is a long-term effort to pass financial responsibility for the maintenance and running costs to the national level. Sustainability of LIFE Nature projects is assessed as medium to high considering that majority of them are going to sustain on the long run.

8 The utility of projects

Links to EU environmental policies are ensured through the application procedure, which is specific in regard to the description of goals and aims, set forth for example in the 6th EAP.

The utility of the single aforementioned LIFE Environment project carried out in Slovenia is assessed to be satisfactory, due to the intention to replace industrial treatment with biotechnology. Certain LIFE Nature projects were regarded as innovative by Slovenian standards (such as active management instead of passive protection of the area), and were tested under real conditions which proved to be useful for further actions related to nature protection. Learning from such cases the approach in localisation of infrastructure has subsequently changed and made space for the compensation measures to take place.



Appendix 1 Comprehensive overview of LIFE Projects in Slovenia

In connection with the ex-post evaluation, data was extracted from the BUTLER database of the LIFE Unit. Table 1 and Table 2 below provide an overview of the information available on each project as well as the LIFE+ theme attached by the evaluation team to the project. The budget figures for LIFE co-financing do not necessarily correspond to the actual payments made.

Table 2 Overview of LIFE Environment Projects in Slovenia

ld.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co- financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE00 ENV/SLO/000966	Thrifty energy master	LIFE II	2000	2001	2003	599,996	244,558		No	Climate change
LIFE03 ENV/SLO/000557	The sustainable rehabilitation of the landfill site	LIFE III	2003	2003	2007	594,721	267,624	Local authority	No	Natural re- sources and waste
LIFE03 ENV/SLO/000559	Thrifty energy master	LIFE III	2003	2003	2006	607,496	148,985	SME	No	Climate change

Table 3 Overview of LIFE Nature Projects in Slovenia

ld.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co- financing (EUR)	Beneficiary type	International partners (yes/no)	Directive (Birds, Habitats) or biodiversity
LIFE00 NAT/SLO/007223	Management plan and urgent actions for Veternik and Oslica high dry meadows	LIFE II	2000	2001	2004	275,000	206,250	Park-Reserve authority	No	Habitats
LIFE00 NAT/SLO/007226	Restoring and conserving habitats and birds in Skocjanski Zatok N.R.	LIFE II	2000	2001	2007	581,869	290,935		No	Birds
LIFE00 NAT/SLO/007231	Peatbogs in Triglav National Park	LIFE II	2000	2001	2004	470,200	352,650	Park-Reserve authority	No	Habitats
LIFE02 NAT/SLO/008585	Conservation of large Carnivores in Slovenia - Phase I (Ursus Arctos)	LIFE III	2002	2002	2005	607,822	455,867	National au- thority	No	Habitats
LIFE02 NAT/SLO/008587	Conservation of endangered habitats / species in the future Karst Park	LIFE III	2002	2002	2006	476,930	357,698	University	No	Habitats
LIFE03 NAT/SLO/000076	Conservation of endangered species and habitats in the Secovlje salt-pans Park	LIFE III	2003	2003	2006	714,440	357,220	Development agency	No	Habitats
LIFE03 NAT/SLO/000077	Establishing long-term protection of Crex crex in Slovenia	LIFE III	2003	2004	2007	809,024	606,768	NGO- Foundation	No	Birds
LIFE04 NAT/SI/000234	Conservation of otter population (Lutra lutra) in Goricko - phase 1	LIFE III	2004	2004	2009	1,050,780	456,244	Local authority	No	Habitats
LIFE04 NAT/SI/000240	NATURA 2000 in Slovenia - management models and infor- mation system	LIFE III	2004	2005	2008	1,686,077	843,039	Public enter- prise	No	Habitats
LIFE06 NAT/SI/000066	Conservation of biodiversity of the Mura river in Slovenia	LIFE III Extension	2006	2006	2012	1,975,519	969,385	Research institutions	No	Habitats
LIFE06 NAT/SI/000069	Intermittent Cerknica Lake	LIFE III Extension	2006	2007	2010	1,840,584	1,340,554	Park-Reserve authority	No	Habitats

Appendix 2 Summary tables on LIFE Environment projects in Slovenia

Table 4 Overview of LIFE ENV projects in Slovenia by year, 1996-2006

Generation	Year	Number of projects	Total budget (EUR million)	Total LIFE co-financing budget (EUR million)	Average duration (years)	Average LIFE funding per project (EUR million)
LIFE II	1996	0	0.0	0.0	0.0	0.0
	1997	0	0.0	0.0	0.0	0.0
	1998	0	0.0	0.0	0.0	0.0
	1999	0	0.0	0.0	0.0	0.0
	Total	0	0.0	0.0	0.0	0.0
LIFE III	2000	1	0.6	0.2	2.0	0.2
	2002	0	0.0	0.0	0.0	0.0
	2003	2	1.2	0.4	3.5	0.2
	2004	0	0.0	0.0	0.0	0.0
	Total	3	2	1	3.0	0.2
LIFE III extension	2005	0	0.0	0.0	0.0	0.0
	2006	0	0.0	0.0	0.0	0.0
	Total	0	0.0	0.0	0.0	0.0
Grand total		3	1.8	0.7	3.0	0.2
Comparative figures for all ENV projects		1,076	1,947.7	615.9	3.3	0.6

Table 5 Overview of LIFE ENV projects in Slovenia 1996-2006 by theme

LIFE+ theme	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Climate change	2	67%	1.2	67%	0.4	60%
Air	0	0%	0.0	0%	0.0	0%
Water	0	0%	0.0	0%	0.0	0%
Soil	0	0%	0.0	0%	0.0	0%
Forests	0	0%	0.0	0%	0.0	0%
Natural resources and waste	1	33%	0.6	33%	0.3	40%
Chemicals	0	0%	0.0	0%	0.0	0%
Urban environment	0	0%	0.0	0%	0.0	0%
Strategic approaches	0	0%	0.0	0%	0.0	0%
Total	3	100%	1.8	100%	0.7	100%

Table 6 Slovenia LIFE ENV projects 1996-2006 according to beneficiary type

Beneficiary type	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Public entities						
National authority	0	0%	0.0	0%	0.0	0%
Regional authority	0	0%	0.0	0%	0.0	0%
Local authority	1	33%	0.6	33%	0.3	40%
Development agency	0	0%	0.0	0%	0.0	0%
Intergovernmental body	0	0%	0.0	0%	0.0	0%
Park-reserve authority	0	0%	0.0	0%	0.0	0%
Sub-total	1	33%	0.6	33%	0.3	40%
Public and private enterprises						
International enterprise	0	0%	0.0	0%	0.0	0%
Large enterprise	0	0%	0.0	0%	0.0	0%
SME Small and medium sized enterprise	0	0%	0.0	0%	0.0	0%
Mixed enterprise	0	0%	0.0	0%	0.0	0%
Public enterprise	1	33%	0.6	34%	0.1	23%
Sub-total	1	33%	0.6	34%	0.1	23%
NGOs and research						
NGO-Foundation	0	0%	0.0	0%	0.0	0%
Research institutions	0	0%	0.0	0%	0.0	0%
University	0	0%	0.0	0%	0.0	0%
Training centre	0	0%	0.0	0%	0.0	0%
Sub-total	0	0%	0.0	0%	0.0	0%
None indicated	1	33%	0.6	33%	0.2	37%
Total	3	100%	1.8	100%	0.7	100%

Appendix 3 Summary tables on LIFE Nature projects in Slovenia

Table 7 Overview of LIFE NAT projects in Slovenia, 1996-2006

Generation	Year	Number of projects	Total budget (EUR million)	Total LIFE co-financing budget (EUR million)	Average duration (years)	Average LIFE funding per project (EUR million)
LIFE II	1996	0	0.0	0.0	0.0	0.0
	1997	0	0.0	0.0	0.0	0.0
	1998	0	0.0	0.0	0.0	0.0
	1999	0	0.0	0.0	0.0	0.0
	Total	0	0.0	0.0	0.0	0.0
LIFE III	2000	3	1.3	0.8	4.0	0.3
	2002	2	1.1	0.8	3.5	0.4
	2003	2	1.5	1.0	3.0	0.5
	2004	2	2.7	1.3	4.0	0.6
	Total	9	7	4	3.7	0.4
LIFE III extension	2005	0	0.0	0.0	0.0	0.0
	2006	2	3.8	2.3	4.5	1.2
	Total	2	3.8	2.3	4.5	1.2
Grand total		11	10.5	6.2	3.8	0.6
Comparative figures for all NAT projects		771	1,224.1	637.2	4.2	0.8

Table 8 Categories of LIFE NAT projects in Slovenia, 1996-2006

LIFE NAT themes	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million	In % of total
Habitats Directive	9	82%	9.1	87%	5.3	86%
Birds Directive	2	18%	1.4	13%	0.9	14%
Biodiversity projects	0	0%	0.0	0%	0.0	0%
Total	11	100%	10.5	100%	6.2	100%

Table 9 Slovenia LIFE NAT projects 1996-2006 according to beneficiary type

Beneficiary type	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Public entities						
National authority	1	9%	0.6	6%	0.5	7%
Regional authority	0	0%	0.0	0%	0.0	0%
Local authority	1	9%	1.1	10%	0.5	7%
Development agency	1	9%	0.7	7%	0.4	6%
Intergovernmental body	0	0%	0.0	0%	0.0	0%
Park-reserve authority	3	27%	2.6	25%	1.9	30%
Sub-total	6	55%	5.0	47%	3.2	51%
Public and private enterprises						
International enterprise	0	0%	0.0	0%	0.0	0%
Large enterprise	0	0%	0.0	0%	0.0	0%
SME Small and medium sized enterprise	0	0%	0.0	0%	0.0	0%
Mixed enterprise	1	9%	1.7	16%	0.8	14%
Public enterprise	0	0%	0.0	0%	0.0	0%
Sub-total	1	9%	1.7	16%	0.8	14%
NGOs and research						
NGO-Foundation	1	9%	0.8	8%	0.6	10%
Research institutions	1	9%	2.0	19%	1.0	16%
University	1	9%	0.5	5%	0.4	6%
Training centre	0	0%	0.0	0%	0.0	0%
Sub-total	3	27%	3.3	31%	1.9	31%
None indicated	1	9%	0.6	6%	0.3	5%
Total	11	100%	10.5	100%	6.2	100%