



**EVALUATION OF THE MAIN ACHIEVEMENTS OF COHESION POLICY
PROGRAMMES AND PROJECTS OVER THE LONGER TERM IN 15
SELECTED REGIONS**

(FROM 1989-1993 PROGRAMMING PERIOD TO THE PRESENT)

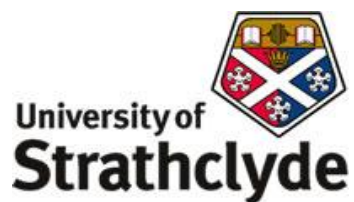
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CASE STUDY DYTIKI ELLADA

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PREFACE

This report presents the case study for Dytiki Ellada as part of the study 'Evaluation of the Main Achievements of Cohesion Policy Programmes over the Longer Term in 15 Selected Regions (from 1989-1993 Programming Period to the Present)', managed by the European Policies Research Centre and the London School of Economics.

The research was conducted over the period May 2012 to December 2012.

The case study was drafted by Dimitris Lianos and Victoria Chorafa, LKN ANALYSIS Ltd. The authors are grateful to a considerable number of individuals in Dytiki Ellada region who participated in the study and provided valuable insights as well as assistance in tracking down other interviewees. The complete list of interviewees is listed in Annex IV at the end of the report.

Contents

EXECUTIVE SUMMARY	1
1. Introduction	5
2. Regional Context and analysis of needs	11
3. Programme evolution and relevance	21
3.1 Explicit and implicit strategies and their evolution	21
3.1.1 <i>The introduction of programming: 1989-93</i>	23
3.1.2 <i>Investing in infrastructure: 1994-99</i>	27
3.1.3 <i>Towards a more comprehensive and integrated strategy: 2000-2006</i>	32
3.1.4 <i>A shared strategy through a shared ROP: 2007-13</i>	36
3.2 Relevance of programmes to regional needs	41
4. Expenditure Analysis	47
4.1 Financial allocations	47
4.2 Expenditure compared with allocations.....	49
5 Achievements Analysis	54
5.1 Reported and actual achievements	56
5.1.1 <i>Programme-level achievements</i>	56
5.1.2 <i>Analysis by theme</i>	68
5.1.3 <i>Institutional factors affecting achievements</i>	77
5.2 Complementarities and synergies	79
5.2.1 <i>Complementarities and synergies within Structural Funds and other EU co-funded policies</i>	80
6 Assessment of achievements against objectives and needs (effectiveness and utility)	84
6.1 Overall achievements of ERDF programmes measured against programme objectives (effectiveness)	84
6.2 Overall contribution of ERDF programmes to regional development (utility)	88
6.3 Key elements of success and failure	93
6.3.1 <i>Good practices and successes</i>	93
6.3.2 <i>Bad practices and failings</i>	94
7 Conclusions	96
7.1 EQ1: To what extent did the programmes address regional needs and problems over time?.....	96
7.2 EQ2: To what extent do ERDF achievements meet regional objectives and needs in each programming period and across all periods?.....	102
7.3 EQ3: What are the main lessons learnt on the effectiveness and utility of ERDF interventions?	107
8 Annex I - Analysis of project samples	110
8.1 Project: The Rion - Antirion Bridge (Harilaos Trikoupi Bridge)	110
8.2 Project: Patras Science Park (PSP)	115
8.3 Project: Interventions in Ancient Olympia.....	122
8.4 Project: Completion of Solid Waste Management Infrastructure in Etoloakarnania prefecture	126
9 Annex II - Structure of programmes 1989-2013 in Dytiki Ellada	132
10 Annex III: Reported Achievements	140
10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 1989-93	140
10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 1994-99	142

10.1	Achievements by thematic axis for the National (sectoral) programmes 1994-99.....	144
10.1	Outputs by thematic axis for the Dytiki Ellada regional programme 2000-06	145
10.1	Achievements by thematic axis for the National (sectoral) programmes 2000-06.....	147
10.1	Outputs by thematic axis for the Dytiki Ellada regional programme 2007-13	148
10.1	Achievements by thematic axis for the National (sectoral) programmes 2007-13.....	150
11	Annex IV: List of interviewees.....	152
12	Annex V: Overview of sources used for the case study.....	157
13	Annex VI: References.....	159
14	Annex VII: Summary of survey results	163

Figures and tables

Figure 1: Geophysical map of Dytiki Ellada.....	6
Figure 2: Administrative map of Dytiki Ellada.....	7
Figure 3: Structure of the Dytiki Ellada economy, shares of gross value-added	11
Figure 4: Structure of Dytiki Ellada employment, shares per economic activity sector	12
Figure 5: GDP per capita (in PPS) and comparison to national performance	12
Figure 6: Allocations and Expenditure by thematic axis across programmes (expressed as percentages)	51
Figure 7: Total expenditure on EU funded projects 1989-2012 (expenditure calculated in euros, constant 2000 prices)	52
Figure 8: Online survey responses to the question ‘Could you please assess the extent to which the ERDF programmes delivered achievements in the fields outlined below (across the entire period, i.e. 1989 to date)?’	164
Figure 9: Online survey responses to the question ‘In your view, did the objectives of the ERDF programmes address regional needs?’	165
Figure 10: Online survey responses to the question ‘On the whole, could you assess the impact of ERDF programmes? For current programmes, please assess the level of impact which you anticipate they will have.’	165
Table 1: Priorities for the Dytiki Ellada regional programmes 1989-2013.....	22
Table 2: Contribution of NOPs to Dytiki Ellada - 1989-93	24
Table 3: 1989-93 Dytiki Ellada ROP Sub-Programmes	25
Table 4: Contribution of NOPs to Dytiki Ellada - 1994-1999	28
Table 5: 1994-1999 Dytiki Ellada ROP Sub-Programmes	30
Table 6: Contribution of NOPs to Dytiki Ellada - 2000-06	33
Table 7: Dytiki Ellada 2000-06 ROP Priorities	34
Table 8: Dytiki Ellada 2007-13 ROP Priorities	38
Table 9: Contribution of NOPs to Dytiki Ellada - 2007-13	40
Table 10: Achievements compared with imputed objectives for eight thematic axes	88
Table 11: Needs and achievements for eight thematic axes	92

List of Abbreviations

AIR	Annual Implementation Report
BERD	Business Enterprise Research & Development Expenditure
CAP	Common Agricultural Policy
CSF	Community Support Framework
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agricultural Guidance and Guarantee Fund
EAPTA	Special Development Programme for Local Authorities
EC	European Commission
ECU	European Currency Unit
EFF	European Fisheries Fund
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
FIR	Final Implementation Report
GERD	Gross Domestic Expenditure on Research & Development
GDP	Gross Domestic Product
GVA	Gross Value-Added
ICT	Information & Communication Technologies
IMP	Integrated Mediterranean Programme
IT	Information Technology
Ltd	Limited (Company)
MA	Managing Authority
Meuro, m €	Million Euros
MIS	Monitoring Information System
MOU	Management Organisation Unit
NOP	National (Sectoral) Operational Programme
NSRF	National Strategic Reference Framework
OP	Operational Programme
NGOs	Non-Governmental Organisations
PA	Public Administration
PATHE	Patras - Athens - Thessaloniki - Evzoni Motorway
PC	Programme Complement
PSP	Patras Science Park
RDP	Regional Development Plan
R&D	Research and Development
R&TD	Research and Technological Development
ROP	Regional Operational Programme
SFs	Structural Funds
SMEs	Small and Medium-sized Enterprises
TEI	Technological Educational Institute
TEN-T	Trans-European Network Transport

EXECUTIVE SUMMARY

Dytiki Ellada is a region comprising the western and north-western parts of Peloponnisos (Achaia and Ilia regional unities) and the western part of Central Greece (Etoloakarnania regional unity). It is one of the most dichotomised regions in Greece. The urbanised, high population density core has suffered problems of deindustrialisation and economic decline for years, while the periphery (predominantly agricultural and sparsely populated areas) has experienced more fundamental development problems, with limited economic and population dynamism and a weak industrial and infrastructure base. Recent years have seen a significant improvement in transport infrastructure and connectivity, although the wider social, economic and demographic problems associated with the region in past decades largely persist today - and have been intensified with the financial and fiscal crisis that has hit the country in the last five years.

Dytiki Ellada is one of the least developed regions of Greece. In the early 1980s, the region's economy was mainly based on low productivity agricultural activities and manufacturing. Between 1980 and 1995, its share of national GDP was constantly fluctuating at the level of 5.7-5.8 percent, showing that the regional economy was keeping pace with the country. Since 1995, the region has slowly diverged from the national average due to lower growth rates as a result of its underperformance in a number of critical indicators in relation to the national average (low employment productivity, low activity rates, high dependency on agricultural activities, limited tourism development, and low labour force educational level). Unemployment rates although comparable to those found nationally, have increased significantly more recently and have risen sharply as a consequence of the deterioration of Greece's fiscal situation and the austerity measures that have been implemented since 2010.

At the outset of the 1989-2013 period the main problems of the region related to disparities and inequalities between the region's areas (rural and urban), low per-capita income, low employment rates in high added-value sectors, a low-skilled workforce, strong signs of deindustrialisation, inadequate infrastructure for industrial development, small size of enterprises, lack of basic services (e.g. basic infrastructure), absence of entrepreneurial culture and innovation, lack of motorway and basic infrastructure, reduced intra- and inter-regional connectivity, lack of railway and airport systems, insufficient water supply and sewerage networks, lack of solid waste management infrastructure and significant shortcomings in school and health infrastructure. Although significant changes have occurred throughout the period in relation to higher levels of intra-regional mobility and basic services infrastructure, the improvement of human capital qualification and the start-up of specific sectors such as tourism, the region still has a combination of demographic, geographic and economic problems which have been intensified with the financial and fiscal crisis of the last five years.

Dytiki Ellada has received substantial EU funding since the mid-1980s, when the Integrated Mediterranean Programmes were introduced. It has been and remains an Objective 1 region from 1989 until 2013. Throughout the 1989-2013 period, there have been six recurrent themes (relative to ERDF - Cohesion Fund) in the region's strategy: connectivity, referring to improvements in accessibility (within the region and in relation to other regions and international connections) through the improvement of transport infrastructure; basic environmental infrastructure; basic social infrastructure; local development; productive investment (mainly funding for SMEs); and

enhancement of the cultural and natural resources associated with tourism. These themes progressively became fundamental components of an intervention policy which sought to 'unify the territory' internally, as well as connecting it to other regions and Europe.

Overall, total expenditure (national and EU) through all Structural Funds in the Dytiki Ellada region from 1989 until today exceeded €4.3 billion (in constant 2000 prices), showing a rising trend between each period. The main regional objectives from the outset of the period were essentially two-fold: the improvement of infrastructure as a tool for reducing internal and external socio-economic disparities; and the modernisation of the local economy. The design of the programmes had no clear intervention logic for achieving both of these objectives - the programme focused on infrastructure investment to improve accessibility, to build up the productive sector by supporting both SMEs and the business environment, to utilise the region's natural and cultural resources to attract more tourists, and also to improve basic services across the whole region. The latter was mainly intended to improve quality of life (social cohesion) and to develop new opportunities (economic cohesion). There was a consistency in pursuing these objectives throughout the 1990s and also to a significant extent in the 2000s, although emphasis slightly shifted in the last RDPs towards promoting innovation and developing SMEs.

Although most of the problems identified at the outset have remained the same over time, the programming process progressively became more sophisticated and so did the perspectives on solutions to problems that have developed over time affecting to a certain degree the mix of policy interventions. Thus, regional strategies have not changed in their orientation but have progressively incorporated a more integrated mix of policies in order to address the variety of regional needs identified. Regional programmes have evolved from having an absolute concentration on infrastructure and a strategy based mainly on transport and secondly on intra-regional cohesion, to addressing a wider set of needs and experimenting with a wider and integrated mix of policy interventions including more emphasis on competitiveness, entrepreneurship development, ICT and R&D.

It is of note that EU funding was also allocated to Dytiki Ellada from National (sectoral) Operational Programmes (NOPs). With the exception of the 1989-93 period, sources from NOPs were much higher than those from the ROP. However, coordination between national and regional authorities was not always successful, and the absence of a regional dimension in the sectoral programmes makes it difficult, if not impossible, to monitor NOPs effectively at regional level.

Dytiki Ellada made systematic efforts to take advantage of synergies between the Structural Funds over the first three programme periods (1989-06) by formulating and implementing multi-funded ROPs with distinct sub-programmes or priority axes corresponding to the interventions of different EU funds (ERDF, EAGGF and ESF). Nevertheless, integration of the ROPs' and NOPs' actions has proved a mixed experience as there were cases of miss-coordination between the regional and national competent authorities. Careful planning of interventions in agriculture avoided overlaps between the ROP and the NOPs but there was more difficulty in developing complementarities between the ROP and NOPs funded by ESF, because they largely financed similar interventions (such as training). The highest levels of synergies and complementarities were developed between ERDF and EAGGF, with Integrated Programmes for Rural Development (2000-06) being the most successful examples of synergies between the two EU funds. Reversion to mono-fund programming in the current period has seen a lessening of coherence.

Regarding the utility of ERDF programmes, a general conclusion drawn is that due to the scale and variety of the region's problems, subsequent prioritisation of need has led to interventions with impacts which vary between sectors and thematic fields. Throughout the entire period, ERDF interventions both at regional and national level served a specific objective: to encounter the problem of insufficient basic infrastructure. However, the picture that emerges indicates more beneficial effects for territorial and social cohesion than for the business environment. Infrastructure interventions improved internal accessibility, increasing living standards and social equality as shorter transit times between mountain communities and primary road links have resulted in improved social cohesion and community development.

It is of note that at the outset of the 1989-2013 period, the region was essentially two separate entities, the only link between the two parts being the ferry between Rion and Antirion. Nowadays the Rion-Antirion Bridge, a significant transport and technological landmark constructed in the mid-2000s with EU funding, connects its two halves (mainland and Peloponnisos).

The region's geographical position (as the 'west gate' of the country) is a key feature, the significance of which could have been further highlighted if the basic transport infrastructure had been completed (since only a part of it has been constructed with a significant contribution from ERDF). However, despite the central role of transport infrastructure over the entire period, both marginality and peripherality remain a problem in terms of external access to the region.

The ERDF contributed to the creation of a very important centre for research and technology (Patras Science Park). Achievements in the field of innovation have been the creation of substantial innovation potential and a high-level research workforce in the region, which has become the third most important innovation pole in the country, following Athens and Thessaloniki. However, although ERDF interventions were expected further strengthen collaboration between public research organisations and firms, this objective was never achieved.

In the field of environmental sustainability, infrastructure related to improved water supply and wastewater management has led to a significant improvement in the wellbeing of the local population and has also ensured compliance with EU environmental legislation. In addition, the environmental infrastructure co-financed by ERDF and CF has contributed to the preservation of the region's natural environment - potentially a very important source of wealth in the region. With regard to social cohesion, improvement of basic social services (education and health infrastructure) is a clear and direct effect of the ERDF assistance, given the absence of a domestic regional policy. In synergy with considerable achievements in the environmental sustainability field (water and wastewater infrastructure), the particular interventions have remarkably increased the share of population served by basic services throughout the 1989-2013 period, indirectly contributing to the improvement of living conditions.

Tourism development became one of the main alternatives for alleviating the serious problems caused by deindustrialisation in the core of the region, as well as Dytiki Ellada's overdependence on the primary sector. Although substantial resources were invested in agriculture, particularly over the 1994-99 and 2000-06 programme periods, tourism gradually gained more importance following an integrated approach which encompassed natural resources and cultural heritage interventions along with aid to enterprises. Given the region's starting point, progress made is of particular

significance in Ilia, which has gradually reduced the dependence of its economy on the primary sector.

In general, needs covered have related to the divergence between Dytiki Ellada and Greek national average rates in terms of infrastructure development, health and education. A further need was a significant upgrade of the internal road network and major improvements in the accessibility of rural and mountainous areas, thus contributing to the maintenance of the population in those areas. Additionally, there were significant improvements in environmental infrastructure that contributed to environmental protection, the reduction of primary sector dependence, the gradual structural adjustment of the economy through the development of tourism, and the creation of a very important research and technology centre. The growth of jobs in the areas of education, health and culture came as a result of infrastructure development financed by ERDF and had an important impact in increasing employment in the relevant sectors until the recent economic crisis.

The scale of the problems faced by the region has meant that the challenge of achieving considerable change was always likely to exceed the resources available. Nonetheless, the Dytiki Ellada has been transformed in some aspects, notably in social cohesion and improvements in quality of life, environmental sustainability and the endowment of basic transport infrastructure. However, considerable problems remain to be addressed, such as low levels of productivity and the underperforming private sector, characterised by low levels of entrepreneurship and innovation and high levels of unemployment. Some of these challenges have been exacerbated by recent developments since 2008, as the region has been hit hard by the economic crisis and subsequent austerity policies, illustrating its fragility despite improvements.

The experience of implementing interventions during the entire 1989-2013 period has provided useful lessons that apply both to the Dytiki Ellada region and the whole country. The first lesson concerns programme procedures and the required emphasis on better diagnosis of real needs and problems that cause lagging development. There is also a requirement for prioritising needs and concentrating resources in specific 'value-for-money' areas of intervention. It is also important to improve coordination between central and regional authorities in order to maximise synergies among funded interventions. The targeted spatial policies and the concentration of funding resources in selected areas on the basis of actual needs lead to a multiplier effect, as experienced through the implementation of Integrated Development Programmes for urban and rural areas during the 2000-06 CSF.

Regarding the project selection process the nature of the project selection criteria is also crucial. To date, more emphasis has been afforded to criteria related to the technical maturity of projects, while other aspects (such as necessity/feasibility or expected impacts) were ignored. Experience within the region has demonstrated that more focus should be placed on anticipated results, rather than on technical issues.

Finally, the economic scale of the interventions for transport and social infrastructure needs special attention. For major TEN-T projects, there were a number of problems that often led to the suspension of works, due to the low anticipated revenues from certain projects, as a result of the reduced traffic. In terms of social infrastructure, the operational cost of the infrastructure created should also be measured.

1. INTRODUCTION

The Dytiki Ellada region comprises the western and north-western parts of Peloponnisos and the western part of Central Greece. It covers an area of 11,350 square kilometres (8.6 percent of the area of Greece) and has a density of 60 inhabitants per km². It comprises the regional units (former prefectures) of Etoloakarnania, Achaia and Ilia. It does not constitute a natural, geographical or historical entity, since the units of Achaia and Ilia form a natural extension of Peloponnisos and are identified with it geographically, historically and culturally, while Etoloakarnania is an extension of Central Greece. At the outset of the 1989-2013 period, the region was essentially two separate entities, the only link between the two parts being the ferry between Rion and Antirion. Nowadays the Rion-Antirion Bridge (constructed in the mid-2000s), a significant transport and technological landmark, connects its two halves (mainland and Peloponnisos).

The region (Figure 1) borders Ionia Nisia to the west, Sterea Ellada to the east, Peloponnisos to the east and south and Ipiros to the north (all of them Objective 1 regions between 1989 and 2006).¹

¹ In the 2007-13 period, Sterea Ellada is eligible as a phasing-in region under the Regional Competitiveness and Employment Objective, while the rest remain Objective 1 regions.

Figure 1: Geophysical map of Dytiki Ellada



Figure 2: Administrative map of Dytiki Ellada



Dytiki Ellada's population is around 680,000 thousand (2011),² and its largest city, Patras (the capital) has 214,000 residents. It is the fourth largest region in Greece, with 6.75 percent of the total population. It is characterised by a very low population density (especially in the north) and a declining population, especially in the more rural areas. Moreover, with the exception of the capital city of Patras (the third largest city in Greece), Dytiki Ellada also lacks significant urban agglomerations that could support the concentration of high-productivity industrial and service sector activities.

² Usual resident population (Hellenic Statistical Authority, provisional data of 2011 population census). No data are available for the de facto population.

The region is characterised by a rich landscape, with a dominance of mountainous or semi-mountainous areas (71 percent of the surface area) and extensive water resources. There is an extended coastline - to the west is the Ionian Sea and to the north the Amvrakikos, Patras and Corinth Gulfs. It also has several protected biotopes, such as the Kotichi lagoon in the Ilia area and the coastal area of Messolongi.

Dytiki Ellada is one of the most dichotomised regions in Greece. The urbanised, high population density core has suffered from the problems of deindustrialisation and economic decline for years, while the periphery (predominantly agricultural and sparsely populated areas) has experienced more fundamental development problems, with limited economic and population dynamism and a weak industrial and infrastructure base. Recent years have seen significant improvements in transport infrastructure and connectivity, although the wider social, economic and demographic problems associated with the region in past decades largely persist today - and have been intensified by the financial and fiscal crisis that hit the country in the last five years.

Throughout the entire period, the economy of the region (as in Greece more generally) is characterised by the rapid shrinkage of the primary sector, the decline of the secondary sector - especially manufacturing - and the significant expansion of the tertiary sector. These changes are observed both in terms of employment and gross value-added (GVA).

The Dytiki Ellada region has benefited from EU support for regional development since the 1980s, with the use of EU funding through the introduction of the Dytiki Ellada and Peloponnisos Integrated Mediterranean Programme (IMP) in 1986. Although this programme ran until 1994, it is not considered at all in this report due to a lack of data.

The decade of 1989-99 is considered to have been a period of continuity in the implementation of EU Cohesion policy. The region was operating as a 'programming unit' and had the responsibility for ROP monitoring, whilst national authorities were the decision-making centre. Actually, the specification of national policies at regional level was implemented through the Regional Operational Programme and was fully integrated into it.

The 1989-1993 period focused on the improvement of basic infrastructure in the region, with the majority of interventions being implemented through the ROP. Emphasis was put on the implementation of small-scale interventions related to roads, water and sewerage networks and educational infrastructure in order to address the needs identified in the late 1980s, while major projects (i.e. the construction of water supply and sewerage networks of Patras) either began at the end of the programme period, or had only completed their preparatory phase (Rion-Antirion Bridge, Patras Science Park).

In the 1994-99 period, the development goal of the Dytiki Ellada region was clarified for the first time, aiming to highlight the region as the country's gateway to Western Europe, due to the war in Yugoslavia, through the utilisation of Patras port and the promotion of major TEN-T projects. Difficulties in the implementation of major projects led to the funding of interventions which related mainly to improving quality of life, while the solution of problems linked to the promotion of a regulatory framework for the provision of EU-funded aid to SMEs finally made them accessible.

The 2000-06 programme period was characterised by the completion of a number of major projects and the failure to complete two very important ones related to the completion of the road and railway axis between Corinth and Patras (segment of PATHE axis). There was no change the basic objectives governing regional development planning. For the first time, the targeting of interventions relating to territorial cohesion was attempted, and integrated interventions in both mountainous and disadvantaged areas and urban centres were promoted. The usual practice of gradual movement from major interventions to smaller ones was also observed in this period, but for the first time an increase of SME funding was registered, although the relevant interventions lacked specific targeting (sectoral/territorial).

Finally, the 2007-13 ROP has been characterised by the relinquishment of promotion of the region as the gateway to Western Greece as a development objective. In line with the requirements of the Structural Funds regulations, it focuses on strengthening competitiveness by enhancing innovation, promoting the use of ICT, connecting research & technology with the firms and providing additional support to SMEs.

The remainder of this report is divided into six main chapters and seven annexes. Chapter 2 describes the evolution of the regional problem and needs from the 1980s to date across eight thematic axes. Chapter 3 comprises three sections: it begins with an analysis of both the explicit and implicit strategies and their evolution, then assesses the relevance of the programmes to regional needs, and lastly discusses relevant implementation factors that influenced programme strategies. An assessment of intended and actual financial (expenditure) allocations is provided in Chapter 4, considering whether the financial allocation reflects the strategies outlined in the programme documents. Chapter 5 reviews the achievements by programme period and by thematic axis, bringing together evidence gathered during fieldwork and other data sources, contrasting and triangulating the related findings. Chapter 6 is structured in three parts, with assessments of the effectiveness of ERDF programmes, how the programmes responded to the broader regional needs and problems (which may have differed from those explicitly stated in the programmes, with reference to the utility of ERDF), and the main good and bad practices that determined the success and failure of the programmes during the period under analysis. Chapter 7 brings together the main findings and conclusions of the study in terms of relevance, effectiveness, and utility, as well as offering lessons learnt regarding the improvement of programme design, implementation, results-based management and achievements for 2014-2020.

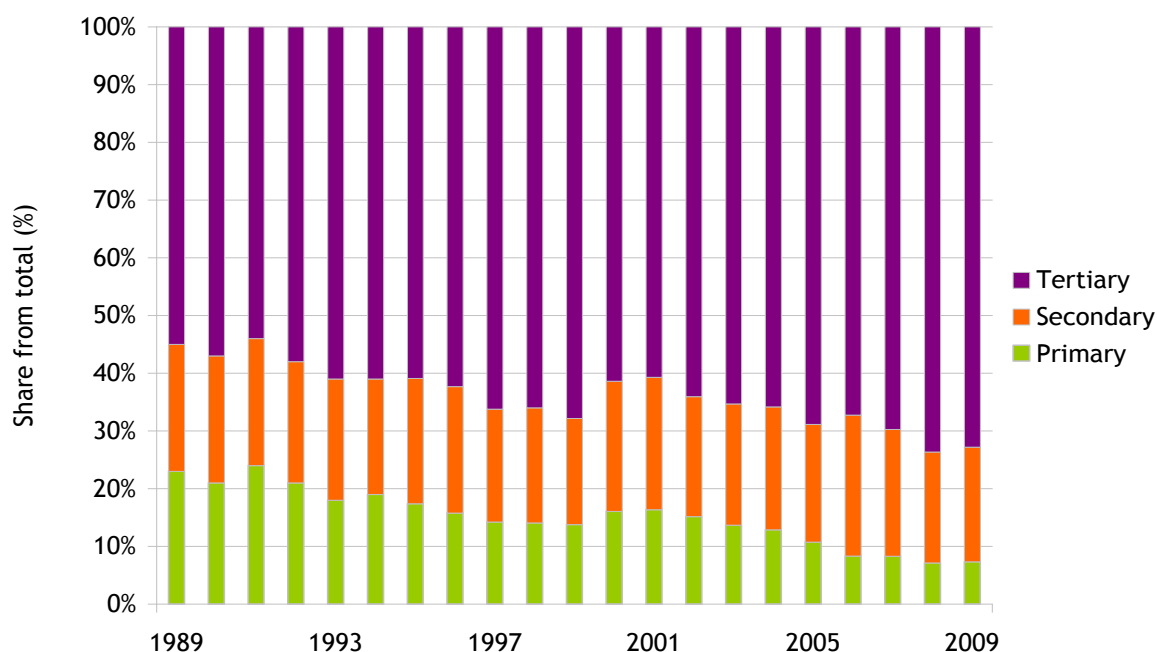
The analysis has been based on expert review of programme documentation, other studies of change in the region, and interviews with key actors. With regard to the primary sources, there was a high level of cooperation from the regional actors, with 27 being interviewed (out of a total fieldwork interview complement of 48). However, several were unable to present the level of detail required, and very few actors were able to provide information about the 1989-93 period. The findings were validated at a workshop held in Patras on 8 October 2012 and attended by 50 people representing the four programme periods, including the regional authorities and the private sector. An online survey was undertaken to complement fieldwork and desk research, and enhance triangulation. This questionnaire was directed at 265 recipients, comprising the interviewees, plus representatives from local authorities, firms, regional and local socio-economic partners and interest groups. The questionnaire returned an overall response rate of 23.4 percent and a completion rate of 11.3 percent. The questions and a summary of responses are presented in Annex VII.

With regard to the secondary sources, a full list of documents consulted is contained in Annex V. Three main challenges arose. First, there was little availability of programme documentation for the 1989-93 period, the only exceptions being an ex-post evaluation and the ROP final report. Second, there were significant limitations with respect to the National Operational Programmes. These are sectoral (thematic) programmes, therefore it was not possible to establish the initial allocation of resources to Dytiki Ellada as those programmes do not have a regional component. Third, there is an absence of ex post evaluation documents at regional level (with the exception of the 1989-93 period); in general, due to the lack of an evaluation culture in Greece, evaluations were always limited to those which were mandatory (ex ante, ongoing/mid-term). Achievements are described in terms of physical (output and result) indicators in Final Implementation Reports (FIRs) and evaluation documents. However, FIRs tend mainly to analyse implementation, institutional and process changes, whilst strategies and achievements are assessed in the evaluation documents at a specific time period. All the figures in this report are in Euros in constant 2000 prices.

2. REGIONAL CONTEXT AND ANALYSIS OF NEEDS

Dytiki Ellada is one of the least developed regions of Greece. In the early 1980s, the region's economy was mainly based on low productivity agricultural activities (almost 30 percent of the regional GDP) and manufacturing (25 percent). Between 1980 and 1995, its share of national GDP constantly fluctuated around 5.7-5.8 percent, demonstrating that the regional economy was keeping pace with that of the country. Since 1995, the region has slowly diverged from the national average due to lower growth rates. In 2000, the region's share of national GDP fell to 5.2 percent, decreasing further to 5.0 percent in 2005 and 4.6 percent in 2009. This is the result of Dytiki-Ellada's underperformance in a number of critical indicators in relation to the national average, such as low employment productivity, low activity rates, high dependency on agricultural activities, limited tourism development, and low labour force educational level. Moreover, the modifications of the Common Agricultural Policy (CAP) in 2004 had strong negative impacts on the tobacco producers of the Etoloakarnania regional unit, as did the devastating fires in Ilia unity in 2007 which reinforced immigration trends to urban areas. The same trend is reflected in the regional GDP per capita (in terms of Purchasing Power Standard - PPS) which in 1995 represented 83 percent of the Greek average, but it gradually reduced to 78 percent in 2000, 76.5 percent in 2005 and finally reached 70.1 percent in 2009. Moreover, whilst in 1995 regional GDP per capita was 69.4 percent of the EU27 average, it reached 73.4 percent in 2003, and lately (2009) shrunk to 66.0 percent.

Figure 3: Structure of the Dytiki Ellada economy, shares of gross value-added

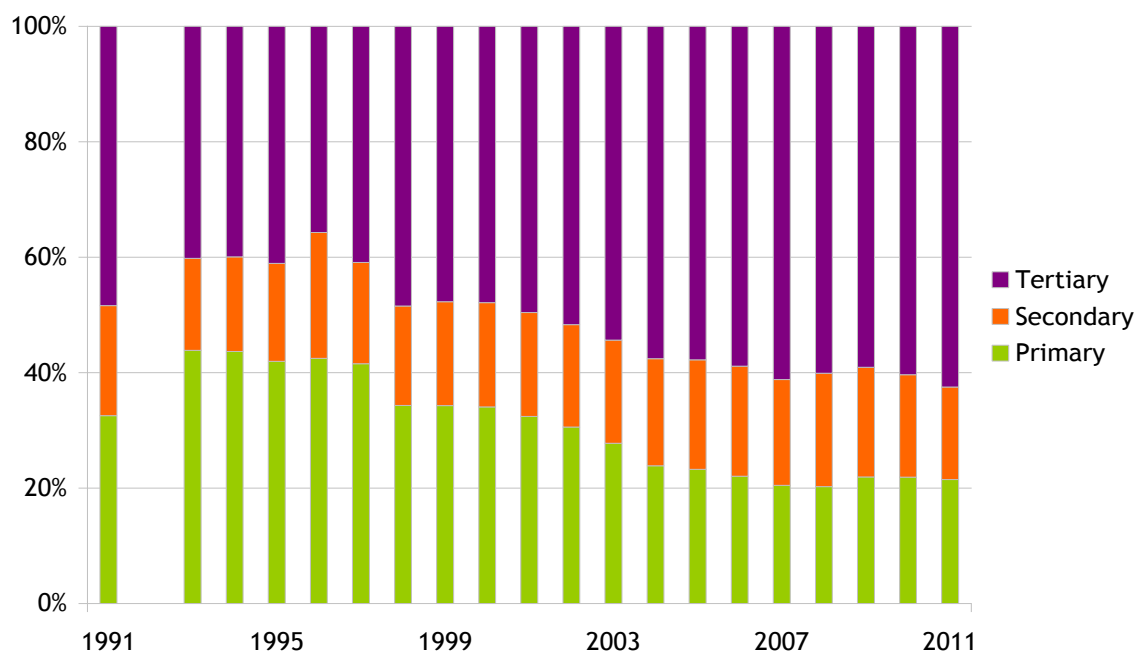


Source: Project team analysis based on Regional Accounts data by the Hellenic Statistical Authority and Eurostat.

Note: Until 1994, the Regional Accounts used the traditional OECD methodology for national accounts (1958) where GDP was calculated for 12 economic sectors. Since 1995, the Regional Accounts have implemented the new European System of National and Regional Accounts (ESA 95) calculating the GVA for 17 and later (in 2005)

for 21 economic sectors. So far, there has been no official publication or announcement of any smooth time-series variable to match previously measured data with recent data.

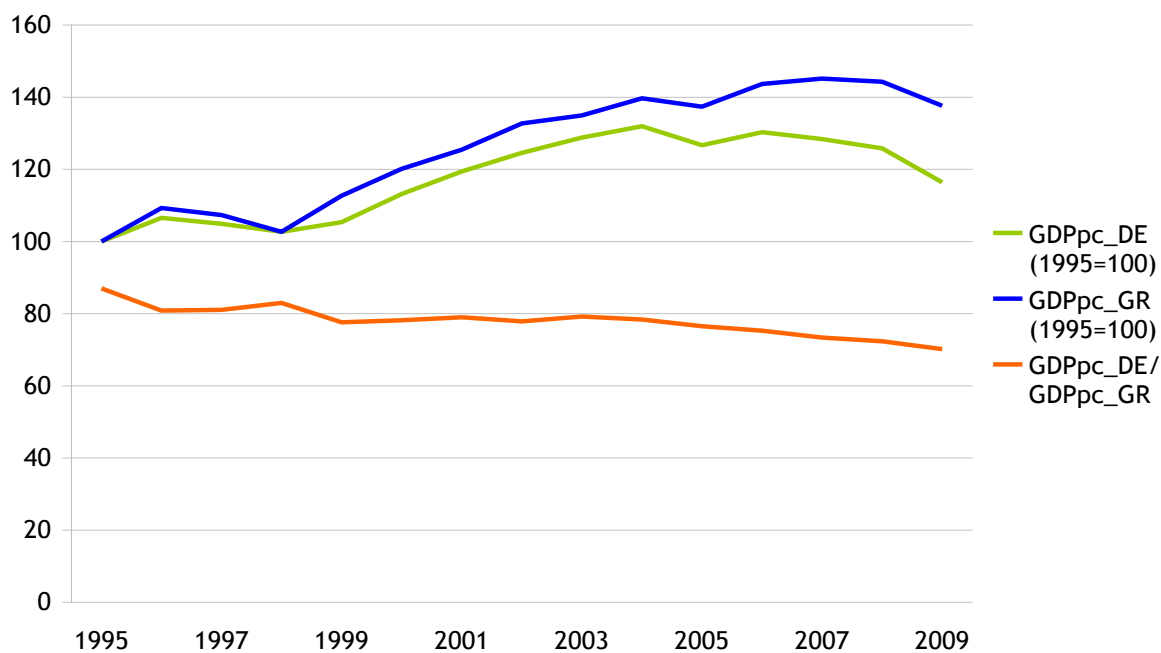
Figure 4: Structure of Dytiki Ellada employment, shares per economic activity sector



Source: Project team analysis based on Hellenic Statistical Authority data.

Note: Data for 1991 comes from the General Population Census. From 1993 onwards, data are based on Labour Force Surveys (Hellenic Statistical Authority). In 1998, there was a major change in the methodology of the Labour Force Survey due to the fact that the survey changed from annual to quarterly. So, from 1998 onwards the data present the annual average calculated from the quarterly data.

Figure 5: GDP per capita (in PPS) and comparison to national performance



Source: Project team analysis based on Eurostat data.

The regional economy was traditionally based on agriculture and industry. Since 1989, the contribution of the primary sector to the total regional GVA has decreased by 16 percentage points, and reached 7.3 percent in 2009, which is less than one-third of the initial share in 1989. Compared to the national average, the region follows the same pattern at a slower pace, and for this reason its share of GVA in the primary sector is more than twice the Greek average. As in many traditional agricultural regions, the share of employment in the primary sector is much higher than its share of GVA, because of the higher productivity of the industrial and tertiary sectors.

In the same period, although the region experienced serious deindustrialisation and economic decline, the secondary sector reduced its contribution to total GVA by only 2 percentage points, reaching 19.9 percent in 2009, mainly due to the fact that two industrial business parks were established within Achaia. The size of the regional sector's share has been consistently slightly higher than the national average. The secondary sector's GVA increased between 2000 and 2004, due mainly to the construction of major infrastructure projects. On the other hand, the main shift has been towards the service sector, the contribution of which has been increased by 18 percentage points, reaching 72.8 percent in 2009. This performance allowed the region to converge with the national average during the past decade. The service sector accounts for a comparatively high proportion of both GDP and employment.

Labour market indicators show that Dytiki Ellada exhibits many of the same problems as does Greece, albeit often to a higher degree, and consequently its scores on most of these indicators are less favourable than the Greek and the EU averages.

With regard to levels of education, the share of persons with higher secondary education attainment rose slightly from 28 percent in 2000 to 34 percent in 2011, along with the share of persons with tertiary education attainment which also rose from 12 percent to 21 percent during the same period. However, Dytiki Ellada continues to underperform because the share of inhabitants with lower secondary education attainment (in 2011) was 22 percent higher than the national average, 50 percent higher than the EU15 average, and 68 percent higher than the EU27 average. The share of the inhabitants with tertiary education attainment in Dytiki Ellada converged over the 2000-2011 period, both with the national average (from 73 percent to 83 percent) and the EU averages (from 64 percent to 78 percent for the EU27, and from 58 percent to 74 percent for the EU15).

Significant changes have occurred throughout the period in relation to higher levels of intra-regional mobility and basic services infrastructure (including environmental infrastructure), the improvement of human capital (with respect to qualification levels), start-up rates in specific sectors such as tourism, the development of the service sector (mainly non-tradable) and improvements in quality of life.

Nevertheless, Dytiki-Ellada still has a combination of demographic, geographic and economic problems, including low population density and depopulation of rural areas, poor international and functional accessibility, low activity rates, persistent unemployment and high inactivity, low levels of productivity and capital investment, lack of economic dynamism and extroversion of the regional economy, deindustrialisation and a low female participation rate, low technology-content of the regional economy, limited links between research, the academic community and the local economy, and intensified pressures resulting from international immigration in recent years.

This chapter reviews the development needs of Dytiki Ellada. It draws on an analysis of relevant indicators, secondary sources, programme documents and the ex-ante evaluations available for each programme period. The analysis is structured along thematic axes, although many issues are cross-cutting, applying to more than one thematic axis.

Enterprise - As elsewhere in Greece, the economy of the Dytiki Ellada is dominated by small and medium-sized enterprises (including micro- and family businesses). With most parts of the region specialising in small-scale farming and non-tradable services (e.g., retail trade), and the tourism industry lacking a concentration of large employers (e.g. resort hotels), average firm sizes (and the number of large and very large firms) are particularly small, even by Greek standards. Firm deaths continue to be a problem, especially in Achaia, in the current climate of nationwide recession. As with small businesses, self-employment levels, amounting to 40 percent in 2011, are also substantially high in the region (and in Greece more generally), with a figure that outstrips the national average (31 percent) and the EU27 and EU15 average (15 percent in both cases). The evolution of self-employment, however, remained fairly stable (about 40 percent) throughout the 1996-2004 period. Despite these figures, the level of entrepreneurship in the region is considered low, especially as firm growth is considered to be particularly low. Employment productivity throughout the economic sectors increased by 26.6 percent between 1995 and 2009, reaching €26.196 per employee in 2009 (in constant 2000 prices). However, this figure is just below the Greek average of 74 percent in 2009, while in 1995 it was 82 percent. This development can be attributed to the relatively large primary sector (which has low productivity - about one-third of the total average productivity), the stagnation of the tertiary sector productivity (which is the best-performing and fastest growing at national level) and the lower performance of the secondary sector productivity, compared to the national average.

Labour market - The Dytiki Ellada labour market performance is poor, including relatively low activity rates, especially for women and high and persistent unemployment rates. Despite its much lower level of incomes, Dytiki Ellada has unemployment rates that are comparable to those found nationally. In fact, the unemployment performance of the region had until the turn of the century been superior to that of the national average. Unemployment, however, has increased significantly more recently and has risen sharply as a consequence of the deterioration of Greece's fiscal situation and the austerity measures that have been implemented since 2010. Since 2005 unemployment rates in Dytiki Ellada have presented major divergence from the EU15 and EU27 averages, although in the 1990s they were at the same levels with both the European averages.

Most of the unemployed people in Dytiki Ellada have been over 12 months without work. The long-term unemployment rate in the region was 61 percent in 1991 (share of the total unemployed persons), decreased to 51 percent in 2009 and rose up again to 53 percent in 2011. During all these years, the share of the long-term unemployed persons was higher than the national average (most of the times by 10 percentage points). Female unemployment has persistently been over twice as high as male unemployment. Furthermore, the region (like Greece, more generally) has significant problems with youth unemployment. In 1993, youth unemployment (age group 15-24) was 30 percent, and by 2011 it hit 44.7 percent, which is very close to the national average (the youth unemployment rate dropped significantly in the first half of the 2000s but rose again in the second part of the decade). Youth unemployment has been higher for women, and the respective rate reached 62 percent in 2011, up from 43 percent in 1993.

The activity rate did not show any significant change during the 1993-2011 period, remaining at around 49-51 percent. The activity rate in Dytiki Ellada region was nearly 50 percent in 1993 and the region was classified in 4th position among the Greek regions. However, in 2009 and 2011 the region's position fell to 11th and 10th position respectively, being lower than the national and the EU average. As per the national trend in Greece, low employment participation rates are mainly attributable to the very low female labour force participation, which in Dytiki Ellada has remained stubbornly below 40 percent for most of the period, is 10 percent lower than the national average, and 25 percent lower than the EU average. Female inactivity is, amongst other factors, largely associated with the existence of the agricultural sector in Ilia and Etoloakarnania.

Agricultural employment has declined rapidly (by 25 percent) since the mid-1990s, but remains well above the national average. On the other hand, the pace at which its share is shrinking is relatively higher at regional level, since the difference with the national average has been decreased by 18 percent.

Employment in secondary sector activities increased by 56 percent between 1993 and 2008, reaching 54,500 employees in 2008. Accordingly, the share of the sector's employment rose from 16 percent in 1993 to 19.6 percent in 2008, and then reduced to 16 percent again in 2011. The difference between this share and the national average has decreased since the turn of the century due to the rapid deindustrialisation of the whole country over the same period. The share of the regional employment in the secondary sector is also relatively low when compared to the EU27 and EU15 averages (25 percent and 23 percent respectively).

Finally, tertiary sector employment grew rapidly (the number of employed persons nearly doubled) from 1993 (when the sector employed 87,400 persons) until recently, reaching 163,800 employed persons in 2011. During the 1993-2011 period, the regional tertiary employment share managed to get 15 percent closer to the national level (which is 70 percent in 2011). The share of the employment in tertiary sector activities in Dytiki Ellada remains lower when compared to the EU27 and EU15 averages (70 percent and 74 percent respectively).

Deindustrialisation, low economic dynamism and a low educational and skill base of the workforce (combined with high foreign immigration in parts of the region) contribute to the poor labour market performance.

Structural adjustment/sectoral development - Agriculture is a key pillar of the Dytiki Ellada economy. At the outset of the 1989-2013 period, the productive structure of the sector was characterised by the small size of farming enterprises, the fragmentation and low productivity of land, and insufficient irrigation of farmland. Despite investment and reorganisation in recent decades, there is still a need for further modernisation of agriculture. In the past, the main agricultural products (tobacco, olives, tomatoes, potatoes, vines, fodder crops, melons and fresh vegetables) were largely consumed locally, and market growth was impeded both by a lack of integration of the agri-food supply chain - which was not capable of coordinating farm activities with their industrial and commercial counterparts - and by the inadequacies of the rural road system. From the start of the 1990s, there was an increase in production and added value that lasted until 1999, resulting from a change in farmers' organisations and the structures of their associations, particularly as regards commercialisation activity.

In the mid-1980s, the region had a very strong industrial base. The manufacturing backbone was made up by the textiles and food industry. The region - Achaia in particular - suffered large-scale deindustrialisation during the late 1980s; a number of major productive units shut down in successive order, most of them in the paper industry, wood, construction, clothing and textiles, and food industry, while industrial decline continued in the 1990s. As a result, the degree of sectoral specialisation in the region, which in the 1980s and 1990s was particularly high (twice as high as the national rate), declined and sharply converged with national levels in the late 2000s - while per capita incomes diverged. Manufacturing employment also declined over the same period, especially in chemicals, transport equipment and textiles, as did energy production. The number of manufacturing enterprises employing more than 10 persons decreased by 42 percent between 1993 and 2007, with a relevant reduction of 24 percent in average annual employment. Despite the serious deindustrialisation problems and economic decline, the secondary sector's contribution to regional GVA reduced by only 2 percentage points to 19.9 percent, mainly due to the fact that two industrial business parks were established within Achaia. The size of the regional sector's share is constantly slightly higher than the national average. The small size of enterprises, the lack of basic services (e.g. basic infrastructure) and the absence of entrepreneurial culture and innovation were identified as the main problems of the sector at the outset of the period and continued over time.

The tertiary sector expanded throughout the period under study, allowing the region to converge with the national average over the past decade. The tertiary sector became more dynamic after 1999, becoming the main source of growth as industry faltered. The service sector accounts for a comparatively high proportion of both GDP and employment.

At the outset of the 1989-2013 period, tourism services suffered from low accommodation capacity and low quality, comprising mainly hotels of medium-to-low quality and small size, unevenly located across the territory. The sector was characterised by a need for modernisation in order to make the tourism offer more attractive (through investment in accommodation capacity and enhancement of environmental and cultural resources). Although regional tourism indicators remain below the national average (occupancy rates, number of arrivals and nights spent), between 2003 and 2010 there was a significant increase (of 58 percent) in the number of 5-star and 4-star hotel beds, especially in the Ilia area. In particular, nights spent in tourist accommodation in Dytiki Ellada increased from 1.5 million in 1994 to 1.6 million in 2000, and to 2.0 million in 2007. In 2010 they fell back to 1.8 million. However, the share of the region's nights spent in tourist accommodation as a percentage of the country's total remained at 2.6-2.8 percent. During the 2004-2010 period the increase in nights spent in tourist accommodation in Dytiki Ellada reached 22 percent, following the country's trend (an increase of 27 percent), and outperforming the EU27's increase of a more conservative 9 percent.

Infrastructure - Infrastructure deficits have always been one of Dytiki Ellada's main problems. At the outset of the 1989-2013 period, the region was essentially cut in two, the only link between its two parts being the ferry between Rion and Antirion. The problematic connection resulted in the geographic isolation of Dytiki Ellada from the country's main development axis (Patras-Athens-Thessaloniki - Evzonoi) and this was, for decades, one of the main factors hampering its development. Furthermore, Dytiki Ellada suffered from transport infrastructure quality problems and large disparities in the availability of such infrastructure within the region.

The region as a whole has very poor international connectivity. Only the southern part of Dytiki Ellada is connected to the national motorway system (the PATHE axis) and the Rion-Antirion Bridge. In addition, the region does not have a rail network and has poor aviation infrastructure. Three small airports operate outside the main cities, but only one has international (charter) flights. International connections are mainly through the port of Patras, which carries some 50 percent of the international passenger sea travel of Greece (but is less important in terms of freight transportation).

Despite the fact that a number of large transport infrastructure projects have been devised for the region since the early 2000s, most of them remain today incomplete. It is doubtful as to whether the completion of the region's main road network, which is part of the national road network, is feasible by the end of the current programme period due to the bottlenecks that have emerged with the concession contracts. Therefore, despite the central role of transport infrastructure over the entire period, both marginality and peripherality remain a problem in terms of external access to the region.

Innovation - Although innovation was not identified as a need in 1989, Dytiki Ellada has over time become one of the most important nodes of the Greek National Innovation System, as a plethora of public research organisations are situated in the region. Over the 1989-2008 period, the region accounted for an average of 6.4 percent of national GERD. More importantly, regional GERD accounted for 0.8 percent of regional GDP, a share which is above the national average (0.6 percent). However, there is limited demand from regional firms for the services of these institutions, and scarce formal technology transfer mechanisms that could enable enterprises to exploit research results and knowledge produced in higher educational institutes and research centres. Furthermore, the patenting activities of firms are relatively low. In contrast, the higher education sector accounts for approximately two thirds (65.4 percent) of regional GERD. In addition, between 2000 and 2011, employment in the sector (Human Resources in Science and Technology) grew from 17.1 percent to 27.9 percent respectively. In general, Dytiki Ellada outperforms the national average, only lagging behind the capital region of Attiki (and perhaps Crete and Thessaloniki), but its innovation capacity remains low by European standards.

Environmental sustainability- Although the variety and wealth of the region's natural environment has always been considered a potential comparative advantage, especially for tourism development, environmental infrastructure deficits have always been one of Dytiki Ellada's main problems.

The region faced serious problems in the launch of the programme periods (1989) due to the complete lack of infrastructure for solid and liquid waste management, whilst water supply problems were also important both in terms of adequacy and quality. The city of Patras was an indicative example of this, in which water was not potable due to salinity problems. Moreover, there were risks of water pollution from domestic sewage or pesticides in cases where the water intakes took place in farmland or residential areas. In particular, at the outset of the 1989-2013 period, the percentage of population connected to water supply networks was 80 percent, while the proportion of inhabitants connected to wastewater treatment systems and to sewerage systems was 3 percent and 30 percent respectively.

The environmental attractiveness of the region still suffers from insufficient investment to improve its value for tourism.

Social inclusion - Overall, the region is rich in cultural heritage. This presented an opportunity for enhancement, although there was a need for conservation and protection. With regard to educational infrastructure, in the late 1980s there were significant shortcomings in school infrastructure (all levels combined), particularly in urban centres, and the region underperformed in relation to the national average. School infrastructure was poor in terms of classrooms operated and supplementary facilities such as school libraries and laboratories, and computer centres. Due to the lack of modern school infrastructure, a double shift in secondary schools was the norm, especially in the urban areas in 1989. The upgrading of infrastructure in tertiary education institutions (Universities and Technological Educational Institutes, TEI) was another identified need. With regard to health infrastructure, although the region has constantly underperformed compared to the Greek and EU average, the level of hospital infrastructure (hospital beds per 100,000 inhabitants) increased from 250 beds in 1989 to 312 beds in 2009.

Recently, the region has faced serious social problems resulting from illegal migration. In particular, the main urban centre of the region (Patras) has attracted high volumes of predominantly illegal migrants (from Africa and Asia) as its port is a gateway to Western Europe via Italy. The concentration of illegal immigrants in parts of the Patras city has intensified social pressures, resulting in a significant increase in crime rates and the fear of crime. Deindustrialisation and rising unemployment have also added to intensifying social problems.

Spatial distribution of economic activity- The region exhibits strong signs of duality, with the regional unit of Achaia hosting a large conurbation (Patras) and most of the region's industrial activity. The rest of the region, especially in mainland Greece, is sparsely populated and agricultural. This duality is also reflected in sectoral specialisations. Two of the regional units (in the north and south) have extremely high shares of employment in agriculture (over 50 percent in the 1990s and just short of 40 percent today), while Achaia (Patras) has a share over three times lower. Importantly, Achaia is disproportionately represented in industry, albeit at a fast-declining pace (from 40 percent in the 1980s to less than 20 percent today), while the relative importance of industry in other regions is following the opposite trend. For example, in the mainland region Etoloakarnania, it has risen from 5 percent to 14 percent over the last 20 years. The share of services is also rather disparate, with the value in the more urbanised Achaia over 20 percentage points higher than in the more rural Etoloakarnania. These disparities also extend to other aspects, such as accessibility and levels of human capital, productivity and incomes, signifying the existence of spatial imbalances in the region.

Overview of need - The main problems and needs of the region up to 1989 are summarised in Box 1. These thematic axes form the analytical lens for the assessment in the remainder of the report. To varying degrees, the issues listed below have been the focus of the ERDF and ESF programmes - the subject of the next chapter.

Box 1: Summary of the main problematic issues in 1989

Thematic axis: Spatial distribution of economic activity within the region

1. **Geographic:** Disparities and inequalities between the region's areas (rural and urban)

Thematic axis: Labour market

2. **Growth and employment:** low per-capita income, low employment rates in high added-value sectors, low-skilled workforce, and emigration.

Thematic axis: Social inclusion - Community development

3. **Social inclusion:** Significant shortcomings in school infrastructure (all levels combined), mainly in urban areas, and health infrastructure

Thematic axis: Structural adjustment/Sectoral development

Production structure - agriculture: small size of farming enterprises, fragmentation and low productivity of land, insufficient irrigation of farmland.

4. **Production structure - industry:** strong signs of deindustrialisation, inadequate infrastructure for industrial development.
5. **Production structure - tourism and service sector:** low accommodation capacity, lack of qualified human capital.

Thematic axes: Enterprise, Innovation

6. **Production structure - craft and industry sectors:** small size of enterprises, lack of basic services (e.g. basic infrastructure), absence of entrepreneurial culture and innovation.

Thematic axis: Infrastructure

7. **Infrastructure and accessibility:** lack of motorway and basic infrastructure, reduced intra- and inter-regional connectivity, lack of railway and airport systems.

Thematic axis: Environmental sustainability

8. Insufficient water supply and sewerage networks, lack of solid waste management infrastructure.

3. PROGRAMME EVOLUTION AND RELEVANCE

3.1 Explicit and implicit strategies and their evolution

The Dytiki Ellada region has been eligible for ERDF funding throughout the period from 1989 to date as an Objective 1 region. The evolution of programme strategies over the last 20 years has followed a fairly consistent line, with a clear focus on infrastructure as a means of addressing economic decline in the most urbanised core of the region, and the more fundamental problems of development characterising the periphery. The earliest programmes had a greater focus on infrastructure, with the 1989-93 programme being almost dominated by infrastructure projects. The relative emphasis on infrastructure has declined over time as a more integrative approach to regional development has been developed over programme periods, and a multi-sectoral mix of policies and measures has been successively included in the programmes.

Over the past decades, in the absence of national requirements for multiannual programming and regional strategic planning, the regional strategy for Dytiki Ellada has been drawn exclusively from the framework of Cohesion policy and set out in the official programme documents for each programme period. Thus, the basic components of the regional strategy were set in the Community Support Frameworks (CSFs) over the 1989-1999 programme periods, and in the 2007-13 National Strategic Reference Framework (NSRF) and specified in the respective Regional Operational Programmes. However, the implementation of the regional strategy did not depend exclusively on the ROPs; considerable resources were also allocated to the region from the National Operational Programmes (NOPs) which operated in parallel with the ROPs.

In all four programme periods examined in this case study, the development vision for the region consisted of four basic elements: (i) transport infrastructure to improve accessibility/ connectivity; (ii) improvement of the quality of life and environmental protection; (iii) development of tourism and culture-related infrastructure; and (iv) support for the regional productive base. These main objectives in the early programme periods were vague and generic, but became more specific over time.

Although the identification of regional needs and problems was fairly well constructed (with the exception of the 1989-93 strategy), implementation was not always in line with the initial design due to delays and programme revisions replacing the most difficult projects with other mainstream projects.

Table 1: Priorities for the Dytiki Ellada regional programmes 1989-2013

Priorities	1989-93	1994-99	2000-06	2007-13
Connectivity	Sub-Programme 1: 'Infrastructure Improvement' Sub-Programme 4: 'Local Self-Government Development Programme'	Sub-Programme 1: Dytiki Ellada - Gateway to Europe Sub-Programme 2: Improving Quality of Life - Environment Sub-Programme 6: Strengthening Local Government structures	Priority Axis 1: Reinforcement and development of the region's position as the country's Western Gateway	- Improvement and completion of transport networks and transport services - Reducing transportation cost for people and goods (Priority Axis 1)
Productive investment Economic infrastructure	- Sub-Programme 1.2: 'Supporting Productive Sectors'	Sub-Programme 5: Upgrading and revitalising industrial areas	Priority Axis 3: Restructuring and extension of the industrial base of the region and promotion of Innovation Priority Axis 2: Cultural and Tourism development - use of the Olympic Games of 2004 Priority Axis 6: Sustainable Rural Development	- Establishing new and supporting existing firms - Support new and existing firms (Priority Axis 4)
Environment, tourism, culture	Sub-Programme 2.1: 'Infrastructure Improvement' Sub-Programme 4: 'Local Self-Government Development Programme'	Sub-Programme 2: Improving Quality of Life - Environment Sub-Programme 6: Strengthening Local Government structures	Priority Axis 2: Cultural and Tourism development - use of the Olympic Games of 2004	- Improving Quality of Life - Environmental Protection - Protection, promotion and enhancement of cultural heritage. -Promotion of Tourism (Priority Axis 7)
Human resources - Social inclusion	Sub-Programme 3: ESF	Sub-Programme 1: Dytiki Ellada - Gateway to Europe Sub-Programme 3: Rural Development Sub-Programme 4: Human Resources Sub-Programme 9: Local Employment Pact of Achaia Prefecture	Priority Axis 5: Promotion of Employment and Human Resources Specialisation	- Reduce isolation and social racism - Enhancing employment -Reducing unemployment - Gender equality (Priority Axis 7)
Urban development			Priority Axis 4: Strengthening Urban Infrastructure - Improving Quality of Life	Improving Quality of Life (Priority Axis 7)
Development of the countryside	Sub-Programme 2: EAGGF	Sub-Programme 3: Rural Development Sub-Programme 6: Strengthening Local Government structures	Priority Axis 6: Sustainable Rural Development	Improving Quality of Life (Priority Axis 7)
Innovation - ICT-R&D			Priority Axis 3: Restructuring and extension of the industrial base of the Region and promotion of Innovation	- Strengthening applied research and technology - Improving competitiveness through ICT - Improving Quality of Life / Improve everyday life through ICT - Improving the productivity of the region through the use of ICT (Priority Axis 4)
Technical assistance	Sub-Programme 5: Implementation	Sub-Programme 8: Implementation	Priority Axis 7: Technical Assistance	Priority Axis 10: Technical Assistance

3.1.1 The introduction of programming: 1989-93

Dytiki Ellada received initial Cohesion policy funding through the 1st Community Support Framework for Greece (1st CSF 1989-93), which consisted of 14 National Operational Programmes (NOPs) and 13 Regional Operational Programmes (ROPs). The following paragraphs provide a brief reference to the planning approach in that period in Greece, in order to set the context in which the regional strategy for Dytiki Ellada was developed.

Over the decade covering the first (1989-93) and second (1994-99) CSFs, domestic strategic development priorities were included in the respective Regional Development Plans, which constituted the wider programming framework on the basis of which the CSFs were prepared. Since the launch of the first CSF in 1989, development programming procedures in Greece and, consequently domestic regional policy, have largely been driven by the Structural Funds, which have provided the policy framework for both national and regional economic development through the Community Support Frameworks (CSF I, II and III). Greece has therefore to a great extent adapted its domestic regional policy to Cohesion policy.

The 1st Regional Development Plan (RDP) for Greece (approved by the EU services as the 1st CSF) was centrally designed by the then Ministry of National Economy, since at the time the 13 Greek regions had just become operational as distinct ‘programme administrative’ units of the State with their own staff and competences.³ In this context, the programme document of the 1989-93 CSF set the priorities for the Dytiki Ellada region which were: sufficient infrastructure works in the urban and rural areas of the region; the creation and support of special industrial zones with sufficient infrastructure as well as a scientific technological park that would link local research and development with production; exploitation of local potential in sectors such as agriculture, fisheries, tourism and rural development; and improvement of the level of specialist knowledge of the region’s population. The objectives set in the CSF would be achieved via the implementation of the national measures of the NOPs and the Dytiki Ellada Regional Operational Programme (ROP 1989-93).

Regarding the analysis and interpretation of the regional strategy of the particular period, it met considerable limitations since the programme documents of the 1989-93 ROP were not at the disposal of the regional team. Thus, the official document of the 1989-93 CSF, the ROP ex post evaluation report and the ROP closure report are the only sources of information for this period.

The strategy of the CSF’s national component (articulated in 14 thematic NOPs and 3 major projects) was structured in five priority axes corresponding to specific policy areas such as infrastructure, rural development, competitiveness, tourism development and human resources. The priority axes of the CSF and the related NOPs are summarised in Table 2.

The contribution of the NOPs to the regional strategy of Dytiki Ellada mainly covered the development and improvement of infrastructure through actions such as preparatory studies for the Rion-Antirion Bridge; the improvement of telecommunication networks; the support of agricultural restructuring; the support of productive investments; and human resources development.

³ The legal framework for the creation of the 13 Greek regions was enacted in 1986 (Law no. 1622/1986), but it was not until 1997 that the regional level became a distinct decentralised administrative unit of the State, with its own staff and competences, and began to participate in the allocation of public investment funding (Ex Post Evaluation of Cohesion Policy Programmes 2000-06 Co-financed by ERDF, 2008).

Table 2: Contribution of NOPs to Dytiki Ellada - 1989-93

CSF 1989-93 PRIORITY AXES*	SECTORAL STRATEGY AFFECTING DYTIKI ELLADA*	SECTORAL/THEMATIC NOPs*
Improvement of the country's basic infrastructure	Transport: to improve road and rail infrastructure in order to reduce the disadvantage of distance and to facilitate the transport of merchandises.	O.P. "Major road axes" O.P. " Railways"
	Communications: improve the telecommunication networks.	O.P. "Telecommunications"
	Energy : Develop the national production and distribution of energy.	O.P. "Electricity"
	R&D: to develop R&D through infrastructure (research and technology centres), incentives to researchers and linking research to production	O.P. "R&D"
	Environment: to deal with environmental problems relating to urban areas, industrial zones, and touristic areas.	O.P. 'Environment'
Improving businesses' competitiveness	Aiding the development of the productive sector by improving the technical and economic environment of industrial and service enterprises (e.g. industrial zones, consulting services); creating specialised staff; and setting an effective state aid scheme.	O.P. "Competitiveness of industrial and service enterprises"
Balanced development of tourism	Exploiting the tourism potential of the country through an effective incentives scheme for small hotel business and vocational training	O.P. "Tourism development"
Human Resources	Responding to the need for vocational training and support to jobs that have been created due to the development and restructuring of the Greek economy.	O.P. "Improvement of training and education structures" O.P. "Multiaxial, multidisciplinary, and inter-regional training actions inter- connected with the other axes" O.P. "Banks and insurance" O.P. "Special measures for training and promoting employment".

*co-financed by ERDF and ESF.

The 1989-93 ROP was a regional sectoral programme, articulated in sub-programmes (equivalent to priorities) with funding from ERDF, ESF and EAGGF. It consisted of five sub-programmes (implemented under 35 measures), three of which corresponded to the three Structural Funds (though not as clearly as to have specific targets), one was financed under a local action plan

entitled ‘Special Development Programme for Local Authorities’ (EAPTA⁴), and the fifth concerned the implementation sub-programme. The basic features of the sub-programmes are summarised in Table 3.

Table 3: 1989-93 Dytiki Ellada ROP Sub-Programmes

SUB-PROGRAMME	TITLE	BUDGET (EUR million/ 2000 prices)	DESCRIPTION
IA	ERDF	107.17	Basic infrastructure (including urban infrastructure, transport infrastructure, and environmental Infrastructure)
IB		5.63	Support to productive sectors
II	ESF	23.50	Training of the unemployed in the primary and secondary sector aiming to improve the level of specialisation and to disseminate the use of new technologies
III	EAGGF-GUIDANCE	13.11	Support to the primary sector (e.g. small-scale irrigation networks, forestry, modernisation of agricultural methods, protection of the environment and natural resources, restoration of damage caused by natural disasters in 1988)
IV	‘Special Development Programme for Local Authorities’ (EAPTA)	25.18	Development of local potential
V	IMPLEMENTATION	1.12	Technical assistance

The ROP is the only clear statement of a regional strategy at the time. Compared to the CSF, it set a more explicit framework for regional development which, however, remained very broad and generic and not sufficiently prioritised, according to a number of the interviewees.

The overall strategy of the programme was developed on the basis of five general aims including; strengthening the regional economy; promoting the adjustment of the region; improving the social situation; upgrading the natural and human environment; and upgrading the cultural environment. There were also five operational objectives (referred to as ‘intermediate objectives’) that became evident in the official documents of the ROP, and provided a further specification of the programme’s wider aims, without, however, explicit targeting that would correspond to the particular measures. These objectives included: upgrading basic infrastructure, increasing regional employment, increasing regional revenue, improving competitiveness, improving wellbeing,; retaining local population, and implementing environmental and consumer protection.

As the general aims and operational objectives of the strategy did not actually correspond to specific targets and measures and hence to the sub-programmes, immediate objectives of the regional strategy were defined ex post, taking into account the physical outputs of the measures

⁴ The EAPTA programme included small-scale interventions, mainly local roads, sewerage and water supply networks, urban rehabilitation projects, etc. It was implemented by municipalities and prefectures.

implemented under the ROP. As such they included transport, environmental and business-related infrastructure, and sector-specific initiatives. The ex post evaluation of the ROP indicated that the majority of the measures mostly targeted the same intermediate objectives.

Overall, the main focus of the ERDF and the EAGGF-GUIDANCE expenditure was on infrastructure, with the most important strategic foci being transport infrastructure and infrastructure for the improvement and protection of the environment and cultural heritage. Infrastructure was identified as a pre-condition for development, reducing constraints on economic growth, enterprise and tourism development. In line with the considerable need for basic infrastructure, most of the funding went to projects such as roads, potable water networks, irrigation systems, water reservoirs, schools, day-care centres, sewers, sewage treatment plants and other construction works. This need for basic infrastructure was also stressed by the interviewees.

The explicit strategy of the ROP was to support the regional economy and promote regional convergence by providing basic infrastructure, and also by improving vocational activities, tourism and agriculture. Its wider objectives were to reduce territorial disparities and foster economic and social convergence with the rest of the Greek regions. Implicit in this strategy was a desire to improve social and territorial cohesion within the region, and not just to boost economic growth.

However, the implementation of the programme also suggests an implicit strategy; an important motivation for the stated strategy of improving infrastructure was also to improve the wellbeing of the local population (in both urban and rural areas) by reducing their isolation, improving mobility and services, and providing adequate environmental facilities (potable water networks, wastewater treatment etc.) and at the same time to improve the image of the region.

Financing a sub-programme dedicated to the local authorities (sub-programme IV) separate from the explicit objectives, which included improvement of rural population wellbeing and retaining local population, also indicated that the enhancement of the role of local authorities' role in the development process was an implicit objective. There was actually an implicit strategy, possibly pursued by the local authorities and at the same time supported by the central government, which focused on the need to draw down the funds and spread considerable financial resources across the local authorities.

Similarly, in the field of enterprise, the explicit strategy was to create a better environment for firms through the provision of infrastructure and services. However, the actions initially planned (infrastructure for a Technological Park in the area of Patras and a project for SME support) suggest that the implicit strategy was to deal with the deindustrialisation of the wider area of Patras - a major problem in the secondary sector - by facilitating SME investment. However, the relevant measures were cancelled over the seven revisions of the ROP due to substantial delays and consequently resources were reallocated by further increasing measures for basic infrastructure. Thus, upgrading basic infrastructure was not only the first ROP priority, but its participation in the programme's budget was increased by reducing or cancelling measures for competitiveness and enterprise and to some extent those for human resources.

With respect to sectoral development the regional strategy indicates weak sectoral differentiation.

Tourism development, although not a substantial component of the implicit regional strategy (not referred to in the general aims and intermediate objectives), was actually implied through the strategic priorities concerning the improvement of the natural and human environment and the upgrading of the cultural environment. The variety and wealth of the region's natural environment and cultural heritage were viewed as comparative advantages. Whilst tourism development was included in the ROP as a separate measure with specific targets (e.g. the improvement of a ski centre and promotional activity), it was actually promoted by several measures for the improvement of the regional image and attractiveness and measures to protect cultural monuments and archaeological sites.

It is important to note that before the development of the 1st CSF and the accompanying ROP, there was no other explicit form of regional strategy, since multi-annual programming under the umbrella of a regional strategy was not in the philosophy of the domestic planning system at that time. It was not until the administrative reform of 2010 that the regional partners (in particular the regional council) developed a written strategy as a requirement of the national system, and not of the Structural Funds.⁵

Nevertheless, implementing a regional strategy for the first time was very important in developing the skills and knowledge base relevant to the regional strategies of subsequent programme periods. Although relatively unsophisticated in defining regional needs and relating them to explicit targets, that strategy was a step forward for the region in terms of strategic development. Moreover, in having to implement the ROP, regional officials familiarised themselves with the European Community's terminology, approach and techniques - a useful learning process for the region.

However, as stated in the ex post evaluation of the ROP, difficulties in both collaboration and understanding arose between the regional authorities and the local implementing bodies (e.g. prefectures, local authorities and other public bodies), which were unable to view the ROP as a whole and were more interested in specific projects than in the implementation of the regional strategy.⁶

3.1.2 Investing in infrastructure: 1994-99

The 1994-99 Regional Development Programme for Dytiki Ellada was prepared generally by the same administration and officials who dealt with the relevant plan of the previous period. As a result, the strategic framework of the 1994-99 RDP was broadly the same as in the 1989-93 RDP, but with substantial improvements in terms of coherence and quality, as it included more specific targeting and priorities linked to specific regional needs. This shift could be attributed to the EU regulatory framework, which for the 1994-99 programmes required a higher level of strategic planning than it previously had, with much greater effort on developing the RDP and the ROP, on the production of a knowledge baseline on which the strategy was based, and hence on linking priorities and measures to perceived regional problems and opportunities.

⁵Under the legislative framework for the 'new architecture for local authorities and decentralised administration' (Law 3852/2010, Kallikratis Programme) the regions which became self-administered local authorities are obliged to develop five-year Operational Programmes. The first Operational Programme of the Dytiki Ellada region was drafted in October 2011.

⁶ ROP Western Greece, CSF ex post Evaluation - Greece, volume II, Joint Venture Evaluation.

Table 4: Contribution of NOPs to Dytiki Ellada - 1994-1999

THEMATIC PRIORITIES OF 1994-1999 CSF	SECTORAL STRATEGY AFFECTING DYTIKI ELLADA*	SECTORAL/ THEMATIC NOPs*
Infrastructure	<p>To improve road and rail and port infrastructure (e.g. Rion - Antirion bridge, Port of Patras etc).</p> <p>To improve the telecommunication networks (e.g. digitisation of networks).</p> <p>Develop the national production and distribution of energy; Incentives to industries and services to promote rational use of electricity; Investments for renewable energy sources.</p>	<p>O.P. Road axes and accessibility</p> <p>O.P. Railways</p> <p>O.P. Communications</p> <p>O.P. Energy</p>
Living Conditions	<p>Health: upgrade/development of health structures (regional hospital infrastructure, public health services, emergency care, information systems, support blood donation).</p> <p>Welfare: new welfare services in the regions; social protection of vulnerable groups; improving effectiveness of welfare system.</p> <p>Environment: Environmental monitoring infrastructure and mechanisms; environmental infrastructure (solid wastes and wastewater management); protection and conservation of natural environment; town planning; land registration</p>	<p>O.P. Health and Welfare</p> <p>O.P. Environment</p>
Competitiveness	<p>Industry: Improving industrial infrastructure; supporting private investments; modernization of enterprises; supporting SMEs; Human resources.</p> <p>Strengthening of R&T in selected sectors; Industrial research, transfer of technology, Innovation; Strengthening and restructuring of the research base; Human resources.</p> <p>Tourism infrastructure and incentives for private investments in the tourism sector;</p> <p>Promotion, protection and enhancement of the cultural heritage</p>	<p>O.P. Industry</p> <p>O.P. Research and Technology</p> <p>O.P. Tourism and Culture</p>
Human Resources	<p>Support and modernise the secondary education, vocational training and tertiary education</p> <p>Setting of a national accreditation system for all training agencies; implementation of vocational training programmes.</p> <p>Combating exclusion from the labour market through support to vulnerable groups (e.g. disabled; returnees; immigrants; refugees; prisoners/ ex-prisoners/ young offenders; single-parent families; drug users; people with cultural and religious particularities etc.).</p> <p>Public administration: administration modernisation; development of integrated information systems (I.I.S.); civil servants' training.</p>	<p>O.P. Education and Training</p> <p>O.P. Employment and Continuous Training</p> <p>O.P. Combating exclusion from the labour market</p> <p>O.P. Klisthenis</p>

*co-financed by the ERDF and ESF

The national strategy of that period was included in the 1994-99 CSF and was delivered in the context of 17 thematic NOPs, 13 ROPs (Dytiki Ellada ROP 1994-99 included) and an NOP for Technical Assistance. Table 4 illustrates the sectoral strategies that affected Dytiki Ellada and the respective thematic NOPs.

As stated in the ex post evaluation of the 1994-99 CSF, the country was lagging behind even the other Cohesion countries in most policy areas, and thus the aim was to achieve a minimum level of public capital investment and infrastructure which was thought to be a prerequisite for productivity, growth and more generally for allowing private capital to build at a later stage. All policy areas were therefore supported with an emphasis on the areas of physical infrastructure and large transport projects.

The explicit regional strategy (set in the 1994-99 ROP for Dytiki Ellada) was to exploit the Dytiki Ellada's potential deriving from the amount and composition of available funds as well as from the region's comparative advantages due to its important geographic position in the domestic and international transport networks. The directions of this strategy were therefore to build on the central position of the region in the transport networks, to exploit and further develop the university potential in connection to the technical modernisation of the regional industry, and to systematically promote regional tourist resources. In terms of the agricultural sector, the efforts ought to focus more on the restructuring of existing cultivation, support of animal breeding, and the further development of aquaculture.

The overall strategy was set in the context of a progressive widening of disparities between the region and the Greek average due to slower levels of growth. The regional strategy was therefore aimed at improving Dytiki Ellada's relative position in GDP terms, reducing the disparity in unemployment, and also reducing the internal regional disparities between the urban and the rural/ isolated areas of the region. The remarkable improvement and expansion of infrastructure focused particularly on transport networks, and environmental protection continued playing a central role in planned investments, as it had in the previous programme period. Emphasis was also put on the need to deal with the isolation and the region's lagging rural prefectures of Ilia and Etoloakarnania through restructuring and enrichment of rural activities within the food industry and tourism.

The strategy as described above would be implemented through the 1994-99 ROP (Total Public and Private allocations of €530 million, expenditure of €465.5 million), the 1994-99 NOPs and the Cohesion Fund projects (total public expenditure of €1.002 million).

On the basis of the regional strategy, the 1994-99 ROP was supposed to build on identified strengths whilst attempting to remedy some of the weaknesses and problems. It was initially structured in 9 sub-programmes and 38 measures. Its orientation and structure were coherent with the regional strategy, since most of the sub-programmes were directly linked to the strategic priorities of the 1994-99 RDP for Dytiki Ellada. The table that follows includes a summary of the ROP sub-programmes.

Table 5: 1994-1999 Dytiki Ellada ROP Sub-Programmes

SUB-PROGRAMME	TITLE	BUDGET (EUR million/ 2000 prices)	DESCRIPTION
I	Dytiki Ellada - Gateway to Europe	84.66	Improvement of transport infrastructure, education infrastructure, vocational training
II	Improving Quality of Life - Environment	123.93	Environmental infrastructure (wastewater sewage systems and water supply), social infrastructure (hospitals, day-care centres etc.), culture and tourism infrastructure, improvement of local road network
III	Rural Development	52.84	Modernisation of irrigation systems, protective actions for forested land, support to farmers, etc.
IV	Human Resources	47.24	Construction of training facilities and upgrade of workforce qualification through vocational training programmes
V	Upgrading and revitalising industrial areas	38.54	Direct financial support for the creation of new enterprises or the expansion and modernisation of existing ones, soft actions for SMEs services, infrastructure for the improvement of Patras Industrial Zone
VI	Special Development Programme for Local Authorities (EAPTA)	54.88	Small- scale public projects such as water supply networks, municipal roads, restoration of public buildings, squares etc.
VII	Completion of operational parts of 1 st CSF projects	7.56	Completion of incomplete projects financed under the 1989-93 ROP.
VIII	Implementation	5.22	Technical assistance
IX	Local Employment Pact of Achaia Prefecture	1.14	Soft actions and infrastructure to tackle deindustrialisation and unemployment in Achaia Prefecture

As in the 1989-93 programme period, the focus remained on basic infrastructure, agriculture, environment, tourism and human resources. The use of EU funding sought to improve basic infrastructure and essential public services to enhance the citizens' quality of life and indirectly retain local population and create job opportunities.

Extending the road and transport network was, again, a priority established in response to the national strategy to create infrastructure for growth. Putting the emphasis on the region's geographic position and the role it could play as a connecting gate to Europe was apparently a completely new element in the 1994-99 strategy. The region's potential to become a gateway to Europe was identified as a major strength that was further reinforced over the early 1990s by the sudden increase in transportation in the port of Patras due to the war in Yugoslavia and by the reorientation of the national transport system from the north-south axis to the west-east axis.

A notable feature of this programme was the introduction of a specific sub-programme targeting the upgrade and revival of regional industrial zones. This was a response to particular weaknesses in the productive sector, such as the decline of the areas of Patras and Aigion (prefecture of

Achaia) due to continuous deindustrialisation, and the overdependence of the population of Ilia and Etoloakarnania on the primary sector in view of their potential to support the creation of agri-food industry.

The regional environmental policy emphasised providing adequate environmental facilities for potable water and wastewater treatment and mostly targeted the urban area of Patras, which faced serious environmental problems over that period. The rural areas which were characterised by very low standards of living would also be favoured by the environmental interventions. In the field of sustainability, the ROP provisions also included interventions in the primary sector aiming to protect natural resources or rationalise their use (e.g. modernisation of irrigation systems, protective actions for forested land, etc.). In contrast to the ROP, the importance and relative weight of sustainability within the wider context of the 1994-99 CSF was actually undermined. In particular, although expenditure data indicate that 24 percent of the ROP resources were directed to environmental sustainability, only 8 percent of the total resources for Dytiki Ellada (ROP, NOPS and Cohesion Fund) were finally spent in the field of environmental sustainability.

A new feature of the ROP in this period was sub-programme IX, which concerned a Local Employment Agreement that was introduced to the ROP during the implementation period (in 1998). Its aims were the reduction of unemployment, the creation of new jobs, and the safeguarding of existing jobs. The programme was focused mainly on Achaia, which was suffering from deindustrialisation, and was planned to work in synergy with the industry and business sub-programme V mentioned above. The slightly stronger emphasis on business support than in the previous period was aimed at reversing the decline in the industrial base. The strategy was more explicit, seeking to improve infrastructure in order to attract new industries in the industrial area of Patras and to provide support to SMEs either directly through financial incentives or indirectly through SMEs services. Initiatives linking the productive base of the region to research and innovation produced by the local university were not yet part of the actual strategy, although the exploitation of the university potential was included as one of the priorities in the RDP.

Tourism development was explicitly part of the strategy as included in the main six priorities of the RDP. However, tourism development did not have its own sub-programme in the ROP but was included as a measure in sub-programme II. Whilst improvement in quality of life was the explicit objective of the particular sub-programme, the strategy actually implemented under its measures (environmental infrastructure, health and welfare, culture and tourism and local and municipal road networks) also focused on improving the region's image, in order to attract both local population and tourists. Providing basic infrastructure in the villages and small inner towns of the region, which were threatened by depopulation, implicitly addressed the need to retain the local population in the countryside. In the same direction, most of the interventions planned under the local authorities' sub-programme entitled EAPTA⁷ were aimed at local development through retaining local population in the lagging inner areas of the region, which is the implicit strategy horizontally affecting the ROP.

Actions in the field of human resources were similar to those in the 1989-93 period. In comparison with the previous programme period, interventions in 1994-99 revealed a better formal synergy between the Funds and the sectoral policies.

⁷Special Development Programme for Local Authorities.

In general terms, there was less conflict than there had been in the previous period between the explicit strategies set out in the programme documents and the implicit strategies actually being followed by the implementing bodies. As in previous period, the persistence of local authorities and other delivering bodies in spending for specific projects rather than approaching the programme as part of the regional strategy was noted in the intermediate evaluation final report,⁸ whereas the region (officials and political staff) was helped by the experience already gained to start shaping future strategic thinking.

3.1.3 Towards a more comprehensive and integrated strategy: 2000-2006

The implementation difficulties that emerged over the 1989-93 and 1994-99 periods were broadly attributed (by both the EU services and the Greek authorities) to structural weaknesses of the domestic public sector. In the mid-1990s, this led to the establishment of new institutions aiming to improve the efficiency and effectiveness of the Cohesion policy programmes by operating in parallel with the traditional public sector.

In this context, the Managing Authorities and other implementing or co-ordinating services were for the first time legislated in Greece under the 2000-06 CSF as distinct management institutions (Special Services established within the ministries and regions) for the EU co-funded programmes, replacing the departments that were responsible for the design and implementation of the previous CSFs and OPs. Being more flexible, the new institutions attained a high potential, especially in the initial phase of the 2000-06 period.

A second key feature of the third programme period was the significant increase in resources available for the Greek CSF, which was reflected by the increase of 58 percent in the financing allocated to the Dytiki Ellada ROP.

The national strategy over that period emphasised the completion of the major transport projects (an upgraded railway and motorway connecting Patras to Athens and Thessaloniki (PATHE), Egnatia motorway and its vertical connections, Rion-Antirion Bridge and Ionian Axis), the enhanced role of the ports in Athens, Thessaloniki and Patras, and the organisation of the 2004 Olympic Games. This national strategy clearly affected the regional strategy, which was not essentially altered in relation to the previous period.

In particular, the strategy of 2000-06 CSF focused on the types of investment in physical, human and knowledge capital that were viewed as the most conducive to increase Greek productivity, including increased efforts in the fields of environment, culture, health and welfare. This was specified in seven priority axes (six thematic and one concerning regional development) and implemented under 10 thematic/sectoral NOPs, 13 ROPs and one NOP for Technical Assistance. The thematic priorities of the 2000-06 CSF and the related thematic NOPs are summarised in the following table.

⁸ Ongoing evaluation ROP Western Greece, Final Report, June 1999, EEO GROUP S.A.

Table 6: Contribution of NOPs to Dytiki Ellada - 2000-06

THEMATIC PRIORITIES OF CSF 2000-06	SECTORAL STRATEGY AFFECTING DYTIKI ELLADA*	SECTORAL/THEMATIC NOPs*
Human and knowledge capital	Taking into account the principle of equal opportunities between men and women, action focuses on improving education and vocational training systems, diffusing technological innovation, and promoting the Information Society. Job-matching services, certification, market driven approaches and open tendering procedures are also promoted.	O.P. Education and initial Vocational Training
Transport	Investment to reduce peripherality vis-à-vis the rest of Europe, and reduce transaction costs; to improve connections with the Balkan countries; to improve and develop infrastructure (roads, railways, ports, airports) so as to create a core network covering the entire national territory; and to improve traffic conditions in the urban centres. Main projects: construction of new sections of motorways and railways and completion of major projects (e.g. Rion - Antirion Bridge, Patras' Port, PATHE railway, PATHE motorway).	O.P. Highways, Ports, Urban Development O.P. Railways, Airports, Public Transport
Competitiveness	To modernise and diversify the system of business support with a focus on SMEs and business starts, putting tourism on a normal business footing, introducing new types of financial products and derivatives, integrating training and education with investment in assets, and finally supporting the liberalisation of energy markets and the achievement of the Kyoto targets	O.P. Competitiveness
Quality of life	Environment: a reinforced effort to fully meet EU Directives concerning drinking water quality and wastewater treatment, and to promote proper management of solid and toxic waste. Environmental actions are reformed to reflect the "polluter pays" principle.. In the health sector, the focus is on supporting reform of the management system. Culture: Preserving cultural heritage and development of Modern Culture with parallel active encouragement of private funding. Health and welfare: supporting reform of the management system.	O.P Environment O.P. Culture O.P. Health and Welfare
Information Society	Viewed as a key factor to enhancing business competitiveness and public sector efficiency. It refers to several fields as a part of a wider development strategy (education, culture, public administration, health and welfare, environment, employment, digital economy, communications).	O.P Information Society

*co-financed by ERDF and ESF

The overall development objective for the region of Dytiki Ellada was to exploit its central geographic position in the national transport system and build on identified comparative advantages, whilst remedying some of the weaknesses and problems such as unemployment and regional disparities. The remarkable new feature of the 2000-06 strategy was a more integrated approach to endogenous and local development, which differentiated in from perceptions in previous periods.

The regional strategy as set in the ROP programme documents was structured around seven priority axes, which mapped closely onto the previous (1994-99) ROP, and are summarised in the following table.

Table 7: Dytiki Ellada 2000-06 ROP Priorities

PRIORITY	TITLE	BUDGET (EUR million/ 2000 prices)	DESCRIPTION
1	Enhancement and exploitation of the region's position as the West Gate of the country	111.47	Improvement of the region's main road and rail network and construction of bypasses of the main towns
2	Cultural and tourism development - Exploitation of the 2004 Olympic Games	64.08	Culture and tourism infrastructure, enhancement of the archaeological site of Ancient Olympia and its greater area, incentives for enterprises in the tourism sector, aesthetic upgrade and cultural infrastructure in Patras
3	Restructuring and expansion of the region's industrial base and promotion of innovation	45.21	Incentives for the creation of new enterprises and the modernisation of existing, industrial infrastructure, SMEs services and actions to promote innovation and increase competitiveness of regional production (co-operation between the production base and the regional research institutes)
4	Urban infrastructure endowment and improvement of life quality	199.99	Environmental infrastructure (wastewater sewage systems to fulfil the community legislation and water supply networks), health infrastructure, education infrastructure and equipment (schools and universities), implementation of integrated urban development plans, information society projects
5	Promotion of employment and human resources specialisation	36.84	Vocational training and measures to promote equal opportunities in the labour market and motivate local bodies to participate in schemes promoting local employment
6	Sustainable development of the countryside: a) agricultural development, b) interventions in mountainous and semi-mountainous areas	171.85	a) support to farmers' investment plans, irrigation projects for sound management of water resources, forest protection, forest and agricultural roads etc. b) basic infrastructure for rural areas and implementation of integrated development plans of the mountainous and internal zones
7	Technical assistance	12.20	Technical assistance

Although very close to the previous strategies, the new strategy allowed the persistent problems of the region identified almost a decade previously to be addressed in a more comprehensive and

integrated way. In practice, as revealed by allocations data (Chapter 4), the first and fourth priority axes were accorded the greatest importance within the strategy, followed by the third priority. However, the actual implementation of the strategy as expressed by the ROP expenditure data indicates that the greatest priority was the 'urban infrastructure endowment and improvement of the quality of life'.

As noted above, the strategic target for completion of major infrastructure projects, which are closely linked to the development of the region and its becoming the western gate of the country, was retained in the regional strategy. The resources allocated to transport infrastructure were predominantly for internal road links, as external accessibility projects were financed by the respective NOPs and the Cohesion Fund.

The explicit strategy of the period - also influenced by the EU agenda - was characterised by a focus on the endowment of urban and environmental infrastructure to improve the level of wellbeing, and implicitly, to support the tourism sector by improving the image of the region. The implicit strategy behind environmental, educational and health infrastructure interventions also involved retaining the population of the region's peripheral towns, eliminating internal emigration to the main urban centre (city Patras), and addressing the socio-economic problems created by the increasing abandonment of the mountainous and rural areas.

As in the previous period, the 2000-06 ROP emphasised business support and industrial development aimed at supporting the establishment of new dynamic units that would remedy the effects of the industrial crises in the region due to deindustrialisation of the greater area of Patras in the late 1980s. Innovation, considered as a basic element of productivity and the creation of new products and services, was introduced in the regional strategy for the first time, with an emphasis on the co-operation between the production base and the regional research institutes aiming at the dissemination of innovative production techniques, services or products.

Integrated development is used as a means for spatial cohesion in a region where disparities identified at several levels (within the urban areas, between the centre of the region and the rural/mountainous areas, and within prefectures) remain one of the most outstanding problems. Regional partners had the opportunity to draw up and implement special plans for integrated development of specific geographic zones situated either in the urban centres of the region, or in the mountainous and lagging areas of the countryside. Such plans included measures and actions eligible by more than one of the Structural Funds so as to allow greater synergy among the Funds. In comparison with attempts at local development over past programme periods (financing lists of small-scale projects without any coherence and logic, apart from providing support to local authorities), this was an innovation by domestic planning standards. The integrated interventions for urban areas would be financed by ERDF and ESF, and those for the mountainous and lagging rural areas by ERDF, ESF and EAGGF-GUIDANCE.

Another key feature of the 2000-06 strategy was the more organised and comprehensive approach towards connecting culture with tourism development through a distinct priority axis focusing mostly on Ancient Olympia and Patras. Considerable resources were allocated to the protection and enhancement of the archaeological site of Ancient Olympia and its greater area, as it was anticipated that this could attract a considerable share of Greek tourism over the Olympic Games

of 2004. The intervention was also planned in the context of the national strategic objective for a more permanent exploitation of the 2004 Olympic Games.

The promotion of the Information Society (IS) was also included in the regional strategy as one of the new features of the programme period. In the early implementation phase of the ROP, an Operational Plan specified the IS actions for each thematic policy included in the regional strategy. Such actions would be complementary to those financed under the respective NOP with the aim of dealing with the specific regional needs regarding particular sectors and thematic fields such as regional competitiveness, regional economic development, social cohesion and improvement of quality of life.

A more comprehensive approach was also introduced in the field of human resources and social inclusion policies, as the 2000-06 period was characterised by a growing emphasis on the adaptability and employability of human resources. In this context, 'Local Employment Initiatives' financed by the ROP were integrated employment programmes implemented at the local level to address unemployment issues through active employment policies for vulnerable social groups.

As stated above, a new element of the agricultural development policy over the 2000-06 period was the integrated development of the mountainous and internal zones of the region by promoting activities that would provide complementary or alternative employment and income to the rural population. This strategy is closely related to the implicit strategy of retaining the rural population by improving its level of wellbeing, and at the same time transforming the abandoned countryside into an attractive environment for developing alternative economic activities such as agro-tourism and the establishment of small businesses linked to the rural tradition of the region.

The devastating fires of summer 2007 did not result in a change in the regional strategy because of the time at which they occurred, but led to significant delays in programme implementation. The delays were addressed by the extension of the eligibility period until 31/12/2009.

3.1.4 A shared strategy through a shared ROP: 2007-13

Over the course of the 2007-13 programme period, the region of Dytiki Ellada, like most of the Greek regions, has not had its own ROP. When preparing the 2007-13 NSRF, the national authorities (the then Ministry of Economy and Finance) designed a major reform of the management and implementation system in parallel. An important change under the 2007-13 NSRF was that the number of regions for programming purposes was reduced from 13 to 5, and accordingly the NSRF strategy was specified at regional level according to the specific features of five spatial entities (Macedonia and Thraki, Peloponissos-Dytiki Ellada-Ionia Nisia, Thessalia-Stereia Ellada-Ipeiros, Kriti-Nisia Aigaiou, and Attiki). ROPs were then designed for each of the spatial entities with the aim of promoting the national strategic priorities complementing the NOPs, and emphasising the specific characteristics and needs of each macro-region (NUTS 1 level). As a result, the region of Dytiki Ellada has become one of the three neighbouring convergence regions which comprise the spatial entity 'Dytiki Ellada - Peloponissos - Ionia Nisia' and shares the 'Dytiki Ellada - Peloponissos - Ionia Nisia OP 2007-13'.

In the absence of a domestic requirement for regional strategic planning outside the context of the Structural Funds, each region's strategy was drawn up under the common ROP and was

incorporated in a set of three ROP priority axes. Thus, the ROP of the spatial entity (3 neighbouring regions) constitutes 9 priority axes incorporating the three regional strategies, plus the Technical Support priority axis (10th axis), shared among the three regions. Since each set of priority axes refers exclusively to the respective region and reflects its regional strategy, this could be addressed as an Operational Programme (or a sub-programme) itself.

The ROP was actually designed as the synthesis of each region's strategy that had been drawn up at the regional level according to the directions of the national authorities. The result of this synthesis is a programme with a strategy focusing on 'broadening its development potential, accelerating economic growth and social development, as well as increasing productivity, with the aim of achieving real convergence and improving the quality of life of those living in the regions touched by the programmes'. The interventions of the programme are categorised in three general objectives:

1. Development and modernisation of accessibility infrastructure;
2. Digital convergence through the utilisation of information and communication technologies and the reinforcement of entrepreneurship;
3. Sustainable development and quality of life.

Each of the general goals corresponds to three priority axes (with the same or similar title) - one for each region. The basic mix of interventions that were designed for all the regions of the spatial unity under these three sets of priority axes included social infrastructure and services, health and welfare projects, culture projects, accessibility and environmental infrastructure, sustainable urban development interventions, actions for mountainous and lagging areas, entrepreneurship and innovation actions. Each region's priority axes were also enriched with more region-oriented interventions according to the specific regional strategy and needs. The priority axes referring to the Dytiki Ellada region are summarised in the following table.

Table 8: Dytiki Ellada 2007-13 ROP Priorities

PRIORITY	TITLE	BUDGET (EUR million/ 2000 prices)	DESCRIPTION
1	Accessibility Infrastructure and Services for Dytiki Ellada	85.00	Development of infrastructure, services and networks Completion of the road network (priority to regional/country roads and national roads) Modernisation of transport infrastructure/enhancement of service provision and safety levels Creation of traffic management systems
4	Digital Convergence and Entrepreneurship in Dytiki Ellada	71.06	Support to dynamic sectors with emphasis in innovation and new technologies/ integration of new technologies and innovation into the production process Transfer of ICT in enterprises and local authorities Support applied research and technology Development and integration of broadband networks, infrastructure and services Support to new and existing enterprises and promotion of large-scale investment plans Promotion of alternative tourism and support to tourism enterprises Integration of quality standards in business activities New industrial infrastructure and improvement of existing
7	Sustainable Development and Quality of Life in Dytiki Ellada	294.81	Integrated development of the countryside and urban areas Improving the level of wellbeing Sustainable development /environmental protection, Tourism development and protection/ exploitation of the cultural heritage Actions for social inclusion, unemployment and gender equity

The explicit regional strategy for the 2007-13 period was the result of economic, political and technical trade-offs, prompted by three important factors. The first was that the region's strategy was to fit under the umbrella of the ROP which, whilst designed for spatial unity between three regions, was also to incorporate a comprehensive and coherent strategy as a whole. Second, closer alignment of Cohesion policy with the goals of the Lisbon Strategy implied a stronger orientation towards competitiveness and innovation than in the previous periods. The challenge for the region was therefore to find a strategy capable of persevering with structural policies carried out in previous years while increasing weight of competitiveness and innovation. Third, the region as well as the NSRF needed to address the problems that were progressively emerging when the economic crisis began, at the launch of the programme period.

The 2007-13 regional strategy sought to integrate cohesion aims and, to a certain degree, Lisbon goals. These were not necessarily incompatible, but the risk was that the logic underlying them

could have led to a strategy which lacked coherence, in a region in which social cohesion and ‘hard’ infrastructure were still not sufficiently developed. With some of the strategic infrastructure projects incomplete, the Dytiki Ellada region still needed to improve road and other transport and environmental infrastructure, as well as the level of wellbeing, and to strengthen the entrepreneurial environment. On the other hand, investment in research and innovation was desirable and was therefore included in the strategy for competitiveness reasons, but it involved higher risks that would be difficult to undertake as indicated by the experience of the previous 2000-06 ROP. The challenge was therefore to balance such trade-offs in the context of the three thematic priorities of the ROP.

The regional development vision included in the ROP programme document emphasises accelerating economic development and convergence with the most developed regions of the country, through improving regional accessibility and competitiveness (enterprise, SMEs, digital convergence actions) as well as improving the level of wellbeing and exploiting Dytiki Ellada’s comparative advantages.

Similarly to the previous programme periods, the focus remains on thematic sectors that concentrate most of the regional needs which the ROP is supposed to address in combination with the NOPs’ interventions. Compared to the 2000-06 ROP, the resources of the current programme allocated to environmental protection and competitiveness were relatively increased, while there was a considerable relative decrease of the resources for transport infrastructure.

Nevertheless, transport infrastructure and accessibility remained the basic priority in expenditure terms, albeit slightly differentiated. The regional strategy, as stated in the ROP programme documents and as implied by the weight of expenditure allocated to transport infrastructure indicates a shift from the prior emphasis to the overestimated role of the region as the ‘Western gateway of the country’, a strategic priority over the two previous periods. The strategic choice to closely relate regional development with the region’s position in national and European networks, and therefore with major infrastructure projects (some still incomplete or postponed) was outdated, as it emerged in a temporarily favourable environment for the region that had suddenly become the basic entrance from Europe to Greece due to the war in Yugoslavia. With the completion of the north axis of Egnatia (around the closure of the 2000-06 period), Igoumenitsa port (in Ipiros) became more strategic (mainly in terms of freight transportation) compared to Patras. The latter remained relatively isolated from the national and European networks due to significant delays in the construction of major projects on which the last decade’s strategy had been based. As a result, the new strategy was slightly removed from the ‘Western Gateway’ development vision to simply linking investment in accessibility with regional competitiveness. Instead, the new strategy underlines the development potential of Patras to become the west metropolitan centre of the country and the gateway to Western Europe.

With regard to the sectoral strategy of the 2007-13 NSRF that contributes to the regional strategy, eight thematic Operational Programmes (7 sectoral and one for Technical Assistance) are being implemented at national level, for the implementation of the country’s thematic priorities that have been set for the 2007-13 programme period. The five thematic priorities of the 2007-13 NSRF as well as the sectoral NOPs are summarised in the following table.

Table 9: Contribution of NOPs to Dytiki Ellada - 2007-13

THEMATIC PRIORITIES OF 2007-13 NSRF	SECTORAL/THEMATIC NOPs	SECTORAL STRATEGY AFFECTING DYTIKI ELLADA
<ul style="list-style-type: none"> • Investment in the productive sector • Knowledge society & innovation • Employment & social cohesion • Institutional framework • Attractiveness of Greece and the regions as places to invest, work and live in. 	<p>OP Environment - Sustainable Development</p> <p>OP Accessibility Improvement</p> <p>OP Competitiveness and Entrepreneurship</p> <p>OP Digital Convergence</p>	<p>Integrated solid and hazardous waste management and soil protection, full application of Directive 2000/60 and the management of urban waste waters, development of measurement and control systems for all sources of atmospheric pollution and the implementation of an action plan aimed at reducing air pollution.</p> <p>Completion and upgrading of motorways and sections pending from the previous period, and motorways and sections in the Trans-European Network; main inter-regional and regional road network; completion & upgrading of the existing rail network with priority to the TEN-T sections; signalling, tele-management and telecommunication interventions; rail connection of the country's nodal ports and Industrial Zones (VI.PE.); completion of main port networks and their interconnection with other Trans-European Networks; upgrading of port services and promoting combined transport; expansion, upgrading and modernisation of existing airports and construction of new airports.</p> <p>Promoting the country's Research, Development & Innovation (RDI) system and connecting it with the productive sector; reinforcing the entrepreneurial basis and upgrading quality, including the development of business clusters; strengthening entrepreneurship support structures; improving market supervision mechanisms; supporting business and innovative action reception facilities/structures; and ensuring the country's energy sufficiency also through the promotion of RES.</p> <p>Promoting ICT in enterprises, re-engineering Public Sector procedures; promoting entrepreneurship in sectors that use ICT; developing public administration digital services for citizens; and improving daily life through ICT.</p>

Table 9: Contribution of NOPs to Dytiki Ellada - 2007-13 (Continued)

THEMATIC PRIORITIES OF 2007-13 NSRF	SECTORAL/THEMATIC NOPs	SECTORAL STRATEGY AFFECTING DYTIKI ELLADA
	<p>OP Reinforcement of Public Administration Efficiency</p> <p>OP Development of Human Resources</p> <p>OP Education and Lifelong Learning</p>	<p>Evaluation and monitoring of public policy implementation; simplification of administrative procedures; organisational and operational re-engineering and administrative regrouping; public administration training; and upgrade of the quality of supplied training in practice.</p> <p>Linking Vocational Education and Training to Employment; modernisation of the labour market structures and systems; active labour market policies, measures against undeclared work; individualized support for unemployed and job seekers; reinforcement of youth and female employment; modern lifelong learning techniques in enterprises; active ageing of the labour force; targeted and integrated interventions for the inclusion of vulnerable groups into society and the labour market; development of the Social Economy; Programme Psychargos ; de-institutionalisation and the development of re-integration policies for the disabled.</p> <p>Redrafting of curricula; accelerating the rate of integration of new technologies; restructuring of vocational training; expansion of Second Opportunity Schools, Adult Education Centres and the Open University; reinforcement of Institutes of Lifelong Learning; teacher training and reinforcement of teaching for minorities.</p>

Concluding, the most significant development with respect to its impact on the wider context of the NSRF has been the economic crisis. By being widely spread, the effects of the crisis are considerably affecting the implementation progress of the NSRF programmes and have created an imperative need for a revision of the total NSRF programmes targeting stronger support to entrepreneurship. Revision of the NSRF is currently being processed by the Greek authorities at central and regional levels.

3.2 Relevance of programmes to regional needs

Over successive programme periods, the Dytiki Ellada's ability to identify problems and needs has improved. This has mainly been a result of the learning process and experience gained through the development of coherent regional strategies required by the Structural Funds regulatory framework. Although most of the problems identified at the outset have remained over time, the list of needs has become larger over successive periods, partly due to the more sophisticated analysis and efficient interpretation of the regional conditions and also due to the adjustment of the regional and national policies to new challenges (e.g. ICT, innovation, etc.). Similarly, the

perspectives on solutions to problems have developed over time, which has, to a certain degree, affected the mix of policy interventions. Thus, regional strategies have not changed in their orientation but have progressively incorporated a more integrated mix of policies in order to address the variety of regional needs identified.

Table 10 below summarises the regional needs identified by the different programmes and the programme responses. This illustrates the progress noted above. A further summary assessment is provided in Table 11, which shows the degree to which programme responses (imputed objectives) matched regional needs in practice.

Over the first programme period (1989-93), the analysis of the regional needs was not thorough and was not based on adequate baseline information. Moreover, needs were not directly translated into specific policy interventions in the context of the ROP, but were addressed through implicit parallel strategies reflected in project focus, rather than explicitly set out in the programme documents. Although the strategy adopted at the national and regional level was almost completely focused on infrastructure, the lagging character of the region could not be addressed with the CSF funding that was allocated to Dytiki Ellada. On the other hand, given the amount of available resources, instead of focusing on a small number of strategic projects the strategy favoured the wide spread of resources to many small projects of doubtful effectiveness. This was the main criticism that most interviewees expressed, not only for the 1989-1993 period, but also for the following ones.

The 1994-99 ROP was more strategically focused on a wider set of regional needs, as it was based on a better analysis of problems. Priorities and measures covered most of the identified regional weaknesses and needs and were oriented towards the provision of adequate infrastructure for all sectors. At that time, the needs remained so clear cut and basic that there was wide consensus on what needed to be done. The strategic targeting of the ROP on the major infrastructure projects actually reflected synergies with the NOPs and the Cohesion Fund, which directed more resources for regional infrastructure than in the previous period. However, the funding allocations proved insufficient for the scale of the needs.

The 2000-06 regional programme was considered by many interviewees as possibly being the best-designed programme, incorporating learning on needs analysis and strategy development whilst depending considerably on the NOPs with regard to strategic investments in major transport projects. The programme continued with proven practices from the 1990s in terms of providing basic infrastructure, but incorporated a more integrated approach, giving greater prominence to improve the level of wellbeing of the regional population and reflecting real regional needs. Many of the targeted interventions included in the programme tried to address issues that had been identified within the region as significant problems, such as the abandonment of the countryside, especially in the mountainous inner areas.

The regional strategy for the current programme period responds to the lagging status of the region with an integrated package of interventions. It does not adopt an approach oriented towards a specific direction (e.g. transport infrastructure), but it is more horizontal and integrated as it derives from the considerable needs on many thematic fields (transport, environment, digital disparities etc.).

As the fiscal crisis proceeded over the implementation period of the 2007-13 programme, some of the needs and problems identified in the design phase were exacerbated and thus the challenge lay in either the actual implementation of the strategy (implicit strategy) or possible revision of the strategy. The new socio-economic conditions have created the need to compromise between continuing with long-term solutions to the region's problems by persevering with strategic investments in infrastructure and enterprise, whilst trying to create jobs through short-term projects with immediate effects for the regional market and addressing the urgent problems linked to the crisis (such as extremely limited cash flows, unemployment, and poverty). As such, the ROP (and, generally, the OPs) included in the 2007-13 Greek NSRF could be described as trying to do many things simultaneously. In contradiction with the broadly stated need to focus on strategic projects, rather than continuing the past practice of spreading resources very widely to lots of small projects (as stated by the vast majority of the regional interviewees), the situation created by the current crisis promotes the easy solutions. The upcoming revision of the NSRF OPs needs to balance these trade-offs.

Overall, programmes have evolved from having an absolute concentration on infrastructure and a strategy based mainly on transport and secondly on intra-regional cohesion, to addressing a wider set of needs and experimenting with a wider and integrated mix of policy interventions. The latter have included more emphasis on competitiveness, entrepreneurship development, ICT and R&D. This process can be seen in more detail in the evolution of the kind of projects being funded, as is explored further in Chapter 5.

Table 10: Comparison of regional needs and programme responses

	Regional need	Response	Project focus
1989-93	Difficult intra-regional connections (Rion - Antirion ferry). Insufficient water supply - sewerage networks. Inadequate infrastructure for industrial development. Large number, small size and fragmentation of farmland. Insufficient irrigation of farmland. Poor road quality in the countryside.	Implementation of the national policy for developing infrastructure to promote economic development. Improving quality of life. Stimulation of endogenous growth. Local development efforts.	Transport Infrastructure Education Facilities. Social infrastructure. Environmental infrastructure (drinking water, sewage). Rural sector infrastructure. Small local development projects. Vocational Training.
1994-99	Deficiencies in basic infrastructure (transport, telecommunications, health, water, etc.) and inadequate utilisation of tourism resources. Regional disparities. Pollution of urban and natural environment. Abandonment of mountainous countryside and increase of urbanisation. Low productivity, structural problems and lack of rural sector infrastructure. Deindustrialisation and unemployment rise in Patras. Increase in unemployment.	Implementation of the national policy for developing infrastructure to promote economic development. Connecting region's development with the planned major transportation projects. Stimulation of endogenous development. Local development. Improving quality of life. Start of industrial development efforts and support of SMEs.	Infrastructure development (transport, social infrastructure, education, environment, tourism, rural sector). Small local development projects. Improving industrial infrastructure. Support for businesses. Support for SMEs. Vocational Training.
2000-06	Increased needs in transport infrastructure. Low per capita GDP. Deindustrialisation of Patras area. Environmental degradation and shortages of basic environmental infrastructure. Strong intra-regional disparities - degradation of mountainous and inland areas. Low productivity of the agricultural sector. Inadequate infrastructure in education (classrooms, laboratories). Need to improve infrastructure for the development of basic and applied research. Unsatisfactory level of health services (except Patras area) Limited tourism development.	Implementation of the national policy for developing infrastructure to promote economic development. Connecting region's development with the planned major transportation projects. Targeting SMEs and environment. Improving quality of life. Linking Innovation and Information Society with regional competitiveness. Integrated approach to spatial targeting in rural, urban and specific population groups. Organized effort to link tourism with culture. Implementation of measures to diversify rural income.	Transport infrastructure. Basic infrastructure (environment, education, health care, agriculture). Intangible actions (promotional actions, support services, etc.). Support and incentives for businesses and SMEs Support to SMEs in tourism. Cultural projects. Support of research programmes. Integrated urban and rural development projects. Provision of aid and incentives in rural sector to improve competitiveness and diversification. Integrated ESF interventions and training. ESF interventions on gender equality (e.g. childcare).

Table 10: Comparison of regional needs and programme responses (Continued)

	Regional need	Response	Project focus
2007-13	<p>Low per capita GDP.</p> <p>Low employment and high unemployment.</p> <p>Depopulation of the countryside.</p> <p>High rates of employment in rural sector.</p> <p>Low labour productivity.</p> <p>Inadequate dissemination of research programmes' results in production process.</p> <p>Intra-regional disparities in ICT infrastructure.</p> <p>Lack of waste management infrastructure.</p> <p>Environmental degradation-soil erosion.</p> <p>Deficiencies in transport infrastructure.</p> <p>Lack of natural gas network.</p> <p>Accessibility problems in mountainous areas.</p>	<p>Continued emphasis on infrastructure development. Gradual adoption of Lisbon Strategy towards competitiveness.</p> <p>Weakening of the strategic choice to connect region's development with large transport projects.</p> <p>Improving quality of life.</p> <p>Focus on competitiveness and SMEs.</p> <p>Linking Innovation and the Information Society with regional competitiveness.</p>	<p>Transportation, environmental and social infrastructure projects.</p> <p>Aid to SMEs.</p> <p>Utilisation of the new financing tools for urban development and competitiveness (Jessica and Jeremie).</p>

Table 11: Needs and imputed objectives for eight thematic axes

Thematic axis	1989-93		1994-99		2000-06		2007-13	
	Needs	Imputed objectives	Needs	Imputed objectives	Needs	Imputed objectives	Needs	Imputed objectives
Enterprise	+	1	+	3	+	4	+	5
Structural adjustment	++	1	++	3	++	4	+	4
Innovation	+	1	+	1	+	3	+	4
Environmental sustainability	++	4	++	4	++	5	++	4
Labour market	++	3	++	4	++	4	+	4
Social inclusion/ Community development	++	5	++	5	++	5	++	5
Spatial cohesion	+	1	+	1	+	3	+	2
Infrastructure	++	5	++	5	++	5	++	5

Needs Scale (evaluation of the region at the start of the period)

- ++ Very high need: the region is highly deprived on this axis
- + High need: the region is somewhat deprived on this axis
- = Average need: the region is around the national mean on this axis
- Low need: the region is above the national mean on this axis
- Very low need: the region is already a European frontrunner on this axis

Imputed Objectives

- 5 Very high effort, this axis is a central aspect of the regional development strategy
- 4 High effort, this axis is an important element in the regional development strategy
- 3 Average effort, this axis is included in the regional development strategy but not particularly important
- 2 Low effort: this axis is only marginally considered in the regional development strategy
- 1 No effort at all on this axis

4. EXPENDITURE ANALYSIS

This chapter presents the financial allocations and expenditures of EU sources for the Dytiki Ellada region, aiming at showing how the ERDF, ESF and other EU resources were used in the region. Given the fact that only total public spending is available during the whole period, all data provided in this chapter will be based on total public allocations and spending, which include national and EU sources but exclude private spending, in order to allow a more realistic approach to the region's allocations and expenditure.

4.1 Financial allocations

In the Dytiki Ellada region, it is rather difficult to achieve a comprehensive approach regarding financial allocations from EU funds, since co-financed interventions in Greece are planned in such a way that explicit allocations were only available in the Regional Operational Programmes of the region. In contrast, all other programmes that implemented interventions in the region (National (sectoral) Operational Programmes, the Cohesion Fund, Community Initiatives, etc.) never had discrete financial allocations at regional level, since programming was delivered nationally taking into account the national objectives set in each programme period. Furthermore, in the case of the Cohesion Fund it is difficult to distinguish between major transport infrastructure projects which are implemented among two or three different regions.

Availability on financial allocations data for Dytiki Ellada ROPs is limited to the last three programme periods, due to the fact that for the 1989-1993 period no programme documentation was available. Table 12 shows the allocations of total public funding (EU + National), in current euro prices, at the time of allocation across the three periods with available data.

Table 12: Dytiki Ellada Regional Operational Programme allocations 1989-2013 (meuro or mecu unadjusted and adjusted values of Total Public Funding)

Programme Period	€ ERDF (Total Public)	€ ESF (Total Public)	Others (Total Public)	€ Total Public Funding	€ ERDF (Total Public)	€ ESF (Total Public)	Others (Total Public)	€ Total Public Funding
	Current Prices				Constant 2000 prices			
1989-1993	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1994-1999	327.7	27.2	47.1	402	346.5	28.8	49.8	425.1
2000-2006	494.1	42.5	101.3	637.9	462.2	39.8	94.8	596.7
2007-2013	449.2			449.2	371			371

Source: Based on data analysis by project team.

A first conclusion from the table's figures is that total public financial allocations (in constant 2000 prices) increased between 1994-99 and 2000-06 by 40 percent, while during the current programme period 2007-13 fell by 38 percent. This is due to the fact that the 2007-13 programme is mono-funded (ERDF) with all other interventions in the region being implemented by National Operational Programmes, in contrast to previous periods where other funds such as ESF and EAGGF contributed to the ROP. Nevertheless, in constant 2000 prices, ERDF allocations in the ROP have risen from €346.5 million in 1993-99 to €462.2 million in 2000-06 (+33 percent), and then fell by 20 percent to €371 million in 2007-13.

Table 13 shows Dytiki Ellada ROP's allocations by thematic axis for each programme period with available data.

Table 13: Dytiki Ellada Regional Operational Programme allocations by thematic axis 1994-2013 (meuro or mecu unadjusted and adjusted values of Total Public Funding)

Targets / Needs	1994-1999	2000-2006	2007-2013	m€ Total	1994-1999	2000-2006	2007-2013	m€ Total
	Current Prices				Constant 2000 prices			
Structural adjustment (sectoral development)	6.8	39.7	7.8	54.3	7.2	37.1	6.4	50.7
Social Cohesion	113.4	239.3	178.6	531.3	119.9	223.8	147.5	491.2
Regional infrastructural endowment	127.9	213.9	102.5	444.3	135.3	200.1	84.7	420.1
Labour Market	26.4	33.1		59.5	27.9	31		58.9
Innovation		5.7	18.1	23.8		5.3	15	20.3
Environmental sustainability	103.9	74.6	58.4	236.9	109.9	69.8	48.2	227.9
Enterprise	18.8	26.2	47	92	19.5	24.5	38.8	82.8
Unspecified	4.7	5.5	36.7	46.9	5	5.1	30.3	40.4
m€ Total	402	637.9	449.2	1489.1	425.1	596.7	371	1392.8

Source: Based on data analysis by project team.

As mentioned in the previous chapter, the regional strategy for Dytiki Ellada has been drawn up exclusively in the framework of Cohesion policy and set out only in the region's ROP programme documents. So, even though no allocations exist for NOPs, based on the above tables, the following conclusions can be derived regarding the allocations per programme period and their relevance with the strategy developed in each period.

The 1994-1999 ROP had an initial funding allocation of €402 million. Approximately 81.5 percent of the ROP's allocated funding came from ERDF, 6.8 percent from ESF and the remaining 11.7 percent from other funds such as EAGGF. The greatest financial weight was given to regional infrastructure and social cohesion interventions. There was also a significant focus on environmental sustainability interventions mainly through resources from EAGGF.

Financial resources for the ROP of Dytiki Ellada for 2000-06 were €637.9 million. The ROP's total budget increased in comparison to the previous programme period by around €236 million in current prices or by around €172 million (+40 percent) in constant 2000 prices. ERDF accounted for 77.5 percent of the total budget, ESF for 6.7 percent, and EAGGF for the remaining 15.8 percent. As in the previous programme period, significant finance was allocated to regional infrastructure, social cohesion and environmental sustainability projects.

Eventually, the budget allocation for the Dytiki Ellada ROP 2007-13 was reduced to €449.2 million, a reduction in comparison to the previous period of around €226 million (-38 percent) in constant

2000 prices. This reduction in the total budget was due to the mono-fund nature of the programme, which for the first time is only funded by ERDF. Compared to the previous programme period, the contribution of ERDF in the 2007-13 ROP has decreased by €91 million or by 20 percent in constant 2000 prices. As with the two previous periods, financial allocations still focus on regional infrastructure and social cohesion.

4.2 Expenditure compared with allocations

As previously mentioned, a full and in-depth comparison of the allocated funds and the actual expenditure in Dytiki Ellada region is not feasible, since discrete allocations exist only for the Regional Operational Programmes. Due to this fact, a basic comparison is attempted at ROP level only, which will be followed by the analysis of all spending in the region through the Regional Operational Programmes and other interventions under the National Operational Programmes and Community Initiatives. Table 14 below shows the allocations and total expenditure of Dytiki Ellada ROPs from 1989.

Table 14: Dytiki Ellada Regional Operational Programme allocations and expenditure 1989-2013 (meuro or mecu constant 2000 prices of Total Public Funding)

Programme Period	€ allocated Total Public (ERDF)	€ spent Total Public (ERDF)	Spend as % of allocation (Total Public ERDF)	€ allocated Total Public (All Funds)	€ spent Total Public (All Funds)	Spend as % of allocation (Total Public All Funds)
1989-1993	n/a	138.5	n/a	n/a	171.9	n/a
1994-1999	346.5	338.4	98%	425.1	416.0	98%
2000-2006	462.2	518.9	112%	596.7	676.7	113%
2007-2013	371	131.2	35%	371	131.2	35%

Source: Based on data analysis by project team.

From the data above, it is evident that for all three completed programme periods (1989-2006), total public spending by both ERDF and other EU Funds in Dytiki Ellada region shows a rising trend. During 1994-99, which is the first period with allocation data available, expenditure reached almost 100 percent of the allocated budget, while for the next programme period 2000-06 expenditure far exceeded the initial programming (by 13 percent or €80 million), which can be attributed to ‘overbooking’ during the specific programme period that led to the increase of the national contribution, since the EU contribution could not be increased. No specific conclusions for the current programme period can be drawn since spending is still well behind initial planning even though the situation is expected to change significantly following the completion of the programme.

The above figures only reflect a small picture of the expenditure in the Dytiki Ellada region, since total public spending through ROP interventions does not exceed €1.4 billion in constant 2000 prices, whereas the total expenditure by all programmes in the region since 1989 is estimated at around €5 billion in constant 2000 prices. For this reason, later in this chapter an overall analysis of the total expenditure from 1989 to date is attempted, considering that it was not feasible to gather expenditure data for projects implemented in the region during the 1989-1993 period under the National Operational Programmes and that data for the current programme period are only temporary. Current data would be expected to be subject to revision after the completion of the

programme, as the period is still in progress and the list of projects and their respective expenditure is not final.

Table 15 shows the total expenditure per programme period.

Table 15: Dytiki Ellada all Programmes expenditure 1989-2013 (meuro or mecu, constant 2000 prices)

Programme Period	ROP (All Funds)	% of Total	NOP, CF etc.	% of Total	€ Total
1989-1993	171.9	100%	n/a	-	171.9
1994-1999	416.0	29.3%	1,002.5	70.7%	1,418.5
2000-2006	676.7	35.3%	1,241.6	64.7%	1,918.3
2007-2013	131.2	15.7%	705.4	84.3%	836.6
All Programme Periods	1,395.8	32.1%	2,949.5	67.9%	4,345.3

Source: Based on data analysis by project team.

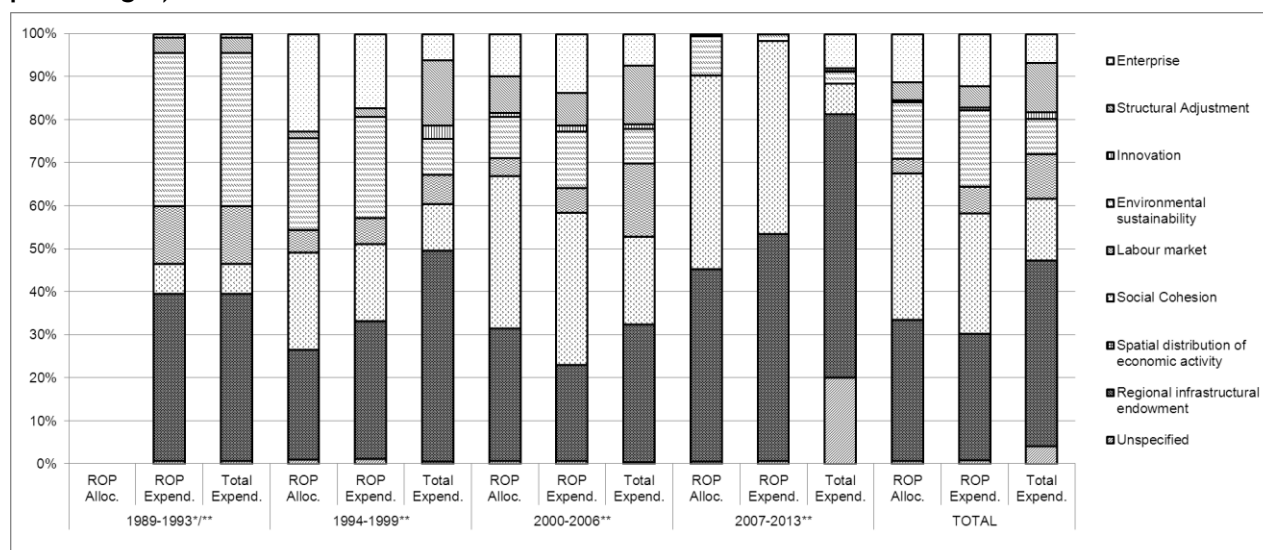
It is evident from the available data that in every programme period the contribution of programmes (apart from the ROP) in total expenditure is crucial and currently reaches 68 percent of the total expenditure in the region since 1989. Even though for the 1989-93 period there is no availability of NOP expenditure data within the region, in the following period (1994-99) there is a large share of expenditure through NOPs that is equal to 70.7 percent of the total (more than €1 billion). This share slightly decreased to 64.7 percent during the next period of 2000-06, but actual spending significantly increased to €1.24 billion. In the current programme period (2007-13) and based on the provisional data available, the NOPs' share is currently very high (84.3 percent or €705 million) due to the mono-fund nature of the ROP and its rather slow implementation.

Overall, total expenditure (National + EU) through all Structural Funds in Dytiki Ellada region exceeded €4.3 billion (in constant 2000 prices) between 1989 and the present day, showing a rising trend between each period. Expenditure rose from €171.9 million in the 1989-93 period, to €1,418.5 million in the 1994-99 period, to €1,918.3 million in the 2000-06 period. A closer look at the adjusted figures across periods reveals that the higher percentage increase has been between 1989-93 and 1994-99, with an almost seven-fold increase, which actually is slightly lower since no NOP expenditure data for that period are available. Expenditure for the current programme period is €836.6 million, but is expected to rise at least to the previous period's levels, given the fact that the current situation does not reflect the expected final expenditure by the end of the programme period. Additionally, it should be noted that if private spending data were available for the whole period, then total expenditure through Structural Funds' interventions in Dytiki Ellada would be estimated to have exceeded €5 billion (in constant 2000 prices) for the whole period.

In order to assess expenditure in the Dytiki Ellada region, and because of the absence of financial allocations in the NOPs (which contribute the largest share of EU funds in the region), it is rather important as a further step to analyse expenditure in terms of final targets/needs, so as to identify how expenditure is allocated across categories of (perceived) need.

The figure below shows the proportions of each thematic axis within every programme period, expressed in percentages.

Figure 6: Allocations and Expenditure by thematic axis across programmes (expressed as percentages)



Source: Based on data analysis by project team.

* For the 1989-1993 period, there is no information on ROP allocations.

** Total expenditure includes the following programmes: 1989-1993: ROP

The rest of the periods: ROP and NOP (including Cohesion Fund). Expenditure data in 2007-2013 are available until mid-2012.

The figure shows that expenditure in the Dytiki Ellada region between 1989 and today mainly targets projects that are relevant to the ‘Regional infrastructural endowment’ thematic axis. The proportionate share of such projects in total expenditure was 39 percent in the 1989-93 period, 49 percent in the 1994-1999 period, 32 percent in the 2000-2006 period and 61 percent to date for the 2007-13 period. On average, the projects of thematic axis ‘Regional infrastructural endowment’ participate with 43 percent (around €2 billion in constant 2000 prices) of the total expenditure, which is explained by the number of infrastructure projects implemented in the past and other infrastructure projects still implemented in Dytiki Ellada region. The main projects supported by the expenditure of this thematic axis include the construction or improvement of primary and secondary roads, national roads, highways, construction of the Rion-Antirion Bridge, construction/improvement of port infrastructure, and telecommunication infrastructure.

In terms of spend, the ‘Social Cohesion’ thematic axis is also important with its share of expenditure amounting to 7 percent in 1989-93, 11 percent in 1994-99, 20 percent in 2000-06 and 7 percent to date for the 2007-13 period. On average, ‘Social Cohesion’ thematic axis’ projects have absorbed 14 percent of the total expenditure (approximately €653 million in constant 2000 prices), while this amount is expected to further increase with the completion of the current programme period. The main projects of this thematic axis are construction/upgrading of school and university units, creation and modernisation of hospitals, educational equipment, interventions in cultural heritage monuments, and so on.

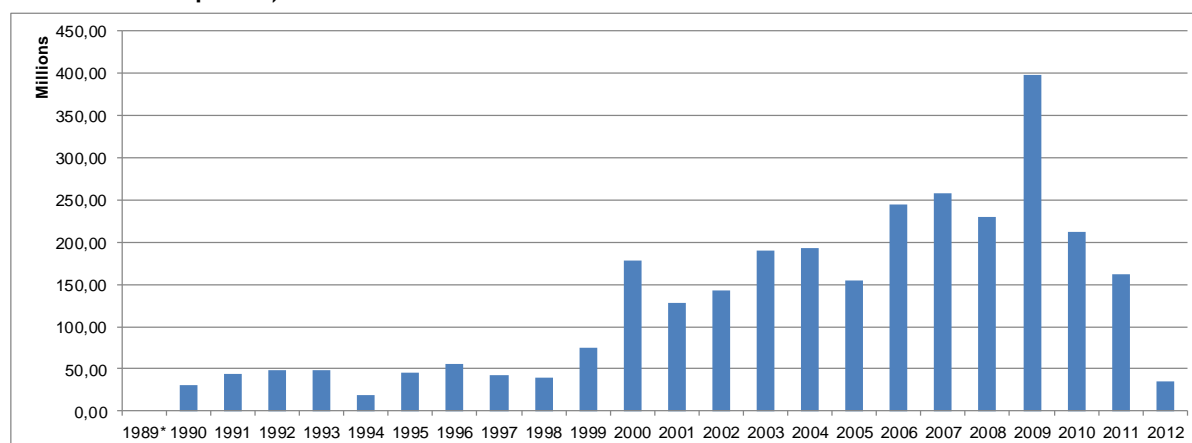
The ‘Structural Adjustment’ and ‘Labour Market’ thematic axes show a share of 11 percent and 10 percent of the total expenditure respectively. Structural adjustment projects have primarily included tourism development projects in every programme period (from large projects, such as the creation of a ski resort, to smaller ones such as rural tourism actions). Labour market projects

include training programmes which mainly served several regional needs such as unemployment (long-term, youth and female), skills shortages, and social inequalities.

Given that the Dytiki Ellada region still remains an Objective 1 region, it is not surprising that its focus on projects has remained almost unchanged since 1989. The region continues to fund projects related to regional infrastructure and social cohesion. The most significant variation observed in the rising trend of the ‘Enterprise’ thematic axis share (from 1 percent in the 1989-93 period to 8 percent during the current 2007-13 programme period) is due to fact that regional and national programme design paid particular attention to supporting new and existing firms for improving competitiveness in Dytiki Ellada.

With regard to annual expenditure since 1989 (Figure 7), annual data is missing for 1994-1999 National Operational Programmes, so spending until 2000 is underestimated by about €1 billion. Nevertheless, from 2001 onwards Figure 7 contains full annual data and clearly illustrates the trend in annual expenditure.

Figure 7: Total expenditure on EU funded projects 1989-2012 (expenditure calculated in euros, constant 2000 prices)



Source: Based on data analysis by project team. Provisional data for 2012.

The peak year of expenditure was 2009, because of CSF 2000-06 closure payments and concurrent payments for the new 2007-13 programme period. In particular, the majority of expenditure for that year (26 percent) came from the NOP ‘Road Axes, Ports, Urban Development 2000-06’, which funded major infrastructure projects in the region. Generally, since 2000 when complete annual expenditure data becomes available and up until 2008, there have been no extreme variations in annual expenditure. Within this period, in constant 2000 prices, total public expenditure was €178 million in 2000 (2.5 percent of Regional GDP), dropping to a minimum of €128 million in 2001 (1.7 percent of Regional GDP), and reaching the maximum of €258 million in 2007 (2.8 percent of Regional GDP). The peak in 2009 (€398 million or 4.5 percent of the regional GDP) is justified by the ‘overlap’ in payments between the two programme periods. From 2010 onwards, expenditure has appeared to fall, which is mainly due to the slow implementation of interventions of the 2007-13 period and the economic crisis affecting the country, which has raised difficulties in the repayment of the national contribution.

Overall then, the analysis of expenditure confirms the trends identified in the programme analysis: there has been a consistent and clear focus, in terms of expenditure, primarily on regional infrastructure and secondarily on social cohesion projects for the whole period, since Dytiki Ellada has remained an Objective 1 region from 1989 to date. At the same time, levels of expenditure rose until 2009, at which point the economic crisis affected the country and the absorption rate of funds was reduced. These developments fit the Dytiki Ellada's programme logic, and the next chapter examines, in addition to this expenditure analysis, the achievements of those developments and whether the projects delivered have met the objectives of the programmes and the wider needs of the region.

5 ACHIEVEMENTS ANALYSIS

This chapter examines the achievements of the ERDF programmes in Dytiki Ellada region throughout the period from 1989 to the present. It examines the achievements reported in programme reports over each of the periods and the extent to which those achievements influenced the direction of the programmes over time through their effect on regional needs.

As discussed in the previous chapters, the programmes have evolved over time with the emphasis and orientation towards the improvement of regional infrastructure in thematic fields such as transport, wellbeing, industry, tourism, culture, environment, etc. In the analysis that follows, achievements of the OPs implemented in Dytiki Ellada over the successive programme periods are systematically presented in order to allow comparisons between different periods as well as conclusions by themes of intervention.

So this chapter turns to the analysis of achievements at programme level and under the thematic axes. This analysis involves: identifying the achievements as reported in the annual and final implementation reports of the programmes available; undertaking further investigation of actual achievements through interviews, additional data and document collection and an online survey; and a triangulation of results. The following sections provide a presentation of the achievements for each programme period classified according to the thematic axes. Complementarities and synergies with other EU-funded programmes (e.g. the NOPs) and with domestic programmes are also examined.

For each ROP, achievements are presented on the basis of indicators reflecting the actual outputs and results of the programmes as compared to targets set in the programme documents. The most important achievements of National (sectoral) OP interventions in the region are also examined on a programme-period basis. These achievements are presented without reference to specific targets as the NOPs did not include targets at the regional level.

A considerable difficulty in attempting a systematic presentation of each period's achievements has been to address the fact that completion of many of the projects has often exceeded the respective programme periods, resulting in considerable amounts of expenditure that did not respond to actual achievements over one or more programme periods or repeating some of the achievements in the frame of more than one programme period. The Rion-Antirion Bridge is a characteristic case of such delays, as the preparatory and technical studies were financed by the 1989-93 CSF while the construction of the project was completed over the 2000-06 period. Over these periods, funding of the project has derived from the sectoral OPs. Similarly, the construction of Patras' new port has started during the 1989-93 period and is currently being financed by the 2007-13 Accessibility Improvement OP. Moreover Patras' bypass road was contracted and operated in phases, but is still incomplete as its connections to the new port are currently under construction through sectoral OP funding.

Despite the fact the reduction of regional disparities, the improvement of the economy's competitiveness and the convergence of the development level to the national average are common objectives throughout the overall period, no quantified targets have been set in any period. In contrast, quantified targets are set at sub-programme/priority axis level, which largely reflect the interim goals (i.e. objectives that are directly related to the implemented

interventions). This approach - common for all co-financed programmes in Greece - is based on the fact that economic development is not determined solely by the implementation of EU-funded programmes, but there is a plethora of factors affecting development. This issue is significant, particularly with respect to the interventions supporting entrepreneurship and structural adjustment of the economy.

Methodological issues on programme indicators system

With respect to programme indicators, a serious methodological problem arose in the process of determining the levels of targeting, matching them with the appropriate-level targets and identifying interventions that contribute to the achievement of these goals. Theoretically, these mappings should be determined by the intervention logic and the tree hierarchy, from the lower level of action - measure - usually corresponding to the output indicators - to the level of sub-programme (1989-93, 1994-99 periods) or priority axis (2000-06 period) - corresponding to result indicators - and finally to the level of long-term (or strategic or general) objectives that correspond to impact indicators and should measure the overall programme's contribution through macroeconomic indicators (GDP growth, level of convergence with either the national or the EU average, etc.).

In the case of Greece, the 1993-2006 CSFs and the 2007-13 NSRF were structured in the sectoral (thematic) programmes, which were implemented horizontally and lacked regional targeting, and in the regional programmes (ROPs) whose general (strategic) objectives were always descriptive and never quantified. The achievement of those objectives, as explicitly stated in the programmes, would be attempted through interventions of both regional and sectoral programmes.

As regards the programmes' indicator system adopted throughout the period, this consists of the physical or output indicators, always measured either at measure level (1989-2006) or at priority axis code (2007-13). The majority of output indicators are quantified indicating specified target values, whilst problems are identified with respect to baseline values. Regarding the 1989-93 period, there is no clear view on the existence of baseline values due to the non-availability of programme documentation for the region (Dytiki Ellada ROP, ongoing evaluation reports, technical consultants' reports, etc.). In the 1994-99 period, the achievements of the measures implemented in the previous period are used as baseline values. In the 1989 -1999 period, there are two types of indicators used, physical and impact indicators, but in practice impact indicators were result indicators. The situation is clearly improved in the 2000-06 period, as three types of indicators are used (output, result, impact), however problems with the indicators and the need for 'a uniform approach' on the definition of indicators and their quantification (baseline and target values) remain, as noted in the mid-term evaluation of the 2000-06 CSF.

The achievements in terms of physical indicators are analysed in detail in this chapter, as well as the results in terms of result indicators. The quantitative assessment of results and impacts is measured throughout the whole period in terms of job creation during the project construction phase (usually as a result indicator, related to temporary jobs), while the job creation during operation (permanent jobs during operation) is used as impact indicator. Furthermore - throughout the period - the population served by the projects implemented is used either as an absolute figure (1989-1993 period) or as a change in the percentage of population served (e.g. population (%))

served by sewerage networks or change in the percentage of population connected to sewerage networks, respectively).

With regard to the 1989-93 programme period, difficulties in aggregating the achievements of the period are also attributed to the overall structure of the 1st CSF which was a bit peculiar as it included: National/Sectoral Operational Programmes such as ‘Major Road Axes’ OP and ‘Railways’ OP; separate projects (not included in the OPs) such as Athens airport, Athens Metro etc.; European Initiatives such as VALOREN, STAR etc.; and also projects transferred from the Integrated Mediterranean Programmes. The multi-fund Regional Operational Programmes such as the Dytiki Ellada ROP have also been basic elements of the 1st CSF since they were allocated a considerable share of its budget.

5.1 Reported and actual achievements

5.1.1 Programme-level achievements

This section includes a detailed exploration of the programmes’ achievements organised by programme period and examines the reported achievements by theme providing also detailed examples as reported through interviews and other sources.

Programme period 1989-93

During the 1989-93 programme period, reporting focused mainly on financial progress rather than on outcomes. There was a lack of any information system used for monitoring and reporting purposes, while the delivery mechanisms had just been established without the necessary experience and expertise.

Lack of both primary and secondary sources has limited the scope for aggregated assessment of the programme’s reported achievements, such as changes in the level of accessibility and mobility in the region, associated trends in tourist numbers and the added-value generated by the development of the tourism sector. It has not been possible to retrieve either the ROP’s programme document or the ex-ante and ongoing evaluation reports. Nevertheless, the monitoring reports of that period were focused on reporting only physical outputs such as kilometres of roads or pipelines or hectares, while implementation reports focused mainly on progress with the programme management. Therefore, the achievements analysis for the 1989-93 ROP is based on the programme’s final implementation report and the programme’s ex post evaluation.

Annex III includes detailed data on the programme’s physical outputs and on the impacts of the interventions which are expressed through results indicators such as jobs created, or population served by the projects (in numbers or percentages).

The 1989-93 ROP financed 664 projects out of which 622 had been completed by the end of the period and 14 continued with funds of the next ROP, which included a special sub- programme dedicated to the completion of incomplete projects of the 1st CSF.

Research based on interviews also provided useful insights on the achievements of the period. Most interviewees confirmed that the programme underperformed with respect to progress in infrastructure, considering that it has been the central issue addressed by the strategy and taking

into account the needs of that period. There was considerable investment in water supply and wastewater treatment and some indication of the impact is provided by the numbers of people benefiting from water purification and sewerage networks investments. On the other hand, improvements to the road network (a crucial requirement for the strategy) were minimal at the level of the primary road network (national roads) but considerable at the local level (regional, local or municipal roads). It is notable that many major transport projects have started with financing from the 1989-93 ROP or the sectoral NOP but some of them are not yet completed (e.g. the western axis, Ionia Odos).

In particular, the reported programme achievements with respect to transport infrastructure indicate road, port and airport interventions closely related to the overall regional and national strategy. A passenger terminal is created in Araxos airport which from an exclusively military airport becomes also civil. Moreover, upgrading interventions take place at the most significant port of the region - the Patras' port- which at the time served 55 percent of the passengers and 60 percent of the cars entering the country by sea. It should be noted that upgrading Patras' port was a crucial intervention in the framework of the overall regional strategy as analysed in Chapter 3. ERDF assisted the improvement of 116 km of national and regional roads includes the commencement of bypasses construction for the region's urban centres (Patras, Agrinio, Pyrgos, Nafpaktos), an intervention to modernise the national road network which until that period by passing through the cities, created major problems with respect to travel time, environmental impact, safety etc.

In parallel, with funding from the NOPs, preparatory and technical studies are undertaken for the most important flagship project of the entire 1989-2013 period, the Rion-Antirion Bridge as initially planned. This is a project of national importance that allowed efficient connectivity within the region and between mainland Greece and Peloponnisos and addressed the chronic problems relating to the seaway transportation (travel-time, interruption of transportation due to weather conditions, etc.).

In the field of communications infrastructure, funding from the (sectoral) Telecommunications OP resulted in the considerable improvement of the telephone connections in the region, since the 6-years waiting time for a connection was reduced by half.

In the structural adjustment thematic axis, only minor interventions, focused on tourism development, have been reported with consequently minor impact for the region. These include upgrading of an existing ski resort and a tourism-promoting action.

With respect to enterprise development, although the programme aimed initially to create a better environment for enterprises through infrastructure and services, the relevant measures were finally cancelled over the seven revisions of the ROP due to substantial delays. As a result, such interventions are not reported.

Innovation was also undermined over the implementation of the ROP with the most significant intervention being the preparatory studies on the creation of a scientific park in the area of Patras.

The overall contribution of the ROP in the environmental sustainability thematic field was significant, taking into account the share of population served by basic environmental

infrastructure (water supply included). Such interventions had a direct positive impact on the regional environmental conditions and indirectly improved the living conditions of the regional population. The population benefiting from water supply projects reached 42 percent of the region's total population, while the population served by wastewater treatment facilities and sewerage networks from 3 percent at the early years of the period, reached 30 percent. Moreover two major interventions for Patras' basic environmental infrastructure commenced during that period and were finalised over the next programme period, namely the water supply project and the wastewater treatment plant. The reported achievements also include construction of two wastewater treatment plants in Ilia and Etoloakarnania regional units (Amaliada and Thermos respectively), purchase of 25 vehicles for urban waste collection, and elaboration of studies on solid waste management.

Regarding labour market needs, the response of the 1989-93 ROP was limited in 344 training programmes for the development of new skills in order to produce qualified and specialised human capital. With regard to the results of the intervention, 1.9 percent of the region's labour force attended these vocational training programmes (see detailed information on the trainees and the duration of the programmes in Annex III). Despite the relatively high completion rate of the vocational training programmes (344 programmes implemented out of the 369 programmes approved), implementation and effectiveness of the vocational training over the first programme period has proved problematic due to deficiencies attributed to the implementing bodies and the overall system, which was revised during the following period. Social cohesion has been one of the objectives incorporated in the regional strategy with interventions such as infrastructure in health services and education. The most important projects include construction of 30 school units, expansion of the university buildings and upgrade of its equipment, infrastructure improvement of Patras Technological Educational Institution (TEI), and construction of building infrastructure for Mesologgi TEI. In the field of social services, eight new day nurseries and a day-care centre for disabled people were established.

As regards the overall impact of the ROP, its implementation has created 1,162 jobs (in equivalent man-years) that correspond to the 0.4 percent of the region's manpower. 917 of these jobs were created over the project construction period, while 245 were permanent new jobs. This disproportion between jobs during the construction phase and permanent jobs can be explained by the programme's actual expenditure which indicates that whilst 82 percent of the funding was directed to infrastructure projects, only 3.2 percent of the resources were spent to improve the region's productive base.

Programme period 1994-99

In the 1994-99 programme period, significant changes took place in the monitoring process as well as in the strategy and structure of the 2nd CSF. The implementation period of the programmes coincided with the launch of the first Convergence Programme, while significant changes of Structural Funds regulations affected the structure of the new 1994-99 CSF with the National OPs (sectoral programmes) being allocated 60 percent of the total resources, resulting thus in a considerable decrease of the regional part.

Although the relative scale of the resources allocated to regions (as a percentage of the total CSF allocations) had been reduced compared to the previous period, the actual amount was

considerably increased. Hence the resources available for Dytiki Ellada 1994-99 ROP were increased threefold in the 1989-93 ROP budget, and this increase is directly reflected in the number of co-financed projects, which amounts to 1,325 projects (twice the number of projects of the previous ROP), as well as in the programme's achievements.

Apart from the ROP and the NOPs of the CSF 1994-99, Dytiki Ellada also benefited from the Community Initiatives Urban, Leader and Interreg Internal Borders.

One of the basic elements of the programme period was the start-up of a number of strategic projects most of which were finalised over the 2000-06 period. Such projects include: the Rion-Antirion Bridge; the Patras bypass; the interventions in the archaeological site of Ancient Olympia; and the west axis of the country (Ionia Odos) connecting the south of Peloponnisos to the northwest borders of Greece (one of the nationally strategic transport projects that faced significant problems due to insufficient resources and which are still under construction with funding from the 2007-13 NSRF). Moreover, a series of incomplete projects coming from the previous period (e.g. Nafpactos bypass) were included as bridge-projects in a distinct sub-programme of the ROP and have also contributed to the achievements of the period.

As for the previous period, the presentation of achievements is attempted by presenting the ROP's outputs compared to the targets set initially (in Annex III) and by summarising the ROP's and NOPs' main outputs and results by thematic axis. The main achievements by thematic axis for the 1994-99 National (sectoral) programmes are illustrated in Annex III.

The reported programme achievements with respect to road construction were much greater than in the 1989-93 period. With regard to the national transport network, the main physical outputs of the period include construction of 14.5 km of motorways and 5.8 km of new national road and improvement of 78.5 km of national roads. Funding for these interventions was provided by the ROP, the (sectoral) Accessibility and Road Axes OP and the Cohesion Fund. Taking into account the condition of the national road network at that time and the fact that those interventions covered just 10 percent of its length, these particular achievements are not considered important. By contrast, the period is characterised by impressive achievements in terms of the secondary (infra-regional) road network. An extensive improvement of regional and local roads took place over the programme period, since the reported outputs indicate 2,234 km of improved regional roads (provincial and local roads included). A more rigorous analysis of the available data has shown that improvements in infra-regional (provincial) roads actually covered 1,117 km which corresponds to 31 percent of the total infra-regional network. Nevertheless, achievements in this field have exceeded initial targets, which were not necessarily revised over the subsequent programme revisions that allocated additional resources to road improvement projects.

Improvement and upgrading interventions in three significant ports (initially planned for four ports) have increased the capacity of the regional ports by 17 percent through the construction of 2,303.5 meters of new quays and piers. The upgrading of Katakolo port (in Ilia) is considered an intervention of particular importance with respect to its effects on tourism development. Being very close to the archaeological site of Ancient Olympia (about 20 km), Katakolo has become over time the main cruise port of the region.

The overall impact of the ROP transport interventions, according to the interim evaluation report, has been a 7 percent reduction of travel time (no further explanation or detail is provided). The operation of Patras' bypass has reduced the duration of the journey Patras-Pyrgos by 30 minutes, while the urban area of Patras is largely decongested from transit vehicles. It should be noted that the traffic congestion of Patras' city centre was to a great extent attributed to transit vehicles travelling towards the west coast of the region and therefore one of the problems to be solved by the bypass.

In the field of communications, the (thematic) Telecommunications OP provided financing for the upgrading of communications infrastructure from analogical to digital, allowing wider connection of regional population to the telephone network and further reduction of connection waiting lists.

The scope of the interventions for sectoral adjustment of the region is limited to tourism development. Significant tourism infrastructure for the region was financed over the period, including improvement of Kalavrita ski centre in the mountain area of Achaia and infrastructure for the creation of two new marinas in Katakolo and Mesologgi. In the field of rural tourism, 84 agri-tourism plans have been supported with EAGGF funding and a considerable number of pathways in the mountainous areas have been constructed in the wider context of promoting alternative tourism activities in the region. Moreover, intertwined with tourism were the interventions in the field of cultural heritage. Intensive work took place in the protection and regeneration of the region's cultural heritage through interventions that exceeded initial targets in monuments' and archaeological sites' restoration and consolidation works. The intervention in the archaeological site of Ancient Olympia is the most characteristic example. In anticipation of the Athens Olympic Games (2004), a number of projects were implemented for the overall protection and promotion of both the archaeological site and the wider area. The interventions started under the 'Tourism-Culture 1994-1999' OP with the implementation of two basic infrastructure projects in the wider archaeological site of Ancient Olympia and were continued in the next programme period with funds from the ROP and the respective sectoral OPs.

Structural Funds investments in enterprise development have actually started over the 1994-99 period, as in the previous period there was not particular progress in this area. In the framework of the ROP, 139 investment plans were supported through the provision of incentives, while the (sectoral) Competitiveness OP provided financial support to 160 SMEs' investment plans. Soft actions included a regional body established in Patras to provide support and services to SMEs and 120 studies on enterprises' development, design of new products and quality control. The most important intervention was the infrastructure improvement of Patras Industrial Zone, aiming at mitigating the effects of deindustrialisation by attracting new industries to the area. Special measures implemented to enhance the productive base of the region in the wider area of Patras had a spatial dimension because of the deindustrialisation issue. Incentives offered for enterprise development in the targeted area were relatively higher than in the rest of the region, creating a more favourable environment. It is estimated that interventions for enhancing enterprise development in that period created about 500 jobs.

The 1994-99 period has marked the beginning of interventions in the field of innovation, with financing coming from the sectoral Competitiveness OP. At that time, in lagging regions such as Dytiki Ellada, innovation was perceived as infrastructure to attract new innovative enterprises and, in its soft version, translated as investment focused on academic research. Hence interventions of

that period included the construction of a hub infrastructure (the Patras Science Park⁹), the upgrade of the Institute of Chemical Engineering and High Temperature Chemical Process (ICE-HT) (an important research institute based in the region) and financial support to 61 R&D programmes.

The need to comply with the requirements of EU legislation on urban wastewater treatment and waste (Directive 91/271) was widely recognised as a priority for the region over the 1994-99 period. As a result, a considerable effort has been made by the region which used Structural Funds support for the construction of 7 wastewater treatment plants serving 91,600 inhabitants of semi-urban areas of the region. The capacity of those plants corresponded to 13 percent increase of the regional capacity in this thematic field. The Cohesion Fund's contribution was also crucial as it supported the construction of the necessary wastewater management facilities (sewerage networks and plants) in the main urban areas of the region (Patras, Agrinio, Mesologgi, Pyrgos). Furthermore, the urban solid waste management system was fairly improved compared to the conditions of the previous period. With ROP funds, a sanitary waste disposal site (XYTA) operated in Kato Achaia by the end of the period and the municipal waste collection systems were supported with new modern equipment. In addition, two new sanitary waste disposal sites were completed in Patras and Mesologgi with funding from the Cohesion Fund. Considerable effort has also been focused on water supply in the urban and rural areas of the region resulting in a duplication of the networks' length. The percentage of regional population served by water supply networks at the end of the period reaches 95 percent, increased by 5 percent compared to the baseline.

In the field of social cohesion, the ERDF has been the main source of funding for a substantial improvement of the social services provided in the region. New health infrastructure in Pyrgos and Mesologgi (a modern hospital in Pyrgos replaced the existing and a new hospital in Mesologgi) has increased the capacity of regional hospitals by 341 beds and significantly improved the number of hospital beds available per 1,000 inhabitants which was increased from 3 at the beginning of the period to 3.25. In addition, 30 new secondary school buildings were constructed, increasing by 25 percent the number of classrooms and substantially decreasing the number of schools that needed to operate in a two-shift basis (morning/afternoon shift) due to limited overall capacity. Infrastructure for higher education was also upgraded through the expansion of the Patras' university and Mesologgi TEI. Equipment (labs, libraries and computers) was also supplied to all educational levels.

The main interventions concerning the labour market were financed by ESF and as in the previous period focused mainly on vocational training programmes which had an impressive performance with respect to the total duration of the programmes, reaching 234,799 man-hours of training. However, according to the ROP's Final Implementation Report, the results of those programmes include an increase of the trainees (age 15-19) by 0.3 percent compared to baseline data. Their overall impact with respect to unemployment has been a reduction of 0.47 percent (from 9.47 percent to 9 percent) by the end of the period. Although this might be considered an important achievement, it is actually an artificial reduction, explained by the fact that during the training programmes trainees are not reported as unemployed. Besides, one of the main criticisms regarding the effectiveness of the system has been the lack of a recorded follow-up process concerning the absorption of the trainees by the labour market. A substantial achievement has been the increase

⁹ The project is not included in the achievements of the 1994-99 period, as it became operational in the next programme period.

of the socially excluded population supported by the programme's interventions and finally rehabilitated in social and vocational terms; the particular indicator from 10 percent at the beginning of the programme turns to 30 percent at its closure. The overall impact - for which there is availability of data - is the employment created by the ROP's interventions which is considered realistic. According to the programme's closure report, it is estimated that the overall employment by the ROP reached 6,599 jobs, analysed as 5,881 'temporary' jobs (defined as employment linked to the delivery of interventions/projects such as jobs during the construction phase) and 718 new 'permanent' jobs created by State aid and incentives provided to enterprises and also by the operation of a new hospital in Mesologgi and the increase of secondary education schools' capacity.

Programme period 2000-06

The remarkable increase of the CSF 2000-06 resources caused an increase of about 50 percent of the resources allocated to Dytiki Ellada 2000-06 ROP. The increased financial allocation made the programme a much more complex development tool, although it was managed with improved management and monitoring systems. It is of note that the EU anti-crisis measures and delays caused by the devastating fires of 2007 in the region, led to an extension of the use of the 2000-06 funding to 31 December 2009. The analysis therefore concerns an almost ten-year period in which significant economic changes took place.

Regarding accessibility infrastructure, the most important achievement of the particular period, with respect to its strategic role for the region, has been the completion and operation of Rion-Antirion Bridge. In addition, the national road network was upgraded through the construction of 18.6 km of new motorway and improvements were made to 37.8 km of motorways within the region. Although reported achievements in upgrading the infra-regional road network seem substantial to some extent (targets were exceeded), actual interventions were fragmented and therefore of questionable effectiveness.

Other significant achievements of the period include the completion of the first operational part of Ionia Odos within the region (a motorway of 30 km in the greater area of Agrinio - Agrinio bypass); the initiation of Patras' new port connections to Patras bypass (the highway is still under construction through the 2007-13 Accessibility Improvement OP); and the completion of the new road to Ancient Olympia. According to estimations included in the ROP's closure report, the road interventions of the programme have reduced travel time by 30 percent.

Towards an effective transport system in the region, interventions to improve the railway line - which was very old and had become incompatible with the rest of the national railway - were financed under the respective ROP measure. Despite the ambitious strategy, the final output consisted in 22.3 km of upgraded railway line linking Patras to the mountainous area of Kalavrita. In particular, this was an old cogwheel railway line (due to the morphology of the area) which was conserved and upgraded with the aim to contribute to the tourism development in Kalavrita and thus it could be characterised as tourism infrastructure rather than transport. However, the major intervention for an efficient railway system was the construction of PATHE railway (a high-speed line Patras- Athens Thessaloniki). Although the part of the line linking Patras to Athens was planned to be financed by the Cohesion Fund and the sectoral OP, only a part of it (up to Aigio) was completed within the programme period - the remainder was transferred to the 2007-13 period and

it is not yet constructed due to delays attributed to the excessive land expropriations' cost which could not be covered by national funding within the programme period.

In addition, interventions in four (4) ports of the region, with the most strategic being the new port of Patras (whose construction continued over the following period), increased the region's port capacity by 25 percent compared to the late 1990s. In the achievements of the period, the construction of 94 km of optical fibre network is also reported.

It is worth noting that, for transport infrastructure planned in the region over the 2000-06 period, resources would derive from three different financial sources: the ROP (minor input), the National (sectoral) OPs and the Cohesion Fund. According to the mid-term evaluation, the initial design allocated a total expenditure of €1.2 million to transport interventions, from which just 12 percent was the contribution from the ROP and almost half of the amount concerned the upgrading of the railway system (the TEN-T rail).

Improvements in the tourism sector, also a strategic priority for the 2000-06 ROP, are considered significant with respect to sectoral adjustment, since 3,963 beds were reported as being created or modernised in the region, representing 10 percent of the regional capacity in tourism accommodation. Thus, 156 enterprises of all tourism sectors have been supported in the context of the ROP and the sectoral 'Competitiveness' OP. Intertwined with tourism was also the realisation of agri-tourism projects in rural areas, creating additional beds. Therefore in the context of the ROP the EAGGF co-financed 56 agri-tourism and craft investment plans. Private investments have also been supported by infrastructure investments in the tourism sector such as marinas with a total capacity of 95 tourist boat berths, and regeneration projects for the tourism development of 11 areas. The significant impact of these interventions is reflected in the increase of nights spent in tourist accommodation establishments between 2000 and 2008 by 22 percent.

Restoration interventions in sites of cultural interest had also a considerable contribution to tourism development. With the target of the programme being 101, interventions for protection, restoration and rehabilitation of monuments and archaeological sites 88 were finally completed. Interventions at the archaeological site of Ancient Olympia have been included in the strategic priorities of the ROP's as analysed in Chapter 3. Continuing the interventions from the previous programme period to the area, the 2000-06 ROP financed the most important and high-cost project for the rehabilitation, enhancement and restoration at the archaeological site with an overall total project cost of €3.18 million. Complementary interventions for the tourism development and enhancement of the area have been also realised under the ROP and two sectoral OPs. The total budget of the interventions at the area of Olympia in the 2000-06 period reached €71.2 million (including road infrastructure). The particular interventions are outlined in detail in Annex I.

In the field of enterprise support, 827 investment plans were supported through State aid both from the ROP and the sectoral Competitiveness OP, and 33 new enterprises have been created. However, the mid-term evaluation notes the fact that incentives to enterprises were not based on specific strategy and targeting (e.g. focus on specific sectors, areas or targets such as productivity growth, job creation, quality certification etc.) and therefore enterprise interventions had limited overall impact on regional development, as also stated by the majority of the interviewees.

Over the 2000-06 period, innovation interventions were supported by both the ROP and the sectoral Competitiveness OP. The performance of the region is reported as making significant progress in the particular field. Patras Science Park has been the first technology hub that started its operation at the launch of the programme period providing accommodation to 100 innovative firms contributing to the creation of New Technology-Based Firms (NTFB) as well as to absorbing and retaining important research and scientific manpower within the region. Infrastructure provided to research institutions included continuous expansion and upgrade of building infrastructure and equipment of Patras University, Technological Educational Institute of Patras (TEI of Patras) and Technological Educational Institute of Mesologgi (TEI of Mesologgi) and also expansion of building infrastructure of the Institute of Chemical Engineering and High-Temperature Chemical Processes (ICE-HT). In this favourable environment for R&D, the reported results include creation of 173 jobs for new researchers, support to 79 private firms to implement R&D projects and technology acquisition, submission of (7) seven patents as a result of co-funded R&D projects, cooperation of regional research institutions with 61 foreign research centres; and financial support to 32 R&D programmes. The results in the R&D field were considered remarkable by most of the interviewees, especially if compared to previous periods. The main criticism though focuses on the need to ensure wider use of research results by the production base of the region and on the actual impact of the particular interventions in regional development terms.

In the field of sustainability, given that deadlines set by the EU directive 91/271 on the management of municipal wastewater treatment and disposal were expiring within the programme period, the need to complete all necessary infrastructure became imperative. Thus achievements in wastewater management are considered significant since they include construction of 3 wastewater treatment facilities for semi-urban areas of the region (through ROP co-financing) and interventions addressing the needs of the urban areas of the region (co-financed by the Cohesion Fund). Such interventions resulted in a significant increase of the regional population served by wastewater networks and treatment facilities covering most of the EU requirements with some minor gaps to be covered by the 2007-13 programmes. As infrastructure for wastewater treatment and disposal had considerably progressed, emphasis was given to compliance with the EU requirements on solid waste management. In this context, 43 uncontrolled waste disposal sites were rehabilitated for future reclamation. Despite the emphasis given by the regional authorities to definitely address the issue of environmentally sound management and disposal of urban solid wastes, there was insufficient progress with the exception of Etoloakarnania regional unit. Lack of social consensus on the site of the sanitary waste disposal facilities has increased to become a serious constraint, becoming the main reason for considerable delays of such projects all over the country. As regards water supply networks, the ROP has exceeded the initial targets, thus covering the whole regional population with potable water infrastructure. The closure of the programme period is characterised by the solution of the chronic problem of water supply in Ilia and also by the initiation of financing for a major project on improving the water supply system of Patras and the wider area. The first interventions for renewable energy production are also reported as part of the outputs achieved in the region by the sectoral Competitiveness OP.

The ROP measures in terms of the labour market theme were financed by the ESF and included, as in the previous periods, vocational training programmes (157 vocational training programmes and 2,918 trainees). The new element of the ESF intervention in the region has been the implementation of actions to promote gender equity in the labour market. Such interventions

included the establishment and operation of 154 social structures (such as day nurseries, day-care centres for elderly and disabled people, door-to-door services and assistance to elderly people etc.) that aimed to facilitate access of women to the labour market. Despite their direct effectiveness with respect to reducing women unemployment (directly and indirectly), such social structures have evolved into valuable mechanisms promoting social cohesion in the region. Integrated development programmes implemented in urban and rural areas of the region, in the context of the ROP, included CSF actions to promote employment at the areas of intervention. Fieldwork has indicated that the operation of such structures has been the most recognisable interventions financed by the ESF in the region. The overall ROP impact for which data are available is the employment created by the programme's interventions. According to the closure report, it is estimated that 14,824 equivalent jobs were created over the construction of infrastructure projects. Taking into account that performance in the indicator is almost double the initial target, the particular achievement is considered overestimated if compared to the respective achievements of the entire CSF which reached 60,000 equivalent jobs. In contrast, the 2,310 permanent new jobs created in the enterprises supported, are considered realistic whilst doubling the target, since they are consistent to the increased expenditure finally spent on the enterprise field.

Substantial contribution of the ROP is also reported in terms of social cohesion. The attempts to achieve higher level of health services in the whole region had started over the previous period, while Patras had reached a certain level of health infrastructure and services due to the university regional hospital. The main achievements of the period include the construction of one new hospital, infrastructure improvement and medical and technical equipment upgrade in 3 hospitals with parallel creation of new clinics. Upgrading projects were also implemented in the small medical units based in the rural areas of the region. The overall result of the ERDF intervention has been the convergence of the region to the national average with respect to health services as expressed by the number of hospital beds by 100,000 inhabitants. Furthermore, construction of 34 new school units and the modernisation of the computing equipment in all regional schools has been the main contribution of the ROP towards upgrading the level of primary and secondary education in the region. Through increasing school capacity by 372 new classrooms, a long-term goal for the region has been achieved; schools are operating in single shift. Solution to the problem was particularly important for the urban areas of the region where school congestion was more acute. Infrastructure and equipment of the university and the Technological Institution (TEI) of Mesologgi kept improving and new educational equipment (labs, libraries and computing centres) was provided to all levels of education.

Integrated development interventions, introduced over the 2000-06 period in the Structural Funds programmes (the ROPs and the sectoral Agricultural OP) promoted integrated development in specific zones and micro-zones in the rural and urban areas respectively. Over the programme period, 11 (out of the 12 targeted) integrated interventions were implemented in the urban areas of the region (financed by ERDF and ESF), whereas integrated interventions in the mountainous and lagging rural areas have benefited 18 rural villages and settlements (financed by the ERDF, ESF and EAGGF). Such plans and projects have considerably raised the living conditions of disadvantaged neighbourhoods or mountainous villages of the region as most of the regional interviewees acknowledged.

Programme period 2007-13

The overall ROP resources allocated to Dytiki Ellada have been reduced in relation to the previous period since the programme is financed only by the ERDF.

Given the implementation stage of the programme, actual physical outputs are still limited as most of the projects are in progress or not yet operating. Thus, discussion on achievements here concerns the expected physical output of projects that are currently financed by the programme and are still under implementation (expected outputs) and also the achievements of the completed projects on the basis of temporary MIS data.

Temporary data available in the MIS on the overall impact on employment to date indicate that 677 equivalent jobs have been created so far during project construction. In addition 835 enterprises, most of which are SMEs, have been financed by the programme with a total amount of €37 million.

In the current period, the strategic transport projects for the region, namely completion of the major road axes [PATHE segment from Patras to Athens and part of Ionia Odos (segment Pyrgos - Agrinio via Patras)] and of the railway axis to Athens, have been included in the context of the sectoral Accessibility Improvement OP. Programming for the current programme period in transport infrastructure includes the construction of 417 km of a Trans-European Networks (TEN-T) motorway (Ionia Odos) in Dytiki Ellada. As discussed above in this section, the particular road axis is considered of strategic importance for the region as it is expected to solve to a great extent the peripherality issue (external and internal). However, due to the current financial crisis, construction works do not show any progress since all concession projects in Greece have been suspended due to financing constraints.

The upgrade of railway within the region also constitutes one of the region's strategic targets for the current period. Being one of the projects which did not proceed whilst having been planned in the previous period, the new high-speed line (98.6 km) - also included in the TEN-T projects as part of PATHE railway - will link Patras to Athens and the rest of the national (already modernised) railway system. However, connection of the new Patras port is not yet part of the project in progress.

Taking into account that from the 1994-99 programme period and onwards regional strategy has been based on the particular transport interventions, there is broad consensus (underlined by all interviewees) that their completion is of vital importance for the overall development of Dytiki Ellada.

Little progress is reported in terms of transport interventions included in the ROP such as improvements at the national road network (from 11.75 km currently being financed only 2 km have been realised) and at the infra- regional network (6 km have been completed out of 71,34 km already included in the programme).

Important interventions are also progressing in the two strategic ports of the region, namely Katakolo and Patras. The construction works at the new Patras port are still progressing although it became operational for the itineraries between Patras and Italy in 2011.

Regional attempts aiming at the structural adjustment of the regional economy focus again on tourism as the modernisation of existing hotel infrastructure is once more part of the regional strategy on tourism sector. Insofar, 364 beds (out of a target of 1877¹⁰) have been upgraded through incentives to private investment plans for hotel modernisation. In the same sector, the creation of three ecotourism routes has been approved for funding as part of the effort to promote alternative tourism at the inner mountainous areas of the region. Protection and promotion of the cultural heritage is also included in the wider attempt to promote tourism. Hence, the restoration of 10 archaeological sites and the construction of one museum are currently under implementation. Towards a structural adjustment of the regional economic sector, the ROP includes also financial support for the creation of clusters in the most dynamic sectors. A project that has been approved for funding includes incentives for 26 enterprises. In the current implementation phase, only three (3) enterprises have been reported as participating in the relevant interventions, suggesting an underachievement attributed to the early implementation stage of the projects and also to the financial crisis.

One of the basic features of the 2007-13 period is the significant increase of the resources allocated to entrepreneurship. On the basis of the initial planning it is expected that 1910 firms will be supported by the programme for implementing their investment plans. According to the ongoing evaluation the particular intervention appears as having progressed to a certain extent, as 1.235 investments have already been completed. It is anticipated that potential resource reallocation aiming to address immediate problems caused by the acute financial crisis, in the framework of the ROP upcoming revision, will lead to a substantial increase of the initial targets in this field with a special focus on business survival.

In the field of innovation, the initial target of the projects approved in the ROP is 33 cooperation schemes between private firms and research institutions, while 10 of them have been already implemented. Moreover, 13 R&D projects have been reported as completed out of 72 which is the approved projects' target. Other expected results from projects being in the course of implementation include: 29 SMES to benefit from R&D and innovation actions; the creation of 122 equivalent man-years of employment in research; and the submission of 39 patent applications from supported researchers. Reported progress in this area is, however, limited as most of the projects are at their initial implementation stages.

With respect to sustainability a gradual shift from the traditional basic environmental infrastructure (e.g. water supply, sewerage treatment, etc.) to the introduction of a more integrated approach within the regional strategy appears to be the new element of the programme period. So renewable energy and energy efficiency issues are also included in the frame of the ROP projects including: replacement of 36,936 energy-consuming appliances with the aim to reduce CO₂ emissions up to equivalent CO₂ 35Kt and renewable energy production up to 3,11MW. However, basic environmental infrastructure gaps remaining from the previous periods are also addressed with particular emphasis on solid waste management projects. The projects that have been approved in this field include the rehabilitation of 11 sites of uncontrolled waste disposal that stopped operating (total area of 58 km²), the construction of a new site for sanitary disposal of residual wastes and of a new wastewater treatment plant. None of these projects is yet completed.

¹⁰ The target refers to projects under implementation.

In the current period the main interventions with direct focus on the labour market are not part of the ROP but are included in the (sectoral) Development of Human Resources OP co-financed by the ESF.

In the social cohesion field, the ROP interventions include further upgrading of health infrastructure focusing also on the main health structures with a target to upgrade 5 principal health units. The overall target of the projects under implementation is to upgrade 560 hospital beds, with 356 of them to have been reported as upgraded.

Less emphasis than the previous programme periods is currently put on education infrastructure as the respective approved projects include construction of 38 school classrooms. This is considered a reasonable shift if taking into account the achievements in the field of education throughout the past twenty years.

Annex III provides a summary of the main achievements of the 2007-13 ROP based on data inserted in the MIS until end of June 2012 and their comparison to targets set at project level. The main outputs so far from the 2007-13 National (sectoral) OPs are summarised also in Annex III with the note that targets set at the sectoral OPs do not refer to the regional level and therefore are not included.

5.1.2 Analysis by theme

The following section examines the aggregate reported achievements organised by theme.

Infrastructure

Infrastructure has always been a central issue in the region's strategy as enhancing physical fixed capital - with particular emphasis on transport - has been considered necessary for economic development. Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Regional Infrastructure Endowment c. €1,964 million until mid-2012, equivalent to circa 43 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 39 percent of expenditure in 1989-93 (ROP only), to 49 percent of expenditure in 1994-99, to 32 and 61 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

The overall interventions in transport infrastructure have achieved their targets relating to the national road network by the construction of 221 km of new national roads which increased by 25 percent the total length of the national roads within the region. However, achievements in the strategic major infrastructure concerning TEN-T (Trans-European Networks) roads and rail have not progressed as initially planned. Significant delays, often related to lack of preparatory studies or financial constraints, led to reallocation of funding at the level of the sectoral OPs and consequently to extensions of construction period (often beyond the duration of the programme period) or project transfers to the following programme period.

The most strategic of these projects was the Rion-Antirion Bridge, characterised as the most emblematic project of the whole 1989-2013 period, since regional geographic cohesion has been achieved to a great extent. With its preparatory and technical studies undertaken during the 1st CSF

and after seven years of construction (covering almost two programme periods), the bridge opened in August 2004, five months before the deadline, providing a permanent link between Peloponnisos and mainland Greece and consequently between the north and south part of the region. As outlined in detail in Annex I, the operation of the bridge has reduced crossing time to 5 minutes (before the bridge was built the average crossing time was 45 minutes using the ferry-boats), has improved the crossing's comfort and safety, and has ensured a permanent link not dependent on weather conditions.

In additional 71 km of motorways constructed over the second and third programme periods have also come into operation. The contribution of such interventions to the reduction of travel time has been substantial and widely recognised by the interviewees despite the criticism of delays affecting the rest of the major projects. The most indicative examples are the reduction of the duration of Pyrgos-Patra journey by 30 minutes and that of Patras-Agrinio by 45 minutes. With the completion of the major interventions planned under the current (and probably the successive) period, it can be concluded that the goal to improve accessibility through road networks will have been totally achieved.

The transport infrastructure of the region has been completed with the upgrade of three out of its four main ports. Interventions included the new port of Patras, the new port of Katakolo and the port of Kyllini which were substantially upgraded. The port of Katakolo, due to the significant improvement works that took place over the successive programme periods, has become the third port of the country with respect to cruise passengers serving 350,000 transit passengers per year (700,000 boardings / disembarkings).

As discussed in Section 5.1.1, limited progress has been achieved with respect to the major railway projects being part of the TEN-T networks and which in combination with the achievements mentioned above were expected to provide an integrated transport system that would address the accessibility issue and support regional economy. A further point of reflection should be in relation to development impact from the tripling of achievements in terms of improving infra-regional and provincial roads (interventions along 2,113 km against a target of 809 km) including 845 km financed under the sectoral programmes. Besides, the basic criticism - emerging from the interviews and fieldwork - related to infrastructure achievements of the entire 1989-2013 period has been the fragmentation of interventions that were finally implemented with questionable actual effects on regional development. A significant amount of resources was spent on fragmented road improvements rather than on more strategic projects of regional importance, mainly because they were easier to implement (faster maturing and construction processes).

Structural Adjustment

The structural adjustment of the region from the beginning of the entire period has focused on strengthening tourism and improving competitiveness of the two main economic activities of the region, being the primary sector and industry. The discussion that follows focuses mainly on what was achieved in terms of the tourism sector which has been the most affected sector by the ERDF intervention taking into account that regional strategies throughout the entire 1989-2013 period had a clear sectoral focus on tourism rather than other sectors. Tourism represented the alternative that would balance the region's overdependence on the primary sector. Besides, regarding the evolution of industry over the entire 1989-2012 period it would not be possible to

draw safe conclusions on the net contribution of ERDF mainly because the particular sector has followed the general national tendency of decline over the last decades. On the other hand, the most important sector for the region of Dytiki Ellada, the primary sector, was not supported directly by the ERDF and therefore no related achievements are reported.

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Structural Adjustment c. €515 million until mid-2012, equivalent to circa 11 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 4 percent of expenditure in 1989-93 (ROP only), to 15 percent of expenditure in 1994-99, to 14 and 1 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

The policy to develop tourism was based mainly on increasing accommodation capacity and improving the quality of existing accommodation. Moreover it has been combined with restoration of the existing cultural heritage and urban regeneration also enabling an enhancement of the quality of life of the local population. The overall attempt was also supported by infrastructure oriented to the particular sector as well as to basic infrastructure (transport, public facilities etc.). The overall achievements include upgrading and modernisation of 3,963 tourist beds corresponding to 20 percent of the region' capacity while new luxury resorts were created at the coastal zone of Achaia and Ilia. Intertwined with tourism was the realisation of agri-tourism projects in rural areas, creating additional tourism beds, particularly over the 2000-06 period with funds mainly from the EAGGF. Tourism-related infrastructure includes the construction of two marinas with a total capacity of 95 berths and the development of a ski centre in Kalavrita.

The interventions that took place in cultural heritage conservation and enhancement also made a considerable contribution to tourism development. A large number of restoration interventions in monuments and archaeological sites of the region were combined with the creation of two museums (in Ancient Olympia and Patras) and other interventions in the field of modern culture such as cultural infrastructure projects connected to Patra's appointment as Europe's Cultural Capital for 2006.

The major intervention in Ancient Olympia is a characteristic - probably the most successful - example of co-ordinating efforts and resources from different sources to achieve a strategic target. Although the majority of interventions in the Ancient Olympia area were implemented through the 2000-06 ROP, the overall intervention covered two programme periods and included 17 projects with a total budget of €33.96 million (financed by 2 successive ROPs, one 1994-99 sectoral OP and two 2000-06 sectoral OPs). It included different types of projects such as rehabilitation, enhancement and restoration of the archaeological site and its monuments, building and upgrading museums, rehabilitation and regeneration projects in the wider area, and information technology projects for the collection, digitisation and promotion of archaeological-historical material. In addition to those projects, the Ancient Olympia bypass was also constructed; a large road infrastructure project of €40.32 million that improved accessibility and simultaneously improved the quality of life of local residents. These particular interventions are outlined in detail in Annex III. The interventions created prospects for increased tourist numbers in the archaeological site and the museum, which began to be visible from 2004 onwards. Two years later, in 2006, the archaeological site's visitors had been increased by 16.3 percent compared to 2004, exceeding

455,000 visitors, while the corresponding increase in the number of the museum visitors was 32.9 percent, reaching approximately 177,000 visitors.

The construction of Katakolo port, serving almost exclusively cruisers, gave a major boost to tourism in the region even if not reflected in the number of tourist overnights. Having become the third most important cruise port of the country, it serves around 350,000 transit passengers per year, the majority of which visit the archaeological site of Ancient Olympia and the greater area of Iliia. In addition, urban regeneration projects, especially over the 2000-13 period, have indirectly affected the regional tourism product through their contribution to the overall improvement of the region's image.

The results of the interventions in the tourism sector are reflected in the significant increase (by 31 percent) of the number of nights spent in tourist accommodation establishments, which from 1,269,265 in 1989 reached 1,663,980 in 2010. This development has also led to an impressive increase of the tourist sector GVA by 83.5 percent over the 1995-2007 period (from €220 million in 1995 to €405 million in 2007).

Enterprise

With respect to entrepreneurship, the ROPs overall have underperformed since they have supported 540 firms /investment plans against as target of 2,114 firms. In addition, the sectoral NOPs have supported 586 enterprises in the region throughout the entire 1989-2013 period. It has not been possible to estimate the extent to which targets were met by the sectoral NOPs. However, the main criticism by almost all interviewees on the incentives policy having been implemented throughout the entire period was that it proved to be of limited overall impact to regional development due to a non-prioritised strategy and lack of specific targeting (e.g. sectoral/territorial) both at the national and regional level.

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Enterprise c. €309 million until mid-2012, equivalent to circa 7 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 1 percent of expenditure in 1989-93 (ROP only), to 6 percent of expenditure in 1994-99, to 7 and 8 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

Regarding this particular theme, it is also worth noting the interventions for the substantial improvement of infrastructure in the industrial zone of Patras, which resulted in the installation of 160 companies employing 5000 employees, as well as the creation of the Industrial Park of Patras. The latter has not proved very attractive to companies due to high prices of land, as indicated by the fieldwork.

In the 2007-13 programme period, although the adoption of the Lisbon Strategy involves business support being focused on innovation, the lagging condition of the region combined with the acute economic crisis has led to more emphasis on the survival of firms.

Innovation

Innovation was originally perceived by the region to be a 'soft' target of investment, not to be a priority until basic needs and the problems of lack of material infrastructure and accessibility had been addressed. It became more prominent in the 2000-06 and 2007-13 programme periods.

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Innovation c. €71 million until mid-2012, equivalent to circa 2 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 0 percent of expenditure in 1989-93 (ROP only), to 3 percent of expenditure in 1994-99, to 1 and 0 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

In the 1994-99 and 2000-06 periods, remarkable support was provided for the construction of facilities with the main beneficiaries of resources for innovation being the Higher Education Institutions (the University of Patras and TEI) and the research centres of the region.

ERDF contribution in the field of innovation has been catalytic for the creation of Patras Science Park (having provided support and accommodation to about 100 companies over the entire period); the development of two important research centres; the creation of one cluster of companies activated in the field of micro-electronics; the development of the research work carried out by the higher education institutions of the region (Patras University and TEI of Mesologgi, Agrinio and Patras). A success story in this field is the Coralia Project on the creation of a micro-electronic SMEs cluster which, having been initially established in the Patras Science Park, was successfully developed and relocated five years after its start-up.

Those projects represent the main results from ERDF support in this field, which had a positive impact in academic research and the creation of regional innovation institutions.

Despite some attempts to establish a more efficient network among regional innovation institutions and local firms under the 2000-06 programmes, businesses did not seem to be very receptive. Because of their small size (in financial terms) and their specialisation in labour-intensive and low value-added sectors, enterprises were not capable of operationalising innovation processes, but were more suited to modernisation actions. Therefore, mainstream R&D actions have not though proved enough to link research to the regional economy and efficiently contribute to its structural adjustment by promoting result-applied research. The particular deficiency lies not only in Dytiki Ellada region, but represents a wider structural problem of the domestic policy on research and technology focused almost exclusively on strengthening research infrastructure preventing them from further evolving. The above observation does not ignore the contribution of the ERDF in creating a substantial innovation potential and a high-level research workforce in a region that underperforms in relation to the national average in terms of the population's educational level.

Indicatively, BERD as a percentage of GDP and of GERD was 0.1 percent and 14.3 percent respectively over the 2000-2008 period and the patenting activities of firms were relatively low. In contrast the Highest Education Sector accounts for approximately two-thirds (65.4 percent) of the regional GERD. In addition, employment in the sector (Human Resources in Science and Technology) is growing between 2000 and 2011 (from 17.1 percent to 27.9 percent respectively). In general,

Dytiki Ellada outperforms the national average, lagging behind only the capital region of Attiki (and perhaps Crete and Thessaloniki).

Environmental sustainability

The environment has been a continuing theme in the regional strategy, which boasts a notable natural heritage that represents a tourism asset. The interventions under this thematic axis vary from waste and water management to energy efficiency.

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Environmental Sustainability c. €374 million until mid-2012, equivalent to circa 8 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 36 percent of expenditure in 1989-93 (ROP only), to 8 percent of expenditure in 1994-99, to 8 and 3 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

The first major reported achievements relate to sustainable development, mainly involving improved water supply and wastewater management leading to an overall improve in citizens' wellbeing. The targets set for the basic environmental infrastructure (water and wastewater systems) were almost reached, substantially increasing the share of population served by basic environment facilities.

At the outset of the study period, 3 percent of the total regional population was connected to sewerage networks, while at the end of the entire 1989-2013 period this percentage is expected to become almost 100 percent. In addition, the region has complied with the requirements concerning the necessary wastewater treatment infrastructure for its urban, semi-urban and coastal settlements, in accordance to the EU legislation.

Progress has been minor in the field of solid waste disposal as only the regional unit of Etoloakarnania has achieved the targets set in this field. With regard to the uncontrolled sites of waste disposal (uncontrolled landfills), rehabilitation works have been completed in 45 of them that had stopped their operation. In addition the ERDF and the Cohesion Fund have provided resources for the construction of sanitary waste disposal facilities which operate at all the three prefectures of the region. By the end of the current period, it is expected that the target for the construction of a new site for sanitary disposal of residual wastes will have been achieved, as will the target to complete rehabilitation in the remaining 11 uncontrolled landfill sites. Compared to the starting point in 1989, when uncontrolled waste disposal was the norm especially in rural areas, progress in the particular field is considered significant.

With regard to the energy efficiency and renewal energy, electricity production from renewable energy sources (RES) and promotion energy efficiency actions are interventions that have been recently undertaken by the ROP. Despite the fact that some of the largest hydroelectric plants in the country are located in Dytiki Ellada, the natural gas network has not reached the region yet, constituting a constraint for the reduction of greenhouse gas emissions.

The areas of forest protection and sustainable development of protected areas (biodiversity conservation) do not indicate any particular progress.

Labour Market

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Labour Market c. €473 million until mid-2012, equivalent to circa 10 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 13 percent of expenditure in 1989-93 (ROP only), to 7 percent of expenditure in 1994-99, to 17 and 0 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

Achievements in the areas of human resources and employment are less clear. Support from ERDF has indirectly tried to tackle the problem of unemployment in the region. In many cases, incentives for SMEs were linked to the creation of new jobs and the safeguarding of existing ones. However, it is not possible to estimate the number of permanent jobs created or to produce a clear picture of what would have occurred to the level of employment without the ERDF contribution.

On the other hand, most of the funding for addressing unemployment came from the European Social Fund, but with more emphasis on vocational training particularly over the first two periods.

Implementation and effectiveness issues that appeared after the first programme period of vocational training programmes in the context of the CSFs, led to an institutional reform of the national system and bodies involved (after strong pressure by the EC) and the establishment of a better structured system of bodies providing vocational training over the 1994-99 period. However, as stated by the evaluations undertaken for both the 1994-99 and the 2000-06 periods, effectiveness of the new system was not as expected, since the vocational training system failed to orient training towards the real needs of the labour market and thus to ensure more effective integration into it.

Social cohesion

Total funding (National+EU) plus private funding (where available) from programmes reviewed in this study, regional and national, invested in the theme of Social Cohesion c. €653 million until mid-2012, equivalent to circa 14 percent of the overall expenditure across the study period. This amount fluctuated over the periods, from 7 percent of expenditure in 1989-93 (ROP only), to 11 percent of expenditure in 1994-99, to 20 and 7 percent respectively in the 2000-06 and 2007-13 programmes (for the current programme spending is still underway).

The major indirect achievements on social cohesion that can be attributed to ERDF are connected to the building of assistance infrastructure. Intervention related to healthcare facilities have been particularly successful since the region has substantially improved its health infrastructure. Two new hospitals (in Pyrgos and Agrinio) were created, while existing hospitals were upgraded through the establishment of new specialised clinics (e.g. paediatric clinics) and intensive care units. The proportion of hospital beds per 1,000 inhabitants increased, from 3/1,000 inhabitants in 1989, to 3.5/1,000 inhabitants in 2010, while psychiatric reform progressed through the promotion of deinstitutionalisation actions. In addition, the 154 social structures that were established in the context of the ESF funding for facilitating the access of women to employment (action for the harmonisation of work and professional life for women) have evolved to become valuable mechanisms promoting social cohesion in the region. Being the most recognisable interventions

financed by the ESF in the regional level, their operation remains under co-financing over the 2007-13 period.

Progress in education infrastructure is also considered important particularly in terms of the operation of a large number of new school units, resulting in the operation of 100 percent of the schools in a single shift daily basis which has been the final target. Taking into account that the double shift in secondary schools was the norm especially in the urban areas in 1989, interventions have completely succeeded their target in basic education. Numerous interventions to upgrade school laboratories and computer centres and create school libraries constitute also a positive evolution.

Integrated development interventions introduced over the 2000-06 period under the Structural Fund programmes (the ROPs and the sectoral Agricultural OP) promoted integrated development in specific zones and micro-zones in the rural and urban areas respectively. They represented to some extent the evolution of the previous model of local development promoted by the Special Development Programme for Local Authorities (EAPTA), consisting actually of lists of projects without any particular strategy and targets at the local level. The new 2000-06 interventions were viewed as tools to promote territorial cohesion in a region where infra-regional disparities remained one of the most outstanding problems. In this framework, integrated programmes were developed by local partnerships through a bottom-up approach and implemented in the specific geographic zones situated either in the urban centres of the region or in the mountainous and lagging areas of the countryside. The interventions included actions eligible by more than one of the Structural Funds so as to allow greater synergy between Funds. Over the 2000-06 period, eleven (11) integrated interventions were implemented in the urban areas of the region (financed by ERDF and ESF), whereas integrated interventions in the mountainous and lagging rural areas have benefited 18 rural villages and settlements (financed by the ERDF, ESF and EAGGF). Specific projects financed under such programmes included urban regeneration, rehabilitation and aesthetic improvement of settlements, restoration of old buildings and monuments, basic environmental infrastructure, creation and operation of welfare structures, incentives to investment plans in the area and other types of actions that were compatible with the specific needs of the zone of interest. The concentration of resources and the focus on specific territorial units has more visible impact in terms of reversing the poor attractiveness of those areas, improving the quality of life and possibly mitigating emigration. The positive impact of ERDF contribution in this field was also recognised by the majority of the regional interviewees.

Moreover the extensive improvement of infra-regional network in the context of the ROPs allowed shorter transit times between mountain communities and primary road links thus resulted in improved social cohesion and community development.

Table 16: Outputs by thematic axis for the regional and sectoral programmes, 1989- 2006

Thematic Axis	Outputs, Results and Impacts				
	Dytiki Ellada ROPs(*)			NOPs(**)	Total Achieved (ROPs + NOPs)
	Target	Achieved	%	Achieved	
Infrastructure					
• Highway				70.9	70.9
• Improvement / construction of national road network (km)	213.4	205.68	96.4	15.46	221.14
• Improvement / construction of roads except highways and outside the national road network (km)	809.4	2113.4	261.1	845.6	2959
• Railway network upgraded (km)	32	22.3	69.7		22.3
• Number of interventions in ports	3	4	133.3		4
• Platforms - docks (new - improved) (meter)	800	1481.5	185.2		1481.5
• Jobs created during implementation (man-years)		7890.5			7890.5
Environmental sustainability					
• Length of sewerage network upgrade - extension) (km)	485.3	481.63	99.2	10	491.63
• Construction - improvement - upgrade of water supply network (km)	631.5	1159.4	183.6		1159.4
• Rural roads (improvement - new) (km)	485	320.95	66.2		320.95
• Number of uncontrolled waste disposal sites rehabilitated	45	43	95.6		43
• Km of new / improved forest roads	835	413.81	49.6		413.81
• Reforestations (ha)	8765	6440	73.5		6440
Enterprise					
• Number of enterprises modernised - improved	2114	540	25.5	586	1126
Innovation					
• Number of research and technological development projects	87	87	100	93	180
• Number of companies that receive funding for R&TD projects and for technology purchase	25	42	168	37	79

Thematic Axis	Outputs, Results and Impacts				
	Dytiki Ellada ROPs(*)			NOPs(**)	Total Achieved (ROPs + NOPs)
	Target	Achieved	%	Achieved	
Social Cohesion					
• Classrooms (education)	610	910	149.2	207	1117
• Hospital beds created - improved	311	340	109.3	534	874
Structural Adjustment/ Sectoral Development					
• Number of Tourist Enterprises funded	677	130	19.2	121	251
• New / modernised tourist beds	2410	2468	102.4	1495	3963
• Number of investment projects carried out in agri-tourism - craft industry	57	56	98.2	32	88
• Number of co-funded agricultural holdings	810	841	103.8		841
Labour market and human capital					
• Man-hours of training	2,732,213	3,444,298	126.1		3,444,298

(*) The values refer to regional programmes (1989-93, 1994-99 and 2000-06). Target double counting, due to projects that were implemented over two programme periods as bridge-projects could not be avoided, as the figures represent the sum of the targets included in the official programme documents. However, the very limited number of bridge -projects in the ROPs has not actually affected the achievements ratio in relation to targets. The most important bridge-projects have been those financed under the NOPs, which did not include regional targets.

(**) The values refer to the National (sectoral) programmes (1994-99 and 2000-06)

5.1.3 Institutional factors affecting achievements

A number of organisational and administrative factors had an impact on programme achievements over the periods in question.

The implementation of EU regional policy in Greece since 1989 is characterised by gradual modification and differentiation of management and implementation mechanisms, introduced throughout programme periods to ensure compatibility with EU Regulations and embed the experience gained during each period. Already during the implementation of the first CSF (1989-93) Structural Funds programming introduced some important innovations to the Greek system, despite the relatively 'light' regulatory framework and simple implementation procedures. These innovations included: the introduction of Monitoring Committees, for the CSF and its individual Operational Programmes (OPs); the creation of Monitoring Committees Technical Secretariats, staffed mainly by civil servants of the relevant ministry or region, often not high-skilled and familiar with Structural Funds procedures and implementation mechanisms, and tasked with the day-to-day management of programmes; and the involvement of external management and evaluation consultants to support Monitoring Committees. Although a novelty, such involvement was rather minimal due to the resistance of civil servants. Despite these innovations, the implementation of the OPs was left almost entirely to the mechanisms of the existing administrative system. However, the performance of the regions as new entities was clearly

disappointing as the Regional Authorities were not able to perform many of their tasks and had to rely on ministries (and their services at the prefecture level) that were inefficient themselves and unwilling to deconcentrate their power (Andreou, 2004: 20-24).

The experience gained with the implementation of the first CSF and the new regulatory framework for the management and implementation of Cohesion policy (1994 Regulations) - which included more standardised procedures and was based on the principle that the EU and Member States were equally responsible for programming and decision-making - led to a piecemeal reform of the Management and Implementation Systems for the implementation of the second CSF, during the 1994-99 period. The new features introduced were: the introduction of an inter-ministerial cooperation process (i.e. Mixed Guidance Committees); the establishment of government agencies, run with private-sector rules; the introduction of a uniform and more sophisticated Management Information System (MIS) for financial monitoring; the introduction of projects' technical bulletins providing financial information at project level in a standardised form as a tool to facilitate project selection and monitoring processes; the institution of an 'Expert Agent for the Sampled Quality Control of Infrastructure Projects' (ESPEL), and most notably, the creation of the Management Organisation Unit (MOU), a semi-independent body operating under private law and having as purpose to assist the public authorities in the effective management of EU-funded programmes, by meeting specific needs in highly specialised human resources and know-how and by formulating methods and processes for the management, implementation and control of the Community Support Framework. At the same time, the regions became distinct decentralised administrative units of the State with their own staff and competences including the ROPs.

Although the roles of management and monitoring structures were not altered, the quality of policy-making was improved though the effectiveness of implementation across individual OPs. However, main problems such as the fragmentation of policy into many small projects, the large number of weak and inefficient Final Beneficiaries, the lack of skilled human resources and the technological gaps remained. The new radical change of the EU regulatory framework for Cohesion policy in the 2000-06 period (1999 Regulations) - which focused on issues such as sound financial management (not least through a new, automatic decommitment rule), monitoring upgrading and adequate reporting - created the environment for a radical reform of implementation mechanisms in Greece during the third CSF. These changes were put forward through the introduction of a new institutional framework, legislative reforms, new technologies in the public sector and new tools, combined with the amelioration (quantitative and qualitative) of human resources.

A significant reform of the Management and Control System (MCS) of the 1994-99 CSF programmes took place, including the establishment of the Managing Authorities as distinct services of the administration; the establishment of the Single Paying Authority and the National Audit Authority (EDEL); full operation of the new Integrated Information System (MIS); the establishment of new special services responsible for the construction of the major infrastructure projects and the Olympic projects and the organisation of the 2004 Olympic Games; the imperative need to comply with the EU environmental legislation with regard to wastewater and solid waste management. Programme design was further supported by the introduction of the Programme Supplement, which included more detailed information on priority axes and measures such as allocated budget, objectives and targets, indicators and indicative actions for each measure. The programme supplement and other new programming and implementation features and rules introduced by the Structural Funds regulations of that period, although being part of a more complicated

management system, allowed a stronger commitment to be shared among the bodies involved in the regional partnership. As a result, stronger effort was put on drawing a strategy based on more comprehensive analysis of needs and explicitly specified through eligible measures and categories of actions. The main features of the 2000-06 Structural Funds regulations that affected both the design and implementation of the programmes were the performance reserve, the automatic decommitment rule (n+2 rule) and the demand for achieving the Lisbon Strategy objectives.

The 2007-13 programme period is characterised by major changes that have affected the design as well as the implementation of both the NSRF and the regional programmes (namely the three axes included in the Dytiki Ellada - Peloponissos - Ionia Nisia OP 2007-13). Such changes relate to the reform of the Structural Funds regulatory framework which introduced the 'mono-fund' character of the Operational Programmes and the earmarking of resources for selected thematic priorities related to the revised Lisbon Strategy. The ROPs were drawn on NUTS 1 basis (instead of NUTS 2) and a central Managing Authority common for all ROPs was established, which would delegate management responsibilities and tasks to intermediate bodies. With respect to the wider institutional framework a radical reform of the local authorities' structure occurred in 2011¹¹ through further consolidating municipalities and transforming the regions to second degree self-administered local authorities.

5.2 Complementarities and synergies

This section mainly focuses on the analysis of complementarities and synergies within ERDF and other EU funds (e.g. ESF, EAGGF and Community initiatives).

With respect to the Community Initiatives the most significant synergies that were developed within the ERDF refer to the programmes implemented under the INTERREG Community Initiative (1994-99 and 2000-06 periods) and the successive 'internal borders' programmes for the co-operation between Greece and Italy. Moreover, over the 1994-99 programme period, an intervention co-funded by the Community Initiative URBAN was implemented in the urban area of Patras. Of particular importance are the complementarities of the ERDF programmes to the LEADER Community Initiative, discussed in further detail in the next section, which focuses on the complementarities between ERDF and EAGGF.

Regarding the coherence to the National Development Programmes and the synergies developed, it is worth noting that since the beginning of the Cohesion policy financial support, the domestic development policy is actually implemented through the (sectoral) National OPs and Regional OPs included in the CSFs (1989-2006) and the NSRF (2007-13) and thus coincides with the Cohesion policy and accompanying European strategies. An examination of the structure of the Public Investments Programme (PPI) - the basic financial instrument for all domestic development interventions closely related to the State budget - throughout the entire 1989-2006 period indicates that its part allocated to the national contribution of the Structural Funds programmes absorbs around 70 percent of the total PPI budget.

Coordination between different Structural Funds contributing to the successive CSFs over the 1989-2006 period is considered particularly effective. At the level of the ROP, complementarities and

¹¹ Law 3852/2010 on the 'new architecture for local authorities and decentralised administration' (Kallikratis Plan).

synergies between different funds are mainly attributed to the multi-funding character of the ROPs. Moreover at the programming level, Structural Funds coordination was achieved to a great extent through the operation of the CSF Monitoring Committee, while at the managerial level, coordination was ensured by the cooperation between the competent Secretariat of the ROP Monitoring Committee (1989-1999 period) or the ROP Managing Authority (2000-06) and the central authorities based at the then Ministry of Economy.¹² Higher levels of coordination, with consequent positive effects in developing complementarities and synergies between Structural Funds were achieved over the 2000-06 period. The central CSF Monitoring Committee was assisted by two sub-committees (the Agricultural Development sub-committee and the Human Resources sub-committee) which had an advisory role in terms of ESF and EAGGF specific issues. Moreover, two Special Coordinating Services based at the Ministry of Agriculture¹³ and the Ministry of Employment¹⁴ respectively, were appointed with coordinating responsibilities concerning the interventions financed by the two Structural Funds (EAGGF and ESF) and the development of synergies under the CSF. On top of these services and the Managing Authorities of the CSF programmes, a central Co-ordination Unit at the Ministry of Economy was appointed with the task of coordinating the overall CSF interventions.

In contrast to the previous periods, the mono-fund character of the ROP over the current programme period provides considerable constraints concerning complementarities and synergy effects of the Structural Funds contribution. A further reason for the limited complementarity between Structural Funds under the NSRF 2007-13 is the fact that the current NSRF regulatory framework does not include provisions for the establishment of central coordinating mechanisms such as Central Monitoring Committee. Nevertheless, at the launch of the current period complementarity between Funds at the programming level was ensured by the operation of a committee of public servants allocated with the task to coordinate the type of actions that would be financed under the Structural Funds, the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF) and to set explicit demarcation criteria that would prevent overlapping between different Funds under the NSRF.

5.2.1 Complementarities and synergies within Structural Funds and other EU co-funded policies

As indicated above, over the three first programme periods (1989-2006) the multi-funded ROPs consist of distinct sub-programmes or priority axes which correspond to different EU Funds (ERDF, EAGGF and ESF). An analysis of the interventions funded by the ESF and the EAGGF under the ROPs as well as their achievements in relation to targets set for each programme period is included in the tables of Section 5.1. The following paragraphs include a brief presentation of the main synergies and complementarities that were developed between the successive ROPs and the respective thematic OP funded by the ESF and EAGGF.

Over the entire 1989-2006 period, the interventions supported by the EAGGF under the sectoral/thematic OPs included major land reclamation and irrigation projects for sound water resources management (dams, reservoirs), incentives for improving competitiveness of the primary sector,

¹² Now Ministry of Development, Competitiveness, Infrastructure, Transport and Networks.

¹³ Now Ministry of Rural Development and Foods.

¹⁴ Now Ministry of Labour.

support to investments in processing and marketing of agricultural products, support for young farmers and early retirement. In addition, actions for providing support to investments in agricultural holdings of animal and plant production were included in the sectoral OPs over the 1989-2000 period.

On the other hand, the ROPs over the entire period included: small-scale land reclamation projects (improving of existing irrigation systems for sound water resources management, forest projects (reforestation, forest roads, forest fire preventive projects etc.), land consolidation projects, rural electrification, rural roads, and interventions to improve quality of life in rural settlements (e.g. water supply). Over the first and second programme periods, ROPs also included support to certain types of farm investments such as the relocation of animal breeding units due to environmental reasons, while the 2000-06 ROP included the provision of support to all types of investments in agricultural holdings of animal and plant production.

The implementation of the LEADER Initiative over the 1994-2006 period in rural mountainous and disadvantaged areas has been of particular importance for the region as it led to the diversification of the economic base of these areas mainly through encouraging the creation of small tourism accommodation and other small-scale enterprises. LEADER has become over time the most recognisable type of intervention in the rural areas with considerable positive impacts in the mountainous areas of Dytiki Ellada such as Nafpaktia and Kalavrita. Its implementation through local partnerships on the basis of local development plans and its contribution to the mobilisation of endogenous potential in the intervention areas have been considered the most significant impacts of the 'LEADER approach' to local development.

Despite the physical outputs achieved by the investments in agriculture under EAGGF and its impact to the rural income, given that farmers were used to income support and assistance from the Common Agricultural Policy (CAP), a longer term impact arose from a change in the agricultural culture due to the wider implementation of the 'LEADER approach'; the switch from providing agricultural income support to the use of rural areas for agri-tourism activities developed gradually an entrepreneurship culture in the rural population. It is worth noting that the wide upgrade of basic infrastructure in the rural areas implemented through ERDF support has been the precondition for the above-mentioned achievements.

The majority of the interviewees consider that the highest levels of synergies and complementarities were developed between ERDF and EAGGF. The most characteristic example of successful coordination between the two Funds has been the implementation of the Integrated Programmes of Rural Development ('OPAAX') in the region over the 2000-06 programme period. Some of these programmes were included in the 2000-06 ROP and some in the sectoral OP resulting in concentration of co-financed intervention in selected mountainous and disadvantaged rural areas. As in the case of LEADER, such programmes were implemented on the basis of local development programmes.

By contrast, there is little recognition of the sectoral OPs funded by the ESF within the region, possibly because they largely financed similar interventions with the ROP (e.g. training). It is considered that the highest synergy between the two Structural Funds was achieved over the 2000-06 programme period in the context of the Integrated Programmes for rural and urban development (as analysed in Section 5.1). Moreover, the social welfare structures (day nurseries, day-care

centres for elderly and disabled people etc.) whose infrastructure was supported by the ERDF and operation supported by the ESF, also represent successive cases of effective complementarity between the two Funds.

Finally funding of aquaculture investment plans in Etoloakarnania and improving and protective interventions in the lagoons of Amvrakikos Gulf and Mesologgi by the FIFG through the sectoral Fisheries OP is a further example of complementary action between the Funds.

The selected model to coordinate interventions of different Funds has operated satisfactorily. However, whether the necessary regional dimension was incorporated in the sectoral policies that have been forwarded by the sectoral OPs remains a point of reflection. Given the fact that regions were not actively involved in the sectoral policy planning and that the general implementing provisions and details of such interventions were set at the central level through common ministerial decisions, it is indirectly concluded that regional dimensions were not always part of the sectoral policies. This perspective is considered reasonable, taking into account that the Greek State has retained its centralised structure for a long period while the strengthening of self-administration actually began in 1994 with the shift of the then prefectures to self-administered local authorities and ended in 2010 with the regions becoming the second-degree self-administered local authorities.

6 ASSESSMENT OF ACHIEVEMENTS AGAINST OBJECTIVES AND NEEDS (EFFECTIVENESS AND UTILITY)

6.1 Overall achievements of ERDF programmes measured against programme objectives (effectiveness)

The effectiveness of the programmes is the extent to which the objectives of those programmes were achieved through the projects funded. The following analysis is based on the aggregated assessment of the effectiveness per thematic axis.

The ROPs' contribution to strengthening entrepreneurship was limited, although varying over time, especially from the 2000-06 period onwards. The achievements are well below the objectives set for the 1989-1999 period both in terms of job creation and the number of assisted firms. The unsatisfactory implementation of the relevant interventions is mainly due to delays in implementation, which led to programme revisions, replacing private investment projects with infrastructure projects, not necessarily in the same sector. An illustrative example is the creation of the intermediate body that would have responsibility for the management of resources for SMEs; although its establishment was planned under the first ROP, it was made possible by the end of the 1994-99 period. In addition, the final leverage of private resources during the 1989-1999 period was far below expectations.

The overall assessment of the CSF 2000-06 evaluator for all interventions related to entrepreneurship was that 'there are often failures in the implementation of business support programmes, time-consuming approval processes and high levels of withdrawals'. In absolute figures, the excess of targets related to assisted firms occurs in the 2000-06 period, whilst a relevant effect is also expected in the current programme period, especially after the revision of the regional programmes, which is in progress. The significant increase in the number of SMEs assisted is the result of the enlargement of the eligible business categories in 2004, adding as eligible for aid SMEs active in the fields of trade and services. The aid provided simply covered the increased demand for entrepreneurship (i.e. the shift towards entrepreneurship either of family nature or in the form of self-employment), rather than served the long-term competitiveness of the regional economy mainly due to the lack of sectoral focus as discussed in Section 5.1.2. However, over time the analysis of the employment composition shows a continuous increase in the employed in the tertiary sector, especially in trade. Respectively, based on the results of relevant fieldwork, the mid-term evaluation of the Dytiki Ellada 2000-06 ROP states the need for better targeting and better design of business support interventions.

Furthermore, evidence from the interviews conducted with the representatives of the socio-economic partners and the workshop held in Patras suggests the limited contribution of both Dytiki Ellada ROPs and sectoral programmes' interventions for enhancing entrepreneurship. The provision of high incentives (as a subsidy on the total cost of the investment) is not the main motivation for entrepreneurial activity, when the general business environment is negative. It is of note that all respondents were of the view that the completion of major transport and energy infrastructure projects will contribute much more to strengthening entrepreneurship in comparison to the various incentives provided through the programmes.

A very important parameter that should be emphasised in regard to entrepreneurship is that, due to the EU regulatory framework, the ERDF was unable to finance the region's most important industrial sector, which is the food industry, as investments in the first processing and marketing of agricultural products were eligible for funding solely from the EAGGF.

More important in terms of effectiveness are the interventions related to industrial infrastructure. The Industrial Area of Patras contains 160 companies with approximately 5,000 employees, whereas 81 businesses are located at the Industrial Park. Regarding this part of intervention, the ERDF contribution was completely effective. Taking into account that the growth of the Industrial Area coincided with the completion of major accessibility projects such as the Rion-Antirion Bridge and the Patras bypass, ERDF assisted in this field with complementary infrastructure that supported the accessibility to the Industrial Area of Patras.

For the overall period, 1,800 investment projects were funded in the region through the Regional and Sectoral Programmes (including development laws) which led to the creation of about 5,000 jobs.

In terms of achievements, targets are far below expectations in the 1989-93 period, whilst they are fully achieved in the 1994-99 period. An overachievement of targets is observed in the 2000-06 period, and it is unclear what the level of achievements will eventually be in the current period. However, it is assumed that the objective of improving the competitiveness of the three sectors of the economy was not achieved.

With regard to employment creation, it is clear that any positive effects eventually withered away due to the economic crisis. The positive impact of the ERDF intervention in decreasing unemployment that became visible mainly over the 1995-2009 period did not survive the recent economic crisis, demonstrating the persistence of structural problems such as the lack of competitiveness.

In terms of structural adjustment, the most obvious effects are related to tourism development. The planned tourist facilities were constructed or upgraded (ski resort, marinas for leisure crafts, funicular railway, etc.) while interventions in Ancient Olympia and the port of Katakolon have contributed significantly to the development of tourism. The aid provided for creating/upgrading of hotel accommodation have complemented the above-mentioned interventions. Progress is not equally distributed, with Ilia benefiting most. Comparing the starting point of the region in 1989 with the present situation, there is a very significant structural change occurring in the mid-2000s, which is reflected in the very large increase in the number of high-class (4 and 5 stars) beds, in the number of nights spent in tourist accommodation establishments and in the impressive increase of the tourist sector GVA.

With regard to the structural adjustment of the economy, it is clear that in the 1994-99 and 2000-06 periods the completion of major infrastructure projects was considered to operate as a catalyst. However, the correlation of infrastructure projects with the structural adjustment of the economy is not clear.

In terms of innovation, it should be noted that interventions related to creating the conditions for the development of innovation partly achieved their specific targets. The most important

achievement in this field was the establishment of Patras Science Park, which is in operation and its occupancy rate has reached 82 percent, while the first generation of companies (microelectronics) installed have already been relocated and have created the only functional cluster in the region (Coralia project). Furthermore, a very important research pole has been created within the region through the operation of three research centres. However, performance is poor if the link of the research base with business activity is considered. Many interviewees stated that the diffusion of scientific knowledge and research results in the local economy was not feasible. Throughout the overall period, innovation was mainly identified with research and technology, based on a national design (top-down approach), However, Dytiki Ellada regional programmes were amongst the few Greek ROPs including such interventions. Moreover, expert interviewees noted that one of the main factors hampering the diffusion of R&D results and the creation of a friendly environment for innovation to local production was the lack of effective SME services, as well as the lack of demand on behalf of the enterprises attributed to their size (in economic terms) and excessively conservative nature.

Environmental sustainability and social cohesion constitute the thematic axes where the greatest effectiveness of interventions is observed. At the outset of the programme periods, the region faced serious problems due to the complete lack of infrastructure for solid and liquid waste management, while the water supply problems were also important both in terms of adequacy and quality, with an illustrative example in the city of Patras, where the water was not potable due to salinity problems. Upon completion of the current programme period interventions, the region will be fully harmonised with EU requirements for proper liquid and solid waste management; 100 percent of the population will be connected to water supply networks whereas at the beginning of the period this percentage was 80 percent; the percentage of the population connected to sewerage systems in 1989 was 30 percent and now approaches 100 percent; whilst the respective percentage of the population connected to wastewater treatment systems was only 3 percent and is now also approaching 100 percent.

Similarly, the fact that the region has covered its needs in terms of education and health infrastructure has led to a significant improvement of the quality of life for the region's inhabitants, and therefore a basic objective of the adopted strategies in Dytiki Ellada programmes was fully achieved.

Regarding the labour market, the ERDF's contribution was limited because the main bulk of the effort came from the ESF. A feature of the period overall is the gradual reduction of the available resources for the labour market (from 15 percent in the 1989-93 period it reached to 5.8 percent in the 2000-06 period). This decrease may be the result of the failure of funded interventions to contribute to unemployment reduction. All the quantified targets for conducting training programmes and the number of trainees were achieved but, as highlighted by the evaluation findings, the effectiveness of training programmes in fighting unemployment was very limited.

As far as territorial issues are concerned it is difficult to determine what specific measures served spatial cohesion, whilst there was no clear distinction, except for the 2000-06 period, where a special design for urban centres and mountainous and disadvantaged areas took place through the regional and national programmes. It is clear for the period overall that the basic component of the regional strategies of the maintenance of the population in the mountainous and rural areas was achieved, taking into consideration the population census data for 1991 and 2001. Improving access

to rural and mountain villages through interventions for provincial or municipal roads was a category of interventions which over time considerably exceeded the targets set and the basic category of interventions that benefited by the reallocation of resources between the ROPs' measures. Whether this tendency served real needs or it was considered an easy solution to increase the absorption rate is an issue that cannot easily be answered.

Lastly, the category of basic transport infrastructure, to ensure the accessibility of the region, presents the poorest performance and the largest deviation from the objectives. The main road network of the region, which is part of the country's basic road network, was not completed and it is doubtful whether its completion will be feasible by the end of the current programme period due to the bottlenecks that have emerged with the concession contracts.

Amongst the individual categories of transport infrastructure, which absorbed most of the resources, the targets set were achieved as regards the airport link. Regarding the ports, the objectives were achieved by 75 percent, as there was a significant upgrade in three out of the four ports. In contrast, no progress has been recorded in railway infrastructure. Targets were fully met regarding the national roads except TEN-T, although this was a prerequisite for the achievement of the region's basic development objective for three out of the four programme periods, i.e. the emergence of the region as the country's gateway to Western Europe and transport hub.

The non-completion of TEN-T projects - i.e. PATHE (segment Patras - Corinth), Olympia Odos (Patras - Pyrgos - Tsakona) and Ionian Axis (segment Kalamata - Pyrgos - Patras - Agrinio - Igoumenitsa) - has adversely affected the overall development of the western part of country and not only of Dytiki Ellada region, while at the same time it raises a major issue related to the financial viability of the planned interventions. Public resources were insufficient for the completion of all projects with TEN-T specifications; therefore the solution of project construction through concessions was adopted. The economic crisis led to the interruption of all projects, and a basic question arising is whether these projects will be implemented according to the original design. The largest deficit of coordination between regional and national authorities occurs with major road axes. The negative evolution has also reduced the effectiveness of major completed infrastructure projects, such as the Rion-Antirion Bridge and the ring road of Patras.

An overview of the relationship of achievements to objectives is provided in Table 17 below. This illustrates for particular thematic axes the extent to which the achievements have been above or below what might be expected given the level of effort and investment.

Table 10: Achievements compared with imputed objectives for eight thematic axes

Thematic axis	1989-93		1994-99		2000-06		2007-13	
	Imputed objectives	Achievements	Imputed objectives	Achievements	Imputed objectives	Achievements	Imputed objectives	Achievements
Enterprise	-	1	+	2	+	5	+	4
Structural adjustment	-	2	++	2	+	4	=	3
Innovation	--	1	=	3	=	4	+	4
Environmental sustainability	++	4	++	5	++	5	+	3
Labour market	=	2	=	3	=	2	--	2
Social cohesion	++	5	+	5	=	5	+	2
Spatial cohesion	--	2	--	2	++	3	--	1
Infrastructure	++	5	++	3	++	2	+	1

Objectives scale, start of period

- ++ Very high effort, this axis is a central aspect of the regional development strategy
- + High effort, this axis is an important element in the regional development strategy
- = Average effort, this axis is included in the regional development strategy but is not particularly important
- Low effort: this axis is only marginally considered in the regional development strategy
- No effort at all on this axis

Achievements scale, end of period with respect to beginning of period

- 5 Very high achievement, the results for this axis are considerably above expectations given the effort put in it and ex-ante conditions
- 4 High achievement, the results for this axis are above expectations given the effort put in it and ex-ante conditions
- 3 Average achievement, the results for this axis are those which could be expected given the effort put in it and ex-ante conditions
- 2 Negative achievement, the results for this axis are below expectations given the effort put in it and ex-ante conditions
- 1 Very negative achievement, the results for this axis are considerably below expectations or even nil

6.2 Overall contribution of ERDF programmes to regional development (utility)

In providing answers to the question of how much ERDF programmes contributed to the development of the Dytiki Ellada region, the approach adopted is qualitative and is based on examination of the socio-economic situation of the region at the outset, on its evolution throughout the period under examination, and on whether there is any differentiation in relation to the overall economic development of the country.

At the outset of the 1989-2013 period, Dytiki Ellada's main problems related to rural-urban disparities and inequalities, low per-capita income, low employment rates in high added-value sectors, a low-skilled workforce, deindustrialisation, inadequate infrastructure for industrial development, small size of enterprises, lack of basic services (e.g. basic infrastructure), an absence of entrepreneurial culture and innovation, lack of motorways and basic infrastructure, reduced intra- and inter-regional connectivity, lack of railway and airport systems, insufficient water supply and sewerage networks, lack of solid waste management infrastructure and significant shortcomings in school and health infrastructure. Although most problems identified at the outset

have persisted over time, needs have become more numerous over successive periods, partly due to the more sophisticated analysis and efficient interpretation of regional conditions, and also due to the adjustment of the regional and national policies to new challenges (e.g. ICT, innovation, etc.).

In absolute terms, regional GDP increased at a slower pace than the national average, resulting in the widening of the region's divergence. An examination of specific indicators at regional level illustrates that a similar divergence exists in the evolution of unemployment and labour productivity in all sectors of the economy. Throughout the 1989-2013 period, the economy of the region (as in Greece more generally) was characterised by the rapid shrinkage of the primary sector, the decline of the secondary sector - especially manufacturing - and the significant increase of the tertiary sector. These changes are observed both in terms of employment and gross value-added (GVA). Thus, in absolute terms, convergence with the national average has not been achieved. The question is whether ERDF funding could contribute to the region's convergence.

Throughout the entire period, ERDF interventions both at regional and national level served as the main response to the lack of infrastructure which was seen as the most important limitation for economic growth. However, the picture that emerges indicates more beneficial effects for territorial and social cohesion than business environment.

Fieldwork confirms that infrastructure interventions improved internal accessibility, reducing the isolation of the mountain areas and increasing living standards and social equality as shorter transit times between mountain communities and main road links have resulted in improved social cohesion and community development. In addition, the operation of the most strategic and emblematic infrastructure project of the whole period, namely the Rion-Antirion Bridge, has solved the major problem of regional geographic cohesion. By ensuring a permanent link between Peloponissos and Sterea Ellada the project also improved the region's external accessibility to a great extent.

The region's geographical position (as the 'west gate' of the country) was a key feature, the significance of which could have been further highlighted if the basic transport infrastructure had been completed, since only a part was completed with the significant contribution of ERDF funding. The failure to upgrade the old line to a high-speed one and the subsequent progressive reduction in passenger traffic has recently led to the interruption of its operation. It is anticipated that such a negative evolution will further affect competitiveness of regional enterprises by increasing the cost of raw materials and goods transport to and from Athens. It appears, therefore, that despite the central role of transport infrastructure over the entire period, both marginality and peripherality remain a problem in terms of external access to the region. Considerable emphasis was also put on the development of the port of Patras without ever measuring its economic contribution and its benefits to the local economy, even during its full operation. Improving infrastructure was considered to be a factor that would contribute to improving competitiveness at regional and national level; it is now clear that competitiveness is not only a result of infrastructure development, but also depends on many other factors.

The regional unit of Achaia always had a predominant position in the regional economy. Achaia is the administrative, economic, health and educational centre of the region, including three of the four islands of the neighbouring Ionia Nisia region. The significant industrial tradition of the city of Patras has contributed to the development of the region for a long time. However, the city (and

Achaia in general) has never recovered from the severe problems of deindustrialisation and economic decline in the 1980s and the early 1990s. No new productive economic activities have emerged, and there has been a re-orientation towards services (mainly non-tradable) and public sector activities. The significant growth of the tertiary sector combined with the central role of Achaia in Dytiki Ellada region led - to a significant extent - to the reduction of high unemployment rates of the early 1990s; however this development has not resulted in high growth rates that could exceed the national average, taking into account the fact that between 1998 and 2008 the country experienced very high national growth rates which led to convergence with the EU average.

Tourism was one of the sectors where the most visible changes can be attributed to ERDF. Although substantial resources were invested in agriculture, particularly over the 1994-99 and 2000-06 programme periods, tourism gradually gained more importance following an integrated approach which encompassed natural resources and cultural heritage interventions along with aid to enterprises. Given the starting point of the region, progress made is of particular significance especially in Ilia, which has gradually reduced the dependence of its economy on the primary sector. Investment in tourism combined with substantial investment in cultural resources (e.g. the intervention in the archaeological site of Olympia) has led to a significant increase in visitor numbers (a 31 percent increase in the nights spent in tourist accommodation over the 1989-93 period). Developing the tourism potential of rural communities and also of mountainous areas had also the indirect effect of raising the living standards of the inhabitants of these areas (constituting, therefore, utility).

The model of tourism that emerged in Dytiki Ellada and its enhanced tourism potential seem to be the result of successive regional and national ERDF programmes. The main lesson from it is that the attractiveness of an area depends on a combination of parameters including not only its natural and cultural capital but also the quality and variety of accommodation, sufficient complementary infrastructure, conserved and accessible cultural heritage, and suitable marketing.

Achievements regarding innovation have created a substantial innovation potential and a high-level research workforce in the region that has become the third most important innovation pole of the country following Athens and Thessaloniki. ERDF funding contributed to the creation of a very important centre for research and technology (Patras Science Park). However, although ERDF interventions were expected to boost research efforts in the region and strengthen further the collaboration between the public research organisations and firms, overall results in this area demonstrate low performance. It is also of note that the attempt to create regional innovation poles in the country (one of which would be in Dytiki Ellada region) as a tool to facilitate the link between research, the academic community and the economy, which emerged at national level in the 2000-06 period, was then abandoned.

In the environmental sustainability field, infrastructure related to improved water supply and wastewater management has led to a significant improve in local population wellbeing and also insured compliance with EU environmental legislation. In addition, the environmental infrastructure co-financed by ERDF and CF has contributed to the preservation of the region's natural environment - a potentially very important wealth source of the region. Regarding social cohesion, improvement of basic social services (education and health infrastructure) is a clear and direct effect of the ERDF assistance, given the absence of a domestic regional policy as stated above in this study. In synergy with considerable achievements in the environmental sustainability field

(water and wastewater infrastructure), the particular interventions have remarkably increased the share of population served by basic services throughout the 1989-2013 period, indirectly contributing to the amelioration of their living conditions.

ERDF support has contributed significantly to meeting regional needs for improved basic social services infrastructure, such as schools, universities, healthcare facilities such as hospitals, and other social structures such as day care centres. The utility of the investments carried out in this particular thematic area is visible in improved levels of well-being, social cohesion and community development as evidenced by the fieldwork research and the workshop.

Moreover the creation of permanent jobs in the areas of education, health and culture came though as a result of infrastructure development financed by ERDF which indirectly affected the labour market in the region. In terms of the need for reducing intra-regional inequalities, there is a gradual convergence of the level of development between the region's units, but it is unclear whether this is related to ERDF or other EU interventions such as CAP. In particular, due to the structure of the regional economy, with the exception of Achaia, the other two regional units are characterised by low population density, low educational level (in relation to the national average) and, until recently, very high dependence on the primary sector. Despite the significant advantages of the region for the development of agriculture, its modernisation and shift towards the production of high commercial value products has not been feasible yet; emphasis was put on the production of goods that received high direct payments from the first pillar of the CAP (tobacco, cotton), especially in the Etoloakarnania regional unit. CAP reform in 2003 and the gradual interruption of aid based on the level of production had a significant negative impact on Etoloakarnania, which was diffused throughout the economy due to the interdependence of tobacco production with other economic activities. Regarding the regional unit of Ilia, the devastating fires of 2007 had a significant economic impact on agriculture and livestock production. The contribution of EU funding on rural incomes resulted in significant increases of income, levels of prosperity and private consumption, but it was not - and could not have been - a factor that would contribute to regional GDP growth.

Looking at the overinvestment in infrastructure that took place over the entire period examined by this study, a reasonable issue to be addressed might be the sustainability of this infrastructure. The majority of the major transport projects that have been completed with ERDF and CF funding are revenue generating projects, and therefore at least self-maintained. The same applies also to environmental infrastructure related to water supply and waste management for which the operators are levied user charges. Similarly, most of the tourism (marinas, ski resorts etc.) and culture projects (museums, archaeological sites etc.) as well as the welfare projects (hospitals, child care, etc.) represent revenue generating projects with no maintenance difficulties. In addition, fieldwork did not indicate cases of non-operating infrastructure leading, thus, to the conclusion that operating bodies do not encounter any infrastructure sustainability problems yet. However, taking into account the economic crisis and the related progressive reduction of government spending, sustainability of infrastructure such as the local and intra-regional road network and education/health infrastructure might be affected in the future.

Despite the substantial investment supported by the EU funding, the region still has a combination of demographic, geographic and economic problems, including; poor international and functional accessibility, low activity rates, persistent unemployment and high inactivity, low levels of

productivity and capital investment, lack of economic dynamism and extroversion of the regional economy, deindustrialisation and low female activity rate, low technology-content of the regional economy, limited links between research, the academic community and the local economy, and intensified pressures from international immigration in recent years. The wider social, economic and demographic problems associated with the region in past decades largely persist today - and have been intensified with the financial and fiscal crisis that has hit the country in the last five years.

Finally, the verdict, confirmed by the bulk of the interviews undertaken, is that ERDF programmes improved the quality of life in Dytiki Ellada and ensured social cohesion, but failed to make changes in the economy that would warrant economic growth. This is mainly attributed to the fact that major infrastructure projects remain incomplete, though the project team is of the view that this parameter is overemphasised. If during the current programme period large infrastructure projects are completed (even partially), then the region will also have integrated a 'programmatic cycle', having fully covered its infrastructure needs. The Europe 2020 strategy opens a new approach and constitutes an important framework for future developmental planning. Whether the region (and the country in general) will be in a position to set new development priorities under the extremely difficult conditions of the financial crisis is a challenge that cannot be answered easily. Considerable difficulties to be overcome are the lack of social capital (highlighted in numerous interviews), the difficulty of attracting foreign investment, the absence of mechanisms for promoting innovation and connecting R&D with production, and the continuous decline of the manufacturing base.

Table 11: Needs and achievements for eight thematic axes

Thematic axis	1989-93		1994-99		2000-06		2007-13	
	Needs	Achievements	Needs	Achievements	Needs	Achievements	Needs	Achievements
Enterprise	+	1	+	2	+	5	+	4
Structural adjustment	++	2	++	2	++	4	+	3
Innovation	+	1	+	3	+	4	+	4
Environmental sustainability	++	4	++	5	++	5	++	3
Labour market	++	5	++	3	++	2	+	2
Social cohesion	++	5	++	5	++	5	++	2
Spatial cohesion	+	2	+	2	+	3	+	1
Infrastructure	++	5	++	3	++	2	++	1

Needs Scale (evaluation of the region at the start of the period)

- ++ Very high need: the region is highly deprived in this thematic axis
- + High need: the region is somewhat deprived in this axis
- = Average need: the region is an average one in this axis, whose values are around the national mean so that there is not the need for a strategy specific for this region
- Low need: the region is better than the average in this axis, or above the national mean
- Very low need: the region is already a front-runner in this axis, not only at national level but also at European level

Achievements scale (end of period with respect to beginning of period)

- 5 Very high achievement: the results in this axis are much above expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events

- 4 High achievement: the results in this axis are above expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 3 Average achievement: the results in this axis are those which could be expected given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 2 Low achievement: the results in this axis are below expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 1 Very low achievement: the results in this axis are considerably below expectations, or even nil

6.3 Key elements of success and failure

6.3.1 Good practices and successes

Dytiki Ellada has gained considerable experience from its engagement with the Structural Funds and the development of regional strategies.

The most positive achievement is associated with the familiarisation of the central and regional administration with the long-term planning processes of regional policies, focused on specific objectives. In a fully centralised state, the establishment of the region as ‘programming unit’ was initially a result of Cohesion policy. The regions were initially established for programming purposes, and long afterwards they were considered by the legislation as self-governed entities.

In terms of good practices, four indicative projects can be identified as success stories. The first was the Rion-Antirion Bridge, which was the only major infrastructure project in the region that was completed ahead of schedule. Its construction through a Public-Private Partnership (Concession Contract) has played a crucial role in order to avoid timetable and budget overruns that are very common in the domestic system of public works.

The second was the creation of a research centre complex (Patras Science Park) and the improvement/expansion of an important higher education institute (University of Patras). The operation of Patras Science Park (PSP) gave the opportunity to start up a large number of companies in high value-added sectors, at the same time exploiting the research potential of the university, which was actively involved from the early stages of the development of PSP. Throughout the period, the PSP operated as an incubator, since the first companies were created by academic research staff and postgraduate students from the university. Its location in the greater area of the university campus and close to other research centres further contributed to the success of the project.

The third was the implementation of integrated programmes in specific territorial units, such as the mountainous areas, which is another success story of the 2000-06 period. The reduction of mountainous areas isolation and the creation of conditions for the development of alternative sources of income in mountainous municipalities represent the positive effects of the ‘Integrated Programmes for Rural Development’. The adoption of the ‘LEADER approach’ in a mainstream Operational Programme by focusing on specific territorial units and concentrating programme resources under local strategies elaborated by local actors are the main features regarding the implementation of these integrated interventions. Moreover, those integrated programmes are considered the most characteristic example of successful coordination between the Structural Funds over the 2000-06 programme period.

Lastly, the Ancient Olympia interventions (described in detail in Annex I) which involved resource concentration from different Operational Programmes and periods towards specific targeting

related to tourism development has been another good practice example. The combination of different types of interventions, both mainstream and innovative (accessibility projects, cultural infrastructure, urban regeneration, digitisation projects etc.), had not just a cumulative but a synergetic effect with regard to the attractiveness of the area as a tourist destination.

6.3.2 *Bad practices and failings*

The region has also experienced a number of problems and examples of poor practice, although in some cases this is due to the wider operation of the Structural Funds in Greece. In particular:

- The very large number of projects, often small in scale, without a significant development impact.
- The persistence-after 1999-of the same mix of interventions in specific project categories, such as small-scale roads, water supply networks and interventions for tourism development in coastal areas or urban centres (i.e. paving, squares etc.) which represented easier alternatives to the difficulties in the implementation of the major infrastructure projects.
- The major delay and uncertainty regarding the timely completion of the TEN-T projects due to deficiencies in the domestic system for public works production, resulting in time-consuming maturation and procurement procedures.
- The greater emphasis put on the ability to absorb available funding and to prepare adequate technical studies for the selection of specific projects, rather than a focus on their feasibility and developmental impact.
- The fragmentation in the design of several projects (i.e. the priority given to the rail connection of Patras port instead of the Industrial Area of Patras).
- The lack of coordination between central and regional authorities, as illustrated by the failure to achieve the objectives set in the first priority axis of Dytiki Ellada 2000-06 ROP.
- The inability to foresee the need for the expansion of the natural gas network in the Dytiki Ellada region and especially in the urban area and the Industrial Zone of Patras.
- The mono-fund structure of the Operational Programmes over the current period has led to limited co-ordination between Funds and ineffective monitoring of all interventions, given that actions co-funded by ESF and EAFRD are implemented at national level.
- The limited participation of socio-economic stakeholders and local authorities during the programme design phase (mainly in the early periods) and their limited familiarisation with Structural Funds operation, including the role of the ROP's Monitoring Committee.
- External factors, including the failure to promote the necessary changes and structural reforms in key areas related to competitiveness in order to attract foreign investment (including bureaucracy, overregulation, frequent changes in the tax regime, and delays in licensing), combined with the outstanding problems associated with the implementation of

the CSF interventions (such as the cost of land expropriations, delays by the Archaeological Service, frequent juridical involvement during tendering or occasionally even in the project construction phase, delays in decision making, lack of social consensus, and the locations of environmental infrastructure projects (wastewater treatment and solid waste)).

7 CONCLUSIONS

This section provides the overall conclusions of the case study organised according to the evaluation questions posed in the call for tenders.

7.1 EQ1: To what extent did the programmes address regional needs and problems over time?

EQ1a: What were the initial regional needs and problems and what has been their evolution?

Over successive programme periods, the Dytiki Ellada's ability to identify problems and needs has improved, mainly as a result of the learning process and experience gained by the development of coherent regional strategies required by the Structural Funds regulatory framework. Although most of the problems identified at the beginning have remained constant over time, the list of needs has become larger, partly due to the more sophisticated analysis and efficient interpretation of the regional conditions and also due to the adjustment of regional and national policies to new challenges (e.g. ICT and innovation). Similarly, perspectives on solutions have developed over time, affecting the mix of policy interventions to a certain extent.

Dytiki Ellada is one of the least developed regions in Greece. In the early 1980s, the region's economy was mainly based on low-productivity agricultural activities (almost 30 percent of the regional GDP) and manufacturing (25 percent). Between 1980 and 1995, its share of national GDP constantly fluctuated around 5.7-5.8 percent, demonstrating that the regional economy was keeping pace with that of the country. Since 1995, the region has slowly diverged from the national average due to lower growth rates.

This is the result of the region's underperformance in a number of critical indicators such as low employment productivity, low activity rate, high dependency on agricultural activities, limited tourism development, low educational level of the labour force in relation to the national rate, deficiencies in basic infrastructure (transport, telecommunications, health, and water), inadequate utilisation of tourism resources, low levels of entrepreneurship and low levels of innovation.

Dytiki Ellada is also one of the most dichotomised regions in Greece. The urbanised part with a high population density has suffered problems of deindustrialisation and economic decline for years, while the periphery (predominantly agricultural and sparsely populated areas) has experienced more fundamental development problems, with limited economic and population dynamism and a weak economic and infrastructure base.

The nature of the Dytiki Ellada's problems/needs is complex, multiple and structural. At the outset of the 1989-2013 period the main problems of the region related to disparities and inequalities between the region's areas (rural and urban), low per-capita income, low employment rates in high added-value sectors, low-skilled workforce, strong signs of deindustrialisation, inadequate infrastructure for industrial development, small size of enterprises, lack of basic services (e.g. basic infrastructure), absence of entrepreneurial culture and innovation, lack of motorway and basic infrastructure, reduced intra- and inter-regional connectivity, lack of railway and airport systems, insufficient water supply - sewerage networks, lack of solid waste management infrastructure, and significant shortcomings in school and health infrastructure.

Over the 1989-2013 period, significant changes have occurred in relation to higher levels of transport infrastructure and connectivity, intra-regional mobility and basic services infrastructure (including environmental infrastructure), the start-up of specific sectors such as tourism, the development of the service sector (mainly non-tradable), and improvements in regional quality of life. Despite these developments, Dytiki Ellada still has a combination of demographic, geographic and economic problems. These include low population density and the depopulation of rural areas, poor international and functional accessibility, low activity rates, persistent unemployment and high inactivity, low levels of productivity and capital investment, lack of economic dynamism and extroversion of the regional economy, deindustrialisation and low female activity rate, the low technology-content of the regional economy, limited links between research, the academic community and the local economy, and intensified pressures from international immigration in recent years. The wider social, economic and demographic problems associated with the region in past decades largely persist today - and have been intensified with the financial and fiscal crisis that has hit Greece in the last five years.

EQ1b: What was the strategy of ERDF programmes of each programme period? What has been their evolution?

Dytiki Ellada has received substantial EU funding since the mid-1980s, when the Integrated Mediterranean Programmes were introduced. It has been and remains as an Objective 1 region (from 1989 until 2013 - and will remain so in the next programme period). Throughout the 1989-2013 period, there have been six recurrent themes (relative to ERDF - Cohesion Fund) in the region's strategy: connectivity, referring to improvements in accessibility (within the region and in relation to other regions and international connections) through the improvement of transport infrastructure, basic environmental infrastructure, basic social infrastructure, local development, productive investment (mainly funding for SMEs), and enhancement of the cultural and natural resources associated with tourism. These themes progressively became fundamental components of an intervention policy which sought to 'unify the territory' internally, as well as connecting it to other regions and Europe.

Therefore, at the outset of the period, in 1989, the Ministry of Economy designed a programme that recognised the region's problems and needs, but which was unable to focus on all of the issues that needed to be tackled. As a result, this initial programme put a sole emphasis on infrastructure. Whilst this was a key part of the problem, this decision was driven mainly by inexperience and a desire to channel funding to local authorities.

The explicit strategy was to upgrade the production structure by building up fixed capital (infrastructure) and also by improving vocational training, tourism and agriculture. The wider (explicit) objectives were to reduce territorial disparities and foster economic and social convergence with neighbouring regions, and to improve workers' skills. In this strategy, there was an implicit desire to improve social and territorial cohesion within Dytiki Ellada instead of boosting economic growth.

The strategy of the 1989-93 CSF's national component (17 thematic NOPs and 3 major projects) was mainly focused on the development and improvement of basic infrastructure in specific policy areas (transport, communications, energy, R&D, environment, competitiveness, tourism and human resources).

The strategic framework of the 1994-99 RDP was broadly the same as in the 1989-93 RDP, but with substantial improvements in coherence and quality, as it included more specific targeting and priorities linked to specific regional needs. The explicit strategy was to exploit the region's potential, deriving from the amount and composition of available funds as well as from the region's comparative advantage, due to its important geographic position in domestic and international transport networks. The directions were therefore to build on the strategic position of the region, to utilise and further develop the university potential in connection with the technical modernisation of the regional industry, and to systematically promote the regional tourism resources. Efforts with regard to the agricultural sector were to focus more on the restructuring of existing cultivation, to support animal breeding, and to further the development of aquaculture.

The remarkable improvement and expansion of infrastructure focused particularly on transport networks and environmental protection, and was considered as a pre-condition for development in the strategic framework described above and, thus, played a central role in the investment planned under the Operational Programmes, as in the previous programme period. Emphasis was also placed on the need to deal with the isolation and the region's lagging rural prefectures of Ilia and Etoloakarnania, through restructuring rural activities and linking them with the food industry and tourism activities.

The overall strategy was set against the context of a progressive widening of disparities between the region and the national average due to slower levels of growth. The regional strategy aimed therefore at improving the region's relative position in GDP terms, reducing the disparity in unemployment and also reducing the internal regional disparities between the urban, rural and isolated areas of the region.

Similarly, the national strategy of that period - as set in the 1994-99 CSF and delivered by 17 thematic NOPs - was aimed at achieving a minimum level of public capital and infrastructure in sectors such as transport, living conditions (health and welfare), competitiveness and human resources (education, training etc.) considered to be the locomotives of economic growth.

The overall development objective for Dytiki Ellada during 2000-06 was to utilise its central geographic position in the national transport system and build on the identified comparative advantages, whilst remedying some of its known weaknesses and problems such as unemployment and regional disparities.

The regional strategy as set in the ROP documents was structured around seven priority axes which mapped closely onto the previous ROP (ROP 1994-99). Although very close to the previous strategies, the new strategy allowed the persistent problems of the region identified almost a decade ago to be addressed in a more comprehensive and integrated way.

In parallel, the national strategy, as described in CSF III (2000-06), emphasised the completion of major transport infrastructure projects and has clearly affected the regional strategy, which is not essentially altered in relation to the previous programme period. The ten thematic NOPs of the CSF 2000-06 focused on the types of investment in physical, human and knowledge capital that were viewed as the most conducive to increasing productivity. They also included increased efforts in the fields of environment, culture, health and welfare.

In the 2007-13 programme period, Dytiki Ellada, as with most of the Greek regions, does not have its own ROP. Dytiki Ellada is one of the three neighbouring convergence regions which comprise the territorial unit 'Dytiki Ellada - Peloponissos - Ionian Islands' and share the ROP 'Dytiki Ellada - Peloponissos - Ionioi Nisoi 2007-2013'. The ROP is actually designed as the synthesis of each region's strategy, prepared at the regional level according to the directions of central government. The result of this synthesis is a programme with a strategy focusing on 'broadening its development potential, accelerating economic growth and social development, as well as increasing productivity, with the aim of achieving real convergence and improving the quality of life of those living in the regions touched by the programmes'.

The explicit regional strategy for the 2007-13 period was the result of economic, political and technical trade-offs, prompted by three important factors. First, the region's strategy should fit under the umbrella of the ROP which, whilst designed for a territorial section of three regions, still ought to incorporate a comprehensive and coherent strategy as a whole. Second, closer alignment of Cohesion policy with the Lisbon Strategy's goals was required, implying a stronger orientation towards competitiveness and innovation than in the previous periods. Therefore, the challenge for the region was to find a strategy capable of persevering with structural policies carried out in previous years while increasing the focus on competitiveness and innovation. Third, the region as well as the whole country needed to address the problems that were progressively emerging with the outbreak of the economic crisis.

Aligned with the Lisbon strategy, the sectoral strategy of the 2007-13 NSRF is delivered by seven sectoral NOPs implementing the country's thematic priorities for the 2007-13 programme period that include: investment in the productive sector; knowledge society & innovation; employment & social cohesion; institutional framework; attractiveness of Greece and the regions as places to invest, work and live in.

Lastly, it is of note that with the exception of the 1989-93 period, sources from National Operational Programmes were much higher than those from the ROP. However, coordination between National (sectoral) Operational Programmes and the regional authorities was not always successful, and the absence of a regional dimension in the sectoral programmes makes it difficult, if not impossible, to have effective monitoring of NOPS at regional level.

EQ1c: What were the priorities and objectives of ERDF programmes of each programming period? What has been their evolution? Were the objectives SMART?

The priorities and objectives have been examined in detail in Chapters 3 and 4, illustrating the continuity in overall objectives with the majority of spending being concentrated on priorities related to all kinds of infrastructure measures (transport, environmental, social).

In broad terms, the allocation of funds remains stable. Only during the current 2007-13 programme period was a higher proportion of ERDF resources allocated to newer development activities such as ICT, innovation and R&D. It is clear that programmes prior to 2000 were largely driven by the desire to identify measures for the improvement of connectivity and accessibility (mostly within the region), social cohesion and environmental sustainability, whereas from 2007 onwards the programmes have been driven largely by ambitions to transform the entrepreneurial base of the region.

A general observation that characterises the whole period is that correspondence between objectives and actions was clear at measure level, less clear at sub-programme /priority axis level and very optimistic and ambiguous at general /strategic objective level.

The extent to which the objectives were SMART has not varied significantly over the period, with some improvements over time, although weaknesses remain in the feasibility of some objectives and indicators.

- Objectives have become more specific over time, especially when examined at measure level, although some of the programme strategic objectives remained ambiguous regarding narrowing regional disadvantages and improving competitiveness of the regional economy.
- Progress has been achieved in making programmes achievements measurable. A monitoring system was built up over time, and since 1999 the establishment of a new Management Information System had improved monitoring. Between 1989 and 1999, there was no distinction between results and impact indicators, but since 2000 there have been three levels of indicators (output, result and impact). Result and impact indicators are identified at priority axis level, but it is not clear where the correlation between intervention logic, objectives and indicators has been (especially for the 1989-19 period). It seems there was no attempt to provide a basis for measuring the overall impacts of the whole programme.
- The question of whether objectives were attainable is related to the measurement issue. Arguably, and especially during the first two periods, they were over-ambitious in terms of what the interventions could achieve. They seem to have been more realistic regarding improvements in infrastructure and public services, but less so in the cases of enterprise and innovation funding.
- Broadly, the objectives of the programmes have been relevant and were based on the Dytiki Ellada's actual needs. However, the problem was that, especially during the first two periods (1989-93 and 1994-99), there was inadequate capacity to prioritise strategic objectives and to ensure that selected projects were in line with the objectives of programmes.
- The objectives of the programmes have largely been timely in terms of addressing immediate needs. However, timing has been problematic, since many of them have major developmental issues and their resolution would require several programme periods.
- The nature of indicators selected show the quality and directness of the entire period's objectives. At output indicators level, information is exhaustive. For measuring results and impacts between 1989 and 1999, two categories of indicators were used: population served by the projects and in some cases the respective percentage change, e.g. 'increase of the percentage of population served by sewerage networks'. During the entire period, 'jobs created during implementation of the projects' was also used as a result indicator, while in the 2000-13 period, the impact indicator refers to the creation of permanent jobs. This indicator system is common for all CFS/NSRF Operational Programmes, but does not allow accurate measurement of the programmes' contribution. Measuring the contribution of interventions on macroeconomic aggregates is made at CSF/NSRF level.

EQ1d: What has ERDF support been spent on in each programming period? Have there been significant transfers from initial allocations of ERDF resources to other priorities in any period?

Overall, total expenditure (national and EU) through all Structural Funds in the Dytiki Ellada region from 1989 until today exceeded €4.3 billion (in constant 2000 prices), showing a rising trend between each period. In detail, expenditure has risen from €171.9 million in the 1989-93 period and €1,418.5 million in the 1994-99 period to €1,918.3 million in the 2000-06 period. Additionally, if one considers also private expenditure, the total expenditure for the whole period though Structural Funds' interventions in Dytiki Ellada can be estimated to have exceeded €5 billion (in constant 2000 prices).

Most of this expenditure has been focused on infrastructure investments: transport, environmental and social infrastructure. This represented 39 percent of total expenditure in the 1989-93 period, 49 percent in the 1994-1999 period, 32 percent in the 2000-2006 period and 61 percent to date for the 2007-13 period. On average, the projects of thematic axis 'Regional infrastructural endowment' participate with 43 percent (around €2 billion in constant 2000 prices) of the total expenditure, which is explained by the number of infrastructure projects implemented in the past and other infrastructure projects still implemented in Dytiki Ellada region. The main projects supported by the expenditure of this thematic axis include the construction or improvement of primary and secondary roads, national roads, highways, construction of the Rion-Antirion Bridge, construction/improvement of port infrastructure, and telecommunication infrastructure.

'Social Cohesion' has also been an important theme, with a share of expenditure of 7 percent in 1989-93, 11 percent in 1994-99, 20 percent in 2000-06 and 7 percent to date for the 2007-13 period. On average, the 'Social Cohesion' thematic axis has absorbed 14 percent of the total expenditure (approximately €653 million in constant 2000 prices), while this amount is expected to further increase with the completion of the current programme period. The main projects of this thematic axis have been the construction/upgrading of school and university units, creation and modernisation of hospitals, the provision of educational equipment, interventions in cultural heritage monuments, and similar.

Circa 11 and 10 percent of total expenditure went to investments that can be classified for 'Structural Adjustment' and 'Labour Market'. Structural adjustment projects have primarily included tourism development projects in every programme period (from large projects, such as the creation of a ski resort, to smaller ones such as rural tourism actions). Labour market projects include training programmes which served several regional needs such as unemployment (long-term, youth and female), skills shortages and social inequalities.

On the whole, the focus of expenditure has remained largely unchanged since 1989. The most significant variation that can be observed relates to the rising trend of the 'Enterprise' thematic axis (from 1 percent in the 1989-93 period to 8 percent in the current period), linked to an increasing attention to supporting new and existing firms to improve Dytiki Ellada's competitiveness.

Assessing the change in the actual relative distribution of expenditure compared to the initial allocations can only be done for the ROPs, due to the fact that the NOPs do not foresee

regionalised financial plans. In the ROPs, there have been significant shifts from one programme to the next in the project categories that received ERDF funding. During the 1989-93 period, there was a reduction in resources available for the productive environment (SMEs funding, tourism promotion), which was instead directed to infrastructure investments. In the 1994-99 period, there was a shift of resources away from basic transport infrastructure (-9 percent), culture-sport-tourism (42 percent), and health-welfare (-42 percent), in favour of district and community roads (32 percent), environmental protection (10 percent), promotion of productive investments (64.2 percent) and in all measures of the priority 'Strengthening Local Government Structures'. A similar situation can be observed in the 2000-06 period, in which there was a major shift from large infrastructure projects to innovation and enterprise projects, as well as interventions included in the priority 'Strengthening Urban Infrastructure - Improving Quality of Life'. It should be noted that during both the 1994-99 and 2000-06 periods, Dytiki Ellada ROP resources were increased, based on the decisions of the CSF Monitoring Committee. In particular, for the 2000-06 period there was an increase in the programme's funding in 2003 as a result of the performance reserve.

7.2 EQ2: To what extent do ERDF achievements meet regional objectives and needs in each programming period and across all periods?

The second set of evaluation questions focuses on how effective ERDF interventions were in fulfilling the objectives set out in programmes and whether they helped to address the needs of the region. Inevitably in a complex policy package, comprising both regional and national ERDF programmes, the answer is mixed.

The assessment reveals that there were substantial achievements in building up physical capital, and in achieving societal objectives in programmes. Throughout the period under study (1989-2013), achievements related to social inclusion, environmental sustainability and intra-regional accessibility interventions were better than forecasted. Dytiki Ellada also achieved tangible progress stimulating structural change, for instance by facilitating the expansion of tourism. Similarly, with regard to innovation (in particular, the creation of R&D infrastructure) the relevant achievements met the regional needs and objectives. By contrast, the achievements in the fields of labour market and enterprise have on the whole been poor and did not meet the needs and objectives of the region.

EQ2a: What are the reported achievements of each programming period?

During the 1989-93 programme period, monitoring focused more on financial progress rather than on what programmes achieved. Reporting of outputs recorded the considerable investment in water supply and wastewater treatment and some indication of the impact is provided by the numbers of people benefiting from water purification projects (42 percent of the region's total population) and sewerage networks (from 3 percent at the outset of the period reached 30 percent). Improvements to the road network (a crucial requirement for the strategy) were minimal at the level of the primary road network (national roads) but considerable at the local level (regional, local and municipal roads). It is notable that many major transport projects began with financing from the 1989-93 ROP or the sectoral NOP but some of them are not yet completed (e.g. the western axis, Ionia Odos). On the other hand, in the field of structural adjustment, only minor interventions focused on tourism development have been reported (the upgrading of an existing ski resort and a tourism promotion action). Despite the programme's initial objective to create a better

environment for enterprises through infrastructure and the improvement of services, the relevant measures were finally cancelled due to substantial delays.

The reported achievements of the 1994-99 programmes were much greater than those of the previous period. One of the basic elements of the particular period was the commencement of a number of strategic projects, most of which were finalised over the 2000-06 period (the Rion-Antirion Bridge; the Patras bypass; the interventions in the archaeological site of Ancient Olympia; and the west axis of the country, Ionia Odos). With regard to transport infrastructure the principal achievements include construction of motorways (14.5 km) and national roads (5.8 km), and improvement of the 30 percent of the intra-regional road network. Interventions in three significant ports increased the overall port capacity of the region by 17 percent. In the field of environmental sustainability, the reported achievements include the construction of 11 wastewater treatment plants serving the main urban centres of the region and a part of semi-urban areas; the completion of three new sanitary waste disposal sites and considerable investment in water supply networks. In the field of social cohesion, the ERDF has been the main funding source for a substantial improvement of the social services provided (new health infrastructure, creation and the upgrading of educational infrastructure). The 1994-99 period marked the beginning of interventions in the field of innovation (with the main achievement being the construction of a hub (Patras Science Park)). Furthermore, it created the preconditions for a gradual structural adjustment of the regional economy, mainly towards the tourism sector. Achievements in this area include the improvement of a ski centre, the construction of two marinas and the considerable investments in cultural heritage protection. Once again, however, the achievements in the field of entrepreneurship were very limited.

In the 2000-06 period, the programmes succeeded in meeting the needs and regional objectives related to social cohesion and environmental sustainability interventions. In particular, the health services provided in the region were considerably enhanced (construction of one new hospital and the upgrading of three existing hospitals), thus converging with the national average with respect to the number of hospital beds per 100,000 inhabitants. A long term goal for the region was achieved through increasing school capacity by 372 new classrooms. In addition, investment in wastewater treatment helped to cover most of EU waste water management requirements. Progress was also made in the field of solid waste management (43 uncontrolled sites of waste disposal were redeveloped for future reclamation), whilst initial targets related to water supply networks were exceeded, thus providing the whole regional population with potable water. In parallel, significant progress was recorded in the field of structural adjustment, mainly regarding tourism development.

In contrast, programme achievements are considered to have been poor in the field of entrepreneurship, despite the increase in available resources. In the thematic axis of transport, infrastructure reported achievements are mixed. The most important achievement of the period, with regard to its strategic role for the region, has been the completion of the Rion-Antirion Bridge. However, achievements in this field can be considered poor taking into account that the TEN-T road and rail network was not completed as initially planned. In the field of enterprise support, despite the increase in the number of investment plans, funding to enterprise was not based on a specific strategy and targeting and, therefore, enterprise intervention had limited overall impact on regional development. The results in the innovation thematic axis are remarkable, especially when compared to previous periods. The main criticism, though, is the need to ensure wider use of

research results by the production base of the region and on the actual impact of the particular interventions on regional development.

EQ2b: To what extent were objectives achieved in each programming period?

Dytiki Ellada's basic needs remained the same throughout the entire period, and strategy was supplemented over the years in line with the change of Cohesion policy's priorities. The main regional objectives from the outset of the period were essentially two-fold: the improvement of infrastructure as a tool for reducing internal and external socio-economic disparities, and the modernisation of the local economy. As mentioned earlier, the design of the programmes did not have a clear intervention logic for achieving both of these objectives; programming focused on infrastructure investment to improve accessibility, to build up the productive sector by supporting both SMEs and the business environment, to utilise the region's natural and cultural resources to attract more tourists, and to improve basic services across the whole region - mainly to improve quality of life (social cohesion) and to develop new opportunities (economic cohesion). There has been a consistency in pursuing these objectives throughout the 1990s and also to a significant extent in the 2000s, although the emphasis shifted slightly in the last RDPs towards promoting innovation and developing SMEs.

Ambitious objectives were set, as Dytiki Ellada's regional authorities were seeking to facilitate transformational changes in a manner which would assist in overcoming physical, economic, social, demographic, environmental and administrative constraints. However, the results were mixed - and the programmes enjoyed more success in improving quality of life, developing the tourism sector, solving the majority of environmental problems, creating a good base for the development of R&D, and improving the region's connectivity - than in overcoming the region's severe accessibility problems. Efforts to support SMEs and to foster innovation also had limited results. In parallel, national (sectoral) programmes had objectives that barely focused on the region's needs and were not targeted.

Overall, during the entire 1989-93 period, the national and regional authorities responsible for programming made considerable efforts to promote strategies which were in line with regional needs, on the basis of how Dytiki Ellada should develop. Additionally, priorities predetermined at EU level did not always correspond to the actual needs of the region or could not always be effectively adopted by the programming authorities (i.e. innovation, structural adjustment).

In conclusion, it can be assumed that the achievements of each programme period in general correspond to the needs of the region as perceived by national and regional authorities and specified in the ROPs. However, if the allocation of resources is considered to reflect priorities and needs that should be met, then it is apparent that improving competitiveness and resolving the regional economy's structural problems has never been a top priority for Dytiki Ellada. Twenty years since the beginning of the implementation of Cohesion policy in the region, the economic crisis inevitably raises questions about the appropriateness of the policy applied and the prioritisation of needs.

EQ2c: To what extent were needs met in each programming period? To what extent can observed changes in regional needs and problems be imputed to ERDF programmes over time?

Whilst in all periods Dytiki Ellada's needs were at least partly met, strategic choices affected the *degree* to which particular needs were met. Due to the scale and variety of the region's problems, subsequent prioritisation of need has led to interventions with impacts varying among sectors and thematic fields.

Throughout the 1989-2013 period, the economy of the region (as of Greece) has been characterised by the rapid shrinkage of the primary sector, the decline of the secondary sector - especially manufacturing - and the significant increase of the tertiary sector. These changes have been observed both in terms of employment and gross value-added (GVA). Thus, in absolute terms, convergence with the national average has not been achieved. The question is whether or not ERDF funding has contributed to the region's convergence. The meeting of needs cannot be attributed to specific periods, since many interventions were implemented in successive programme periods.

ERDF interventions served as the main response to the lack of infrastructure, which was seen as the most important limitation for economic growth. However, the picture that emerges indicates more beneficial effects for territorial and social cohesion than for the business environment. Fieldwork confirms that infrastructure interventions improved internal accessibility, reducing the isolation of the mountain areas and increasing living standards. It also improved social equality as shorter transit times between mountain communities and main road links resulted in improved social cohesion and community development.

The region's geographical position (as the west gate of Greece) was a key feature, the significance of which could have been further highlighted if the basic transport infrastructure had been completed, since only a part of it was constructed with a significant contribution from the ERDF.

Tourism was one of the sectors in which the most visible changes can be attributed to ERDF. It gradually gained more importance following an integrated approach which encompassed natural resources and cultural heritage intervention along with aid to enterprise. Investment in tourism has led to a significant increase in tourism flows and has indirectly raised the living standards of rural communities and those in mountainous areas.

ERDF support has contributed significantly to meeting needs for improved basic social services infrastructure, such as schools, universities, healthcare facilities and other social structures, raising levels of wellbeing and improving social cohesion.

Achievements regarding innovation have created a substantial innovation potential and a high-level research workforce in the region but have failed to actually strengthen the collaboration between public research organisations and firms.

The growth of jobs in the areas of education, health and culture came as a result of infrastructure development financed by ERDF and had an important impact in increasing employment in the relevant sectors until the recent economic crisis.

Finally, the verdict is that ERDF improved the quality of life in the region and ensured social cohesion, but it failed to make the necessary changes in the economy that would warrant economic growth. Shortcomings are related to the lack of social capital, the difficulty in attracting foreign investment and the limited effectiveness of mechanisms for promoting innovation and connecting R&D with production.

EQ2d: What have been the complementarities and synergies of ERDF interventions with ESF, EAGGF/EAFRD, and domestic regional policy interventions?

Over the three first programme periods (1989-06), Dytiki Ellada ROPs were multi-funded and had distinct sub-programmes or priority axes, corresponding to the interventions of different EU funds (ERDF, EAGGF and ESF).

The highest levels of synergies and complementarities were developed between ERDF and EAGGF. There were distinct actions that could be funded by either the ROP or the NOP. The implementation of the LEADER Community Initiative in rural mountainous and disadvantaged areas over the 1994-06 period has been of particular importance, as it aimed to diversify the economic base of these areas. This was done mainly through encouraging the creation of small tourism accommodation facilities and other similar actions. The investments in agriculture under the EAGGF had obvious impacts on rural income, since farmers were only used to subsidies from the Common Agricultural Policy (CAP). A long-term impact was the wider implementation of the 'LEADER approach', which gave the rural population the opportunity to explore new ways to become and remain competitive and improve quality of life in rural areas.

There were also complementarities between EAGGF/EAFRD and ERDF in financing the upgrade of the basic social and environmental infrastructure of the region and substantially improving the connectivity within and outside rural areas, contributing to the decline of internal migration from the region's rural areas to urban ones, which was one of the major problems of Dytiki Ellada.

In contrast, there are few synergies between the ERDF and NOPs funded by ESF, because they largely financed similar interventions with the ROP (e.g. training). Probably the highest synergies between ERDF and ESF were achieved during the third programme period, through the Integrated Programmes for Rural and Urban Development (as analysed in section 5.1). Moreover, social welfare structures (day nurseries, day-care centres for elderly and disabled people, etc.) whose infrastructure was funded by ERDF and operated by ESF also represent successful cases of effective complementarity between the two funds.

Domestic regional policy was fully harmonised and incorporated into Cohesion policy.

EQ2E: What has been the overall contribution of ERDF programmes to regional development?

The scale of problems faced by Dytiki Ellada has meant that the challenge of making considerable change was always likely to exceed the resources available. Nonetheless, the region has been transformed in some aspects, notably in social cohesion and improvements in quality of life, in environmental sustainability and in the endowment of basic transport infrastructure. However, considerable problems remain to be addressed, such as low levels of productivity, and the underperforming private sector - characterised by low levels of entrepreneurship and innovation, and high levels of unemployment. Some of these challenges have been exacerbated by recent developments since 2008 as Dytiki Ellada has been hit hard by the economic crisis and the subsequent austerity policies, illustrating the fragility of the region in spite of improvements.

Despite current difficulties, Dytiki Ellada is undoubtedly a better place to live in and is more attractive for investors and tourists than it was at the outset of the period. The improvement in basic infrastructure (especially in rural areas), the creation of a nationally important centre for

research and technology, and the infrastructure for the development of tourism are achievements which can contribute to regional development.

It was made clear from all the interviews that ERDF improved the quality of life in the region and ensured social cohesion, but failed to make the necessary changes in the economy that would ensure economic growth.

7.3 EQ3: What are the main lessons learnt on the effectiveness and utility of ERDF interventions?

EQ3a: What are the main good/bad practices?

Dytiki Ellada has gained considerable experience from its engagement with the Structural Funds and the development of regional strategies. The most positive achievement is associated with the familiarisation of the central and regional administration with the long-term planning processes of regional policies focused on specific objectives.

The success stories of the region include; the construction of Rion-Antirion Bridge due to the adoption of a new method of project delivery; the creation of a research centre complex (Patras Science Park) and the improvement/expansion of an important higher education institute (University of Patras); the Ancient Olympia interventions which involved resource concentration from different Operational Programmes and periods towards specific targeting related to tourist development; and the implementation of integrated programmes in specific territorial units, such as the mountainous areas, through the mobilisation of regional resources and the creation of partnerships.

The region has also experienced a number of problems and examples of poor practice, although in some cases this is due to the wider operation of the Structural Funds in Greece. In particular:

- The very large number of projects, often small-scale budgeted, without a significant development impact.
- The persistence-after 1999-of the same mix of intervention in specific project categories, such as small-scale roads, water supply networks and interventions for tourism development in coastal areas or urban centres (i.e. paving, squares etc.), which represented easier alternatives to the difficulties in the implementation of major infrastructure projects.
- The major delay and uncertainty regarding the timely completion of the TEN-T projects due to deficiencies of the domestic system for public works production, resulting in time-consuming maturing and procurement procedures.
- The greater emphasis put on the ability to absorb available funding and to prepare adequate technical studies for the selection of specific projects against their feasibility and the developmental impact.
- The fragmentation in the design of several projects (i.e. the priority given to the rail connection of Patras port instead of the Industrial Area of Patras).

- The lack of coordination between central and regional authorities, as illustrated by the failure to achieve the objectives set in the first priority axis of Dytiki Ellada 2000-06 ROP.
- The inability to foresee the need for the expansion of the natural gas network in Dytiki Ellada region and especially in the urban area and the Industrial Zone of Patras.
- The mono-fund structure of the Operational Programmes over the current period has led to limited co-ordination between Funds, as well as ineffective monitoring of all interventions, given that actions co-funded by ESF and EAFRD are implemented at national level.
- The limited participation of socio-economic stakeholders and local authorities during the programme design phase (mainly in the early periods) and their limited familiarisation with Structural Funds operations, including the role of the ROP Monitoring Committee.
- External factors including the failure to promote the necessary changes and structural reforms in key areas related to competitiveness in order to attract foreign investment, combined with the outstanding problems associated with the implementation of the CSF interventions (i.e. the cost of land expropriations, delays by the Archaeological Service, frequent juridical involvement during tendering or even in the project construction phase, delays in decision-making, lack of social consensus and implications of locating environmental infrastructure projects).

EQ3b: What conclusions can be drawn for improving ERDF programme design, implementation, results-based management, achievements?

The experience of implementing interventions during the entire 1989-2013 period has provided useful lessons that apply both to Dytiki Ellada region and the whole country.

The first lesson concerns programme procedures and the required emphasis on better diagnosis of real needs and problems that cause lagging development. There is also a requirement for prioritising needs and concentrating resources in specific ‘value-for-money’ areas of intervention. It is also important to improve coordination between central and regional authorities in order to maximise synergies among funded interventions. The targeted spatial policies and the concentration of funding resources in selected areas on the basis of actual needs leads to a multiplier effect, as experienced through the implementation of Integrated Development Programmes for urban and rural areas during the 2000-06 CSF.

Limited achievements in the fields of enterprise and innovation in Dytiki Ellada suggest that it can be particularly hard to make a transition from an intervention logic that focuses absolutely on investing in physical capital to one that also emphasises enterprise development and innovation, especially if the latter is suggested by national or EU policies (such as the Lisbon agenda) through top-down processes and is thus not incorporated into the regional programming culture. The lack of a comprehensive strategy in this field and consequent results have highlighted the necessity for a smart specialisation strategy at the regional level. The tools to facilitate the links between research, the academic community and the economy of the region should be developed through a bottom-up process, taking regional conditions and specificities into account.

In addition, coherence problems between the ROPs and the NOPs have led to adverse effects on the aggregate results regarding the implementation of the regional strategy. The most obvious example of this is the continuing deficit in external rail and road links resulting from a combination of investment inadequacies under the national ERDF programmes and the significant delays in the maturation and construction of works.

At a different level, lessons relate to the project selection process and the need to improve project selection criteria. To date, more emphasis has been afforded to criteria related to the technical maturity of projects, while other aspects (such as necessity/feasibility or expected impacts) have been ignored. Experience within the region has demonstrated that more focus should be placed on anticipated results, rather than on technical issues.

Finally, other lessons relate to the economic scale of the interventions for transport and social infrastructure. For major TEN-T projects, there were a number of problems that often led to the suspension of works, due to the low anticipated revenues from certain projects, as a result of the reduced traffic. In terms of social infrastructure, the operational cost of the infrastructure created should also be measured.

8 ANNEX I - ANALYSIS OF PROJECT SAMPLES

8.1 Project: The Rion - Antirion Bridge (Harilaos Trikoupis Bridge)

Summary description

The Rion- Antirion Bridge is considered a landmark of Greece's 21st century. For Harilaos Trikoupis, when he became prime minister of Greece in 1880, this bridge could only have been a dream, unrealisable with contemporary technology.

The bridge crosses the Gulf of Corinth connecting Peloponnisos with mainland Greece. It links the town of Rion at the outskirts of the city of Patras (regional unit of Ahaia, south coast), and Antirion (regional unit of Etoloakarnania, north coast). The bridge links two major road axes of national importance, notably the Ionian axis (Ionia Odos), crossing the western part of the country and the segment of PATHE axis (Patras, Athens, Thessaloniki, Evzonoï (FYR Macedonia border) which links the three largest cities of Greece and form part of the Trans-European Network Transport (TEN-T). The bridge facilitates communication between Greece and Italy, and thus Western Europe, through the ports of Patras and Igioumenitsa in Ipiros.

The project was implemented under the sectoral Operational Programmes 'Accessibility and Road Axes' of the CSF 1994-99 and 'Road Axes, Ports and Urban Development' of the CSF 2000-06 through a Concession Agreement, with a total cost of about€ 820 million.

Underlying problem and context of the project

The first conception of the Rion-Antirion Bridge was as a rail link project by Harilaos Trikoupis back in 1889. For many years, the bridge had been a project that Greece 'had' to build. However, it took almost a century before the Greek State managed to invite tenders for building a fixed link between Northwest Peloponnisos and the mainland.

The necessity of the project emerged by the problematic connection between Rion and Antirion which was undertaken by ferry-boats with an average crossing time of 45 minutes. In periods of increased traffic the connection was burdened with long waiting times of boarding-disembarking, and sometimes was interrupted due to strong winds in the area. The connection problem resulted in the geographic isolation of Dytiki Ellada and Ipiros from the country's main development axis (Patras-Athens-Thessaloniki - Evzonoï) and was, for decades, the main factor hampering the development of these regions. With Greece's accession to the European Union and the continuous expansion of needs for ensuring good connectivity to other Western European countries initially, and Central and Eastern, after the successive enlargements, this problem acquired a trans-European character and it was addressed through the overall organisation and development of the Trans-European Network Transport (TEN-T).

In 1994, the EC Essen Summit identified 14 priority transport projects (TEN-T). These included the PATHE motorway while Rion-Antirion Bridge was incorporated into PATHE, as a vertical connection to PATHE before Patras. This development was regarded as an absolutely critical milestone for the implementation of the project.

The project was selected for EU co-funding under Measure 1.3.3 'Rion-Antirion link' of the 1994-99 Accessibility and Road Axes OP. Preparatory work and supportive services for the completion of the procedures before the start-up of construction were carried out. In the 2000-06 period the construction of the bridge became a separate specific objective (Specific Objective 3) and was the sole subject of Measure 1.6 'Rion-Antirion link' within the framework of Road Axes, Ports and Urban Development OP.

The design of the country's main road network, the implementation of which had gradually started from the 1994-99 programme period, included PATHE Axis, Egnatia Road and Ionia Odos. In this network, the Rion Antirion Bridge emerged as a crucial project to remove the discontinuity of the network. It is of note that at the time the Rion-Antirion Bridge was planned, constructed and delivered the road network linked with the bridge was in poor condition and not up to motorway standards. All roads, Egnatia Odos, the Peloponnisos part of PATHE and the Ionia Odos were of quite poor standards or had major segments still under construction. Gradually, since that time, these road links have been significantly upgraded and it is anticipated that, if the bottlenecks that have now emerged with the concession contracts are overcome, by 2015 the remaining road links will be upgraded to motorway standards.

Furthermore, the project had an intra-regional significance for Dytiki Ellada region as it would contribute to reducing the isolation of Etoloakarnania and generate development prospects in tourism and manufacturing related activities. Travel time to the city of Patras would be significantly reduced, ensuring easy access to services and social infrastructure which, in turn, would directly upgrade the quality of life of Etoloakarnania and other neighbouring areas, while strengthening the role of Patras as a major regional urban development pole.

Detailed description of the project

The aim of the project was to improve the accessibility of the regions of Western Greece (Ipiros and Dytiki Ellada) and their connection to the major urban centres within the framework of the TEN-T completion, in which the bridge was included as a segment of PATHE motorway. This objective remained stable throughout the whole project maturation and construction period to date. In particular, the main objectives of the project were as follows: to drastically decrease travel time, providing fast and safe movement of people and goods and new prospects for the development of Peloponnisos and Dytiki Ellada regions; to provide a segment of PATHE TEN-T; to contribute to the economic and cultural development of the geographical areas of Peloponnisos, Dytiki Ellada and Ipiros; As a part of the Western Road Axis from the Albanian border to Kalamata (on the south-west of Peloponnese), to connect PATHE with Egnatia Road, which were the two TEN-T priority axes at that time, enhancing the country's connection to Italy and the rest of Western Europe through the ports of Patras and Igoumenitsa; to decrease crossing travel time per car by about 40 minutes, and consequently decrease the total cost of crossing the straits; to improve the comfort, reliability and quality of service and ensure the continuation of service regardless of weather conditions.

The project, both technically complex and expensive, was implemented through a Concession Agreement, following an international tender. The call for tenders was launched in 1991 and after repeated postponements it was carried out in December 1993. Two years later, in January 1996, the concession contract for the project was signed between the Greek State and the concessionaire

(the Franco-Hellenic consortium Gefyra S.A. comprising the French company GTM (acquired by VINCI in 2001)- which is the largest shareholder - and six smaller Greek companies).

The concession contract was ratified by the Greek Parliament by Law 2395/1993. In December 1996 the European Investment Bank (EIB) approved a loan of 370 m EUR and soon after, negotiations began between Gefyra SA, the State and the consortium of commercial banks for the finalisation of the financing terms and the signing of the loan conventions. In July 1997 the Master Facility Agreement was signed between Gefyra SA and EIB, while in December 1997 the final contracts were signed and the financing of the project was defined and ensured. The effective date of the Concession Agreement was 24 December 1997. The project began in 1998 and was completed in 2004; since then it has been in full operation. The seven-year construction period consisted of a two-year design and preparatory works period and a five-year bridge construction period. The project embodied the DBFO method (Design-Build-Finance-Operate) with Gefyra SA responsible for the design, construction, financing, maintenance and operation of the bridge during the 42-year concession period. The construction was completed in August 2004 (almost five months before the deadline). On 12 August 2004, the Harilaos Trikoupi Bridge was opened to traffic.

The Rion-Antirion Bridge is the longest multi-span cable stayed bridge of the World with its 2,252 meters' continuous and fully suspended deck. Its foundations lay on a seabed that reaches 65 meters of depth. This is a world record for a bridge as well as their diameter of 90 meters making of them the world's largest bridge foundations. But its chief characteristic in the safety criteria in accordance with which it was conceived, giving it the ability to withstand 250 km/h winds, collision with a 180,000 tones tanker traveling at 16 knots, or a seismic tremor registering above 7 on the Richter scale.

The bridge was designed and constructed in order to cope with the exceptionally difficult physical conditions in the straits between Rion and Antirion: high water depth; deep strata of weak soil; very strong seismic activity; strong winds; and fault displacements. In addition the risk of the heavy ships collision had to be taken into account, as well a non-stop serviceability of the link. For these reasons, quite innovative techniques needed to be developed, such as improving the strength of the in-situ soil by means of inclusions and suspending the bridge deck on its full length so as to be as isolated as possible. The technical innovations that have been employed for the realization of this project are manifested by their numerous references in the scientific and technical literature. As a result of innovative character of its structure the bridge has been awarded a lot of international awards by the international scientific community.

The total cost of the project was €823.1 million from which the state contribution - EU (ERDF) and state subsidy - was €385.1 million, the EIB loan €370 million and the participation by the Consortium that operated the Concession Contract amounted to €68.6 million.¹⁵ The contribution of EIB through the loan provision was crucial to the project implementation, but created additional requirements for financial management with the involvement of banks, negotiations between involved parties, etc. This resulted in delays as regards the launch of the concession contract, but also ensured the smooth financing and completion of the project.

¹⁵ The Franco-Hellenic consortium Gefyra S.A. comprising the French company GTM (acquired by VINCI in 2001)- which is the largest shareholder - and six smaller Greek companies.

With the completion of the bridge, its operation began by the Consortium that operated the Concession Contract through a company that seamlessly operates the bridge until today.

Outputs and achievements

The bridge has been realised as designed and tendered. There were no deviations from physical and financial specification.

The main achievement of the project is that the bridge provides a permanent link: a) reducing crossing time to 5 min (compared to the average 45 min when using the ferry-boats before the bridge was built); improving crossing's comfort and safety to high standards; and remaining in operation whatever the weather conditions.

In a study carried out by the University of Patras (March 2008) regarding the spatial impacts of the bridge and the Western Axis in general, based on the evolution of the number of vehicles crossing the bridge, it was concluded that the bridge addressed the problems for which it was designed and built. Total traffic volume between Rion and Antirion during 1993-2003 showed an annual increase equal to 4.6 percent. Between 1999 and 2003 this increase fell to 3 percent annually. Since the bridge's operation in 2004 and until 2007 the overall number of vehicles (bridge plus ferries) has been sharply increased with an annual growth rate of 12.7 percent. This proves that the former way of connecting Rion-Antirion by ferry prevented a large number of the desired traffic. The bridge's operation allowed to serve this additional demand.

However, while the traffic volume continued at high levels during 2009 and exceeded 420,000 vehicles per month (on average) by the end of the first quarter of 2010, from March 2010 onwards a continuing downward trend began with traffic dropping below the level of 300,000 vehicles during July 2012. This unexpected development is a direct consequence of the current economic crisis that affects all activities in the country by reducing the number of crossings and especially non-professional ones.

The bridge boosted drastically the economic growth of the region. In the above mentioned study it is indicated 'Through a concrete research method founded on the interregional data, the index of the project came out and it was found to be 1.88, so on the basis of the whole investment cost of the bridge it was estimated that the total influence on the national economy was near to 1.5 billion Euros. An important part of the total influence (67 percent) stays into the administrative limits of Dytiki Ellada region'.

The environmental objectives were also achieved, given that the operation of the bridge diminished the pollution and general unrest caused by the car and track congestion in the ports of Rion and Antirion which are now free of congestion. Furthermore, the significant reduction of the ferries has also significantly decreased the sea pollution caused.

However, the expected positive impacts on the local economy (development and attraction of productive activities and improvement of the businesses' competitiveness) with respect to the current difficult economic environment depend directly on the synergies with other actions, such as developing appropriate financial mechanisms, promoting innovation, etc. However, it should be pointed out that, as regards the transport infrastructure the integration of PATHE Axis (Corinth-Patras section) and the construction of the Western Axis will play a key role in maximising the

benefits from the operation of the bridge and will highlight the strategic position of Dytiki Ellada region. Both projects are implemented through the Accessibility Improvement OP 2007-13. The completion of this basic network will enhance the competitiveness of businesses and lead to the establishment of new ones in the areas of the north-western parts of the country. Minor projects towards this direction are also implemented through the Dytiki Ellada-Peloponnisos-Ionia Nisia ROP 2007-13.

Value-added

The construction of the Rion-Antirion Bridge was a unique project from technical, scientific and organizational aspect, documented by a number of international awards. The implementation of a large and complex project with Public Private Partnerships was practically unknown at the time to the Greek public administration, since major road projects were implemented as purely public projects co-funded by Structural Funds. The whole process was an unprecedented one for the public decision-making system since the project was amongst the first major concession contracts implemented in the transport sector.

Due to the specific project implementation process, international expertise has been utilized through the concessionaire and it has also been possible to raise the necessary funds (EIB loan, concessionaire's participation) in addition to public expenditure (EU and National) that made the project financially feasible. This is of particular importance since the technical specifications of the project provided an increased risk for the investment. Moreover, EIB's involvement, with special expertise in financing major projects, besides ensuring valuable resources, resulted in the creation of such a financial design model that minimised any risks in case of non-completion of the project.

The successful delivery of the project within the expected deadlines and budget, which at the time was a challenge for EU co-funded programmes, highlighted it as a 'good practice' model.

The Rion-Antirion Bridge is amongst the first three projects to be procured as Private Public Partnerships in Greece with the support of EU Structural Funds and EIB's long-term lending. It opened the way for the adoption of a new method of project delivery, both from the government and the public in general. A direct result of this development was the improvement of capacity building in the public sector (Ministries, Managing Authorities of EU co-funded programmes, etc.) and the familiarisation of the business world with this system for the delivery of public works. Thus, today under the NSRF 2007-13 OPs (i.e. 'Accessibility improvement OP'), the design and implementation of major transport infrastructure projects is largely based on Private Public Partnerships with the above mentioned advantages.

Conclusions

Since late 19th century, the implementation of the Rion-Antirion Bridge was a national dream and a project going far beyond local boundaries. Its implementation eight years ago was a big step towards the completion of the Trans-European Transport Network (TEN-T), which also contributed to overcome the isolation of Dytiki Ellada, while providing growth prospects in the region.

Although the achievement of these objectives is delayed due to the current difficult economic situation (which is not related to the project itself), its legendary status proved that there is a great potential for successful implementation of difficult and large projects by public

administration bodies, if focus is given on the utilisation of all available resources including private funding. Additionally, the value of this project, beyond those mentioned above, is expected to be multiplied through the synergies following the completion of complementary transport infrastructure projects within the Trans-European Network Transport.

8.2 Project: Patras Science Park (PSP)

Summary description

Patras Science Park S.A. (PSP) was established in 1989 as Patras Technological Park S.A. by FORTH/ICEHT. In 1992 the company took its current name, while in 1998 its premises were completed. Since 2001, the Ministry of Development has been the main shareholder.

Next to the University of Patras and the Institutes of Chemical Engineering and High Temperature Chemical Process and of Computer Technology, PSP is an organisation of a particular structure, establishing mechanisms and services primarily targeted in promoting the creation, operation and growth of 'innovative firms'. The Park aims to support the creation, operation and development of innovation based enterprises and the promotion of their activities. Such operations aim at the fast conversion of the R&D results into business success.

Patras Science Park (PSP), created and developed through ERDF programmes, is the critical link in the chain between science, research and production. Being a privileged place for establishing research centres and high-technology companies, the PSP provides a high quality environment supporting the development of small, innovative and technologically advanced businesses, through certain processes, such as business incubators and spin-offs.

The construction and equipment cost amounted to €4.5 million (ERDF contribution 75 percent), while the total budget for research and scientific programmes, in which PSP has participated is at the area of €26 million (€25,981,905).

Underlying problem and context

The establishment of direct links between education & technological research and production processes, has been a key priority for economic growth internationally and especially in Greece, since the country is well behind in this area.

Especially for Patras, this link is crucial, given the existence of a top university and research institutes demonstrating the city's concentration and specialisation in the technology sector. Especially in recent decades the deindustrialisation of the region and parallel technological developments highlighted the issue of converting R&D results into business success, in order to modernise and transform the production base. Towards fulfilling this need, Patras Science Park has been established, aiming to utilise the comparative advantage of knowledge based organisations and the natural environment of an area with industrial and business tradition.

The objectives of Patras Science Park were:

- To facilitate the creation and growth of innovative, technology driven companies, to implement their business plans, providing value-added services combined with high quality space and facilities.
- To assist in the exploitation of R&T results produced mainly within the local scientific community and research organisations.
- To attract private investments to establish R&D units in its premises, to initiate the convergence and cooperation between knowledge creating organisations and the industry.
- To assist in the achievement of economies of scale between universities, research centres and corporate sector, to contribute through partnerships, acquisitions or research programmes to the restructuring and reengineering of the regional private and public sector organisations.
- To assist regional stakeholders and policy decision-makers in the field of knowledge-based society.
- To support and coordinate clusters initiatives at local level.

Achieving those objectives remains even more vital nowadays, under the light of the current financial crisis in Greece and its impacts in Dytiki Ellada region in terms of deindustrialisation, unemployment, etc.

The establishment of Patras Science Park was mainly financed by ERDF interventions. During the 1994-99 period, two projects for infrastructure constructions and provision of equipment were financed by the Research & Technology OP (Measure 2.3 'Transfer of Technology'). More projects of PSP were also funded during the next programme period, CSF III 2000-06, targeting objectives related to both Competitiveness and Regional Development.

Regarding the improvement of competitiveness policies of the period the restructuring and strengthening the industrial base was crucial, as well as the support of the SMEs and the Research and Development (R&D), particularly through the establishment of new business activities. Among others, main policy priorities were the creation links between education, training and business needs, the simplification and streamlining of business environment, the promotion of new financial instruments, the measures for technology transfer of spin offs mechanisms, etc.

At the same time, the regional policy aimed at strengthening the competitiveness and increasing the employment. Priority was given to interventions boosting the international competitiveness of the region, promoting its comparative advantages and extroversion.

Moreover, PSP also contributed to the achievement of one objective (out of three) of Measure 4.4 of the Competitiveness 2000-06 OP, regarding raising the awareness of specific groups (professionals, entrepreneurs, opinion leaders, teachers, students, etc.) and the general public, on the achievements and potential of Science and Research and the adoption of new technologies. Additionally, it contributed to the objective of Measure 4.6 of the same OP, concerning the strengthening of the comparative advantages (with geographical and thematic criteria), arising from the interaction and networking

between the Research Bodies which are the producers of Knowledge and those absorbing the Knowledge, aiming to improve their innovation capacity and competitiveness.

Furthermore, PSP contributed to the fulfilment of the general objective of the Regional Operational Programme 2000-06, regarding the utilisation of Region's geographical location and its comparative advantages, for overcoming the problems of unemployment and the intra-regional inequalities. PSP served this general objective, through its direct contribution to one of the seven strategic objectives of the ROP, namely the restructuring and expansion of the industrial base of the region and the promotion of innovation.

During the same program period (2000-06), PSP activities were supported through its participation in transnational and cross-border cooperation programmes (Arcimed and Interreg 'Greece-Italy'). Participating In Arcimed, PSP contributed to the general objective of the project concerning the improvement of integration of the South East Mediterranean. In the 'INTERREG' Programme, PSP projects were related to the general objective of strengthening the cross-border cooperation system between the two countries, in order to increase the competitiveness of the entire area, preserve and promote common environmental and cultural resources.

During the 2007-13 programme period, PSP is supported through the Competitiveness - Entrepreneurship 2007-13 OP and also through projects aiming at the development of Territorial Cooperation (Objective 3). During this period, under the Territorial Cooperation, transnational (South East Europe) and intra-regional cooperation projects are implemented (Interreg IVC), as well as projects supporting urban development (Urbact II). Furthermore, PSP contributes to the general objective of Axis 1 'Creation and utilisation of innovation supported by research and technological development' of the Competitiveness - Entrepreneurship 2007-13 OP which aims: at the acceleration of the transition to a knowledge economy; the incorporation of research, technology and innovation into the country's productive fabric as its principal tool for development and competitiveness; the broad diffusion of research and innovation results in the Greek economy and society.

At the same time, the Territorial Cooperation programmes aim to promoting cooperation between the Greek regions with similar ones in other Mediterranean countries, strengthening technological cooperation and exchanging of expertise, which consist PSP's key areas of interest.

Detailed description

PSP is an organisation whose main objective is to provide, create and develop the appropriate infrastructure, conditions, mechanisms and services contributing to the development of an 'innovation culture', competitiveness and entrepreneurship among companies hosted by the Park, or connected to it and knowledge producers (University, research institutes etc.) located in the same area. This goal has been fulfilled through the implementation of projects co-funded by the ERDF and developed its premises. In particular, under the framework of the Research and Technology 1994-99 OP two projects were implemented in the framework of Measure 2.3. 'Transfer of Technology'; the first was related to the construction of PSP's Building A, with a total surface of 4.792 square meters and cost of €4.5 million, while the second was the completion of its infrastructure with a cost of €0.766 million (€766,013).

Through the construction of building and logistics infrastructure, PSP can offer to the hosted companies the following services:

- Areas accommodating companies and laboratory facilities of total surface of 1,980 square metres
- Secretarial, accounting and legal services (if requested by the companies)
- Project management (physical and economic object), preparation of business plans and submission of proposals
- Access and collaboration with academic and research institutes of the area in order to conduct technological projects, transfer technical knowledge
- A scientific library
- Collaboration with and access to the European Science and Technology Parks network (member of the International Association of Science Parks)
- Networking services and Computer Centre (Broadband & wireless internet, fibre optic access)
- Conference and meeting rooms
- Space for catering and for the organisation of events
- Gym
- Storage areas, parking spaces
- Mechanical equipment (generators, UPS, air compressors, etc.)
- Participation in the implementation of national and European development projects in collaboration with technology companies and academic and research institutes in the region

Outputs and achievements

Nowadays, PSP hosts 20 companies and Institutes, while 100 individuals work in its facilities on a daily basis. Actually it is one of the largest employers of the region. Recently, three companies have developed enough to withdraw from PSP, having successfully completed the first period of their life-cycle, thereby creating the conditions to accommodate and develop new ones. New technology companies have already been accommodated and as a result the PSP has an 82 percent occupancy of its facilities (which is the largest in Greece), while there is also a waiting list of companies which cannot be accommodated by the existing facilities.

The PSP has a good track record of companies which gained importance through it, such as Analogies, Nanoradio, Bytemobile, Antcor, Eyelead, Atmel, CBL etc. However, companies which left PSP mainly due to lack of available space, still remain in its wider environment, creating its 'ecosystem'. The main areas of interest include Information Technology and Microelectronics, Renewable Energy and Life Sciences. Companies' origin is mainly Greek, having started their activities in Dytiki Ellada, but there are also companies with foreign capital invested (Sweden, USA). The majority of companies show significant extroversion (90 percent of their turnover consists of foreign transactions), while three of them have

been invested by high-risk capital (venture capitals). Furthermore, the companies established in the PSP have patented more than 25 inventions internationally, implemented more than 30 projects of research and technological development with a total budget of approximately 20m€ and invested more than 6m€ in technological equipment.

The PSP itself has implemented more than twenty-nine research and development projects (national and European), aiming to bring together universities and SMEs in Dytiki Ellada. More specifically, during the 2000-06 period the PSP participated in projects through the following programmes:

- **Competitiveness OP** with two projects: The first was the Regional Innovation Pole of Dytiki Ellada, the largest project of the Park with a budget of €4.4 million (€4,392,662), included under Measure 4.6 of the programme. The Pole's objective was to improve regional competitiveness and entrepreneurship, based on thematic units, which firstly showed great innovation potential and secondly provided a competitive advantage for Dytiki Ellada. The Pole focused on the areas of Information and Communication Technologies, Food Safety & Technology, Environmental Protection & Management. The leader of the project was the Patras Science Park with the other participants being Higher Education Institutions, Technological Educational Institutes (TEI), research centres, technology and science parks, industry companies, chambers, associations, development agencies, 34 small and medium enterprises (SMEs) and 14 small companies of Dytiki Ellada region. The second project was the 'Lighthouse' of Knowledge for Research and Technology in Dytiki Ellada, with a budget of €80,000, included in Measure 4.4 of the programme. The project's objective was to familiarize the public, especially young people, with issues of Research & Innovation Technology.
- **Dytiki Ellada ROP** with two projects related to the establishment of Joint Ventures of Research and Technological Development in national priority areas. The PSP participated as a partner with total budget participation of €65,538 in both projects.
- **Transnational 'Interreg III Programme' - 'Archimed'** with two projects. The first concerned the creation of networks in the participating countries regions and the coordination of policies in the fields of agriculture, tourism, environment, culture, SMEs and services. In this project PSP acted as was the leading partner with a participation budget of €554,000. The second project (ARCHINET) concerned the improvement of the conditions for regional development and convergence, through alliances of partners in the Mediterranean area by strengthening and improving the Science Parks' network. In this project, the PSP participated as a partner with a total participation budget of €184,800.
- **Cross-border Programme Interreg III 'Greece - Italy'** with four projects.

The first (NET-ITEL) aimed at increasing the environmental awareness, by using environmentally friendly energy and advanced technology in the fields of Information Technology and Microelectronics. In this project, PSP participated as a partner with a budget of €170,000.

The second project (INNOVA) involved the development of a model for permanent Greek-Italian cooperation in research and innovation. In this project, PSP participated as a partner with a budget of €199,750.

The third project (SFINX) was about the development of a Geographic Information System (GIS), to be used for the effective prevention and management of natural disasters resulted by water resources. In this project, PSP participated as the Leader, with a budget of €215,565.

Finally, the fourth project concerned the collaboration of the involved research, development and technology transfer institutions for the incorporation of the research results in organic agriculture and the production and promotion of organic agricultural products (mainly olive oil and wine). In this project, PSP participated as a partner with a budget of €157,288.

During the current programme period PSP participated in the implementation of the following programmes:

Competitiveness & Entrepreneurship OP. Under the HERMES programme, PSP participated with the project of 'The Science and Technology Festival 2008', which aimed to protect the environment with edge technologies in Energy and ICT. In this project, PSP participated as the coordinating partner, with a participation budget of €39,800.

Moreover, in the 2007-13 period PSP participated in the implementation of Objective 3 programmes of Territorial Cooperation. Specifically, under URBACT II programme, the project 'Urban N.O.S.E. - Network of Social Enterprises' was implemented, aiming at the creation of urban social companies. The central idea was that those companies can represent a driving force for sustainable development of urban areas and also increase social cohesion and improve urban economy. In this project, PSP participated as a partner and the total budget amounted to a €684,000.

Also, as part of the South East Europe programme (Transnational Cooperation Programme), 'ECOPORT 8' project aspired to improve the quality of ports, preventing pollution and preserving natural resources in them, as well as in the nearby coastal areas. In this project, PSP has participated as a partner with a participation budget of €228,400.

In the framework of INTERREG IVC programme, PSP participated with four projects. Those projects are: 'Mini Europe', 'More for Energy', 'Regions 4 Green Growth' and 'Smart Europe'. These are interregional projects, whose objective is the exchange of good practices in order to develop innovative regional policies towards the development of Small and Medium Enterprises (SMEs), the promotion and improvement of renewable energy sources coupled with energy efficiency, the development of appropriate mechanisms for financing, the acceleration of investment in sustainable energy projects and, finally, the exchange of good practices for the enhancement of innovative employment in European Regions. PSP participated in these projects as a partner with a total participation budget of €554,150.

Finally in the competitive programmes of Research and Technology Frameworks, since 2005, PSP participated in ten projects with a participation budget of €610,983.

Value-added

Patras, a city with an industrial and entrepreneurial tradition, acquired a significant advantage in the late 70's, through the University's establishment and soon became a magnet for young scientists because of its modernised research centres. The creation of the PSP managed to connect the production of knowledge at the University to the applied research at the research centres and scientific institutes bringing together the world of science and that of business.

The dissemination of scientific knowledge produced was fruitfully utilised through applied scientific research, which in turn was connected to the business world. These mutually beneficial ties upgraded the image of the University and the Research Institutes, attracting not only new notable scientists but also companies that recognised the high value of these synergies. Therefore, the benefits for all three parties were optimised, which in a modernised technological environment substantiated the visibility of their activities, the competitiveness of their products and services and also ensured financial resources for their further development. In the current context, where the resources allocated for education and research in Greece are limited and the competitiveness of enterprises is the main issue, the above cooperation plan is a the only solution.

The project constitutes a good practice for the contribution of ERDF programmes to the development of the region. Its systematic funding primarily through the ERDF, first, contributed to the smooth operation and secondly, offered an example to be emulated in Greece.

Conclusions

PSP is an institution that transforms the accumulated technological knowledge produced at the University of Patras and the Institutes and Research Centres of the region, to innovative entrepreneurship. In this way it can significantly boost social and economic development in the entire region.

International experience shows that in periods of economic crisis activities such as those promoted by the PSP and the companies hosted in it may contribute to the change of the structure of the regional economy, by expanding its production base. More specifically, the extrovert orientation of products and services is a critical requirement for the sustainability of companies and contributes to the high status and international visibility of the University, the institutes and research centres. The PSP bridges the technological gap between Greek technology producer enterprises and their respective international counterparts.

The projects implemented by the PSP contributed to the development of the Dytiki Ellada region, functioning complementarily with other Structural Funds interventions, promoting the extroversion of production and consolidating its developmental role. As a conclusion, the operation of PSP contributes to the development of Dytiki Ellada region through the integration of research, technology and innovation in the productive fabric, thus enabling the sustainability and competitiveness of companies and further maintaining the high quality of produced knowledge.

8.3 Project: Interventions in Ancient Olympia

Summary description

Ancient Olympia, the birthplace of the Olympic Games, is one of the most popular destinations in Greece and one of the most powerful 'brand names' worldwide as it attracts thousands of visitors from around the world. In the mid 90's, despite the relatively high number of visitors, the existing facilities at the archaeological site and the wider area were insufficient and could not meet respective tourism needs.

In anticipation of the Olympic Games in Athens since the mid-1990s, a number of projects have been implemented for the overall protection and promotion of both the archaeological site and the wider area, with co-funding from the 1994-99 and 2000-06 ERDF programmes.

This intervention should have been completed before the Athens 2004 Olympic Games according to the context of the county's obligations arising from the special role of Ancient Olympia site during the Games. In addition, it was the first time that such a large scale intervention took place in Ancient Olympia, aiming at promoting the area, improving its image and utilising its comparative advantage.

The intervention included the following types of projects: 1) rehabilitation, enhancement and restoration of the archaeological site and its monuments, 2) building and upgrading museums, 3) regeneration and rehabilitation projects in the wider area, and 4) information technology projects for the collection, digitization and promotion of archaeological - historical material. This intervention included 17 projects with a total budget of €33.96 million.

In addition to those projects, the Ancient Olympia by-pass, a large road infrastructure project with a budget of €40.32 million, was constructed to improve accessibility and simultaneously upgrade the quality of life of local residents.

Underlying problem and context

The archaeological site of Ancient Olympia, one of the three main archaeological sites in the periphery of mainland Greece (outside Athens), along with Delphi and Mycenae, has always attracted visitors from around the world. Despite this fact and the high number of visitors, no major infrastructure projects had been undertaken both to the archaeological site and the wider area of the Municipality of Ancient Olympia. For example, there was no modern museum available, facilities and site configuration for easy navigation was non-existent, while at the same time the modern city of Olympia had all the negative characteristics of a typical small town such as insufficient infrastructure; lack of organised, modern traffic network; inadequate lighting; severe traffic problems during the summer season; low-quality public spaces, lack of cultural sites etc. A particular problem was also the lack of a by-pass road causing circulatory problems due to increased traffic during the summer and generally degrading the environment (pollution, noise, etc.) and the quality of life.

However, despite these problems, it was commonly accepted that the archaeological site of Ancient Olympia had the potential to significantly contribute to the country's tourism promotion and attract more visitors with obvious benefits for the economy. Especially for the wider area of Ilia, which has a remarkable natural environment, Ancient Olympia could become a serious competitive advantage for tourism development which at that time was very limited. In the above context, the Athens 2004 Olympic Games offered the opportunity to focus on improving Ancient Olympia through a group of interventions.

Those interventions included a number of projects for the overall protection and promotion of both the archaeological site and the wider area and were mainly funded by ERDF regional and sectoral programmes.

In particular, Ancient Olympia interventions were supported by the CSF 1994-1999 under the Tourism-Culture OP. The sub-programme 'Culture' was the first organized effort at national level to develop an EU co-funded structural intervention in the sector of culture. Two projects were funded through Measure 2.4 'Enhancement - Restoration of Monuments and Sites' and Measure 2.3 'Culture-Sports-Tourism' and contributed to the overall target of the programme that was mainly to improve and enhance tourism and to stimulate economic activity through utilisation, improvement and rational management of cultural infrastructure and activities.

During the 2000-06 CSF Ancient Olympia has been funded through the Culture OP, the Dytiki Ellada ROP and the Information Society OP.

The Culture 2000-06 OP co-funded the construction of a new museum, contributing to the targets set in the programme's first priority axis 'Protection and Promotion of Cultural Heritage' whose aim was twofold, namely the upgrading of museum infrastructure and improvement of the services offered and the protection and promotion of monuments and archaeological sites. For this reason it was deemed as necessary to consolidate a modern perception in the field of museums and museum policy, as well as in the field of archaeological sites and monuments through the improvement of infrastructure and the qualitative upgrade of services and products provided.

The majority of interventions in the area of Ancient Olympia were implemented through the Dytiki Ellada ROP 2000-06, including rehabilitation, enhancement and restoration projects of the archaeological site and its monuments, building and improving museums and regeneration and rehabilitation projects in the wider area. These projects contributed to the general development objective of the region regarding the exploitation of the region's geographic position and its comparative advantages for overcoming the unemployment and intra-regional inequality problems. Ancient Olympia projects contributed to two of the seven strategic objectives of the general development objective, namely the strengthening of the region's position as the western gate of the country and the cultural and tourism development utilisation of the 2004 Olympic Games.

In the framework of the Information Society 2000-06 OP one IT project was implemented, contributing to the programme's objectives under Measure 1.3 'Documentation, Utilization and Promotion of Greek Culture' with the aim to promote and utilise the culture and cultural heritage through the usage of new ICT. This utilisation included a series of actions for the widespread usage of the opportunities provided by new ICT, with both direct economic and indirect scientific, educational, recreational and educational objectives.

Detailed description

The interventions started during the 1994-99 CSF under the Tourism-Culture OP with the implementation of two basic infrastructure projects in the wider archaeological site of Ancient Olympia. Those two projects - the construction of a fire-extinguishing system in the archaeological site and the conversion of a 2,000 m² designated building to an archaeological museum - with a

total cost of €308 million marked the beginning of the upgrade of the archaeological site of Ancient Olympia.

During the next programme period the Dytiki Ellada 2000-06 ROP funded the most important and high-cost interventions at the archaeological site through a rehabilitation, enhancement and restoration project. The project included works such as maintenance, cleaning and restoration of monuments, visitor paths creation, site fencing, etc., corresponding to an overall total cost of €3.18 million.

During the same programme period the site's equipment needs (adequate and modern exhibit halls) and promotion needs (to display the history of the Olympic Games) were fully covered through two relevant projects: the construction of the new Archaeological Museum of Olympia under the Culture 2000-06 OP and the completion of the old museum in the context of Dytiki Ellada ROP 2000-06, which had started in the previous programme period, with a total cost of 17.15 million.

The digital display of the Ancient Olympia antiquities and of the Olympic Games was elaborated through two IT projects: the first concerned the indexing and digitisation of the material associated with the exhibits and the history of the Olympic Games (Dytiki Ellada 2000-06 ROP); the second developed a digital exhibition of the history of the Olympic Games through an advanced computer system (Information Society OP 2000-06). The total cost of these two projects amounted to €4.06 million.

Over the same programme period, the intervention included ten regeneration-rehabilitation-enhancing projects of the Ancient Olympia settlement funded by the Dytiki Ellada 2000-06 ROP. The particular projects aimed at the improvement of the wider residential areas of the city and of their connection to the archaeological site. These rehabilitation projects included creation of roads; street and building lighting works; development of parking areas; construction of a new bus station; linking residential areas with the archaeological site with certain configurations (pedestrian, bicycle, etc.); new pavements etc. Apart from these public spaces' projects some individual projects were also undertaken including aesthetic improvement of selected buildings (facade improvements) and creation of a cultural venue in Xenia Hotel. By these projects, with a total cost of €6.49 million, the residential area was significantly upgraded and the city gained even more attention by Greek and foreign visitors.

Over the same period and in addition to the above projects, a large road infrastructure project was funded through the Dytiki Ellada 2000-06 ROP, with the aim to improve accessibility in Ancient Olympia. This project was the 8,8 km long Ancient Olympia by-pass including four junctions and five tunnels with a total cost of €40.32 million.

Outputs and achievements

The implementation of the interventions in Ancient Olympia resulted in the overall improvement of both the archaeological site and the wider area. The completion of these projects contributed to the successful organisation of the events that took place in the archaeological site during the Athens 2004 Olympics, through which the international promotion of Ancient Olympia was made possible.

Those improvements of the site created prospects for increased tourist numbers in the archaeological site and the museum, which began to be visible from 2004 onwards. Two years later, in 2006, the site's visitors had been increased by 16,3 percent compared to 2004, exceeding 455 thousand visitors, while the corresponding increase in the number of the museum visitors was 32,9 percent, reaching approximately 177 thousand visitors.

This increase in visitor numbers was eventually halted next year due to the devastating fires in the summer of 2007, which hit the regional unit of Ilia and Ancient Olympia (plantings, pavements, etc.). The archaeological site and the museum, although seriously threatened, were not directly affected, but there was a direct negative impact because of the extensive damage in the region. Although shortly after significant positive efforts were made to recover from the disaster in the area of Ancient Olympia, in 2009 the global economic crisis hit the country and created a negative environment for tourism. Therefore, in 2010 there was a general decline in visitors in all museums and archaeological sites of Greece. The country's museums, including Ancient Olympia museum, indicate a decrease in the number of visitors, with the only exception being the new Acropolis Museum. However, the image is slightly different in the case of the archaeological sites as most of them show decreased tourist numbers and just two show an increase over the previous year; Ancient Olympia by 21.6 percent and Delphi by 3.4 percent.

In 2011, the increase of the visitor numbers in the archaeological site seems to have also pushed up the number of visitors to the Ancient Olympia Museum, creating a positive outlook for the future. This development is closely linked to the international promotion of Ancient Olympia, following the completion of this project and thereby establishing Ancient Olympia as an international tourist destination.

This conclusion is based on the statistics on the cruise movements in Greece, according to which in recent years a rapid increase is observed in the area, through the port of Katakolon which became one of the major cruise ports of the country. It is obvious that this increase of cruise visitors at the area with key attraction the Ancient Olympia, has a direct positive effect on the regional unit of Ilia and is considered especially crucial for today's economic situation.

Due to the fact that this great increase in cruise visits is very recent, direct and indirect impacts to the economic and productive activities of the area cannot be identified at the moment. It is however certain that the utilisation of the comparative advantage of Olympia through the increased cruise numbers provides great development opportunities to the region for new activities and further support of the local economy.

Value-added

The interventions in Ancient Olympia, both in terms of the physical object and in terms of their timing, achieved their direct objective of successfully hosting 2004 Olympic Games events. In addition to the developmental benefits to the region, the project has achieved something more important that set the course for renewed growth; the promotion and establishment of Ancient Olympia as a strong brand name in the international tourism market.

It is certain that it would have been impossible to achieve this so effectively and quickly if the project interventions in Ancient Olympia were not implemented before the Athens Olympics, but at

another time when the global audience would have its attention elsewhere. It is also obvious that in any other time in order to gain equal promotion, greater amounts, in comparison to the project total cost, should have been invested.

It is a fact that Ancient Olympia, as a world heritage site, remained unchanged over time. However, those interventions had to be implemented on time so that the area became an attractive tourist destination ensuring long lasting benefits from the increased tourist numbers.

Conclusions

The interventions in Ancient Olympia ensured the active participation of the area during the 2004 Olympic Games and promotion of Ancient Olympia as a strong brand name in the international tourism market. This development has set the foundations for regional growth, and although seriously affected by the devastating fires in 2007, managed to quickly recover despite the current economic crisis.

This development proved that cultural projects implemented at the right time can maximise their benefits and are directly linked with tourism increase. In some cases, when the particular cultural asset enjoys international acceptance, it is also possible to gain a prominent place in the international tourism market with all the respective benefits.

In today's economic climate, where the allocated resources for infrastructure projects and especially for cultural projects are drastically reduced, this project can become a model of effective investment with multiple developmental benefits over time.

8.4 Project: Completion of Solid Waste Management Infrastructure in Etoloakarnania prefecture

Summary description

Solid waste management in the country's regions has been a major and long lasting problem that the national and regional authorities attempted to solve in the context of Cohesion Policy. Those attempts started during the 1989-93 CSF, but efforts were intensified in the past decade with the introduction of integrated interventions through national and regional plans for solid waste management.

Etoloakarnania, one of the three regional units of Dytiki Ellada and the largest in the country, made some serious efforts to address the problem by implementing the regional plan.

The project 'Completion of Solid Waste Management Infrastructure in Etoloakarnania' was funded by the Cohesion Fund and implemented between 2004 and 2011 with a total cost of €23.1 million. It included the creation of two landfills (sanitary waste disposal sites), three waste transfer stations and rehabilitation of uncontrolled landfills. With the implementation of the project the core infrastructure network of waste management of the prefecture was completed, the areas of uncontrolled disposal of waste were rehabilitated and the organised, comprehensive and rational management of the prefecture's waste was ensured.

Underlying problem and context

The absence of an organised solid waste management framework both at national and regional level as well as the long uncontrolled usage of landfills caused serious problems with serious environmental consequences and negative effects on the growth of those areas.

Interventions in the fields of solid waste management have been funded by cohesion policy through co-funded programmes since CSF I. These interventions, through either regional or sectoral OPs, were extremely limited during the 1989-93 period (mainly environmental measurements and studies). Interventions in waste management infrastructure actually started in the following programme period (1994-99).

However, over the 2000-06 period, a critical boost was given in order to meet the needs of the country's basic infrastructure for solid waste management, in the context of the national environmental strategy. During that period the Environment OP became the core of a comprehensive intervention towards the country's environmental upgrade and the creation of the necessary conditions for the implementation and application of the sustainable development principles. In the same period the Cohesion Fund (CF) started covering the country's great needs in infrastructure in the fields of urban wastewater and solid waste management. The interventions of CF and the ROP, in both fields, combined with the actions of the Environment OP, were an integral part of an Action Plan to implement the respective requirements laid down by the European legislation.

In particular for solid waste, according to the obligations arising from the EU and national legislation, the Ministry of Environment completed by 1999 the 'National Solid Waste Management Plan' which was based on the overall Action Plan. According to this plan, the overall objective was the environmentally sound management of all types of solid wastes throughout its range (registration, prevention, collection, transportation, transshipment, processing, material - energy recovery, disposal) on the basis of national, regional and prefectural management plans, and, where needed, the environmental renovation in areas of uncontrolled disposal of waste.

The establishment of the Regional Solid Waste Management Plan of Dytiki Ellada Region, in accordance with the National Management Plan, fulfilled the requirements for approval of financing relevant projects by EU funds during the 2000-06 period and beyond. In particular, regarding Etoloakarnania, efforts focused on the utilization of Cohesion Fund resources in order to complete urban waste management infrastructure, aiming to protect public health and the quality of land and water resources from pollution caused from the uncontrolled disposal of solid waste.

Etoloakarnania is one of the three regional units of Dytiki Ellada, and although it is not the most populated in the region with just 29.4 percent of the region's total population (2001), it is the country's largest regional unit. Moreover, Etoloakarnania's natural environment is one of the richest in the country with important wetlands, rivers, lakes, lagoons and forests. It is worth noting that in 2005 when the Regional Waste Management Plan was adopted, the area had 13 NATURA 2000 sites, significant woodlands covering 66 percent of its total surface area (at the east and northeast) and 13 game reserves.

However, despite the relatively small population of Etoloakarnania and the relatively small volume of waste, the unregulated management and the lack of organized landfills to cover the entire regional unit's needs resulted in the degradation of the natural environment and the quality of life as well as became a major constraint to the region's tourism development despite its remarkable natural environment. Indicative of the situation is the fact that according to the Regional Waste Management Plan, in 2005 Etoloakarnania had 68 scattered areas of uncontrolled disposal of waste, which represented 43 percent of all areas of uncontrolled disposal of waste in the region, of which just 17 were inactive while the remaining 51 were active.

Based on the approved Regional Waste Management Plan, Etoloakarnania has been divided into four operational units. One landfill would operate in each unit and the operation of 5 waste transfer stations (three in the first, one in the second and one in the third unit) was also planned. With the gradual operation of all the planned landfills it would be possible to shut down and restore all the areas of uncontrolled disposal of waste and improve the environment and quality of life in the prefecture.

This Cohesion Fund's project, which included the construction of two landfills, three waste transfer stations and rehabilitation of areas of uncontrolled disposal of waste, would complement the infrastructure network of landfills and waste transfer stations of the prefecture and would allow full operation of the solid waste management system in Etoloakarnania.

Detailed description

In Etoloakarnania the effort for the completion of basic infrastructure of urban waste management focused on Cohesion Fund's resources utilisation. The incomplete prefecture's coverage by landfills and waste transfer stations, made impossible to close and rehabilitate all areas of uncontrolled waste disposal with significant environmental impacts, and at the same time prevented full integration of modern and acceptable waste processing in order to recover raw material (separation, recycling) and optimise usage of infrastructure with the gradual conversion of the areas of uncontrolled disposal of waste to landfills.

To address these problems it was decided that Cohesion Fund interventions should include a group of four key infrastructure projects; two landfills and two waste transfer stations and rehabilitate landfills within the context the overall target for rational-modern waste management and closure-rehabilitation of landfills. In detail those projects were:

- The creation of the 2nd operational unit's landfill in Stratos, a waste transfer station in Thermo and rehabilitation of Thermo's landfill. The project aimed to serve 110,000 inhabitants and manage 56,000 waste tonnes per year. These wastes were previously deposited in uncontrolled landfills, many of which were in Achelous River.
- The creation of the 3rd operational unit's landfill in Paleros, rehabilitation of landfills in Amphiloikia and Astakos, and the creation of waste transfer stations in Amphiloikia and Astakos. The project aimed to serve the coastal zone of the Ionian Sea with 52,000 inhabitants and high number of visitors and manage 24,000 waste tonnes per year. These wastes were previously deposited in uncontrolled landfills in gullies and ravines that were ending in the Ionian Sea. This project would also protect the area's high quality drinking

water (Korpi water source) and improve the coastal zone, which had great competitive advantages for tourism development.

- Rehabilitation of five landfills of a total area of 41 acres located near Achelous River which polluted surface and underground water as well as the river's protected ecosystem (NATURA - RAMSAR). The project aimed to protect the environment of the area and the marine ecosystem.
- Rehabilitation of Nafpaktos' landfill which was on the west bank of the river Mornos and operated since the mid-1970s covering over 34 acres. The project aimed to environmentally protect the area and the marine ecosystem.

The intervention has been approved in the context of the Cohesion Fund by the end of 2004 (E(2004)5251/15-12-2004) and completed by the end of 2011. The project was implemented by the Prefecture, which after the recent administrative reform (Kallikratis Programme) continued as the Regional Unit of Etoloakarnania.

The total cost of the intervention amounted to €23,125,472, of which 74 percent was funded by the Cohesion Fund and the remaining 26 percent by national funds. Additionally, in order to optimise the operation of the 2nd operational unit's landfill, whose road connection to the national and provincial network was deficient, a project for the construction of new 7 km long road was included in the NSRF with a budget of €10.85 million.

Outputs and achievements

Upon completion of the project, Etoloakarnania had completed its solid waste management infrastructure being a pioneer compared to other areas of the country.

The construction of two landfills served 110,000 residents in the 2nd operational unit and 52,000 residents in the 3rd operational unit. Thus, the construction of the two landfills served 72 percent of the prefecture's population (162,000 in a total of 224,429 residents in 2001), completed the network of four landfills and secured complete coverage. In addition three of the five waste transfer stations of the Regional Waste Management Plan were constructed. The two waste transfer stations that were not built (Apodotia and Platanos) were not included in the project. However, this does not refute the importance of the project that provided full coverage of Etoloakarnania resulting in the closure and rehabilitation of areas of uncontrolled waste disposal, which constitutes a remarkable achievement for the region.

The relatively recent completion of the project and the delay in the operation of the landfill of Paleros and the waste transfer stations of Astakos and Amfilochia, which are expected to operate during October 2012, does not allow immediate assessment of the impact of the integrated operation of the waste management system. However, it should be mentioned that according to the Regional Waste Management Plan, the landfill of Paleros is also expected to cover the neighbouring island of Lefkada that has considerable tourism, and thus will greatly improve the project's efficiency.

It is even more difficult to assess the impact of the overall environmental enhancement of the area with respect to the development of productive activities, such as tourism. It should be noted

though, that the completion of the major transport infrastructure projects is expected to play a key role for the region's development since the project would significantly improve region's accessibility. However, only a small number of relevant projects have been completed (Rion-Antirion Bridge) while others are still under construction (Ionia Odos and Corinth-Patras segment of PATHE). In this context, the completion of the waste management infrastructure of the region and the resulting environmental enhancement, even though it does generate the appropriate conditions for development activities related to tourism, it is expected to have a multiplier effect when the region's access by the PATHE axis will be completed.

However, it is of particular importance the recent approval of the project of Integrated Waste Management of Etoloakarnania as a Public Private Partnership for a period of 27 years. With this project, which includes the construction of a waste-processing unit and three recycling units, the infrastructure capacity will reach 110 thousand tonnes per year, covering the entire regional unit, according to the Regional Solid Waste Management Plan of Dytiki Ellada.

Thus, the implementation of this Cohesion Fund project, laid the basis for the definitive solution of the longstanding problem of waste management in Etoloakarnania, while it developed, beyond the obvious environmental benefits, a new business activity that contributes to job creation during the construction and operation of the infrastructure.

Value-added

Although the project included basic infrastructure for waste management (landfills, waste transfer stations and rehabilitation of areas of uncontrolled disposal of waste), the implementation was crucial for launching modern technologies and new production activities in the waste management sector.

Following the creation of basic infrastructure, conditions for sustainable waste management are suitable in order to finally address the problem. The new targets set in the near future are the reduction of the amount of landfilled waste and the minimisation of environmental impacts through the processing of biodegradable waste. Another target is the recovery of raw materials and the production of energy that, beyond the obvious environmental and economic benefits, will also contribute to the overall sustainable management of natural resources. These operations require investments in complex technological equipment, expertise and scientific monitoring - procedure control, and are expected to create new productive activities and specialised jobs in the region.

The recent decision on implementing the project of Integrated Waste Management of Etoloakarnania as a Public Private Partnership proves that the infrastructure already constructed has enabled new business initiatives of high value added, which are of great importance for the region in the current difficult economic situation.

Conclusions

The project met the objectives set, both at the level of physical completion (two landfills, three waste transfer stations, rehabilitation of areas of uncontrolled disposal of waste) and by meeting the identified needs. With the project's contribution the entire regional unit is now served by modern landfills and there are no longer scattered landfills causing environmental degradation. Furthermore, it is of note that although two waste transfer stations were not built (as planned by

the Regional Waste Management Plan), the project covers the needs of the area and constitutes the 'critical mass' that led to the solution of Etoloakarnania's waste management problems. Based on this, Etoloakarnania now has an advantage in the waste management sector, which is also proved by the launch of a Public Private Partnership for the next phase of the sustainable waste management through integrated processing of solid waste.

This project demonstrated that responding to needs in an organised manner, as this was done with the Regional Waste Management Plan, and by the implementation of an integrated intervention, with specific schedule, approved budget, predetermined physical specification, and single management framework (mono-fund, one implementing body) was particularly effective.

On the contrary, the experience of similar interventions at national level shows that fragmentation in implementation does not help for addressing the problem of integrated waste management at regional or other level. This finding is particularly important by stressing that during the project many administrative problems arising from the recent administrative reform (Kallikratis Programme) were addressed, which in many other similar cases resulted in delays or even cancellation of projects.

9 ANNEX II - STRUCTURE OF PROGRAMMES 1989-2013 IN DYTIKI ELLADA

All funding in millions of euro (current prices, where available)

ROP Western Greece 1989 - 93

Priority Axis	Measure		EU Funding source	ERDF Allocation	ESF Allocation	Other Funds Allocation	National Funds	Private Funds	Total Funds
SUBPROGRAMME 1 - ERDF	101	Roads - Bridges	ERDF	n/a			n/a	n/a	n/a
	102	Ports	ERDF	n/a			n/a	n/a	n/a
	103	Airports	ERDF	n/a			n/a	n/a	n/a
	104	Water Supply - Sewage	ERDF	n/a			n/a	n/a	n/a
	105	Health - Welfare	ERDF	n/a			n/a	n/a	n/a
	106	Education	ERDF	n/a			n/a	n/a	n/a
	201	Technology Park	ERDF	n/a			n/a	n/a	n/a
	202	Endogenous Capital Utilization	ERDF	n/a			n/a	n/a	n/a
	203	Enhancement of Archaeological Sites	ERDF	n/a			n/a	n/a	n/a
	204	Tourism promotion	ERDF	n/a			n/a	n/a	n/a
	205	Infrastructure development projects	ERDF	n/a			n/a	n/a	n/a
	206	Business' support	ERDF	n/a			n/a	n/a	n/a
	207	Fire department's equipment	ERDF	n/a			n/a	n/a	n/a
SUBPROGRAMME 1 - ERDF Total				n/a			n/a	n/a	n/a
SUBPROGRAMME 2 - ESF	1	Primary Sector	ESF		n/a		n/a	n/a	n/a
	2	Secondary sector	ESF		n/a		n/a	n/a	n/a
	3	Tertiary Sector	ESF		n/a		n/a	n/a	n/a

	4	Local development	ESF		n/a		n/a	n/a	n/a	
	5	Apprenticeship	ESF		n/a		n/a	n/a	n/a	
SUBPROGRAMME 2 - ESF Total					n/a		n/a	n/a	n/a	
SUBPROGRAMME 3 - EAGGF	1	Dealing with damage from fires	Other			n/a	n/a	n/a	n/a	
	2	Forestry projects	Other			n/a	n/a	n/a	n/a	
	3	Addressing flesh disease in stone fruit	Other			n/a	n/a	n/a	n/a	
	4	Monitoring of pesticides residues and agricultural warnings	Other			n/a	n/a	n/a	n/a	
	5	Measure 5	Other			n/a	n/a	n/a	n/a	
	6	Relocation & handling - livestock waste treatment plants	Other			n/a	n/a	n/a	n/a	
	7	Measure 7	Other			n/a	n/a	n/a	n/a	
	8	Improvement - Completion - Renovation of Irrigation projects	Other			n/a	n/a	n/a	n/a	
	SUBPROGRAMME 3 - EAGGF Total						n/a	n/a	n/a	n/a
	SUBPROGRAMME 4 - Local Self-Government Development Programme	1	Roads	ERDF	n/a			n/a	n/a	n/a
2		Water Supply - Sewage	ERDF	n/a			n/a	n/a	n/a	
3		Social and Cultural Facilities	ERDF	n/a			n/a	n/a	n/a	
4		Environmental Protection	ERDF	n/a			n/a	n/a	n/a	
5		Development of tourism resources	ERDF	n/a			n/a	n/a	n/a	
6		Improving business competitiveness	ERDF	n/a			n/a	n/a	n/a	
7		Strengthening productive investments	ERDF	n/a			n/a	n/a	n/a	
SUBPROGRAMME 4 - Local Self-Government Development Programme Total					n/a		n/a	n/a	n/a	
SUBPROGRAMME 5 - IMPLEMENTATION		Technical Assistance, operating expenses, Publicity								
	1	ERDF	ERDF	n/a			n/a	n/a	n/a	

		Technical Assistance, operating expenses, Publicity							
	2	ESF	ESF	n/a	n/a		n/a	n/a	n/a
SUBPROGRAMME 5 - IMPLEMENTATION Total				n/a	n/a	n/a	n/a	n/a	n/a
ROP Western Greece 1989 - 93 Total				n/a	n/a	n/a	n/a	n/a	n/a

ROP Western Greece 1994 - 99

Priority Axis	Measure		EU Funding source	ERDF Allocation	ESF Allocation	Other Funds Allocation	National Funds	Private Funds	Total Funds
Sub-programme 1: Western Greece - Gateway to Europe	1.1	Basic Infrastructure	ERDF	49,329,000			16,443,000	0	65,772,000
	1.2	Human Resources	ERDF	9,446,000			3,149,000	0	12,595,000
	1.3	Passenger-Cargo Infrastructure	ERDF	3,411,000			1,137,000	0	4,548,000
	1.4	Complementary actions	ERDF	2,586,000			862,000	0	3,448,000
	1.5	Training	ESF		616,000		205,000	0	821,000
Sub-programme 1: Western Greece - Gateway to Europe Total				64,772,000	616,000		21,796,000	0	87,184,000
Sub-programme 2: Improving Quality of Life - Environment	2.1	Environmental Protection (Water - Sewage - Sewage Treatment Plants)	ERDF	11,629,000			3,877,000	0	15,506,000
	2.2	Health - Welfare	ERDF	29,894,000			9,965,000	0	39,859,000
	2.3	Culture - Sport - Tourism	ERDF	22,119,000			7,373,000	0	29,492,000
	2.4	District and Community Road	ERDF	34,090,000			11,363,000	0	45,453,000
Sub-programme 2: Improving Quality of Life - Environment Total				97,732,000			32,578,000	0	130,310,000
Sub-programme 3: Rural Development	3.1	Land reclamation - Land distribution	Other			17,275,000	5,758,000	0	23,033,000
	3.2	Rural Infrastructure Improvement	Other			5,948,000	1,983,000	0	7,931,000
	3.3	Utilization of Renewable Energy	Other			2,069,000	690,000	2,759,000	5,518,000
	3.4	Rural Tourism	Other			1,552,000	517,000	1,379,000	3,448,000

	3.5	Animal Production	Other			1,810,000	603,000	805,000	3,218,000
	3.6	Forestry	Other			4,655,000	1,552,000	0	6,207,000
	3.7	Fishery	ERDF	3,094,000			1,031,000	0	4,125,000
	3.8	Training	ESF		434,000		145,000	0	579,000
Sub-programme 3: Rural Development Total				3,094,000	434,000	33,309,000	12,279,000	4,943,000	54,059,000
Sub-programme 4: Human Resources		Initial Training, Secondary Education							
	4.1	Infrastructure	ERDF	20,202,000			6,734,000	0	26,936,000
		Further education and unemployment combating							
	4.2		ESF		10,447,000		3,482,000	0	13,929,000
	4.3	Social exclusion	ESF		6,987,000		2,329,000	0	9,316,000
	4.4	Accompanying actions	ESF		1,302,000		434,000	0	1,736,000
Sub-programme 4: Human Resources Total				20,202,000	18,736,000		12,979,000	0	51,917,000
Sub-programme 5: Upgrade and revitalize of industrial areas	5.1	Promotion of productive investments	ERDF	10,401,000			3,467,000	94,657,000	108,525,000
	5.2	Support of SME services	ERDF	3,723,000			1,241,000	0	4,964,000
	5.3	Industrial Infrastructure Improvement	ERDF	2,527,000			842,000	0	3,369,000
Sub-programme 5: Upgrade and revitalize of industrial areas Total				16,651,000			5,550,000	94,657,000	116,858,000
Sub-programme 6: Strengthening Local Government structures	6.1	Basic Infrastructure	ERDF	2,926,000			975,000	0	3,901,000
	6.2	Environment	ERDF	30,001,000			10,000,000	0	40,001,000
	6.3	Strengthening Local Government	ERDF	3,523,000			1,175,000	0	4,698,000
Sub-programme 6: Strengthening Local Government structures Total				36,450,000			12,150,000	0	48,600,000
Sub-programme 7: Completion of CSF I unfinished projects	7.1	ERDF	ERDF	4,538,000			1,512,000	0	6,050,000
	7.2	EAGGF	Other			1,474,000	491,000	0	1,965,000
Sub-programme 7: Completion of CSF I unfinished projects Total				4,538,000		1,474,000	2,003,000	0	8,015,000
Sub-programme 8:	8.1	EAGGF	Other			517,000	173,000	0	690,000

Implementation	8.2	ESF	ESF		616,000		205,000	0	821,000
	8.3	ERDF	ERDF	2,359,000			787,000	0	3,146,000
Sub-programme 8: Implementation Total				2,359,000	616,000	517,000	1,165,000	0	4,657,000
Sub-programme 9:	9.1	ERDF	ERDF	0			0	0	0
Local Employment Pact	9.2	ESF	ESF		0		0	0	0
Sub-programme 9: Local Employment Pact Total				0	0		0	0	0
ROP Western Greece 1994 - 99 Total				245,798,000	20,402,000	35,300,000	100,500,000	99,600,000	501,600,000

ROP Western Greece 2000 - 2006

Priority Axis	Measure	EU Funding source	ERDF Allocation	ESF Allocation	Other Funds Allocation	National Funds	Private Funds	Total Funds
Reinforcement and development of the region's position as the country's Western Gateway	1.1	Roads-Ports	ERDF	94,546,740		31,515,580	0	126,062,320
	1.2	Other Transport Infrastructure	ERDF	25,495,747		8,498,582	26,449,001	60,443,330
Reinforcement and development of the region's position as the country's Western Gateway Total				120,042,487		40,014,162	26,449,001	186,505,650
Cultural and Tourism development - use of the Olympic Games of 2004	2.1	Culture	ERDF	21,822,225		7,274,075	0	29,096,300
	2.2	Tourism	ERDF	14,235,128		4,745,043	26,441,002	45,421,173
	2.3	Emergence of Ancient Olympia	ERDF	8,498,580		2,832,860	0	11,331,440
	2.4	Patras - Cultural Capital of Europe 2006	ERDF	8,498,579		2,832,860	0	11,331,439
Cultural and Tourism development - use of the Olympic Games of 2004 Total				53,054,512		17,684,838	26,441,002	97,180,352
Restructuring and	3.1	Boosting private productive investments	ERDF	12,747,878		4,249,293	33,993,997	50,991,168

extension of the industrial base of the Region and promotion of Innovation	3.2	Improvement of Industrial Infrastructure	ERDF	6,480,173			2,160,058	0	8,640,231
	3.3	Support SMEs	ERDF	6,905,100			2,301,700	17,098,000	26,304,800
	3.4	Linking Research and Production -							
Promotion of Innovation		ERDF	4,249,290			1,416,430	1,416,000	7,081,720	
Restructuring and extension of the industrial base of the Region and promotion of Innovation Total				30,382,441			10,127,481	52,507,997	93,017,919
Strengthening Urban Infrastructures - Improving Quality of Life	4.1	Health - Welfare	ERDF	20,396,603			6,798,868	0	27,195,471
	4.2	Education	ERDF	46,742,213			15,580,738	0	62,322,951
	4.3	Environment	ERDF	16,208,925			5,402,975	0	21,611,900
	4.4	Urban Infrastructure	ERDF	14,872,522			4,957,507	0	19,830,029
	4.5	Integrated Urban Development interventions in local small zones - ERDF	ERDF	12,065,858			4,021,953	0	16,087,811
		Integrated Urban Development interventions in local small zones - ESF	ESF		6,654,390		2,218,130	0	8,872,520
Strengthening Urban Infrastructure - Improving Quality of Life Total				110,286,121	6,654,390		38,980,171	0	155,920,682
Promotion of Employment and Human Resources Specialization	5.1	Empowerment and Development of Social Support Services	ESF		12,105,413		4,035,138	0	16,140,551
		Development and Improvement of Skills of Human Resources	ESF		2,091,468		697,156	0	2,788,624
	5.3	Local Employment Initiatives	ESF		7,436,262		2,478,754	0	9,915,016
Promotion of Employment and Human Resources Specialization Total					21,633,143		7,211,048	0	28,844,191
Sustainable Rural Development / Rural Development	6.1	Managing and Protecting Water Resources-Land Improvements	Other			29,107,650	9,702,550	0	38,810,200
		Investments in Agricultural Holdings	Other			15,934,830	5,311,610	29,462,000	50,708,440
	6.3	Operations Support - Developing	Other			637,395	212,465	850,000	1,699,860

		Networks for agricultural economy and rural population							
6.4		Rural Infrastructure	Other			9,560,903	3,186,968	0	12,747,871
		Protection and Management of Forest Ecosystems							
6.5		Ecosystems	Other			9,560,903	3,186,968	0	12,747,871
		Environmental Protection in conjunction with forestry, agriculture, hygiene and animal welfare							
6.6			Other			1,062,322	354,107	708,000	2,124,429
6.7		Fishing	ERDF	9,029,745			3,009,915	0	12,039,660
6.8		Improved provincial road network	ERDF	40,368,270			13,456,090	0	53,824,360
6.9		Strengthening Rural People	ESF		3,186,969		1,062,323	0	4,249,292
		Development of Mountainous areas, improvement of rural settlements							
6.10			Other			4,249,290	1,416,430	0	5,665,720
		Supporting entrepreneurship in mountainous areas							
6.11			Other			4,249,290	1,416,430	5,666,000	11,331,720
		Creation of mountain centres - Improving Quality of Life							
6.12			ERDF	4,249,288			1,416,429	0	5,665,717
		Processing and Marketing of Agricultural Products in Integrated Interventions							
6.13			Other			1,062,324	354,108	1,416,000	2,832,432
Sustainable Rural Development / Rural Development Total				53,647,303	3,186,969	75,424,907	44,086,393	38,102,000	214,447,572
Technical Assistance	7.1	Technical Assistance ERDF	ERDF	3,187,137			1,062,379	0	4,249,516
	7.2	Technical Assistance EAGGF	Other			574,707	191,569	0	766,276
	7.3	Technical Assistance ESF	ESF		376,807		125,602	0	502,409
	7.4	Maturity and Preparation Studies	ERDF	0			0	0	0
Technical Assistance Total				3,187,137	376,807	574,707	1,379,550	0	5,518,201

ROP Western Greece 2000 - 2006 Total	370,600,001	31,851,309	75,999,614	159,483,643	143,500,000	781,434,567
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ROP Western Greece - Peloponnesus - Ionian Islands 2007-2013

Priority Axis	EU Funding source	ERDF Allocation	National Funds	Private Funds	Total Funds
1. Infrastructure works & accessibility in Western Greece	ERDF	87,100,000	15,370,588	0	102,470,588
2. Infrastructure works & accessibility in Peloponnesus	ERDF	93,000,000	18,000,000	0	111,000,000
3. Infrastructure works & accessibility in Ionian Islands	ERDF	46,050,000	11,512,500	0	57,562,500
4. Digital convergence & entrepreneurship in Western Greece	ERDF	46,850,000	18,219,000	0	65,069,000
5. Digital convergence & entrepreneurship in Peloponnesus	ERDF	26,000,000	6,600,000	0	32,600,000
6. Digital convergence & entrepreneurship in Ionian Islands	ERDF	29,200,000	5,152,747	0	34,352,747
7. Sustainable development & quality of life in Western Greece	ERDF	217,870,000	55,143,353	0	273,013,353
8. Sustainable development & quality of life in Peloponnesus	ERDF	190,000,000	52,400,000	0	242,400,000
9. Sustainable development & quality of life in Ionian Islands	ERDF	163,450,000	43,752,500	0	207,202,500
10. Technical Support	ERDF	14,480,000	2,849,312	0	17,329,312
ROP Western Greece - Peloponnesus - Ionian Islands 2007-2013 Total		914,000,000	229,000,000	0	1,143,000,000

10 ANNEX III: REPORTED ACHIEVEMENTS

10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 1989-93

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Infrastructure			
Roads and road transport			
• km of new single carriageway regional roads	110,402	116.05	105.1
• km of improved local network	135.42	113	83.4
• km of new/ improved small roads from EAPTA		92	
• No. of direct jobs created during construction (man/months)		4,130	
• Size of population affected		655,262 (100% of the population)	
• Area serviced		11,350 km ²	
Waterways & ports			
• Metres of extension of pier/ quay	72	63	87.5
• No. of direct jobs created during construction (man/months)		324	
• Size of population serviced/ affected		655,262	
Airports			
• Number of airports upgraded	1	1	100
• No. of new/ improved passenger's terminal		100%	
• No. of direct jobs created during construction (man/months)		36	
• Size of population serviced/ affected		655,262	
Environmental sustainability			
Water engineering			
• km of new/ upgraded water mains	269.5	265.5	98.5
• No. of direct jobs created (man/months)		3,624	
• Increase in no. of households connected to network		80%	
• Size of population serviced/ affected		278,697	
Environmental improvements			
• m ² of restructuring of public areas	10,538.38	9,038	85.8
• m ² of buildings for community usage	4,380	4,380	100
• km of walkways	4.4	4.9	111.4
• No. of direct jobs created		1,573	
• Size of population serviced/ affected		190,795	

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Sanitation, domestic waste disposal			
• km of new upgraded sewers	134.3	133.3	99.3
• No. of direct jobs created during construction		2,446	
• Size of population serviced/ affected		278,697	
Protection of the environment			
• No. of the animal stock raising units financed for waste treatment	42	40	95.2
• No. of sewerage treatment plants	2	2	100
Rural development			
• No. of farms assisted	1,100	1,450	131.8
• ha reforested	8,700	6,000	69
• ha irrigated	3,850	350	9.1
• No. of holdings assisted		1,450	
• Income generated (KECUs)		375	
• No. of direct jobs maintained		26	
• ha of farmland irrigated		350	
Social Cohesion			
Educational facilities			
• University buildings new/ improved (m ²)	31,700	31,200	98.4
• No. of direct jobs created		1,361	
• Size of population serviced/ affected		31,140	
Health & welfare infrastructure			
• No. of new/ improved day care centres	7	6	85.7
• m ² buildings (e.g. day care centres, youth centres)	9,500	7,900	83.2
• No. of direct jobs created (construction/ operation)		449	
• Size of population serviced/ affected		171,000	
Structural Adjustment/ Sectoral Development			
Tourism			
• No. of ski centres improved	1	1	100
• No. of actions taken for the promotion of the region	1	40%	
• Research & development for tourism (no. of actions)	13	13	100
Innovation			
Business services Advisory			
• No. of advisory services set up	1	10%	
Studies (increasing business competitiveness, garbage use, etc.)			
• No. of studies	30	30	100

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Labour market and human capital			
Multi- priority training			
• No. of trainees trained	8,679	8,679	100
• Hours of training	96,873	96,873	100
• No. of programmes	369	340	92
• Improvement in skill levels (of the regional population that was trained)		1.9%	
Secondary level technical training			
• No. of trainees trained	3,830	3,830	100
• Hours of training	109,600	109,600	100
• No. of programmes	4	4	100

Source: Joint Venture Evaluation, ex-post evaluation of Western Greece ROP, Volume II (Technical Sheet 13)

10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 1994-99

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Infrastructure			
Basic Infrastructure - Complementary actions - District and Community Roads - Industrial Infrastructure Improvement - Completion of CSF 1989-93 incomplete projects - Basic Infrastructure (Strengthening Local Government structures) - EAPTA			
• National roads (improved - new) (km)	70	67.94	97.1
• Regional- provincial- local roads - (improved - new) (km)	400	1,515.4	379
• Piers/ quays (improved - new) (meters)	800	1,418.5	177.3
• Equivalent jobs created over projects' construction	1,900		
• Travel time reduction	7%		
Environmental sustainability			
Environmental Protection (Water - Sewerage - Sewerage Treatment Plants) - ERDF (Completion of CSF 1989-93 incomplete projects) - Rural Infrastructure Improvement - Land reclamation - Land distribution - Environment (Strengthening Local Government structures) - EAPTA			
• Sewerage networks και stormwater pipes (km)	203	135,330	66.7
• Rural roads (improved - new) (km)	450	208.95	46.4
• Water supply (improvement-expansion km)	200	468.91	234.5
• Water tanks - wells	168-170	79 - 53	47 - 31.2
• Irrigation network (km)	205	157.88	77
• Irrigation ditches (improved - new) - (m)	730	15,399	2109
• Electrified ditches	679	1,914	281.9
• Semi-urban population served (thousands)	172	2.70	1.6

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
• Wastewater treatment plant - equivalent population planned (thousands)	183	91.6	50.1
• Improved irrigation conditions for rural population		36,000	
• Reduced production cost for the beneficiaries of rural electrification		10%	
• Increase of rural income of beneficiaries		5%	
• Reduction of rural water losses (percentage)		15-20%	
• Percentage of urban and semi-urban population served by potable water supply		5%	
Utilisation of Renewable Energy - Forestry			
• Biomass equipment in existing and new greenhouses (acres)	1,339	163.9	12.2
• Reforestation (acres)	649	4,400	678
• Forest protection (acres)	651	51,180	7,861
• Forest roads (km)	655	210	32.1
• Increase of gross forest product		6%	
Enterprise			
Promotion of productive investments - Support of SME services			
• Aid to enterprises' investment plans	1,754	139	7.9
• Number of business consultants		38	
• Job creation or safeguarding		400	
• Increase of the value of exports		2%	
Social Cohesion			
Human Resources - Initial Training, Secondary Education Infrastructure			
• Classrooms - Labs - Libraries - Auditoriums - rooms for multiple use (improved - new)	350	538	153.7
• Jobs created (number)		100	
Health - Welfare			
• Hospital bed spaces (new) number	91	120	131.9
• Hospital bed spaces per 1000 inhabitants (baseline 3)		to 3.25	
Culture - Sport - Tourism			
Structural Adjustment/ Sectoral Development			
Rural Tourism			
• Agri-tourism plans	627	52	8.3
• Increase seasonal employment (seasonal jobs)		70	
• Restorations (frescos-mosaics) (m ²)	370	50	13.5
• Consolidation - reparation work (m ³)	371	640	172.5
• Restorations (m ²)	372	5,350	1,438
• Development and distribution of audio-visual material (number)	980	1,602	163.5

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Labour market and human capital			
Training - Further education and unemployment combat - Social exclusion - ERDF - ESF (Local Employment Pact)			
• Man- hours of vocational training	50,005	234,779	
• Increase of trainees' quota in the age group 15-19 years (baseline 2.5%)		to 2.8%	
• Evolution of unemployment quota (baseline 9,47%)		to 9%	
• Increase of the socially excluded persons supported and socially and vocationally rehabilitated (baseline 10%)		to 30%	

Source: Final Implementation Report, POP 1994-99, Western Greece (2003).

Note: Quantified targets were not set for some interventions.

10.1 Achievements by thematic axis for the National (sectoral) programmes 1994-99

Thematic Axis	Outputs, Results (R)
Infrastructure	
• Motorway (km)	14.5
• National roads (improved) (km)	10.56
• Infra-regional roads - (improved - new) (km)	718.6
• Piers/ quays (improved - new) (meters)	885
Environmental sustainability	
• Sewage networks and storm water pipes (km)	10
• Projects for protection and enhancement (ha)	1.8
• Length of cleaned coastal zone (km)	140
Enterprise	
• Aid to enterprises' investment plans (number)	160
Innovation	
• R&D programmes supported	61
Social Cohesion	
• Classrooms - Labs - Libraries - Auditoriums - rooms for multiple use (improved - new)	45
• Hospital beds (new) number	250
• Hospital beds per 1,000 inhabitants (baseline 3)	to 3.5
• Area of archaeological sites rehabilitated - enhanced (acres)	60
Structural Adjustment/ Sectoral Development	
• Agri-tourism plans	32
• Pathways (improved) km	168

Source: Processed data from the Management Information System (MIS) Office. Note: no baseline available.

10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 2000-06

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
Infrastructure			
Roads-Ports and other transport infrastructure - Improved provincial road network - Urban infrastructure - Creation of mountain centres - Improving Quality of Life			
• Roads (km)	33	21.69	65.7
• Infra-regional/ provincial roads (improved - new) (km)	274	393	143.4
• Number of intervention in ports	3	4	133.3
• Upgraded railway (km)	32	22.3	69.7
• Travel time reduction due to new roads and by-passes	30%	30%	100
• Equivalent jobs created during construction (equivalent man-years)	1,063	1,500.45	141.2
• Equivalent jobs created during operation (equivalent man-years)	100	100	100
Environmental sustainability			
Environment - Managing and Protecting Water Resources - Land Improvements - Protection and management of forest ecosystems -Integrated Urban Development interventions in local small zones (ERDF) - Improving Quality of Life - Rural Infrastructure			
• Water supply networks (replaced - new) (km)	162	425	262.3
• Sewerage networks (new) (km)	148	213	143.9
• Wastewater treatment plants (new)	3	3	100
• Rehabilitation of uncontrolled waste disposal sites (number of uncontrolled landfill sites)	45	43	95.6
• Rural roads (km)	35	112	320
• Flood defence projects (number)	4	4	100
• Forest roads (new- improved) (km)	180	203.81	113.2
• Population served by improved water supply networks	39,153	62,000	158.4
• Population served by new sewerage networks	25,260	87,000	344.4
Enterprise			
Boosting private productive investments - support SMEs			
• Number of investment plans supported	70	107	152.9
• Number of SMEs received aid	290	294	101.4
• Equivalent jobs created during construction (equivalent man-years)	112	453	404.5
• Equivalent jobs created during operation (equivalent man-years)	400	884	221
Innovation			
Linking Research and Production - Promotion of Innovation			
• Number of supported research/ R&D projects	25	25	100

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
<ul style="list-style-type: none"> Number of enterprises receiving financial aid for R&D projects and technology purchase 	25	42	168
<ul style="list-style-type: none"> Number of jobs created or safeguarded 2 years afterwards (after financial support) 	10	81	810
Social Cohesion			
Health - Welfare - Education - Urban Infrastructure - Integrated Urban Development interventions in local small zones (ERDF) - Integrated Urban Development interventions in local small zones (ESF) - Development of Mountainous areas, improvement of rural settlements			
<ul style="list-style-type: none"> Number of hospitals (new - improved) 	4	4	100
<ul style="list-style-type: none"> Hospital bed spaces (new) number 	220	220	100
<ul style="list-style-type: none"> Hospital bed spaces per 1000 inhabitants 	3.54	3.54	100
<ul style="list-style-type: none"> New classrooms (number) 	260	372	143.1
<ul style="list-style-type: none"> Urban regeneration and enhancement (number of interventions) 	12	33	275
<ul style="list-style-type: none"> Integrated urban development plans (number of plans supported) 	12	11	91.7
<ul style="list-style-type: none"> Urban regeneration in villages/rural settlements (number of villages/settlements) 	10	18	180
<ul style="list-style-type: none"> Equivalent jobs created during construction (equivalent man-years) 	2,385	3,719	155.9
<ul style="list-style-type: none"> Equivalent jobs created during operation (equivalent man-years) 	237	259	109.3
Structural Adjustment/ Sectoral Development			
Tourism - Culture -Improvement of Industrial Infrastructure - Fishing - Supporting entrepreneurship in mountainous areas - Processing and Marketing of Agricultural Products in Integrated Interventions - Investments in Agricultural Holdings			
<ul style="list-style-type: none"> Number of hotel bed spaces (new-upgraded/modernised) 	2,410	2,468	102.4
<ul style="list-style-type: none"> Number of tourism enterprises receiving aid 	50	77	154
<ul style="list-style-type: none"> Number of manufacturing areas (VIPE) improved/ upgraded 	1	1	100
<ul style="list-style-type: none"> Number of agri-tourism and craft investment plans supported 	57	56	98.2
<ul style="list-style-type: none"> Number of investment plans in agriculture (agricultural products processing and marketing) 	5	4	80
<ul style="list-style-type: none"> Number of farms supported 	810	841	103.8
<ul style="list-style-type: none"> Infrastructure and protection interventions for lagoons (number) 	7	6	85.7
<ul style="list-style-type: none"> Equivalent jobs created during construction (equivalent man-years) 	830	1,677	202
<ul style="list-style-type: none"> Monuments restored, rehabilitated, consolidated 	101	88	87.1
Labour market and human capital			
Empowerment and Development of Social Support Services - Development and Improvement of Skills of Human Resources - Local Employment Initiatives - Strengthening Rural People			
<ul style="list-style-type: none"> Support structures for manpower (number) 	90	158	175.6

Thematic Axis	Outputs, Results and Impacts		
	Target	Achieved	%
• Number of trainees (including unemployed trainees)	3,907	3,456	88.5
• Vocational training programmes (number)	211	181	85.8
• Duration of Vocational training programmes (man-hours)	2,568,778	890,035	34.6
• Equivalent jobs created during construction (equivalent man-years)	2,295	2,587	112.7
• New professionals subsidised (number)	108	451	417.6

Source: Final Implementation Report POP 2000 - 06, Western Greece (March 2011).

10.1 Achievements by thematic axis for the National (sectoral) programmes 2000-06

Thematic Axis	Outputs, Results
Infrastructure	
• New motorways (km)	18.6
• Improved motorways (km)	37.8
• National roads (improved) (km)	4.9
• Infra-regional/provincial roads (new - improved) (km)	127
• Modernised ports (number)	1
• New Optical Fibre Network(km)	94
Environmental sustainability	
• Wastewater treatment plants (new)	1
• Electric power lines (km)	50.8
• Fire fighting (and assisting) aircrafts	3
• Programmes/ Plans for immediate responding to natural disasters	2
Enterprise	
• Number of enterprises' investment plans supported	426
• Equivalent jobs created over construction (equivalent man-years)	399
Innovation	
• Positions for new researchers	173
• Number of enterprises receiving financial support for R&D projects and technology purchase.	37
• Number of foreign research centres cooperating in R&D projects	61
• R&D and innovation programmes	32
• Number of scientific announcements resulting from R&D projects	187
Social Cohesion	
• Hospital beds (new) number	71
• Hospital beds (improved) number	213
• New classrooms in higher education	48
• New school classrooms	114

Thematic Axis	Outputs, Results
<ul style="list-style-type: none"> Urban regeneration and rehabilitation (number of interventions) 	6
Structural Adjustment/ Sectoral Development	
<ul style="list-style-type: none"> Hotel bed (new- upgraded/ modernised) 	1,495
<ul style="list-style-type: none"> SMEs supported (in all tourism sectors) 	79
<ul style="list-style-type: none"> Restaurant investment plans receiving support 	42
<ul style="list-style-type: none"> Archaeological sites restored 	3
Labour market and human capital	
<ul style="list-style-type: none"> New infrastructure for employment services 	4

Source: Processed data from the Management Information System (MIS) Office. Note: no baseline available.

10.1 Outputs by thematic axis for the Dytiki Ellada regional programme 2007-13

Thematic Axis	Outputs, Results and Impacts		
	Target*	Achieved**	%
Infrastructure			
National roads - Regional/local roads - Ports - R&TD infrastructure - Services and applications for the citizen (e-health, e-government, e-learning, e-inclusion, etc.)			
<ul style="list-style-type: none"> Improvement / construction of National Road Network (km) 	4.3	0	0
<ul style="list-style-type: none"> Improvement / construction of roads except highways outside the National Road Network (km) 	64.84	6	9.3
<ul style="list-style-type: none"> Number of ports upgraded 	1	0	0
<ul style="list-style-type: none"> Number of research and technological development projects (infrastructure) 	2	0	0
<ul style="list-style-type: none"> Number of Information Society projects (e-services) 	9	0	0
<ul style="list-style-type: none"> Jobs created during implementation (man-years) 	523	94	18
Environmental sustainability			
Management of household and industrial waste - Water treatment (waste water) - Management and distribution of water (drinking water) - Other measures to preserve the environment and prevent risks			
<ul style="list-style-type: none"> Areas of uncontrolled disposal of solid waste rehabilitated 	11	0	0
<ul style="list-style-type: none"> Number of waste management projects 	4	0	0
<ul style="list-style-type: none"> Length of sewerage network (km) 	21.7	3	13.8
<ul style="list-style-type: none"> New Wastewater Treatment Plants 	1	0	0
<ul style="list-style-type: none"> Construction - improvement - upgrade of water supply network (km) 	259.7	58	22.3
<ul style="list-style-type: none"> Rehabilitation of areas (km²) 	57.74	16	27.7
<ul style="list-style-type: none"> Number of risk prevention projects 	6	1	16.7
<ul style="list-style-type: none"> Population served by waste management projects 	259,751	0	0
<ul style="list-style-type: none"> Additional population served by water resource management projects 	88,296	0	0
<ul style="list-style-type: none"> Jobs created during implementation (man-years) 	635	186	29.3

Thematic Axis	Outputs, Results and Impacts		
	Target*	Achieved**	%
Enterprise			
Other investment in firms			
• Number of existing SMEs modernised	1,474	1,113	56.6
• Funded private investments (M€)	103.7	36.9	35.6
Innovation			
R&TD activities in research centres - Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)			
• Number of research and technological development projects	29	3	10.3
• Number of cooperation projects between enterprises and research institutes	7	0	0
• Number of companies benefiting from Research and Innovation Development actions	8	0	0
Social Cohesion			
Integrated projects for urban and rural regeneration - Measures to improve access to employment - Education infrastructure - Health infrastructure - Other social infrastructure			
• Number of integrated large-scale urban interventions	2	0	0
• Population served by integrated urban development interventions	115,000	0	0
• 'Help at Home' structures (number)	76	76	100
• Classrooms of elementary and secondary education	319	38	11.9
• Number of education projects	29	3	10.3
• Number of health projects	18	4	22.2
• Hospital beds created - improved	560	356	63.6
• Social care infrastructure facilities	3	0	0
• Jobs created during construction	2,546	497	19.5
• Job creation during operation	69	0	0
Structural Adjustment/ Sectoral Development			
Protection and preservation of the cultural heritage - Development of cultural infrastructure - Other assistance to improve cultural services - Other assistance to improve tourist services			
• Monuments - archaeological sites enhanced	12	11	91.7
• Number of museums	2	1	50
• Number of art and cultural events	2	0	0
• Number of tourist beds modernised	1,877	364	19.4
• Number of tourism promotion programmes	1	0	0

Source: Processed data from the Management Information System (MIS) Office. * Based on target values of selected projects. ** Based on the value corresponding to the bi-annual project monitoring datasheet (15/9/2012)

10.1 Achievements by thematic axis for the National (sectoral) programmes 2007-13

Thematic Axis	Targets* [Outputs, Results (R)]
Infrastructure	
• Highway construction and completion - TEN (km)	417
• Improvement / construction of National Road Network (km)	7.45
• Improvement / construction of Regional Road Network (km)	6.5
• Number of ports upgraded	2
• Construction and improvement of railways - TEN-T (km)	98.6
• Digital service centres for enterprises	20
• Number of Information Society Projects (e- services)	209
Environmental sustainability	
• Energy intensive devices to be replaced	36,936
• Installed capacity from renewable energy (MW)	3.11
Enterprise	
• Number of existing SMEs modernised	436
• Funded private investments (M€)	27.8
Innovation	
• Number of research and technological development projects	43
• Number of cooperation projects between enterprises and research institutes	26
• Number of companies benefiting from Research and Innovation Development actions	21
• Number of patent applications from researchers	39
Structural Adjustment/ Sectoral Development	
• Monuments - archaeological sites enhanced	1
• Number of ecotourism routes	3
• Number of cultural - tourism infrastructure funded	6
• Number of companies participating in clustering actions	26
• Number of per year visitors of new cultural - tourism infrastructure	10,000

Source: Processed data from the Management Information System (MIS) Office. *Based on target values of selected projects.

11 ANNEX IV: LIST OF INTERVIEWEES

Name	Position (current and former roles where relevant)	Place	Date	Form
Kostas Mousouroulis	Minister of Marine & Aegean, former Secretary General for Investments and Development 2004-2007/Ministry of Development, Competitiveness, Infrastructure, Transport and Networks (former Ministry of Economy & Finance)	Athens	9/7/12	Face to Face
Giannis Firbas	Head of Special Service for Strategy, Planning and Evaluation of Development Programmes (Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority)	Athens	16/7/12	Face to face
Dimitris Iakovidis - Popi Mitsoula	Head of Unit B (Planning and Evaluation) - Official (responsible for the evaluation of Dytiki Ellada - Peloponnisos - Ionia Islands OP 2007-13) of Unit B / Special Service for Strategy, Planning and Evaluation of Development Programmes (Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority)	Athens	13/7/12	Face to face
Marina Koutsouri - Eleftheria Papageorgiou	Officials of Unit B (Planning and Evaluation) / Special Service for Strategy, Planning and Evaluation of Development Programmes (Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority), former Officials of former Managing Authority for the CSF 2000-2006	Athens	12/7/12	Face to face
Evangelia Sofouli - Panagiotis Haginikolaou	Head of Directorate of Design & Planning - Head of Coordination Division (Ministry of Education, Culture & Sport, General Secretariat for Research and Technology)	Athens	10/9/12	Face to face
Vassilis Aivalis	Director of the Department of Manufacturing (Diaxeiristiki of European Programmes, Local Antenna of the Intermediate Body of Competitiveness and Entrepreneurship OP 2000-06 and 2007-13)	Patra	6/7/12	Face to face
Christina Dritsa - Ioannis Krassakopoulos	Head of Unit A (Planning and Evaluation) - Head of Unit B (Management and Monitoring) / Managing Authority of Accessibility Improvement OP 2007-13 (Ministry of Development, Competitiveness, Infrastructure, Transport and Networks), former relevant Heads of former Managing Authority of Road Axes, Ports and Urban Development OP 2000-06	Athens	11/7/12	Face to face

Name	Position (current and former roles where relevant)	Place	Date	Form
Georgios Aggelopoulos	Vice Governor of Development and Rural Policy / Region of Dytiki Ellada	Patra	18/9/12	Face to face
Charalampos Kafiras	Deputy head of Regional Unity of Ileia / Region of Dytiki Ellada, (former Prefect of Ileia)	Pyrgos	3/8/12	Face to face
Dimitris Karavidas	Head of Directorate of Development Planning / Region of Dytiki Ellada	Patra	6/7/12	Face to face
Nikolaos Masikas	Officer in Department of Environment Structures / Directorate of Technical Works for the Regional Unity of Etoloakarnania / General Directorate for Development Planning, Environment and Infrastructure - Region of Dytiki Ellada	Mesologgi	7/9/12	Face to face
Panagiotis Pagiaslis	Head of Directorate of Technical Works for the Regional Unity of Achaia / General Directorate for Development Planning, Environment and Infrastructure - Region of Dytiki Ellada	Athens	1/10/12	Face to face
Athanasios Kondos	Head (now retired) of Former Managing Authority of Dytiki Ellada ROP 2000-06	Patra	26/6/12	Face to face
Michalis Tzortzis	Head of Intermediate Managing Authority of Dytiki Ellada ROP 2007-2013	Patra	6/7/12	Face to face
Evangelos Georgiou	Head of Unit A (Planning and Evaluation) / Intermediate Managing Authority of Dytiki Ellada ROP 2007-2013, former Official in Programme Secretariat of 1994-1999 ROP of Dytiki Ellada	Patra	8/8/12	Face to face
Nikolaos Thomopoulos	Official (responsible for Digital Convergence & Entrepreneurship and water treatment) of Unit A (Planning & Evaluation) / Intermediate Managing Authority of Dytiki Ellada ROP 2007-2013, former Official of former Managing Authority of Dytiki Ellada ROP 2000-06	Patra	3/7/12	Face to face
Ioanna Fanariotou	Official (responsible for Tourism & Urban and Rural Development projects) of Unit B (Monitoring & Management) / Intermediate Managing Authority of Dytiki Ellada ROP 2007-2013, former Official of former Managing Authority of Dytiki Ellada ROP 2000-06	Patra	3/7/12	Face to face
Kostas Foininis	Official (responsible for Environmental & Educational projects) of Unit B (Monitoring and Management) / Intermediate Managing Authority of Dytiki Ellada ROP 2007-2013, former Official in Programme Secretariat of 1994-1999 ROP of Dytiki Ellada	Patra	3/7/12	Face to face
Pavlos Mosholios	Mayor / Municipality of Agrinio	Agrinio	6/9/12	Face to face
Andreas Karavolas	Ex-Mayor / Municipality of Patras	Patra	8/8/12	Face to face

Name	Position (current and former roles where relevant)	Place	Date	Form
Makis Paraskevopoulos	Mayor / Municipality of Pyrgos	Pyrgos	3/8/12	Face to face
Anna Chrysafi	Director / Chamber of Etoloakarnania	Agrinio	6/9/12	Face to face
Athanasios Koustas	Special Consultant to the President / Chamber of Achaia	Patra	8/8/12	Face to face
Kostas Nikoloutsos	President / Chamber of Ilieia	Pyrgos	3/8/12	Face to face
Petros Mantas	General Secretary / Federation (SEV) of Peloponnese and Western Greece Industries	Patra	18/9/12	Face to face
Dimitris Psaltopoulos	Deputy Head / University of Patras, Department of Economics	Athens	27/7/12	Face to face
Kostas Tsekouras	President of the BoD / Patras Science Park	Patra	3/7/12	Face to face
Petros Groumpos	Ex-President of the BoD / Patras Science Park	Patra	3/8/12	Face to face
Aggelos Koutsomichalis - Gerasimos Ioannou	Project Manager / EEO Group, External Evaluator for the on-going evaluation of 1994-99 ROP of Dytiki Ellada and the midterm evaluation of 2000-06 ROP of Dytiki Ellada - Member of the evaluation work team / EEO Group, External Evaluator for the on-going evaluation of Dytiki Ellada - Peloponnisos - Ionia Nisia ROP 2007-2013	Athens	1/8/12	Face to face
Nikos Milionis	Project Manager for the ex-ante evaluation of 'Accessibility Improvement' OP 2007-13 / METRON S.A., Studies, Research, Planning and Development Consultancy (located in Dytiki Ellada region)		20/7/12	Telephone
Athanasios Papadaskalopoulos	Director / Panteion University, Regional Development Institute	Athens	19/7/12	Face to face
G. Kalogirou - J. Freris	Deputy Administrator and CFO - Director of Corporate Communication and Sustainable Development / Gefyra S.A. (Concessionaire for the Rion-Antirion Bridge)	Athens	9/10/12	Face to face
Gerasimos Mentzelopoulos	Director / Patras Science Park	Patra	1/10/12	Face to face
Kostas Theos	Former Secretary General for Investments and Development 1999-2004 / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks (former Ministry of National Economy)	Athens	2/7/12	Face to face
Antonis Kotsalis - Takis Triantafyllou	President - Head of Planning Studies and Documentation Dpt. / Patras Municipal Enterprise for Local Development (ADEP S.A.)	Patra	8/8/12	Face to face
Francesco Amondeo	Task Force for Greece - Athens Antenna / DG Regio representative	Athens	25/6/12	Face to face
Eleni Paleologou - Nikos Chryssanthou	Deputy Head of Unit 3 - Senior Desk Officer of Unit 3 / DG Regio representatives	Bruxelles	5/9/12	Face to face

Name	Position (current and former roles where relevant)	Place	Date	Form
Nikolaos Papadodimas	Ex-Chief Executive / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, Directorate General for Development Planning, Regional Policy and Public Investment (now retired)	Athens	2/10/12	Face to face
Pantelis Armaos	Ex-responsible for the Dytiki Ellada ROP 2000-06 / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority (former Managing Authority for the CSF 2000-06), Special Coordination Service for the implementation of the Operational Programmes (now retired)	Athens	3/10/12	Face to face
Maria Dimopoulou	Official (responsible for the monitoring of the ROPs 2000-2006) / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority (former Managing Authority for the CSF 2000-06), Special Coordination Service for the implementation of the Operational Programmes	Athens	4/10/12	Face to face
Nana Nikolaidou	Official of Certifying Authority (former Paying Authority for the CSF 2000-2006) / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks	Athens	5/10/12	Face to face
Vasiliki Pahi	Official in National Coordinating Authority (former Special Managing Authority for Cohesion Fund 2000-2006) / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks	Athens	9/10/12	Face to face
Heracles Alexopoulos	Officer in Consulting & Support Services Department / Management Organisation Unit of Development Programmes S.A., former Head of Unit A (Planning and Evaluation) in former Managing Authority of Environment OP 2000-06 (Ministry of Environment, Energy and Climate Change)	Athens	10/10/12	Face to face
Georgios Georgakopoulos	Head of Special Service Department of Health and Social Solidarity (former Managing Authority of Health and Welfare OP 2000-06) / Ministry of Health and Social Solidarity	Athens	11/10/12	Face to face
Vasilis Antonopoulos	Deputy Head of Regional Unity of Etoloakarnania / Region of Dytiki Ellada		13/10/12	Telephone
Georgios Michailidis	Evaluator / Consortium 'BCS-DMP-Ergomichaniki-J. Patellis Consultants' (ex post evaluator of Dytiki Ellada ROP 1989-93)		12/10/12	Telephone

Name	Position (current and former roles where relevant)	Place	Date	Form
Athanasios Giannadakis	President of Dytiki Ellada Department / Technical Chamber of Greece		11/10/12	Telephone
Christos Christou - Aristides Petropoulos	Head of Unit E - Official (responsible for the monitoring of Dytiki Ellada - Peloponnisos - Ionia Islands OP 2007-13) of Unit E (Management of Regional Operational Programmes 2007-13) / Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, National Coordinating Authority, Special Coordination Service	Athens	12/10/12	Face to face

12 ANNEX V: OVERVIEW OF SOURCES USED FOR THE CASE STUDY

Programme name	OP	AIR	FIR	Spend	Evaluation reports	Strategic interviews	Operational interviews	External interviews	Stakeholder/ Beneficiary interviews	Workshop
CSF 1989-1993 for Greece			at OP level			Yes				
Dytiki Ellada ROP 1989-93			Yes		Yes			Yes		Yes
CSF 1994-1999 for Greece	Yes		at OP level		Yes	Yes				
Dytiki Ellada ROP 1994-1999	Yes		Yes		Yes		Yes	Yes	Yes	Yes
Industry OP 1994-1999	Yes		Yes		Yes					Yes
Accesses and Road Axes OP 1994-1999	Yes		Yes							
II Research Technology OP 1994-1999	Yes		Yes		Yes					
Technical Assistance OP 1994-1999	Yes		Yes							
Postal Services OP 1994-1999	Yes		Yes							
Telecommunications OP 1994-1999	Yes		Yes							
Tourism Culture OP 1994-1999	Yes		Yes							
Roads, ports and airports OP 1994-1999	Yes		Yes							
Rail transport OP 1994-1999	Yes		Yes							
Urban development OP 1994-1999	Yes		Yes							
Energy OP 1994-1999	Yes		Yes							
Environmental protection OP 1994-1999	Yes		Yes							

Programme name	OP	AIR	FIR	Spend	Evaluation reports	Strategic interviews	Operational interviews	External interviews	Stakeholder/Beneficiary interviews	Workshop
Healthcare and welfare OP 1994-1999	Yes		Yes							
Industry and services OP 1994-1999	Yes		Yes							
Natural gas OP 1994-1999	Yes		Yes							
Research and technology OP 1994-1999	Yes		Yes							
CSF 2000-2006 for Greece	Yes	Yes	Yes		Yes	Yes				Yes
Dytiki Ellada ROP 2000-06	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Environment OP 2000-06	Yes	Yes	Yes		Yes	Yes				
Road Axes, Ports and Urban Development OP 2000-06	Yes	Yes	Yes		Yes	Yes				Yes
Competitiveness OP 2000-06	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Culture OP 2000-2006	Yes	Yes	Yes		Yes					
Health-Welfare OP 2000-2006	Yes	Yes	Yes		Yes	Yes				
NSRF 2007-2013	Yes					Yes				Yes
Dytiki Ellada - Peloponnisos - Ionia Nisia ROP 2007-2013	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Environment & Sustainable Development OP 2007-13	Yes	Yes			No					
Improvement of Accessibility OP 2007-2013	Yes	Yes			Yes	Yes				Yes
Competitiveness and Entrepreneurship OP 2007-13	Yes	Yes			Yes		Yes	Yes	Yes	Yes
Digital Convergence OP 2007-13	Yes	Yes			No					
Technical assistance OP 2007-13	Yes	Yes			No					

13 ANNEX VI: REFERENCES

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14 ANNEX VII: SUMMARY OF SURVEY RESULTS

A total of 265 contacts were invited to take part in the online survey for Greece. This number includes 48 who were interviewed by the case study team, plus 217 additional invitees. The 265 invitees were broken down as follows: 12% were Central Government contacts (Ministries, Managing Authorities, Certification Bodies); 15% were Regional Government contacts (Decentralised Regional Administrations, Intermediate Managing Bodies); 8% were Local Authorities representatives (Municipalities); 11% were representatives from socio-economic stakeholders (Professional Chambers, Federations, Universities, Technological Institutes); 2% were external recipients (Consulting firms and Research Institutes); 34% were firms representatives; 8% were politicians; 8% were local interest groups representatives (Local Development Enterprises, Water and Sewage Management Enterprises, Protected Areas Managing Bodies, Equal Opportunities Enforcing Institutes); and the remaining 1% were representatives from the European Commission (DG Regio).

The overall response rate (i.e. those who started the survey and answered at least one question) was 23.4%, though the percentage of invitees who completed the entire survey (i.e. up to and including the final question) was expectedly lower at 11.3%.

Within the above-mentioned categories, the breakdown of respondents was as follows (fully completed responses): 30% were from the sample of Central Government; 37% were regional government representatives; 3% were from local administration bodies; 20% were from local firms; 3% were from European Commission representatives; and the remaining 7% were from the consulting firms. There were no completed responses from politicians or from socio-economic bodies and groups of special interest.

Some key findings from the survey are summarised in the figures to follow.

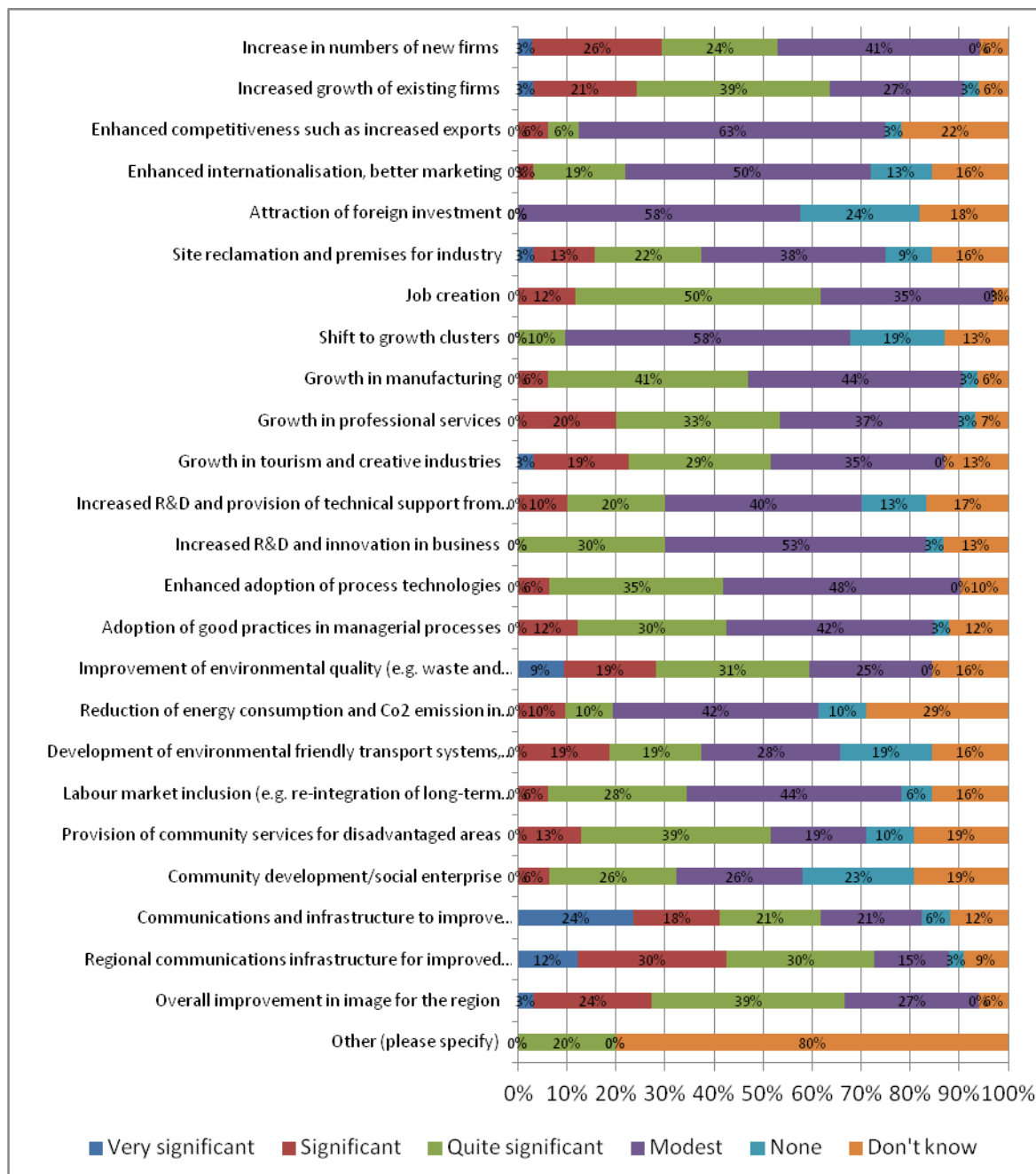
Respondents' participation in Dytiki Ellada EU-funded programmes across different periods (a respondent can participate in more than one period)

Answer	Response	%
1989-93	5	12%
1994-99	14	34%
2000-06	31	76%
2007-13	38	93%

Source: Online survey. Figures reported are the actual responses.

Figure 8: Online survey responses to the question ‘Could you please assess the extent to which the ERDF programmes delivered achievements in the fields outlined below (across the entire period, i.e. 1989 to date)?’

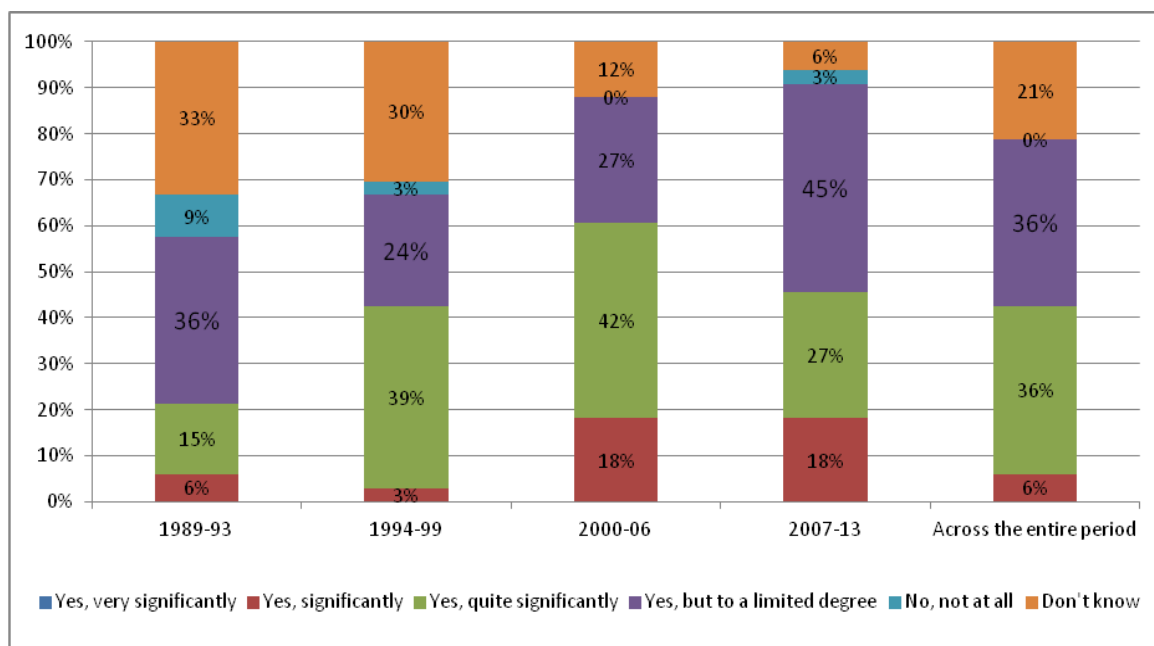
(not every respondent answered all the questions)



Source: Online survey. Percentages may not sum to 100% due to rounding.

Figure 9: Online survey responses to the question ‘In your view, did the objectives of the ERDF programmes address regional needs?’

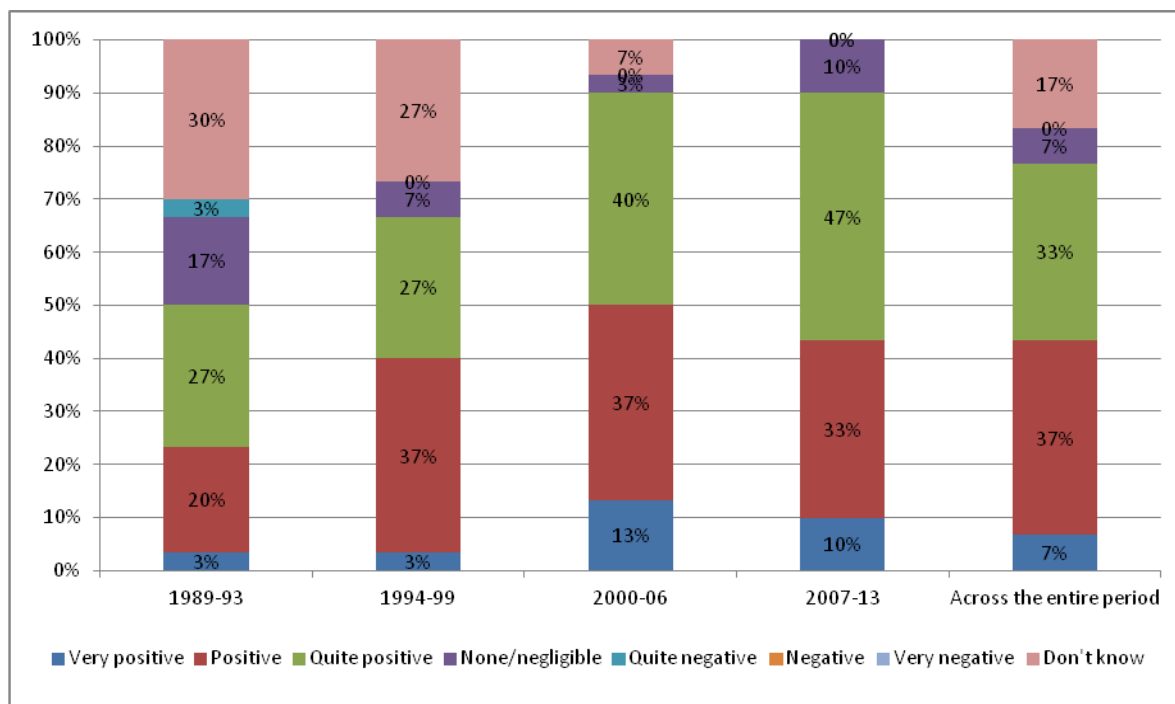
(33 respondents answered the question for all periods)



Source: Online survey. Percentages may not sum to 100% due to rounding.

Figure 10: Online survey responses to the question ‘On the whole, could you assess the impact of ERDF programmes? For current programmes, please assess the level of impact which you anticipate they will have.’

(30 respondents answered the question for all periods)



Source: Online survey. Percentages may not sum to 100% due to rounding.