Strategic Planning for Avoidance of Catastrophic Flood Consequences

Odysseas N. Kopsidas¹ and Stephanos D. V. Giakoumatos²

1. School of Economics, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece
2. School of Industrial Management and Technology, University of Piraeus, Piraeus, 18534, Greece

Abstract: The present study is to deal with the strategic planning in avoidance of all catastrophic consequences of major flood in West Attica region in 2017 and is divided into three main sections. The first one comprises the study of the internal and external environment of the Regional Unit of West Attica with analysis of resources, procedures, culture that governs the internal environment, external bodies and mapping through PESTEL (Political, Economic, Socio-Cultural and Technological) analysis as components of the external environment. The second section comprises the vision and mission of this strategic plan and specializes in reporting and analyzing the strategic objectives as well as the actions that characterize them in order to complete the mission that has been set and to achieve the vision that has been planned. The last section focuses on the feasibility of the above proposals formulated in the midst of actions and strategic objectives with the help of SWOT (Strength, Weakness, Opportunity, and Threat) analysis and concludes with a proposal for the implementation of strategic planning with the implementation of the Integrated Spatial Investment tool.

Key words: Strategic planning, natural disasters, flood, PESTEL analysis, SWOT analysis, Integrated Spatial Investment tool, West Attica.

1. Introduction

For the development of the Strategic Plan of the public Agency, the model of strategic management of public organizations according to Bryson was chosen [1], as the Agency is part of the wider Public Administration [2]. According to this model, strategic management in public organizations includes ten distinct steps concerning the identification of the institutional framework and the expectations of the stakeholders, the analysis of the current situation within the organization and the external influences, the emergence of strategies, the selection of strategic objectives, the definition of operational objectives to achieve them and their metrics, and the development of an action plan for the implementation of strategic planning, monitoring and evaluation [3]. For the purposes of the present study, the Bryson model was applied to specific strands which we considered to be central to the immediate and successful implementation of the strategic planning plan [4]. Therefore, in the present work, emphasis was given to the steps up to the definition of the operational objectives and the actions that result from them [5].

The analysis of the internal environment of the Regional Unit of West Attica is a key study to clarify the available resources, the usual procedures and the culture that governs the Organization of the Region, to remove the consequences of the catastrophic flood of November 15th, 2017. The study of the internal environment is not only a component of any strategic planning but also a catalyst for its successful analysis and implementation. Strategic objectives are analytically presented in the Appendix [6].

2. Aftermath of the Physical Disaster

The prevailing situation in at least 3 out of 5 municipal entities of West Attica region, shortly after
the catastrophic flood’s occurrence was such that the whole region had been declared a state of emergency. Many residences were ruined apart from the serious infrastructure damages. The urgent measurement to be taken to support the suffering community to reverse the negative climate back to normal was set to be the high priority [7]. Funding from every potential source was prioritized at the very beginning in the aftermath of the misfortune [8].

3. Internal Environment

3.1 Evaluation and Funding

Human resources employed include several public services employees. Human resource management should ensure a sufficient number of employees for the proper and efficient operation of the organization [9]. Public services evaluate the skills of its employees and appoint the most suitable one according to his competences, to undertake all responsibilities that lead to individual professional performance maximization and consequently to the performance optimization of the public service [9]. Administrative staff of offices that are pertained to the West Attica central administration public service, including Civil Protection Directorate, are at the aforementioned service disposal to achieve the best goals for the public interest [10].

The most serious problems identified in terms of human resources of the Region, are understaffed services, manned with underqualified personnel who lacks of proper specialized engineers’ significant shortcomings. Thus, it is of crucial importance, the needs of human resources to be re-evaluated, a practice that will be helpful to any future strategy implementation [11].

Public service needs financial resources to operate and implement its design. Key financial sources are the state annual budget and European funding [12]. The well performed management practice entails securing financial re-sources and their proper distribution within the public service. Further potential financial sources are the Public Investment Program or even for certain projects implementation the national financial institution named Deposits and Loans Fund, though scarcely appealed [13].

Further available funding is supported from several European funding mechanisms, mainly for infrastructure construction & reconstruction purposes. As such are Horizon 2020 investment, InnovFin, LIFE, COSME, European Structural and Investment Funds and EIB (European Investment Bank) [14]. In addition, the European Union Solidarity Fund can provide financial assistance to those affected by the catastrophic effects of floods. Projects implementation is also achievable through public-private partnership schemes [15].

3.2 Technology, Infrastructure and Material Resources

Resources to cope with the floods in this category include facilities, equipment, machinery, vehicles, existing raw materials, etc. In addition to the issue of a good management for the proper allocation of financial resources, it is called upon to use properly and efficiently the material resources to achieve the maximum possible return. Material resources include: all types of material equipment of the Organization such as trucks, tools, special vehicles, computers etc.; movable equipment and real estate, building infrastructure, etc.; existing flood protection infrastructures, such as the rainwater drainage network and flood protection projects in the areas of Attica that were previously affected. The existing in the organizational structure of the public service emergency units appertained to the regional service unit (e.g. health unit etc.). Furthermore, the penetration of technology in public organizations can be utilized, as well as the know-how that the services have at their disposal.

Utilizable resources in this direction are: the studies and plans that the service has at its disposal, such as the Road Plans, studies for dealing with catastrophic phenomena, the Civil Protection Plans, etc. The
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disposable National Cadastre and Mapping Agency database is by all means a valuable tool, the adequate degree of digitization of the operations e.g. the Digitization of the Archive of West Attica regional unit.

3.3 Procedures

The procedures that govern the internal environment of the Regional Unit of West Attica are based on three main pillars. The first pillar concerns the Organization Chart of the Region of West Attica as an organizational structure that bears the burden of removing the consequences of the catastrophic flood of November the 15th, 2017. The second pillar concerns the institutional framework that defines its scope and legal framework within which can act. The third pillar is based on the cooperation of the Region in the context of extroversion and its most effective administration [16].

3.4 Work Culture

A significant parameter that characterizes the internal environment is the work culture that governs the Regional Unit of West Attica as a local public organization and to a large extent has been shaped both by the broader prevailing perception of public organizations in Greece and by the particularities of the organization itself. More specifically, there is fragmented policy planning, with a lack of central planning as well as harmonization of projects and their integration into a global framework of sustainable development and regeneration of the region. In the same context, especially in the past, the design of projects and policies, worked in fragments, incomplete, with logics of raising funds, not in the context of integrated studies but based on opportunistic circumstances, without linking the need for implementation with the desired result.

This logic has led to the fragmentation of projects and policies, to fragmented solutions, without taking into account external counter-economics and the negative effects of this fragmented way of planning and implementation. This fragmented design logic includes the lack of environmental awareness, while respecting the cultural heritage, the service of the public interest, social solidarity and ultimately the social prosperity of the region. A significant disadvantage in policy planning and implementation is the usual lack of monitoring mechanisms and prevention policies, with the result that management is often called upon to take ex post action, repressive or remedial, depending on the policy area. On the other hand, there is a strong lack of cooperation and coordination mentality, both above and below levels of Public Administration but also with supranational actors, which, although presented in the central administration, have a cumulative effect on the internal problems of the organization [17].

The frequent overlap of responsibilities, the lack of cooperation both in terms of administrative and control responsibilities of the organization creates phenomena of administrative and operational inadequacy, complicating both day-to-day operation and effective intervention in crisis management. Incomplete or even irrational staff distribution creates phenomena of inadequate efficiency and effectiveness. Remarkable vacancies of specialized jobs in public organizations tend to be a common phenomenon which incurs hindrances in many operational aspects i.e. project planning, bidding and supervision, leverage, drafting and technical bulletin preparation etc. However, the recent institutional framework, both with the possibilities emerging through Law 4412/2016 as well as the institutionalization of mobility of professional posts to cover operational needs of public institutions, is a flexible tool to fill the necessary positions. Positive mentality, in terms of policy design, was created by Law 3852/2012, “New Architecture of Local Government and Decentralized Administration”, where, despite the initial problems it created with the merging of municipalities and communities and the changes it brought about to the
so called “second degree” of local government, it also created improved scale economies, expanding the responsibilities of the regional “decentralized” public organization itself. In this light, but also in combination with the directions given by the law on local authorities, the need for documented planning and the formation of integrated proposals is created.

In order to be able to absorb national and European resourced funds, it becomes necessary to strategically plan the projects with integrated proposals and link the purpose of the result, thus creating the appropriate mentality in both, the political leadership and the employees of the organization. The continuous self-improvement of the staff in terms of its professional skills becomes a necessity, changing the mentality of the public organization as a whole, for the benefit of a modern administration, in the service of the citizen.

4. External Environment

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4.1 General

The analysis of the immediate external environment includes the identification of the bodies that are directly connected with the public regional unit of West Attica, as well as the analysis of the interactions and synergies that develop among them. Stakeholders are foreign institutions, public services companies and groups of people who are influenced and/or exert influence upon the West Attica Regional Government or even are affected by it. The following are the main bodies that constitute the immediate external environment of the public regional unit of West Attica.

4.2 Foreign Bodies

Institutions of the EU (European Union): The legal order imposed and issued by the EU through its institutions, with the Regulations, the Instructions, the Decisions etc. It is an integral part of the legislative framework that the public regional unit of West Attica must have under constant consideration.

European Structural and Investment Funds (GRNET): That is, EU GRDs (ECB, ERDF and Cohesion Fund) financed projects that can be implemented or managed by the West Attica public regional unit.

4.3 Public Bodies

The Ministry of Interior: The legal framework and the human resources of the Ministry are factors that can develop collaborations with the public regional unit of West Attica. The Ministry of Finance: Cooperation is developed to secure funding and fiscal guidance in line with the constraints of fiscal adjustment programs. The Ministry of Infrastructure & Transport: Influences the public regional unit of West Attica with the legislative framework it provides, in terms of infrastructure and transport, as well as with the various infrastructure projects. The Ministry of Environment, Energy & Climate Change: Interacts with the public regional unit of West Attica regarding spatial planning, the final location and operation of various landfills, integrated waste management system, urban planning, transportation network, land uses, etc. The Ministry of Education, Research & Religions: Provides upgraded consulting services to students in the affected areas and further motivations by founding new schools that will be an additional motivation for the inhabitants not to search for new residences to other unaffected municipalities.

The Ministry of Culture: Cooperates in the light of the protection and promotion of antiquities and various cultural heritage monuments located in the West Attica. The Chambers: Collaborate by promoting the improvement of their services and the
satisfaction of the various sectorial interests they serve. The various services of general interest: PPC, EYDAP, OSE and STASY develop collaborations with the public regional unit of West Attica in terms of networks, infrastructure and farms.

4.4 Private Entities

Banks: Cooperation is being developed with the West Attica Regional Bank in terms of lending and supply of banking products. Cooperation is also being developed in the framework of the Corporate Social Responsibility of the banking groups. An important role will be played by the announced National Investment Bank, which will provide funds for development purposes of general interest.

The Associations of Industrialists and Craftsmen: Collaborate with the public regional unit of West Attica with a view to the development of entrepreneurship, research and development at the level of production, as well as innovation. The Employees’ Unions: Cooperate with the public regional unit of West Attica with a view to the development of employment and at the same time the social security of their member members. The Associations of Traders: Collaborate with the public regional unit of West Attica with the aim of developing the various product markets, improving the local economic and development indices.

The Civil Society: The various associations, associations, unions, NGOs (Non-governmental Organizations) cooperate with the regional unit of West Attica in order to meet the requirements of members to improve the quality of life of citizens.

Motorway Management Companies: “Olympia Odos” and “Attiki Odos” offer infra-structure and transport services on land in the geographical area of West Attica.

5. PESTEL (Political, Economic, Socio-Cultural and Technological) Analysis

For the analysis of the wider strategic external environment (the “big-picture” in which the organization operates), the tool of PESTEL analysis is used, i.e. the analysis of the political, economic, social, technological, environmental and legal environment. This analysis allows us to identify the conditions under which the organization is required to develop and execute its strategy.

5.1 Political Environment

Primarily, it is considered positive in every aspect, the political will and a broader consensus on the prevention of environmental disasters in a climate of general political stability. Furthermore, the administrative planning of civil protection has a long-term horizon which is not affected by the political (electoral) cycle. In the aftermath of the physical disaster communities are always widely susceptible to radical changes and redesign of the operational framework for dealing with similar issues.

Apparently, since the region of Western Attica remains a region of the EU, all governmental mechanisms stemming from this relationship affect positively the final outcome (grants, integration into development programs, convergence mechanisms etc.).

5.2 Financial Environment

As regards the financial environment in which the public organization operates, considerable subsidy is granted through various regulars and in emergency state financial programs from both the EU and the National Treasury. More specifically, many subsidies are derived from EU (Prevention) program (regular funding), NSRF (FTA) 2014-20 and the (regular) leverage based on the “Juncker investment plan”. Regular financing through various investments to be implemented is considered essential for the EU Prevention by the European Investment Bank [18]. The regular EU programs also include the latest RescEU Program for more effective cooperation between Member States in dealing with natural disasters.
disasters. Additionally, emergency funding can be obtained from the EU Solidarity Fund to deal with emergency natural disasters. National financing includes mainly the (regular, annually) financing from the Fiscal State Treasury, which actualizes several programs inter alia, infrastructures in the region for flood prevention. Despite the recession and economic crisis in Greece, the present status is favorable and there are good prospects for economic prosperity of the local economy in the region of our interest.

5.3 Social Environment

Both, the social and the media pressure due to the recent natural disasters, but also the heterogeneous social stratification tapestry i.e. immigrants, Roma, workers from all regions, permanent residents of the region, etc. can be included in the wider external social environment. It is characteristic that oral interviews completed with inhabitants that reside in the stricken area, after the catastrophe, demonstrate a tendency to relocate their residences and their activities therefore, to abandon the stricken area permanently. Such a possibility, when implemented, will incur extremely negative social consequences for the region.

In terms of unemployment rate indices, in the aftermath of the catastrophe, it is almost certain that will turn worse since many enterprises activated in the region are going to suspend their business activities at least in the near future. Some of them will remain inactive and quite a few are going to be relocated. Finally, the literature demonstrates that in such cases, the suffered population encounter significant psychological problems due to the loss of beloved persons mostly relatives in the stricken areas which are characterized by an intense “social stigma” with a long-term negative impact on their daily behavior [19].

5.4 Technological Environment

The slow return of the region back to normality and consequently to the development is partly due to the low technological penetration overall (in the wider region) as well as the prevailing a lag phase in informatics technology. Unfortunately, the damaged technological/communication infrastructure in the area as a result of the unfortunate incident deteriorates the negative consequences of the disaster.

5.5 Natural Environment

When describing the wider external environment of the public service/organization, the effects of the natural environment of the area must also be taken into account and deep consideration. And the reason is that the stricken area of our interest is located where watersheds are, to undertake rainfall outflows directed downwards from the neighboring mountains [20].

As a result, according to the experience acquired by the latest flood phenomena, heavy rainfall in the mountains gives rise to enormous hydraulic loads which turn into flood venting through certain watersheds where human activity occurs. Considering that the occurrence of extreme events (high rainfall in a short period of time, without significantly changing the total rainfall height) has been intensified in the last decade, which is considered to be an ongoing phenomenon, it becomes apparent that any risk assessment from the occurrence of extreme phenomena, take into account necessarily the current climatic conditions [21].

It is necessary industrial and urban defined zones to be reconsidered and revised making use of the latest catastrophe experienced. Watershed should be redefined away from residences and mountains and high hills runoff should be redirected properly to avoid future structure damaging. One of the basic factors that affect mountainous runoff is undoubtedly the soil composition. It must therefore be reconsidered whether soil composition, forest covering, slope grading, plant roots in soil etc. to what extent affect the sediments transportation and in general to soil erosion contribution [22].
Industrial installations that produce hazardous chemical agents that fall under e.g. “SEVESO III” EU’s environmental legislation, their presence in W. Attica region increase the level of responsibility, since physical catastrophes incur serious environmental problems in the area (water pollution, air pollution, etc.), and an extensive remediation program has to be followed to restore the environment in the previous state [22-23].

5.6 Legal/Institutional Environment

Attica region, since it does not have its own legal-preparatory competence, is operating within the legal framework, externally defined by the central Government and EU Legislation. Therefore, in the light of the external definition of its competencies and within the legal framework in which it operates, it is questionable whether the local public organization will be able to exert the required authorization to implement the planning within the framework of its jurisdiction and responsibilities. In many cases authorization overlapping phenomena are encountered with decision-making centers’ conflicts. Furthermore, Greek Public Administration is suffering seriously with Law codification dysfunction which results in the projects’ delay and procedures’ hindrances due to the complicated legal framework [22].

6. SWOT (Strength, Weakness, Opportunity, and Threat) Analysis

The data obtained from the previous external and internal environment analysis are organized and then evaluated using the SWOT environmental analysis tool (STRENGTHS-WEAKNESSES-OPPORTUNITIES-THREATS). The various variables are classified into four broad categories, as follows:

**Internal environment**

<table>
<thead>
<tr>
<th>1. STRENGTHS</th>
<th>2. WEAKNESSES</th>
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<tr>
<td>3. OPPORTUNITIES</td>
<td>4. THREATS</td>
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**Strengths:**
- Strong political will from the political leadership of the region for immediate response to the consequences of the incident
- Long-term planning of civil protection plans
- Central weight position in the Greek area of West Attica regional public service unit
- Existence of a Strategic Planning from the region, where it can be used for the sustainable development of the region
- Use of Information Communication Technology programs
- Utilization of European funding (NSRF)
- Cooperation of the Region with bodies and organizations at supranational/national/subnational level

**Weaknesses:**
- Determination of planning by the political leadership, resulting in the change of the development perspective of the Region depending on the respective political leadership.
- Overlap of responsibilities between the region-central administration and first-degree municipalities
- Structural weaknesses and bureaucracy
- Insufficient funding from the state budget
- Lack of structures at local level as well as lack of coordination
- Insufficient specialized staff and its irrational distribution
- Delay in the planning and implementation of staff actions
- Fragmentary design of projects and policies

**Opportunities:**
- Priority of political leadership in the design and implementation of flood protection of the area
- Central weight position of regional unit of West Attica in Greece
- Utilization of national and European resources
- Institutional framework that favors the conclusion of program contracts for the execution of projects and the staffing of technical services as well as a revised framework of mobility of civil servants (Law 4420/2016 and Law 4440/2016)
- The emergence of Eleusis as the cultural capital of Europe in 2021
- The revision of the GIS and the coordination of spatial/urban and transport Planning.
- Revised and flexible institutional framework for the social and solidarity economy (Law 4430/2016)

**Threats:**
- Unclear institutional framework, pluralism and bureaucratic procedures
- The constraints imposed by the general fiscal situation of the country and the limited resources of the EDP
- The lack of central planning with a holistic approach to the development of the area
- The absence of central flood protection planning as well as the integration of projects with other infrastructure projects, regeneration and development of the area
- The involvement of various actors for the holistic planning of the development of the region and the problem of their coordination
- Climate change combined with increasing air pollution and wildfires in forest areas
- The intense heterogeneity of the social stratification of the region
The data included in categories 1 and 2 have emerged from the analysis of the current state of the internal environment, while the data in categories 3 and 4 derived from the postulated PESTEL analysis, selecting those that were found to be of most interest/influence on the West Attica regional unit. Strengths and Opportunities are the positive dimension of the organization, whilst Weaknesses and Threats constitute the negative dimension.

7. Strategic Objectives—Conclusions

Achieving the vision of the organization requires the definition and achievement of specific strategic goals. In this context, the following are set as Strategic Objectives:

(1) Repair of damages in the region of West Attica from the floods of November 15th, 2017. In order to render this, feasible, proper planning is needed which comprises the recording of all problems encountered, and construction phase for the restoration and reconstruction of the area, households and businesses.

(2) Prevention to avoid new disasters from floods in prefecture region of West Attica. Proactive treatment of similar phenomena plays a key role in the future action projection on the part of the public organization. Therefore, disasters prevention in the future is an essential Strategic Objective of the public organization. Implementation actions are broken down into four sub-business objectives. These objectives are: (i) the mapping of flood risk zones; (ii) the review of the flood protection framework; (iii) the improvement of prevention culture & protection plans against natural phenomena; and (iv) the management of the forest environment.

(3) Sustainable development of the prefecture region of West Attica. It is related to the sustainable urban development and the improvement in terms of social conditions, on daily life basis, of the inhabitants of the public regional organization unit of West Attica. The characteristics will incorporate individual feasible goals so that “green” achievable targets can be reached: maximizing the social obtained benefits. The balanced development will integrate the cultural upgrading of the area and the educational progress of its inhabitants, which will contribute to the overall social well-being. According to the above, the operational objectives of the Regional Unit of West Attica are being prepared, which will allow the implementation of an operational integrated development program.

References


Appendix

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<th>Strategic objectives</th>
<th>Business objectives</th>
<th>Actions</th>
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<td>1</td>
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<td></td>
<td>Business objective 1: Short-term Planning—Assessment of the current situation in terms of economic, social and environmental costs</td>
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<tr>
<td>Strategic objective 1: Rehabilitation of flood damage</td>
<td>Operational objective 2: Disaster recovery actions</td>
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<td>1</td>
<td>Completion of the process of granting compensation to the beneficiaries. Cleaning of houses, shops, businesses, crafts and industries’ facilities and removal of all the mud and debris accumulated, with simultaneous transport and disposal of debris in a special issued area. Completion of the cleaning of the torrent beds in the areas of West Attica from debris and other waste and with simultaneous transport and disposal of debris and other waste in a special issued area. Completion of the cleaning of the road network in the region of West Attica where it was severely damaged by the flood. Completion of the cleaning of school buildings and public areas in the affected areas of West Attica. Completion of the repairs and functional restoration of the all-kinds infrastructure of the region including culverts, sewage, water supply pipeline network, electrical grid and supply, etc. Repair and restoration of heavily damaged houses. Repair of damaged businesses, crafts and industries. Repair of the main traffic network of West Attica region i.e. Megareon, Elefsina municipalities and Mandra-Eidyllias route. Repair and restoration of buildings of public interest. Completion of the restoration of schools and public services. Removal of the Municipal depot and private companies located within the riverbeds.</td>
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<tr>
<th>Strategic Objective 2:</th>
<th>Prevention</th>
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<tr>
<td>Operational objective 1:</td>
<td>Capture flood risk zones</td>
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<tr>
<td>1</td>
<td>Redefinition of land uses, zones of economic activities etc. throughout the region of West Attica.</td>
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<td>2</td>
<td>Preparation of hydrological studies of the West Attica region and reevaluation of the potential of the drainage basins. Rainfall data for over two decades should be interrelated with climate change phenomena and a new analysis “in extremis” will be taken into account, in order to obtain new construction design values for hydraulic projects.</td>
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<td>3</td>
<td>Determining the flood area to be caused by the rainfall density value of the action plan 2.</td>
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<td>4</td>
<td>Calculation of the maximum flow rate (based on the design values of action 2) of the “SOURES” and “AGIAS AIKATERINIS” watercourses that flow within residential areas.</td>
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<td>5</td>
<td>Soil erosion analysis in the mountainous areas of West Attica region.</td>
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<td>6</td>
<td>Identification of the zones suffering from anthropogenic activities and the floodplain, as these will result from actions 1 and 3.</td>
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<td>7</td>
<td>Risk analysis for buildings and infrastructure within the floodplains of the catchments of the West Attica region.</td>
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<td>8</td>
<td>Review of the road network in West Attica region, taking into account the findings of actions 6 and 7.</td>
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<td>9</td>
<td>Relocation, where possible, of infrastructure located in stricken areas, in compliance with the findings of action 7.</td>
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<td>10</td>
<td>Establishment of an early warning flood system.</td>
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<tr>
<th>Operational objective 2:</th>
<th>Review the flood protection framework</th>
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<td>1</td>
<td>Inspection of existing flood protection projects in the area of the West Attica region.</td>
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<td>2</td>
<td>Control of existing topsoil and terrain improvement projects in the area of the West Attica region.</td>
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<td>3</td>
<td>Control of existing rainwater drainage projects in the road network of the West Attica region.</td>
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<td>4</td>
<td>General control</td>
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<td>5</td>
<td>Maintenance of existing top soil and terrain improvement projects in the area of the West Attica region, based on the findings of action 2.</td>
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<td>6</td>
<td>Maintenance of existing rainwater drainage works of the road network in the area of the West Attica region, based on the findings of action 3.</td>
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<td>7</td>
<td>Preparation of hydraulic studies for the watersheds and drainage “SOURES” resulting from the floodplains of the West Attica region and assessment of the capacity of existing projects to respond to the new climatic conditions.</td>
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<td>8</td>
<td>Elaboration of hydraulic studies for the watersheds in “AGIA AIKATERINI” area resulted from the flood fields of the West Attica region.</td>
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<th>Business objective 3:</th>
<th>Improving a culture of prevention &amp; protection plans against natural phenomena</th>
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<tr>
<td>1</td>
<td>Campaign to inform the residents of the West Attica Region about the flood risks in the West Attica Region and instructions for immediate response, by organizing workshops, sending information leaflets, posting instructions on the site of the Attica Region, etc.</td>
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<td>2</td>
<td>Informing the residents/individuals of West Attica for measures to protect their property in West Attica from floods or other natural disasters (e.g. raising structures, construction of retaining/supporting walls or embankments) with the provision of engineers for consulting services.</td>
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<td>3</td>
<td>Informing all stakeholders (craftsmen, entrepreneurs and their employees) of West Attica region for the flood prevention-protection measures and other natural disasters (e.g. construction of retaining walls or embankments, facilitation of evacuation in certain areas when needed), with workshops, collaboration with representatives industries, issuing instructions, etc.</td>
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Establishment of psychological and counseling support centers to individuals affected by the disaster. Special gravity and care should be given to the West Attica region dwellers who lost intimate persons e.g. relatives during the flood. The proper support should also be given to those who witnessed the loss of their property completely.

Establishment of psychological and counseling support centers in regional schools emphasized on the psychological support of students who have undergone the ordeal of a natural catastrophe.
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<table>
<thead>
<tr>
<th>Business objective 4: Forest environment management</th>
<th>Strategic objective 3: Development</th>
<th>Operational objective 1: Financial support</th>
<th>Operational objective 2: Infrastructure development</th>
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<tr>
<td>4. Review and improvement of flood disaster management plans in West Attica (formulation of disaster scenarios, review of institutional framework, role of first and second-degree local authorities and other stakeholders). Further specialized training of the human resources of the public organization/agents involved in the response to flood control &amp; emergencies and documentation of the equipment needed to cope with such an extreme phenomenon.</td>
<td>4. Information and awareness campaigns towards dwellers and business organizations for the forest protection areas with workshops, brochures/leaflets, speeches, excursions for educational purposes to forest areas.</td>
<td>1. Submission of a proposal to the central public administration for the provision of subsidy and tax reductions exemptions for households to be granted. Call of interest for participation in NSRF 2014-20 period programs, focused on sustainable SMEs (Small and Medium-Sized Enterprises), aiming growth achievement in medium and long-term period.</td>
<td>3. Introduction of all infra-structure suitable for the utilization and exploitation of renewable energy sources (wind turbines, photovoltaics) through the right energy investments.</td>
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<td>5. Encouragement of the voluntary movements and initiatives at local/regional level and developing a master plan for its employment in emergency response procedures when floods or other natural phenomena occur. Development of a collaboration network with EU Institutions under the new RescEU program with other EU Member States to exchange former experience acquired and identify opportunities for exchanging available material resources (if required).</td>
<td>5. Launching projects to deal with soil erosion in forest areas. Implementation of reforestation projects of forest areas that need rehabilitation. Development of a master plan for the tourism development (ecotourism) and action for local flora and fauna preservation.</td>
<td>2. Redefining the industrial zone resulting from the regulatory plan “Athens 2014” and review of predefined land use areas.</td>
<td>4. Construction and redesign of wastewater treatment plants.</td>
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<td>6. Motivation of domestic civil protection bodies to exchange former experience acquired and identify opportunities for exchanging available material resources.</td>
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<td>3. Preparation of a study for the possibility of creating cooperatives.</td>
<td>5. Improvement of the road and railway network in cooperation with the Ministry of Public Works and Infrastructure.</td>
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<td>4. Examining the possibility of hiring staff (through programs) to meet needs and stimulate employment. Conducting conferences to consolidate the cooperation with the involved bodies (associations of industrialists, craftsmen, traders and workers) and exchange of proposals.</td>
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</table>
### Business objective 3: Cultural upgrade

1. Development of closer cooperation with cultural associations.
2. Cultural events (theatrical performances, cinemas).
3. Promoting the project of Eleusis as the next “cultural capital of Europe”, and acting as a springboard for local cultural renaissance.
4. Promotion of the archeological site and the cultural heritage of the area by holding events.
5. Consolidation of cooperation with the Ministry of Tourism for the promotion of cultural tourism and implementation of actions.
6. Stimulation of the educational and training level by carrying out educational actions.
7. Startup of an experimental school.
8. Expansion of fire/flood works.

### Operational objective 4: Environmental protection/upgrading

1. Expansion of fire/flood works.
2. Efficient management of solid waste & wastewater through extensive sewerage and drainage network and wastewater treatment plants and sanitary landfilling, in accordance with the principles of “green” development.
3. Coordinated use of sanitary landfill sites and integrated recycling and reuse programs.
4. Reduction of CO₂ emissions and suspended particles through right policies, in cooperation with the Ministry of Environment.