Policy uptake in climate change adaptation related to a LIFE project in Cyprus

Department of Environment

Ministry of Agriculture, Rural Development and Environment

Introduction

Project's Name:

CYPADAPT - Development of a national strategy for adaptation to climate change adverse impacts in Cyprus (LIFE10ENV/CY/000723)

Area of implementation: Cyprus

Project Budget: 1.358.847,00 €

EC Funding: 678.423 € (49,9% of Total Project Budget)

Duration: 31 months

Start date: 01/09/2011, **End date:** 31/03/2014

Introduction

Project's partners

Coordinating beneficiary:

- Department of Environment, Ministry of Agriculture, Natural Resources and Environment of Cyprus (MANRE).

Associated beneficiaries:

- National Technical University of Athens (NTUA),
- National Observatory of Athens (NOA).

Introduction

The CYPADAPT main aim was to strengthen and increase Cyprus adaptive capacity to climate change impacts through the development of a National Adaptation Strategy.

The project contributed to the realisation of the objectives of the European Climate Change Programme (ECCP II) to promote adaptation. It also promoted the implementation of various sector-specific EU directives and policies, such as the Water Framework Directive.

The following were the specific objectives that CYPDAPT accomplished:

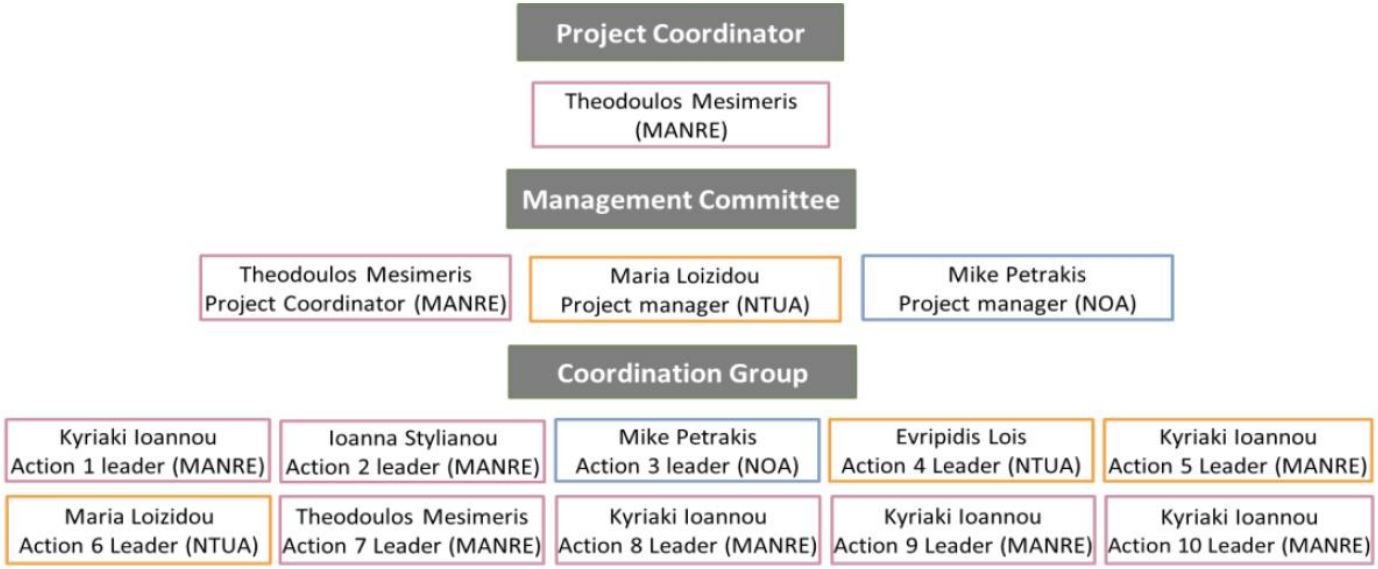
- outline knowledge about current climate variations,
- describe future changes projected for the 21st century,
- characterise adaptive capacity to cope with present-day climate,
- provide estimates of potential impacts under future climate change,
- assess the relative vulnerability of different systems, sectors or communities to climate change,
- propose appropriate measures for adapting to climate change.

Management System

The Following Groups/Committees were created for the successful implementation of the project actions:

- Management Committee,
- Coordination Group,
- Coordination Steering Committee and
- Thematic Steering Sub-Committees.

The project managers of each partner formed the Management Committee, the action managers formed the Coordination Group while the Coordination Steering Committee and the Thematic Steering Sub-Committees consisted of representatives involved in the eleven Cypriot policy areas, considered to be affected by climate changes.



Management System

The Steering Committees promoted more active stakeholder involvement during the project, resulting in the wider dissemination level of the project, in capacity building and in the successful implementation of the project.

The synthesis of the Steering Committee is considered quite representative, as it includes members from several departments of the Ministries in Cyprus as well as from academic institutions, environmental research institutes and environmental NGOs.

Management System

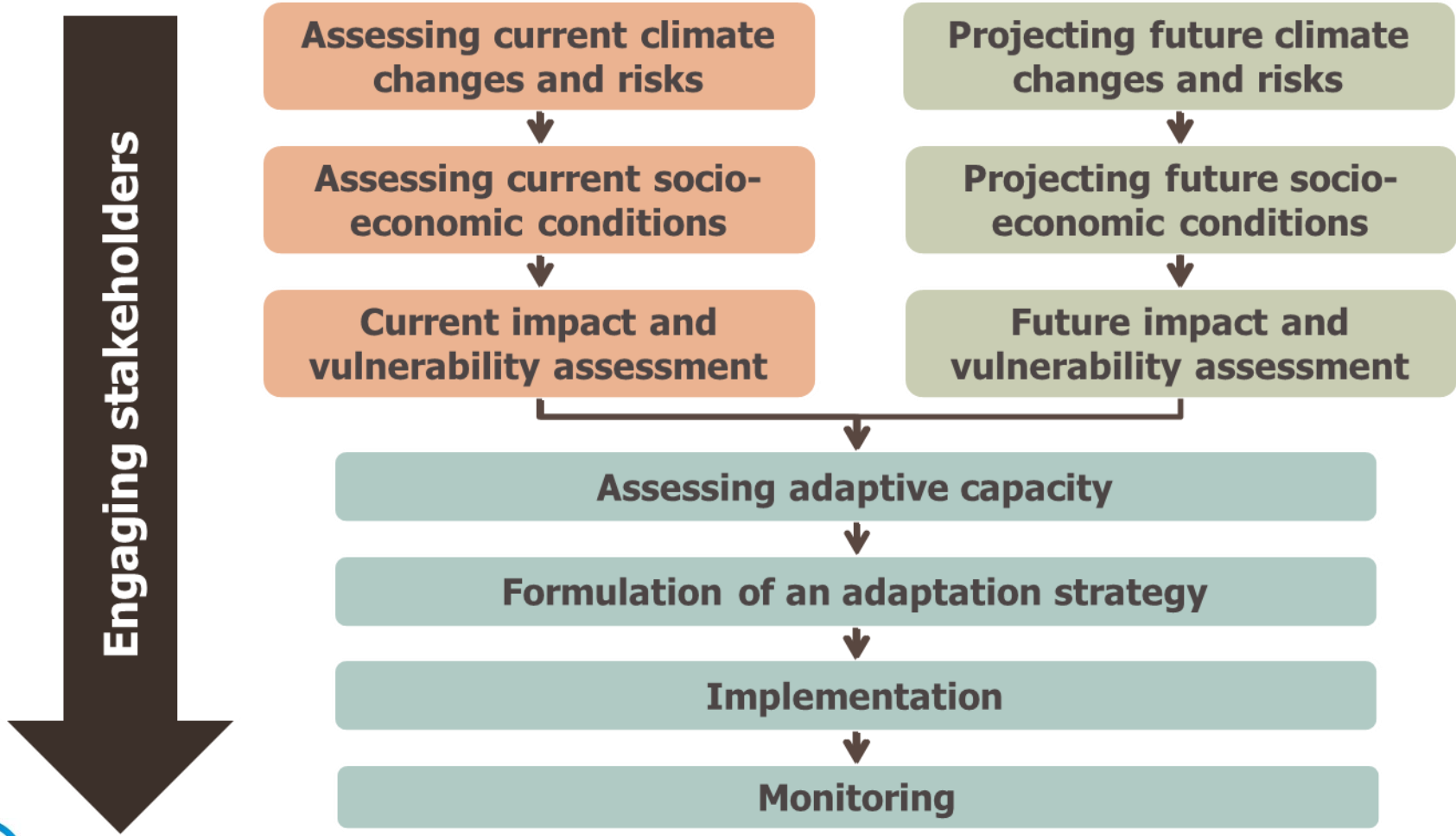
Name	Thematic Group	Entity
Gianna Economidou (thematic coordinator)	Water resources	Water Development Department, Ministry of Agriculture, Natural Resources and Environment
Nicholas Kathijotes (deputy thematic coordinator)	Water resources	Cyprus University of Technology (CUT)
Anna Savvidou (thematic coordinator)	Biodiversity	Department of Environment, Ministry of Agriculture, Natural Resources and Environment
Andreas Dimitropoulos (deputy thematic coordinator)	Biodiversity	Federation of Environmental and Ecological Organizations of Cyprus (NGO)
Marina Argyrou (thematic coordinator)	Fisheries	Department of Fisheries and Marine Research, Ministry of Agriculture, Natural Resources and Environment
Myroula Hajichristoforou (deputy thematic coordinator)	Fisheries	Federation of Environmental and Ecological Organizations of Cyprus (NGO)
Xenia Loizidou (deputy thematic coordinator)	Coastal areas	AKTI - Project And Research Center
Ioanna Constantinidou (thematic coordinator)	Coastal areas	Department of Environment, Ministry of Agriculture, Natural Resources and Environment
Georgia Hadjipavlou	Agriculture (Livestock)	Agricultural Research Institute (ARI)
Dionysia Fasoula	Agriculture (Plant production)	Agricultural Research Institute (ARI)
Christos Hadjiantonis	Agriculture (Soils)	Department of Agriculture, Ministry of Agriculture, Natural Resources and Environment
Andreas Poullikas (thematic coordinator)	Energy	Electricity Authority of Cyprus (EAC)
Marios Valiantis (transport coordinator, deputy energy coordinator)	Energy, Transport	University of Nicosia (UNIC)
Eleni Topouzi (deputy thematic coordinator)	Energy	Energy Service, Ministry of Commerce, Industry and Tourism
Phoeve Katsouri (thematic coordinator)	Tourism	Cyprus Tourism Organization (former general director)
Michalis Ierides (deputy thematic coordinator)	Tourism	Cyprus Marine Environment Protection Association (CY.ME.PA)
Theodoros Panagiotou (thematic coordinator)	Economy	Cyprus International Institute of Management (CIIM)
Constantinos Makris (thematic coordinator)	Public health	Cyprus University of Technology (CUT)
Edna Yamasaki Patrikiou (deputy thematic coordinator)	Public health	University of Nicosia
Vasiliki Giorgatsou (deputy thematic coordinator)	Infrastructure	Department of Town Planning and Housing, Ministry of Interior

Management System

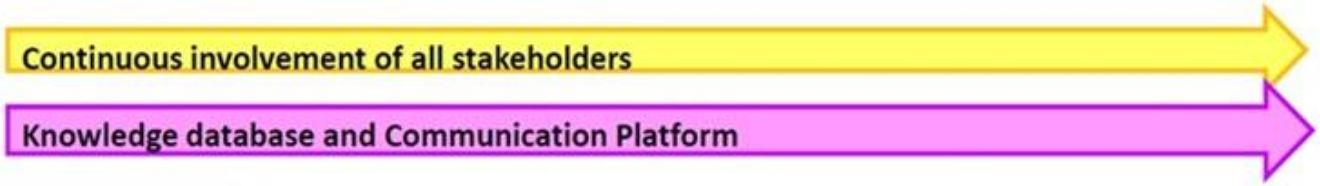
Overall, it can be said that the management system and working method set were efficient and effective as there was optimum cooperation between the project partners and the steering committee.

As a result, the project objectives and expected results were successfully achieved.

Methodology for adaptation



Methodology for adaptation



Project's Actions

ACTION 1: Preparatory actions (Duration: 6 months),

ACTION 2: Review of existing national adaptation plans worldwide and assessment of relative measures taken in Cyprus to adapt to climate change (Duration: 6 months),

ACTION 3: Prediction of future changes and responses due to climate change in Cyprus (Duration: 9 months),

ACTION 4: Development of a multi-criteria analysis tool for the elaboration of the adaptation plan for Cyprus (Duration: 9 months),

ACTION 5: Elaboration of a national adaptation plan for Cyprus (Duration: 6 months),

ACTION 6: Dissemination Activities (Duration: 31months),

ACTION 7: Management and Reporting to the EC (Duration: 31months),

ACTION 8: Networking with other projects (Duration: 31months),

ACTION 9: Monitoring and Evaluation of the project progress (Duration: 31months),

ACTION 10: After-LIFE Communication plan (Duration: 3 months).

Action 4: Development of a multi-criteria analysis tool for the elaboration of the adaptation plan for Cyprus

Activity 4(b): Development of a multi-criteria analysis tool for the selection of the most appropriate set of adaptation options. Implementation for the case of Cyprus

- Use of the MCA tool for the prioritization of the alternative adaptation options applied worldwide recorded in the CYPADAPT database.

Action 5: Elaboration of a National Adaptation Plan for Cyprus

Activity 5(a): Elaboration of a National Adaptation Plan for Cyprus

- The output of the multi-criteria analysis will be used for the preparation of a draft adaptation plan for Cyprus,
- Stakeholders will evaluate the adaptation options proposed by the MCA tool on the basis of their contribution to climate change adaptation, the potential barriers for their implementation, the cost effectiveness and viability,
- Selection of a set of measures that will be incorporated in the National Adaptation Plan for Cyprus,
- Distinction between urgent and less urgent policies that address the current adverse impacts of climate change (based on projected impacts),
- Development of a draft adaptation plan,
- Public consultation for a period of two months,
- Submission of the revised adaptation plan for endorsement to the Parliament.

CCRA – Risk Assessment Study

The CCRA gives an assessment of potential impacts (opportunities and threats) from climate change, focusing on how climate risks are likely to manifest themselves over the 21st century in the absence of action.

For the 2016 **Evidence Report**, the Department of Environment produced a focused report that sought to address the following issues:

- Assess climate risks in the light of methods of assessment and knowledge of climate change impacts,
- A fuller assessment of how climate interacts with socio-economic factors and how these drivers of risk might change in the future, for example economic growth; population change; land-use change,
- How the effects of adaptation actions are likely to alter risk levels,
- Assess the magnitude of impact and the urgency of action needed for different threats and opportunities, as well as developing an understanding of the possible net effect of different risks acting together,
- Assess the uncertainties, limitations and confidence in the underlying evidence and analysis for different risks.

Adoption of the National Adaptation Plan

The National Adaptation Plan of Cyprus has been adopted by the Ministerial Council in May 2017. It constitutes the framework of action for the effective preparation and proofing of the country against the observed and expected changes in climate.

The Adaptation Plan foresees approximately 250 adaptation measures, actions and practices for each of the eleven policy areas of Cyprus:

Conclusions and Findings of Life CYPADAPT and Risk Assessment Study

- Cyprus is already affected by climate changes and their adverse impacts in several sectors of its economy.
- During the last century it was observed that the climate of the island changed with precipitation reducing at a rate of 1mm per year, where the mean temperature increased by 0,5°C.
- Extreme climatic phenomena especially droughts are more frequent than before, with droughts causing water shortage and scarcity, and adverse effects on the economy, the social life and the environment.
- Climate change is expected to lead to further reduction of precipitation and temperature increase in the coming years which will result in higher evaporation and drier conditions.
- The demand for water will increase with the increase in temperature and particularly crop water demand. With growing dependence on air conditioning, frequent heat waves during summer could result in increased demand for energy production and even cause loss of life if power supplies fail.
- The coastal zone of Cyprus is considered to be a valuable and vulnerable area. This zone, in which most urban development and economic activity takes place, covers 23% of the total country's area, 50% of total population as three out of four of Cyprus main cities and 90% of the tourism industry are located by the coastline. Moreover, a great percentage of the island's 'natural beauties' is also located near coastal areas.

Measures for Water

- Maintenance and repair of the water delivery systems and related infrastructure,
- Control and prevention of water demanding requirements in all areas with insufficient water resources (e.g. golf courses, tourist facilities, water consuming crops),
- Enhancing the efficient use of water in buildings, agriculture and industry,
- Reusing treated liquid urban origin waste only after rigorous testing of the quality / suitability for specific locations,
- Periodic reviews of progress and priorities and adapting the objectives, means and resources of water policy,
- Extension of the use of water flow meters,
- Awareness / information campaigns,
- Utilization of rainwater (collection in a separate Network and special facilities),
- Effective water pricing by applying punitive provisions particularly in areas with the highest consumption (agriculture, tourism).

Future Steps

- By adopting the adaptation strategy we will proceed to the implementation phase.
- The foreseen monitoring team will be responsible for periodically re-evaluating the level of impact, adaptive capacity and vulnerability of Cyprus to climate change.
- The adaptation strategy will be examined periodically for revision based on the monitoring findings.
- Integrated Project (IP).

Thank You For Your Attention

More information on the project available at: http://cypadapt.uest.gr

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