SUPPLUMENTARY MATERIAL

Protection Policies for Tourism	Are you aware of its existence?		Is it already implemented in Sitia?		Is it effective?	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**
Development of bioclimatic facilities in tourist areas e.g., use of "green" materials at the construction of new buildings and at renovations, vertical gardens etc.						
Energy upgrade of tourist areas buildings (thermal insulation, replacement of frames and lights, upgrade of air-conditioning system etc.)						
Actions to improve the visitor conditions of the archeological sites and monuments of the Region of Crete during periods of very high temperatures.						
Development of communal green areas in tourist areas to deal with the distress of visitors. Emphasis on specialized information on thermal comfort aimed at tourists / visitors, with a consequence of increasing the value of the tourism product. It is proposed to choose appropriate plants to avoid increased exposure of humans to allergens of natural origin.						
Creation of grant mechanism in case of disasters from extreme phenomena.						

Table S1. Questionnaire: Gaps identification of policies in Tourism sector.

Protection Policies for Biodiversity	Are you aware of its existence?		Is it already implemented in Sitia?		Is it effective?	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**
Climate change impact assessment study on landscapes of particular natural beauty and other areas/areas of landscape protection and drawing up an action plan for their protection if necessary.						
Strengthening of ecosystem services (protection actions, sustainable management e.g., timber, soil, etc.).						
Design a study to model the mobility of invasive foreign species and develop a monitoring system for their early detection.						
Implementation of targeted actions at regional level to inform and raise awareness about the adaptation of biodiversity to climate change. Indicative conferences are organized in schools, universities and municipalities.						

Table S2. Questionnaire: Gaps identification of policies in Biodiversity sector.

Protection Policies for Agriculture/Livestock farming	Are you aware of its existence?		Is it already implemented in Sitia?		Is it effective?	
	Yes	No	Yes	No	Yes	No
Providing incentives for farmers to implement closed hydroponic systems.						
Participation of the Region in research programs (LIFE, Horizon, etc.) for the pilot implementation of climate change adaptation measures, in selected agricultural species of economic importance for the Region.						
Carry out information actions, workshops, training seminars, by all appropriate means (e.g. media), to farmers and the relevant bodies and services of the Region of Crete, for the effects of climate change in the agricultural sector, the cultivation techniques suitable for the new climatic conditions of the Region, the resistant varieties to high temperatures, the sustainable methods of irrigation and the avoidance of salinization in low-altitude crops, issues of erosion and sustainable management of soil resources, etc.						
Incentives to farmers to implement low-input production systems (e.g. Organic Farming, Integrated Production Management Systems).						
Develop and strengthen existing genetic material banks for the storage of indigenous genetic material.						

Table S3. Questionnaire: Gaps identification of policies in Agriculture/Livestock farming sector.

Protection Policies for Water Resources	Are you aware of its existence?		Is it already implemented in Sitia?		Is it effective?	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**
Implementation of a network to monitor the effects of climate change on the main groundwater bodies and reservoirs of the Region of Crete (development of a telemetric network for the continuous measurement of rainfall, level, and supplies in the most important water systems of the Region). It is proposed to explore the possibility of including it in the existing National Monitoring Network on Water Quality and Quantity.						
Maintenance, repair, and modernization of the water supply networks of the Region of Crete. Development of "smart" networks and installation of "smart" hydrometers.						
Construction of new Sewage Treatment Plant (STPs) or upgrading of existing ones, so as to result with the treatment of water of suitable quality for irrigation of green areas and specific crops, for enrichment of Underground Water Systems (UWS) etc.						
Control of the exploitation of groundwater.						
Establishment of a protection zone for significant groundwater abstractions.						
Information campaigns on the impact of climate change on water resources and best water-saving practices. Updates on the applicability of treatment and recycled water reuse methods to different uses. Encourage changes in consumption patterns and attitudes.						

Table S4. Questionnaire: Gaps identification of policies in Water resources sector.

Risk assessment – Flood - Drought

How vulnerable do you consider different socio-economic groups, physical infrastructure and the environment to flooding incidents?

Your answers will help gather additional data for the analysis and identification of areas vulnerable to flooding. Identifying potential impacts is critical to developing risk reduction and mitigation strategies.

Category	Flood			Drought		
	Very likely	Likely	Unlikely	Very likely	Likely	Unlikely
Impacts on the natural world and the environment						
Building infrastructures						
Urban buildings						
Monuments - Cultural heritage						
Critical assets						
Schools						
Hospitals						
Transport infrastructures						
Ports						
Airports						
Network infrastructure - Vital services						
Water supply - Sewerage						
Energy						
Telecommunications						
Population						
Vulnerable groups (children)						
Vulnerable groups (elderly)						
Vulnerable groups (disabled)						
Socio-economic assets						
Municipal organization						
Social services						
Understanding risk						
Environmental values						
Support in environmental policies						
Energy poverty						
Access to environmental information						
Trust in public bodies						
Participatory processes						
Access to public infrastructures (healthcare/ education)						
Public infrastructure service levels						
Social impacts						
Risk understanding						

Environmental values						
Support in environmental policies						
Energy poverty						
Access to environmental information						
Trust in public bodies						
Participatory processes						
Access to public infrastructures (healthcare/ education)						
Public infrastructure service levels						

Table S5. Questionnaire: Risk assessment of environmental and societal impacts of droughts and floods.

Sector affected	Policy	Measures
Tourism	Adaptation of tourist facilities to climate change	Development of bioclimatic facilities in tourist areas e.g., use of “green” materials at the construction of new buildings and at renovations, vertical gardens etc.
		Optimization of thermal comfort during summer season, water saving and reuse, installation of RES and utilization of geothermal energy (heat pumps) to cover electricity demands etc.
		Energy upgrade of tourist areas buildings (thermal insulation, replacement of frames and lights, upgrade of air-conditioning system etc.)
	Support for tourism adapt to climate change and to deal with extreme phenomena.	Preparation of regional strategy and action plan to adapt tourism to climate change. Specifying of the need to shift the tourism product over short -term horizon (period by 2040).
		Measures for the development of special and alternative forms of tourism (eg cultural, ecotourism) of the Region of Crete.
		Information, advertising, and tourism promotion actions planning. Briefing on the differences that arise in the tourism product due to climate change and promotion of the tourism sector after adapting it to the new conditions resulting from climate change.
		Administrative support, organization and awareness of climate change in tourist destinations.
		Use of communication technologies to spread information in cases of extreme phenomena and to disseminate visitors' safety guidelines.
		Creation of grant mechanism in case of disasters from extreme phenomena.
		Development of communal green areas in tourist areas to deal with the distress of visitors. Emphasis on specialized information on thermal comfort aimed at tourists / visitors, with a consequence of increasing the value of the tourism product. It is proposed to choose appropriate plants to avoid increased exposure of humans to allergens of natural origin.
		Actions to improve the visitor conditions of the archeological sites and monuments of the Region of Crete during periods of very high temperatures.
Agriculture	Monitoring of critical parameters to assess potential threats to the agricultural sector.	Recording the level of desertification of the Region's territories, draw up a soil map of an appropriate scale and updating it when necessary.
		Prediction and improvement/strengthen the system of recording the occurrence of zoonoses and plant pathogens in the Region of Crete, aiming at the early detection of new threats due to climate change, as well as the development of preparedness systems for addressing them.
	Climate change risk management. Such disasters include damage from extreme weather events, e.g., high temperatures, drought, floods, sea level rise, etc.	Publication of a Guide by the Region including areas of increased risk, the types of potential risks, the ways of relocation of the exploitation and the possibilities for relocation
		Enhancing the protection of crops against extreme weather events (heat, frost, floods, windstorms, etc.) through modern agricultural insurance techniques. In modern techniques of insurance against adverse weather events, the correlation of weather with losses is approached by statistical methods (identification of areas most vulnerable to severe weather events as well as the crops most affected, depending on the amount of grants awarded and their frequency for a long and continuous period), but also in more dynamic ways, such as the use of new technologies (e.g. satellite imagery and agro-meteorological models).
		Providing economic incentives for the relocation of farms as well as livestock farms and productive animal farming units from high -risk areas in low -risk areas.
		Establishment of a mechanism by the Region setting out the responsibilities of the services, the conditions for inclusion in the relocation program of the holding and financial incentives.
		Development of an early warning system in the Region of Crete for extreme events (floods, high temperatures, fires, etc.). For the alerts, the system can use location- and population-based communication technologies, mobile phones, social media, etc.

		Temporary water storage projects (reservoirs, rehabilitation of wetlands, etc.), upstream of agricultural and livestock areas at risk of flooding (e.g., within Potentially High Flood Risk Zones (PHFRZ)) and the channeling of flood waters during the winter period for use in agriculture and livestock.
		Upgrading and extension of Local Land Improvement Organizations (LLIO) in the Region of Crete. Incentives, replacement, and modernization of irrigation systems. It is proposed that when modernizing the networks, 'smart' irrigation networks should be developed, and more efficient systems be adopted.
		Implementation of an appropriate irrigation water pricing policy (e.g. higher price on overconsumption).
		Creation of a grant mechanism to professional breeders for income losses due to extreme weather.
	Establishment or improvement of existing systems of recording critical parameters based on new knowledge about the effects of climate change on the components of the productive system for livestock farming	Preparation of the study of animal living conditions, microbial and non - pathogenic factors that cause disease in animals and proposals/measures to effectively address them.
		Implement measures to deal with microbial and non-bacterial agents causing disease in animals as well as disease vectors. As an indication, the protection of productive animals from the above factors can be achieved by preventive hygiene measures and/or appropriate treatment. Strengthen protection against parasites and diseases.
		Carry out a study on the mechanisms for the response of animals to extreme temperatures in terms of metabolism, physiology and in general their health (e.g. food consumption, liver function, immune response, mortality, infectious diseases, resistance to heat stress, etc.) as well as reproductive (estrous onset, conception rates, oocyte growth rate, embryo-fetal mortality, etc.) and capacity (milk production, milk chemical composition, growth rate, etc.) and measures to address these.
		Provide incentives to adapt housing and managing productive animals under the new environmental conditions shaped by climate change so that there is no negative effect on the well -being of aggravated animals.
		Participation of the Region in research programs and broader partnerships with research organizations to adapt production systems to new data so that they are technically feasible, economically viable, environmentally acceptable and without negative effects on animal welfare. Further research on the mechanisms of animal responses to climate change, the occurrence of zoonoses, etc.
		Providing incentives to improve outdoor conditions in livestock farming, indicative of planting tree plants, shelters and other ways in in the premises of plants and lairaging.
	Promotion to rural professionals, livestock farmers, the relevant bodies, and services of the Region of Crete the knowledge of the effects of climate change on agriculture and livestock farming and innovative actions to address them.	Carry out a specialized study to investigate the effects of climate change on agriculture at the level of the region, focusing on crops of economic importance, Products of Designation of Origin (PDO) and Products of Geographical Indications (PGI) and proposing appropriate adaptation measures. Regarding the adaptation measures to be proposed, at least the change of cultivation practices, their displacement within the island of Crete (e.g., shifting to higher altitudes), and varietal change and crop restructuring/change.
		Participation of the Region in research programs (LIFE, Horizon, etc.) for the pilot implementation of climate change adaptation measures, in selected agricultural species of economic importance for the Region.
		Carry out information actions, workshops, training seminars, by all appropriate means (e.g. media), to farmers and the relevant bodies and services of the Region of Crete, for the effects of climate change in the agricultural sector, the cultivation techniques suitable for the new climatic conditions of the Region, the resistant varieties to high temperatures, the sustainable methods of irrigation and the avoidance of salinization in low-altitude crops, issues of erosion and sustainable management of soil resources, etc.
	Promotion of the planning of the agricultural policy of the Region of	Integration of climate change adaptation actions into the Rural Development Program of the Region.

	Crete, based on the levels of vulnerability resulting from the Regional Adaptation Plan on Climate Change (RAPCC). It aims to adapt the agricultural sector of the Region to the new climatic conditions.	Incentives to farmers to implement low-input production systems (e.g. Organic Farming, Integrated Production Management Systems).
		Encourage farmers to manage land sustainably to reduce soil erosion.
	Changes in biological material and cultivation techniques. The action includes actions aimed at creating new varieties (excluding genetic modification) and adapting cultivation techniques to climate change.	Carry out a specialized study to explore the appropriate cultivation techniques for the Region of Crete.
		Participation of the Region in research programs for the pilot application of new (alternative) cultivation methods in selected species or geographical areas. For example, pilot restructuring of crops with drought-resistant species (e.g., carob tree).
		Study to identify the indigenous genetic material (varieties, etc.) suitable for cultivation in the Region of Crete under climate change conditions (e.g., material resistant to high temperatures, drought, etc.).
		Develop and strengthen existing genetic material banks for the storage of indigenous genetic material.
Biodiversity	Improvement of knowledge about the biodiversity of the Region of Crete and the impact of climate change on it and ecosystem services.	Empowerment of the relevant services. Provide the necessary means, including adequate staffing, ongoing staff training and the availability of the necessary scientific and technical tools and financial resources at regional and local level, so that competent services can properly plan and effectively implement measures to halt the loss of biodiversity due to climate change impacts in their area of competence (thematic or spatial). Facilitate access to environmental and climate information for public administration and local authorities to develop coherent and effective policies and interventions.
		Preparation of specialized studies (fauna and flora) to further analyze the impact of climate change on the ecosystems of the Region of Crete and to identify the most vulnerable habitats/habitats (terrestrial and aquatic) and species of flora and fauna, as well as the role of ecosystem services in tackling and adapting to climate change in Crete.
		Specialized studies to protect the most vulnerable habitats and biotopes and fauna and flora species of the Region of Crete from the effects of climate change, focusing on vulnerable endemic, endangered and protected species. Carrying out a specific study to protect the habitats of the Phoenix theophrastii palm tree.
		Climate change impact assessment study on landscapes of particular natural beauty and other areas/areas of landscape protection and drawing up an action plan for their protection if necessary. Link to the LIFE-IP AdaptInGR project and the LIFE Adapt2Clima project.
	Protection and enhancement of biodiversity to adapt to climate change and to help mitigate its impacts. The Action aims to strengthen the elements of biodiversity so that they can effectively respond to climate change.	Integration of the climate change parameter and the results of the RAPCC in the development of the Natura 2000 Network Areas of the Region of Crete, which are expected to be developed in the framework of the Specific Environmental Studies (SES) that are ongoing.
		Strengthen the ecological coherence of the Natura 2000 Network of the Region of Crete (planning and development of ecological routes between the areas of the Network, to facilitate the movement of vulnerable species to more suitable habitats for them, due to climate change).
		Land-use arrangements to halt the further decline and fragmentation of natural ecosystems and the loss of habitats of rare, threatened, or protected species of flora and fauna.
		Strengthening of ecosystem services (protection actions, sustainable management e.g., timber, soil, etc.).
		Promoting biodiversity conservation measures (strengthening the vulnerabilities of biodiversity in their natural environment through the creation of in situ reserves and ex situ preservation thereof through the establishment of seed banks and genetic material) with priority to rare, endangered, and locally restricted species. Investigation for collaboration with existing seed banks and genetic material. Proposal to exploit the results of relevant European projects or other initiatives such as the CRETAPLANT project “Pilot Network of Micro-Reserves of Plants in Western Crete”.

		Take action to maintain the ecological supply of river water bodies (WB) as well as to maintain ecological potential in highly modified water bodies (HMWB), with appropriate prioritization (e.g., development of a specific plan by HMWB and its monitoring program).
		Protection and enhancement of coastal ecosystems as a key measure of protection against sea level rise, salinization of groundwater and extreme weather events.
	Monitoring the mobility of invasive foreign species in the whole ecosystems of the Region of Crete.	Design a study to model the mobility of invasive foreign species and develop a monitoring system for their early detection.
		Conduct a species interaction study and develop a monitoring system for early diagnosis of diseases and epidemics.
		Develop a system for monitoring species and ecosystem functions of interest to record the response of biodiversity elements to climate change over time.
	Information and awareness-raising actions.	Implementation of targeted actions at Regional level to inform and raise awareness about the adaptation of biodiversity to climate change. Indicative conferences are organized in schools, universities and municipalities.
Water	Sustainable management of the region's water resources in relation to agriculture. The action aims at the efficient and rational use of irrigation water and at adapting the agricultural sector to the new climate conditions where drought and water scarcity are expected to occur more frequently and more intense.	Carry out a study on the application of crops in the Region of Crete with low water requirements.
		Encourage farmers to use less water-intensive and even dry crops. For example, through government grants to maintain a good agricultural income and to support the practice of land farming as a main occupation.
		Design study for the implementation of the appropriate program and irrigation systems based on crops and their real water needs as well as local conditions and irrigation water availability. Strengthening and expanding the area of the Region to issue an irrigation report for all types of interest crops.
		Incentives to farmers to implement closed hydroponic systems.
		Maintenance of existing and improvement-replacement where necessary of irrigation networks of the Region to reduce water losses during transport, to reduce the waste of irrigation water. It is proposed that when modernizing the networks, 'smart' irrigation networks should be developed, and more efficient systems be adopted.
		Use of treated water from urban wastewater treatment plants in agriculture.
		Support for farmers in disadvantaged areas with an increased compensatory allowance with the condition of implementing adaptation measures.
		Establishment of a regulation to manage the high concentration of salt in irrigation water in coastal agricultural areas (salinized underground waters) and in areas with increased salinity (gypsum waters).
	Actions to assess the impact of climate change on the water resources of the Region of Crete.	Carry out a specialized study to identify the most vulnerable water systems in the Region of Crete, to assess the risk of water resources being unavailable and to investigate the effects of water salinization at regional level due to the expected climate changes. Development of a specific plan of measures to protect vulnerable aquatic systems for adaptation to climate change regarding the risk of unavailability of water resources (surface and ground) and mitigation measures.
		Implementation of a network to monitor the effects of climate change on the main groundwater bodies and reservoirs of the Region of Crete (development of a telemetric network for the continuous measurement of rainfall, level, and supplies in the most important water systems of the Region). It is proposed to explore the possibility of including it in the existing National Monitoring Network on Water Quality and Quantity.
	Water saving and efficiency actions.	Promote water saving in all sectors and uses (agriculture, tourism, industry, housing). For example, by installing water saving equipment in residential and public buildings, recycling rainwater for irrigation, financial incentives for recycling water in industry, promotion, and support of pilot projects.
		Maintenance, repair, and modernization of the water supply networks of the Region of Crete. Development of "smart" networks and installation of "smart" hydrometers.

		Installation of low-water equipment in the public buildings of Crete. Incentivize the installation of adequate low-water equipment in private enterprises and in the domestic sector (e.g., provision of free equipment, subsidies, tax rebates, etc.).
		Optimization of existing surface water storage methods (e.g. dams) and new generation (e.g. tanks), if necessary, in particular by replacing pumps during low-flow or no-flow periods.
	Promote the reuse of treated urban wastewater.	Construction of new Sewage Treatment Plant (STPs) or upgrading of existing ones, so as to result with the treatment of water of suitable quality for irrigation of green areas and specific crops, for enrichment of Underground Water Systems (UWS) etc.
		Encourage the reuse of treated urban wastewater in agriculture, industry, tourism and the domestic sector. For example, the irrigation of urban green areas, hotel units etc. Information measures are needed to implement the measure.
	Development of activities and land use compatible with locally available water resources.	Control of aquatic activities, as a priority in areas with insufficient water resources, for possible measures (e.g., large tourist facilities, water-intensive crops).
		Re-inspection licensed water abstractions in water bodies of the Region of Crete threatened due to climate change.
		Control of the exploitation of groundwater.
		Introduction of incentives and disincentives for the rational use of groundwater resources (indicative of grants, fines, etc.).
		Develop a plan for the application and use of broader plant associations in reforestation to limit competition in territorial water and application economy.
	Integration of the impacts of climate change into the water management planning of the Region of Crete.	Integration of vulnerability to climate change and its impact on the entire water management planning of the Region of Crete (River Basin Management Plans (RBMP), Masterplans, drought plans, water safety plans, etc.). Complementing the water management planning of the Region of Crete as well as the review of existing plans.
		Establishment of a protection zone for significant groundwater abstractions.
	Actions to inform the public, public bodies, and enterprises about the impact of climate change on water resources and how to deal with them.	Information campaigns on the impact of climate change on water resources and best water-saving practices. Updates on the applicability of treatment and recycled water reuse methods to different uses. Encourage changes in consumption patterns and attitudes.
	Knowledge and recording of the risks of climate change in the coastal zone of the Region of Crete.	Specialized study to investigate the risks and impacts of climate change in the coastal zone of the Region of Crete and in individual uses. Establishment of risk areas of an appropriate scale and categorization by type of risk.
		Preparation of a study and drawing up a plan for the "Integrated Coastal Zone Management (ICZM) Management of the Region of Crete".
		Establishment of a mechanism for continuous monitoring of the coastal areas of the Region of Crete with emphasis on the most vulnerable areas.
	Preparation and implementation of an integrated coastal zone management plan for the Region of Crete, incorporating climate change.	Establishment of a coastline for the Region of Crete and ensuring its continuous update.
		Integration of protection zones between the coastline and the residential zone in the new spatial plans (Regional Framework of Spatial Planning and Sustainable Development (RFSPSD), General Urban Plan (GUP), Open City Planning and Housing Organization (OCPHO)) and antiquities protection plans.
		Set incentives to avoid residential and business development in coastal areas facing serious risks, up to and including a ban on land use (where necessary) in coastal areas threatened. Incentives to relocate existing actions of coastal areas at increased risk.
		Completion of limit line of the foreshore and beach.
	Risk prevention and response actions.	Examination of the necessity of gradual or immediate relocation of buildings and facilities from high -risk areas to safer areas, providing appropriate grants and incentives.

		Studies on protection projects (mild interventions are prioritized) in the most vulnerable coastal areas (artificial vegetation cover along the coastline, artificial coastal replenishment, breakwaters, installation of bottoms, removal of river interventions where possible, etc.). The studies also include the upgrading of existing projects, where appropriate. It is proposed to give priority to nature-based solutions. It is also proposed that priority be given to coastlines of interest for the tourism sector and for the protection of coastal ecosystems.
		Implementation of protection projects.
Climate Disasters	Actions to address the effects of climate change on river flooding.	Carry out a specialized study to identify and demarcate the areas of the Region of Crete most threatened by flooding. This study will include hydraulic studies of an appropriate scale of the defined high flood zones (Potentially High Flood Risk Zones (PHFRZ)) in relation to existing activities and projects (e.g., tourism activities, hotel complexes, roads, urban fabric, etc.) and the expected impacts due to climate change.
		Specialized studies to protect the most vulnerable areas (flood defenses, anti-erosion measures, fund support etc.). Establishment of zones and riverbed protection measures.
		Immediate implementation of the proposed protection projects in the areas most at risk. It is proposed to prioritize nature-based solutions.
		Conservation and restoration of wetlands and riverbeds as natural flood protection.
		Construction of rainwater storage projects (or rehabilitation of wetlands where possible) in upstream areas where it is not possible to drain them safely (flood protection projects). It is proposed to give priority to nature - based solutions.
		Construction or extension of rainwater sewerage network, as a priority in the settlements of the Region of Crete located within Potentially High Flood Risk Zones (PHFRZ).
		Development of a telemetric network for the continuous measurement of rainfall, level, and supplies in the bodies of water of the Region which present the greatest risks.
		Implementation of innovative pilot actions on flood phenomena and exploitation of the results of existing pilot actions (e.g., flood protection projects). It is proposed that nature-based solutions should be adopted.
		Conduction of specialized implementation studies for further development of ecosystems in small wetlands after flood water diversion.
	Integration of climate change impacts into flood risk management planning in the Region of Crete.	Utilization of the results of the RAPCC during the review of the PHFRZ concerning the Region of Crete.
		Provide funding for the implementation of projects and cleanups in lowland and mountain water beds.
	Soil protection against erosion.	Studies to give a detailed indication of the implementation of anti-erosion projects. Demarcation of areas with a high degree of soil erosion, on an appropriate scale, and proposal for specific measures by region.
		Implementation of anti-erosion projects.
		Construction of horticultural works. Construction of carrier material and water dam barriers to normalize rainwater drainage, reduce erosion and floods as well as control of increased river and stream stereosupply. Installation of branches, where appropriate.
	Prevention and handling forest fires.	Study on the classification of forests according to fire risk and the definition of high-risk areas. The study will include an assessment of the vulnerability of the forest areas of the Region of Crete to climate change and proposals for their adaptation.
		Strengthening infrastructure to improve the fire protection of forests in the Region of Crete (e.g., fire-fighting zones, installation of additional water tanks, maintenance of existing forest roads and/or opening of new ones if required, etc.). Modernization of forest fire-fighting equipment. Implementation of the measure prioritized according to the vulnerability ranking by geographical area in the short term (2040).

		Annual planning and implementation of appropriate interventions (including actions related to traditional activities such as beekeeping, controlled grazing, etc.) for the reduction/removal of flammable biomass which is a main source of forest fire initiation and expansion.
		Installation of warning systems and development of fast and uninterrupted area evacuation software. Focus on areas with high traffic and restricted escape exits in the event of fire (e.g., gorges).
		Strengthen public information and awareness-raising activities on the protection of forests against fires.
		Implementation of pilot actions and exploitation of results of existing or new pilot actions.
	Restoration of fire-stricken forest areas of Crete.	Speed up the procedures for the restoration of the damaged burned areas to protect and stabilize the soil (e.g., sowing with suitable seed mixtures, after the outbreak of fire, at the beginning of the autumn season, combined with the laying of branches, to contain soil).
		Studies on the protection and restoration of the fire-ravaged forest areas of the Region. Implementation of the measure prioritized according to the vulnerability ranking by geographical area in the short term (2040). In the context of the studies, resistant to new climatic conditions forest varieties should be selected and broader planting links should be used to limit competition in soil water and application economy.
		Implementation of protection and restoration measures, based on studies carried out, prioritized according to the vulnerability ranking by geographical area in the short term (2040).
		Public information and awareness actions to attract volunteers for the implementation of reforestation of fire-affected areas. Indicative actions are proposed by schools and associations, with day trips for this purpose.
		More emphasis should be placed on prevention, as a more economical solution, ensuring accessibility, by limiting fuel by means of cultivation interventions and controlled grazing.
		Modernization of forest fire-fighting equipment, installation of warning systems and rapid and uninterrupted evacuation software, training to avoid human casualties and restoration of natural ecosystems.
		Growing forestry interventions, combined with controlled grazing to reduce the flammable biomass, main fire starting and expansion site.
		Cooperation with existing banks of indigenous genetic material to support local populations in abandoned farmland and / or strengthen existing grassland.
		Restoration of the fire-damaged forest areas of the Region of Crete, using indigenous genetic material where necessary.

Table S6. Policies and Measures for sectors of interest from Regional climate change adaptation plan of Crete (2022).

Tourism Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Limited/Indirect risk	Insignificant risk
Wind	×	Limited/Indirect risk
Heatwave	Significant risk	Significant risk
Frost	×	Insignificant risk
Snowfall	×	Insignificant risk
Sea-level rise	×	Significant risk
Flood	Significant risk	×
Fire	Significant risk	×
Coastal erosion	Significant risk	×
Landslide	Significant risk	×

Table S7. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Tourism Sector, regarding risk matrix.

Agriculture/Livestock farming Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Significant risk	Significant risk
Wind	×	Insignificant risk
Heatwave	Significant risk	Limited/Indirect risk
Frost	×	Limited/Indirect risk
Snowfall	×	Insignificant risk
Seawater rise	×	Significant risk
Flood	Significant risk	×
Fire	Significant risk	×
Coastal erosion	Insignificant risk	×
Landslide	Significant risk	×

Table S8. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Agriculture/Livestock farming Sector, regarding risk matrix.

Biodiversity Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Significant risk	Significant risk
Wind	×	Insignificant risk
Heatwave	Significant risk	Limited/Indirect risk
Frost	×	Insignificant risk
Snowfall	×	Insignificant risk
Seawater rise	×	Significant risk
Flood	Significant risk	×
Fire	Significant risk	×
Coastal erosion	Limited/Indirect risk	×
Landslide	Insignificant risk	×

Table S9. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Biodiversity Sector, regarding risk matrix.

Water resources Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Significant risk	Significant risk
Wind	×	Insignificant risk
Heatwave	Significant risk	Insignificant risk
Frost	×	Insignificant risk
Snowfall	×	Limited/Indirect risk
Seawater rise	×	Significant risk
Flood	Insignificant risk	×
Fire	Insignificant risk	×
Coastal erosion	Insignificant risk	×
Landslide	Insignificant risk	×

Table S10. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Water resources, regarding risk matrix.

Coastal infrastructure Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Significant risk	Insignificant risk
Wind	×	Limited/Indirect risk
Heatwave	Significant risk	Insignificant risk
Frost	×	Insignificant risk
Snowfall	×	Insignificant risk
Seawater rise	×	Significant risk
Flood	Significant risk	×
Fire	Limited/Indirect risk	×
Coastal erosion	Significant risk	×
Landslide	Significant risk	×

Table S11. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Coastal infrastructure, regarding risk matrix.

Urban fabric Sector		
Climate Change hazard	**Stakeholders' Perception**	**Crete's Regional climate change adaptation plan**
Drought	Significant risk	Insignificant risk
Wind	×	Insignificant risk
Heatwave	Significant risk	Limited/Indirect risk
Frost	×	Insignificant risk
Snowfall	×	Insignificant risk
Seawater rise	×	Significant risk
Flood	Significant risk	×
Fire	Significant risk	×
Coastal erosion	Significant risk	×
Landslide	Significant risk	×

Table S12. Comparison between stakeholders' perception and Crete's Regional climate change adaptation plan for the Urban fabric, regarding risk matrix.

Possible solutions	Correspondence with CRCCAP	Measures from CRCCAP
Construction of hotel units based on the most modern materials and standards of safety specifications in case of natural disasters.	×	-
Dam Construction. Establishment of river cleaning.	Partially	• Optimization of existing surface water storage methods (e.g. dams) and new generation (e.g. tanks), if necessary, in particular by replacing pumps during low-flow or no-flow periods. • Construction of horticultural works. Construction of carrier material and water dam barriers to normalize rainwater drainage, reduce erosion and floods as well as control of increased river and stream stereosupply. Installation of branches, where appropriate.
Organization and information of visitors.	✓	• Information, advertising, and tourism promotion actions planning. Briefing on the differences that arise in the tourism product due to climate change and promotion of the tourism sector after adapting it to the new conditions resulting from climate change. • Administrative support, organization and awareness of climate change in tourist destinations. • Use of communication technologies to spread information in cases of extreme phenomena and to disseminate visitors' safety guidelines.
The "greener" the accommodation is, the more visitors get.	✓	Development of bioclimatic facilities in tourist areas e.g., use of "green" materials at the construction of new buildings and at renovations, vertical gardens etc.
Necessary security elements.	×	-
Promotion of Irrigation & Wastewater treatment.	✓	• Upgrading and extension of Local Land Improvement Organizations (LLIO) in the Region of Crete. Incentives, replacement, and modernization of irrigation systems. It is proposed that when modernizing the networks, 'smart' irrigation networks should be developed, and more efficient systems be adopted. • Use of treated water from urban wastewater treatment plants in agriculture. • Encourage the reuse of treated urban wastewater in agriculture, industry, tourism and the domestic sector. For example, the irrigation of urban green areas, hotel units etc. Information measures are needed to implement the measure.

Fire prevention zones.	Partially	Strengthening infrastructure to improve the fire protection of forests in the Region of Crete (e.g., fire-fighting zones, installation of additional water tanks, maintenance of existing forest roads and/or opening of new ones if required, etc.). Modernization of forest fire-fighting equipment. Implementation of the measure prioritized according to the vulnerability ranking by geographical area in the short term (2040).
Protection of terraces (mainly in agriculture).	×	-
Water supply network	✓	Maintenance, repair, and modernization of the water supply networks of the Region of Crete. Development of "smart" networks and installation of "smart" hydrometers.
Reduction in the imprudent use of pesticides	×	-
Local farmers and producers training.	✓	Carry out information actions, workshops, training seminars, by all appropriate means (e.g. media), to farmers and the relevant bodies and services of the Region of Crete, for the effects of climate change in the agricultural sector, the cultivation techniques suitable for the new climatic conditions of the Region, the resistant varieties to high temperatures, the sustainable methods of irrigation and the avoidance of salinization in low-altitude crops, issues of erosion and sustainable management of soil resources, etc.
Financial and equipment-wise support for civil protection.	Partially	Modernization of forest fire-fighting equipment, installation of warning systems and rapid and uninterrupted evacuation software, training to avoid human casualties and restoration of natural ecosystems.
Reinforcement of the local Fire Department.	Partially	Modernization of forest fire-fighting equipment, installation of warning systems and rapid and uninterrupted evacuation software, training to avoid human casualties and restoration of natural ecosystems.
Artificial lakes/open tanks for irrigation.	Partially	Optimization of existing surface water storage methods (e.g. dams) and new generation (e.g. tanks), if necessary, in particular by replacing pumps during low-flow or no-flow periods.
Construction of tertiary (extra filtration) wastewater treatment.	×	-
Sewage-water reuse.	✓	Construction of new Sewage Treatment Plant (STPs) or upgrading of existing ones, so as to result with the treatment of water of suitable quality for irrigation of green areas and specific crops, for enrichment of Underground Water Systems (UWS) etc.
Use - management of rainwater in the urban fabric.	✓	Promote water saving in all sectors and uses (agriculture, tourism, industry, housing). For example, by installing water saving equipment in residential and public buildings, recycling rainwater for irrigation, financial

		incentives for recycling water in industry, promotion, and support of pilot projects.
Projects of placing reefs or breakwaters that will reduce the wave momentum on the coasts.	×	-
Building new dams to save water.	✓	Optimization of existing surface water storage methods (e.g. dams) and new generation (e.g. tanks), if necessary, in particular by replacing pumps during low-flow or no-flow periods.
Awareness from a young age about resource management.	Partially	• Implementation of targeted actions at Regional level to inform and raise awareness about the adaptation of biodiversity to climate change. Indicative conferences are organized in schools, universities and municipalities. • Strengthen public information and awareness-raising activities on the protection of forests against fires. • Public information and awareness actions to attract volunteers for the implementation of reforestation of fire-affected areas. Indicative actions are proposed by schools and associations, with day trips for this purpose.

Table S13. Comparison of stakeholders' possible solutions and measures in place.



Figure S1. Outcome of the 1st LC meeting: risk matrix and possible solutions.



Figure S2. 2nd LC meeting.