

The Expansion of the Contemporary Economic Role of Crete throughout its Extensive History

International Journal of Economics,
Business and Management Studies
Vol. 4, No. 1, 17-37, 2017
e-ISSN: 2226-4809/p-ISSN: 2304-6945



Corresponding Author

Magoulios George¹
Maniadis Metaxas Georgios²

¹Professor, Department of Accounting and Financial, Technological Education Institute of Central Macedonia (Greece)

²New York University, Classics/Fine Arts Department, USA

ABSTRACT

This article investigates the contemporary economic role of Crete through its history of many centuries. More specifically, it considers the effect of the natural, climatic and marine environment in the productive economic activity, in the international trade and its relations with its neighbors, as well as Crete's modern financial, developmental characteristics and its position in the Mediterranean, in Europe and the World. From the review of the relative, with the economy of Crete, bibliography, ranging from antiquity until today, as well as from the analysis of modern related quantitative data, it is realized that the basic elements that determine the economic identity and the position of Crete in the international environment during its extensive history are the ground and the products that it produces, the marine environment and the interconnections that it creates with the world, the climate, and the favorable conditions that it shapes for the flora and the fauna and its human resource, as this develops in the particular historical environment each time. These are the characteristics, along with the multiform and rich accumulated cultural reserve, which Crete can evolve and strengthen in the contemporary world so that it cures its disadvantages and most importantly so that it takes advantage of the developmental surplus of possibilities that it allocates. Crete has all the prerequisite conditions- productive and human resources, research and technological infrastructure, democratically programmed institutions- and allocates the initial conditions for a developmental take off, in the frame of flexible specialization, intelligent and viable growth.

Keywords: Crete, Economy, History, Economic role.

DOI: 10.20448/802.4.1.1.17.37

Citation | Magoulios George; Maniadis Metaxas Georgios (2017). The Expansion of the Contemporary Economic Role of Crete throughout Its Extensive History. International Journal of Economics, Business and Management Studies, 4(1): 17-37.

Copyright: This work is licensed under a [Creative Commons Attribution 3.0 License](https://creativecommons.org/licenses/by/3.0/)

Funding : This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

History : Received: 9 January 2017/ Revised: 29 January 2017/ Accepted: 10 February 2017/ Published: 24 February 2017

Publisher: Online Science Publishing

1. INTRODUCTION

This article is sought to investigate the contemporary economic role of Crete through its extensive history. More specifically, the cases investigated are: The diachronic effect of Crete's geographic position in the Mediterranean and in Europe regarding Crete's economic role in the region; the effect of the natural, climatic environment in the productive economic activity, as well as that of the sea in the international trade and in the relations with its neighbors. The characteristics that can be pointed out throughout Crete's extensive history which can also be exploited in the investigation of its modern economic role; the modern economic and developmental characteristics of Crete and its role in Mediterranean, in Europe and the world. The methodology consists of the review of related, with the economy of Crete, bibliography, ranging from antiquity until today, as well as the analysis of quantitative data, relative to Crete's contemporary economic role.

2. THE ECONOMY AND THE ROLE OF CRETE THROUGHOUT ITS HISTORY (LITERATURE REVIEW)

The economy of the Early Minoan II (EMII) period was based on agriculture, livestock farming, the supply of local and imported raw material, technical specialization, production for external consumption and the existence of some central power for the organization of working hands and infrastructure. According to Manning and Halstead, during the Late Prepalatial period, an agricultural elite that needed surplus for investment emerged, starting a process of nucleation of the Cretan settlements around the arable land, but also of changes in the agricultural practices at EMII-Middle Minoan IA (MMIA) period. This organization differs from that of premature Prepalatial one, which was centered around kin-based social organization, economic stratification, and common religious adoration. According to Haggis, in the interconnections of the various settlements, as well as in the growth of the economy, mountaintop sanctuaries played a central role, as they marked areas of agriculture and herding for Cretan settlements and stimulated a sense of private/common space that is interconnected to religious presence. The elite of the Palatial period gained, according to Haggis, in the beginning, the control of this religious network, during Late Prepalatial period. It is likely that the Sanctuaries constituted the first level of unification of settlements and villages and perhaps the first level of control and exploitation of rural surplus. During the MMIA one can notice imported objects, as well as objects of prestige that indicate a possible enhancement of the Prepalatial elite (Haggis, 1999).

At the Late Prepalatial period bigger villages, which also functioned as local centers, possibly participated in a network of economic and social interactions based on competition but also on interdependence. We should take note of the use of seals from canine hippopotamus teeth, imported from Egypt and the Near East. At the MMIA period, local centers expand. With the use of writing, they have already had a certain central hierarchical structure and the control of basic economic goods (Sbonias, 1999).

In Bronze Age Crete, life expectancy was lower for women. Men in Crete lived more from the corresponding men in the rest of Greece, proving a better diet and a more advanced Cretan society. A variety of demographic elements indicates that after the MM period the peaceful conditions and the improvement of diet result in a higher life expectancy for both genders. Even in the Late Bronze Age, where there is an improvement in life expectancy for the whole of Greece, Crete exceeds it once more. The most significant development happened for Crete in the Middle of the Bronze Age, while mainland Greece progresses in the aspects mentioned towards its end (Halstead, 1977).

Similar to the societies in the Aegean, the Palaces acted within a core-periphery system, perhaps in a determined territory, with the rest of Cretan settlements (Cherry, 1984). The understanding of Palatial Crete is

largely based in the concept of mobilization of economic resources of basic goods and models of subsistence/redeployment, the financing of wealth or both. The emerging elite of the period used the agricultural surplus in order to finance foreign relations, dominate production and exploit the available working hands (Manning, 1994).

The need for raw materials for the palace artisans was a decisive reason for trading on an international scale and consequently for stepping up transportation and shipping. External trade consisted of the exchange of Cretan goods with rare raw materials and luxury products from foreign countries. It is likely that Cretan seamen had undertaken the transit trade as part of an international trade network. The import of indispensable raw materials, and the peace guaranteed by the Minoan thalassocracy, assisted in the development of technology and art, which contributed considerably to economic development. The construction of public works, roads, bridges and cisterns resulted from this thriving economy. During the Palatial period (2000-1400 BCE) trade organization and control passed entirely to the authority of the palaces. This is the place where the agricultural and handicraft products were gathered and then distributed to the domestic and foreign markets. The exchange of products with distant countries from which Minoans were supplied with raw materials was served by the perfectly organized shipping and the foundation of commercial stations in significant ports of the Mediterranean. Moreover, it is much likely that Minoans had taken over a part of the international transit trade also, thus transporting along with their own products those of other countries. The memory of Cretan supremacy on the seas was kept alive in later traditions. Sources from Antiquity refer to the "Minoan thalassocracy." These references, substantiated by the archaeological data revealed a strong Minoan presence in certain faraway insular settlements such as Akrotiri on Thera and Kythera, which resemble permanent Minoan settlements, if not entire organized colonies. Similar Minoan characteristics appear in a series of important settlements on the coast of Asia Minor, Palestine and Egypt. A limited but continuous presence of Cretan goods is indicated in the western Mediterranean, in the ports of Italy, on Malta and Sardinia. The trade of Minoan goods over such a large area could not have been possible without the establishment of foreign settlements, whether temporary or permanent. Thus means that there must have been merchants, craftsmen, seamen and diplomats residing in the various commercial centers of the Aegean and eastern Mediterranean. Contact between Minoans and other countries is indicated by the presence of articles of Minoan art, mainly ceramics, located in distant regions and the contemporary importance of foreign products into Crete. The main raw materials that were imported were metals, precious stones and ivory. There are also a great number of luxury goods of Eastern and Egyptian origin in Crete. Foreign markets imported Minoan handicrafts too, which were the most select Cretan goods. In the Late Minoan period (1550-1100 BCE) wine, olive oil and different kinds of scented oils were transported, sealed in specially designed vases for transportation, the stirrup jars. Textiles may also have been traded. Cretan timber, which must have been exported to countries lacking forests such as Egypt and Mesopotamia (where there is evidence for the use of imported timber), was in great demand. (Foundation of the Hellenic World)

Archaeological excavations have confirmed Thucydides' account of the Mediterranean world around 1500 BCE and the alleged sovereignty of Minoan Crete (traces of Minoan culture in the Cyclades, in Cretan colonies, the Apples, Siphnos, Kythira, Delos, Thira, Rhodes, Asia Minor, Sicily etc., Cretan golden coins in Spain, Britain and Egypt.) The above point to the big influence of Crete in the ancient world (Piero and Gian, 1984).

Crete maintains contact with the Near East and Egypt during the entirety of the Bronze Age and particularly to its end. In general, this contact appears to begin during the Early Bronze Age, and reaches a zenith at beginning of the Late Bronze Age. It is abruptly interrupted after the Late Minoan IIIA (LMIIIA) period. As proofs for the fluctuations of contact with each culture stand: objects in LM Crete from Egypt and the Near East, referred to as

“Orientalia,” Minoan ceramics and other Minoan objects that were found in Egypt, Syria, the Palestine, Cyprus, Mesopotamia and Asia Minor as well as written reports of the respective cultures which accounted Minoan tradesmen, gods and diplomats, Linear B’ tablets and murals from the Egyptian New Kingdom, that either represent Minoans or were created by Minoan artists. At the LMI-II the imports from Egypt exceed those from other regions and are mainly comprised of ceramics, faience vessels, figurines, scarabs, beads and amulets. Discoveries indicate imports from Syria/Palestine (ceramics, seals,) from Asia Minor, and Cyprus (ceramics). It is likely that Crete was the main destination of Egyptian exports, as attested by archaeological discoveries in the rest of Aegean, and that Egyptians dominated in the commercial routes of period. During the LMIIA-C period the imports are evenly distributed between Egypt and the other cultures. The various Egyptian imports are presented mainly around Knossos, but also in other regions, contrary to the rest of imported objects (mainly ceramics and vases,) that are almost exclusively excavated in Kommos, a region characterized as a gateway to Cretan imports. It is likely that the goods that were contained inside the vases were discharged there and continued their travel in the rest of Crete, in different containers. After the LMIIIA2 period, there is an abrupt reduction of imports, probably connected with the destruction of Knossos and the replacement of the Minoan trading culture with that of the Mycenaean. Hence, Chania becomes the most important region for imports, replacing Knossos. At the LMIIIC, imports from Egypt stop, and only some from the Cyclades and Rhodes are recorded. It is speculated that after the destruction of Knossos trade is mainly conducted with the Western Mediterranean, as testified by the Minoan provenance of the discoveries in the respective regions. There are exported objects to the East from the MMI until the LMIIIB period. For the Late Minoan Period particularly, ceramic exports have been found in Asia Minor, Cyprus, Syria/Palestine and Egypt, but not in the Mesopotamia. The above cultures have produced written accounts regarding the Minoan culture. Furthermore, semetic linguistic elements appear to have influenced the Minoans. The idea of the *Minoan thalassocracy* has been rejected, as well as that of the “core-periphery system” used to describe the relations of Crete with the rest of the Mediterranean at the Late Bronze Age. It is more likely that there was a “core-core system” in the economic Mediterranean context (Eric, 1999). It is likely, as it appears from the study of the Minoan of settlement in Kafri, that during the LMIIIB-IIIC period, the Lasithi Plateau had been converted into areas of safety for immigrants, after the economy of Crete at the 14th and the first half of the 13th century BCE, based on agriculture, livestock farming, and international trade, did not manage to survive the natural destruction of LMIA and the raids of the LMIB. The disappearance of central power and the movement of Cretans in bigger altitudes, where husbandry becomes more important, begins in the second half of the 13th century. Agriculture is also transported to regions of higher altitude. Commerce is interrupted for many decades between the 13th and 12th century BCE with less coastal settlements (Krzysztof, 1999).]

The palaces in Knossos, Phaistos, and Malia, were known political, economic and ritual centers from the Early Palatial Period. The rest of the local elite of the island imitated the most prestigious palace, Knossos regarding architecture and art. Dignitaries were sent by the palace to manage the microeconomic activities in other regions of Crete. Epigraphical evidence from the kingdom of Tuthmosis III indicates the central role of Crete in the Bronze Age and even mentions Cretan kings. There is also epigraphic evidence in Linear A' and Minoan of weights in the Cyclades, pointing to the same conclusion. The military character of the Mycenaean culture appears to be consolidated nowadays from the weapons that were exported in Mycenaean Greece, as well as around Euphrates and Egypt. Imports of Palatial Crete consisted of metals, copper, and tin (Niemer, 2004).

The Palatial authority, beginning in the LMI, shows particular interest in products of wide consumption, as it appears from the corresponding infrastructures of storage units. There is an increase of storage from the Proto-Palatial to the Neo-Palatial period. The architectural changes after the LMIB exhibit smaller storage facility,

perhaps because of a political initiative of the authorities that wished to distribute storage in regional centers near the palaces (Christakis, 2004).

The LMIB households show a lack of subsistence, according to the archaeological discoveries of jars and their corresponding storage units. On the other hand, the Palatial authorities intensified the concentration of rural surplus, to concentrate political power. The lack of self-preservation of common households and the parallel concentration of surplus in a hierarchical context will climax in Mycenaean Crete (Christakis, 1999).

Mycenaean rule in Crete gradually led to a strictly bureaucratic economy under military control, which began to show clear signs of decline towards the end of the Late Bronze Age. The wear and tear of the political system and the international unrest of the period, so vividly described in the written sources from the East, were the main causes of economic decline. The military conflicts in the East affected the internal affairs of the island and held back economic progress. These conflicts were the reason why Crete was excluded from many international markets, while its possible involvement in military operations inhibited the progress of peaceful activities. After the decline of its economy, Crete lost its position of international prominence, which had been based on external trade. It followed the historic course of Mycenaean Greece, entering the economic decline and isolation of the Dark Ages (Foundation of the Hellenic World). The prosperity of Geometric Crete continues until the 7th century BCE, when we observe particularly important influence from Cyprus, Egypt and the Near East. In this period Crete was more connected with Melos, Thera and Rhodes. Crete co-founded colonies, with the islands mentioned, such as Gela in Sicily and Cyrenaica (Boardman and Hammond, 1982).

Imports from the Cyclades are recorded in Crete already from the Neolithic Age. Crete, being agriculturally self-sufficient, had a predominant demand for metals and stones which were abundant in the Cyclades. Akrotiri, in Thera, indicates that during the Late Bronze Age Crete coexisted in a system of economic interdependence with the Cyclades. In Historical times, it is with Santorini and Melos that Crete has the most interactions. These islands offered Crete both goods and services (Doumas, 2010).

The advent of regionalism and war-like spirit develops in Crete due to the Island's geographic constitution and consequent natural segmentation during the period of primitive transport. Thus, there are frequent civil wars between the Cretan cities. Proximity to the sea and excess production of goods contributed to the export of products and to the growth of shipping and trade (Vourveri, 1953). The exclusive, according to many ancient writers, relations between Aegina and Kydonia, appear to have resulted in the introduction of coins in Crete during the second half of the 6th century BCE. Local minting begins in the second quarter of the 5th century BCE. and comes to a zenith at the end of the 4th century BCE, like the other Greek cities. From the 6th century BCE until the 3rd century BCE transactions took place with the use of caldrons, tripods as well as coins. Cretans imported silver for the needs of minting while only a few coins were exported in the Hellenistic Period. The reduction in the supply of Aegian coins, which, until then, constituted the international currency, was the reason for the beginning of local minting in 470 BCE, with the pseudo-Aegian coins. The latter were replaced by local coins, proving the cohesion of the various Cretan cities in the political and economic shifts of the Mediterranean (Stefanakis, 1999). The system of self-sufficiency of the Cretan cities that according to Chaniotis, was based on livestock-farming and functioned with the ratification of agreements between them indicates that the continuous effort of the Cretan cities for expansion is immediately correlated to the economic equilibrium and more specifically to livestock-farming. However, even from the Archaic period, the importance of tax imposition appears from the fact that cities such as Praisos and Lytos expanded towards the sea, not only in order to exploit the trade routes, like Rhodes had done, but also the tax opportunities irrespective of their need for cultivable ground and their hegemonic tendency. We should

not consider the self-sufficient Cretan economy, before the Roman conquest, closed. It is likely that Cretan products were transported in mixed cargos, besides the obvious and important timber exports (Didier, 1999).

The Cretan system is more communal than that of Sparta where each citizen pays a constant tax. If one fails to do so, they are deprived of the rank of the citizen. In Crete, a part of the output of public and land taxation is used for the adoration of gods as well as for *syssitia* and public services (Aristotle *Politica* 1272 a 14-21).

According to Plato, Crete is almost self-sufficient in terms of production of all types of products." Also, he indicated that the growth of Cretan regionalism, individualism, and warlike nature resulted from its natural segmentation, at the time of primitive transport. Hence the frequent civilian wars between the Cretan cities. In this spirit, Cretan legislation aims at the preparation and education of citizens for war. The public and private institutions, the soup kitchens, the gymnasia and the military exercise, have a common aim, "the victory of war" (Vourveri, 1953) according to Homer, Helen, presenting the Cretan hero Idomeneus, to Priam, reports, "for his bravery he is respected by his friends and feared by his enemies" (Aposkitou, 1960).

During the Classical and Hellenistic periods, the Cretans Mountains were incorporated in a subsistence economic system. Besides timber, there was no other important exported good and the Cretan highlands only covered domestic needs mainly for the cultivation of olives and vines. The seasonal movement of herds, as it is reported between Ierapetra and other Cretan cities during the 3rd and 2nd centuries BCE, show that from the Classical period there might have been specialized pastoralism and manufacturing of textile and leather products. It is noteworthy that in 1948 BCE, 48% of Cretan land was used for nomadic grazing. This shows the endurance of the importance of Cretan pastoralism. Diodorus accounts Crete to be the mother of domestic reproduction of sheep and cattle. Contrary to the Roman period, when the conflicts and hostilities between the countless Cretan cities seem to stop, and trade is intensified, with wine, medical plants, and stone, representing main export goods, Cretan mercenaries, with their contribution of wage from looting were the main supporting factors of the economy of Hellenistic Crete. Trade was carried out solely as a result of war (Chaniotis, 1999).

For Hellenistic Crete our main sources of information are treaties between different Cretan cities which primarily dealt with questions of egalitarianism, but probably also took under consideration economic aspect, such as agricultural and pastoral issues, monetary transactions, which indeed did take place in Hellenistic Crete, and imports/exports of products mainly for private use. The *syssitia* system had the same result with the direct tax imposition in agricultural harvest, while the seasonal movement of herds shows that the economy was not absolutely subsistent. This movement offered citizens raw material for transactions, thus creating an "inter-Cretan" absolutism. In Crete, contrary to the rest of Greece, taxes were imposed inland trade as well. However, trade from afar was the main source of indirect tax imposition (Guizzi, 1999).

Wine, during the Archaic and Classical periods, was used for *syssitia*, for the preparation of food, and for religious ceremonies but also as a tax to the city-state. The production, up until the end of the Hellenistic period, is small, but under the *pax Romana* wine became a predominant exported good for Crete via amphoras, particularly in 1st-3rd century CE because of the need of Rome for wine import. The discovery of amphoras manifests that Cretan wine was transported in the cities of Oplontis, Herculaneum, Naples, Stabiae, and Puteoli through Pompeii. The export of wine collapsed at the end of 300 CE and was reestablished with the conquest of the Island from Venice between in the 13th-17th century CE (Marangou, 1999).

The Roman conquest of Crete (69-67 BCE) was product of the Roman imperialist policy and happened as a form of retaliation to the alleged help of Cretans to king Mithridates VI of Pontus as well as to their involvement to pirate circuits. Roman involvement in Cretan affairs begins in 189 BCE. Romans play the role of the arbitrator for the various wars amongst the Cretan cities. Despite the image of decay in Hellenistic Crete, as portrayed, mainly by

Polybius, the minting of silver coins, and the lack of Romans *negotiatores* shows a degree of social and political strength. The development of ports during the Late Hellenistic Period happened simultaneously with the development of commercial relations with the rest of the Eastern Mediterranean. The steady population growth and the domination of certain cities also gave impetus to provincial settlement (De Souza, 1998).

By 67 BCE, the conquest of Crete had been completed, and the Romans had established it as the capital of the common province of Crete-Cyrenaica, Gortyn, while Knossos was merely left a colony of the province. Contrary to Sparta, Gortyn, and Corinth, the society of Knossos can be summarized with the concept of globalization. With the end of the 1st century BCE Crete becomes more important because of Trajan's expansion in the East and the emancipation efforts of many Eastern Roman provinces. The city's economy was based on agriculture and the export of oil lamps and wine. This allowed for the presence of not only luxury products, but also well-developed Roman buildings (Sweetman, 2007).

According to Venetian travelers of the 16th century CE, Crete was full of Roman art and marble architecture. Marble constituted, during the Roman period, the predominant import product, because Crete lacked sources of architectural stones. Today, we mainly find marble in Knossos, but also in other important cities along with public and private buildings (Sara Paton – Rolf, 1999).

Because of the exceptional geopolitical importance of Crete, which is owed particularly to its geographic location (Afro-Eurasia,) Cretans were forced to ward off many attacks, beginning in 268 CE, from the Goths, the Vandals, the Slavs and the Arabs. These attacks aimed at the separation of Crete from Istanbul. The ultimate goal had been to weaken the Greek-influenced Byzantium geostrategically. The goal was ultimately achieved in 1204 CE from the Franks, who sold the Island to the Venetians. Crete's economic and cultural growth was abruptly interrupted by the Turks in 1669 CE when they conquered the Island. In the context of the policy of Turkification of foreign populations, the Ottoman empire imposed on Crete a regime that can be summarized by the prevention of free trade, by efforts of Islamization and the execution of dissidents. Crete, because of its significant geographical location, had always been an "apple of discord" in the various political arrangements that continually took place. The geopolitical and military position of the self-sufficient island has deemed as its historical fate to constitute a crossroad of the populations of three continents (Georgakakis, 2012).

During the Ottoman period, the administrative system that wanted the farmland, *miri*, to belong to the Sultan, had been replaced by the system of *chiflik*. Contrary to the image given to us by the Ottoman documents, Crete was a self-governed portion of the empire. After the siege of Heraklion, property was seized by the Aga, the Janissaries and other Ottoman officers, traders and tax collectors. The system of *chiflik* promoted exports, but not technological development in agriculture. The most important products of the island had always been wheat, wine, and oil. After the reduction in wheat production, during the Venetian period, wheat production increases again to surplus levels and thus export levels too only after the collapse of wine trade. The shift of the predominant exporting products from wine to oil happened due to the Veneto-Turkish War and the increase in French oil demand, after the latter suffered a catastrophic domestic oil production (Brumfield, 2002).

To a great extent, the discreet character of the Aegean landscape springs from its isolation, which has produced a unique naval history and coastal connections that have played an important role in the configuration of local history, as well as human psychology and behavior, both on a personal and on a collective level (Terkenli, 2005).

Many different viewpoints have been formulated concerning the investigation of the effect of location in the developmental process, from the viewpoint of economic geography such as that of the basic geographic truth. According to the latter, different parts of the world produce dissimilar products and with different conditions culminating in commercial transactions. Other opinions point to the correlation of cultural growth to climatic

conditions, the influence that the human psyche received from the respective geographical location as well as the soil and the climate. Natural environmental conditions and, more specifically, the geographic location of space, the soil consistency which directly affects the type of economic activities, the geological structure (water, rocks, minerals), the climate, the flora and the fauna of a region, all influence human activity. The quality of human resource is also considered a critical factor in regional growth (Gioti-Papadakis, 2011).

Although the role of culture in the economic thought was mysterious and problematic (before the 18th century the research of such hypotheses was even considered as unnecessary or a luxury), it was finally acknowledged as an important sector of economic activity. In general, the interest in the economic meaning of culture is as old as the economic literature itself and the relationship between cultural and economic policy can lead to a holistic theory of development (Giannadaki, 2013).

As Kazantzakis accounts: *«Crete served as the first bridge between Europe, Asia and Africa. Crete was the first place in a then totally dark Europe to become enlightened. And it was here too that the Greek soul accomplished its destined mission: it reduced God to the scale of man. Here in Crete the monstrous immovable statues of Egypt or Assyria became small and graceful, with bodies that moved, mouths that smiled; The features and stature of God took on the features and stature of man. A new original humanity, full of agility, grace, and oriental luxury lived and played on Cretan soil, a humanity which differed from the subsequent Greeks...»*. *«Crete's mystery is extremely deep. Whoever sets foot on this island senses a mysterious force branching warmly and beneficently through his veins, he senses his soul to begin to grow. But this mystery has become even deeper and richer since the discovery of this immensely versatile and versicolored civilization filled with such great nobility and youthful joy»* (Kazantzakis, 2015).

Crete's natural environment and extensive history sculpted the characteristics of its residents. If we are to attribute their experiences and behaviors, the Cretans are characterized by: Their particular love for their place of origin, in the same way as the latter surrounds with infinite love both its residents and its visitors. Their extreme and occasionally contradictory demonstration of sentiments during good and bad times, in the same way as the environment that shapes them, is also full of oppositions. Their militancy and bravery, as they had to defend their country against intruders, in various historical periods. Their hospitality, because a fertile ground allowed even to the poorest to own the necessities to offer to "Another," to a foreign visitor. Their dedication towards their responsibility to their family, to society, to their homeland, as a historical deposit for their efforts and the brilliant historical moments of the Cretan tradition and culture. Unfortunately, the above characteristics fade away with time. The subsequent model of growth based on consumerism and the thoughtless housing expansion injure the beautiful environment of Crete. The consequences are irreversible. The subsequent to the model of growth supremacy of private against public interest and the immoderate "I" instead of "we," twist the significance of militancy and bravery, even downgrading and trivializing it at times to the level of a pointless carrying and using of guns. The big touristic flows lace traditional hospitality. Fortunately, certain regions, mainly in the continental mainland, resist and try to safeguard the traditional values of Crete and its People, with a creative way and in their modern dimension.

3. CRETE'S ECONOMY AND INTERNATIONAL POSITION IN CONTEMPORARY TIMES

3.1. Crete's Contemporary Productive Identify and its Contribution to the Greek Economy

Crete is a rather isolated island from the mainland. From the one hand this led to a relative level of autonomy when it comes to the regional market. From the other hand, it stimulated an initial search for policies that would take it out of its isolation. Consequently, apart from an effective system of marine connections with Athens, Thessalonica and the large islands, Crete already has two airports with regular itineraries of domestic and

international flights, as well as many charter international flights during the tourist season. Exporters of agricultural products use air transport more and more frequently. As a result, in Crete, ways to overcome the considerable distance from the mainland and to improve its access to significant national and international markets have been discovered. Crete appears to have developed effective transport connections and has, therefore, overcome its geographic isolation. Crete's success in the confrontation of its geographic isolation, with the development of effective transportation and with the exploitation of its potential in tourism is a remarkable lesson. Statistics indicate that a critical portion of the manufacturing sector, the presence of capital intensity of enterprises and the high quality of human resources, as well as the growth of tourism, are factors that contribute to regional growth (Ioannides, 2000).

The Mediterranean island of Crete, a predominantly rural area that has gone through a significant technological development during the last ten years, leading to extensive specialization, is facing serious structural issues as does most of Southern Europe. Consequently, an advanced strategical development oriented towards the structural growth of rural economy and the enhancement of endogenous development is necessary. Furthermore, the resolution indicates that Cretan economic prosperity is largely based on activities of agricultural food products and of tourism mainly because a handful of its regional sectors are tightly connected with the sectors mentioned above (Tzouvelekas and Mattas, 1995).

Crete is the largest and most populous island of Greece and the fifth largest island in the Mediterranean. It extends over 8,336 km² and covers 6.3% of the overall surface of the country. According to the 2011 population census, Crete's population reaches 584,120 people. It is the 7th most important region in Greece, in terms of population numbers, and concentrates 5.4% of the entire country's population. During the decades of 1981-1991 and 1991-2001, there was a steady population growth, while the respective percentage changes were higher than those of the whole country (7.55% and 11.31% for Crete, 5.33% and 6.86% for the entire country). For the period between 1981-2001, Crete's population increased by 19.71%, underlining its potential to retain and renew its population. The islandic character and the significant geographical location manifests the idea of a particular spatial system with a satisfactory mainland and population size and with a large mountain zone which also constitute the predominant elements of its physiognomy (Operational Program of Crete 2012-2014, 2011).

The region of Crete grew rapidly and stabilized its position in the Greek economy during the 2005-2010 period. It is situated in an intermediate growth level in the EU and it is characterized as a transitioning region. The per capita income of the Region of Crete corresponded in 2011 to 87% of the country's median and to about 69% of the median of the 28 countries of the EU. Prior to the recession (2008) tourism, trade, real estate development, automobile manufacture and, partially, process manufacturing were enhanced. There was a decline of the primary sector in terms of production but also in terms of occupation. Crete holds a satisfactory composition of economic activities, besides the fact that during the recent years, growth was excessively supported by real estate investments. Investments have created important growth poles when it comes to certain sectors. Regional economy specialized in economic activities related to the rural economy (19.4% of employment), tourism and trade (35.4% of employment). According to the Gross Value added, tourism and trade concentrate 35% of economic activity, agriculture concentrates 9% of economic activity, process manufacturing/energy and manufacture concentrate 9%, while real estate management approximates 10% (from 8% in 2005). Tourism and an important section of the agricultural and process manufacturing production address to international markets. Besides the economic activities mentioned above, in which Crete specializes in, Research and Technology also constitutes an important growth pole as the Region features important educational and research resource, which substantially contributes to economic growth and can enhance, to a greater extent, the development of the island's productive sectors. During the period

200-2008, the Region represented 7.8% of the national expenditure for research and development (GERD), with 0.95% of the regional GDP being disposed for R&D. This ratio exceeds the national mean (0.6%) and is one of the highest in Greece. As far as publications are concerned, Cretan educational and research institutions have conquered an outstanding position in Greece in terms of reception and international collaboration, creating powerful interconnections with other research centers both in Europe as well as abroad. Many publications have to do with scientific fields regarding the productive specializations of regional economy. The concentration of researchers is important with a ratio of 1.05% over the total number of employment (1st Region in Greece in 2011,) while employment in high technology sectors remains at the same rates with the rest of the country. While the Region of Crete features comparably strong advantages, it has failed to dynamically form competitive advantages. Crete's competitiveness is still weak due to the limited inclination toward innovation, the weak entrepreneurship and the absence of a suitable institutional environment. More specifically, the transformation of research results into marketable goods and services is limited, the connection between the Research and Technology (R&T) system and the local economy is weak due to demand from companies and the orientation of the research workforce, while there is also absence of the reliable configurations for the allotment of high risk and seed capital. Moreover, the enlargement of businesses and the creation of collaborative bodies (nets and clusters) is limited. As a result there are no economies of scale being created and the organization of production, the import of innovation and the promotion of local products in international markets are suffering. The regional economy presents important specializations, which are differentiated according to the method used for their examination. Between the twenty (20) sectors in which the Region of Crete shows high specialization at a European level, seven, (7) are classified in the broader agrifood complex and concentrate the highest level of employment (49%), while five (5) are classified in tourism (31% of employment.) Specialization in agricultural economy is affirmed by the export structure as well (59% of exports are products of the primary sector.) But if the approach takes place based on the gross value added, tourism and trade concentrate 35%, while agriculture only covers for 9% and is practically equivalent to process manufacturing/energy and construction which also cover for 9% each. In the agrifood sector, the Region of Crete has created some strong advantages as it features recognizable, high-quality products which are sold both within the country and in international markets. The Cretan diet, which is the standard of the Mediterranean diet constitutes <<*intangible cultural heritage*>> with a powerful promotional potential Operational Program of Crete under the Objective, 2014.

In Crete's sectorial specialization, in the two most important sectors of agricultural production and tourism, one can take note of intraregional differentiations between the northern and southern part of the Region. In the environmental sector, the high-intensity tourism and the important population densities in the urban concentrations of the northern part, create the need for a viable development, with spikes in bioclimatic upgrade of the environment in the urban and touristic areas as well as in the confrontation with the seasonal fluctuations in energy demand. In the mountainous mainland, in the east, north and west coastal zone, where extensive NATURA zones are located (265km Ha, respectively, 32% of the total surface area of the Region,) with 69 small-scale wetlands (129 ha,) however scattered, with dispersed archaeological sites (12 km Ha, respectively 1.5% of the total surface area of the Region,) intensive agricultural zones and scattered, small, and medium-sized residential concentrations, there is need for a different approach, as far as viable growth is concerned. Regarding transportation, the amelioration of the safety conditions and the enhancement of the connection nodes with the primary vertical transportation axes that connect the northern and southern sections are predominant objectives along the transeuropean part of the transport network Region of Crete, 2013. Among the five areas of Greece that were included (2015) in the Global Repark Network (120 areas in 33 countries internationally with substantial

geological and cultural significance, whose value for the planet's evolution exceeds national borders,) which has been established under the auspices of UNESCO, and constitute geological monuments of global heritage, two (2), the areas of Psiloritis and the area of Sitia, belong to Crete.

Crete's share in Greece's GDP shifted from 3.99% in 1970, to the greatest value of 5.25% in 1995. It then stabilized in 4.7-4.9% in the following years. From 2008 until 2012 Greece's GDP declined by 19.78% while Crete's dropped by 22.96%, respectively (table 1)

Crete's per capita GDP dropped from 98.39% of our country's respective GDP in 1995 to 82.24% in 2012, as a result of the financial recession (2008). From 2008 until 2012, Greece's GDP per capita declined by 19.10% while Crete's declined by 23.85% respectively (table 2).

Table-1. Crete's Share in Greece's GDP, 1970-2012 (mil. drachmas, current prices 1970-1990, mil. euro, current prices 1995-2012)

Time Period	Greece's GDP	Crete's GDP	Crete's/Greece's %
1970	258,000	10,290	3.99
1975	593,181	24,451	4.12
1980	1,523,724	64,152	4.21
1985	4,136,852	200,858	4.85
1990	9,226,518	452,138	4.90
1995	79,927	4,198	5.25
2000	141,732	6,902	4.86
2005	199,153	9,779	4.91
2008	242,096	11,770	4.86
2010	226,210	10,796	4.77
2012	194,204	9,067	4.67

Source: HSA Regional Accounts, GDP by Region.

Table-2. GDP per capita values for Greece and Crete 2000-2012 (euro, current prices)

Time Period	Greece	Crete	Crete/Greece %
1995	7,516	7,395	98.39
2000	12,983	11,702	90.13
2005	17,953	16,083	89.58
2008	21,642	18,908	87.36
2010	20,282	17,210	84.85
2012	17,507	14,398	82.24

Source: HSA, GDP per capita by Region.

In 2008 to 7.5% of Crete's GDP derived from the agricultural sector, while the secondary sector holds a contribution that reached 15.3%. The service sector is very important in the economy of the Region of Crete, as the percentage of the regional GDP attributed it reached 77.2% in 2008. The situation is differentiated after 2009. The crisis influenced certain sectors disproportionately, mainly construction and the primary sector. The remaining sectors and especially that of tourism exhibited great resilience and enhanced their share in the regional economy. Despite the deteriorating course, Crete maintains an outstandingly high market share 38.5% in olive oil and 30.4% in olives, over the sum of the country. Furthermore, the share of Crete over the entirety of the country is important in wine (13.4%), in citrus fruits (11.3%), in vegetables (10%) and generally in agricultural production (9%) Interim Managing Authority Region of Crete, 2014.

As far as the diachronic evolution of the sectorial structure of the regional GDP is concerned, until 1985 the share of the primary sector was about 1/3, the share of the secondary sector was 1/4 and that of the tertiary sector 1/2. From 1995 onwards there is a gradual decline of the primary sector's share reaching 7.5% in 2008. There is

also decline in the secondary sector reaching approximately 15% and rise of the tertiary sector which now represents about 3/5 of the regional GDP (table 3).

According to the corresponding study concerning the views of the citizens of the Region of Crete and the hierarchy of their priorities, the following in order of classification based on the Diffusion Index was concluded: Health Services 96.6 - New Technologies 89.1 - Cultural activities 87.8 - Tourist 87.6 - Commercial activities 87.4 - Agricultural activities 87.1 - Athletic activities 85.4 - Maritime Activities 84.0 - Livestock Activities 81.6 - Mineral Resources 78.1 - Biofuels 74.6 and Industrial Activities 71.4 Economic Chamber of Greece, Athens University of Economics and Business, 2013.

Table-3. Sectorial Structure of the GDP for the Region of Crete (%)

Year	Primary	Secondary	Tertiary
1970	33.24	23.30*	43.38
1975	38.53	18.73	42.67
1980	39.27	24.54	52.98
1985	36.30	16.68	52.98
1990	26.00	16.96	57.89
1995**	22.07	11.32	65.89
2000	10.80	13.20	76.10
2001	10.80	14.90	74.50
2002	11.20	14.00	74.80
2003	9.50	13.90	76.60
2004	10.70	15.20	74.00
2005	9.40	15.20	75.30
2006	7.90	15.70	76.40
2007	7.80	14.80	77.50
2008	7.50	15.30	77.20

Source: HSA Regional Accounts, GDP by Region.

* includes construction

** Gross value added

3.2. Crete's International Financial Position (Foreign Trade, Tourism)

Regional economy is characterized by extroversion as both tourism as well as an important part of agricultural production address to international markets. The export structure reaffirms the sectorial specializations of the regional economy with some important differentiations. Exports, in Crete, mainly consist of primary sector products (59%), while process manufacturing enhances its position, mainly due to the major, local plastic industry (15%). Primary sector products remain a steady source of export. Two countries (Germany and Italy) absorb 47.5% of the Region's exports while 10 countries absorb the remaining 75%. Among the emerging countries, China has begun to absorb a notable percentage of exports (2%) with potential for increase, while Russia participates with lower percentages (0.9%) Operational Program of Crete, 2014.

In 2010 the percentage of exports over all imports (coating ratio of foreign trade) was 87.7% with exports falling short of its imports by 12.3%. This gap between imports and exports is visible in the trade balance deficit, which in 2010, reached 4.7 million euros. Concerning the 10 main export destinations of the Region of Crete, Italy absorbs 21.2% of all exports, followed by Germany (20.8%) and the US with 5.8%. The Food sector with a contribution of 50.7% and export value of 177.1 million euros (2008) constitutes the predominant export sector of the Region of Crete. The Chemical and Plastic sector follows, with a share of 19.1% and export value that reaches 66.7 million euros Economic Chamber of Greece, Athens University of Economics and Business, 2013.

The first semester of Cretan exports of 2015 concluded with a positive sign and an increase of 94.15% in relation to the first semester of 2014. The total value of both reached 295 million euros, against 152 million during the respective period of last year. The Food and Beverage sector, which accounts for 71% of the total number of Cretan exports in the time period studied, indicates an increase equal to 175%. The Chemicals and Plastics sector comes second with a share of approximately 18% over the total number of Cretan exports and an increase of 15%. The remaining percentage of Cretan exports is taken over by the rest of the sectors such as Textiles, Machines & Devices, Construction Products, etc. olive oil, which accounts for 79% of all exports of the Food & Beverage sector and 57% of the overall value of Cretan exports. Olive oil constitutes the flagship of Cretan product, as it presents an increase that reaches 518%. Fresh vegetables follow, with a decline of 12%. Together with olive oil, they account for approximately 96% of the entire export number of this particular sector. As far as markets are concerned, first comes Italy with a share of 45% and an outstanding increase of 954%. This increase resulting by the huge bulk olive oil export increase. Germany follows with a share of 15% and an increase of 3%. Spain comes third, with a 4% share and an impressive increase of 320%. France comes fourth with a 3% share and a 13% increase followed by Bulgaria with a 3% share and a decline of 9% Exporters' Association of Crete, 2015.

According to the export data acquired from customs, Crete's share in Greek exports fluctuated from 5.74% down to 2.77%, from 1920-1999 with the greatest value in 1940 (7.22%) and the lowest one in 1950 (0.47%). From 2008 until 2012, the respective share in Greek exports has the highest value in 2010 (3.39%) and the lowest one in 2012 (1.48%) (table 4).

Table-4. Crete's share in Greece's exports 1920-2009, (1920-1990 thousand drachmas, 2008-2012 mil. euros)

Time Period	Greek Imports	Cretan Imports	Cretan/Greek %
1920	686,311	39,394	5.74
1930	5,985,677	300,537	5.02
1940	9,199,875	664,509	7.22
1950	451,590,586	2,151,113	0.47
1960	6,096,237	366,771	6.01
1970	19,278,258	870,448	4.51
1980	221,108,700	6,071,674	2.75
1990	1,267,506,753	35,177,235	2.77
1999	1,825,242,000	73,933,000	4.05
2008	21,227	375,21	1.76
2010	21,300	722,11	3.39
2012	27,579	407,66	1.48

Source: HSA, SEVE 2008-2012 Cretan Exports, data processing

Table-5. Crete's share in Greek imports 1920-2009, (1920-1990 thousand drachmas, 2008-2012 mil. euros)

Time Period	Greek Imports	Cretan Imports	Cretan/Greek %
1920	2,177,530	35,293	1.62
1930	13,276,097	222,946	1.68
1940	12,244,352	120,943	0.99
1950	2,141,133,599	17,439,827	0.81
1960	21,060,887	193,371	0.92
1970	58,750,346	298,421	0.51
1980	452,881,265	2,684,774	5.93
1990	3,137,523,626	86,813,358	2.76
1999	6,240,564,000	61,413,000	0.98
2008	65,529	538,74	0.82
2010	52,147	421,33	0.80
2012	49,537	260,67	0.52

Source: HSA, SEVE, Cretan Imports 2008-2012, data processing

As far as imports are concerned, Crete's share in Greek imports has fluctuated from 1920 until 1999 between the lowest value of 0.51% (1970) and the greatest one of 5.93% (1980), according to the import data provided by customs. From 2008 until 2012, the respective share in the Greek markets has the highest value in 2008 (0.82%) and the lowest one in 2012 (0.52%) (table 5). From 2009 until 2012, Crete shows a positive trade balance with the export value exceeding that of imports, contrary to the negative Greek trade balance.

The degree of Crete's economy's extroversion (goods exports/GDP) increased from 8.45% in 1970, larger from Greece's respective value by approximately one unit, to 9.46% in 1980. It was later reduced to 7.78% (1990) and to 4.49% (2012) (table 6).

Table-6. Extroversion degree (X/GDP) for Greece and Crete, 1970-1990 (mil. drachmas current prices, 2008-2012, mil. euro current prices)

Time Period	Greek GDP	Greek Exports	Cretan GDP	Cretan Exports	X/Greek GDP%	X/Cretan GDP%
1970	258,000	19,278	10,290	870	7.47	8.45
1980	1,523,724	221,108	64,152	6,071	14.51	9.46
1990	9,226,518	1,267,506	452,138	35,177	13.73	7.78
2008	242,096	21,227	11,770	375,21*	8.76	3.18
2010	226,210	21,300	10,796	722,11	9.41	6.68
2012	194,204	27,579	9,067	407,66	14.20	4.49

Source: HSA, GDP by Region, *SEVE, Cretan exports, data processing

In 2014, non-resident alien arrivals in Cretan tourist accommodations represented 18.4% of all arrivals in the country. During the decade of 2004-2014, Crete's share fluctuates between 12.9% (2005) and 18.8 (2013) (table 7).

Table-7. Non-resident alien arrivals in all tourist accommodations in Greece and in Crete 2004-2014

Year	Greece	Crete	Cretan/Greek %
2004	12,131,583	1,879,731	15.5%
2005	13,412,596	1,732,679	12.9%
2007	16,037,592	2,237,139	13.9%
2008	16,013,569	2,287,742	14.3%
2009	16,304,677	2,383,97	14.6
2010	16,241,395	2,464,814	15.2
2013	16,325,762	3,075,375	18.8
2014	17,743,493	3,262,292	18.4

Source: National Statistical Service of Greece, Hellenic Statistical Authority, data processing.

Nights spend by non-resident aliens in all Cretan tourist facilities comprise of approximately ¼ of total nights spent in the country, during the decade of 2004-2014 (table 8).

Table-8. Nights spent by non-resident aliens in all tourist facilities in Greece, Crete 2004-2014

Year	Greece	Crete	Cretan/Greek %
2004	52,554,21	13,159,757	25.0%
2005	55,264,093	12,499,798	22.6%
2007	65,420,236	15,324,936	23.4%
2008	65,624,563	15,729,316	24.0%
2009	66,022,270	15,621,455	23.7
2010	66,800,371	16,449,065	24.6
2013	71,469,189	20,130,136	28.2
2014	75,390,445	20,626,843	27.4

Source: National Statistical Service of Greece, Hellenic Statistical Authority, data processing.

Outside traffic to the two international airports of Crete, Iraklion and Chania, shows increase by 80.21% from 1995 to 2014 when it comes to aircraft arrivals and departures. There was an 86.51% increase in passenger arrivals and a 84.68% increase in passenger departures (table 9).

Table-9. Airports of Iraklion and Chania, Outside Traffic (aircrafts, passengers), 1995-2014

Year	Aircrafts Arrivals+Departures	Passengers Arrivals	Departures
1995	25,566	1,893,322	1,896,621
2000	31,740	2,508,491	2,554,460
2005	32,562	2,559,290	2,574,042
2008	36,740	2,825,487	2,839,581
2010	33,568	2,523,383	2,535,046
2014	46,074	3,531,317	3,502,678

Source: Civil Aviation Authority, Airports of Iraklion, Chania, data processing

As far as the structural data of the tourist enterprises over the 2002-2012 period is concerned, Crete's share over the entire country represents approximately 8-9% of enterprises, 10-11% of turnover, 9% of the employed population and 12-20% of investments (tables 10-12).

Table-10. Structural data of Tourist Enterprises', Cretan shares (%) over Greece 2002, 2012, mil. Euro

Data	2002	2005	2007	2010	2012
Number	8.21	9.45	8.76	8.71	8.83
Turnover	10.11	10.11	9.40	10.33	10.99
Employed Population	9.08	8.73	8.37	9.69	8.83
Investments	20.53	11.62	12.00	20.48	14.48

Source: National Statistical Service of Greece, Hellenic Statistical Authority, data processing.

Table-11. Greek Tourist Enterprises' Structural Data, 2002, 2012, mil. Euro

Data	2002	2005	2007	2010	2012
Number	97,399	102,215	111,786	95,089	91,568
Turnover*	7,148,255	8,742,569	9,931,459	10,265,156	8,317,389
Employed Population	250,738	280,175	298,118	276,047	262,252
Investments	545,117	821,554	1,670,808	867,816	368,073

Source: National Statistical Service of Greece, Hellenic Statistical Authority

* Excluding VAT

Table-12. Cretan Tourist Enterprises' Structural Data 2002, 2012, mil. Euro

Data	2002	2005	2007	2010	2012
Number	7,998	9,661	9,790	8,284	8,088
Turnover	722,535	884,187	933,220	1,060,962	914,262
Employed Population	22,872	24,474	24,968	26,743	23,164
Investments	111,929	95,475	200,480	177,720	53,304

Source: National Statistical Service of Greece, Hellenic Statistical Authority

3.3. Crete's Role in Europe, in the Mediterranean and in the World

The role of the Region of Crete in the regional system of EE28 is defined by the following indexes: it is classified under the areas in transition, with a GDP per capita >75% - < 90% of the EU. It belongs in the EU peripheries with the highest rates of doctors (600 + /100000 residents, 2011). 20-30% of the total population aged 30-34 years old are higher education graduates (EU28 average 37.9%) The employment rates of the population

between the ages of 20-64 are 55-65% (mean, EU28, 69.2%) Unemployment rates of people aged 15-74 years old is greater than 20% (EU28 average 10.1%). The share of the primary sector over the total gross value added is 300%, respectively that of the industry <50%, that of services 100-110% (EU28=100). It is the only Region of the country with a rate for research and development (R&D) that fluctuates between 1-2% of the GDP (EU28 average 2.01%) and a rate of researchers also fluctuating between 1-2% over the total number of employed (EU28 average 1.16). It belongs to the EU peripheries with the highest volume of nights spent >20 million in tourist establishments (EU28=2,642 million) and is included in the 20 areas in the whole EU with high tourist intensity and density levels (each one of these areas featured on average more than 10,000 nights spent in tourist establishments per 1,000 residents and more than 2,000 nights spent in tourist establishments per km²) (Eurostat, 2015).

The Mediterranean is a large closed sea, contained between three continents, while at the same time, it constitutes a sea crossing, given that it connects and forms a passageway between the Black Sea, the Indian Ocean and the Atlantic, connecting different people, cultures and worlds. Located in the center of a relatively unstable regional frame, the Mediterranean plays a central role in the shape of the geostrategic environment of the entire Europe, North Africa, the Middle East and even more broadly. From a geopolitical point of view, the Mediterranean area can, as an international area, be subdivided in various individual areas (subareas or geopolitical subsystems). The continent of Europe, North Africa, the Middle East and areas that spread above the Mediterranean basin and constitute in a way its extension, are all included in the main subareas that we distinguish in the wider Mediterranean area. Sub-Saharan Africa, the Black Sea, and the Persian Gulf region belong to these areas. In the Mediterranean basin there are marine communication channels to and from Africa, mainly when it comes to the regions of Cyprus, Crete, Malta, Sicily, Sardinia, the Balearic Islands and Gibraltar. Energy Security is a predominant element of the Mediterranean environment, as more than 65% of oil and natural gas European imports come from the Mediterranean. The establishment of a safe and stable environment in the area is important not only for the countries that import, but also for the countries-producers of energy as well as for the countries through which the transportation of oil and natural gas takes place (Paris, 2014).

Crete's Urban Plan is governed by the Regional Framework of Spatial Planning and Sustainable Development of the Region of Crete (Gazette B 1486 / 10.10.2003). It documents the place and role of Crete in a national, European and international setting, the functioning of interregional character that Crete features or might develop in the future, the factors that influence the long-term growth and structure of space as well as the spacial consequences of European, national and regional political programs on a regional level. Furthermore, it determines, with a fifteen-year perspective, the key priorities and strategic options for the integrated and sustainable development of space in a regional level, which promotes the equitable inclusion of the wider international, European and national space. Therefore, according to the Regional Framework, the spatial development pattern of Crete should support and exploit its comparative advantages and opportunities relevant to emerging new forms of development with actions and initiatives directed but not limited to: The promotion and enhancement of the role of Crete in the center of the SE Mediterranean and hub of international importance in the fields of economy, culture and communication. Creating or enhancing the existing four development axes: A. Eastern Mediterranean Countries - Cyprus - Crete- Western Greece. B. Eastern Mediterranean Countries - Cyprus- Crete- Central and Western Mediterranean Countries. C. Crete- African and Arab Countries. D. Crete- N. and S. Aegean- Thrace- Balkans- Black Sea.

The combined promotion of their culture and the natural environment. The Encouragement of the production of agro-environmental products and the strengthening of the process manufacturing activity in the primary sector products. The upgrading of the role of cities, the strengthening of smaller urban centers and the stimulation of the

functioning of the mountainous and semi-mountainous areas. The Formulation of a comprehensive strategy for sustainable development, with emphasis on the development of the associated sectors of Tourism and Agriculture. The Support of the production of high value added products, particularly those of high technology (biotechnology, information technology, etc.). Addressing the acute problems in the critical areas of energy production, management of water resources and the emergence of Crete as a center for development of pilot production and for applications of renewable energy and technology transfer.

Especially for the port of Heraklion, the national spatial plan provides for the strengthening of its international role, in conjunction with the other ports of the country, central (Piraeus, Thessaloniki, Patras, Igoumenitsa) and regional (Souda, Alexandroupolis, Volos), in order to elevate and consolidate them as the main maritime gateways of the country. For this purpose, investments for the development of coastal infrastructure, cruise and marine tourism and hospitality are necessary.

The trade activity depends on a skilled hub container port on the south coast, the activation of the Adriatic / Ionian Sea Highway Trans-European Transport Network, the increase in volume, but also the change in the distribution and marketing of the agricultural products of Crete Heraklion Municipality Operational Programme, 2008.

The position of the Heraklion Port is identified by the following elements : It holds a prominent geostrategic position - in the center of the South - eastern Mediterranean, it is the third port in Greece in passenger traffic, in terms of coastal shipping : 1,500,000 passengers - 310,000 vehicles / year , in terms of cruises: 270,000 passengers - 250 approaches / year, in terms of tradable goods, it is the main gate of Crete with 330 truck arrivals / departures daily, it is the 2nd Harbor in Greece to become a cruise Home-Port (Mpras, 2014).

Today the geostrategic - energy role of Crete in the Eastern Mediterranean and Europe is highlighted in both the issue of the exploitation of hydrocarbons, the expected gas pipeline projects and submarine transmission cable (Israel - Cyprus - Crete - Mainland Greece ending Central Europe) (Ligeros, 2015). The Israel -Cyprus -Greece pipeline concerns the distribution of natural gas from the Eastern Mediterranean Basin to European markets. It is expected to connect Israel with Cyprus and Greece with a final stop in Crete. Some analysts argue that this pipeline will provide energy security in Europe as it is estimated that the Mediterranean basin, without specifying geographic size or countries, holds more than 3.5 billion cubic meters of gas.

The Eastern Mediterranean stocks are able to meet the domestic needs of the countries of origin, but also to be used for to meet Europe's needs. In Greece, most deposits are located in the marine area of Crete and totaled 6 trillion cubic meters of gas and 1.7 billion barrels of liquid hydrocarbons. The viability of natural gas reserves south of Crete is estimated to 100 years. The latter, underlines the importance of the proper management by the Greek Government (Gatsidas, 2013).

Crete, located in the broader territorial unit of the Aegean maintains interdependence with the islands of the South Aegean and the Dodecanese. In regards to mainland Greece, its interdependence lies mostly with Attica and the Peloponnese. The entities of Crete and the Aegean Islands form a functional islandic area consisting of more than 90 islands, which, taking into consideration the islandic aspect, is characterized by problems and possibilities that form a complex developmental environment at a European and a Mediterranean level.

The combination of the characteristic of the geographical discontinuity, isolation, regionalism, fragmentation of space, but also the unique cultural identity, make up the particular image of this islandic space which concentrates a rich network of separate habitats. Moreover, the axis of Crete - Cyprus enjoys an advantageous geographical position in the Southeast Mediterranean, as it connects the region of Europe with the Middle East and North Africa, as well as constituting an entry-exit gate of the EU to other countries.

Also, it holds a very important position, as far as the development of the European Union's relations with the rest of the Mediterranean are concerned, in the framework of the Euro- Mediterranean partnership, and a key position in the development of the maritime boulevard of South - Eastern Europe. The inter-island trait and universal domination of maritime space that offers a unique natural environment richness, while highlighting the economic, cultural and social relations with the people of the Eastern Mediterranean and Europe, which are all outcomes of a long historical route and great civilizations, constitute elements that promote Crete to the present day and feature the islands as interesting tourist destinations. Finally, it should be noted that given the location and transport infrastructure available (international airports, commercial ports), economic relations with too many points are maintained (national and international), with which there are air and sea links. The key location of Crete at the crossroads of three continents, was a historical, cultural meeting and composition point as well as one for the development of multiple economic exchanges and activities. This large advantage, combined with the development of transport infrastructure, the upgrade of higher education, the development of research and technology, the production of individual, high-quality agricultural products, which form the basis of the Cretan diet, the continued demand of mass and thematic tourism, and especially the high quality of life Crete offers to its residents and visitors, make it a unique place to stay, an attractive area of investments and a potentially crucial business center in the Eastern Mediterranean region. Based on the above and under the continued pressure / requirement for regional competitiveness, the specificities and needs of Crete practically underline a developmental vision that can be outlined: the emergence of Crete as a model island for development, with pillars its competitiveness in the economy, research and innovation , extroversion, quality of life of its inhabitants and green growth, in order for Crete to become a model region and a strong pole for multiple business opportunities and investment options (Operational Program of Crete 2012-2014, 2011).

4. CONCLUSIONS

The economy of Crete in its long history was based on agriculture, cattle breeding and international trade. Throughout the years from antiquity until today the main manufactured products remain the same and are: olive oil, wine, wheat, herbs-medicinal plants and livestock products. Its designation as "*the large self-sufficient island*", determines the productive dynamic that shapes the ideal combination of land and climate. The marine environment and the surplus of produced goods were the factors that contributed to exports in other countries and turned Crete's residents to trade and, formerly, to shipping.

The key location of Crete at the crossroads of three continents, was a historical, cultural meeting and composition point as well as one for the development of multiple economic exchanges and activities. It has been this geopolitical position's historical destiny to be the crossroads of peoples of three continents and it therefore has always been a bone of contention. Conflicts and natural disasters have been the main causes that postponed the promotion of peaceful work, causing decay and the international isolation of Crete. Moreover, today, Crete's geostrategic-energy role as one of the channels of communication in the Mediterranean is enhanced since most of Europe's imports of oil and gas travels through the Mediterranean, but also in terms of the potential for exploitation of hydrocarbons.

Crete's modern economy specializes in economic activities related to agriculture, tourism, trade and construction. Especially in the food processing sector, Crete has created some powerful advantages as it possesses agricultural products of recognizable quality, available both within the country and in international markets and the Cretan Standard of the Mediterranean diet, which constitutes an "*intangible cultural heritage*" with strong promotional momentum. The Cretan economy is characterized by extroversion, as both tourism and an important

part of agricultural production is directed to international markets. Apart from the economic activities that Crete specializes in, Research and Technology is a strong growth pole and has an important educational and research potential, which contributes significantly to economic growth and can enhance a greater degree of development of the productive sectors of the island.

It is realized that the basic elements, that determine Crete's economic identity and position in the international environment throughout its history of many centuries, are the soil and the products that it produces, the marine environment and the interconnections that it creates with the globe, the climate and the favorable conditions that it shapes for the flora and the fauna, as well as its human resources, as this develops in the respective, for each period, historical environment.

These are features , along with the diverse and accumulated rich cultural heritage, that can develop and enhance Crete in modern times, in order to heal its disadvantages and more specifically, to exploit the available surplus of growth potential that Crete features.

Crete has all prerequisite conditions- productive resources, human resources, research and technology infrastructure, institutions of democratic planning; and features the initial starting conditions for a developmental takeoff, in the frame of a flexible specialization, smart and sustainable growth, prioritizing agriculture , tourism, culture, the environment, energy, communications and transport, with an emphasis on the economy of knowledge, research, technological development and innovation and the enhancement and extension of the extroversion of the local economy. This developmental takeoff will further highlight and strengthen the economic-geopolitical role of Crete in the Mediterranean, Europe and the world, along with a bold improvement and development program of transport networks and infrastructure (roads, airports, ports). This ambitious prospect is primarily a matter of the Peoples of Crete, but requires its inclusion in a National and European Development Plan, at least to the extent of Crete's contribution in the wealth produced in the country.

REFERENCES

- Aposkitou, M., 1960. Crete and homer 'society of cretan historical studies. *Cretan Chronicles*, 14: 168. Retrieved from <http://64.244.59.70/IMH/output/2702561270578a.pdf>.
- Boardman, J. and N.G.L. Hammond, 1982. *The Cambridge ancient history: The Expansion of the Greek World, Eighth to Sixth Centuries BC*. University Press, 3. DOI <https://doi.org/10.1017/CHOL9780521234474.009>.
- Brumfield, A., 2002. Agriculture and rural settlement in ottoman crete, 1669–1898. *A Historical Archaeology of the Ottoman Empire, Contributions To Global Historical Archaeology*, Ed. Uzi Baram, Lynda Carroll: 37-47. Retrieved from <http://link.springer.com/book/10.1007/b110350#page=49>.
- Chaniotis, A., 1999. Milking the mountains. *Stuttgart: From Minoan Farmers to Roman Traders*. pp: 145, 180-188, 210-212.
- Cherry, J.F., 1984. The emergence of state in the Aegean. *From Proceedings of the Cambridge Society*. pp: 18-48.
- Christakis, K.S., 2004. Palatial economy and storage in Late Bronze Age Knossos. *British School at Athens Studies*: 299-309.
- Christakis, S.K., 1999. Pithoi and food storage in Neopalatial Crete: A domestic perspective. *World Archaeology*, 31(1): 1-20.
[View at Google Scholar](#) | [View at Publisher](#)
- De Souza, P., 1998. Late hellenistic crete and the Roman Conques. *Proceedings of the First Colloquium on Post-Minoan Crete. Held by the British School at Athens and the Institute of Archaeology. University College London, 10-11 November 1995 (1998)*, 2: 112-116. Retrieved from <http://www.jstor.org/stable/40960151?seq=1>.
- Didier, V., 1999. Economy and territorial dynamics. *Stuttgart: From Minoan Farmers to Roman Traders*. pp: 221-223, 226-227, 231.

- Doumas, C.C., 2010. Crete and the cyclades in the early bronze age: A view from the North. *British School at Athens Studies*, 18: 101-105.
- Eric, H.C., 1999. Crete, Egypt and the Near East. Stuttgart: From Minoan Farmers to Roman Traders. pp: 116-121, 128-134.
- Eurostat, 2015. Statistical books. European union. Luxembourg: Publications Office of the European Union, Regional Yearbook. pp: 22, 79, 96, 104, 109, 131-132, 134, 160, 165, 192, 199.
- Gatsidas, J.N.T., 2013. Energy stocks in Greece and the Eastern Mediterranean, in *Deep Analysis*(3). Retrieved from www.indeepanalysis.gr.
- Georgakakis, K., 2012. Retrieved from <http://www.Pygni.gr> [Accessed 31/03/2012].
- Giannadaki, G., 2013. Culture and economy: The role of culture in the history of economic thought. London School of Economics: 6. Retrieved from www.lse.ac.uk/europeanInstitute/research/hellenicObservatory/CMS%20pdf/Events/2013_PhD_Symposium/Paper%20for%20website/Giannadaki%20Giouli.pdf.
- Gioti-Papadakis, O., 2011. Introduction to economic geography. Greek Edn., Kritiki. pp: 17, 24, 49-53, 75.
- Guizzi, F., 1999. Private economic activities. Stuttgart: From Minoan Farmers to Roman Traders. pp: 235-236, 239-241, 243.
- Haggis, H.D., 1999. Staple finance, peak sanctuaries, and economic complexity. Stuttgart: From Minoan Farmers to Roman Traders. pp: 53-59, 68, 70, 75-79.
- Halstead, P., 1977. The bronze age demography of crete and Greece: A Note. *Annual of the British School at Athens: JSTOR*, 72: 107-109.
- Ioannides, Y.M., 2000. Regional disparities in Greece: The performance of crete, Peloponnese and Thessaly. *EIB Papers*, 5(1): 40-41, 53, 54.
- Kazantzakis, N., 2015. Report to Greco. Kazantzakis (Niki Stavrou), Greek: 172-177.
- Krzysztof, N., 1999. Economy of Refugees. Stuttgart: From Minoan Farmers to Roman Traders. pp: 145, 167-169.
- Ligeros, N., 2015. The new data on the island within the EEZ. Region of Crete and Professional Scientific Association of Technological Education Engineers (EETEM) Heraklion: 18.
- Manning, S.W., 1994. The emergence of divergence: Development and decline on bronze age crete and the cyclades, in C. Mathers and S. Stoddart (eds), *Development and Decline in Mediterranean Bronze Age*. Sheffield. pp: 233-245.
- Marangou, A., 1999. Wine in the cretan economy. Stuttgart: From Minoan Farmers to Roman Traders. pp: 269-270, 273, 278.
- Mpras, J., 2014. Heraklion port authority, innovation & development of the next step. Retrieved from <http://docplayer.gr/5862779-Economist-conferences.html> [Accessed 27/11/2014].
- Niemi, W.-D., 2004. When minos ruled the waves: Knossian power overseas. *British School at Athens Studies* (n.d.). *JSTOR* [JSTOR], 12: 393-398.
- Parisis, J., 2014. The modern strategic environment Southeastern mediterranean. National Defense General Staff, Workshop. Retrieved from <http://www.geetha.mil.gr/el/briefing-el/conferences-el/4125>.
- Piero, V. and P.C. Gian, 1984. Crete on the trail of the minotaur. Greek Edn., Athens: Ammos. pp: 24.
- Sara Paton – Rolf, M.S., 1999. Imported marble on Roman crete. Stuttgart: From Minoan Farmers to Roman Traders. pp: 279-280, 294.
- Sbonias, K., 1999. Social development in prepalatial crete. Stuttgart: From Minoan Farmers to Roman Traders. pp: 36, 46-47.
- Stefanakis, I.M., 1999. The introduction of coinage in crete. Stuttgart: From Minoan Farmers to Roman Traders. pp: 247-248, 257, 264.
- Sweetman, R.J., 2007. Roman Knossos: The nature of a globalized city. *American Journal of Archaeology*, 111(1): 61-81. *View at Google Scholar* | *View at Publisher*

Terkenli, S.T., 2005. Human activity in landscape seasonality: The case of tourism in crete. *Landscape Research*, 30(2): 221-239.

[View at Google Scholar](#) | [View at Publisher](#)

Tzouvelekas, V.M. and K. Mattas, 1995. Revealing a region's growth potential through the internal structure of the economy.

International Advances in Economic Research, 1(3): 304-313. [View at Google Scholar](#) | [View at Publisher](#)

Vourveri, K.I., 1953. Plato and crete In the section of ancient Greek human geography. *Society of Cretan Historical Studies, Cretan Chronicles, Z: 325-327.*

Online Science Publishing is not responsible or answerable for any loss, damage or liability, etc. caused in relation to/ arising out of the use of the content. Any queries should be directed to the corresponding author of the article.