

IMPACTS OF VARIETY IN SOCIAL, POLITICAL, ECONOMIC SITUATIONS, AND HISTORICAL DEVELOPMENTS IN MEDITERRANEAN REGION PRESENTLY MANIFESTATED BY HETEROGENEOUS HUMAN POPULATION COMPOSITION AND MIGRATIONS INTERFERING WITH AN EFFECTIVE MARINE ECOSYSTEM CONSERVATION IN MEDITERRANEAN SEA

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ABSTRACT

We have entered a period in which a real environmental protection cannot be truly achieved in the key large Mediterranean marine ecosystem which shapes considerably the overall fate of the world. International institutions, legislations, conventions, agreements, environment projects fiscal opportunities, precautionary investments, new findings of scientific research, each day rapidly complicating complex reporting methodologies developed by European Union (EU), and United Nations Environment Programme UNEP, and other positive, kindly approaches so far could not find an acceptable, and satisfactory policy to be implemented by the stakeholders, i.e. Mediterranean countries, to solve the present problems regarding smoothly functioning ecosystem services, and equity in sharing them by the stakeholder nations from Türkiye, Syria, Israel, Egypt, Libya, Morocco, Tunisia, Greece, Malta, and finally Portugal in Iberia. Despite the most comprehensive conservation plans and are prepared by European Union (EU), dualism between EU and the rest hampers international cooperation which is a must in protecting such a big whole ecosystem. Remedy to sustainably manage this ecosystem requires some decades to balancing unequity between different stakeholders in terms of revenue, GDP distribution, in addition to political, national, and fair ecosystem sharing rights etc. appropriately even though the difference in cultural properties have been exaggerated nowadays.

Key words: aquatic ecosystems, ecosystem services, biodiversity, migrations, people, Mediterranean, international cooperation.

As sustainable management of aquatic ecosystems requires better coordination between policies spanning freshwater, coastal and marine environments, also a cooperation and cultural, behavioural, ethical cooperation between the citizens of countries sharing and protecting the same ecosystem is absolutely required, in our opinion, in advance of freshwater, inland waters, coastal coordination in the Mediterranean region. Otherwise, no one can achieve and ecosystem-based management (EBM) and any integrative approach to maintain biodiversity dependent (also, people dependent) protection of aquatic biodiversity. Generally, conservationists urge the necessity of cooperation and contribution coming from local communities but

ignore mutual responsibility and benefit sharing contribution of citizens of nations, states who are in common with sharing, protecting, and using the same ecosystem. They live together irrespective of their uneven GDP distribution because they have already been connected by means of the common big ecosystem shaped through centuries, even thousands of years. Somehow, academicians, scientific researchers studying in the field, and experts see, respect, and use the evolution theory, evolutionary pathways followed by pre-historic ages, but never mention about evolutionary shaping of ecosystems and landscapes by people. In this regard, Human Ecology journal, edited by an eminent anthropology scientist in US is greatly appreciated.

However, provision of holistic approach is almost impossible due to social economic level differences shared the same ecosystem, due to extreme richness of western countries, and the EU compared to Middle East countries in the east, which also responsible for protection of the same ecosystem while have the rights benefited from the common ecosystem services illustrated various international environmental organisations and EU publications, including ecosystems services classification tables and peculiar ecosystem maps in colour. At the present time

Besides the difference in implementing ways of national environmental policies delimited by country borders, the imbalance between EU and non-EU countries has caused some artificial separations in achieving maintenance of realistic ecosystem sequences which could facilitate ecosystem based management tools used by each country to protect Mediterranean more comprehensively. EU itself in this respect prevents such a marine ecosystem protection cooperation between the poor and rich countries, between other neighbouring religions, and ethnic groups, though all are originated from the same lands in history. In other words, the EU has hitherto exaggerated the effect of cross-cultural differences at the cost of losing this big ecosystem, in particular in future. Therefore, it would be better for EU Commission to change EU conservation policies beyond the scope of limited space of European countries as Mediterranean is an integral part of the entire Europe, Africa, and Asia met in the matrix of Mediterranean Sea.

The succession of civilizations that waxed and waned in the Mediterranean Basin over several millennia has had great impacts on biota and ecosystems everywhere in the basin. A complex 'coevolution' has been claimed to shape the interactions between ecosystem components and human societies. Two opposing schools of thought traditionally have considered the consequences of human pressures on Mediterranean ecosystems. The 'Ruined Landscape' or 'Lost Eden theory' argues that human action resulted in a cumulative degradation and desertification of Mediterranean landscapes. The second school argues that humans actually contributed to keeping Mediterranean landscapes diverse since the last glacial episode. With this debate in mind, I show the following:

(1) One cannot understand the components and dynamics of current biodiversity in the Mediterranean without taking into account the history of human-induced changes;

(2) The various systems of land use and resource management that provided a framework for the blossoming of Mediterranean civilizations also had profound consequences on the distribution and dynamics of species, communities, and landscapes;

(3) The processes of domestication of plant and animal species, which first occurred in the eastern Mediterranean area some 10,000 years ago, contributed to the increase of certain components of biodiversity at several spatial scales. Positive and negative feedback cycles between cultural practices and natural systems at the local and regional levels have kept ecosystems robust and resilient;

(4) Assuming that human action can, to a certain extent, be considered a large-scale surrogate for natural sources of ecosystem disturbance, such patterns give support to the diversity-disturbance hypothesis—specifically, intermediate levels of disturbance have promoted biological diversity;

(5) Intraspecific adaptive variation increased as a result of human-induced habitat changes over millennia, resulting in bursts of differentiation during the later Holocene of local ecotypes and gene pools of domesticated and wild plant and animal species, with region-specific characters fitting them to local climate and environmental conditions.

In the European Union (EU) efforts to conserve biodiversity have been consistently directed towards the protection of habitats and species through the designation of protected areas under the Habitats Directive (92/43/ECC). These biodiversity conservation efforts also have the potential to maintain or improve the supply of ecosystem services; however, this potential has been poorly explored across Europe. In addition, yet EU environment organisations and universities (e.g. Nottingham university, coordinating CICES, i.e. ecosystem services classification) could not aware of importance of evaluation and status of each marine ecosystem services according to biogeography, GDP level, conflict-war status, and Mediterranean trade in accordance with traditional and present trade patterns via sea. That's why ecosystem services management policies in a way have failed in implementing Habitat and Bird Directives, Article 17, and balancing social discrimination threats due to cultural, religious, and economic variations which have shape d disequilibrium in Europe and the Mediterranean. That is really harmful also for Turkey, Egypt, Israel, Libya, Greece, and so on.

High intraspecific adaptive variation also arose from earlier natural processes of the Pleistocene, mainly from a combination of periodic refugia formation and climate dynamics. During the Holocene, the main sources of disturbance came increasingly from humans, specifically from the coupled cultural and natural modifications of community and landscape structure. It is concluded that a high degree of resilience of Mediterranean ecosystems resulted in a dynamic coexistence of human and natural living systems, which in some cases provided stability, while fostering diversity and productivity.

The word “design” used in the title and elsewhere in this paper metaphorically indicates that the long-lasting influence of human impacts resulted in an unintentional shaping of individual components of landscapes.

However, Europe and other western countries which assume protection is needed only in their parts do not take into this contribution provided by people at present, majority is migrating towards west account, but hit them over the sea and transboundary passage routes harshly. This indeed is a severe, illogical rejection of people-landscape formation process ongoing through centuries, even thousands of years in the Mediterranean region by the European Union member countries, and other rich western countries far away from Mediterranean in the west.

Political interventions to a commonly accepted marine conservation programme by North Africa, Balkan, EU countries, and Türkiye is meaningless for the ongoing actual mechanisms of marine ecosystem dynamics, irrespective of negotiations or disputes the marine component of earth ecosystem cannot be reined. To cope with such challenges weakness of any Mediterranean country should be restored by the EU and other relatively improved western countries in line with taking into consideration implementation of EU Directives, and their corresponding extensions in the east, Asia, and Africa countries in accordance with their own cultures, economic scales and capacities, and war/peace status. To consolidate the expected efficiency of overall outputs of these effective cooperation policies voluntary agreements, and fiscal supports can be launched by the EU, and international organisations such as the World Bank, UNDP, GEF, and IMF.

Accordingly, the UN intergovernmental platform dedicated to ecosystem services, IPBES can, even should produce Mediterranean related ecosystem services classification tools coupled with social economic differences of Mediterranean region with its own descriptive compound classification system.

With the result that, the EU's way while conserving biodiversity in accordance with CBD Convention, IPBES and EU Directives should be developed towards ensuring equity amongst Mediterranean countries as each country's reduction in GDP indirectly but severely affect the resilience of this ocean like, big marine ecosystem.

Mediterranean Sea ecosystem is waiting for a specifically designed humane purposes driven new environmentalism, of which the targets would be better accepted the all. Much realistic, working policies, and legislations required to be explored by western and eastern institutions, and governments, as EU alone is neither the only responsible manager, nor the owner of the Mediterranean Sea. In other words, today our world should invent short, less complicated, but sincere, direct, and implementable policy mechanisms.

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