The Interactional Relationship between Ecotourism and Sustainable Development

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Abstract : The Ecotourism is considered as an important part of the export industry, which depends on the natural elements with their various resources and wealth, in addition to the developed elements that has been established by people to attract tourists. Moreover, Ecotourism has a prominent role in achieving sustainable development, which mirrors the overall development of people and countries in all fields. Furthermore, the sustainable development has a direct relation with the environment where it works on achieving the development goals of the human race while protecting the environment and its sustainability.

Keywords : Ecotourism ,Sustainability, Development, Environment, Balance

INTRODUCTION

The sustainable development has become a priority to most countries and governments around the world which is a goal that requires investing all possible resources within comprehensive policies and strategies under the term defined as “Comprehensive Economical Engineering”. Within this definition, tourism is considered one of the most important sectors which contribute into the economic development and subsequently the overall development economically, socially and culturally. Furthermore, the various fields and activities of tourism and its relation to sustainable development has become of interest to the economists and social scientists due to the economic and social demand. Therefore, it became necessary to expand the touristic base to include Eco-tourism which is based on the environmental balance. The target of this new phenomenon is to research and think about nature and its various inhabitants, while providing comfort to humans. Moreover, the main advantage that applying ecotourism provides is linking the investment and the production projects to the protection of the environment the biodiversity and cultural of the tourist destination within the same equation.

This research will study the sustainable development and the ways to achieve it through the development of the Ecotourism concept under three main part:
part One: Tourism and the Relation with Environment
part Two: Sustainable Development (Dimensions & Indicators)
part Three: The Effect of Ecotourism on Sustainable Development

1. TOURISM AND THE RELATION WITH ENVIRONMENT
1.1 General Definitions of Tourism and its Impacts
1.1.1 The Definition of Tourism

Despite the consensus between the tourism scientists that it would be difficult to put tourism under one comprehensive definition, many definitions that clarifies the nature and classification of this activity and its different aspects can be found. Therefore, we will go through several definitions that accompanied the activity development of tourism:

- In 1905, the German Guyer Freuller defined tourism as “One of the era’s phenomena that emerges from the increasing need to acquire leisure and recreation, to intuit and savor the nature’s beauty, and to experience the pleasure of residing in regions of a special nature.” (Latif, 1994:10). We notice how this definition focused on the psychological and moral aspects of tourism and neglected other aspects.

- The Austrian economist Vau Schuller defined tourism as “The sum total of operation mainly of economic nature which is directly related to entry, stay and movement of foreigner inside or outside a certain city or region.”. (Reid,2003:108) We noticed that this definition has focused on the economic aspects in addition to a reference to the domestic and international tourism.

- The United Nations Conference for Tourism and International Travel, held in Rome in 1963, recognized that tourism is “a social and
human phenomenon that is based on the movement of the individual from his permanent residence place to another place temporarily for a minimum period of twenty four hours and a maximum period of one year for leisure, therapeutic or historical tourism. Additionally, tourism like a bird has two wings domestic and international” (United Nations,1963).
- In 1991, The Ottawa Conference in Canada defined tourism as “The activities carried out by a travelling person out of his usual environment for a certain period of time while his purpose of travel should not be performing any activities to earn income at his destination”. (United Nations,1991).

Based on the abovementioned definitions, we observe the contrast while no comprehensive definition can be found. However, the main points about the tourist activities can be summarized as the following:

- Tourism is a collection of materialistic and non materialist relations.
- Tourism is established by the movement of persons and their residence in places other than their permanent residences.
- The movement to the destination is for a temporary period that has a minimum and a maximum.
- The purpose of visiting should not be for commercial or work reasons.

1.1.2 The Environmental Impacts of Tourism

There are no doubts that the tourism sector has a significant role in the economic and social growth. However, few specialists in this sector have focused on its environmental impacts whether they were positive or negative.

The Positive Impacts

Similar to any other economic sector, tourism services depends on natural resources. It is also noticeable that most of tourism elements are related directly and indirectly with the environmental resources. Therefore, the positive impacts of tourism on the environment can be summarized as the following:

- The environment benefits from tourism through the attention paid to its physical features, archaeological sites and wild life.
- The historical and cultural heritage defines the attractiveness of a certain country to tourists and it encourages the government to preserve those features. Therefore, many countries put huge efforts into providing an organized protection for the archaeological cities, villages and sites especially which have historical and artistic significance.
- Tourism is used to raise awareness about the importance of nature and environment; hence the tourism resources can be used efficiently.

The Negative Impacts

The positive impacts have beside them many negative impacts, and to mention a few:

- The impact of tourism on the Ecological System: the tourism activities interferes with the plants and wild lives, therefore, many damages are caused especially if the infrastructure is not completely ready to contain these activities. Moreover, this may cause disturbance to the wild life and put more pressure on the endangered species. For instance, the souvenir phenomena in many cases causes the destruction of the wild environment through the killing operations of animals for trading as the demand on the souvenirs made of their furs, horns or skins is increasing. Furthermore, coral reefs and marine ecology are threatened by tourism due to the increasing disposal of untreated waste and chemicals which eventually destructs its tourist value.
- Pollution and wastes: tourism causes the consumption of huge amounts of domestic resources which subsequently results into solid and liquid wastes. This matter became an issue for many countries which do not have the ability to treat waste material. For instance, estimation shows that tourist ships in the Caribbean are alone responsible for 70,000 tons of waste.
- He excessive use of natural resources: the development of tourism and the infrastructure related to its activities mostly cause harms to natural sights by urban expansion. Moreover, natural water resources are also facing the same issues especially in regions where it is scarce. Studies show that a tourist consumes double the amount of water of a resident. In addition to water use in entertainment activities such as swimming pools and golf courses.

1.2 The Relationship Between Tourism and Environment

The conventional and emergent tourist destinations are facing more pressure on their natural, cultural, social and economic environments due to the rapid expansion of the tourism sector. Moreover, there is...
recognition that the inordinate growth of tourism, which aims to achieve short-term benefits, mostly results into negative impacts on the environment, society, and the base of tourism itself by the excessive consumption of material, pollution, and wastes resulting from the infrastructure and tourist facilities’ development.

1.2.1 The Emergence of Ecotourism

William Morris (1834 – 1896), an English, artist, writer and social scientist, is considered the first in calling for Ecotourism. He was known for his designs of wallpapers and textiles, moreover, he founded an organization calling for handcraftsmanship and clean cities and environment. Furthermore, the term “Ecotourism” is attributed to the Mexican architect Hector Ceballos-Lascurain in 1983; one of the advocates of environment protection and the founding director of the Environmental nongovernmental organization “PRONATURE” calling for the preservation of the wetlands in order to secure and guarantee the continuation of the reproduction of the birds in their homelands such as the American Flamingo. Ceballos-Lascurain had noticed that there were increasing numbers of tourists especially from North America who were interested primarily in birds’ observance, which made him believe that such people could play a dominant role in reinforcing and encouraging the domestic countryside’s economy, creating new jobs and preserving the environment in the region. Subsequently, the term “Ecotourism” was used to describe that phenomenon and since then many specialists from international organizations, such as The International Union for Conservation of Nature and The UN World Tourism Organization, have developed the definition of Ecotourism and established its conditions. And even before the term was established, many tourist activities had started within promising tourists who had started realizing the negative impacts on society, environment and economy (Denga, et al, 2011).

1.2.2 Definition of Ecotourism

The term “Ecotourism” had appeared in the eighties of the twentieth century, which was a modern term that came to express a new type of eco-friendly tourist activity performed by mankind preserving the natural and civil inheritance of their environment.

Moreover, the ecotourism is a leisurely and recreational type which relates tourism to environment. In other words, the ecotourism means deploying our surrounding environment to represent one of the tourism types which a person haven to for enjoyment. Furthermore, ecotourism is a natural pleasure that means in general going out of the daily routine to the desert in order to appreciate its beauty and nature including its wildlife and take part in its usual activities or to the archeological sites or to mountain areas. Therefore, there are many definitions for ecotourism:

- Global Environment Fund: according to Global Environment Fund ecotourism is “Traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas” (Fennell, 2001: 18). This type of tourism is considered highly important for developing countries as it represents an income source in addition to its role in environment conservation, cultural establishment and sustainable development practices.
- Manila declaration: this declaration in 1980 assured that the relationship between tourism and environment is a balance relationship between development and conservation of the environment. However, the tourist needs should not compromise the social and economic interests of the population of the tourist regions, the environment, the natural resources or the archeological and cultural sites which are considered attracting elements for tourism. Moreover, the declaration had stressed that these resources are part of the humanity heritage which should be protected by the local, national and international community by taking the necessary steps. (WTO, 1980)
- The International Union for Conservation of Nature and Natural Resources: Which defined ecotourism in 1999 as “the responsible travelling to the natural regions which conserves the environment and guarantees its population’s prosperity and comfort” (Dudley, 2008).

1.2.3 The Elements and Principles of Ecotourism

The most important elements of Ecotourism are as the following (Honey, 2008:31).

- No defects should occur to the environmental balance resulting from human behaviors which are represented by the tourist
behaviors and any pollution that he may cause. Another relationship had appeared between tourism and the environment as a whole and the sustainable development where development is seen as a tool for human progress. However, the opposite has occurred when development had become an exhaustion, harm and pollution tool to natural resources.

- Tourism is based on displaying the beauty features of any environment in the world. The more healthy and clean is the environment, tourism can flourish and brisk as one of the environment conservation sources.
- Achieving balance between tourism and environment from one side and the economic and social interests from the other side.
- The biodiversity, the purity of the natural environment and the rescuing of endangered species are essential elements in ecotourism stimulate. Therefore, it is necessary to take into account that the deterioration of environment limits the opportunities for tourism development.

Furthermore, many countries around the world have established the principles and conditions for ecotourism and to mentions a few:

- Providing designated entry centers that provide the tourist with the necessary information about the tourist region through the local community.
- Managing the natural resources and the biodiversity in a sound and environmentally sustainable way.
- Putting strict and effective laws for accommodating and protecting the tourists’ volume while protecting the environmental sites.
- Involving the society population and raising their awareness and educating them about environment and tourism. This also includes establishing projects to enhance their life conditions through developing touristic industries (Fennell, 2003: 258).
- Working on achieving suitable revenue for the region or the country where the investment has been made in a way that ensures the development and future expansion (Honey, 2008: 31).

2. SUSTAINABLE DEVELOPMENT (DIMENSIONS and INDICATORS)

2.1 Sustainable Development Definition

This term had appeared for the first time and had been structured through the report “Our Common Future” published in 1987 by The World Commission on Environment and Development chaired by the Norwegian prime minister at the time, who started developing the report in 1983. At the time, Sustainable Development was a new term, as it was the first time that a definition addressed the economic, social and environmental needs at once. These three dimensions merge in decision making where the economic outcome goals become connected to conservation of natural environment and conditioned to achieving social justice. Moreover, the Portland report assures the strong bond between these dimensions, where no sustainable development can be applied without merging these elements. Furthermore, the commission defined the sustainable development as the development which takes into consideration the current society needs without compromising the rights and needs of the coming generations. Some see the sustainable development based on essential principles illustrated in adopting production and consumption patterns that respects the environment and humanity, and fulfills all earth inhabitants’ needs including the essential needs of humans for food, shelter, education, work and live in a sound environment. As the feeling arose on the importance of the environment, the Earth Summit had been held in Rio De Janeiro in 1992 where the sustainable development was the key concept. Therefore, the summit was concluded with publishing a bulletin known as AGENGA 21 “which specifies the economic, social and environmental standards to achieve sustainable development as a human development substitute in order to face the needs and the challenges of the 21st century”. Moreover, the second Earth Summit held in Johannesburg in 2002 under the name The World Summit on Sustainable Development (The United Nations, 1992.).

2.2 The Dimensions Of Sustainable Development

We have mentioned that the sustainable development cannot be achieved unless the integrate between the economic, social and environmental elements are achieved, where the omission of the social or environmental dimensions has a negative impact on the economic dimension.

2.2.1 The Economical Dimension

The sustainable economic system is the one that allows production of products and services to satisfy humanity and achieve a continuous prosperity without harming the natural environment. This system imposes changes in
production and consumption patterns to eliminate natural resources’ waste. It also enforces find effective methods to satisfy the economic needs without harming the environment by air, water or soil pollution. Moreover, it implements reducing liquid and solid waste by treatment to avoid the contamination of surface water, ground water, soil which can cause diseases and epidemics.

2.2.2 The Social Dimension

Sustainability in its social dimension means the justice in distributing wealth among the society individuals and the access to essential necessities such as healthcare, education and shelter to poor categories. It also means eliminating the economic and social differences between the urban and countryside residents, and equality between all social levels by involving all society members in decision making to spread freedom and apply democracy.

Furthermore, the demographic growth in any country needs to be balanced and reasonable in accordance with the capacity and natural resources of each government. Thus, any rapid and unbalanced demographic growth makes the government incapable of responding to its people by providing the necessary services of healthcare, education and shelter, which subsequently will increase poverty. Moreover, the random use of wealth and natural resources, including water resources and agricultural land, drains these resources, hinders the sustainability of the development and burdens the coming generations.

2.2.3 The Environmental Dimension

The sustainable development in its environmental dimension imposes the necessity of maintaining a solid base of natural resources by following reasonable patterns of production and use to avoid excessive draining to renewable and nonrenewable resources in order to ensure biodiversity, purity of air, fertility of soil and conservation of biodiversity. Furthermore, the environmental specialists focus in their approach to sustainable development on the concept of “Environmental Limits”, which means that every natural system has its limits that cannot be exceeded by the usage and the excessive usage of these resources would eventually mean the deterioration of the environmental system. The specialists also demonstrate that the only way to protect the environmental system is by abolishing bad production and consumption patterns such as draining surface and ground waters, deforestation, etc.

2.3 The Indicators of Sustainable Development

Thinking about the continuance resulted in depth into evolving indication tools for development which its role was for a long time limited to monitoring economic growth rates. In the early nineties, the development of indicators was completed by phrasing sustainable development indicators for comprehensive environmental, social and economic dimensions.

The sustainable development indicators appeared under the pressure of international organizations led by the United Nations which brought many programs in order to formulate them. One of the most important programs in The United Nations’ Commission on Sustainable Development which emerged from the Earth Summit which included around 130 indicators categorized into four main types; Economic, social, environmental and institutional.

Moreover, the indicators of sustainable development were also categorized into another three main types (The United Nations, 2001):

- Driving forces indicators; categorizing the pressures performed by the activities and patterns.
- State Indicators; providing a glance of the current status such as water and air qualities.
- Response framework indicators; summarizing the taken procedures.

2.3.1 The Economic Indicators

- GDP and GNP per capita: this indicator is considered a driving force for economic development as it measures the gross domestic product and its volume. Although it does not fully measure the sustainable development, it represents an important element of the life quality elements.
- The ratio between Gross investment to GDP and GNP: this indicator means the percentage of spending on the fixed assets’ profits of the Gross Domestic Product and Gross National Product, which measures the percentage of investment to production.
- The ratio between the current account and GDP: the current account indicator measures the national debt and helps evaluating the country’s debt endurance. This indicator is related the resources’ base through the ability of transferring
the resources to exportation in order to reinfore
the ability of debt repayment.
• The ratio between net ODA to GDP and
GNP: This indicator measures the level of con-
ditional aids which targets boosting the
development and social services, and it is
represented by a percentage ratio from the GDP
and GNP.

2.3.2 The Social Indicators

• Poverty indicator: which is a composite of
tree dimensions considering developing
countries; life expectancy, health status
(percentage of people who do not reach their
forties), and the availability of the economic tools
(Percentage of people who are unable to benefit
from health and water services).
• employment rate: it includes all the
working force individuals who are not employed
but paid by social security or self-employed as a
percentage from the working force.
• Life quality: this indicator is used to
measure the number of individuals that are not
expected to reach their forties as a percentage from
the total population. Also, the percentage of
population who are unable to benefit from safe
water resources, healthcare services and sewerage
services which are considered an essential matter
for sustainable development.
• Education: this indicator is used to measure the
percentage of illiterate people under the age of 15
years old. Also, the gross ratio of high school
admission is used as an indicator to measure the
participation level in preparatory education.
• Population growth rate: this indicator
measures the annual population growth as a
percentage.

2.3.3 The Environmental Indicators

• Total water resources per capita: this
indicator is related to two main phenomena;
population growth rate and demographic changes,
and the increase in living standards resulting from
the redistribution which is targeted by some
economic development programs.
• The mean arable land per capita: this
indicator measures the individual’s share in
hectares from the arable (agricultural) land.
• Annual used volume of fertilizers: indicates the density of fertilizers usage and
measured by kilogram per hectare.
• Desertification: this indicator measures
the area of deserted land and its ratio to the gross
area.
• Forest area change: this indicator
measures the change that occurs by time to the
forestry area as a percentage to the gross country
area.

2.3.4 The Institutional Indicators

• The main phone lines per 100 capita: the
most general indicator of degree of development of
telecommunications in any country.
• Mobile phones subscribers per 100 capita: this indicator measures the number of mobile
phones’ users.
• computers per 100 capita: the number of
personal computers available for a certain
country’s population measures its ability to
reinforce its production and keep pace with
world’s economy.
Internet users per 100 capita: measures the
participation level of the countries in the
information technology evolvement. (Newton et al,
2010)

3. EFFECTS OF ECOTOURISM ON
SUSTAINABLE DEVELOPMENT
3.1 Development and Sustainable Tourism
3.1.1 The Definition of Sustainable Tourism

If the economic development was a permanent
advancement factor, then this only shows a
quantitative dimension. While there is consensuses
among the specialists of the tourism sector that
tourism activities cannot form an economic pole
unless they acquire continuity that makes them a
constant factor in the economic surrounding which
can drive the advancement wheel.
On that subject, the report done by The United
Nation Economic and social Council in 2000
mentions that; “The tourism development has to be
built on an Ecological base on the long-term and
on the economic and social levels of the local
societies” (Social and Economic Council, 2000).
Obviously the sustainable development in its
modern definition does not exclude tourism as a
sensitive sector that seems to be a new global
direction. Moreover, the advanced countries in the
tourism sector are working on putting long-term
studies and plans to create a kind of stability and
establishment for this sector. Subsequently, these
countries are adopting comprehensive policies that
have a medium and long term effects while
avoiding the short term development plans.
Therefore, we find that the development of the
tourism sector by sustainable development is
mentioned in agreements and pacts that have a
continental and international nature. For instance, we could mention “Manila Report” which is related to heritage, where in 1988 a statement was published in it “that tourism is capable of providing the suitable conditions, and in the international research frame which was executed by the new international organization, and capable of playing a positive role in creating balance and cooperation between countries” (Social and Economic Council, 2000).

The aforementioned clearly illustrates that the view of the tourism sector has become built on the long term plans in order to create a solid base for this industry targeting its transformation to an essential factor in achieving sustainable development.

3.1.2 The Objectives of Sustainable Tourism

- Protecting the local culture and its environmental, cultural and social properties (The heritage and traditions, the social and economic phenomena, and the civil and cultural levels).
- Tourist resources usage rationalization.
- Protecting the environment from pollution (earth, climate, water, life, wildlife, population growth). (Weaver and Lawton, 2007).

3.2 The Role Of Ecotourism In Sustainable Development

Ecotourism represents a type tourism that is based on the concept of tourism sustainability. It also depends mainly on the nature’s elements followed by the social element of the local residents who live in the tourist areas. Therefore, the sustainability is mainly related to the sustainability of the environment and the sustainability of the economy.

The observer of the ecotourism evolvement synchronicity with the world economic crisis realizes the importance of supporting this direction from an industrial and production perspectives which contributes into increasing the national income, providing employment opportunities, utilizing manpower, and achieving the development program. From the environmental perspective, ecotourism is an attraction factor for tourists and for satisfying their desires and aspirations to enjoy and visit the natural places; however, taking into consideration that this investment in environment resources does not result into draining these natural resources but should be a way to conserve and protect it for “a sustainable ecotourism”. Therefore, ecotourism cannot be a development factor unless it is used to achieve a sustainable ecotourism and subsequently a sustainable development.

CONCLUSION

Tourism, like any other development sector, can have positive and negative impacts at the same time on the natural environment, which is the base of ecotourism. Therefore, it is necessary for the relation between tourism and the environment to be a symbiotic relationship and a balance between the development and the environment conservation. Moreover, it is to be ensured that the tourist needs are not satisfied through harming the social and the economic interests of the residents of the tourist areas, the environment, natural resources, or the archeological and cultural sites, which are considered primary attracting elements for tourism, where it is also necessary that the local and international communities take the needed steps to protect those elements. Furthermore, the long-term and thoughtful planning is an essential element for establishing the balance between tourism and environment in order for the tourism to become a sustainable development activity.

REFERENCES


Newton, C., Geneletti, D., and Orsi, F (2010) Towards a common set of criteria and indicators to identify forest restoration priorities: An expert
panel-based approach, Journal of Ecological Indicators, (9) p672.


