

Impacts of Tourism on Coastal Ecosystems

Module 3: Coastal and Marine Tourism
Duration: 1 Hour

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Project: 101129136 — SustainaBlue — ERASMUS-EDU-2023-CBHE



Co-funded by
the European Union



PROJECT PARTNERS

Malaysia



Indonesia



Greece



Cyprus



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Project: 101129136 – SustainaBlue – ERASMUS-EDU-2023-CBHE

Content

1

Introduction to Coastal Tourism

2

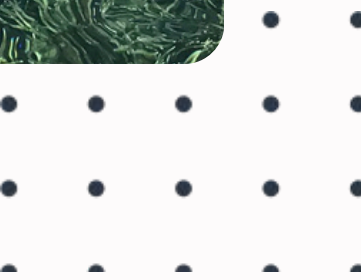
Environmental Impacts

3

Socio-Economic Impacts

4

Summary



Introduction to Coastal Tourism

- Coastal tourism is one of the fastest-growing sectors and the largest sector that heavily relies on the use of the ocean, due to the large and constantly rotating number of tourists who come to engage in activities around the Coastal area.
- In addition, marine-based ecotourism is also a major attraction for Coastal tourism.



Source: Hall, C.M. (2001)



Introduction to Coastal Tourism

- The increasing number of tourist have a benefit for local businesses and people near the Coastal area in terms of employment and increased income. Such as travel guides, beach resorts, restaurant businesses, and a sailing activity that requires the expertise of rural people.
- The growing demand of tourists for ecotourism will significantly damage the coastal and marine environment in the long term if no planning is done on sustainable used of breach and oceans resource.



Environmental Impacts

- In response to the surge in tourism and the demand for goods and services, coastal economies have to respond to these increasing demands, which in turn has an impact on the coastal environment.

Affected areas

➡ Coastal development

➡ Physical damage

➡ Pollution

➡ Wildlife disturbance



➡ Coastal development

- Most of the coastal business developments are mainly concerned with the importance of budget for development and using the benefits of natural resources to reduce development costs, which leads to long-term problems.

Source: (UNEP & PAP/RAC, 2009)

Groundwater extraction

- The accommodation business and most of the production of water-consuming goods or services focus on pumping groundwater instead of desalination of seawater to reduce production costs.

➡ **Saltwater intrusion:** the excessive underground aquifers pumping, saltwater from the sea seeps in to replace it. which leads to contaminated freshwater supplies and soil.



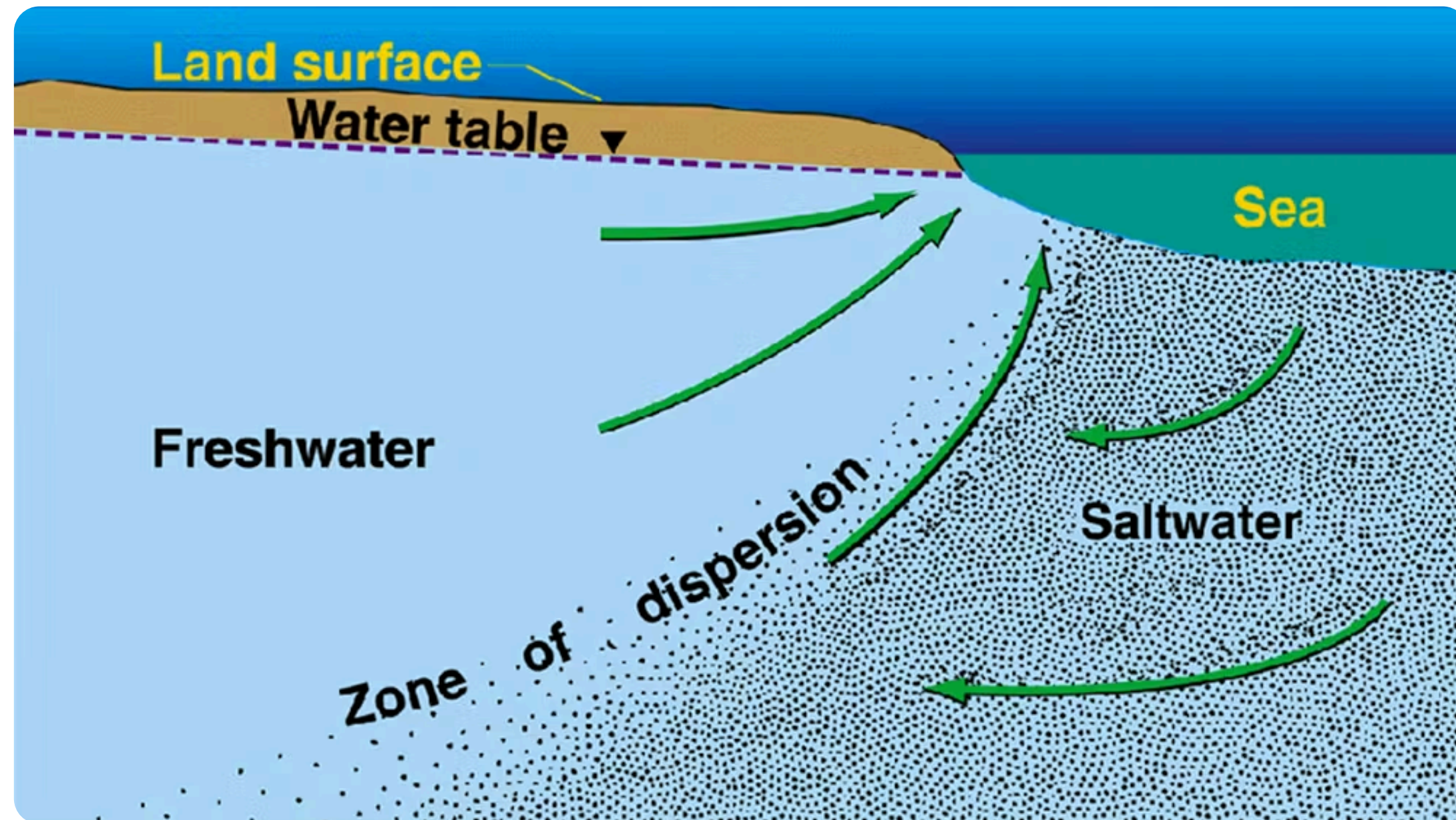


image:curiositysavetravel.com



Huge consumer of natural resources

- The increase in the number of tourists also leads to an increase in the consumption of goods and services.
- For example, seafood restaurants need to catch a lot of fish to meet the increasing number of customers, or accommodation businesses use more electricity such as water heaters and air conditioners.

Environmental Impacts



➔ Pollution

- Most of the pollution caused by coastal tourists is due to increased consumption of goods and services, such as accommodation businesses along the coast that dispose of wastewater by pouring wastewater into the ocean instead of sewage purification, and increased waste generated from the consumption of goods.

➔ **Tourism growth on the Galapagos Islands:** A group of islands located in Ecuador. It's known as an island rich in marine natural resources that are the main attraction for tourists.

- The abundance and quality of the marine environment are essential issues that the Ecuadorian government must prioritize, particularly concerning pollution and waste resulting from increased tourism.

Galapagos Islands Case study

The Ecuadorian government formed the National Tourism Board (DITURIS) in 1974.

- to enhance management in the areas of countries' tourism industry, laws, regulations, and to promote investments in tourism.

The Master Development Programme: objectives for tourism development and obligation.

- Controlling the number of tourists to 20,000 per year, but the number exceeded 60,000 in 1967.
- Not covering tourist activities that damage the marine area (lack of data)
- In 1998, Ecuador drafted a new Special Law for Galapagos to effectively address the problem of raising solid waste every year.

Source: Egret Communications / ARA Consulting (2001)



➡ Physical damage

- Tourist activities and anchored vessels serving them are the main contributors to the most visible physical damage along the coastline (WWF, 2007).
- According to Hawkins and Roberts' report on the expansion of coastal tourism in Egypt, particularly around the popular Red Sea resorts of Hurghada, land infilling to expand tourist infrastructure has led to increased sedimentation.
 - Smothering corals
 - Reduced Light Penetration(Sediment clouds)



Environmental Impacts

➡ Wildlife disturbance

- Scuba diving and boat trips to explore coral reefs or marine life are activities that attract tourists, which can disturb marine life due to noise pollution.

➡ Stress and Behavioral Changes

➡ Disruption of Breeding and Nesting



Socio-Economic Impacts

- The growth of tourism has a considerable influence on coastal communities, contributing to both social and economic integration while also introducing potential negative consequences.

Source: UNEP & PAP/RAC, (2009)

Advantages

- ➔ Higher human resources demand: The expansion of coastal enterprises has highlighted the growing necessity of human resources to meet the efficient production of goods and services.



Source: UNWTO (2006)

Disadvantages

➔ Economic Leakage: Unequal income, Foreign investors' or non-local businesses around the coast have higher income-generating rates than local businesses. UNCTAD (2007)

In a study of cruise tourism in Australia, Dwyer and Forsyth (1996)

- The foreign investors' cruise industry has higher production finance supply than local cruise and can generate more income than local businesses by providing more convenience than local coastal businesses.
- Fly cruise packages: It's a booking that combines a flight and a cruise package. The highlight of this package is the convenience of both types of travel and the number of destinations compared to local cruises.



Socio-Economic Impacts



Fly cruise packages



local cruise

- ➔ Resource competition: The coastal resort and large restaurant businesses are intensive resource-consuming to provide goods and services, leading to resource scarcity among local people.
- agriculture in local requires clean water
 - insufficient food supply (fisherman)
- ➔ Cultural commodification and gentrification: Local cultural practices and traditions would be at risk of being eroded along with the growth of the coastal tourism industry due as values that conflict with the interests of tourists often cause shifts in local people's traditions to align with tourist interests.



Activity: Tourism Impact Mapping

- Identify a popular tourist site in your country.
- Map its environmental and social impacts.
- Suggest 3 sustainable alternatives.
- Share findings on course forum.



Summary

- The tourism industry has a significant impact on the ecosystem, along with its development and expansion, due to the concentrated number of coastal tourists contributing to an increase in the consumption of goods and services. Consequently, a surge of pollution and destruction to the coastal ecosystem.
- Despite the negative impact of the tourism industry, it can't be denied that economic benefits and income generation are crucial factors for a country's revenue.



Reference

- Hall, C.M. (2001). Trends in ocean and coastal tourism: the end of the last frontier?. *Ocean & Coastal Management*, 44(9-10), 601-618.
(Reviews impacts of coastal tourism development)
- UNEP. (2009). *Sustainable Coastal Tourism: An Integrated Planning and Management Approach*. UNEP Manuals. (Provides insight into environmental impacts of tourism and management strategies)
- Hall CM. Environmental impact of tourism in the Pacific. In: Hall CM, Page S. editor. *Tourism in the Pacific: issues and cases*. London: Routledge, 1996, p. 65–80.
- Milne S. The impact of tourism development in small Pacific Island states. *New Zealand Journal of Geography* 1990;89:16–21.



Reference

- Minerbi L. Impacts of Tourism Development in Pacific Islands. Greenpeace Pacific Campaign, San Francisco, 1992.
- Egret Communications/ ARA Consulting (2001), Galapagos Islands, Ecuador Tourism Growth Case Study, Available at: <http://www.juneau.org/>
- WWF (accessed in June, 2007), Tourism & coastal development, World Wide Fund for Nature, Available at: <http://www.panda.org>
- Hawkins JP, Roberts CM. The growth of coastal tourism in the Red Sea: present and future effects on coral reefs. *Ambio* 1994;23(8):503–8.
- UNWTO (2006), Tourism and Least Developed Countries, A Sustainable Opportunity to Reduce Poverty, World Tourism Organisation, Madrid.




Reference

- UNCTAD (accessed in June, 2007), Helping Developing Countries Destinations to Become More Autonomous, United Nations Conference on Trade and Development, Available at: <http://www.unctadxi.org/>
- Dwyer, L., Forsyth, P. (1996), Economic impacts of tourism: an overview of approaches, Journal of Travel Research, Vol. 35 No. 1, pp. 3–11.



THANK YOU

ASSOC. PROF. DR MAHADI MOHAMMAD

 +6012-472 2912

 mahadi@usm.my



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.
Project: 101129136 — SustainaBlue — ERASMUS-EDU-2023-CBHE

