# Research Report

## **Environmental Commission**

Protection of coastal sites against the effects of pollution





**Forum Environmental Commission** 

Protection of coastal sites against the effects of Issue:

pollution

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#### Introduction

It is estimated that more than 50% of the world's population lives within 100km from the coast. Most of the world's greatest cities are located on the coast and the popularity of regions with close proximity to coastal regions growing. Furthermore coastal areas have a lot to offer for their countries' economies including fisheries and tourism as well as natural resources such as oil and harbour space. Coastal areas are however under danger of being destroyed by various types of pollution starting from a person simply throwing their own waste into the ocean going all the way to oil spills and industrial waste. Many of these coastal regions have already been destroyed. One case in point is San Francisco where 95% of wetlands have already been destroyed. However coastal areas are also very important for our planet's environment. Several important ecosystems and habitats are located in coastal areas. The destruction of these coastal regions will lead to the destruction of these habitats and therefore result in a loss of biodiversity. For all these reasons combined, it is very important to protect coastal areas and ensure that no further harm is done to these already endangered and exceptionally popular regions of our world.

## **Definition of Key Terms**

#### **Pollution**

The action of polluting, or condition of being polluted; defilement; uncleanness or impurity caused by contamination (physical or moral). Spec. The presence in the environment, or the introduction into it, of products of human activity which have harmful or objectionable effects. (Oxford English Dictionary)



#### **Coastal Areas**

Coastal areas are commonly defined as the interface or transition areas between land and sea, including large inland lakes. Coastal areas are diverse in function and form, dynamic and do not lend themselves well to definition by strict spatial boundaries. Unlike watersheds, there are no exact natural boundaries that unambiguously delineate coastal areas. (http://www.fao.org/docrep/w8440e/w8440e02.htm)

#### Biomagnification

The increasing concentration of a substance, such as a toxic chemical, in the tissues of organisms at successively higher levels in a food chain. As a result of biomagnification, organisms at the top of the food chain generally suffer greater harm from a persistent toxin or pollutant than those at lower levels. (http://www.thefreedictionary.com/biomagnification)

#### **Pathogens**

An agent that causes disease, especially a living microorganism such as a bacterium or fungus. (http://www.thefreedictionary.com/pathogens)

#### **General Overview**

#### **Importance of Coastal Sites**

Coastal sites are very important for our planet regarding the economy and the environment. They create a source for jobs and income. Employment opportunities associated with coastal areas include fishery and tourism. In addition since coastal areas are very attractive for people to settle, there are many job possibilities in the service industry. Coastal sites have habitats for many species which are vital to the ecosystem. Unfortunately pollution is a great danger putting the economy and the environment at risk.

Coastal areas are very important to the economy of the countries to which they belong adding substantial economic benefits. For example coastal sites are very popular for tourism. The tourism industry offers a great source income for citizens. Tourists need several services, such as hotels, restaurants and shops. Considering that the people working in the tertiary sector need these services as well, creating even more jobs leading to economic growth. Therefore many jobs in general are available in coastal areas. Tourism is booming at the moment, because of the constantly improving ways of transport if however coastal areas are destroyed due to pollution or its aesthetic value suffers, this branch of the economy is



also substantially harmed. For some countries this could mean a serious decrease in economic resources.

Furthermore fishery is an endangered industry in many countries. It is estimated that 90 percent of the world's fish is dependent on coastal areas at some point of their life cycle. This means that if coastal areas are destroyed, so is a large part of the world's fish supply. This would lead to insufficient fish supplies to meet consumption demands.

Coastal areas are very important for our environment. They provide unique ecosystems for important and rich biodiversity. Losing coastal sites means losing biodiversity including fish used for human consumption. In addition the poisoning of fish and shell fish with dangerous substances such as mercury can also lead to biomagnification and bioaccumulation. This is also very dangerous for the people consuming affected fish and shellfish.

The people are very affected by these changes as well. When parts of our economy are destroyed so are income opportunities. As a result people lose their means of life which is very dangerous. Also the loss of fish takes away an important part of our nutrition. Therefore coastal sites are crucial for the populations of them.

There are many aspects in which coastal areas are important to our world. Their loss of these coastal regions would have strong impacts on the economy, the environment and the people. It is therefore vital to protect these areas against pollution.

#### **Sources of Pollution**

There are many different types of pollution affecting coastal regions. These include pathogens, toxic substances including heavy metals, industrial waste products and toxic compounds such as herbicides, pesticides, litter and noise. These materials pollute the environment and come from both industry and the population living in the areas itself.

Industry is a major cause of pollution in coastal territories. There are different kinds of industries such as factories, oil platforms and agriculture. Factories cause pollution because they sometimes dump toxic materials into the ocean as means of avoiding government regulations and associated costs. In addition when containers or buildings are not built properly this can lead to leaks of poisonous chemicals. When oil platforms are damaged oil flows into the ocean poisoning animals. The oil can also stick bird's wings together preventing them from flying away. Herbicides, pesticides and pathogens run off into the ocean from faulty practices employed in the agricultural industry. These sources must be kept to an absolute limit when trying to protect coastal areas.

Another source of pollution is the people living at the coast or spending recreational time there. They simply dump their household garbage into the water. One particularly dangerous item often thrown in ocean is the plastic rings used to hold 6-packs of cold drinks. Birds can easily get caught in these plastic rings, trapping them and therefore leaving them to die. It is thus very important to raise awareness among the people living in these areas of the consequences of throwing garbage into the water. This will hopefully prevent them from unknowingly endangering coastal areas and harming their environment.

A further threat that comes both from industry and the population is noise. Whales and dolphins orient themselves and communicate through sound. Over the past years, there have been several cases in which whales and dolphins beached themselves due to distraction from human generated noise. This noise is caused by factories, cars or other means of transport such as trains, ships and planes. Loud noises distract the ocean life close to the coast endangering its animals. Therefore noise must also be considered when trying to solve this issue.

#### **Consequences of Pollution**

Pollution has many consequences on our world. Consequences for our economy, our environment and the people living here. As mentioned before pollution of coastal areas can have many consequences on our economy, for example by loss of tourism and fishery as well as our environment. This however also means that there are consequences for the people living and working not only in coastal areas but all over the world. Hurting the economy has direct consequences on the population dependent on coastal regions for their livelihood. Environmental changes will also have these consequences. Some species can go extinct because of these environmental changes or poisonous pollution. Therefore food chains will be interrupted destroying them to some extent. It is therefore of high importance to solve this problem quickly and most of all effectively.

## **Major Parties Involved and Their Views**

#### Greenpeace

Greenpeace is a non-governmental organization (NGO) which focuses on the environment and our planet. It is one of the largest organizations on this topic and works internationally trying to solve issues concerning the environment worldwide. It was formed from 1969 to 1972 in Vancouver, Canada. Its headquarters are now in Amsterdam, the Netherlands. Greenpeace does not rely on funding by governments, corporations or political

parties. The organization is part of the United Nations Economic and Social Council and works through research, lobbying and demonstrations. It is Greenpeace' goal to protect the planet including all coastal areas. They are strongly against making money on account of the environment and the world we live in.

#### **United Nations Environment Programme (UNEP)**

The UNEP is a programme of the United Nations founded in 1972 after the United Nations Conference on the Human Environment in June the same year. Its headquarters are located in Nairobi, Kenya and the UNEP has six other offices in different countries on different continents. The UNEP structures and coordinates the UNs activities linked to the environment. UNEPs main tasks include climate change, ecosystem management and environmental governance. The goal of the UNEP is to protect the environment without interfering with other parts of the UN.

#### **Timeline of Events**

There are only few exact dates regarding the development of the pollution of coastal areas because it is an ongoing progress without milestones.

Date	Description of event
1969	Greenpeace founded
June 1972	United Nations Conference on the Human Environment held.
1972	UNEP established
1992	First International Earth Summit held in Rio de Janeiro

## **UN involvement, Relevant Resolutions, Treaties and Events**

The UN has had some involvement with coastal pollution already. This involvement has however mainly been focused on maritime pollution in general or the laws of sea regarding pollution. These are the main resolutions passed on this issue:

- Oceans and the law of the sea, 20 March 2010 (A/RES/64/71)
- Coastal state jurisdiction relating to marine pollution, 29 July 2000 (Resolution 10/2000)



- Large-scale pelagic drift-net fishing and its impact on the living marine resources of the world's oceans and seas, 20 December 1991, (A/RES/46/215)
  - There is however two documents from the UN concentrated more on coastal pollution. Both have been initiated by the UNEP. These can be found on the following websites:
- <a href="http://www.unep.ch/regionalseas/regions/med/t barcel.htm">http://www.unep.ch/regionalseas/regions/med/t barcel.htm</a>
- http://www.unep.org/urban\_environment/PDFs/Coastal\_Pollution\_Role\_of\_Citi es.pdf

## **Evaluation of Previous Attempts to Resolve the Issue**

The UN has taken some measures regarding coastal pollution. These measures were however obviously not sufficient since we are still dealing with this issue. The resolutions passed were mainly focused on maritime pollution and less on coastal pollution. So far no concrete measures have been taken against coastal pollution. No resolutions have been passed. This is why the effects of pollution of coastal areas is one of our topics at this year's MUNISH.

#### **Possible Solutions**

The key to solving this issue is to create a balance between the environmental needs of coastal areas and the economic benefits related to the coastal sites in an environment harming way such as harbours. While trying to achieve this balance one must however keep in mind that upholding the coastal areas is also very important for all countries' economies. One measure that could be taken to solve the issue is raising awareness about the issue to the people that influence coastal areas by living in them or spending their holidays there. Another measure could be to give companies incentives which act in an environment friendly way concerning the pollution of coastal areas. Furthermore treaties could be created between governments or companies regarding pollution of coastal areas. This should be encouraged in order to make parties agree on taking measures helping the issue of pollution themselves. To solve this issue, it is important to eliminate the roots of the problem not the "symptoms". It is however important to keep in mind that the Environmental Committee is not

the Security Council and we therefore cannot force any party to do anything. We can however make recommendations.

## **Bibliography**

- "1. The Need for Integrated Coastal Area Management." *Rural Development through Entrepreneurship.* N.p., n.d. Web. 17 June 2013.
- < http://www.fao.org/docrep/w8440e/w8440e02.htm >.
- "About Greenpeace." *Greenpeace International.* N.p., n.d. Web. 17 June 2013.
  - <a href="http://www.greenpeace.org/international/en/about/">http://www.greenpeace.org/international/en/about/</a>.
- Center for International Earth Science Information Network at Columbia University (CIESIN).
  - "PERCENTAGE OF TOTAL POPULATION LIVING IN COASTAL AREAS." N.p., n.d. Web. 17 June 2013.
  - <a href="http://sedac.ciesin.columbia.edu/es/papers/Coastal\_Zone\_Pop\_Method.pdf">http://sedac.ciesin.columbia.edu/es/papers/Coastal\_Zone\_Pop\_Method.pdf</a>.
- "Introduction to Coastal Pollution." *Introduction to Coastal Pollution*. N.p., n.d. Web. 17 June 2013. <a href="http://oceanworld.tamu.edu/resources/oceanography-book/introtocoastalpollution.htm">http://oceanworld.tamu.edu/resources/oceanography-book/introtocoastalpollution.htm</a>.
- "Marine Biodiversity Wiki." *Coastal Pollution and Impacts* -. N.p., n.d. Web. 17 June 2013. <a href="http://www.marbef.org/wiki/Coastal pollution">http://www.marbef.org/wiki/Coastal pollution</a> and impacts>.
- UNEP. "Convention for the Protection Of The Mediterranean Sea Against Pollution." *Barcelona Convention*. Regional Seas Programme, n.d. Web. 19 June 2013.

  <a href="http://www.unep.ch/regionalseas/regions/med/t">http://www.unep.ch/regionalseas/regions/med/t</a> barcel.htm>.
- "United Nations Environment Programme (UNEP) Home Page." *United Nations Environment Programme (UNEP) Home Page.* N.p., n.d. Web. 17 June 2013. <a href="http://www.unep.org/">http://www.unep.org/</a>>.
- Wikipedia contributors. "United Nations Environment Programme." Wikipedia, The Free Encyclopedia, Web. 17 Jun. 2013.

  <a href="http://en.wikipedia.org/wiki/Unep">http://en.wikipedia.org/wiki/Unep</a>>.

