

# UNFCCC Topic 1: **Measures to improve and adjust the economy and its respective infrastructure in order to adapt to the consequences of climate change.**

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## **1) Introduction**

The climate on earth has been changing ever since the creation of the earth. Different species have existed in different geological eras and most of them became extinct due to sudden changes in climate which they couldn't adapt to. Right now we are experiencing another climate change that is different from those in the past because it is the first one that is mainly manmade. Even though it has been getting warmer on earth since the end of the last glacial period, there has been a drastic change. Through industrialization, starting about 1850, the content of greenhouse gases in the atmosphere and therefore the global temperature has been rising rapidly. Although the UNFCCC and other UN organisations are currently working on slowing down this process of global warming, it is extremely likely that it will go on in the following decades or even longer, and there are already consequences that we can see and feel today. Not only are different species of both animals and plants endangered, humanity also faces numerous problems caused by climate change. As stated before there are already several programmes trying to fight climate change, but we as the UNFCCC also see it as our task to look at the problem from a different

angle and to search for solutions for the consequences instead of only trying to fight its origin.

## 2) Different consequences:

### a) Rise in sea level

One of the most common consequences of climate change is the rise in sea level, caused by melting ice and thermal expansion of water. There are several studies estimating different rises in sea level. The IPCC (International Panel on Climate Change) predicted that the sea level will most likely rise faster in the 21st century than in the period from 1971 to 2010. Furthermore, according to the IPCC, a rise of up to 2.5 metres is possible. It is also important to note that in different regions around the world the rise can vary. The main problem is that big parts of the human population live close to the sea and thus will experience the negative effects of the rise in sea level.

There are different ways to protect the population as well as the economy in these areas. One of the most common ways is to build dams and dykes, but their constructions can be improved. Countries like the Netherlands have been dealing with the problem for many years and have gathered experience to tackle the problem in other countries we have to share information on an international basis and do further research on the topic.

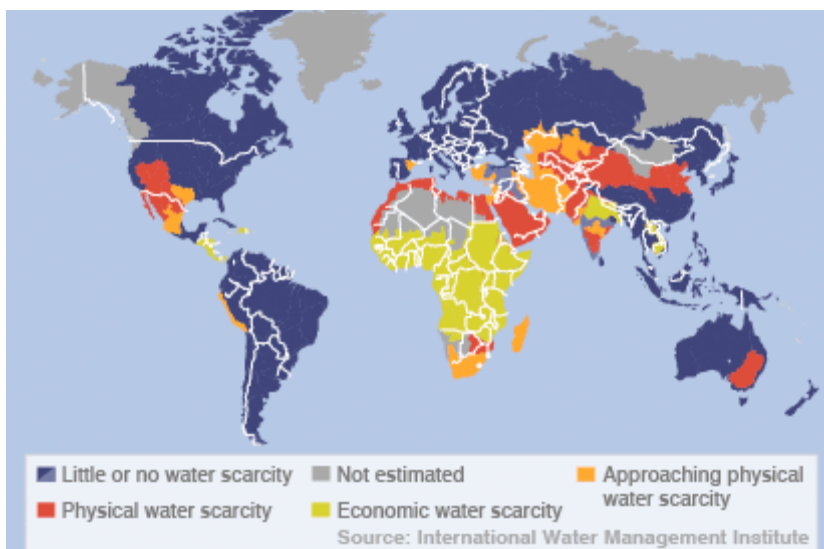


b) Extreme weather phenomena

Of course, natural disasters such as tsunamis, wildfires or landslides have always been a threat to human lives and structures, but through the rising temperatures in the atmosphere and in the sea they have become more likely to happen and also more extreme. We have to ensure the safety of houses, factories, power plants or any other buildings in every region that is somehow affected by extreme weather phenomena or natural disasters. Natural disasters can be combated best by taking safety measures before disasters happen. Therefore, establishing a robust infrastructure and economy could even save money.

c) Water shortage and resulting famines

One of the main reasons for water shortage in different regions are droughts which are caused by climate change. Despite the fact that the UN considers water as a human right, water shortage affects two-thirds of the world population. The mostly affected regions are Africa, parts of Asia and Central America. Water shortage has devastating effects on agriculture, the eco-system and, of course, on the human body. It can lead to famines and desertification. There are different ways to fight water shortage but most of them are not sustainable. Of course, the measures we take to fight the consequences of climate change should not contribute to climate change themselves.



### **3) Possible Solutions**

City planning will become more and more important in order to face the consequences of climate change. The first and most obvious reason are the higher temperatures. In a big city these become more noticeable because cities can heat up. For example skyscrapers and asphalt warm up easily. Another factor that should be considered in city planning is the location. Many cities are located very close to the sea or other waters and have to find solutions but new cities are built especially in developing countries and for those the location should be reflected.

For many problems a solution can be found by doing research. Agriculture under difficult climate conditions, protection of coasts, production of water or disaster control could possibly be simplified with technological inventions and new methods. That's why research should be continued.

Another hurdle to take is the fact that most of the consequences mostly affect undeveloped and developing countries. These countries often do not have the financial capacity to invest in solutions. They rely on the help of the international community and the United Nations to support them.

### **4) P5 positions**

#### United States of America

The President of the United States of America denies the existence of global warming. He believes that the changes in the earth's climate are something completely natural. Despite these facts, the USA should still be worried about the possible consequences of climate change, as they indeed affect the country. The east coast as well as the west coast have a very big population and several cities like New York or San Francisco. The USA as a highly developed country should also be open to give financial support to other nations.

#### French Republic

France does not belong to the countries which are mostly affected directly by climate change. Nevertheless, France should care about the protection and adjustment of

the existing economy. With the good financial conditions France could be one of the nations that take action in their own country and become a role model for other countries.

#### United Kingdom of Great Britain and Northern Ireland

Considering the fact that the UK is an island, it is obviously the rise in sea level that concerns the UK the most. Just like the other P5 nations the United Kingdom has the financial possibilities to deal with the national aspects of the issue and focus on supporting other member states of the UNFCCC.

#### People's Republic of China:

The PRC has a huge area that is only few metres over sea level. In fact, if all the ice worldwide melted and the sea level rose as much as possible, China would be the country losing most of its land surface. Regarding the fact that the PRC hasn't been the most considerate state in terms of reducing CO2 emissions, taking measures against the consequences instead could be very attractive for China.

#### Russian Federation:

Russia is strongly affected by global warming. According to national institutions the temperature in Russia has risen by about 0.5 degrees more than the global average calculated by the IPCC. The higher temperatures could lead to floodings and other natural disasters due to melting ice. Despite these problems Russia has only taken little action against climate change. But seeing the numerous consequences in Russia, the country should be interested in a resolution fighting them.

### **5) Sources**

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