

# Intergovernmental Panel on Climate Change

TOPIC B:

## **Desertification in the south of Europe and its impact on food supply**

**Undersecretary:**

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# INTRODUCTION

Desertification is a form of land degradation caused by the continuous exploitation of soil through human activity and it is a direct effect of climate change, resulting in droughts, increased temperatures, and less precipitation. In this particular process, soil is turned into sand, which means it loses all of the nutrients it needs to be fertile. During the 1950s, large efforts were made to draw attention to this issue, highlighting the negative potential outcomes that could happen in already arid regions (UNEP, 1992). Desertification has been occurring for hundreds of years; however, the increase of Greenhouse gases and carbon dioxide emissions has greatly elevated the consequences of this natural episode.

## BACKGROUND RESEARCH

According to the UN's top drylands official, Luc Gnacadja, desertification is "The greatest environmental challenge of our time" (ECA,2018). For example, it's starting to become a growing threat to the people and natural resources of Europe; Spain, Portugal, Italy, Greece, Cyprus, Bulgaria and Romania are all located in dry and semi-dry areas, which is why they're some of the most vulnerable countries in this issue. Additionally, the phenomenon is extending northward, encroaching on thousands of kilometers of rich soil that will soon become useless.

It takes between 200 to 400 years for one cm of soil to regenerate. According to the Global Footprint Network Report, on July 29, 2019 we reached "Earth overshoot day", marking the point where humanity has consumed all the natural resources that earth can generate in a year, thus reducing its capacity for regeneration. Last year, Madrid experienced the highest temperatures ever recorded in June -40.7 C (105 fahrenheit)-, reinforcing the data given by scientists, which predict that some parts of Spain could look like the Sahara by the end of the century. With less fertile soil to work on, a country's economy comes to a halt because it limits the production of food, decreases the land's natural resilience and reduces water quality, affecting the primary source for the population's wellbeing and security.

In a report done by IPCC, data shows that economic models project that the price of cereal and other products will increase up to 29%, impacting consumers globally through higher food prices, taking into consideration that "Low income consumers will be particularly at risk, with models projecting an increase of 183 million additional people at risk of hunger" (Mirzavaev, 2017). With less soil for production, the demand for food will increase and the supply will decrease, elevating the prices and leaving countries with less resources, possibly sparking worldwide hunger and food conflicts.

## UNITED NATIONS INTERVENTION

The UN created a commission called the United Nations Convention to Combat Desertification (UNCCD), inaugurated in 1994. A conference is held every year in which 197 parties, including the European Union, discuss a range of solutions, strategies, and action plans that can be implemented to reduce the effect of human activity on desertification; some of the most notable initiatives to have begun at this commission are the Common Agricultural Policy and the EU Forest Strategy, all which aim to “Protect, restore and and promote sustainable use of terrestrial ecosystems” (UNCCD, 2015). The current UNCCD Executive Secretary, Ibrahim Thiaw, stated in a response to the recent IPCC report on climate change that “The knowledge and technologies to manage our lands sustainably already exist. All we need is the will to use them to draw down carbon from the atmosphere, protect vital ecosystems and meet the challenge of feeding a growing global population”(UNCCD, 2015).

## POINTS TO CONSIDER

- Costs of sustainable solutions like fertilizer will be more expensive than chemical ones.
- IPCC only serves as a body that provides information about overall Climate change, and does not act as an organization itself.
- Low income countries should implement ways to maintain a balance in the market place so when the inflation occurs population and stock are not as affected.
- Less food equals conflict among citizens.

## QUESTIONNAIRE

- A. What is my country's position?
- B. What are my country's policies?
- C. What can my country do to solve this issue?
- D. Which countries can my delegation work with?
- E. What are three possible solutions?
- F. What has been done to solve the problem?

## USEFUL LINKS

Desertification <https://www.ipcc.ch/srccl/chapter/chapter-3/>

United Nations Convention to Combat Desertification <https://www.unccd.int/>

Combating desertification in the EU: A growing threat in need of more action.

<https://op.europa.eu/webpub/eca/special-reports/desertification-33-2018/en/index.html>

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