

FOOD CONSUMPTION UNIT FOR ERASMUS+ ENVIRONMENT AND SUSTAINABILITY:  
UNDERSTAND CARE ACT.

Step 1:

# FOOD & ENVIRONMENT: LOSS OF SPECIES DIVERSITY

**WHAT WE OWE TO THE  
EARTH**

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## OBJECTIVES OF THE UNIT

1. To understand basic concepts related to the environment
2. To understand the importance of nature in the life of humans.
3. To know the interrelationship between all the elements of the environment and how they influence each other.
4. To recognize the different types of pollution created by alimentary industries and how they affect the environment
5. To raise awareness of the importance of protection and respect for natural and development spaces.
6. To understand what climate change is.
7. To recognize environmental impacts, their causes and consequences ..
8. To know the effects of climate change.
9. To know the natural risks and the factors that increase them.
10. To understand the basic principles of sustainability by international and citizen actions.

## CONTENTS:

1. Bases of climate change.
2. The global dimming.
3. The greenhouse effect.
4. The ecological footprint.
5. Population growth problems.
6. Types of pollution.
7. Waste.
8. Deforestation and desertification.
9. Biodiversity loss.
10. Types of natural risks.
11. Factors that influence natural risks.
12. Principles of sustainable development.
13. Renewable energy.

## METHODOLOGY:

This teaching unit will be taught through discussion sessions and documentaries, as well as the use of the reading below, to reach the main conclusions in their notebooks.

In the high school session, students of Bachillerato have prepared two debate positions on the subject: Is veganism more sustainable than the omnivorous diet? Some results of one position are situated below.

The students of ESO have watched the documentary "Before the flood" and solved several questions related to it. The links are in YouTube and vimeo: <https://vimeo.com/356141324> with the key TFFS2019-20  
There is also a blog of the film, <https://antesqueseatarde2018.blogspot.com>

Finally, we have analyzed the newspaper article in the annex.

## LO QUE DEBEMOS A LA TIERRA

*La cuenta ecológica de la Tierra está en números rojos. EFE/ El Mundo, 3-8-20 10 (fragmentos)*

La Tierra tiene un límite anual para regenerar los productos que se gastan. Harían falta 3 planetas si toda la humanidad tuviera el nivel de consumo español. Un español emite el mismo CO<sub>2</sub> en 7 días que alguien de Tanzania en 12 meses.

Si toda la población mundial tuviera el nivel de vida de un español medio, serían necesarios tres planetas como la Tierra para conseguir un equilibrio sostenible entre consumo y regeneración ecológica.

En el caso de que el nivel de vida alcanzara el de un ciudadano estadounidense, el número de planetas necesarios sería de cinco, mientras que la producción de la Tierra podría reducirse a la mitad si la población global viviera como un ciudadano indio.

Estos son los datos que ha aportado la organización británica independiente New Economics Foundation, reflejan la capacidad del planeta para sustentar la vida que en él se desarrolla y ponen de manifiesto que la Tierra tiene un límite ecológico al año para generar productos y absorber contaminación.

Superado este límite se consume mediante la sobreexplotación de los recursos, señala a Efeverde el director de economía ambiental de New Economics Foundation, Aniol Esteban. En declaraciones a Efe, Esteban explica que un español genera en los siete primeros días del año tantas emisiones de CO<sub>2</sub> como un ciudadano de Tanzania en los doce meses siguientes.

(...)

La organización medioambiental estadounidense Global Footprint Network analiza la situación global para determinar la huella ecológica que la humanidad deja cada año, y aporta las cifras que determinan dónde están los límites de la naturaleza.

Las cantidades consumidas de pesacado, carne, cereales y vegetales se transforman en superficie de terreno que es necesario para generarlas y se contabiliza, entre otros, el consumo energético y las emisiones de CO<sub>2</sub> para obtener el área de producción que corresponde a cada ciudadano del mundo.

Los últimos datos de Global Footprint Network señalan que corresponden casi dos hectáreas por persona, pero sólo en España cada ciudadano consume la producción de unas seis hectáreas de terreno aproximadamente.

Según explica Esteban, la humanidad ha vivido durante siglos en equilibrio hasta que, hace aproximadamente tres décadas, empezamos a consumir y a vivir a crédito, llevando nuestro saldo a un punto cada vez más extremo. La organización alerta: la cuenta ecológica del planeta ha entrado en números rojos.

**¿Qué timbres de alarma señala el texto sobre el agotamiento del planeta?**

**¿Cuáles son las razones por las que vivimos hoy por encima de nuestras posibilidades?**

## **WHAT WE OWE TO EARTH**

***The ecological account of the Earth is in red numbers***  
***EFE / El Mundo, 3-8-20 10 (fragments)***

The Earth has an annual limit to regenerate the products that are spent. It would take 3 planets if all humanity had the level of Spanish consumption. A Spaniard emits the same CO<sub>2</sub> in 7 days than someone from Tanzania in 12 months.

If the entire world population had the standard of living of an average Spaniard, three planets like Earth would be necessary to achieve a sustainable balance between consumption and ecological regeneration.

If that the standard of living to be achieved were that of a US citizen, the number of planets needed would be five, while the production of the Earth could be reduced a half if the global population live as an Indian citizen.

These are the data provided by the independent British organization New Economics Foundation, they reflect the ability of the planet to sustain the life that develops there and show that the Earth has an ecological limit per year to generate products and absorb pollution.

Exceeded this limit we consume by overexploitation of resources, says the director of environmental economics of New Economics Foundation, Aniol Esteban. Speaking to Efe, Esteban explains that a Spaniard generates in the first seven days of the year as many CO<sub>2</sub> emissions as a citizen of Tanzania in the following twelve months.

(...)

The American environmental organization Global Footprint Network analyzes the global situation to determine the ecological footprint that humanity leaves each year, and provides the figures that determine where the limits of nature are.

The quantities of consumed fish, meat, cereals and vegetables are transformed into land areas that are necessary to generate them and it counts, among others, energy consumption and CO<sub>2</sub> emissions to obtain the production area that corresponds to each citizen of the world .

The latest Global Footprint Network data indicates that each person corresponds almost two hectares, but only in Spain each citizen consumes the production of approximately six hectares of land.

As Esteban explains, humanity has lived for centuries in equilibrium until, approximately three decades ago, we began to consume and live on credit, taking our balance to an increasingly extreme point. The organization alerts: the ecological account of the planet has entered red numbers.

**What alarms does the text indicate about the depletion of the planet?**

**What are the reasons we live today beyond our means?**