



CLIMATE DETECTIVES 2021 – 2022



os 20 Afonsinhos
Escola D.AfonsoIII

RESEARCH QUESTION

What can I do, as a young man, to build a society capable of facing longer and longer periods of drought?

SUMMARY OF PROJECT

With this project we tried to understand the reason for scarcity of water in Algarve and if we were making efficient use of potable water. To this end, we analyzed the following data:

- Our school's water bills(Fagar).
- The temperature variation in Algarve(IPMA).
- The variation of precipitation(IPMA).
- The evolution of drought in the south(IPMA).
- We calculated the waterfootprint(trough the website of portuguese association of water resources, "ECH2O água" program) of our school community(students, teachers and staff) and recorded the direct and the indirect waterfootprint values of each person.

Figure 1:

MAIN RESULTS

- Water scarcity is an increasingly common and prolonged phenomenon.
 - We investigated the area and population of the district of Faro and the city of Faro.
 - We calculated the water footprint of the elements of our school community, having concluded that, on average,the direct consumption of water is 531L/day and the indirect consumption is 4992 L/day.
 - We analysed the values of precipitation in the last years.
- We concluded that the annual consumption of our school is around 2430 m3 of drinking water.
- We did a survey of our school's faucetes and went to check if any were dripping.
 - We concluded that in Algarve, water scarcity is an increasingly common and prolonged phenomenon and we are not making efficient use of driking water, and we are not making use of rainwater.

Figure 2:

ACTIONS TO HELP LESSEN TO THE PROBLEM

We are going to carry out an awareness campaign, trough a lecture prepared by us, for the entire educational community, with the aim of being able to make a more efficient use of drinking water. At the same time, we are going to hold a contest at our school to see with class can make more use of rainwater, which will late be used to water the gardens.

Figure 3: