

# S-TEAM PROJECT FEMALE INSPIRING FOR THE FUTURE OF STEM

Girls conquering Science, Technology, Engineering and Mathematics



Erasmus+

November 24th 2023  
KARIS FOUNDATION  
SECONDARY SCHOOL  
**RIMINI/IT**



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**ASSOFORM**  
ROMAGNA



Women  
SPACE

La constelación de mujeres del sector  
de la Ciencia y la Tecnología de Extremadura



Osnovna škola  
Ivana Cankara

*The students of*

# IES CASTELAR

*present:*

OTTO-H2O



# Introduction

## **Tanker trucks and reused wastewater: How EU countries are fighting drought**



In Spain, the drought situation is the order of the day.

Therefore, we as a group will use the resources we have to end this situation.

# OUR PROJECT



To create our project we will use a series of materials.

Besides it will be responsible for solving the following problems.

# Materials

**water pump**



**otto**



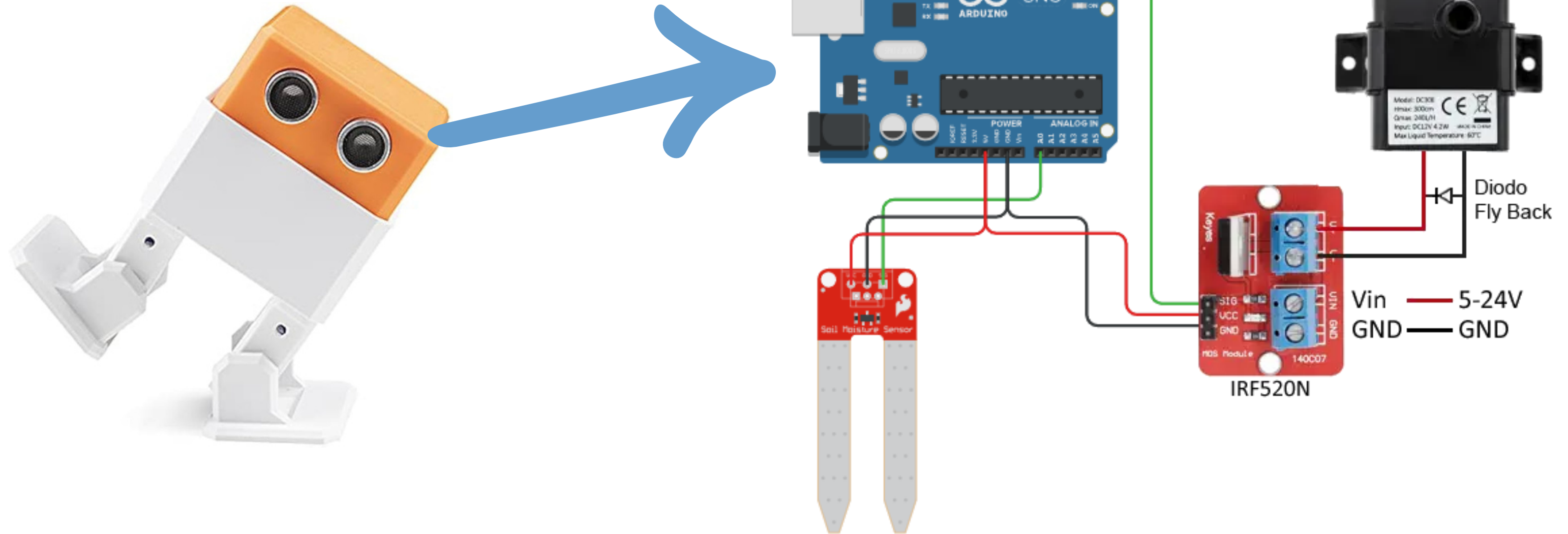
**humidity sensor**



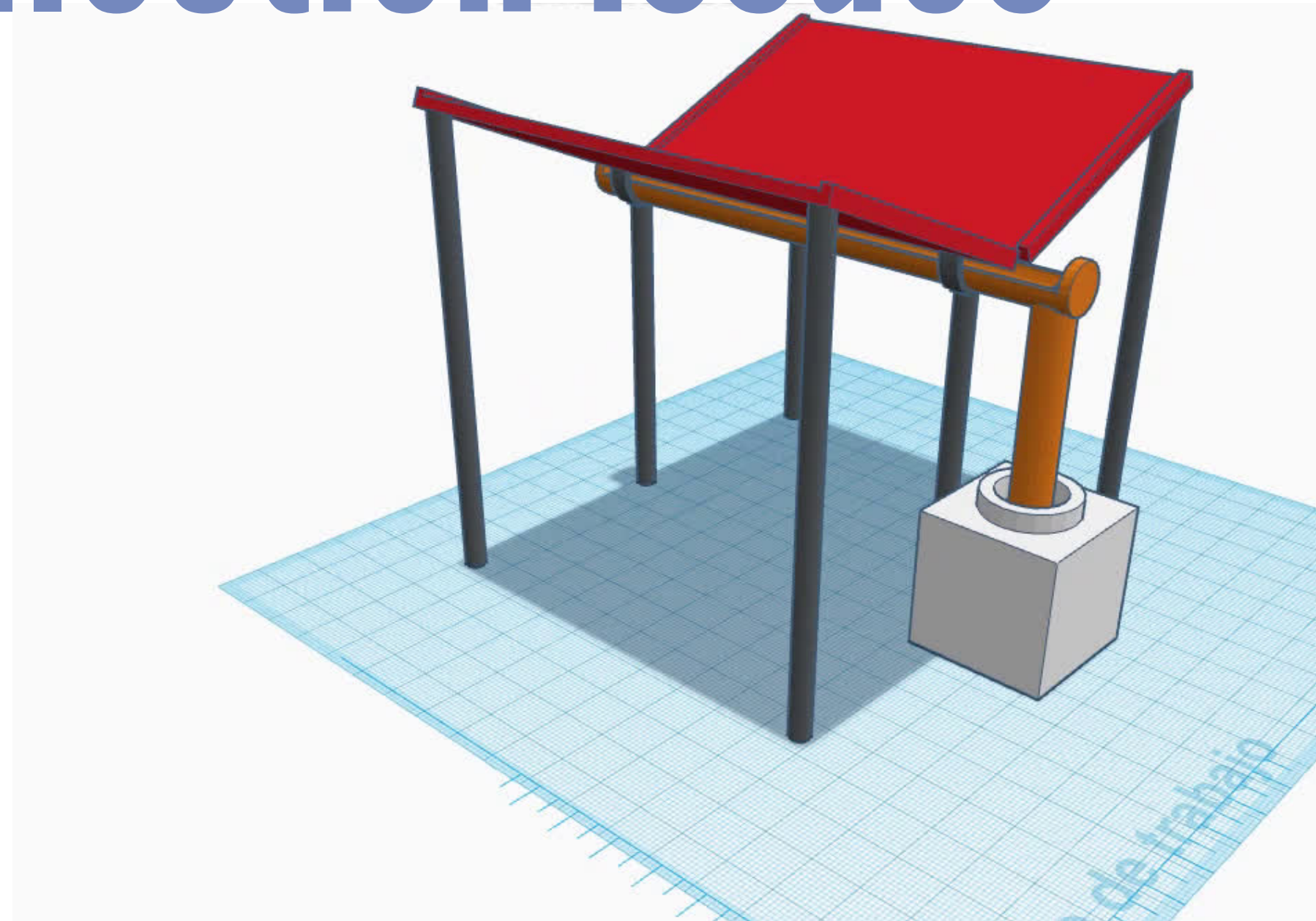
**water tank**



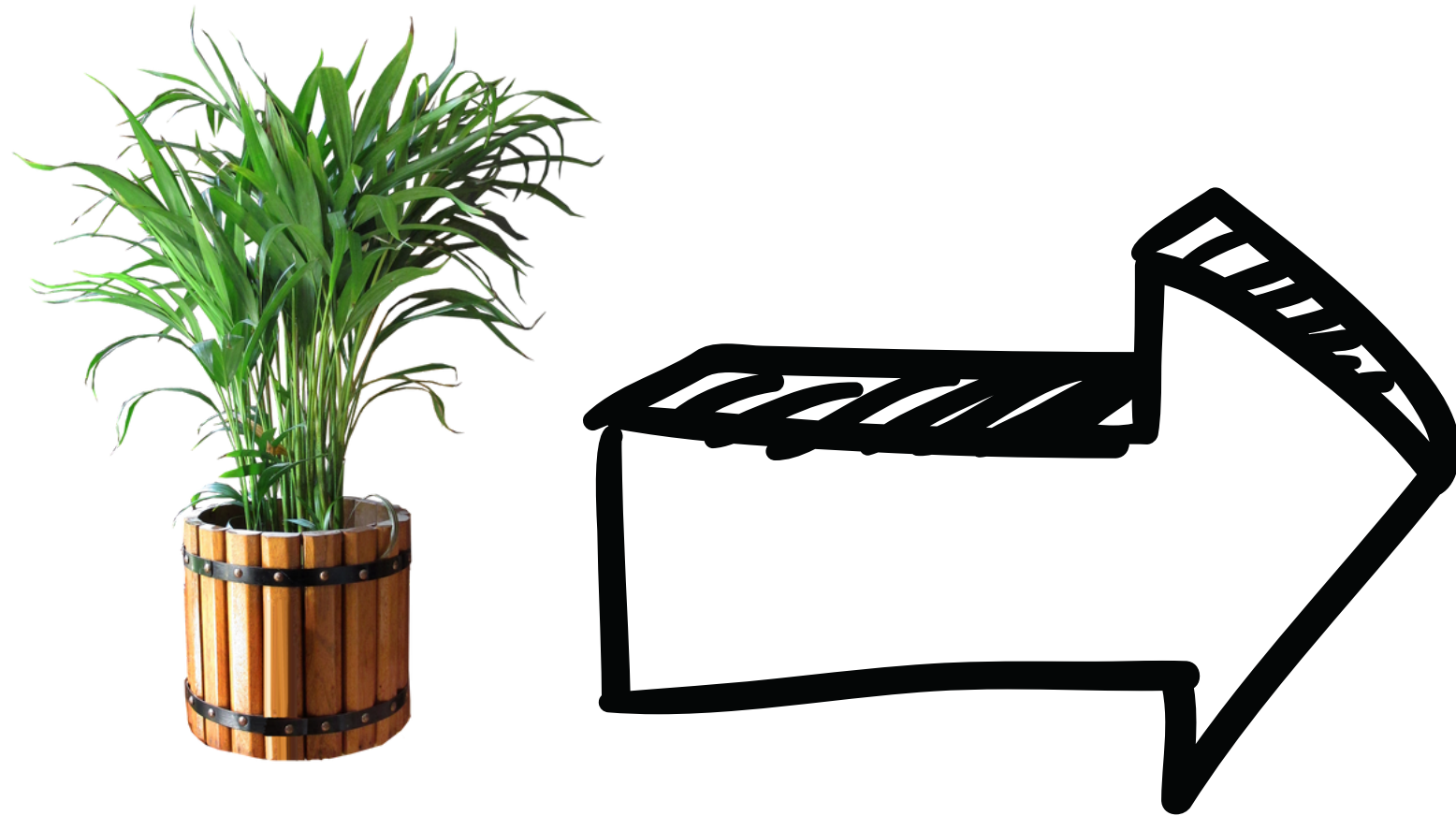
# Circuit



# Rainwater collection issues

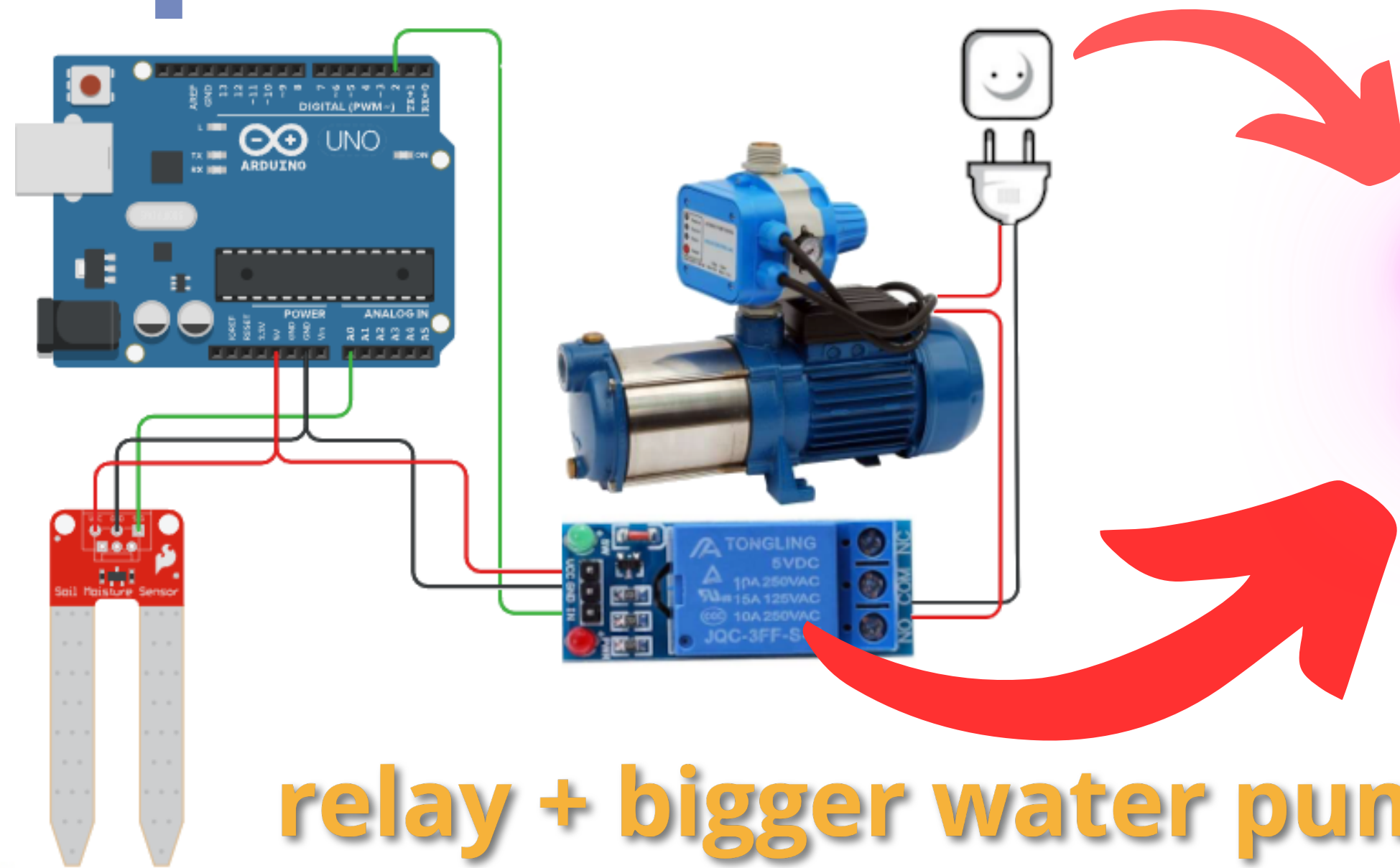


# Water Pump issues





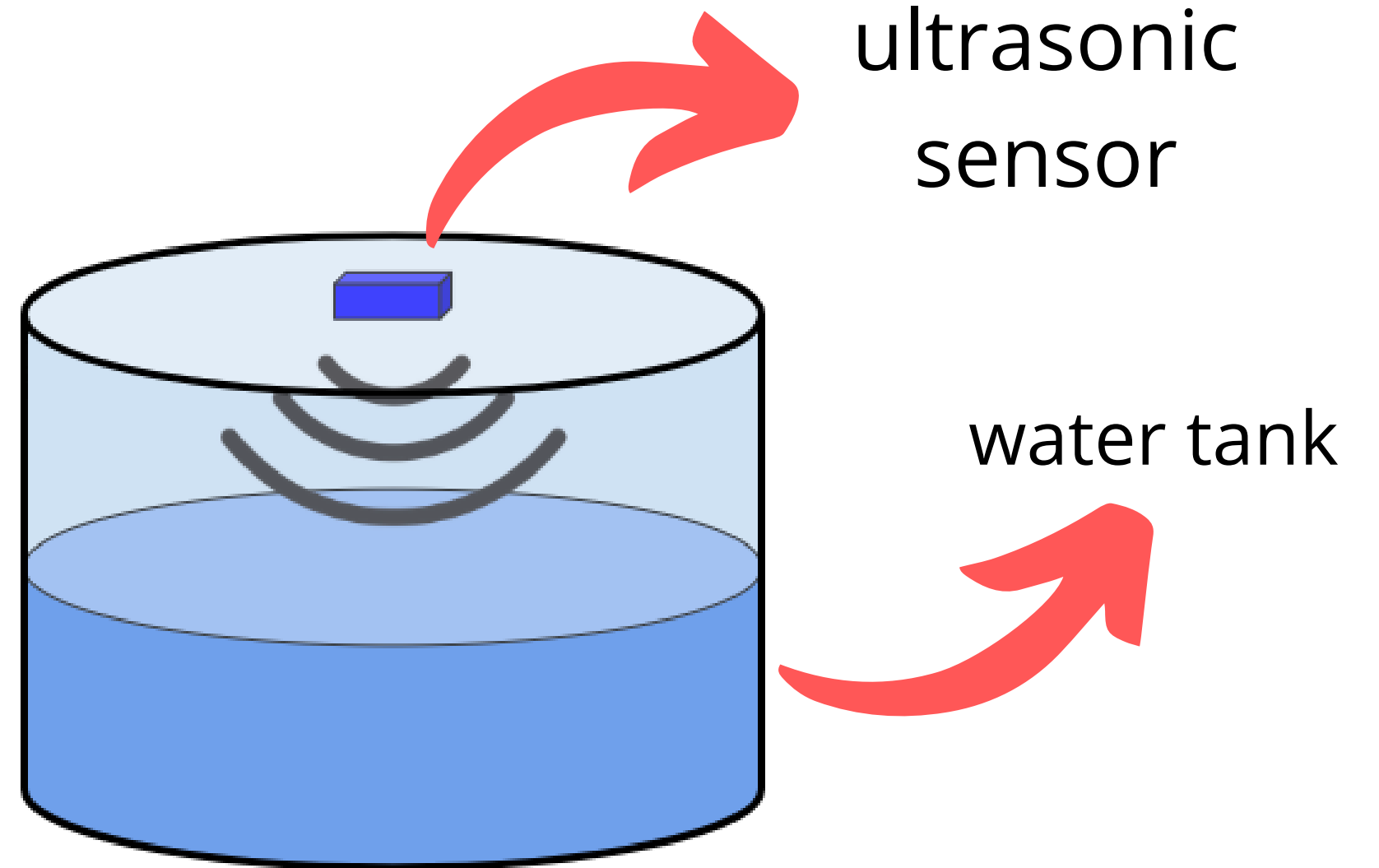
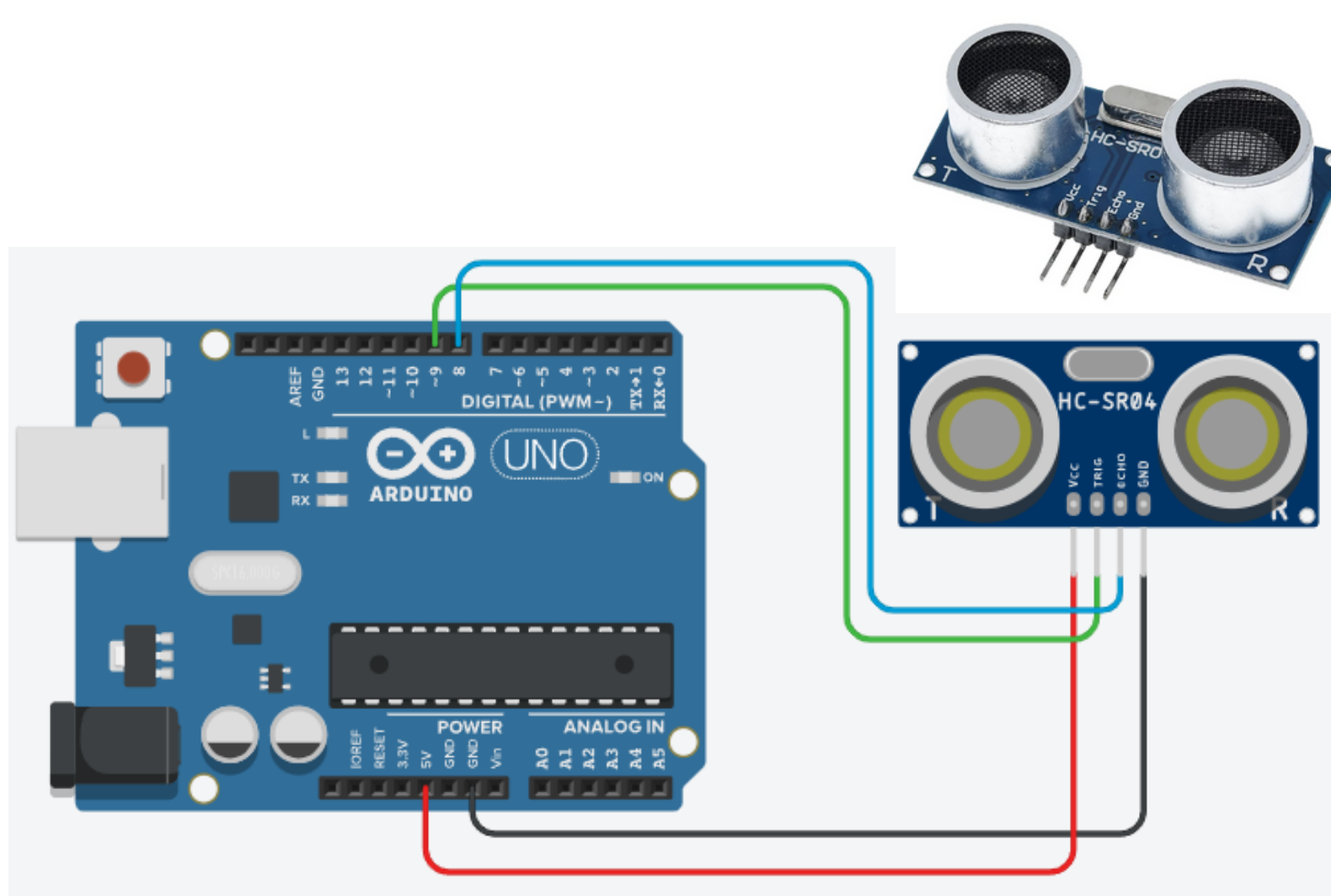
# Water Pump SOLUTIONS



220V

relay + bigger water pump

# Water Level issues



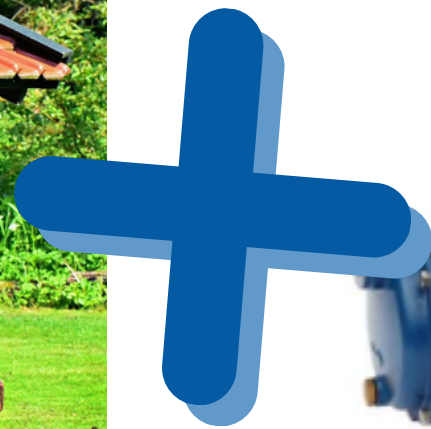
if water level is too low ...

we will refill the tank



# but..., we have two options

## First option



well + water pump

## Second option



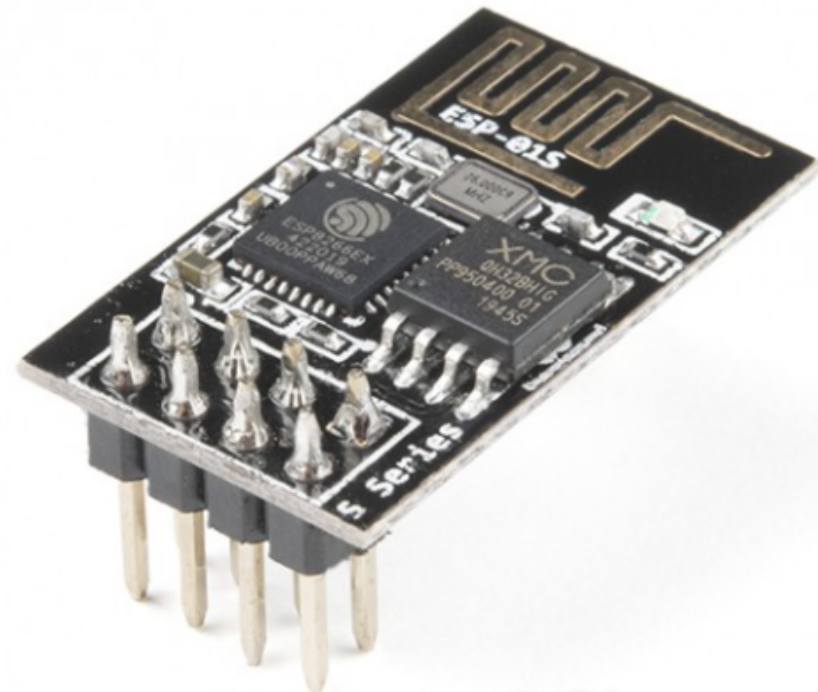
tap + electro valve

if the humidity in floor does not increase  
we will send a message



# and again, we have two options

## if we have wifi connection ...



### Esp8266 Wifi Module

## if not ...



### SIM 900A Module

# if we do not have electricity



we will use solar panels and batteries

# CONCLUSION

We have proven once again that technology can help the environment and make our lives easier.





# THE END

WE ARE ...

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ALEXANDRA BORREGO COVARSI

