

4) SUSTAINABILITY SIMULATION: FISHING GAME

The Fish Game can be used to start the conversation about education for sustainability with young people and stakeholders. The simulation invites us to “go fishing” and the objective of each game is to “have as many fish as possible by the end of 10 rounds”. The game teaches system dynamics, ecological principles, responsible citizenship, and more. The Fish Game concentrates on the use of a lake’s common resources. All the players have access to the lake with fish and decide how many of them they want to catch. After each round, fish regenerate at a stable rate, dependent on the number of fish left in the lake. The aim of the game is to show how individuals’ decisions affect resources and may cause their depletion.

Number of players: single or multiple-player

Playing time: 15 minutes or less

Players: students, youth workers, local communities, NGOs, policymakers etc.

Game master: youth worker, teacher (*it can be also played online, where you do not need game master*)

Materials:

- [Fish game online](#)
- [Fish game video debrief](#)
- Game rules for different scenarios (*if played in person*)
- Printed fish (*if played in person*)

How to play/conduct the activity?

Each day/turn, you will choose whether you want to take none, one, two, or three fish for the day. There are two other fishermen also trying to catch as many fish as they can— they will follow your lead and base their catch on yours. The lake in which you are fishing can only support 20 fish (that is the carrying capacity of the lake). Every night, the fish that remain after a day of fishing will reproduce at a rate of 25% (for the purpose of this game, we round it to the nearest whole number). However, the total number of fish cannot exceed 20.

Competences:

- critical thinking and problem solving
- system thinking
- ecological literacy
- strategic decision-making
- collaboration and negotiation
- responsible citizenship
- ethical and value-based decision-making
- resilience and adaptability