

River basin game – Facilitator's manual

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Target group

The primary target group of the game is formed by university students. But it is also nice to play the game with colleague academics or water professionals. You could also try the game with a class in secondary school. The game can actually be played at different levels, you will have to adjust your explanations and feedback according to the level of the participants.

Learning goals

- Discover the natural dynamics of water flow in a river basin (water balance, runoff and delay);
- Understand how a growing water footprint contributes to water scarcity and rising costs;
- Get acquainted with free-rider behaviour when depending on a common pool resource;
- Learn about the effects of an upstream water footprint on the water availability downstream;
- Experience social dynamics around common pool resource use, e.g. learn about incentives and barriers to cooperation.

Number of participants

To play one river basin you need 9-15 participants. If you have a multiple of this number, you can play two or more river basins. The advantage of having more than one river basin is that at the end of the game you can show and discuss the results of both basins, which creates the opportunity for the participants to learn not only from their own case, but also about how it can go differently.

Required time and space

The game will take about 2.5 to 4 hours, depending on the speed of the participants and the time used to introduce the game and provide feedback afterwards. You need a classroom big enough to place one roundtable per river basin.

Overview of files and their use

File	Use of the file
RiverBasinGame.xls	The game in excel-format. The input-output worksheet is the most essential one when playing the game. Here you fill in the data as provided by the participants and read out the data for feedback to the participants.
RiverBasinGame-Introduction.pdf	Hand out one copy to each participant at the start of the game.
RiverBasinGame-Who-is-who-sheet.pdf	Hand out one copy per river basin at the start of the game.
RiverBasinGame-Decision-sheet.pdf	Hand out one copy to each participant at the start of the game.
RiverBasinGame-Feedback-sheet.pdf	At the end of each round of the game: fill in one piece of the sheet (based on the output of the model) and hand out to the participants.

RiverBasinGame-LessonsLearned.pdf	Hand out one copy to each participant at the end of the game.
RiverBasinGame-LessonsLearned2.pdf	Hand out one copy to each participant at the end of the game. This document requires some background in math, hydrology and economics, so you can also decide to not distribute this document.

Playing the game

The introduction to the participants describes how the game is played. It also suffices as play description for the facilitator. For suggestions to improve the game please contact:

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