SUSTAINICUM COLLECTION
LEHRMATERIALIEN FÜR BILDUNG ZUR NACHHALTIGKEIT

Fisher Game

(Resource ID: 13)

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This teaching resource is allocated to following University:
KFUG - Karl-Franzens-University Graz

http://www.sustainicum.at/en/modules/view/13.Fisher-Game

Group work

More than 10 students

Up to 3 lecture units

English, German

Those who get a hands-on experience of the effects of time delays in complex systems and the 'Tragedy of the commons', will gain a better understandig thereof than those who just study the theory. The fisher game is well suited to gain these experiences.

Humans usually have difficulties in understanding complex relations systemically. Incorrect assumptions are usually made in terms of time delays. In order to understand sustainability processes, the knowledge of these system properties is, however, essential.

The fisher game is a playful way to convey this knowledge. Different groups of players should independently try to catch as many fish as possible. Even though the teams get information on the remaining fish population every year, the game always ends in a massive overfishing of the oceans.

The reason for this phenomenon can be easily explained: If you catch too many fish in one year, you would have to stop fishing completely the next year, so that the fish population can grow back to its original size. As a rule,

fisherman teams are reacting to dwindling fish populations by slightly reducing the fishing quota, so that the fish populations will be reduced even more as there are less spawners in the next generation. This problem is also referred to as the 'Tragedy of the commons'.

The game instructions and further details are attached.

Teaching Tools & Methods

Game

Learning Outcomes

- Understanding the time delay of complex systems;
- Understanding the 'Tragedy of the commons';
- Understanding the long-term effects of cooperative or selfish behavior

Relevance for Sustainability

Those who try to incorporate sustainable development have to understand the time delay of complex systems.

Related Teaching Resources

No specific previous knowledge / related resources required

Preparation Efforts

Low

Access

Free

Sources and Links

OSSIMITZ, G. und LAPP, C. (2006): Das Metanoia Prinzip. Eine Einführung in systemgerechtes Denken und Handeln. Franzbecker Verlag, Hildesheim/Berlin, 286 S.

SPIEGEL (Hrsg., 2012): Fischereireform: EU-Minister haben Angst vor dem großen Wurf. URL: http://www.spiegel.de/wissenschaft/natur/eu-fischereireform-umweltschuetzer-beklagen-kompromiss-der-minister-a-838575.html (Zugriff: 11/2012).

ZIEFLE, W. (2000): Das Fischerspiel. In: BREIT, G. und SCHIELE, S. (Hrsg.): Werte in der politischen Bildung. LpB, 2000, 464 S.

Recherche unter: https://www.lpb-bw.de/publikationen/did_reihe/band22/ziefle.htm

Fischerspiel (mit Creative Common Lizenz, basierend auf dem Spiel "Harvest" aus dem Systems Thinking Playbook von Linda Booth Sweeney, Dennis Meadows und Gillian Martin Mehers, herausgegeben von der Deutschen Gesellschaft für internationale Zusammenarbeit (GIZ), sowie auf einer Spielanleitung von Wolfgang Ziefle bei der Landeszentrale für politische Bildung Baden-Württemberg): http://www.umwelt-im-unterricht.de/unterrichtsvorschlaege/prinzipien-der-nachhaltigen-fischerei

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