Simulation Games for Sustainable Development

Dr. Markus Ulrich, UCS Ulrich Creative Simulations – Simulation Games and Policy Exercises for Sustainable Development and Corporate Sustainability, Zurich, Switzerland
Interactive Workshop, Monday, 5. July 2010

1. Abstract

In this workshop you will participate in a number of short simulation games. They all deal with aspects of sustainable development. They address issues like the distribution of resources among the world population, the management of natural resources, or the selection of optimal leverage points to take actions.

All games are short, easy to use and directly available. Furthermore, some of them can easily be adapted to other topics. The objective of this workshop is to experience simulation games, to experience their application in the field of sustainable development, and discuss the own experience and the context of use with other participants.

2. Key Aspects of Sustainable Development, N&L

The goal of sustainable development is first to meet the needs (N) of all humans on earth, focusing on the basic needs such as food, shelter and education. These needs should be met today, and in the future. Therefore, the second goal is to keep human activities within the limits (L) of planet earth to provide resources and energy, and to absorb all waste materials.

Basic characteristics of sustainable development are given in the box right (taken from the schematic developed for the simulation game COREBIFA – Sustainable Development and Nutrition, Markus Ulrich et al., 2000).

Characteristics of Sustainability
- Social framework/blueprint for development
- Sustainability should be staged in actual situations
- Goals may be conflicting
- The process of searching, learning and realization
- Sustainable development & system-thinking
  - Mutual relationships and connections will be recognized in situations previously considered separate
  - Information about a system should not be distorted (truthfulness)
- Sustainable development should not lead to a shift of symptoms

3. Simulation Games Presented

Fishpond. Sustainable management of renewable resources / commons goods. All materials available at the educational internet platform iconomix of the Swiss National Bank. Developed by Markus Ulrich. www.iconomix.ch

Triangles. Booth-Sweeny, L. & Meadows, D. (1995/2009). The Systems Thinking Playbook. Exercises to stretch and build learning systems thinking capabilities. Including 30 well documented interactive games and DVD.
www.chelseagreen.com/bookstore/item/the_systems_thinking_playbook

Space for Living. Same source as Triangles.

Distribution Game. Hands-on experience of the worldwide distribution of wealth. Developed by Markus Ulrich. The instructions are available as pdf from Markus Ulrich (open source), send an email to: info@ucs.ch.

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