



Stratagem

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strategic simulation game
simulation of the (sustainable) development of an emerging country

developed by Dennis Meadows, Club of Rome
moderated by Christian Baumgartner

background

Dennis Meadows, author of ‚Limits of Growth‘, developed the strategic simulation game Stratagem. It is a computerized board game simulating the more or less sustainable development of an emerging nation.

Back in 2010, Christian Baumgartner together with other experts on sustainable development had the unique opportunity to play Stratagem with Dennis Meadows himself.

Since then he has been using STRATAGEM on a regular basis in his master courses (Environment and Sustainability Management, Tourism) at different universities of applied science.

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procedure

introduction¹



game



reflection²

A maximum of 10 players slip into the roles of ministers with different portfolios. They have a disposed time frame of 10 legislative periods to give their country a sustainable development direction.

Each of the teams forms a government and each government receives a certain budget to use per legislative period. Procedures concerning discussions or voting (e.g. consensus, majority principle ...) are agreed upon.

Starting from a realistic scenario an emerging nation might find itself in, the teams have to decide upon the allocation of financial resources in the following sectors:

- production of energy and goods
- production of food
- energy savings
- environment protection
- health and education

The country is able to export and import goods and can take out a loan at the World Bank.

The single decisions are fed into a computer programme producing scientifically grounded results for a series of ecological, social and economic indicators, which are then the basis for the next round.



picture: © Christian Baumgartner

Each of the max. 4 groups (with a max. of 10 participants each) is playing on a board for itself and not against each other. Strategies and results can of course be compared and discussed upon.

¹Introduction to sustainable development (if necessary) and to the history of Stratagem: explanation of the game, details to strategies and important relations

²Reflection: debriefing, analysis of results and dynamics of the group processes

targets

The game simulates a complex realistic situation. Players will...

- ... understand the relationships and interaction of social factors, economic performance and environmental situation
- ... get to know and train systemic thinking and learn to integrate it as a planning tool in cases of uncertain contexts
- ... learn how a society respectively a country can develop in a sustainable way
- ... get to know the exponential impact in case of strong population growth, above average level of debt etc.
- ... get to know social and political areas of conflict, decision making processes as well as constraints decision makers are facing
- ... will gain a better understanding of the time delay between intervention and impact
- ... learn and practice to communicate, work in teams, get an understanding for group dynamics and decision making processes

The simulation game allows immediate experiences and therefore triggers the understanding of sustainable development, including its multi-disciplinarity and multi-dimensionality.

The participants take an active part, they analyse, balance opportunities, take decisions, take actions and experience the impact of their policies

target groups

Teachers in schools, lecturers in universities and universities of applied science as well as trainers who would like to qualify for simulation facilitators.

conclusion

„Although the game is based on conditions reducing the complexity of real world (e.g. no elections, no corruption, no external influences etc.) it is a challenging and fascinating way to find out that it is hardly possible to even approximate the key indicators standing for sustainable development“ (Christian Baumgartner)

picture: © Hilde Matouschek | officina



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 **playing time:** approx. 8 hours

suitable for: age 14+
lessons in schools, universities of applied sciences, universities, trainings in NGOs, companies etc.



of parallel groups: max. 4

group size: max. 10 persons