FACTSHEET

AgriLemma – A SERIOUS GAME

Key information

AgriLemma is a game to increase awareness about WATERAGRI solutions. The game engages stakeholders to test different water retention and nutrient retentions solutions considering different trade-offs involved in selecting solutions under uncertainties.

Target audience: farmers or farm managers, agricultural chambers, farmer associations, water management organizations, media, researchers, policymakers.

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A. Brief Introduction:

Serious games are designed to serve a purpose beyond entertainment, such as training, education, behaviour change or awareness raising. Serious games offer multiple benefits. They are attractive to play because they are fun and engaging and give players a sense of autonomy, competence and connection. Games allow us to simplify and model the complexity of the real world and allow players to experiment with their choices when doing so in the real world can be costly. Stakeholders can also understand how to adapt their choices and decisions in the face of uncertain factors such as climate change. In addition, games are engaging and provide a good learning medium compared to more traditional forms of learning such as information campaigns, websites, marketing flyers or leaflets. They are also an effective tool for communicating with the general public and stakeholders who may not have the technical knowledge and background in agricultural water management.

B. Design concept:

In the game, players take on the role of a farmer in Europe. They have their own farm with fields and can grow five different crops: potatoes, sugar beets, rapeseed, maize, and wheat. To grow crops in the field, players need resources, such as water, nutrients, workers, and seeds. In each round, farmers gain resources, trade resources, plant crops, monitor crops, discover opportunities and invest in their farm by implementing technologies. These technologies will help them retain nutrients and water, increase yields and improve the sustainability of their farm. In AgriLemma, the player's goal is to keep their farm economically, environmentally and socially sustainable.

C. Practical information:

AgriLemma can be played as a table-top board game with 4-6 players. The board game will be delivered as a downloadable Word document/PDF with all the printable game materials such as cards, graphics to stick on the board, etc. This will be made available via the WATERAGRI website along with instructions for facilitators and a list of game pieces (e.g. pawns, water cubes, game money tokens, etc.).

To conduct a gameplay session, facilitators can translate the Word document of the game deliverable into their own language and arrange the list of game pieces themselves. Furthermore, they will need to arrange a table and a few chairs. If there is interest in measuring the impact of the game, questionnaires can be deployed before and after the game to collect data about player's awareness levels about different solutions, perception on agricultural water management, and game experience. These questionnaires can be downloaded along with the game materials.

D. Costs:

Certain costs are involved in conducting a game session. We estimate that it will cost around 20-30 euros to print all the game materials and about 20-30 euros to order additional game elements (such as pawns, cubes, game token money, etc.). The game elements can be easily arranged from existing board games (if the facilitators have access to them). Please account for additional costs or personnel hours if you plan to translate the game from English to another language.

E. Challenges

Playing games may be an unusual concept for many users/players, depending on their age or previous exposure to serious games. This method may need convincing and its added value should be made explicit and explained to players. Furthermore, as with any modelling exercise, serious games are a simplification of reality and the information in the game does not provide a fully realistic assessment of the solutions. Please refer to the WATERAGRI framework and the results of individual solutions and the underlying models used. Finally, AgriLemma is designed as a generic game that does not take into account local conditions such as soil type and weather patterns of a specific area. Users interested in applying the game to a specific geographical area are encouraged to adapt the game to their local conditions.

F. Reference and demonstration:

To access the game, please check the WATERAGRI website and the project deliverable D1.3

WATERAGRI

Contact Information

Aashna Mittal a.mittal@tudelft.nl

TU Delft - Faculty of Civil Engineering and GeoSciences

https://wateragri.eu/

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