



Developing a board game for chinese farmers

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“Save the Water” (2017 – ongoing) is a cooperative design & research project between the Subject Area Game Design & Game Lab of the Zurich University of the Arts (ZHdK) and the Institute of Environmental Engineering of the Swiss Federal Institute of Technology (ETH Zurich). The main goal of the project is to raise awareness for the growing problem of groundwater depletion, among Chinese farmers in Guantao, prefecture of Handan. The ZHdK team has been developing and researching the game design process of an analogue (board game) as well as a digital (browser) game, while the ETH team provided the quantitative hydrological and agronomical framework, having studied and interacted with the groundwater management system on the ground in China for many years.

Remotely developing applied games for another cultural context poses many challenges. Having Chinese experts on the team, who know both the scientific topic as well as the target culture and community well, was a necessity.

A crucial design tool consisted of frequent test playing which helped to shape the usability of the game. The tests were conducted in two phases and locations: For the board game, play sessions with game design students and ETH staff in Switzerland served to find the appropriate game mechanics and adjust the rules. Then, a couple of month later, play testings took place in Guantao, China with farmers and water administration officials. Those play testings were the most valuable design tool, since they yielded a variety of results and demanded the biggest iteration steps in the development process. For one, they proved that the target group was mainly two-fold, and depending on the group the function and the complexity of the game would have to be different.

For the primary target group, the Chinese farmers, the game was too complex and – albeit the mainly pictorial design – it contained too much text. It needed simplification, and some of the extra features (such as add-ons like buying a tractor) had to be omitted. The game proved to be a useful tool for dialogue, since it was not focusing on behavior change but more on raising awareness and stimulating discussions.

A second, equally important target group, were the political officials, the decision makers from the water management systems and groups who helped organizing farmers to playtest. Coming from a different educational background, they were more comfortable with the original game complexity. For that community, the game worked well as a marketing tool.

This contribution intends to share these and more lessons learned during the game design process which encompassed numerous discussions with various team members and the target groups, developing design rules, discussing political and functional aspects and deciding on the “translation” of scientific real-world factors (such as detailed agricultural knowledge) into game elements. It sheds light on the different game mechanics of the board game and the digital implementation and offers a valuable contribution for game-based ecological and socio-economic research.