

Testimony from the:

Training Program: Groundwater Governance in Theory and Practice in Asia

A Simulation Game for Decision Making of Farmers

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The simulation game for the decisions made by small and marginal farmers in a poor Asian (in this case Indian) village was undertaken in the training course on Oct. 18, 2006 in the Central Soil and Water Conservation Research and Training Institute, Dehradun, India. The participants were from Bangladesh, China, India, Nepal and Sri Lanka and were divided into 11 groups to play the game interactively (Picture 1). Dr. Phansalkar, IWMI-Tata was coordinating and facilitating the game implementation.



Picture 1. Eleven groups participated in the game

The aim of the game was to discover how decisions are made by small-scale households and how they influence the livelihoods of small farmers and landless laborers in rural areas and also to develop a better understanding of economic conditions among planners and decision makers in rural areas.

The game issues concerned the decision making processes of farmers in the context of rural economic development in relationship to the crop production system, livestock production system, household system and the market system.

The roles simulated in the game required that the members formed into pairs, acting as the main members of the household, including the head of the household. Each group had to consider how to make decisions for producing best results with given constraints and resources and obtaining acceptable consequences for these decisions.



Picture 2. Dr. Yanfeng Liu and Dr. Rajendra Singh Gautam

The winners of Group 4 (Pictures 2 and 3) emerged in the final stage of the game. These were Dr. Yanfeng Liu from China and Dr. Rajendra Singh Gautam from India.

The winners shared their experiences of playing the game in the workshop with the other participants.

‘We presented what we played in a right way, which included six main points:

- *We integrated the characteristics of rural marketing and the needs of our neighboring farmers;*
- *We collected and analyzed the data to compare our own situation of crop and livestock production with other groups of participants;*
- *We discussed with other participants’ groups and helped them to solve their problems, which involved*

exchanging our production to get advantages from the agricultural market mechanism;

- *We considered combining many aspects of the crop production system, market system, livestock production system, and household system to make right decisions for our household;*
- *It was important to consider the speed of the game, which was related to the changing prices of exchanging agricultural products because the needs of farmers would be different in different seasons. People should know when is the best time to put their products on the agricultural market to get high value or price for their goods and labors;*
- *Teamwork with the partners playing the game was also vital for the participants’.*

(Dr. Liu and Dr. Gautam, Oct 2006)

Experiences learnt from the game have been highlighted. The participants emphasized that (1) It is important to enact the roles of water rights for groundwater irrigation in a suitable way to obtain efficient water resources utilization and exploitation for farming communities in rural areas as a whole. (2) Decisions and plan-making are more significant in influencing the rural economy of agricultural production than high technology application. (3) The population increase could be affected by (or affecting?) the improvement of rural conditions. (4) The possibility of combining market mechanisms with the governmental administration to balance rural agricultural economic development and poverty reduction for farming groups.



Picture 3. The winners of the game