

Organized jointly by:  
Food and Agriculture Organization of the United Nations (FAO)  
UN-Water Decade Programme on Capacity Development (UNW-DPC)  
China Agricultural University (CAU)

## International Workshop on Capacity Development for Farm Management Strategies To Improve Crop-Water Productivity using AquaCrop

14-18 September 2009

### SUMMARY REPORT

From 14 to 18 September 2009, another regional workshop on “Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity, using AquaCrop” was held at the China Agricultural University in Beijing, China. More than 30 participants, including mid-level managers, professionals and researchers in water and agriculture, met in Beijing for five days to be trained in the practical applications of AquaCrop, a new crop-water productivity model recently developed by FAO, which focuses on simulating the attainable yield in response to water, which is the key driver for agricultural production. Eleven female and twenty male representatives from institutions from India, PDR Laos, DPR Korea, South Korea, the Philippines, Vietnam, Cambodia, Thailand, Bangladesh, Indonesia, Myanmar, Sri Lanka, Mongolia, Nepal, and the host country China attended the training workshop.

#### Opening session

The workshop was opened by three speeches of the representatives of the three organizing institutions. First, Dr Zhang Linyi, Deputy Director of the China Agricultural University, congratulated the FAO and UNW-DPC for the successful convening of the participants for the software training. She discussed the teaching and research work of the CAU and the urgency of conserving the available water resources. Then Ms Victoria Sekitoleko, FAO representative in China, emphasised that training



is one of the main activities of the FAO for improving nutrition and living standards of all people, which is at the core of FAO’s work. She said that while increasing agricultural production, the protection of natural resources was very important, and that these efforts needed to take into account issues such as population growth and climate change, which require member states to strengthen co-

operation. Finally Dr Charlotte van der Schaaf, Programme Officer at UNW-DPC, emphasised that gains in water productivity also require a policy and institutional environment that encourages on the one hand the uptake of new techniques and tools, and on the other hand deals with the resulting trade-offs. She urged that especially capacity development and political awareness-raising in the agricultural and water sectors are important stepping stones towards better water management in agriculture.

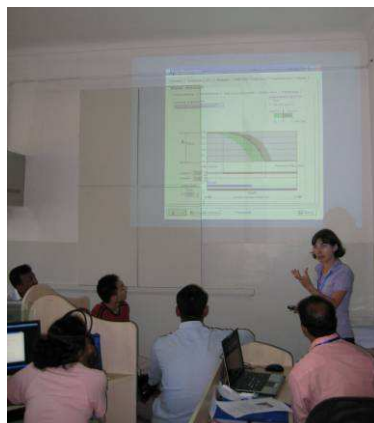
## Workshop set-up

The first main objective of this train-the-trainer workshop was to train participants in the practical applications of AquaCrop in order to improve their skills in strategic farm management practices toward increasing crop water productivity in rainfed and irrigated production systems, and to identify possible paths of action towards implementation of the concept in their own field of work. The second objective was to encourage the participants to take their newly derived knowledge back to their institutions and countries and will use and disseminate the tool during their teaching, research and project activities. To support this objective the software can be downloaded for free from the FAO AquaCrop website.



To follow up on these objectives, the programme of the training workshop was divided in two parts. The first part included a set of modules in which the main theoretical concepts used in AquaCrop are introduced. The second part included a set of modules of practical exercises on PC using the AquaCrop software. The training programme was designed to provide the participants with an in-depth overview of the functionalities and features of AquaCrop dealing with climatic data processing, soil and crop characteristics, yield response to water, irrigation management, field management and crop water productivity, among others. The sessions were conducted by Prof. Dirk Raes of the K.U. Leuven University and by Dr Gabriella Izzi, of the FAO Crop Water Productivity Programme, Water Development and Management Unit.

Both the theoretical and practical sessions of this workshop, while adopting an open and interactive approach, were followed with high interest and active involvement by all the participants.



## Evaluation and follow-up

The participants were able to evaluate the training workshop and the software and could make specific suggestions for follow-up activities through an evaluation questionnaire that was circulated during the workshop. Some of the follow-up activities mentioned included regular (annual) workshops or conferences to discuss the applications of the software and the experiences made by the participants, the publication of selected case studies, and the development of e-learning courses on the use and application of the AquaCrop software. FAO and UNW-DPC consider jointly discussing possible follow-up activities in the near future, based on these recommendations.

UNW-DPC also prepared a questionnaire for the participants on capacity development needs in the field of water and food that will be analyzed in order to assess specific gaps in terms of individual, institutional and organizational capacity in the countries of the participants. The results of this questionnaire will help UNW-DPC in identifying coordinated responses to fill these gaps and develop capacity in this field.

A final report of the outcomes of the collaboration between FAO and UNW-DPC will be published and disseminated after completion of the 5 regional workshops on “Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity using AquaCrop”.

