

## Water saving irrigation extension tools in Syria <Part 1>

As introduced in past AAINews editions, AAI has been working on water saving irrigation agriculture extension in Syria since 2005 (see AAINews No. 78). In the Syria project, we promoted the results-oriented training and extension method (ROTEM), conducting training and supporting improvement of extension activities undertaken by extension staff (AAINews No. 68). Extension staffs are often characterized as having “insufficient technologies and knowledge to promote”, “no idea about the extension method”, and “no confidence to teach”. Given these concerns the ROTEM, which we used in our project in Syria, tried to ensure that trainees acquired water saving irrigation knowledge and techniques, and learned practical skills for extension activity planning and operation. The ROTEM linked training and actual extension activities following the flow – understanding of needs → selection of learning themes → extension staff training implementation → extension activities by trained extension staff → resolving farmers’ problems.

In the ROTEM, one needs in principle to clarify “what” and “how to” communicate to farmers at the initial stage of the training for extension staffs. Given this we devised the development of four extension tools, after contemplating how we could arouse the interest of farmers in the concept of water saving. And how we could communicate in a comprehensible manner to farmers who have a low level of knowledge on irrigation and awareness of the necessity of water saving. These

tools are a “discharge measurement kit”, an “irrigation calendar”, an “irrigation notebook” and a “digital irrigation note”. Extension staff can communicate essential knowledge and information on water saving irrigation by explaining the use of the four tools and by distributing the material. Farmers will improve their awareness on water saving and farm management as a whole by using these tools.

The discharge measurement kit enables farmers to easily measure irrigation water amounts on their farming plots. By using this tool, farmers can understand the amount of water they are using for irrigation. The irrigation calendar is a tool that shows the necessary duration of irrigation for different crops. The irrigation notebook can be used as a cultivation record with notes and one can identify inefficiencies by recording daily farming activities. The digital irrigation note is the PC version of the irrigation notebook. It can automatically create graphs based on the data in the notebook for visual information presentation. By combining these four tools, farmers are able to know their own farming management in an objective manner, leading to increased awareness of the necessity of water saving.

In the next part of this series, we will introduce the inspiration of each of these tools, and describe what challenges occurred and what innovations were made to lead to the development of all these tools and outline the results obtained through the use of the tools to date.

