Introduction of modern methodologies for crop water requirement calculations

Water management in Central Asia

FAO has worked for several decades to disseminate the best methodologies available for the calculation of crop water requirements, a founding block for sustainable water management. Its flagship publications in the subject have become international standards on the subject. In the countries of the former Soviet Union however, the standard method was an empirical formula that presented as the main disadvantage, the over-calculation of crop water requirements during the peak of the growing season. FAO has developed a computer software and worked with the Interstate Commission for Water Coordination of Central Asia to translate it into Russian language and has also provided regional and national trainings on its use and advantages over the older local methodology. Although it is still an on-going process, users in the region have started to adopt the methodology thanks to the simplicity in use of the user-friendly software and to the fact that more precise results are obtained, reducing significantly the amount of water being allocated for irrigation, decreasing the risk of waterlogging.

Related documents:

1. Report of the REGIONAL SCOPING WORKSHOP ON THE USE OF IRRIGATION SYSTEMS FOR FISH PRODUCTION IN CENTRAL ASIA
   Tashkent, Uzbekistan, 17–20 July 2007
   ftp://ftp.fao.org/docrep/fao/010/i0075e/i0075e00.pdf

2. FAO Subregional Irrigation Water Management Training Workshop
   Ankara, Turkey, 12 – 14 September 2007
   http://www.un.org.tr/2007_Dec/en/haber_sag9.html

3. Climate change and water security in Central Asia
   Presentation is prepared for the Mapping of and Policy Orientation for Adaptation to Climate Change (TCP/RER/3203) Final Project Workshop, Budapest, Hungary, 9 - 10 December 2010
   http://www.fao.org/fileadmin/user_upload/Europe/documents/Events_2010/Climate2010/Dukhovny_en.pdf

4. ARAL SEA BASIN INITIATIVE
   Towards a strategy for sustainable irrigated agriculture with feasible investment in drainage
   SYNTHESIS REPORT, 2005
   ftp://ftp.fao.org/agl/iptrid/aral_sea_synthesis.pdf