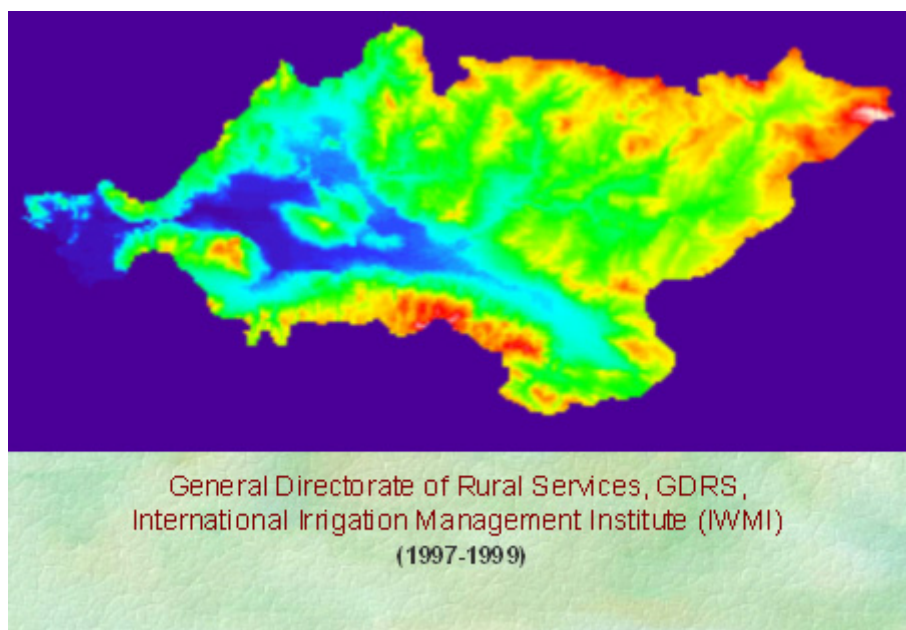


GDRA – IWMI Gediz Joint Research Project

This project was launched in 1997 with the cooperation of General Directorate of Rural Affairs and International Water Management Institute (IWMI – Sri Lanka) and completed in 1999. Gediz Basin is 1 722 000 ha in total and this area constitutes 2.2% of total area of Turkey. There are 7 major and a few hundreds of minor irrigation networks in Gediz Basin. 6 of these major irrigation networks were studied in this research.

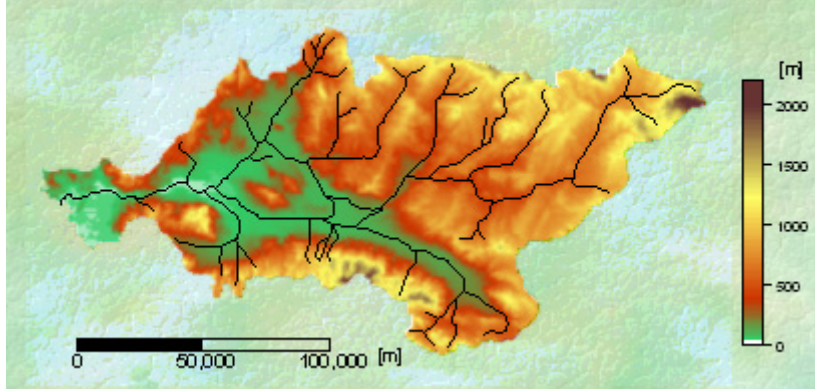


Objectives of The Project

This can be summarized as the evaluation of possible changes which might affect the water management in Gediz Basin. Evaluation of performances of current irrigation networks in Gediz Basin, development of interrelated irrigation and basin management models for Gediz Basin, activities on water management and activities on basin management models were mainly studied. In activities on water management studied subjects are as follows; Evaluation of irrigation performance in the basin, determination of principals on water distribution and use, analyses on sustainability and structure of water management organizations in Gediz Basin, evaluation of water pumps used in irrigation and evaluation of factors affecting farmer's decisions. In activities on basin management modelling studied subjects are as follows; evaluation of datas related to basin area, evaluation of datas related to water management, basin and water management model development and model integration.

Two different hydrological model (SLURP and SWAP) were studied on three different levels; on Basin Level, Irrigation Level and Field Level. These models can be used to examine different alternatives and scenarios on different crops within the basin, water management applications and water supply. It is available to evaluate the results of possible alternatives and scenarios such as different applications in water management in case of increase or decrease in water supply of the basin or necessary changes due to crop pattern or alterations in farmer water use habit. These models have also provided a better coverage on evaluation of real time performances of irrigation networks on different water management and water supply conditions.

Gediz Havzasının Topoğrafyası ve Su Ađı



This research revealed the values between 1983 – 1998 and created the database. This project is a significant study especially in terms of comparison between before and after 1994-95 when the irrigation system management was transferred to water users associations from State Hydraulic Works.

According to the results of the project under the Management of the WUA's irrigation performance is better in Gediz Basin and it is also in a very good condition comparing to other countries. Upon completion of the project it turned out to be possible to use models with different purposes and it is also a pioneer project for the other 25 large basins.