



DSI leads water management in Turkey

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The General Directorate of State Hydraulic Works (DSI), is a legal entity included in general budget, and is the primary executive state agency responsible for planning, management, development, and operation of the Turkey's overall water resources.

DSI works under the aegis of the Ministry of Environment and Forestry. It takes the responsibility for achieving four major tasks namely, irrigated agriculture enhancement, hydroelectric energy generation, domestic water supply for all settlements, and flood prevention measures. In order to reach the above-mentioned objectives, DSI primarily develops dam projects which are at the centre of the four objectives. Therefore, DSI is mainly known as a public agency developing dam projects.

DSI with a headquarters in Ankara and 25 Regional Directorates deals with integrated water management in basin level and water allocation for single and multiple utilization. With its yearly budgets which are about 3 or 4 billion USD, DSI has developed only 1/3 of water potential of Turkey since 1954. DSI needs more financial sources in order to complete Integrated Regional Development Projects such as GAP (South Eastern Anatolia Project) as well as other projects in its investment portfolio. This means that DSI requires a certain amount of financing to complete its planned projects in the sectors of energy, agriculture, services, and environment by 2023.

Why Turkey needs water projects? Though Turkey generally has adequate amounts of water, it is not always in the right place and at the right time to meet present and anticipated needs. The rivers have generally irregular regimes and natural flows cannot always be diverted directly. The average annual precipitation, evaporation, and surface runoff vary with respect to time and geography. Approximately 70% of total precipitation falls from October to March; there is little effective rain during the summer months. Therefore, it is necessary to have storage facilities in order to ensure domestic, industrial and agricultural supply, and hydropower generation. In addition, dams make a considerable contribution to control the floods and erosion.

The water resources development projects of DSI are accepted as crucially important works for the improvement of the welfare and happiness of the people in the country. It is a well-known fact that the main source of daily food, drinking water, and electricity depend on water resources development projects. That is why Turkey has to develop all of her water potential to maintain adequate living standards for the people.

Agriculture in Turkey heavily depends on climatic conditions, the adverse effects of which can only be minimized by developing hydraulic structures. DSI contributes to the development of agriculture in which 30% of Turkey's population is employed by investing mostly in development of irrigation sector. As the production and consequently the income of our farmers increases because of irrigation development, there are further inputs to agro-industries. Because of this, water resources development has a vital role to play in the socioeconomic development of Turkey. Thus, DSI's investments in hydropower, which is a national source of the electricity needed by industry are important in that they are able to lessen the rate of migration to the cities and to decrease the unemployment in the country.

As of 2008, approximately 25 650 staff are employed in this water agency. The organizational structure of DSI more or less resembles the United State of Bureau Reclamation (USBR). Since 54 years from its establishment, DSI constructed 592 dams, irrigation networks for 3 million ha area, domestic water for 70 million people and hydropower plants with 13 500 MW installed capacity accounting for 43,5 billion kilowatt hours annual generation. But it should be recalled that among these hydraulic structures, operation of hydropower plants had been transferred to Turkish Electricity Generation Agency (EUAS), operation of irrigation networks to Water User Organizations (WUOs), Water Treatments Plants and their main conveyance lines to Municipalities. With the realization of water management projects one by one, DSI provide significant added value for Turkey's economy and development

In the last decade, it is well known that global climate change impacts such as drought and floods have started to distort water resources and their regimes in many countries. While water resources are lessening and keeping their qualities in good condition is becoming difficult year by year, the importances of agencies working in water sector such as DSI are to be noticed very well.

In the fast globalization period, DSI adopts new approaches and technologies in water management, and would like to share this experience in water sector in nationwide as well as international level. On the other hand, it closely follows international organizations studies. DSI expects participation of all stake holders from water communities and water experts from all countries to the 5th World Water Forum to be held in Istanbul on 16-22 March 2009 in order to find technical solutions all together into many problematic water issues and put them politicians agenda as a priority. In this respect, Director General of DSI, Mr. Haydar KOCAKER invites everybody to the Istanbul World Water Forum to meet there.



Local water management in the Barcelona process

Initiated during the Euro-Med Conference of Water Ministers in Turin in 1999, the declaration and action plan enabled to carry out a Euro-Mediterranean Programme for local management funded by the EU.

The Actions of this programme covered mainly the setting up and consolidation of partnerships between different institutions and organisations of EU member states and MEDA countries. These actions covered mainly the following:

- Strengthening of water governance.
- Development of tools and concrete projects on non conventional resources.
- Improvement of water management efficiency and decision making processes regarding irrigation, drinking water supply and sanitation in rural and suburban areas.
- Implementation of guidelines for drought.

During the first conference of the MEDA Water partners held in April 2007, the progress report was handed out to the main partners for the projects financed within the scope of the European programme. A second regional event organised in Marrakech on April 28, 29 and 30, 2008, presented the concrete results of the MEDA Water projects. The discussions led to the formulation of recommendations and conclusions on the part of MEDA country national Authority representatives. (Publication: www.medawater-rmsu.org).

The partners then made a joint call aimed at ensuring a broad dissemination of the Action results in order to:

- Include the proposed innovations initiated, tested and implemented in the MEDA Water Programme in their water policies and apply these on a larger scale and in a wider context.
- Enable and support the building of partnerships between public and private entities in the region concerned with water management issues.
- Adapt their legislative framework and regulations in order to enable innovative developments in local water management.

Consistent with the initiatives and programmes supported by the EU in the Region (Horizon 2020, European Neighbourhood Policy, EU Water Initiative,...) and the results of the MEDA Water Programme, a Euro-Med Water Ministers Conference will be held within the framework of the "Barcelona Process: Union for the Mediterranean".

This conference is in line with the ambitions expressed by of the Heads of States and Governments during their meeting in Paris on July 13, 2008 and aimed at defining a Water strategy for the Mediterranean. This strategy should strive to ensure the protection of water resources, the diversification of water resource supplies and a rational and sustainable usage of water.

Through its involvement in the Region, the Euro-med partnership must strengthen and consolidate its WATER component as a key element to promote peace, solidarity and development.

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