

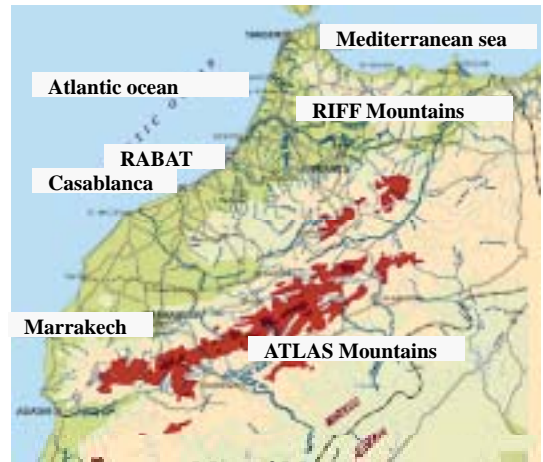
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The Struggle of Farmers for Water (Morocco)

At Since this March AAI has been involved in JICA's development study in Morocco, and I was given an opportunity to visit the country. Featured in the movie "Casablanca", Morocco is well known as a tourism destination. Casablanca itself is a commercial city with not many tourist attractions, and the country's major tourism area is the southern part of the country with Marrakech, designated as a World Heritage Site, at its center. Although it did not succeed in the competition, Morocco was bidding for the right to hold the football World Cup 2006 after the 2002 World Cup in Japan and South Korea.



Map of Morocco

The objective of our survey was to short-list candidates out of 25 sites proposed for construction of small- to medium-size dams, and to conduct feasibility studies at the selected sites.

In order to visit all these sites we had to travel around the whole country. As I have only traveled in the Gulf States recently, to my eyes the natural environment of Morocco appeared quite diverse. The area on the Mediterranean coast starting from the Straits of Gibraltar, which is near the Riff Mountains, receives a fairly good amount of precipitation and here wheat is cultivated with rainwater. On the other hand, the southern side of the Atlas Mountains, the so-called spine of Morocco, is a dry region leading to the Sahara desert, and here and there we found oasis farming of a scale so large I'd never seen its like before. On the northern side of the Atlas stretch are extensively irrigated areas where wheat and various fruits are cultivated in the mild climate.

In general, the life of many farmers in Morocco is rather difficult. The severe drought, in particular, has continued from last year and has added to their hardships to the extent that the government has declared a state of emergency. Where there was no irrigation, wheat and beans were left to die and the almond fields were full of dry, dead trees. In Morocco cattle ranching is also a major agricultural activity, but due to the shortage of fodder caused by the drought, farmers were having to sell off some of their cattle to buy fodder for the rest. We were told that, with so many farmers wanting to sell their cattle, the market is now at the mercy of the buyers, which has drastically reduced the price of cattle.

Since the purpose of our visit was to survey sites for new dams, the farms in the target areas we visited were not benefiting from irrigation, except for some in oases (though quite a few oases were also suffering water shortages). While the government is trying to improve irrigation facilities, farmers in the non-irrigation area are making great efforts themselves to secure water employing various methods. For example, they use ditches meant exclusively for flood water (Photo 1), as well as watercourses to lead water from rivers by constructing stone barrages. Weirs built during the French colonial period bring water to the fields even now. Also, floodwater is deposited underground and used for various daily activities (Photo 2). Who knows how long these facilities and methods have been in operation, but in any event, I was impressed by the farmers' wisdom, creativity and patience in trying to save and make use of every single drop of the limited water supply.

These facilities are far from perfect. It takes ages to build them, though it does not cost much. Sometimes they get damaged, but can be rebuilt by the farmers themselves with some effort. It would be nice if we could harmonize the existing facilities which can be operated and fixed by farmers themselves, and those modern facilities that may be introduced in the future. We should think of a way to incorporate what we have learned from the farmers in Morocco, and to borrow their wisdom in carrying out our development aid work in the country.

(By ZAITSU, August 2000)



(Photo1) A ditch used only at the time of flood



(Photo2) Underground water tank to deposit floodwater