

Water: the Source of Life

Irrigation Canals in Baghlan Enable Higher Harvest

Mahsel gazes with satisfaction at the masses of water pouring out of the Amu Darya River into the new Baladory irrigation channel. The irrigation system starts at the flood control barrier in Shamaq village in Baghlan Province and extends 22 kilometres downriver. Around 5,000 farmers working a total of 8,000 or so hectares of land depend on the system. Mahsel is the water resources manager, known locally as the Mirab. Elected by the farmers, he is responsible for ensuring that every family has enough water to irrigate their fields and produce a good harvest.

Until around a year ago, Mahsel faced an almost impossible task. After 30 years of war, the irrigation and flood defence systems lay in ruins. The inflow and outflow channels had ceased to function, sediment had built up and the mood among the farmers was often tense. Then the German Government invested EUR 2.1 million in restoring three irrigation channels and flood control barriers in Baghlan Province, including the channel at Baladory. Working on behalf of the provincial government, a local construction company rebuilt the channel in 2014. KfW Development Bank provided the required funding. Mahsel explains what this means for the families who rely on the irrigation system: “For the past 12 years, I have been responsible for water distribution. In the past, I wasn’t able to supply enough water to the farmers at the lower end of the channel. The inflows and outflows had been destroyed and the water was seeping away through leaks. As a result, many families’ wheat, rice and vegetable crops simply withered away in the fields.”

Before the construction work began, Mahsal held a meeting with the water users’ council, the head of the Water Management Department at the Ministry of Energy and Water and his technical staff. Together, they worked out how much water users required and where. On this basis, they came up with a maintenance schedule. Mahsal’s eyes light up when he thinks back to the start of the project: “Government representatives and local people coming together, developing the project plans and taking the decisions collectively was a marvellous experience.”

And the results speak for themselves. Afghanistan’s Water Law stipulates that every farmer should receive the same quantity of water for every 2,000 square metres of land. “The farmers at the upper end of the channel get 30 minutes of water at a time and those at the lower end get 50 minutes – and that happens several times a day,” Mahsel explains. “The way it’s divided up is important because the flow decreases along the length of the system, so lower down there’s less water.” If he finds that sediment is building up, or



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that new inflow or outflow channels or different allocation models are needed, he contacts the team at the ministry and discusses possible modifications. In addition to the official inflows to their irrigation channels, farmers had also created numerous informal water withdrawal points for themselves in the past. This unregulated water withdrawal often meant that not enough water reached users downstream. That's all in the past, says Naseem Akbary, the Ministry's hydraulic engineer. "We've rebuilt all the connection points, based on hydrological calculations, so that the water manager can now distribute the water evenly in accordance with farmers' needs."

Afghanistan has a long tradition of employing mirabs, who have been ensuring the equitable distribution of this precious resource for hundreds of years. The role is passed down from father to son, as long as their position is reconfirmed by the water users' council every year. Mahsel is proud to have local people's trust and pleased that he is now able to provide them with a service that actually works: "Now that the channel is finished, there's enough water for everyone. The farmers have doubled their yields – and therefore their incomes – from some of their produce, so their financial position has improved." But that's still not enough for this dedicated water resources manager. He and the ministry team are already looking at new initiatives and applying for project funding from the international community: "We want to expand the flood defences in the near future and build water storage systems. The ministry makes sure that as water users, we are on board with these projects as well. The working relationship is excellent."

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