

Donor Support to the Water Sector in Armenia

Since Armenia became independent from the Soviet Union in 1991, several international financial institutions and bilateral donors have provided technical and financial support to the water sector in Armenia, including the World Bank (WB), International Financial Corporation (IFC), Asian Development Bank (ADB), Eurasian Development Bank (EDB), European Bank for Reconstruction and Development (EBRD), United Nations Development Programme (UNDP), Global Environment Facility (GEF), European Union/European Commission (EU/EC), United Nations Economic Commission for Europe (UNECE), Organisation for Economic Co-operation and Development (OECD), and Organization for Security and Co-operation in Europe (OSCE). The bilateral donors include the United States Agency for International Development (USAID), Millennium Challenge Corporation (MCC), KfW Development Bank (KfW), German Agency for International Cooperation (GIZ), Japanese International Cooperation Agency (JICA), Swedish International Development Cooperation Authority (Sida), Agence Française de Développement (AFD), Kuwait Fund for Arab Economic Development (KF), and the Government of Norway (GoN).

The donors with the most investment and longest history of engagement in the water sector include the WB, EBRD, and USAID. ADB, KfW, and JICA have been active in recent years. AFD and KF are among some of the new donors in Armenia. The areas of engagement by these various donors are given in Table 5.1. More details on the water-related activities supported by the WB and other donors are provided in appendixes J and K, respectively.

Donor Engagement by Topic

- **Monitoring of water quantity and quality.** USAID and the EU have been actively involved in supporting surface water quality monitoring in Armenia. The Environmental Impact Monitoring Center has received modern

equipment, including an inductively coupled plasma mass spectrometer, atomic absorption spectrometers, gas chromatographs, and equipment for sampling and analysis of hydrobiological parameters. From 2002 to 2008, USAID also supported the rehabilitation of selected hydrological posts in the Northern and Southern basin management areas, as well as in the Lake Sevan basin and Araks transboundary river. This included installation of continuous stream-gauging devices, acoustic dopplers, and other equipment. In 2008, USAID provided resources to reestablish groundwater monitoring in Armenia. The program assisted in reestablishing the National Reference Groundwater Monitoring Network and provided technical guidelines for groundwater monitoring. The State Water Cadastre Information System (SWCIS), which aims to integrate all water monitoring data from various sources for effective IWRM planning, was also developed with the support of USAID.

- **River basin planning.** To date, several donors have provided financing for the development of river basin plans. This includes financing from the EU for the development of basin plans in the Aghstev, Debed, Akhuryan, and Metsamor (in progress) basins. USAID has supported the drafting of river basin plans in the Vorotan, Meghri, and Voghji (in progress) basins. UNDP/GEF is financing the preparation of the Arpa basin plan. UNECE supported the preparation of water management measures for the Marmarik basin. None of these plans has yet been formally adopted by the government. Also with support from USAID, a model basin plan was developed to help provide an overarching framework (model contents and analysis).
- **Water use permits.** In 2007, USAID provided a report on international best practices for compliance with the requirements of water use permits, enforcement of the provisions of water use permits, and self-monitoring. The report also made recommendations on how to improve the entire cycle of permit compliance and implementation. In 2008, USAID also supported the development of guidelines for training on compliance as well as procedural aspects of the permitting process.
- **Ararat valley water resources issues.** In 2006–11, the MCC undertook irrigation investments (totaling around US\$120 million or 50 billion Armenian drams) to repair gravity-fed irrigation systems and rehabilitate canals, pumping stations, and drainage systems throughout Armenia. In particular, around US\$16 million or 6.6 billion Armenian drams was spent on rehabilitation of some of the drainage infrastructure in the Ararat valley (47.8 kilometers of main drainage canals out of a total 65 kilometers). This work aimed to reduce groundwater levels (from waterlogged lands) in 35 communities of the Ararat and Armavir provinces and to increase crop productivity. As part of the ongoing USAID Clean Energy and Water Program, a comprehensive assessment of the groundwater resources (including artesian aquifers) in the Ararat valley was completed.

- **Transboundary water issues.** There have been several activities by the EU/EC, UNDP/GEF, UNDP/Sida, and OSCE to promote regional dialogue and cooperation on monitoring and management of transboundary water resources. Efforts to date have been mostly focused on the Kura River basin (with Armenia, Azerbaijan, and Georgia). Much of this work has been focused on introducing the principles and approaches of the European Union Water Framework Directive, development of common approaches and methodologies for water quality monitoring and assessment, development of river basin plans in transboundary basins, and the introduction of integrated surface water and groundwater monitoring systems. No donor activity has been successful in engaging the Islamic Republic of Iran and Turkey.
- **New reservoirs.** The government of Armenia has approached several donors for financing for new storage. This remains a long-held priority for the government. Four donors are currently considering four projects: JICA is supporting the feasibility studies for Yegvard reservoir, KfW is supporting the feasibility studies and implementation of Kaps reservoir, AFD is supporting the feasibility studies for Vedi reservoir, and the government of Armenia has requested KfW to undertake preparation for Selav-Mastara reservoir. These four reservoirs were identified during Soviet days as part of the master plan for development of water resources. Most donors agree that there is scope to update this master plan and that it is important to consider new reservoir construction in the context of overall river basin planning.

Donor Engagement in Other Water-Related Issues

Various donors have also provided direct support for water-related issues, such as water supply and wastewater services, hydropower, climate change adaptation, and biodiversity, ecosystem, and environmental protection (including Lake Sevan) (USAID 2012).

Table 5.1 Donor Support to Water Sector in Armenia, by Topic

Challenges and issues		International financial institutions									Bilaterals								
		WB	IFC	ADB	EDB	EBRD	EU/EC	OSCE	UNECE	OECD	UNDP	USAID	MCC	JICA	KfW	GIZ	AFD	KF	GoN
Emerging challenges to IWRM	Future of Ararat valley (agriculture and fishery)																		
	Drainage												X						
	Fishery and groundwater										O								
	Storage and irrigation																		
	New storage													Δ	Δ		Δ	Δ	
	Dam safety	X																	
	Irrigation (WUAs, canal rehabilitation, etc)	O			Δ								X						
	Transboundary issues						X	O			O ^a								
	River basin planning (incl. IWRM and institutional/legal reforms)	X					O		O		O	O							
	Monitoring of water quantity and quality																		
	Monitoring capacity											X							X
	Information system											X							
	Issuing, oversight, and control of water use permits											X							
Other water-related issues	Water supply and wastewater services (incl. PPP and water tariff)	O		O		O	O		O	O	X	X		O					
	Energy-water (small, medium, large hydropower plants)	X	X	O		O						O		O				X	
	Climate change adaptation (incl. disaster risk management)	X						O			O								
	Biodiversity, environment, ecosystem protection (incl. Lake Sevan)	X				X		X			X				O			X	
	Solid waste management	Δ		O		O					X								

Note: X = closed activities; O = ongoing activities; Δ = activities in preparation or prefeasibility assessment; PPP = public-private partnership; WUA = Water User Association.

a. The Reducing Transboundary Degradation of the Kura Aras River Basin Project is implemented by UNDP, with financing from Sida (completed) and GEF (ongoing).

Reference

USAID (United States Agency for International Development). 2012. *Water and Energy Related Donor Projects in Armenia: An Overview Document*. Prepared under USAID Clean Energy and Water Program.

