



UN initiatives on water management in Central Asia and potential entry points

Issue-Based Coalition on Environment and Climate Change

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This paper was prepared by Mr. Jon Marco Church, Ph.D., for UNECE. The views in the document are those of the author and do not necessarily express the position of the United Nations, its Member States and the members of the Issue-Based Coalition.

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Table of contents

| | |
|--|----|
| Index of figures | 2 |
| Index of tables..... | 2 |
| Acronyms..... | 3 |
| 1. Scope and purpose of the review | 4 |
| 2. Key water issues in Central Asia..... | 6 |
| 2.1 Water management in Central Asia | 8 |
| 3. Summary mapping of UN activities | 10 |
| 3.1 Subregional activities in Central Asia | 14 |
| 3.2 Transboundary activities in Central Asia | 15 |
| 3.3 National activities | 15 |
| 3.3.1 Kazakhstan | 15 |
| 3.3.2 Kyrgyz Republic | 15 |
| 3.3.3 Tajikistan..... | 15 |
| 3.3.4 Turkmenistan | 16 |
| 3.3.5 Uzbekistan | 16 |
| 4. Summary analysis of projects implemented by non-UN partners | 17 |
| 5. Programmatic and policy entry points of collective UN efforts..... | 20 |
| List of references..... | 23 |
| Annex: Results chain for the UN System-wide Strategy for Water and Sanitation..... | 25 |

Index of figures

| | |
|---|----|
| Figure 1: Level of water stress: freshwater withdrawal as a proportion of available freshwater.. | 7 |
| Figure 2: People using safely managed drinking water and at least basic sanitation services | 8 |
| Figure 3: Number of UN projects on water in Central Asia | 10 |
| Figure 4: Indicative budget of UN projects on water in Central Asia..... | 10 |
| Figure 5: Number of UN projects on water in Central Asia by thematic area | 11 |
| Figure 6: Indicative budget of UN projects on water in Central Asia by thematic area..... | 11 |
| Figure 7: Number of projects on water in Central Asia by UN entity | 12 |
| Figure 8: Indicative budget of projects on water in Central Asia by UN entity | 12 |
| Figure 9: Indicative budget of UN projects on water in Central Asia by country | 13 |
| Figure 10: Disbursement of ODA to the water sector in Central Asia by country..... | 16 |
| Figure 11: Indicative budget of UN projects on water by agency..... | 17 |
| Figure 12: Disbursements by larger donors to the water sector in Central Asia..... | 18 |
| Figure 13: Disbursements by smaller donors to the water sector in Central Asia | 20 |

Index of tables

| | |
|--|----|
| Table 1: Role of UN entities in water-related thematic areas in Central Asia..... | 14 |
| Table 2: Ratification of main international legal instruments on water | 22 |

Acronyms

| Acronym | Meaning |
|---------|--|
| ADB | Asian Development Bank |
| AFD | French Development Agency |
| AIIB | Asian Infrastructure Investment Bank |
| ASBP | Aral Sea Basin Program |
| BWO | Basin Water Organization |
| CAREC | Central Asia Regional Economic Cooperation Program |
| CAREC | Regional Environmental Centre for Central Asia |
| CAWEP | Central Asia Water and Energy Programme |
| COP | Conference of the Parties |
| CRS | Creditor Reporting System |
| DAC | Development Assistance Committee |
| EDB | Eurasian Development Bank |
| EBRD | European Bank for Reconstruction and Development |
| EC | Executive Committee |
| EDB | Eurasian Development Bank |
| EFSD | Eurasian Fund for Stabilization and Development |
| EIB | European Investment Bank |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| GCF | Green Climate Fund |
| GEF | Global Environment Facility |
| IBC | Issue-based Coalition on Environment and Climate Change |
| ICWC | Interstate Commission for Water Coordination of Central Asia |
| IFAS | International Fund for Saving the Aral Sea |
| IFI | International Financial Institution |
| IsDB | Islamic Development Bank |
| IWRM | Integrated Water Resources Management |
| JMP | Joint Monitoring Programme for Water Supply Sanitation and Hygiene |
| KfW | German Credit Institute for Reconstruction |
| NGO | Non-Governmental Organisation |
| ODA | Official Development Assistance |
| OECD | Organisation for Economic Co-operation and Development |
| OSCE | Organization for Security and Co-operation in Europe |
| SDG | Sustainable Development Goal |
| SIC | Scientific Information Centre |
| SONCA | Subregional Office for North and Central Asia |
| SWS | United Nations System-wide Strategy for Water and Sanitation |
| UN | United Nations |
| UNCT | United Nations Country Team |
| UNDP | United Nations Development Programme |
| UNDRR | United Nations Office for Disaster Risk Reduction |
| UNECE | United Nations Commission for Europe |
| UNEP | United Nations Environment Programme |
| UNESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| UNRC | United Nations Resident Coordinator |
| UNRCCA | United Nations Regional Centre for Preventive Diplomacy for Central Asia |
| UNSDCF | United Nations Sustainable Development Cooperation Framework |
| UNSPECA | United Nations Special Programme for the Economies of Central Asia |
| WASH | Water, Sanitation and Hygiene |
| WECOOP | Water, Environment and Climate Change Cooperation Programme |
| WEFE | Water-Energy-Food-Ecosystems Nexus |
| WHO | World Health Organization |

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1. Scope and purpose of the review

The Issue-based Coalition on Environment and Climate Change (IBC) provides a regional platform for UN entities in Europe and Central Asia to (1) promote coordinated support to all Member States in Europe and Central Asia in their implementation of the 2030 Agenda and (2) support UN Country Teams (UNCTs) in the Europe and Central Asia region on environmental and climate change issues. The IBC work is implemented through different thematic priorities. Amongst priorities, the topic of transboundary water cooperation and management and prevention of conflicts has been prioritized by the UN Resident Coordinators (UNRCs) in meetings between the UNRCs and co-chairs of the IBC several times. The UNRCs noted that water is a topic of national and regional importance, which requires a high-level perspective and coordinated approach from UN entities at the regional and country levels, especially in country programming.

The IBC Task Team on Water Management has organized several workshops and webinars to respond to the requests from UNRCs and UNCTs: transboundary water cooperation in the Western Balkans, preventing water conflicts through transboundary water cooperation, informal dialogue on water cooperation in Central Asia with UNRCs and UNCTs and a dedicated session on water including transboundary cooperation as part of a regional workshop on environment and climate change issues in the implementation of United Nations Sustainable Development Cooperation Frameworks (UNSDCFs).

The informal dialogue on water cooperation in Central Asia, which was organized on 17 February 2023, discussed ways to strengthen support from the UN system to the countries of the subregion in the implementation of water-related goals and targets of the 2030 Agenda for Sustainable Development and how to further improve coordination between the activities of UN entities. To facilitate the discussion and use it as background information for the informal dialogue, a mapping table was produced, based on the inputs from IBC focal points and UNCTs on planned, on-going and recently concluded programmes and projects on water management in Central Asia. The mapping of UN activities since 2019 was further updated in June 2024 and was used for a retreat among the UNRCs and UN entities on the gaps and potential entry points for transboundary water cooperation. The database resulting from the mapping is attached to this review.

The Regional Development Coordination Office (DCO) has requested the IBC to conduct a thorough analysis of the existing mapping as a follow-up to this meeting, including a review of interventions by non-UN development partners in this area, and to propose potential programmatic and policy entry points for the UN system to be used for the UNSDCF process. To this end, a consultant was hired to undertake the following tasks:

- Briefly describe key water issues in Central Asia;
- Analyse inputs from IBC member agencies and UNRC Offices in Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan on planned, on-going and recently concluded programmes and projects on water management in Central Asia at subregional and country level;
- Review the outcomes and impact of major UN implemented programmes;
- Compile and review programmes and projects currently implemented and concluded in the past five years by non-UN major development partners on water issues at the subregional, national and catchment levels, including by ADB, EBRD, EIB, EU, World Bank, as well as other international financial institutions and bilateral donors;

- Considering UN's role as being not only a provider of technical expertise but also a convenor and facilitator of global and regional water processes, identify programmatic and policy entry points and the potential comparative advantage or added value of collective UN efforts for the new UNSDCF cycle of 2026-2030 both at subregional and country levels.

This paper summarizes the outcomes of the above analysis. Political sensitivities in the subregion and change of donor landscape and priorities have been considered across the document. At possible extent, a special focus on climate change impacts, adaptation and possible action, and related competition for water resources, including in view of the latest UN Climate Change Conferences have been provided in the analysis.

Scope and limitation of the study

The overview does not intend to provide a comprehensive subregional analysis of the water management situation in the sub-region. However, a short introductory section has been included to describe some of the challenges in the subregion. The scope of the review is only the five countries that compose the subregion: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. The neighbouring upstream or downstream countries of the Islamic Republic of Afghanistan, Azerbaijan, China, Islamic Republic of Iran, Islamic Republic of Pakistan and Russian Federation play an important role in a transboundary context but are not the focus of this review.

The list of UN initiatives only includes projects and programmes from the UN entities which participated in the mapping exercise and provided information. This information does not fully reflect activities that are not project based and are covered by other human and financial resources, including the regular budget. Also, activities of some UN entities that are active in the subregion and have mandate on water management, but for which there is no project-related information, such as UNRCCA's support to cooperation in the region on water-energy, environment and climate for the period of 2022-2025, UNEP's support to the Secretariat of the Tehran Convention for the protection of the Caspian Sea and the water-related activities UNESCAP and its Subregional Office for North and Central Asia (SONCA), are not included in the review. Therefore, the mapping exercise cannot be considered as exhaustive, even if it reflects all activities and projects in the UN INFO online planning, monitoring and reporting platform, which should capture all that individual entities do at country level.

The review of non-UN initiatives is not based on a comprehensive mapping of such activities, which would have required a considerable investment of time and resources. The review was conducted based on existing incomplete databases of projects, which were produced for the European Commission under the WECOOP Project and the Team Europe Initiative for Central Asia, by the SIC ICWC for the Nexus Project, as well as by the World Bank and shared with the consultant. The review also includes the Water Pillar of ADB's CAREC Program and the data reported in the Creditor Reporting System (CRS) by the OECD's Development Assistance Committee (DAC).

Because of lack of information, this review does not include bilateral cooperation with all partners. In fact, little information is available to the consultant about development cooperation from several countries that are partnering with Central Asia in the water sector, such as China, the Islamic Republic of Iran and the Russian Federation. Also, the CRS system does not include data on disbursements from EBRD and EIB, which are major players. The information in the CRS system is also known to be incomplete. In particular, there are problems of misattribution of

water-related interventions, which may be attributed to other sectors, such as climate adaptation, urban planning, agriculture development and glacier research. For the scope of this report, only primary attributions were considered.

2. Key water issues in Central Asia

The complex technical system of the Aral Sea basin depends on both sound infrastructure and strong institutions. The Aral Sea basin is the largest and major basin in Central Asia and is divided into two major subbasins, the Amu Darya basin, flowing from the mountains of Tajikistan and Afghanistan to the desert of Turkmenistan and Uzbekistan and the Syr Darya, flowing from the peaks of the Kyrgyz Republic to the steppes of Kazakhstan, through Tajikistan and Uzbekistan. The subregion is also characterized by several other basins, most of which are transboundary. The Aral Sea crisis is perhaps one of the best-known environmental disasters of the 21st century. According to UN Secretary-General António Guterres: “This is probably the biggest ecological catastrophe of our time.”

The Aral Sea crisis was caused by the unsustainable use of abundant water resources for irrigated agriculture, which accounts for about 80% of water withdrawals in the subregion, mostly to produce cotton for export markets and cereals for domestic consumption. This system relies upon a network of large and small interstate, inter-farm and intra-farm canals and pipes that require careful maintenance and management to avoid inefficiencies in water use. The World Bank estimates that 79% of irrigation water is lost on the way or during storage (World Bank 2020). The water supply for agriculture also requires close coordination with upstream electricity generation from hydropower that powers energy-intensive industrial conglomerates and is used for household heating during winter. In Soviet times, the upstream republics of Tajikistan and Kyrgyz Republic ran hydropower plants in irrigation mode in summer, providing the necessary water for the vegetation period and cheap electricity for pumping stations, whereas the downstream countries of Kazakhstan, Turkmenistan and Uzbekistan delivered gas in exchange during winter, when the discharge was stopped to collect water for the summer. This exchange of water, energy and land resulted in the over-use of water resources for irrigation, causing the Aral Sea environmental disaster. This problem is exacerbated by demographic growth, as an increasing population relies on limited resources. This water-energy-land exchange system depended on strong institutions at the level of the union and the republics to manage the water resources and address the crisis. The breakdown of Soviet Union brought new complexities into subregional management of water resources.

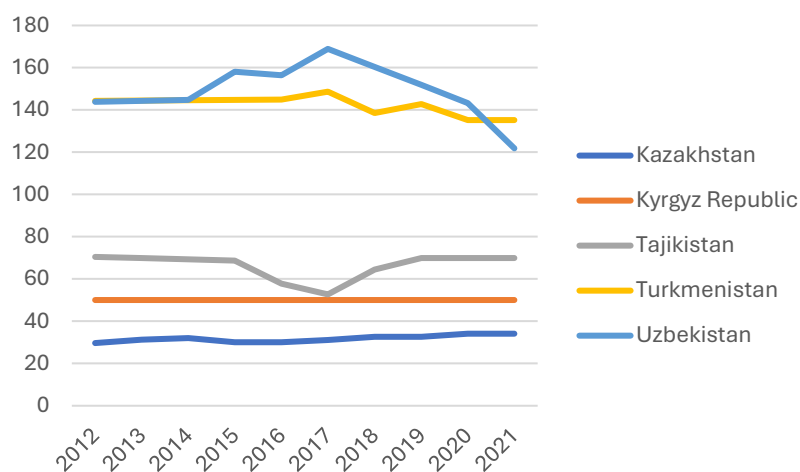
In the Amu Darya basin, Central Asian governments failed so far to limit withdrawals to sustainable levels. After independence, it took only twenty years for the Aral Sea, which was beginning to recover in the 1980s, to almost disappear. So far, with an ongoing transition to a market economy and weaker institutions at the subregional level, the Central Asian republics managed to improve the situation only of the northern part of the Aral Sea that is fed by the Syr Darya river but have failed so far to limit withdrawals to sustainable levels in the Amu Darya basin, resulting in high levels of water stress (**Figure 1**) and the ongoing transformation of the southern part of the Aral Sea into the Aralkum Desert (Xenarios et al. 2020). Because of winds and dust storms, this results in high levels of salt and chemicals from agriculture and industry being diffused in the surrounding areas, with severe impact on public health. The current infrastructural, institutional and market configuration fails to reconcile the legitimate quest for short term social needs and economic profit and long-term environmental and health benefits. The use of Integrated Water Resources Management (IWRM) with a basin approach combined with a Water-Energy-Food-

Ecosystems (WEFE) “nexus” intersectoral approach are expected to revive a more integrated management of water, energy and land in the Aral Sea basin to help address its crisis.

Central Asia has uneven access to drinking water supply and sanitation. While downstream countries with higher GDP per capita tend to have better access to drinking water supply and sanitation than upstream ones with lower GDP per capita (**Figure 2**), in all countries the situation in rural areas is much more critical than in urban areas. In rural areas, where a significant part of the population lives, the infrastructure has often collapsed, while in urban areas the situation has improved, and investments are often on the way. In rural areas, children, women, elderly people and persons with disabilities tend to be overrepresented because of the outmigration of able-bodied men to the Russian Federation and other countries. The situation in schools, hospitals and workplaces is generally worse than in households. Hygiene, defined as access to hand-washing with soap, is relatively good, while domestic and industrial wastewater treatment, including in the mining sector, is close to non-existent, except in a few large cities. Investments and reforms are underway to improve the situation, particularly in urban areas.

Climate change is already affecting the subregion. Over the last decades the whole subregion is already facing more frequent dry years and a significant reduction in glacier volume. If, by the mid-2030s, a 2.5% increase in hydropower potential is expected due to climate change and the related increase in glacier melt, by 2050, annual runoff is estimated to drop by 41% (Zholdosheva et al. 2017). In Uzbekistan, 25-63% yield loss is expected by 2050 due to climate change (World Bank and ADB 2021). All countries in the region are committed to the 2015 Paris Agreement and submitted Nationally Determined Contributions (NDC). All countries are currently implementing and updating them, often with the support of the UN. Tajikistan and the Kyrgyz Republic are investing on the construction of large hydropower plants. These dams are expected to reduce greenhouse gas emissions and the risk of flooding. However, besides environmental concerns related to hydropower development, countries now pay more attention to climate change because of the water shortages, even in countries where water is relatively abundant. Quicker snowmelt in spring, aging infrastructure and poor disaster risk management make Central Asia vulnerable to climate change, particularly in poorer areas. The main threats include more frequent and intense drought, flooding, mudflows, landslides, avalanches and glacial lake outburst floods.

Figure 1: Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (%)

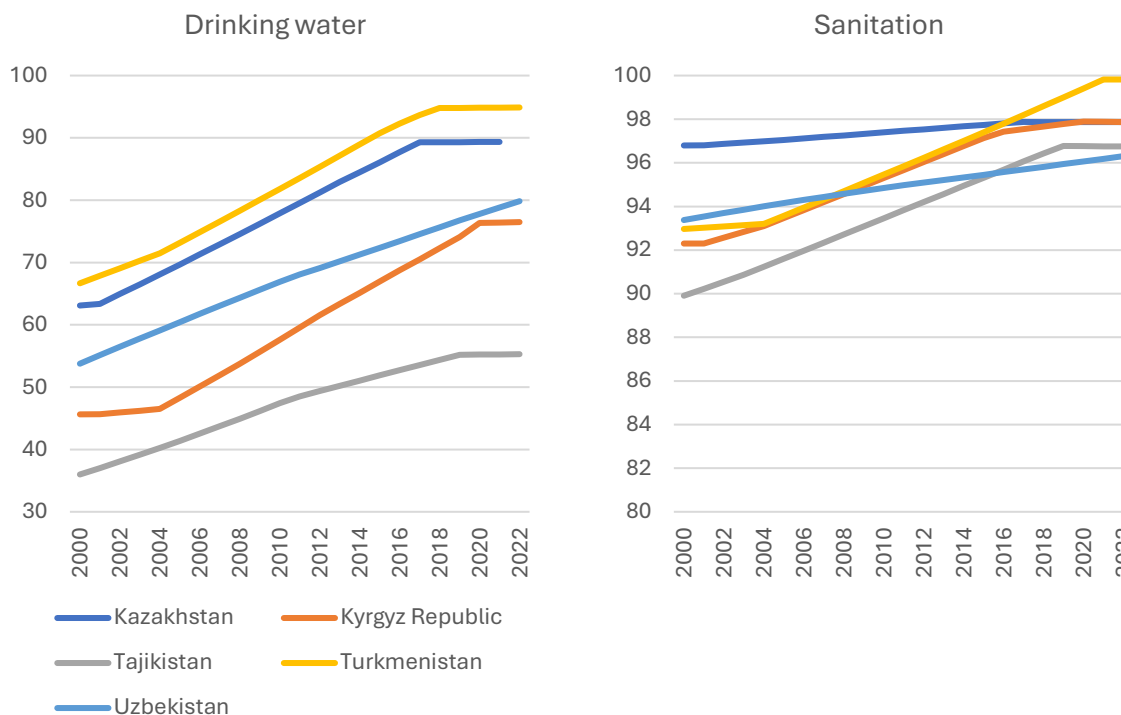


Data: FAO AQUASTAT

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Figure 2: People using safely managed drinking water (left) and at least basic sanitation services (% of population)



Data: WHO/UNICEF JMP

2.1 Water management in Central Asia

IFAS (International Fund for Saving the Aral Sea) is the only case of regionally owned autonomous integration organization and is specific to the water sector. IFAS is a complex organization set up after independence in 1992. Its members are the five countries, represented by their presidents, which meet at regular intervals. They assume the chairmanship on a rotating basis. Arguably, this practice has spillover effects on regional cooperation also in other sectors. IFAS is currently chaired by Kazakhstan. In 2016, the Kyrgyz Republic suspended its participation in IFAS, raising concerns about benefits from participation for upstream countries. Currently all five countries are discussing an IFAS reform, with the Kyrgyz Republic's active participation. The IFAS reform process has been going on for more than a decade.

EC IFAS (Executive Committee of IFAS) was established at senior officer level for more regular consultations. EC IFAS is staffed by representatives of the governments of the five Central Asian republics. Its functioning is based on the 1992 Almaty Agreement and subsequent documents, which set the legal framework. Its headquarters move with the rotating chairmanship. Rotation between countries is poorly regulated and time consuming. It reduces efficiency and has an impact on effectiveness. Even if the Aral Sea basin concerns most of Central Asia, IFAS does not cover basins shared with other countries, such as the ones shared with the Islamic Republic of Iran, China and the Russian Federation, as well as the Caspian Sea basin.

Despite its name, IFAS is not a fund and does not have a common bank account. In 1998, Uzbekistan established an Agency for the Management of Project Implementation of the Aral Sea Basin (Agency of IFAS) in Tashkent for this purpose. Similarly, Kazakhstan set up an Executive Board of the International Fund for Saving the Aral Sea (EB of IFAS) in the Republic of Kazakhstan

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to solve the problems in the Kazakhstan part of the Aral Sea and region. However, there is no consensus among the five Central Asian republics to share their own funding and jointly operate an IFAS funding scheme. Therefore, IFAS cannot act as an implementing agency.

ICWC (Interstate Commission for Water Cooperation) is the equivalent of an Aral Sea basin commission. ICWC is part of IFAS and has a permanent secretariat in Tajikistan. It serves as the Aral Sea basin commission but does not cover Afghanistan, which refused to join IFAS in the 2000s after a mediatized debate on the national interest of Afghanistan on water and maintains a de facto observer status. As per the 1992 Almaty Agreement, ICWC's main role is to establish water use quotas. These quotas are based on a 1987 agreement negotiated under the Soviet Union. They do not satisfy all countries but are difficult to revise. Quotas are a Pandora's box that countries seem unwilling to open. The ICWC also oversees water allocation through two BWOs (Basin Water Organizations): BWO Amu Darya and BWO Syr Darya, both permanently based in Uzbekistan. A SIC ICWC (Scientific Information Centre of ICWC) was also established to collect, assess and provide scientific information at the regional level for sound decision-making by ICWC. SIC ICWC is also headquartered in Uzbekistan and has branches in each Central Asian republic. For decades, SIC ICWC has been the major hub for water information in Central Asia. In Central Asia, groundwater and glaciers are typically managed separately from surface water, despite strong interlinkages between surface water, groundwater and glaciers. Hence, groundwater and glaciers do not fall under the purview of water institutions at the national and regional levels.

In the Aral Sea basin, quotas are wrong more than 80% of the time. Despite the existence of more than 40 hydrological models of the Aral Sea basin, often created with the support of development partners, it remains difficult to establish yearly quotas. Not only the data provided by riparian countries is questionable, but also its analysis in the context of climate change is difficult. Moreover, verification of actual use of water is limited. The mandate of ICWC seems to be de facto limited to irrigation. ICWC has little influence over hydropower management. As a result, quotas are usually both wrong and not respected. Proposed IFAS reforms, including the proposal to establish a Water and Energy Consortium, aim inter alia at improving coordination between the irrigation and hydropower subsectors. The consortium was initially put forward by Kazakhstan in 1997 but has not managed so far to reach the consensus of other riparian countries.

The ASBP (Aral Sea Basin Program) is the blueprint for regional water cooperation. To coordinate efforts to save the Aral Sea, IFAS develops ten-year programs. In the 2010s, the 3rd ASBP attracted €87 million of donor funding. The fourth iteration was developed in 2016-2019 under the Turkmenistan Chairmanship of IFAS, with the support of GIZ, and was approved in June 2021 under the Tajikistan Chairmanship of IFAS, with the support of the World Bank. All projects under the ASBPs are meant to be co-funded at least in part by riparian countries and benefit all countries in the basin. While the first program in the 1990s was mostly donor funded and driven, the second one in the 2000s was mostly funded by Central Asian republics. The third program in the 2010s was again mostly donor funded, with only 6 projects out of 50 being implemented. For the fourth program, the number of projects was reduced to 34 to provide greater focus and increase the likelihood of successful funding.

In the 4th ASBP, projects are clustered around four broad areas: water management, environmental management, socioeconomic development and governance. This includes the reform of IFAS and of water management in each Central Asian republic. Some projects concern directly the Aral Sea, while the impact of other projects is expected to be indirect. The program document includes a short description of the proposed projects. Since approval of the programme document, EC IFAS has been working closely with donors and other development partners on its implementation. It is promoting a division of labour among donors who would support specific projects to reduce the risk of duplication. The implementation of ASBP-4 was delayed on average by more than two years because of the COVID-19 crisis.

3. Summary mapping of UN activities

Over the period between 2019 and 2023, the UN has been implementing 77 water-related projects in Central Asia for a total of more than 67.2 million USD. This means around 13.4 million USD on average per year and that the average project is of less than 0.8 million USD, which can be considered a low threshold for large donors and a high threshold for small donors. The UN has been implementing 59 small projects with a budget below 1 million USD, for a total of around 10.3 million USD and only 3 large projects with a budget above 5 million USD. The UN is therefore not a competitor to IFIs, which focus on large infrastructure projects. For the small projects on WASH and in rural areas, it is likely that the UN is competing with NGOs as implementing partners. However, those 3 large projects alone have mobilized more than 20.9 million USD, which means more than double the resources mobilized by the small projects.

It is the 15 mid-sized projects that make up for more than half of the financial resources available to the UN. These mid-sized projects have a budget between 1 and 5 million USD. This corresponds to 35.9 million USD, which is more than the combination of all small and all large projects (**Figure 3** and **Figure 4**). These mid-sized projects put the UN in direct competition with bilateral development cooperation agencies, such as GIZ and JICA, for both hard and soft components and with large development consulting firms, like COWI and GOPA, particularly for soft components.

Figure 3: Number of UN projects on water in Central Asia

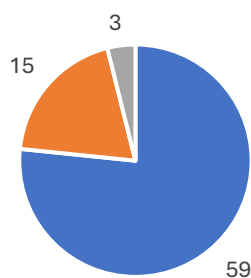
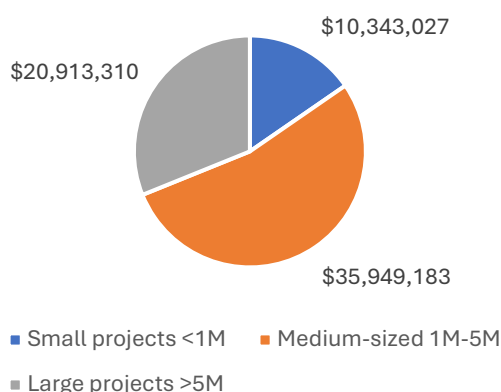


Figure 4: Indicative budget of UN projects on water in Central Asia



The UN has been active on all fronts in a balanced manner, except for WASH and water use efficiency. Water-related projects have been covering water and climate change (17%), transboundary water cooperation (16%), IWRM (15% of available resources), water management (15%), the WEFE nexus (13%), as well as water and health (14%). Surprisingly, a major issue for the subregion such as WASH mobilized limited resources, even if WASH constitutes the largest group of projects implemented by the UN in Central Asia, with 24 projects out of 77. This means that WASH projects tend to be small, perhaps because they often target rural and remote areas. Water use efficiency is another major problem for the subregion that failed to mobilize significant resources (**Figure 5** and **Figure 6**).

Figure 5: Number of UN projects on water in Central Asia by thematic area

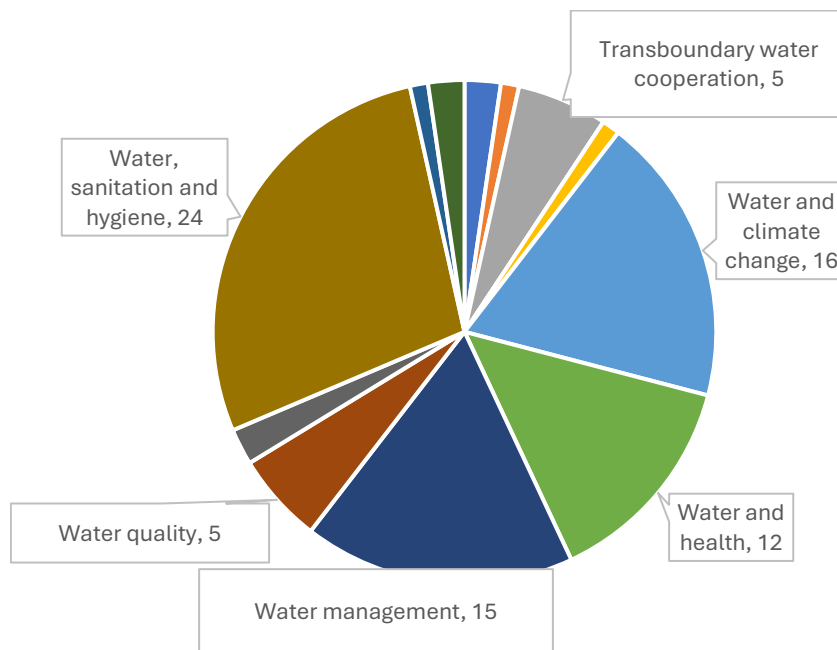
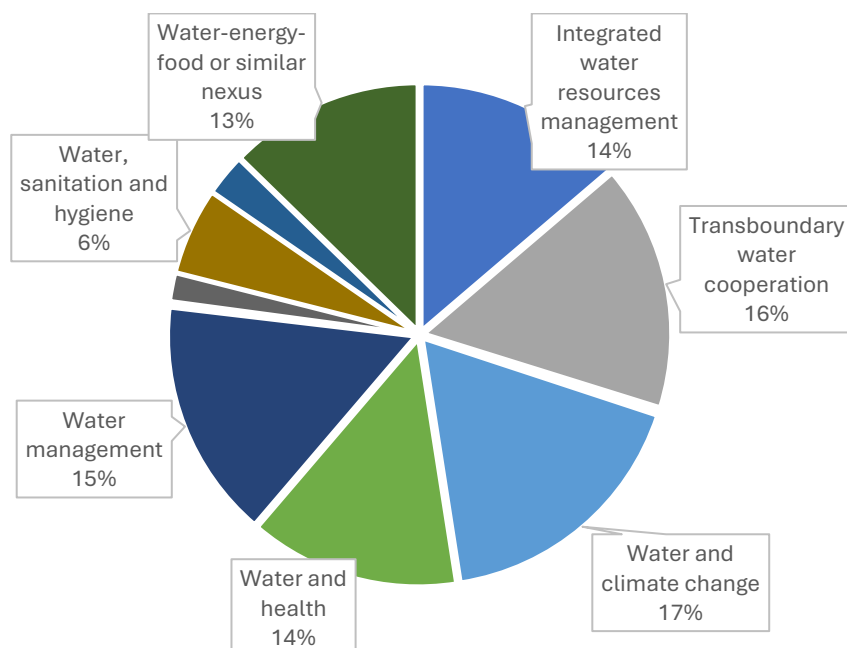


Figure 6: Indicative budget of UN projects on water in Central Asia by thematic area



UNDP raised more than half of all the UN financial resources for water management. However, the largest portfolio in terms of number of projects is that of UNICEF, but the funds available are less than one-third of those of UNDP. UNECE, which services the Secretariat of the Water Convention as well as UNSPECA, manages the third largest portfolio in the subregion (**Figure 7** and **Figure 8**). The thematic focus of the implemented projects generally follows the mandate of the respective organizations. The situation of UNEP is peculiar, as it has a significant mandate regarding water management and is custodian of several indicators of SDG 6 on water and sanitation but is absent from the water sector in the subregion. UNEP's role stems from its global mandate to support countries in monitoring and reporting on three SDG 6 water indicators. This includes assisting all UN member states in collecting and submitting SDG water data for global reporting and analysis. While UNEP also works in select countries to build capacity for using these data to drive action, it did not have project-based support in the subregion during the period analysed. UNEP's support to the Secretariat of the Tehran Convention for the protection of the Caspian Sea is not included in this analysis. FAO and WHO also have a weak presence, despite a strong mandate (**Table 1**). Upcoming projects on the water and land nexus are expected to strengthen FAO's presence in the region.

Figure 7: Number of projects on water in Central Asia by UN entity

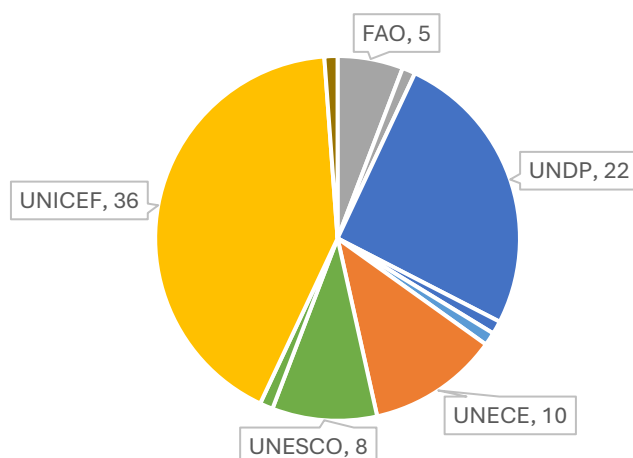
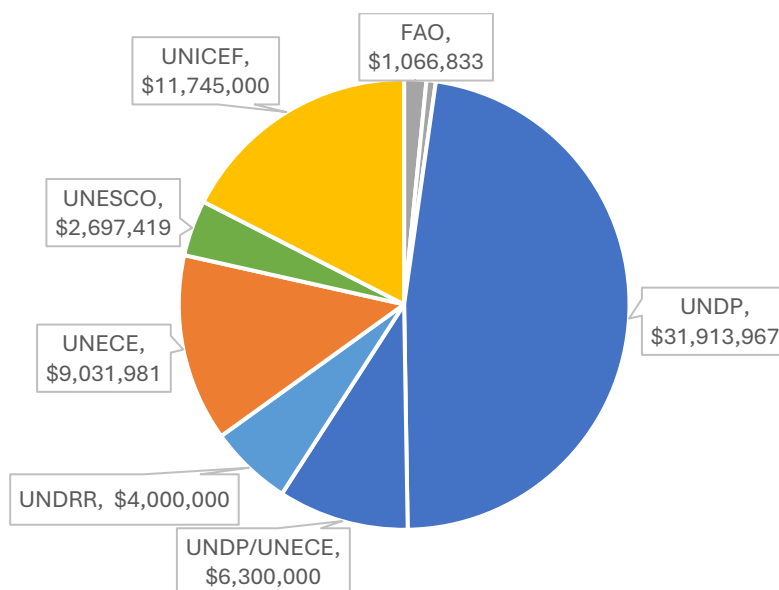
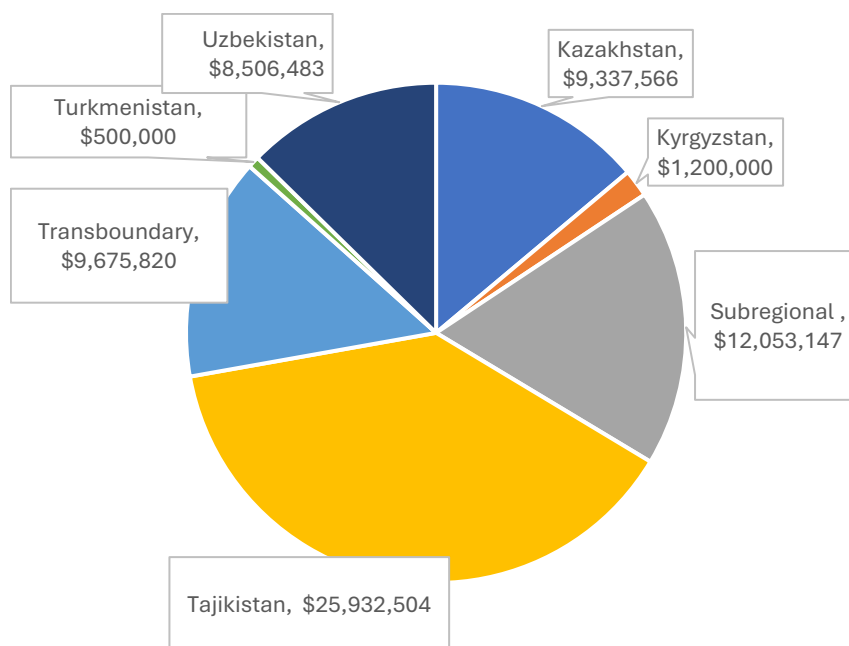


Figure 8: Indicative budget of projects on water in Central Asia by UN entity



Tajikistan received more than one-third of all financial resources mobilized through the UN for water management. This reflects its status as the country with the lowest GDP per capita in the subregion, also because of five years of civil war in the 1990s, but can as well be considered a spillover effect of the active water diplomacy of the country at the global level. Donor support to Tajikistan has been growing steadily in the water sector for more than a decade. Subregional and transboundary cooperation absorb around one-quarter of resources, reflecting the interdependency of the water sector in the subregion and the prevalence of transboundary watersheds. Surprisingly, the Kyrgyz Republic, which has the second lowest GDP per capita in the subregion, has been receiving very limited support from the UN in the water sector, while Kazakhstan, which is an upper-middle income economy according to the World Bank and a donor country according to OECD DAC, receives more than seven times more than the Kyrgyz Republic (**Figure 9**).

Figure 9: Indicative budget of UN projects on water in Central Asia by country

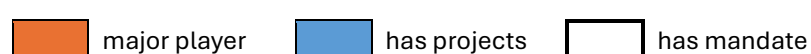


In general, the water-related work of the UN is appreciated in Central Asia. In a subregion that is in-between centres of geopolitical tension, the neutrality of the UN is a major advantage compared to other partners. Beneficiary countries feel that the UN works for them. At the same time, because of the same geopolitical reasons, donors may fear the independence of the UN, which may be seen as not working sufficiently for specific donors. Moreover, the capacity of the UN to work in border areas, particularly the one with Afghanistan, where security conditions make it difficult for NGOs and private companies to operate is seen as a major asset. Finally, the convening power of the UN at the national and regional level is another comparative advantage of the UN, especially for policy work. The governments of the region themselves sometimes ask the UN to use this convening power on water-related issues to promote reforms and other initiatives both domestically and internationally.

Table 1: Role of UN entities in water-related thematic areas in Central Asia

| Thematic focus | FAO | UNDP | UNEP | UNECE | UNESCO | UNICEF | WHO |
|---------------------------------|--------------|--------------|------|--------------|--------------|--------------|--------------|
| Industrial accidents | | | | major player | | | |
| IWRM | | major player | | has projects | | | |
| Transboundary water cooperation | has projects | major player | | has projects | has projects | | |
| Wastewater management | | has projects | | | | | has mandate |
| Water and climate change | has projects | major player | | | has projects | | |
| Water and health | | has projects | | has projects | | major player | has projects |
| Water management | has projects | major player | | has projects | has projects | | |
| Water quality | | | | | | has projects | |
| Water use efficiency | | has projects | | | has projects | | |
| WASH | | has projects | | has projects | | major player | |
| WEFE nexus | | has projects | | major player | | | |

Source: UN support to countries in Central Asia on water management (2024)


 major player has projects has mandate

3.1 Subregional activities of the UN in Central Asia

At the subregional level, the main activities in the target period concerned transboundary water cooperation, where UNDRR implemented an EU-funded multidimensional project on building resilience and UNECE led a Russian-funded project on dam safety. Both projects have however been completed and there seems to be little prospect for follow-up under the UN. The activity on dam safety is now being continued under the World Bank's CAWEP program with funding from the EU, Switzerland and the United Kingdom. Moreover, capacity building regarding the Water Convention and its Protocol on Water and Health is being provided by UNECE, as well as for the monitoring of SDG 6.5.2 on transboundary cooperation by UNECE for surface water and UNESCO for groundwater cooperation. UNRCCA is also active on transboundary water cooperation. For several years, it promoted the conclusion of specific agreements in the Amu Darya and Syr Darya Basins. However, ownership of the countries has been limited.

There is a new multidimensional project on the WEFE nexus in the subregion, which is funded by Germany, led by OECD and implemented in partnership with UNECE, FAO and other organizations. Also, UNSPECA has a Working Group on Water, Energy and the Environment, which meets yearly at the technical level, bringing together the water, energy and environmental authorities of the subregion. The new Nexus Project is expected to build on this UNSPECA platform. Some FAO and UNDP interventions also provide technical assistance and build capacity on water and climate change, particularly in the Ferghana Valley. Minor sub-regional level activities also concern WASH, water management, water use efficiency. UNESCO is also involved in such activities.

The integration of Afghanistan in subregional water cooperation is important. However, this can be complicated because of the Taliban regime in place and because of the building of the Qosh Tepa canal, which is diverting significant amounts of water from the Amu Darya basin with important consequences for the downstream countries of Turkmenistan and Uzbekistan. Because of the non-recognition of the Taliban regime by the UN, no water-related regional activities are currently being developed with Afghanistan, which does not even participate in UNSPECA activities, including its Working Group on Water, Energy and the Environment, despite Afghanistan being a full member of UNSPECA.

Info: <https://uneuropecentralasia.org/en/ibc-environmental-coalition>

Email: IBC-Env-Climat@unesco.org

3.2 Transboundary activities of the UN in Central Asia

The UN has a significant portfolio of water-related transboundary activities in Central Asia.

One of the largest projects that is implemented by the UN in the subregion is the result of a partnership between UNDP and UNECE with a focus on capacity development for transboundary water resources management. For many years, UNECE has been supporting the Chu-Talas Commission between Kazakhstan and the Kyrgyz Republic. Another major project is implemented by UNDP and concerns raising awareness of climate-related fragility, including water, at the local, national and regional levels. A third smaller project is implemented by FAO and UNFPA and focuses on climate-smart agriculture. The focus of these projects is transboundary relations in the Ferghana Valley, particularly between the Kyrgyz Republic and Tajikistan and between the Kyrgyz Republic and Uzbekistan, where decades-old tensions escalated into several violent incidents in recent years. As for subregional activities, transboundary relations with Afghanistan can be complicated because of the Taliban regime in place and because of the building of the Qosh Tepa canal. Since the UN does not recognize the Taliban regime, no water-related transboundary activity is currently being developed with Afghanistan.

3.3 National activities of the UN on water

3.3.1 Activities of the UN in Kazakhstan

The water management portfolio of the UN in Kazakhstan is limited. In the target period, it amounted to 9.3 million USD (**Figure 11.1**). UNDP implements the two largest interventions, focusing on private investment for water-related climate action and the empowerment of local communities. UNESCO is also implementing an important activity on water-related ecosystems. Minor activities also concern the adoption of digital technologies and the capacity development of water operators, aiming at improving the service quality. These activities reflect the higher level of development of Kazakhstan, compared to the other countries in the subregion.

3.3.2 Activities of the UN in the Kyrgyz Republic

The UN only has a minimal presence in the water sector in the Kyrgyz Republic. It is limited to two projects implemented by UNDP on water and health and water use efficiency, plus one intervention by UNICEF on water in healthcare facilities (**Figure 11.2**). Such minimal presence is surprising, as the Kyrgyz Republic has the second lowest GDP per capita in the subregion and the third largest recipient of water sector ODA in the subregion, without considering investment from EBRD to upgrade drinking water supply in urban areas, which is remarkable. As the trend has been positive in recent years, more opportunities may emerge for the UN in the near future (**Figure 10**).

3.3.3 Activities of the UN in Tajikistan

Tajikistan is the largest recipient of water-related ODA in the subregion, but UNDP and UNICEF are the only UN entities active on water. In recent years, these two UN entities have been managing a portfolio of more than 25 million USD, including the largest water-related single project in the subregion, dedicated to livelihoods of small-scale farmers and pastoralists in rural areas and a project to provide support to the Ministry of Energy and Water Resources to adopt IWRM and implement a water sector reform programme (**Figure 11.3**). Moreover, UNDP, in partnership with the UNRC, UNDESA and UN-Water, has been providing technical assistance to the Government for the organisation in Dushanbe of High-Level International Conferences on water every two years since the early 2010s. Thanks to this support, Tajikistan launched several international water initiatives, including the International Decade for Action “Water for Sustainable

Development”, 2018-2028, the co-hosting by Tajikistan of the UN 2023 Water Conference in New York and the recognition of 2025 as the International Year of Glaciers' Preservation. UNICEF manages many small and medium-sized projects with a focus on water quality and water and health, particularly schools and healthcare facilities. Tajikistan, the country in the subregion with the lowest GDP per capita, is the second largest recipient of water sector ODA. This excludes the notable investments from the EBRD aimed at upgrading urban drinking water supplies. Given the positive trends in recent years, there may be increasing opportunities for the UN to engage with Tajikistan in the near future (**Figure 10**).

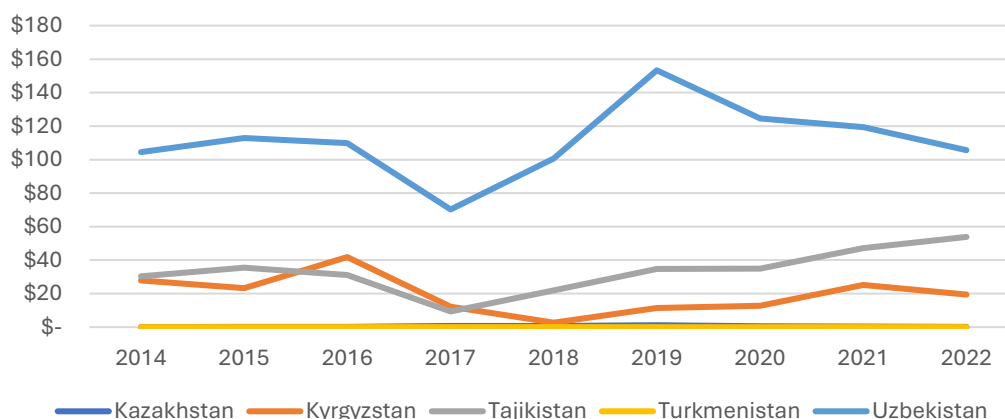
3.3.4 Activities of the UN in Turkmenistan

There is almost no UN presence in the water sector in Turkmenistan. This is limited to water and health, where UNICEF, WHO and UNECE implement a limited number of activities related to standards, water in healthcare facilities and water quality target setting (**Figure 11.4**). Moreover, Turkmenistan hosts UNRCCA in Ashgabat, which is active on subregional and transboundary water cooperation, including the abovementioned tensions between the Kyrgyz Republic, Tajikistan and Uzbekistan on water resources and irrigation infrastructure in the Fergana Valley. Turkmenistan is a large exporter of oil and gas and an upper-middle-income country. It receives very little ODA (**Figure 10**).

3.3.5 Activities of the UN in Uzbekistan

Uzbekistan is the largest recipient of water-related ODA in Central Asia, with a strong presence of the UN. Despite some natural gas reserves and a developed industrial sector, Uzbekistan is not a rich country. Since 2016, it attracted considerable donor support also in the framework of reforms promoted by the current government. Projects concern all aspects of water management for a total of 8.5 million USD: WASH, wastewater management, industrial accidents, water and health, water and climate change, as well as IWRM. FAO, UNDP, UNECE, UNESCO and UNICEF have implemented projects in Uzbekistan in recent years (**Figure 11.5**). These projects helped increase water use efficiency in the country. The two largest projects are implemented by UNDP with a focus on rural areas, particularly water saving technologies and land degradation. A UN Multi-Partner Human Security Trust Fund for the Aral Sea Region is also in place in Uzbekistan and is focused on ecological restoration of the former Aral Sea seabed and the surrounding area, supporting the afforestation efforts promoted by the government with the support of many donors, including France, Finland, the United States, the EU and EIB.

Figure 10: Disbursement of ODA to the water sector in Central Asia by country (in million USD)

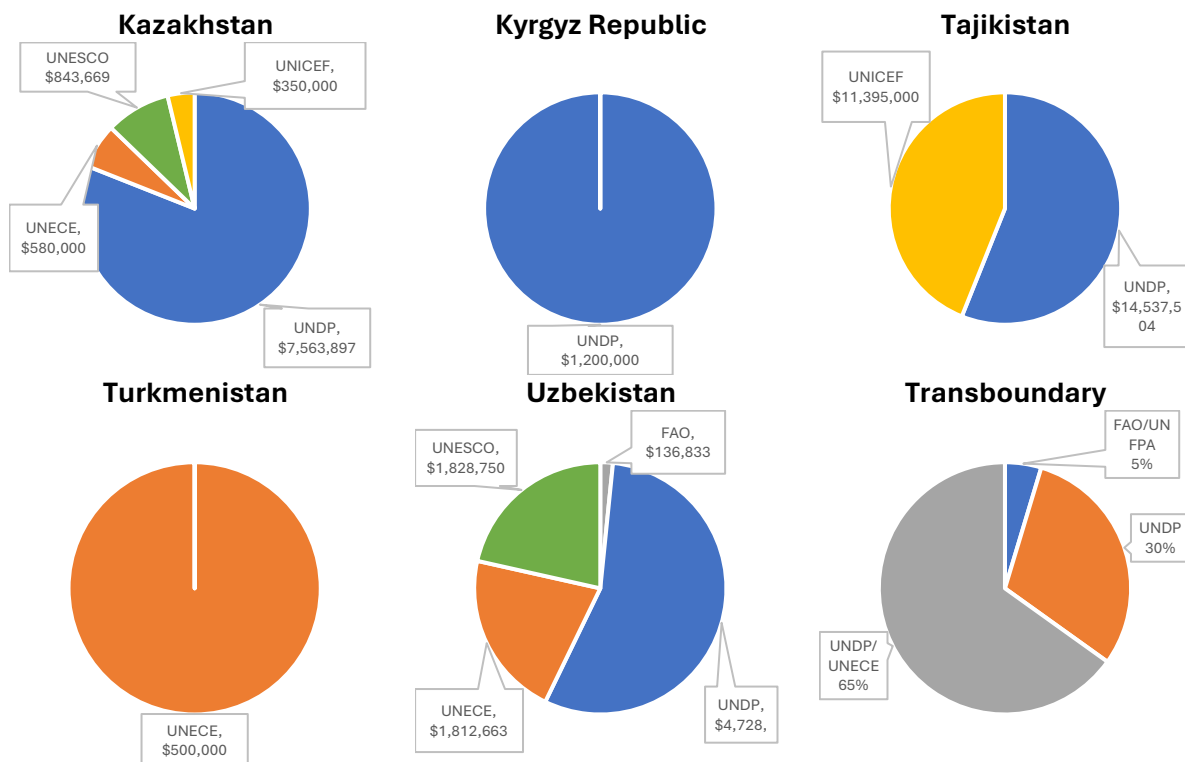


Data: OECD/DAC

Info: <https://uneuropecentralasia.org/en/ibc-environmental-coalition>

Email: IBC-Env-Climat@unesco.org

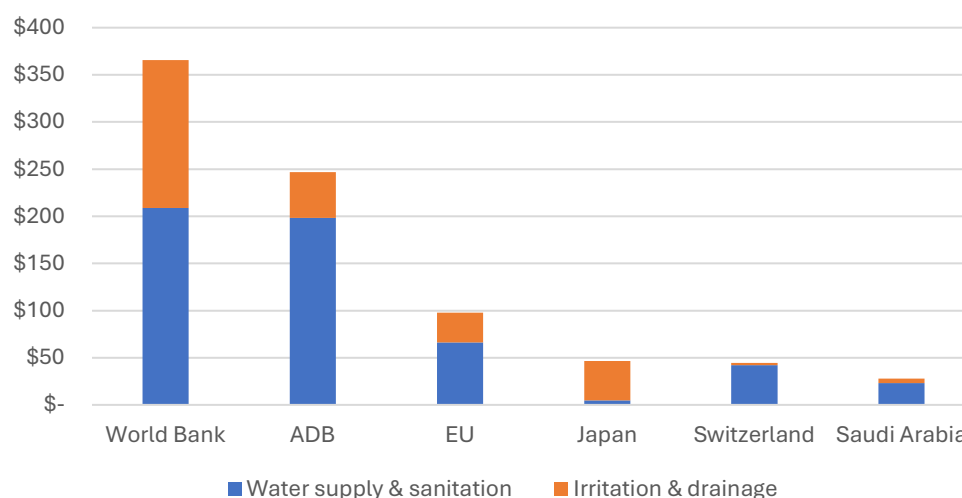
Figure 11: Indicative budget of UN projects on water at the national and transboundary level in Central Asian countries by agency.



4. Summary analysis of projects implemented by non-UN partners

A significant part of the action of the World Bank, ADB, EBRD and other IFIs is the provision of reimbursable loans. For this purpose, like the UN, they rely on donor funding from partners like the United States, Japan and the EU to keep these loans as concessional as possible. For lower middle-income economies, like Tajikistan, Kyrgyz Republic and Uzbekistan, IFIs often provide grants instead of loans, as the macroeconomic situation of the countries would not allow for credit operations. Because of size of their interventions, IFIs are the partners of choice for the implementation of large and medium-size infrastructure projects in the water sector, including the construction of the large hydropower plants that Tajikistan and the Kyrgyz Republic are investing on. They are also often involved in water sector reform processes, as better governance contributes to derisk investment and lower the cost of credit.

With an average of 13.4 million USD per year, the UN as a whole represents the fourth largest development partner in the water sector in Central Asia. However, UN entities tend to present themselves separately, often relegated to a minor partner role. The largest partner is the World Bank, with an average of 73.1 million USD per year, followed by ADB with 49.3 per year and the EU with 19.5 per year. Large donors providing more than 10 million USD per year to the subregion's water sector include Japan, Switzerland and Saudi Arabia (Figure 12). Some of these large donors also provide conditional budget support directly to the governments for water-related actions. With more than 1 billion USD invested over the years in urban water supply and sanitation, EBRD is also a major player, through its Green Cities programme.

Figure 12: Disbursements by larger donors to the water sector in Central Asia (in million USD, 2022)

Data: OECD/DAC

Recent years have seen fierce competition among IFIs in the water sector in Central Asia.

The causes are the high levels of liquidity in financial markets, but also the proliferation of development banks that are present in a subregion that is developing fast: besides the World Bank, ADB, EBRD, other development banks such as AIIB, EDB, EIB and IsDB are also present, just to name the largest ones. Countries with sound management of their macroeconomic situation, such as Kazakhstan and Uzbekistan, calculate how much new debt they are willing to take and, on this basis, make IFIs compete against each other to provide the best conditions possible. For lower-middle income economies like Tajikistan and the Kyrgyz Republic, where institutional capacity also tends to be lower, IFIs need to provide significant amounts of technical assistance, including policy guidance, to develop investment projects. Still, these countries are not short of IFIs willing to assist them. In general, the issue for Central Asian countries is more the absorption capacity of national counterparts, including contractors, rather than the availability of financial resources.

The World Bank and ADB developed subregional programmes to help prepare investments.

The World Bank currently manages CAWEP, which is a trust fund supported by the European Union, Switzerland and the United Kingdom. CAWEP focuses on water and energy in Central Asia. It is mostly used by the bank to develop knowledge products and organize events that create the conditions to identify and formulate investments at the subregional and national level. ADB manages instead CAREC, which is a larger platform that extends well-beyond Central Asia¹ and includes a large number of sectors. CAREC developed a Water Pillar, under which most water-related investments of ADB are prepared. Several water-related projects are also found among climate-related investments, as they are identified based on the analysis of the expected impact of climate change and designed to reduce climate risk, such as the “From Glaciers to Farms” regional programme launched by ADB in November 2024 with support from the GCF Project Preparation Facility. The level of country ownership of such climate-based projects is variable.

¹ Members of CAREC: Afghanistan, Azerbaijan, China, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan

CAWEP is currently providing technical assistance for the ongoing reform of IFAS, which is the only subregional organization established by Central Asian countries after independence. IFAS oversees the complex institutional arrangement that coordinates water resources in Central Asia with the aim of addressing the Aral Sea crisis.

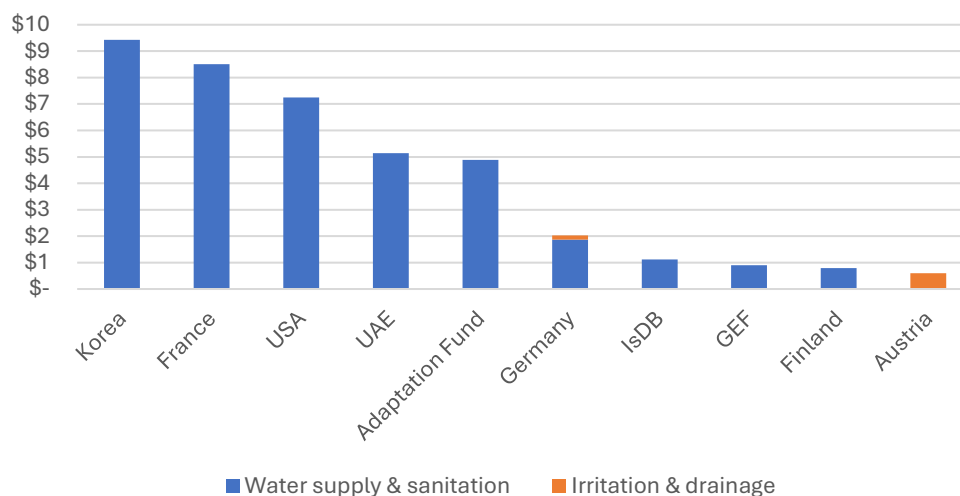
Many bilateral donors are active in the water sector. They include Austria, Finland, France, Germany, Japan, the Republic of Korea, Saudi Arabia, Switzerland, the United Arab Emirates, as well as the United States. Vertical funds like the Adaptation Fund and the GEF also provide significant support. Small donors provided between 10 and 0.5 million USD during the target period (**Figure 13**). It is likely that the contribution of Germany is underestimated in the CRS. According to the information available, Germany is currently implementing a portfolio of more than 40 million USD per year in the water, energy and environment sectors, with many water-related projects, including groundwater management. Many of these initiatives are co-funded by the EU and implemented by GIZ in partnership with several organizations, including UN entities. However, given the focus on climate-proofing interventions, it is likely that German activities are reported under other themes. The same can be said about Switzerland, which supports initiatives, such as Blue Peace, implemented by CAREC, and the EBRD Green Cities programme. France is also known to be scaling up its water-related investments in Uzbekistan, mostly loans through AFD, focusing on urban water supply, wastewater treatment and water-related ecosystem restoration. The United States are also considered a major player, for instance through the Smart Waters regional project. The data in the CRS most likely underestimates the contribution of the United States.

The country that has seen the highest flows of water-related ODA is Uzbekistan, which mobilizes every year more than 100 million USD, followed by Tajikistan with more than 50 million and the Kyrgyz Republic with around 20 million per year. These figures are significantly different from those of UN activities, where Tajikistan is the largest recipient. According to CRS data, Kazakhstan and Turkmenistan receive almost no water-related ODA.

Water and sanitation, which includes IWRM, mobilize most financial resources in Central Asia, like in other regions. This is very important to improve water supply and public health. The only major partners for irrigation and drainage, which is key for water use efficiency in Central Asia and to address the problem of water scarcity, are the World Bank, ADB, the EU and Japan. In this regard, Austria, Germany, Saudi Arabia and Switzerland also provide some resources, but to a minor extent.

The support provided to irrigation and drainage is welcome by Central Asian governments. In fact, irrigated agriculture is seen more of a problem by Central Asian governments than drinking water supply and sanitation and IWRM. Hydropower and energy-related issues such as pumped irrigation are also perceived as major problems, where support is required.

Figure 13: Disbursements by smaller donors to the water sector in Central Asia (2018-2022, in million USD)



5. Programmatic and policy entry points and the potential comparative advantage and added value of collective UN efforts

The water sector in Central Asia is crowded. The UN is no more one of the few development partners active in Central Asia, as it was in the past, and often not the implementing partner of choice. It is estimated that more than 50 development partners are currently active in the subregion's water sector, including more than a dozen UN entities.

It is therefore essential for the UN to position itself strategically. Considering UN's role as being not only provider of technical expertise but also a convener and facilitator of global and regional water processes, the identification of programmatic and policy entry points and the potential comparative advantage or added value of collective UN efforts for the new UNSDCF cycle of 2026-2030 is of paramount importance both at subregional and country levels. Donors often organize activities in cycles. The UN can also provide inputs to their programming, such as the one of the European Union, which starts in 2027.

The UN System-wide Strategy for Water and Sanitation is useful to identify entry points. The Strategy was launched at the UN High-Level Political Forum on Sustainable Development, held in New York in July 2024, and unites the UN system's work towards a world with accessible, available and sustainably managed water and sanitation for all people and the planet. It provides a system-wide approach for UN entities to work collaboratively on water and sanitation, including all themes, such as irrigation and drainage, hydropower, water-related ecosystems, not as a sector in a "silo", but holistically to address the interrelated cross-sectoral aspects of water and sanitation.

The Strategy identifies 5 entry points, 14 output actions and outlines their expected outcomes. Its goal is to enhance United Nations system-wide coordination and delivery of water and sanitation priorities in support of countries to accelerate progress on national plans and priorities, internationally agreed water-related goals and targets, realization of human rights, and transformative solutions to current and future water and sanitation challenges for the benefit of all people and the planet (**Annex**).

The following entry points were identified based on the analysis of subregional and national activities by the UN and by non-UN partners. The System-wide Strategy was used as guidance to identify them. All entry points are adapted from the Strategy, based on the analysis presented in this paper.

Entry point 1: Lead and inspire collective action on water in Central Asia at the regional, transboundary and national level.

Strategic leadership should be provided to UN entities on water-related issues in the subregion. To support this objective, compelling and unified UN communication materials and messaging could be produced, featuring the joint impact of UN entities. Moreover, the UN could help champion the engagement of the subregion and its countries in platforms for collective action on water and sanitation at all levels, including the International Year of Glaciers' Preservation, UN 2026 Water Conference and the UN Water Convention, promoting the ratification and implementation of UN legal instruments by all countries, including upstream ones (**Table 2**).

Entry point 2: Engage better for Central Asian countries.

The UN should strengthen its joint work by implementing a “One UN” approach to water, striving to align projects with mandates, promoting greater participation of UN entities such as UNEP and FAO, whose mandate is important for water, on water-related issues, as well as leveraging a “whole-of-UN” support to countries, mobilizing different stakeholders and partnerships. To pursue this goal, the UN could continue to provide platforms bringing together all water-related UN and non-UN partners and stakeholders at regional and national levels, such as the National Policy Dialogues on IWRM. The UN should focus on mid-size projects between 1 and 5 million USD, not to compete with IFIs for large projects and with NGOs for small ones. It could also scale up support in the Kyrgyz Republic for greater subregional balance in efforts that reflect the needs of the countries. The UN could also promote, if possible, the better integration of Afghanistan in regional water cooperation and the relevant institutional arrangements, including IFAS and UNSPECA.

Entry point 3: Align UN system support for integration of water across sectors and to mainstream water at all levels

Operational and financial strategies of UN entities should be aligned to harness complementarity of mandates. Support to the production of integrated policy frameworks across sectors using the latest data and evidence produced by different UN entities could be conducive to such alignment. Moreover, the UN could continue to provide platforms bringing together partners and stakeholders across sectors to mainstream water, such as the Nexus Project and the UNSPECA Working Group on Water, Energy and the Environment. Moreover, the UN could engage more not only on WASH, including in rural areas, but also on sustainable irrigation and drainage and on sustainable hydropower to gain more relevance and promote integration across subsectors, including groundwater and the cryosphere.

Table 3: Ratification of main international legal instruments on water by Central Asian countries

| Legal instrument | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan | Uzbekistan |
|--|------------|-----------------|------------|--------------|------------|
| Convention on the Law of the Non-Navigational Uses of International Watercourses (UN Watercourses Convention) | | | | | |
| Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UN Water Convention) | | | | | |
| Protocol on Water and Health to the UN Water Convention | | | | | |
| Ramsar Convention on Wetlands | | | | | |

 *ratified*

Entry point 4: Accelerate progress and transformational change through the SDG 6 global accelerators: financing, data and information, capacity development, innovation and governance

To accelerate the achievement of SDG 6 in the subregion, the development of financing strategies, frameworks and plans should be supported by the UN for investment across sectors, emphasising the financial needs of poorer countries in the subregion, for instance by promoting synergies with IFIs that do not have a specific programme in the region. The UN should make sure high-quality and disaggregated data and information are available according to international standards and shared transparently through strengthened national monitoring systems and sub-regional platforms with UN support. Capacity development of institutional and human resources should be provided in a manner that responds to national and subregional needs and priorities. Moreover, the UN should support enabling environments for water and sanitation innovation, including policies, partnerships and transfer of technology to remove barriers, with emphasis on the needs of countries with the lowest GDP per capita in the subregion. Finally, the UN should support the improvement governance of water at all levels.

The UN could position itself between countries and IFIs, firmly on the side of countries in a context of increasing indebtedness. The UN could help empower countries to choose the most socially and economically beneficial way to finance their initiatives and leverage the neutrality and convening power of the UN to engage in policy work. In this domain, IFIs may have conflicts of interest, if this implies them supporting the very institutions that are in charge of overseeing their own operations, particularly lending ones.

Entry point 5: Account for progress through joint review and learning

The progress on water and sanitation should be jointly reviewed at technical and leadership levels, including by providing aggregate figures across UN entities. To achieve this result, progress on water-related goals and targets could be reviewed through joint learning and exchange among all relevant UN entities and other actors. Moreover, the status of water bodies could be regularly assessed, including transboundary ones, taking into account the impact of climate change. The World Water Development Reports, which are produced annually by UN-Water, could better reflect the Central Asian region.

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Annex: Summary of the results chain for the UN System-wide Strategy for Water and Sanitation

| ENTRY POINTS | OUTPUTS | OUTCOMES | GOAL |
|---|---|---|---|
| <p>1. Lead and inspire collective action on water and sanitation.</p> | <p>Output 1.1. Water and sanitation issues are a strategic leadership priority for the United Nations system.</p> <p>Output 1.2. Action is inspired by compelling and unified United Nations system communications and messaging on water and sanitation.</p> | <p>Outcome 1. Strengthened United Nations system-wide leadership on water and sanitation.</p> | <p>VISION</p> <p>A world with accessible, available and sustainably managed water and sanitation for all people and the planet.</p> <p>IMPACT</p> <p>A more holistic, integrated approach to the sustainable management of water and sanitation that accelerates progress on internationally agreed water-related goals and targets and leaves no one behind.</p> <p>GOAL</p> <p>To enhance United Nations system-wide coordination and delivery of water and sanitation priorities in support of countries to accelerate progress on national plans and priorities, internationally agreed water-related goals and targets, realization of human rights, and transformative solutions to current and future water and sanitation challenges for the benefit of all people and the planet.</p> |
| <p>2. Engage better for countries by leveraging whole-of-United Nations system support and by mobilizing stakeholders and partnerships for water and sanitation.</p> | <p>Output 2.1. Expertise and resources are fully leveraged by the United Nations system to support countries, with emphasis on the water and sanitation needs of developing countries.</p> <p>Output 2.2. Diverse stakeholders and partnerships are mobilized by the United Nations system to support countries' progress on water and sanitation.</p> | <p>Outcome 2. Enhanced demand-driven support to countries on water and sanitation through mobilization of available capacities and resources of the United Nations system and its partners at all levels to leave no one behind, with emphasis on the needs of developing countries.</p> | |
| <p>3. Align United Nations system support for the integration of water and sanitation issues across sectors and mainstreaming into intergovernmental processes.</p> | <p>Output 3.1. Operational and financial strategies, policies and approaches of the United Nations system are aligned to harness complementarity.</p> <p>Output 3.2. Integrated policy frameworks to manage water and sanitation across sectors are supported by the United Nations system using latest data and evidence.</p> <p>Output 3.3. Mainstreaming of water- and sanitation-related issues into intergovernmental processes led by Member States is supported by the United Nations system.</p> | <p>Outcome 3. Improved policy coherence on water and sanitation through United Nations system support for integration across sectors and mainstreaming into intergovernmental processes led by Member States.</p> | |
| <p>4. Accelerate progress and transformational change by unifying United Nations system support through the five SDG 6 global accelerators: financing, data and information, capacity development, innovation and governance.</p> | <p>Output 4.1. Financing strategies, frameworks and plans for investing in water and sanitation across sectors are prepared and implemented with United Nations system support, with emphasis on the financing needs of developing countries.</p> <p>Output 4.2. High-quality, disaggregated water and sanitation data and information are available and shared transparently through strengthened national and subnational monitoring systems, and regional and global platforms, with support from the United Nations system.</p> <p>Output 4.3. Institutional and human resources capacity-development support that responds to national needs and priorities is provided by the United Nations system, contributing to a skilled water and sanitation workforce.</p> <p>Output 4.4. Enabling environments for water and sanitation innovation are supported by the United Nations system, including policies, partnerships and transfer of technology to remove barriers, with emphasis on the needs of developing countries.</p> <p>Output 4.5. Governance of water and sanitation is improved through United Nations system support, with emphasis on the needs of developing countries.</p> | <p>Outcome 4. More impactful United Nations system support to countries to accelerate progress and transformational change, including through the five SDG 6 global accelerators: financing, data and information, capacity development, innovation and governance.</p> | |
| <p>5. Account for progress through joint review and learning.</p> | <p>Output 5.1. Progress on the implementation of the United Nations System-wide Strategy for Water and Sanitation is reviewed jointly by the United Nations system at technical and leadership levels.</p> <p>Output 5.2. Progress on water-related goals and targets is reviewed through joint learning and exchange among all actors, with support from the United Nations system.</p> | <p>Outcome 5. Strengthened accountability for progress on water and sanitation through joint review and learning.</p> | |