

ANNUAL **REPORT 2017**



REGIONAL COOPERATION FOR
BETTER ENVIRONMENT

THE REGIONAL ENVIRONMENTAL CENTRE
FOR CENTRAL ASIA

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LIST OF ABBREVIATIONS

AAI	Agency of Amelioration and Irrigation
AiPoCH	Air Pollution, Climate and Health
AUCA	American University of Central Asia
BC	Basin Councils
BP	Basin Planning
CA	Central Asia
CAIEF	Central Asian International Environmental Forum
CALP	Central Asian Leadership Programme
CAMP4ASB	Climate Adaptation and Mitigation Program for Aral Sea Basin
CAREC	The Regional Environmental Centre for Central Asia
CAWECOOP	Promoting Dialogue for Conflict Prevention Related to Environment, Water Nexus Issues in CA: CA Water-Nexus Cooperation
CCICED	China Council for International Cooperation on Environment and Development
CCSE	Climate Change and Sustainable Energy
CBD	Convention on Biological Diversity
CIAT	International Center for Tropical Agriculture
CIS	Commonwealth of Independent States
CO	Country office
DRS	Districts of Republican Subordination
EBRD	European Bank for Reconstruction and Development
EfCA	Environment for Central Asia
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
ESD	Education for Sustainable Development
EU	European Union
GBAR	Gorno-Badakhshan Autonomous Region
GCE	Global citizenship education
GIZ	German Agency for International Cooperation
IFAS	International Fund for Saving the Aral Sea
IWRM	Integrated Water Resources Management
MEA	Multilateral environmental agreement
MEWR	Ministry of Energy and Water Resources
MFA	Ministry of foreign affairs
NAC	Network of Academic Communities
NGO	Non-governmental organisations
ODI	Overseas Development Institute

OECD	Organization for Economic Cooperation and Development
OSCE	Organization for Security and Co-operation in Europe
PEER	Partnerships for Enhanced Engagement in Research
PES	Payments for ecosystem services
PIK	Potsdam Institute for Climate Impact Research
PRISE	Pathways to resilience in semi-arid economies
RCU	Regional Coordination Unit
SBC	Small Basin Councils
SCO	Shanghai Cooperation Organisation
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goals
SDPI	Sustainable Development Policy Institute
SIWI	Stockholm International Water Institute
TIAME	Tashkent Institute of Irrigation and Agricultural Mechanization Engineers
ToT	Training of trainers
TPCIT	Tashkent Professional College of Information Technologies
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research
UNRCCA	United Nations Regional Centre for Preventive Diplomacy for Central Asia
USAID	U.S. Agency for International Development
WHO	World Health Organization
WIS	Water Initiatives Support
WWW	World Water Week

WELCOME ADDRESS BY THE CHAIRMAN OF BOARD OF GOVERNORS

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UNDERTAKEN ACTIVITIES AND PROJECTS
DEMONSTRATE CAREC'S UNCEASING EFFORTS
TO SECURE POSITIVE CHANGES IN THE FIELD OF
ENVIRONMENTAL PROTECTION IN CENTRAL ASIA

Dear ladies and gentlemen,
colleagues and friends!

I would like to welcome you on
behalf of the Board of Governors
of the Regional Environmental
Centre for Central Asia!

The Regional Environmental
Centre for Central Asia (CAREC)
was founded 16 years ago by
the governments of Central
Asian countries, the European
Union and the UN Development
Programme. Ever since, CAREC
has turned into a unique platform
to consolidate efforts of the
Central Asian environmental
community, governments, regional
and international organisations,
financial institutions, businesses
and universities in addressing
environmental problems of the
region. In 2017, CAREC con-
tinued to facilitate constructive
cooperation on environmental
protection and sustainable deve-
lopment. Participation of each of
the aforesaid institutions plays a
key role in promoting environmental
protection in Central Asia, and it is
a great honor for us to represent
the interests of our partners in joint
projects.

In 2017, CAREC reached a whole
new stage of cooperation at three
levels: global, regional and national.
The successful organisation of the
1st Central Asian International
Environmental Forum in Ashgabat
is a bright example of such a
cooperation. The Forum brought
together government offici-
als, international and regional
organisations, environmental
leaders and prominent experts.
Outcomes of the Forum serve
as a valuable contribution to the
dialogue and partnership between
all stakeholders in the field of
environmental protection and
sustainable development of our
region.

CAREC continuously expands
its horizons and develops
institutionally. For instance, this
year CAREC marked the 15th
anniversary of the Tajik Country
Office and held a formal opening
ceremony for the new country
office in Kazakhstan's capital city,
Astana.

All these activities and projects
demonstrate CAREC's unceasing
efforts to secure positive changes
in environmental protection in



Central Asia. However, CAREC
does not rest on its laurels and is
committed to become a leading
knowledge and information hub
on environmental issues in Central
Asian region. By 2020, CAREC
plans to expand its collaboration
in regional processes of
environmental management. We
wish the CAREC team success
and many inspiring projects next
year, and we are willing to provide
further support in their aspirations!

Mukhammet DURIKOV
Chairman of the CAREC
Board of Governors

MESSAGE FROM EXECUTIVE DIRECTOR

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IN RESPONSE TO THE GROWING NEED OF ENVIRONMENTAL COLLABORATION IN THE REGION, CAREC SHIFTED THIS YEAR'S FOCUS ON DEVELOPING AS AN EFFICIENT REGIONAL PLATFORM FOR MUTUALLY BENEFICIAL INITIATIVES. WE ARE GUIDED BY THE PRINCIPLES OF OPENNESS AND EXPERTISE IN IMPLEMENTATION OF OUR PROJECTS

For CAREC, the year 2017 was commemorated by implementation of numerous key projects, discovery of additional areas of knowledge and a beginning of new partnerships on environmental issues in Central Asia. In response to the growing need of environmental collaboration in the region, CAREC shifted this year's focus on developing as an efficient regional platform for mutually beneficial initiatives. We are guided by the principles of openness and expertise in implementation of our projects.

Participation of delegations from the Central Asian countries in the annual World Water Week (WWW) became a significant event for CAREC. WWW is one of the major platforms that shapes the global agenda on sustainable development and water management. CAREC has supported participation of our region's representatives in that platform since 2016. In 2017, we reached a new level of cooperation as Afghanistan joined the delegation. Also, participation of Central Asian countries in the WWW had a higher qualitative level as this year's delegation was

represented by high-level officials. The joint statements expressing the will for closer cooperation on environmental protection and water management in the region were made. Representation of the region as a single entity, with common issues and problems, demonstrates that our countries are open for the dialogue and gaining new experiences to address transboundary problems. At the regional level, the successful organisation of the 1st Central Asian International Environmental Forum (CAIEF) proved to become an important factor in strengthening the cooperation. The event brought together a large number of participants of ministries and agencies for environmental protection, water resources and foreign affairs, as well as parliaments of the Central Asian countries, regional and international organisations, academia, diplomats, journalists and donors. Implementation of the Forum was supported by all governments of Central Asian countries, which, again, underlines the interest and need in this collaboration platform. It is worth noting that the Forum



launched the first-ever dialogue on the “Environment for Central Asia” process, to become a coordinating mechanism for the efforts undertaken in Central Asia. Currently, preparations for the next forum, to be held in Tashkent in 2018, are in full swing.

At the national level, high-level meetings and conferences resulted in the signing of a number of memoranda of cooperation with various government and non-governmental organisations. New representatives from Uzbekistan and Kazakhstan were included into the CAREC Board of Governors, while the country office in Astana received official registration in Kazakhstan. Apart from that, a representative of the Swiss Agency for Development and Cooperation became a member of the Board of Governors.

CAREC is also improving its long-term and strategic project on leadership support. CAREC's Central Asian Leadership Programme on Environment for Sustainable Development (CALP) is an exemplary of successful inter-sectoral and cross-programme activities implemented in the Central Asian region, including Afghanistan, for the last eight years. This programme dynamically develops by adapting to the needs of the participating countries and target groups.

We continue working on capacity

building and cooperation between regional organisations. Their meetings are now arranged on a rotating basis. Additionally, we conducted capacity assessment of the regional organisations with the aim to identify the needs and opportunities for mutual learning. The assessment will allow for more accurate coordination of the planned capacity building activities.

Undoubtedly, CAREC will prioritize strengthening multilateral cooperation for the benefit of environment and sustainable

development in Central Asia through effective implementation of its programmes and projects. Thanks to close collaboration with partners and relying on human resources, CAREC will continue providing support to the governments of Central Asian countries in addressing environmental challenges.

Iskandar ABDULLAEV
Executive Director

HIGHLIGHTS OF 2017: ACTIVITIES AND ACHIEVEMENTS



CAIEF Opening in Ashgabat, June 2017

In 2017, CAREC continued fulfilling its mandate in various forms of cooperation with international organisations, government bodies of Central Asia (CA), local municipalities, non-governmental and other organisations in the field of environmental protection

and sustainable development. Numerous events have been organised to facilitate partnerships with national and civil society organisations, international and regional agencies.

CENTRAL ASIAN INTERNATIONAL ENVIRONMENTAL FORUM

One of CAREC's significant events held in 2017 was the **Central Asian International Environmental Forum** on the theme **Climate Change and Water Cooperation in the Context of Sustainable Development in Central Asia**, held June 5-7 jointly with the State Committee of Turkmenistan for Environment Protection and Land Resources. The event brought together over 200 participants from 13 countries including Belgium, Czech Republic, Germany, Hungary, Italy, Japan, Kazakhstan, Kyrgyzstan, Switzerland, Tajikistan, Turkmenistan, United States, and Uzbekistan. Forum participants included top officials and leading specialists of respective ministries, agencies and other government institutions, members of national parliaments, and diplomats.

Having organized such a representative forum, CAREC has proved its status as a regional platform for cooperation and discussion of pressing issues on the regional and global agenda for CA. Undoubtedly, the Forum enhanced the dialogue between stakeholders with various views and concepts on establishing lasting and productive interaction in strategic areas. The

following issues received special attention at plenary and panel sessions:

- ◆ Current situation in the field of environmental protection in CA;
- ◆ Existing obstacles and potential opportunities for partnership;
- ◆ Potential ways of cooperation on legal issues of transboundary water resources management and environmental protection;
- ◆ Inter-agency and inter-sectoral cooperation;
- ◆ Climate change problems in CA and their relation to the global agenda;
- ◆ The role of mass media in raising awareness about environmental problems in the region;
- ◆ Green investment for sustainable development;
- ◆ Interrelation between ecosystems, water, food and energy sectors.

The Forum participants supported the idea of developing Cooperation roadmap and launching the Environment for Central Asia (EfCA) process, which may become a coordination tool for all sustainable development efforts being undertaken in the region.



CAIEF participants in Ashgabat, June 2017

Another highlight of the year was the participation in a high-level international conference on security in the region «Central Asia: One Past and a Common Future, Cooperation for Sustainable Development and Mutual Prosperity», held on 10-11 November 2017 in Samarkand, Uzbekistan. Conducted under the auspices of the UN, this event gathered more than 500 participants, including ministers of foreign affairs from Central Asian countries, high-level officials from the CIS, Europe, Asia and the USA, heads of international organisations (UN, EU, OSCE, SCO, EBRD), foreign media. The main outcome of the conference was the signing of a

joint communiqué calling for the UN General Assembly to adopt a resolution on ensuring peace, security and sustainable development in Central Asia. On behalf of CAREC, Dr Iskandar Abdullaev, Executive Director of CAREC, addressed the conference by highlighting the issues of environmental protection and transboundary water management. Dr Abdullaev pointed out that lack of systematic cooperation in the region can lead to an increased competition for water resources. In this context, the implementation of basin agreements, building proper water infrastructure could be some of possible solutions to address water management issues in Central Asia.



Signing of a Memorandum of Cooperation between EC IFSA and CAREC CO in Turkmenistan, November 2017, Ashgabat

Furthermore, on 13 November 2017 a Memorandum of Cooperation was signed between the Executive Committee of the International Fund for Saving the Aral Sea (Executive Committee of IFAS) and CAREC in Ashgabat. It is expected that the Memorandum will give an additional impetus for expanding and strengthening

regional cooperation, opening up new opportunities for two sides in implementing joint projects, assisting Turkmenistan and other countries of the region in mitigating the consequences of the environmental disaster in the Aral Sea zone and increasing the amount of financial assistance for these purposes.



Signing of the Framework Agreement between the State Committee of the Republic of Uzbekistan on ecology and environmental protection and CAREC, 2017, Tashkent, Uzbekistan

Equally important document signed in the reporting year is a Framework Agreement between CAREC and the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection, which marked a qualitatively new stage in bilateral relations. The document is intended to promote more effective cooperation and mutual support of the parties in implementation of specific projects, initiatives and activities aiming to improve the environmental situation and supporting sustainable development of Uzbekistan and the region. The central element of the implementation of the agreement includes comprehensive preparations to the CAIEF to be held in Tashkent in 2018.

It should be specially noted that in 2017, the CAREC Executive Director Dr Iskandar Abdullaev was appointed as a Special Adviser to the China Council for International Cooperation on Environment and Development (CCICED) for the period 2017-2021, which is undoubtedly can serve as a unique tool for promoting the initiatives of the organisation outside of

the region. The CCICED is a non-profit international advisory body established in 1992 under the auspices of the Chinese State Council and composed of high-level Chinese and international policy-makers and experts in environment and development issues. Over the next five years, the Council will focus on such issues as «green transformation», biodiversity, and climate change. It is expected that special advisers will provide strategic recommendations for policy formation.

The reporting year was closed by the 39th meeting of the CAREC Board of Governors. At the meeting, CAREC Executive Director presented a report describing the activities of the previous year, the financial report and the organisational work plan for 2018. The members of the Board of Governors unanimously praised the work done. Also, by the decision of the Board of Governors, Ms Shynar Toylybayeva has been appointed as the director of the CAREC branch in Astana, and Mr Meder Seytkasymov is given a second term as the director of the CAREC branch in the Kyrgyz Republic.

THE FIFTEENTH ANNIVERSARY OF THE TAJIKISTAN BRANCH

In 2017, the Tajikistan Branch of the CAREC celebrated 15 years since its establishment. The Branch is one of the very first offices of CAREC, which began operating in the country in 2002. Main activities of the office include providing assistance to Tajikistan on environmental protection and sustainable development issues, promoting regional cooperation and implementing joint conservation initiatives.

Current priorities include providing assistance to the water sector reform and legislative improvement,

strengthening of the regional cooperation for implementation of Sustainable Development Goals, support for environmental education and raising awareness of regional initiatives in the field of environment protection. Also, a new Branch director was appointed on June 7, 2017, at the 38th meeting of the Board of Governors. Currently, the office has four full-time employees, as well as over 20 short-term and long-term experts. Overall, the year 2017 was one of the most productive and eventful years for the Branch.

INCREASED MEMBERSHIP OF THE CAREC BOARD OF GOVERNORS AND OPENING OF A COUNTRY OFFICE IN KAZAKHSTAN

In February 2017, with support of the Ministry of Energy of the Republic of Kazakhstan, Vice Minister of Energy, His Excellency Mr Gani Sadibekov became a member of the CAREC Board of Governors, which confirms the role of CAREC in promoting high-level environmental policy in the country.

On April 4, the CAREC CO was officially registered in Kazakhstan, and on April 12 **the High-Level International Conference** took place to mark this

event and to discuss the “green” economy issues in Kazakhstan and advantages of the “green” regional cooperation in Central Asian countries. Conference participants included representatives of the Ministries of energy, agriculture and foreign affairs of the Republic of Kazakhstan, deputies of the Mazhilis (Lower house of Parliament) of Kazakhstan, and regional offices of international organisations.



Participants of the High-Level International Conference to Mark the Opening of the CO in Kazakhstan, Astana, April 2017



MoU signing ceremony between the Ministry of Energy of Kazakhstan and CAREC during the High-Level International Conference to Mark the Opening of the CO, Astana, April 2017

The Conference agenda included signing of the Memorandum of Understanding between the Ministry of Energy of the Republic of Kazakhstan and CAREC. It was signed by the Vice Minister, His Excellency Mr

Gani Sadibekov and CAREC Executive Director Dr Iskandar Abdullaev. This conference was an important event to provide incentives for further constructive work of the CAREC CO in Kazakhstan.

ACTIVITIES OF THE CAREC COUNTRY OFFICES

The year was also rich in events at the national level. In September 2017, the CAREC Country Office in Uzbekistan received the official status of the **CAREC Branch in Uzbekistan**. The branch carried out a series of activities to promote the organization's status in Uzbekistan. These include the workshop on Initiatives to Improve Water Management in Tashkent. The event aimed to discuss the completed and ongoing work on environment protection and sustainable development, in particular, issues related to water management and use in the Republic of Uzbekistan and CA. Workshop participants included

members of the Oliy Majlis (Supreme Assembly), diplomatic corps, representatives of environmental and water management organisations, universities, environmental non-profit organisations, mass media. Also, in 2017 the CO in Uzbekistan held a high-level meeting between the Minister of Foreign Affairs of the Republic of Uzbekistan and the CAREC Executive Director. Partnership with different Uzbek governmental and non-governmental organisations was reinforced by the signing of a number of memoranda of cooperation.



The meeting between Abdulaziz Kamilov, Minister of Foreign Affairs of the Republic of Uzbekistan and Iskandar Abdullaev, CAREC Executive Director, July 2017

CAREC Branch in the Kyrgyz Republic (KR)

continued implementation of the CAREC mandate in the country in various forms of cooperation. The KR CO provided support to the working group of the State Agency for Environment Protection and Forestry in preparing the draft of the KR Environmental Code. The Branch representatives also assist Independent Forest Platform on promoting public and local community engagement in joint forest management, the Climate Dialogue Platform and information exchange.

Furthermore, with support from one of its founders, UNDP, the CO started revision of the strategic documents on National Priorities in Preserving Biological Diversity of the Kyrgyz Republic until 2024 and the Action Plan on Implementation of the KR Priorities in Preserving Biological Diversity for 2014-2020. In addition to the above-mentioned activities, cooperation was established with the Aarhus Center in Kyrgyzstan on expansion and implementation of

the Activity Development Strategy under the Aarhus Convention¹.

The CO in Kazakhstan, officially established in April 2017, has been actively promoting the “green economy” and “green development” principles in the country. The year was marked with reinforced partnerships with government bodies and offices of national and international organisations. At the legislative level, the Branch cooperates with Parliament of the Republic of Kazakhstan, in particular, with Committee for agrarian issues and Committee for environment and use of natural resources under the Mazhilis. It also facilitated interactions with the Ministry of Energy of the Republic of Kazakhstan in promoting green development issues. As per water projects, the Branch collaborates with the Department of Asian Cooperation under the Ministry of Foreign Affairs and the Committee for Water Resources under the Ministry of Agriculture of the Republic of Kazakhstan.

¹ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters



Participants of the International High-Level Conference to mark the Opening of the CO in Astana, April 2017

Also, the CAREC CO in Kazakhstan works closely with public, private and non-governmental stakeholders in the field of environmental management and transport control. In this context, in 2017, the office started implementing a new project on clean transport supported by UNEP. This project aims to provide support for developing countries and transition economies to improve public health by using cleaner fuel, and mitigate climate change effects by improving transport vehicles and reducing short-term climate pollutants.

The year 2017 turned out to be a very eventful and significant period for the **CAREC CO in Tajikistan**. Main achievements of the office in the reporting

period include signing of Memoranda with three Finnish institutions (Finnish Environment Institute, Geological Survey of Finland, Finnish Meteorological Institute) and the World Bank's Environmental Land Management and Rural Livelihoods Project to raise funds and carry out joint activities.

In the framework of the Water Initiative Programme, the project activity was mainly aimed at promoting water sector reform in the Republic of Tajikistan. In the context of the transition to IWRM, works on the modernization of the training site of the Tajik Research Institute of Hydraulic Engineering and Land Reclamation and the Ministry of Energy and Water Resources have been completed, using modern irrigation methods.



Training site of the Tajik Research Institute of Hydraulic Engineering and Land Reclamation

As part of providing assistance to improve legislation in the country's water sector, a team, comprising national experts has embarked on the drafting of the «Law on Melioration».

In March 2017 an introductory workshop was held in Dushanbe to assess the needs for climate knowledge, services and capacity of the **Climate Change Adaptation and Mitigation Programme for the Aral Sea Basin**. The project aims to address challenges related to the consequences of climate change in Central Asian countries. Tajikistan is the second beneficiary country of the project, along with Uzbekistan.

The CAREC project office in Turkmenistan also continued to develop the dialogue platform between parliamentarians and diplomats, which started back in June 2016. The meeting was held on January 25, 2017 between the CAREC Executive Director and deputies of Turkmenistan's Mejlis and diplomats from Turkmenistan's Ministry of Foreign Affairs. The meeting aimed to enhance interaction and cooperation of CAREC with diplomats and legislative bodies of CA countries, and to keep participants updated on the projects and programmes being implemented in the region within the last two years. The discussion emphasized the need to improve regulatory frameworks of the countries in the region on a number of issues including energy efficiency, renewable energy sources, climate change and environmental impact assessment in the course of economic planning.

The Turkmenistan office is also actively engaged in the project Enhancing Sustainable Management of Forest Resources in Turkmenistan. The project aims to prevent adverse environmental impact of the processes related to the drying-out of the Aral Sea and expansion of the forest plantation area. Expanding the area of forest plantations and planting seedlings are among effective means to counter climate change and critical situation caused by the Aral Sea drying

off. Additionally, the office carried out activities to strengthen the capacity of civil society, such as, hosting first volunteer training seminar on February 25, 2017, addressing issues of the legal status of volunteers and their practical training. The seminar was held in the format of interactive dialogues between experienced environmental specialists and youth, who expressed a desire to volunteer.

In November 2017 Turkmenabad hosted a round table on «Priorities of scientific research in the water sector of Turkmenistan». The event was organized by CAREC in cooperation with the Ministry of Agriculture and Water Resources of Turkmenistan as part of implementation of Component 1 on the development and strengthening of the academic network for cooperation between scientists and researchers of the regional «Water, Education and Cooperation» project, supported by USAID. The main objective of the event was to discuss current state of scientific research in the regional water sector. To strengthen academic cooperation of scientists at the regional level, Head of the regional MA Program on IWRM at the Kazakh-German University in Almaty, Dr Barbara Janusz-Pawletta, and the professor of the TIAME, Mr Sallakhitdinov, were invited to the round table. Among the national partners the round table was attended by specialists from the Ministry of Agriculture and Water Resources of Turkmenistan and its relevant departments, scientific staff of the «Turkmensuvlyymtaslama» Institute, TAU named after Saparmurat Niyazov, Academy of Sciences of Turkmenistan, National Committee of Hydrometeorology under the Cabinet of Ministers of Turkmenistan, Ministry of Finance and Economy of Turkmenistan, as well as ICSD Secretariat. The round table discussions helped to identify the current problems of the water sector, existing research gaps, prospects and opportunities for cooperation development for joint scientific work across regional water research centers and to outline further joint initiatives in this field.

PROGRESS REVIEW OF THE CAREC PROGRAMMES

CLIMATE CHANGE AND SUSTAINABLE ENERGY PROGRAMME (CCSE)

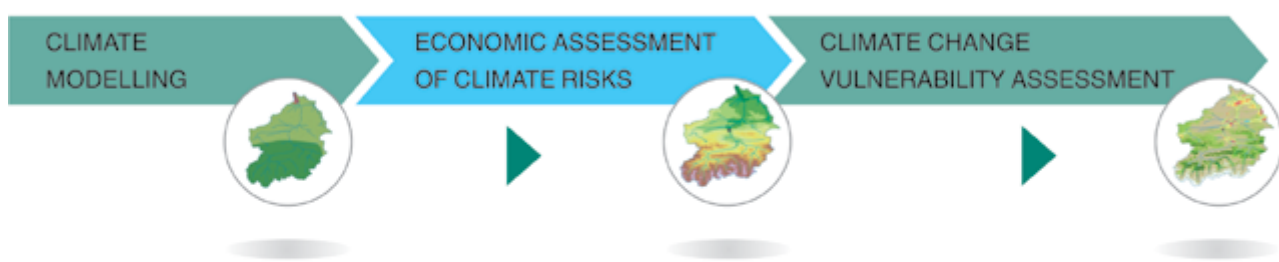
In 2017, the CCSE programme continued to work on Climate Adaptation and Mitigation Program for Aral Sea Basin (CAMP4ASB)² project and PRISE research initiatives in Tajikistan. For instance, under CAMP4ASB Component 1, the CCSE/RCU team made significant progress in assessing the needs of CA countries in establishing the information platform, generating new knowledge, carrying out research, capacity buildup, and improving the stakeholders' communication and engagement in the project's regional activities. This assessment allowed to shape the project work plan for the upcoming years in a

way to fully cover the identified needs. Based on the above-mentioned, the topics considered number one priorities for all CA countries include:

- I. climate change modelling;
- II. climate change economy (gains and losses resulting from the adaptation and mitigation measures);
- III. climate change vulnerability assessment;
- IV. climate risk management and early warning;
- V. climate change research in countries.

Moreover, the approach implying joint efforts and consultations with all project stakeholders became the key element in implementing project activities in the reported period.

EXPERT POTENTIAL BUILDING



KNOWLEDGE PRODUCT: COMPREHENSIVE INFORMATION AND DATA ON CLIMATE CHANGE IN PILOT AREA/SECTOR



An Integrated Approach to Technical Capacity Buildup and Formation of Knowledge Products under CAMP4ASB Project for 2017-2019

² UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. Please visit [here](#) for comprehensive semi-annual report on the CAMP4ASB progress

CAPACITY BUILDING AND AWARENESS RAISING

Capacity building and awareness raising on climate change and sustainable energy was one of the priority programme activities. During the reporting period, a total of over 600 people from CA countries were covered via online tools and personal meetings. For example, participants and speakers focusing on climate change provided a vital input in presenting the progress of the national climate policy and the Paris Agreement commitments, as well as discussion of the climate risk and natural disaster management under CAIEF, held on June 5-7, 2017 in Ashgabat, Turkmenistan. On the other hand, the panel session on low-carbon development

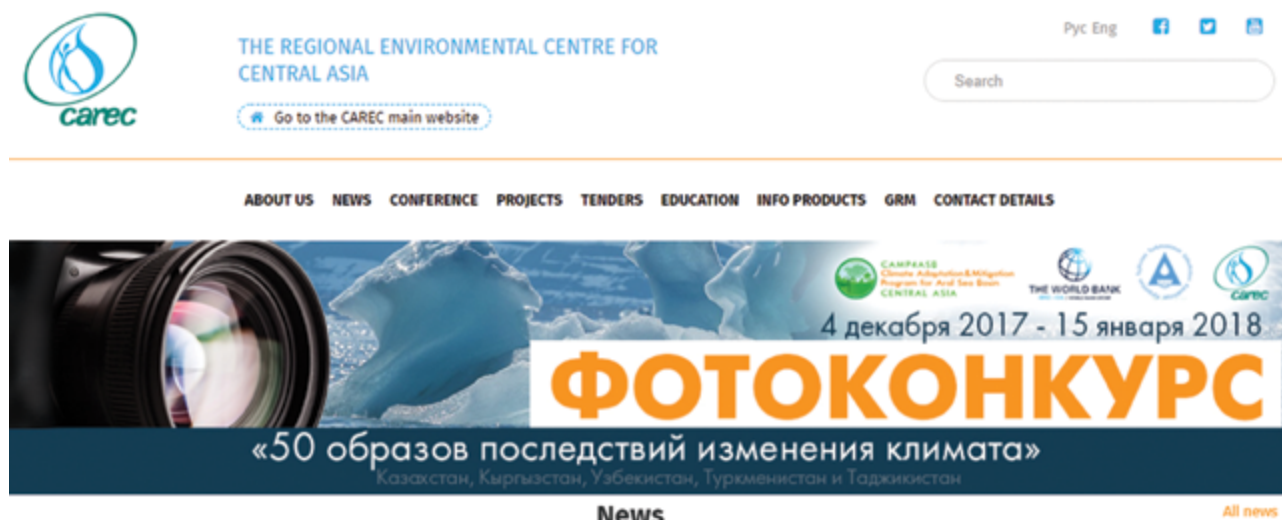
with specialists from CA countries, held on July 11, 2017 during EXPO 2017 in Astana, Kazakhstan, underlined the importance of regional collaboration and information exchange.

In order to ensure appropriate interaction between all project stakeholders and updates on the programme implementation, CCSE designed the thematic web page. Launched in May 2017, this online resource now contains more than 3170 users with 82% of them being from CA countries. By the end of December 2017, regular users across the region amounted to 65%.

CROSS-PROGRAMME ACTIVITIES

As part of cross-programme activities of the CCSE team and other CAREC programmes, the main results are summarized as follows: (I) shaping a common vision on the Monitoring and Evaluation (M&E) system at CAREC, (II) conducting opinion surveys on climate change, using extended polls of all CAREC partners

and developing the Communication and Engagement strategy, (III) identifying areas of cooperation between the Water Initiatives Support programme and CCSE, in particular, on selecting the transboundary rivers, capacity building and developing of information products.



Website on Adaptation to Climate Change in Central Asia (www.ca-climate.org)

PROGRAMME VISION FOR 2018

Based on the needs assessment in climate knowledge conducted under CAMP4ASB project, the CCSE programme plans to focus on enhancing the potential of national agencies and the expert community in

using new analytical tools, methodologies to conduct research and climate change assessments across CA countries. Such a research will help to generate new knowledge and information products of most

interest in CA countries such as analytical reviews, technical reports, infographics and visual aids. Given the amount of the research materials collected, CCSE will consider publishing them in recognized scientific journals in CA region and beyond.

The Regional Climate Forum to be held in Almaty

on January 24-25, 2018, is expected to become the largest event within the CCSE programme. The Forum will continue to serve as a knowledge exchange platform to foster regional dialogue and collaboration on climate change and sustainable development between countries of the region.

EDUCATION FOR SUSTAINABLE DEVELOPMENT PROGRAMME (ESD)

In 2017, the ESD programme worked in the following key areas: capacity building, promotion of the

Sustainable Development Goals (SDGs), supporting research, international cooperation and development.



Day One of the 8th CALP

The programme successfully carried out a number of events, including regional seminars, meetings and round tables, as well as developed learning curricula and the regional review on ESD. The 8th Central Asian Leadership Programme on Environment for Sustainable Development (CALP) was held to unite emerging leaders from all CA countries and Afghanistan. Also, the programme worked on the

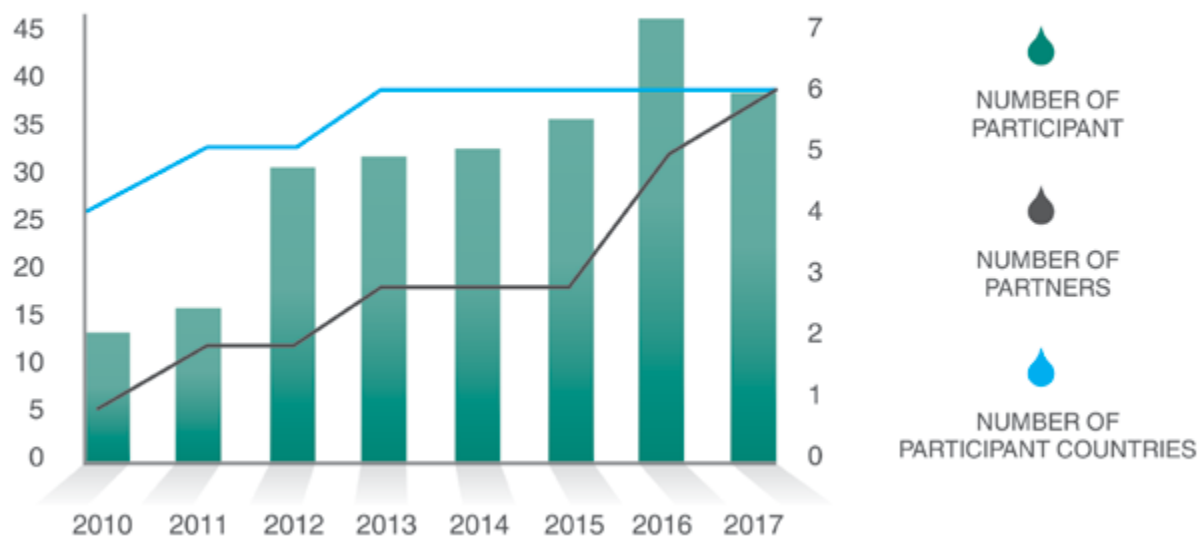
UNESCO regional project Sustainability Begins with Teachers in CA on SDG promotion and the role of SDG #4 “Quality Education”, “Refocusing the Education and Training System to Improve the Life of Local Communities”, as well as the project on greening education «Innovation Academy of Samsung in the Republic of Uzbekistan».

CAPACITY BUILDING

From January to September 2017, the Programme has mainly focused on implementation of the flagship initiative of the 8th CALP as an effective tool to promote ESD. To date, CALP is the only regular programme on capacity building for environment and sustainable development in CA for representatives

of governments, academia, private sector and non-governmental organisations (NGOs) and mass media. This leadership programme helps to ensure comprehensive understanding of environmental protection and sustainable development issues among participants.

CALP DATA DYNAMICS, 2010-2017



In 2017, CAREC held the 8th CALP in cooperation and with support of six partners and donors: UNEP, the Government of Norway, the OSCE Programme Office in Astana, the European Union, Smart Waters project (USAID) and Climate Adaptation and Mitigation Program for Aral Sea Basin project (World Bank). Starting from 2013, participants from Afghanistan attend the programme.

The 8th CALP was held during the International Specialised Exhibition EXPO-2017 «Future Energy» held in Astana in June-September 2017, and therefore was thematically linked to the issues of «green economy», «green growth» and «green development» in Central Asia.

In 2017, the CALP made a step forward in terms of

PARTICIPANTS SUGGESTED TO ESTABLISH THE ORGANIZING COMMITTEE OF THE CALP ALUMNI NETWORK. IT IS EXPECTED THAT THE ORGANIZING COMMITTEE WILL BE ESTABLISHED BEFORE THE END OF 2017 AND WILL UNDERTAKE THE MODERATION OF THE NETWORK AND PRESENTATION OF ITS ACTIVITIES AT THE CENTRAL ASIAN INTERNATIONAL ENVIRONMENTAL FORUM (CAIEF) IN 2018.

its format and curricula, promoting the role of the regional platform for cooperation on environment and sustainable development in Central Asia, the importance of the approach on water-food-energy-ecosystem nexus and regional cooperation in promoting «green economy». The 8th edition of CALP comprised various thematic plenary sessions, interactive and practical exercises and plenary thematic discussions on

environmental topics relevant to the region.

On top of that, in 2017 the role of the partners and donors working in the CA region was enhanced. They were invited as moderators and speakers for the 8th CALP sessions on water cooperation, climate change and green economy.

WHILE THE FIRST CALP WAS HELD IN ASTANA IN 2010 WITH ONLY 13 PARTICIPANTS, IT NOW HAS OVER 230 ALUMNI ACROSS THE REGION, INCLUDING 16 CALP ALUMNI FROM AFGHANISTAN

However, it is not only the programme curricula that change, but also the very process of selection procedures via introducing online registration of participants. This made the selection process more open, transparent and accessible for all interested parties. The programme agenda included sessions on adaptation to climate change and the role of

business in environmental protection, discussions of academic publications and water problems. To enhance interaction between participants, invited facilitators held warm-ups and exercises in order to develop a team mentality and leadership skills among participants.



Day Two of the 8th CALP, 2017. To enhance interaction between participants, the invited facilitators held warm-ups and exercises to develop a team mentality and leadership skills among participants



Final day of the 8th CALP, 2017

«THE LECTURERS ARE HIGHLY QUALIFIED AS THEY ARE IMMEDIATE PARTICIPANTS OF THE PROJECTS THEY TALK ABOUT. I LIKE THAT OUR CONVERSATION WITH THEM WAS MAINTAINED ON AN EQUAL BASIS»

VIKTORIYA RZAYEVA, CALP PARTICIPANT FROM UZBEKISTAN

The participants also visited the ecological village «Almaray», where they got acquainted with eco-

friendly methods of construction, and also laid a drip irrigation system on their own.

SDGs PROMOTION

CAREC's ESD programme has contributed greatly to sub-regional cooperation between the CA educators and implementation of SDG #4 in education through the UNESCO-Almaty project "Sustainability Begins with Teachers in Central Asia". Its main objective is to improve professional level of educators for SDG implementation in the education system and training of teachers. The project is being implemented in four CA countries – Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, and significantly increases the capacity of universities and teachers' training institutions.

On June 19-23, 2017, Almaty hosted the regional workshop on ESD and global citizenship education (GCE), bringing together educators from CA countries and uniting concepts of ESD and GCE. Participation of European, Asian-Pacific and CA experts on the ESD and GCE brought new expertise and developed new skills and competencies among CA teachers in respective fields. This multilateral project was a vivid example of replication, adaptation and coordination of global education initiatives in the region. As a result of the workshop, CAREC, in cooperation with the national coordinators, prepared a consolidated Regional

Review on ESD, which will serve as a basis for bringing changes in the education systems of Central Asian countries towards sustainable development.

In 2017, CAREC continued Phase 2 of the project "Samsung Innovative Academy in the Republic of Uzbekistan", with the implementation period from April 2017 to March 2018. The project is carried out by the CAREC CO in Uzbekistan in cooperation with the ESD programme, at the Tashkent Professional College of Information Technologies (TPCIT). Implementation of the Samsung project's Phase 2 focuses on the extension of the curriculum on advanced studies of equipment repair and increasing environmental awareness. In particular, the specific thematic materials on "Environment and Sustainable Development" are being developed for the courses such as "Efficient Use of Resources", "Eco-Design" and "Energy Efficiency". A project roundtable at TPCIT is scheduled for late February 2018 for the TPCIT experts and Eco-Movement of Uzbekistan to present the completed courses and offer a training for respective colleges in Tashkent which train specialists for the Republic of Uzbekistan.

INTERNATIONAL COOPERATION AND DEVELOPMENT

In January 2017, CAREC took part in the meeting on the planning of UNESCO's global project "Refocusing the Education and Training System to Improve the Life of Local Communities" for the Asia-Pacific region, in Nilai, Malaysia, and in October 2017 in project coordination meeting in Sudbury, Canada, which brought together regional coordinators of the project from all over the world. The experts discussed the coordinators' reports on implementation achievements, challenges and milestones of this project. A questionnaire was developed to poll local communities, as well as the

project implementation plan.

In April, 2017, CAREC took part in the workshop on capacity building for the countries of Eastern Europe, the Caucasus and CA to achieve Agenda 2030 and SDGs. It also participated in the 12th annual meeting of the UNECE Steering Committee on ESD in Geneva, Switzerland. CAREC presented its expertise on capacity building in the area of water-related issues, climate, green economy and CALP, the synergy between environment protection, sustainable development and ESD.

PROGRAMME VISION FOR 2018

The ESD programme will work on advancing leadership instruments under the 9th CALP, improving the potential and implementation of SDG #4 "Quality Education" under UNESCO projects such as "Sustainability Begins with Teachers in CA" and "Refocusing the Education and Training System to Improve the Life of Local Communities". It will also continue collaborating with business sector on greening education under the

Samsung project "Innovative Service Academy" in Uzbekistan.

In 2018, the Programme plans to strengthen the "mentorship" component in the programme manager's activities. It is also expected to enhance cooperation with the CAREC CO in Astana, younger employees and interns at the CAREC's head office to share their experience and knowledge on ESD.

ENVIRONMENT AND HEALTH

The main objective of the CAREC “Environment and Health” (E&H) programme is to identify interrelationships between human health and environment in the CA region and provide assistance to reduce the burden of environmentally-related health

problems. Key areas of the E&H programme include projects aimed to prevent and reduce diseases associated with water supply, sanitation and hygiene, climate change, air pollution, and waste management.

E&H PROGRAMME ACHIEVEMENTS

In 2017, the E&H programme achieved a new stage of cooperation at three levels: national, regional, and global. This became a foundation of the long-term multi-level partnership system and a basis for the future development of the programme.

At the global level, partnership was established with the European process “Environment and Health”, supported by WHO, UNECE and UNEP. This process focuses on achieving the SDGs adopted by CA countries. Partners at all levels now consider CAREC as a unique platform for cooperation in the CA region on the issues of environment and health protection. Publication of CAREC articles by the WHO Regional Office for Europe reveals the level of recognition by the scientific community of the importance of the E&H programme goals and objectives.

At the regional level, an updated concept of the E&H programme has been finalized and disseminated among a broad range of stakeholders (government

bodies, research institutions, NGOs, etc.). National focal points of the CA countries were officially appointed from among the ministries of environment protection and public health. High representativeness of the focal points (heads and deputy heads of offices and subdivisions) ensures the countries’ interest and commitment to long-term cooperation in four priority areas of the E&H programme.

At the national level, interaction with the countries’ partners (ministries of environment protection and public health, hydro-meteorological service, research institutes, NGOs) was enhanced. A number of meetings were held with specialists from respective ministries to discuss project concepts and suggestions. The first national project was implemented on developing the training course “Medical Ecology” at the Tashkent Institute of Physicians Improvement under the Ministry of Health of Uzbekistan.

COOPERATION WITH THE EUROPEAN PROCESS “ENVIRONMENT AND HEALTH ” (WHO, UNECE, UNEP) AND INTER-SECTORAL INTERACTION

To enhance involvement of CA countries into the European process “Environment and Health”, and to prioritize the portfolio projects of the E&H programme, CAREC initiated the first regional meeting of CA specialists in environment and health protection and the WHO Regional Office for Europe (Copenhagen, Denmark), which took place in March 2017 in Almaty. The target group of the event included representatives from the CA countries, responsible officials from

environment protection and public health ministries and agencies, ministries of foreign affairs, research institutions and international organisations. The inter-sectoral character of the meeting demonstrated common interests in the CA region and the countries’ willingness to collaborate in solving issues associated with environment and health protection. Since then, the WHO has viewed CAREC’s E&H programme as a sustainable platform for cooperation in CA.



The Sixth Ministerial Conference on Environment and Health, June 2017, Ostrava

Another important step towards cooperation under the European process “Environment and Health” was participation of a CAREC representative in the Sixth Ministerial Conference on Environment and Health in June, organised with support of WHO, UNECE and UNEP in Ostrava, Czech Republic. Conference was attended by participants from 53 WHO member countries, including five CA countries.

Ministerial conferences of the European process “Environment and Health” are a unique inter-sectoral platforms to develop and implement policies uniting

the efforts of various sectors and partners, aimed to shape and implement the policy based on relevant data and support initiatives in environment, health and well-being in the WHO European region. As a result of such participation, CAREC became a member of WHO Ad Hoc Working Group on nature and health protection (the governing body of the European process “Environment and Health”) for 2018. Also, UNECE invited CAREC to join the Coordinating Committee of the UNECE Pan-European Programme Initiative for Transport, Health and Environment.

DEVELOPMENT OF RESEARCH ACTIVITIES TO DESIGN THE PORTFOLIO OF PROJECTS

In 2017, direct contacts were established and collaboration significantly improved with Mr Srdan Matic, Coordinator for Environment and Health at WHO/Europe and Dr Elizabet Paunovic, Head of WHO European Centre for Environment and Health. As a result of the E&H programme manager’s participation in the 20th meeting of the joint WHO working group and the UNECE Convention on Long-Range Transboundary Air Pollution on the environment contamination factors affecting public health (May, Bonn), an agreement was reached with the WHO Science Centre for Air Quality at the German Federal Environment Agency about regular dissemination

of information on the E&H programme activities through the newsletter published by the Centre every six months. CAREC article was published in the July issue of the newsletter (#59). The newsletter has a circulation of 2,000 copies in 50 countries of the world. In September 2017, CAREC started carrying out negotiations with the Swiss Agency for Development and Cooperation (SDC) on cooperation under the new large-scale regional project “Air Pollution, Climate and Health (AiPoCH)” – high-quality services to mitigate climate change and air pollution and enhance positive effect on human health (project implementation period 2018-2026).



Meeting with Dr. Elisabeth Paunovic (WHO), May 2017, Bonn, Germany

IMPLEMENTATION OF NATIONAL PROJECTS

In 2017, the Tashkent Institute of Physicians Improvement under the Ministry of Health of Uzbekistan, with support of CAREC, started developing the course curriculum on Medical Ecology as part of skills improvement system. It will be implemented in educational curriculum for training and re-training of specialists for the Ministry of Health of Uzbekistan, Tashkent Medical Academy, State Committee for

Environmental Protection, and other stakeholder ministries and agencies.

“Medical Ecology” is a comprehensive discipline which considers all environmental aspects, with the focus on public health. In this respect, medical environmental personnel training comes to the first place. It is expected that the developed learning curriculum will be introduced into the education system of Uzbekistan.



Round table on Medical Ecology educational course curriculum, July 2017, Tashkent, Uzbekistan

PROGRAMME VISION FOR 2018

In 2018, the E&H programme will be working on drafting Assessment report that provides a clear and up to date view of the current state of knowledge relevant with regards to environment and health and based on WHO methodology. The report will play an important supportive role in policymaking and resource mobilization to implement the Programme's project portfolio. Besides, the E&H programme will focus on organisation and maintaining of national dialogues in CA countries as per renewal of drafting national action plans on nature protection and hygiene.

Work on developing project concept notes and proposals

to maintain project portfolio will be continued in the following areas: water, sanitation and hygiene; climate change impact on public health; effect of air pollution on public health; achievement of Sustainable Development Goals, etc. Also, it is planned to carry out negotiations with the Swiss Agency for Development and Cooperation (SDC) on collaboration under the regional project "Air Pollution, Climate and Health (AiPoCH)" – high-quality services to mitigate climate change and air pollution and enhance positive effect on human health (project implementation period: 2018-2026).

THE WATER INITIATIVE SUPPORT PROGRAMME (WIS)

In 2017, the Water Initiative Support programme continued working on six main projects currently being implemented in CA and focused on capacity building of water specialists in understanding and introducing integrated water resources management (IWRM). A number of analytical research was conducted with national and international experts to make situational analysis and identify the countries' needs as per transition to IWRM, as well as adapt the existing practices to meet country-specific needs. The following projects entered in final stage and now undergo

monitoring and evaluation:

- 1) Phase 2: Support for Local Initiatives in Environmental and Water Management in CA;
- 2) GIZ project "Capacity building of regional, national and local organizations and extension of experiences gained at previous stages";
- 3) Promoting Dialogue for Conflict Prevention Related to Environment, Water Nexus Issues in CA: CA Water-Nexus Cooperation (CAWECOOP);
- 4) Evaluation of water cooperation benefits in CA.



The Isfara River Day Festival, September 2017, Tajikistan

The main programme activities in the reporting period focused on the following topics:

- ◆ **TRANSBOUNDARY COOPERATION AND PROMOTION OF THE IWRM PRINCIPLES:** working with stakeholders on basin planning (BP), support and establishment of Basin Councils (BC), providing assistance to draft the basin plans and implement the BP objectives;
- ◆ **WATER DIPLOMACY AND PLATFORM FOR COOPERATION:** establishment and support of the platform for cooperation between members of parliaments and Ministries of Foreign Affairs in CA, carrying out negotiations on small rivers, support for regional working groups and sharing international experiences in discussing transboundary issues;
- ◆ **PROMOTION OF INNOVATIVE APPROACHES AND PRACTICES:** joint research, pilot testing of new technologies, promotion of new practices and engaging national and international expertise to address the water-related issues;
- ◆ **CAPACITY BUILDING AND SCIENTIFIC EXCHANGE:** partnership with research institutions and universities, joint scientific research, engaging international expertise and exchange.

Implementation of project objectives and achievement of the programme and organisational development strategy was secured by inter-project and inter-programme activities. Therefore, all staff members

contributed to the achievement of the goals set in all key areas. This ensured high quality of the activities carried out and helped to shape out a multi-sectoral team of WIS specialists.



Establishment of the Kurkureu Su SBC, Meeting Outcomes, Kyrgyzstan, February 2017

In November 2017, the 6th meeting of regional organisations was held in Ashgabat with the support of the German Society for International Cooperation (GIZ) in the framework of the «Transboundary Water Management in Central Asia» programme in conjunction with the project «Promoting dialogue for conflict prevention related to environment, water nexus

issues in Central Asia» (CAWECOOP) supported by European Union. The meeting aimed to strengthen the coordination of regional processes and programmes on environmental issues and to join efforts in achieving sustainable development goals. One of the primary tasks is to strengthen coordination between regional organisations, and their interaction with international

and financial institutions. In addition, the information and knowledge exchange among all stakeholders is also recognised as a priority issue.

Another important milestone was the final conference on the project “Promoting dialogue for conflict prevention related to environment, water nexus issues in Central Asia” (CAWECOOP). It was attended by representatives of foreign ministries, parliaments, water management agencies and environmental protection in Central Asia, as well as international organisations and NGOs. The project was implemented by CAREC in a period of 2015-2017 with participation of key stakeholders. The main objective of the project was to increase the level of transnational and political participation in water and energy cooperation in the region. NEXUS in the title of the project implies the principle of interdependence of various water issues - energy, food security and water quality.

Driven by its regional mandate, in 2017, CAREC initiated a series of trainings on international water law in Tajikistan, Turkmenistan and Uzbekistan as part of

«Water, Education and Cooperation» (Smart Waters) project. The main objective of the training was to study water allocation mechanisms and approaches to resolution of water disputes based on international water law. In the course of training, discussion touched upon the topic of global water conventions and their applicability to the Aral Sea basin, along with procedural obligations and information exchange tools on protection and use of transboundary watercourses and other issues related to the operation of water management facilities. A keynote speech was delivered by prominent expert on international water law from the University of Dundee (UK), Dr. Sergei Vinogradov. The target audience of training series mainly included representatives of national parliaments, ministries, departments and public organizations working in the field of water resources protection, as well as university students. These trainings allowed its participants to look more broadly at the practices of legal regulation of transboundary water resources in the regional context.

TRANSBOUNDARY COOPERATION AND PROMOTION OF THE IWRM PRINCIPLES

In the reporting period, the Smart Waters project completed needs assessments in all CA countries and used the results obtained to draft a work plan for project's Year III. In Afghanistan, the assessment reached its final stage, with comments and recommendations received from national partners. With support from GIZ, two Small Basin Councils (SBC) were established in the Kyrgyz and Kazakh parts of the Kurkureu Su river basin. This enables to start a comprehensive analysis of the territories for further BP development. In this respect, the Kyrgyz branch of CAREC started analyzing general hydrological conditions, water use and irrigation facilities, as well as social, economic and environmental conditions in the new pilot Kurkureu Su river basin.

Moreover, the CAREC CO in Kyrgyzstan supports the working group of experts in drafting legal regulatory documents on economic mechanisms of water use, to be subsequently sent to the Kyrgyz Government for review. Also, the work continued in transboundary basins of the Aspara and Isfara rivers; two trainings for trainers (ToT) were held on Basin Planning and Training Methods. As a result of these two trainings the Manual on Training Practices has been developed

by a certified coacher. The CAREC project office in Turkmenistan held its first regional ToT on BP on March 28-31, 2017. A key element of the project is the ToT for trainings on basin planning in welayats (provinces). The participants made a special note of the methodological maturity of the training and availability of all appropriate key materials and information for study and use.

In order to provide assistance in the development of basin-wide regional cooperation on water quality, in 2016 UNECE and CAREC began implementation of the “Strengthening Cooperation in Water Quality Management in CA” project, funded by the FinWaterWEI programme. The project's top-priority objective is to identify the needs of hydro-meteorological services in monitoring of the quality of water resources as part of national and regional priorities: information and data, laboratory potential, transboundary cooperation. This work will result in drafting national and regional basin-wide reports on quality assurance systems for water resources. The reports will become a basis for joint transboundary monitoring and technical support for hydro-meteorological bodies.



Joint SBC Meeting, Isfara, May 2017

WATER DIPLOMACY AND PLATFORM FOR COOPERATION

Main achievements in water diplomacy were demonstrated by the “Promoting Dialogue for Conflict Prevention Related to Environment, Water Nexus Issues in CA: CA Water-Nexus Cooperation” (CAWECOOP) project, which entered its final stage. The project was well received by national, regional and international partners, while the MFA and parliaments’ interaction platform reached a new level of cooperation thanks to involvement and joint statements of closer cooperation in environment protection and water management in CA during the World Water Week 2017. Following the negotiations, CAREC and UNRCCA signed a Memorandum of cooperation, which laid basis for joint regional meetings and dialogue on promoting the water diplomacy in CA. This, too, helps promote the platform of cooperation.

The “Isfara River Day” international festival, held by the CAREC Branch in Tajikistan on September 12-13, 2017, turned out to be a vivid example of promoting inter-government cooperation. The festival brought together representatives of government bodies, water management offices, non-government and international organisations, as well as mass media from Kyrgyzstan and Tajikistan. For the first time, water management representatives from the Uzbek side were invited to the festival as observers. This year, the “Isfara River Day” was held for the second time, with the focus on strengthening inter-government cooperation. For local residents, it became a day of friendship, collaboration, good neighborliness,

mutual trust and agreement. The agenda included both serious discussions of issues associated with provision of clean potable water to people and prevention of natural disaster damage, and children’s competitions, an exhibition of agricultural products and vocal performance.

In general, the development of the relatively new direction of water diplomacy as part of this project, made it possible to unite the efforts of all interested stakeholders performing these functions both within the region and beyond. Cooperation with such leading organisations as the Stockholm International Water Institute and the UN Regional Centre for Preventive Diplomacy has improved the results of the program through uniting decision-makers and experts in the field directly implementing the policies, and has introduced a new round of development in the process of forming a single process for the joint development of the Framework Document for Water Management in Central Asia. **Promotion of Innovative Approaches and Practices.**

During implementation of the project “Phase 2: Support for Local Initiatives in Environment and Water Management in Central Asia”, the region had gained the critical mass of successful ecosystem assessments, and the awareness of ecosystem services had increased significantly. In 2017, the concept of “assessment of ecosystem services” continued its successful adaptation and pilot testing in CA countries. The methodology which includes tools

such as payment for ecosystem services, as well as mapping and economic assessment of ecosystem services, was successfully test-driven in four pilot basins in Kyrgyzstan, Tajikistan and Kazakhstan (Chon-Aksu, Zerger, Ikansu and Shirkent). Jointly with local and international experts, CAREC completed development of the Manual on Economic and Financial Instruments for Basin Planning and the Manual on Using Instruments for Assessment of Ecosystem Services in CA.

An effective exchange of experience and knowledge plays an important role in the programme's activities. In this context, in November 2017 a seminar for regional organisations was held as part of the «Transboundary Water Management in Central Asia» programme

and the CAWECOOP project. NGOs working on sustainable development and environmental protection issues received up-to-date information on institutional development, financial reporting, project monitoring and evaluation systems, knowledge management methodology, resource mobilisation and information support.

Under the CAWECOOP project, an Interactive map on best practices in use of water, land and energy resources in CA has been developed. Development of such information products is a confident step forward in positioning CAREC as a regional Knowledge hub, in accordance with the Concept of Changes and the CAREC Strategic Development Plan until 2020.

CAPACITY BUILDING AND SCIENTIFIC EXCHANGE

15 students from CA and Afghanistan are enrolled in the Master's degree programme on Integrated Water Resource Management at the German-Kazakh University (GKU). It is expected that they will use acquired knowledge to solve pressing problems in the water sector of their respective countries. The Network of Academic Communities (NAC) began its operation and the work is currently under way to test the sustainability of this platform with the involvement of academic partners. The work focuses on engaging representatives of Afghanistan at the regional level to join NAC. In addition, the CAREC Branch in Tajikistan offered the English language courses for young specialists from the Committee for Environment Protection, Ministry of Energy and Water Resources (MEWR) and the Agency

of Amelioration and Irrigation under the Government of the Republic of Tajikistan (AAI), willing to continue their training at the GKU master's courses with major in IWRM. Another input made by the Tajikistan branch to promote the programme was the nationwide conference on "Water for Sustainable Development" held in Dushanbe in close collaboration with the MEWR. More than 135 specialists, researchers, experts and development partners from all over the country took part in the conference. Working closely with the AAI, a team of experts was established to draft the Law of the Republic of Tajikistan On Amelioration and Irrigation. Notably, no such law directly regulating the irrigation sector had ever existed even in the Soviet times.



Republican Conference on "Water for Sustainable Development, March 2017, Dushanbe

To disseminate reliable information on environmental issues in the media, a training workshop was organised in July 2017 in Dushanbe on the theme «Modern mechanisms for covering environmental problems in the media» with the goal to promote issues of environmental protection and water resources management through modern electronic, print and television media.

In May, the Uzbekistan branch arranged an exchange study tour to the Tashkent Institute of Irrigation and Melioration (TIIM) and a visit to waterworks facilities for water experts and teachers from respective universities of CA and Afghanistan as part of Smart Waters project. The study tour helped to strengthen cooperation between TIIM and academia from participating countries. It also facilitated discussions around academic, methodological and scientific issues, as well as water specialists' skills improvement. Proposals for cooperation were voiced out during the event, in particular, to set up a unified staff training system for integrated water resource management.

The CAREC Branch in Uzbekistan gave a start to a significant public awareness campaign under the UzWaterAware («Raising Awareness and Partnership for Sustainable Water and Environment Development in Uzbekistan») project, funded by the European Union. Extensive activities are carried out to develop networks with the community and mass media. In particular, in the Aral Sea zone was held an information tour for journalists on the issues of implementation of

water-saving and other technologies for the protection of the environment. As part of this event, in November 2017 journalists participated at the round table «Prospects for the development of the Muynak district. Water-saving technologies» organised by CAREC together with the State Committee of the Republic of Uzbekistan on Ecology and Environmental Protection. They also visited an open-air museum of ships on the dried-up bottom of the Aral Sea. On top of that, starting from September 2017 the project team has embarked on implementation of a large-scale communication strategy aimed at raising awareness of the population of Uzbekistan on water and environmental issues. In the framework of UzWaterAware project, the CAREC Branch is providing financial support (from June through December 2017) to the only children's environmental magazine Bulokcha/Rodnichok, being published since 2007 by the Ecological Movement of Uzbekistan.

Also, in November 2017, with the financial support of the UzWaterAware project, journalists have visited three best practices on the introduction of drip irrigation and other agricultural technologies in the farms of the Fergana Valley, also reflected in the interactive map of the CAWECOOP project. In addition, media representatives took part at a round table devoted to the presentation and discussion of the results of the «Water Cooperation in Central Asia» project along with representatives of ministries and public authorities, experts and specialists.

PROGRAMME VISION FOR 2018

Taking into consideration the multipolarity of the WIS programme, its short-term activities will focus on furthering and promoting the following initiatives:

- ◆ **THE «MFA+PARLIAMENT» INTERACTION PLATFORM:** the platform proved to be of interest for SIWI, and currently CAREC conducts negotiations on further continuation of the platform and strengthening it at national and regional levels in 2018-2019. This initiative is also supported by other programme projects as it aims to assist in addressing the transboundary issues.
- ◆ **THE NAC (NETWORK OF ACADEMIC COMMUNITIES) PLATFORM:** to secure sustainability of the platform, interaction with the German-Kazakh University on further promotion of this platform will continue. In the long run, this platform will operate with support from national stakeholders.
- ◆ **WATER QUALITY:** water quality issues are among other priority issues in the programme development strategy. Short-term plans include continuation of this work and laying grounds for follow-up activities.
- ◆ **PILOT TERRITORIES:** working in pilot areas is the main objective of the Smart Waters in the project's Year III. The main efforts of the WIS team will be concentrated on this dimension, not losing sight of other important programme areas.

THE ENVIRONMENTAL MANAGEMENT PROGRAMME (EMP)

In 2017 the Environmental Management Programme (EMP) has launched a unique project in the region that creates conditions for organizing intersectoral planning of investment projects aimed at achieving water, energy, food and environmental security in Central Asian region. Intersectoral working groups are created on the basis of existing platforms, such as the Council on the transition to a green economy under the President of the Republic of Kazakhstan, the National Commission on Irrigation and Drainage under the Agency of Land Reclamation and Irrigation under the Government of the Republic of Tajikistan, etc. Further discussions on the intersectoral approach and its results are to be conducted at the National Water Policy Dialogues (UNECE/OECD) and with potential investors. The programme continues to work in such key areas as development of ecosystem assessment methods and accounting of natural capital to preserve natural resources in the region, as well as working with multilateral environmental agreements. The programme also contributes to organizational development of CAREC through increased interaction with non-profit environmental organisations and implementation of the gender approach at the system level. Programme evaluation in 2017 has results in several areas: First area: project implementation. Implementation of Nexus project. The main results of this project are as follows: signing of a Memorandum of cooperation with the Executive Committee of the

International Fund for Saving the Aral Sea (EC IFAS) in Turkmenistan; creation of intersectoral working groups to develop investment projects in all countries covered by the project; establishing working contacts with potential investors; conduction of stakeholder analysis; start of assessment of the institutional capacity for the implementation of the interconnection approach; development of selection criteria for investment projects.

In 2017 the programme continued to conduct economic assessments of ecosystem services and mapping in pilot areas. The assessments have been carried out and completed in Kazakhstan, Kyrgyzstan and Tajikistan. Kyrgyzstan continues to be the leader in developing the ecosystem approach. In particular, the territory of Tyup forestry enterprise and two adjacent rural government offices were selected as the new pilot area. With all preparatory work done, the project experts of the Kyrgyz branch designed for them a PES- (payments for ecosystem services) based interaction system for Tyup forestry enterprise and two adjacent rural government offices. Agreements of cooperation were signed between administrations of Tyup forestry enterprise, Santash and Sary-Bulak rural government offices, Grazing land committee, Public organisation of drinking water supply, and the Kyrgyz Branch of CAREC. The economic assessment of the pilot territory will be carried out jointly with the American University of Central Asia (AUCA).



First National Advisory Meeting on the Project "Central Asian Dialogue on Using Opportunities of Multi-Sectoral Funding through Enhancing Interaction "Water-Energy-Food", June 15, 2017, Astana, Kazakhstan



The 10th Regional Meeting of the Ramsar Initiative for Central Asia

The year of 2017 has also been productive in terms of development of new working dimensions: work with multilateral environmental agreements; membership in Green OBOR and providing inputs to the Report on Greening the Belt and Road Initiative.

As part of the work with conventions, CAREC performed functions of the Secretariat for the Ramsar Initiative, as well as implemented joint project with the Espoo Convention Secretariat and with the Ramsar Convention Secretariat. working with multilateral environmental agreements, CAREC signed two contracts with the Secretariat of the UNECE Convention on Environmental Impact Assessment (EIA) in a Transboundary Context (Espoo Convention), and with the Secretariat of the Convention on Wetlands (Ramsar Convention). The results are as follows: 1) The draft of EIA guidelines in a transboundary context for Central Asian countries has been prepared, however it needs further harmonization in the countries; 2) information update on the status of wetlands in Kazakhstan, Kyrgyzstan and Turkmenistan; 3) analysis on the implementation of separate multilateral environmental agreements.

Second area – contribution to the CAREC organizational development: this year, the programme took part in such major events as CAIEF-Ashgabat and CALP-2017. At the same time, the programme is involved in the process of developing the concept of the gender approach at CAREC and enhancing cooperation with environmental NGOs in the region. Individual information products became a common achievement of programme activities. The following materials were prepared for projects implemented under the programme: draft manuals for transboundary EIA in CA (project “Guidelines for Transboundary EIA in CA”). Furthermore, the team of international experts prepared the report on ‘Greening One Belt One Road Initiative’. In line with recommendations received from the United Nations Institute for Training and Research (UNITAR) the Training module for mid-career civil servants in Kyrgyzstan and Tajikistan has been developed. Once the testing phase is completed, the module will be published on CAREC website. Finally, three articles were published in the scientific journal ‘Ecology and Industry of Kazakhstan’. (#3 (55) 2017).

PROGRAMME VISION FOR 2018

In 2018 the EMP will focus on further implementation of its current strategic projects. These include: (1) implementation of the project “Central Asian Dialogue on Using the Opportunities of Multi-Sectoral Funding through Enhancing the “Water-Energy-Food” Relation” in respective countries. A critical work area not only for the programme but also for the organization on the whole includes (2) developing the “Environment for CA” process and inform country partners on the importance and expediency of this initiative. Therefore, special resources will be used to work in this area. (3) Besides, the plan includes supporting

current projects associated with the aforesaid areas; these include working with conventions, SDG promotion, and furthering of the PES principles. (4) Considering the importance of human resources, in 2018 special attention will be paid to the programme personnel development: specific trainings, trainings for personal growth, additional training courses that may prove useful for work. (5) Develop and strengthen cooperation with partners, banking sphere representatives, and non-government organizations. (6) Publish and disseminate information and analytical materials.

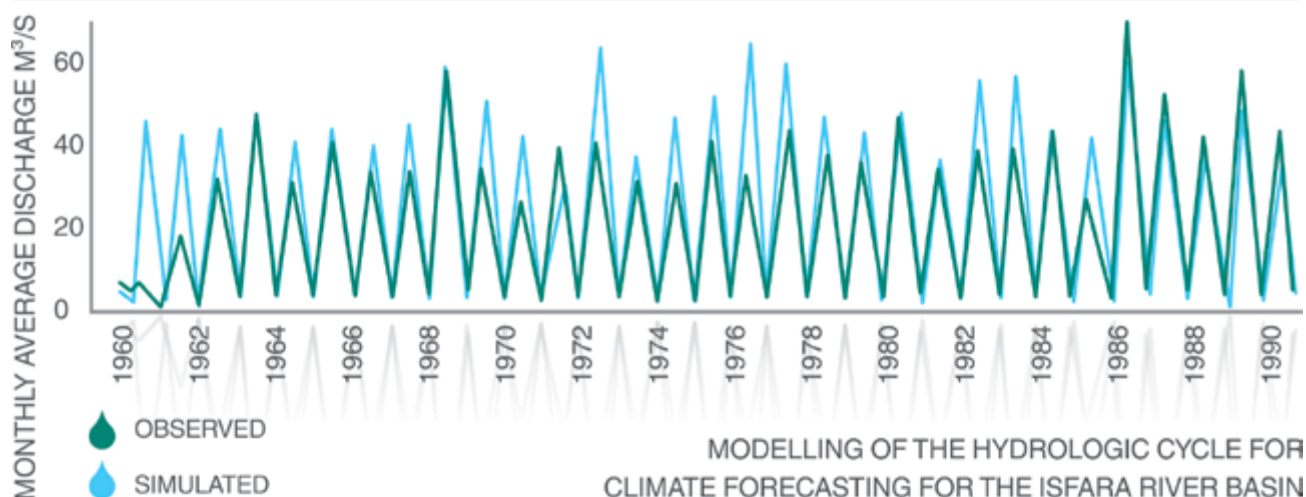
⁴ Конвенция об оценке воздействия на окружающую среду в трансграничном контексте, принятая 25 февраля 1991 г. в г. Эспо (Финляндия)

RESEARCH ACTIVITIES

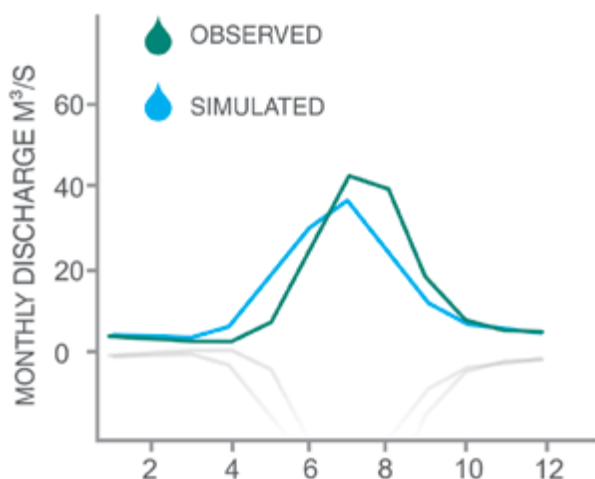
In 2017 CAREC made a significant progress in developing research activities. CCSE programme conducted a joint research in such areas as (I) climate risk modelling and assessment in the transboundary context in CA with the support of the Potsdam Institute for Climate Impact Research (PIK), (II) assessment of migrants' money transfers in developing climate

resilience by carrying out structured interviews with over 500 respondents living in the most vulnerable areas of Tajikistan, and (III) assessment of the climate change impact at each section of the value added chain in the area of cattle breeding, with more than 120 respondents living in pilot areas of Tajikistan.

MONTHLY AVERAGE DISCHARGE



ANNUAL DYNAMICS



In this context, the CAREC team, in cooperation with national partners in Tajikistan and international experts of the PRISE (Pathways to resilience in semi-arid economies) initiative, carried out the research to determine the migrants' role and private investment via money transfers, which facilitate climate-resilient development at the household level in Sughd and Khatlon Regions, as well as in Districts of Republican Subordination (DRS) and Gorno-Badakhshan Autonomous Region (GBAR). With that, the project's science-based approach serves as the ground for making suggestions on developing the country's effective sustainable development policy, especially in current conditions of high vulnerability to the quickly changing environment. The project is innovative to the effect that it views migration as an opportunity for adaptation to climate change and generation of new

knowledge on how economic development in arid and semi-arid countries could be made more resilient to climate risks. The research project will be completed in 2019.

In 2017, CAREC also launched a study on the impact of climate change on the quality of surface water in the Amu Darya basin, as part of the USAID's Global Program for Promoting Research Partnerships for Enhanced Engagement in Research (PEER). During the project implementation, the development of methodological approaches to the study was carried out. The basis of the methodology is an understanding of the relationship between climate change, hydrology and water quality parameters of the river flow under various scenarios of climate change. The key sector of water use and the source of return flow to the Amudarya River is irrigated agriculture. Therefore, it is important to determine how changes in agricultural policy will affect both water use and water quality. For this purpose, the project team analyzed tools and models for modeling the impact of climate change on

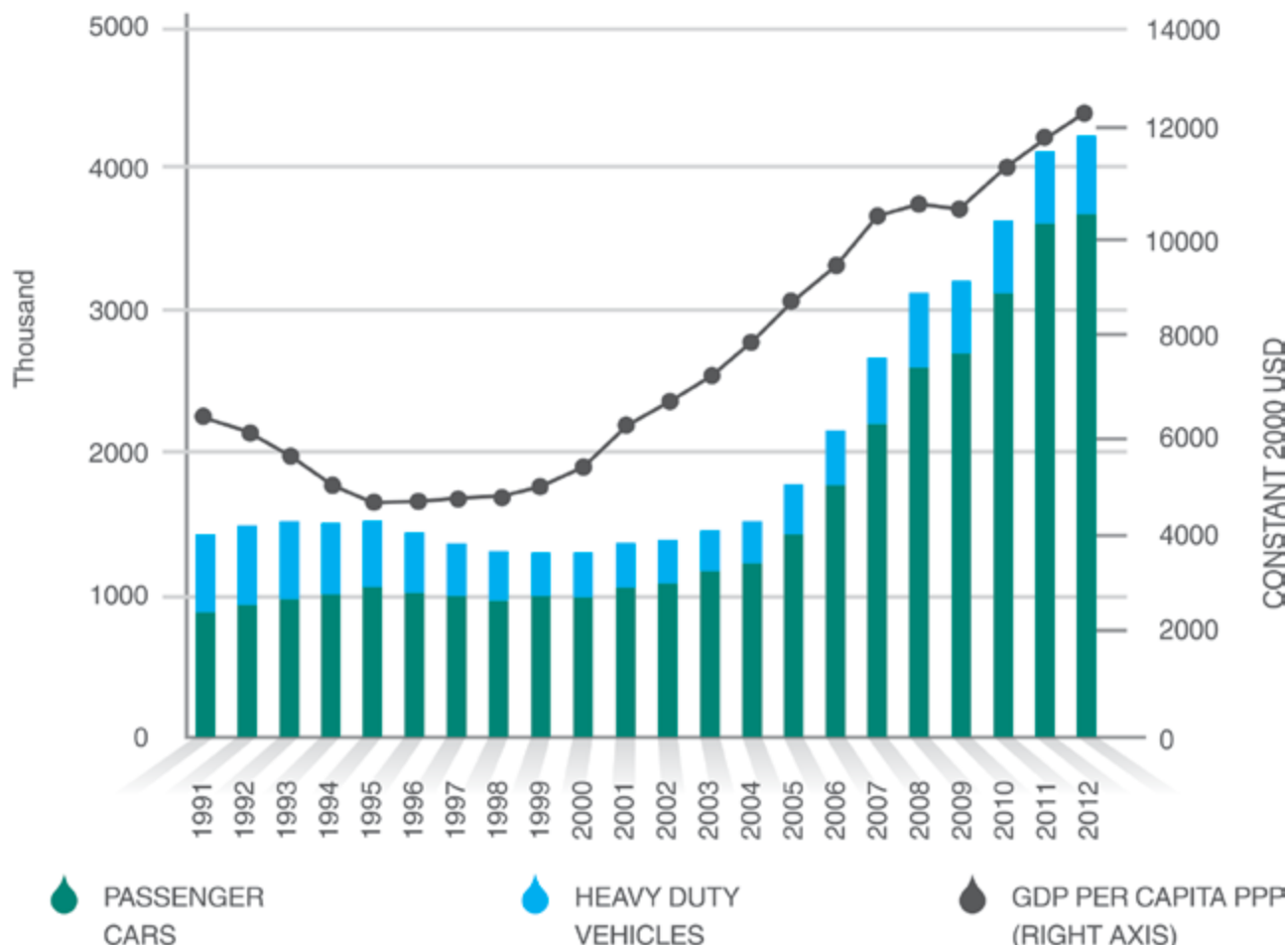
water quality. In addition, partnerships with research and water management institutions to conduct close work both at the research stage and at the stage of dissemination of its results.

During the reporting period, CAREC, with the support of UNEP, also launched a research project «Promoting the development of clean transport in Kazakhstan», whose main goal is to determine the average specific fuel consumption of a truck fleet in Kazakhstan, assess the impact of government transport sector regulation measures on this indicator, and also model long-term trend of fuel economy indicators depending on the scenarios of state policy in this area. During 2017, the study identified the basic indicators of the road transport sector in Kazakhstan, and the project began modeling the structural changes in the motor transport sector in the medium and long term (2030, 2050) as a result of government regulation. The results of the project will be available and discussed with stakeholders in Kazakhstan in early 2018.



Field Research under PRISE Project

DYNAMICS OF GDP GROWTH AND AUTOMOBILE PARKS IN KAZAKHSTAN SINCE 1990



In 2017, CAREC's ESD programme joined the York University's global research project of the UNESCO chair on "Refocusing the Education and Training System to Improve the Life of Native Youth and Local Communities". The project aims to implement respective social, environmental and economic issues, alongside with the local knowledge of elders and other members of local communities, to ensure high-quality education. CAREC is a regional partner to the project and is responsible for coordination in the CA region. In each country, the project has a partner from the research sector responsible for its implementation and tracking of results and conclusions.

The communication platform <https://wechange.de/group/esd-indigenous/> was created to improve project communication and exchange of information and best practices. The Memorandum of understanding

was signed between CAREC and the UNESCO chair for ESD of the York University. On June 27-29, 2017, the project's introductory sub-regional meeting was held for CA countries and Afghanistan at CAREC, Almaty, Kazakhstan, in cooperation and with support from UNESCO-Almaty. The meeting participants included national coordinators and ESD experts from Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Experts discussed general issues of project implementation, terminology and school selection criteria, and also signed memoranda with supervising universities and pilot schools in CA countries. CAREC is expected to bring its own regional experience in the area of ESD, capacity building in water, climate change, energy efficiency and SDG, experience in regional networks of academic communities on USAID's Smart Waters project, CALP graduates, experience of pilot

areas and best practices in scientific research.

With support from WIS specialists, CAREC also implemented the project “Evaluation of Water Cooperation Benefits in Central Asia”. A report was drafted to assess the current status and development outlooks for water cooperation in CA, as well as the countries’ national interests and development strategies. Common topics were identified such as climate change, droughts, floods, cooperation in disaster prevention, etc., and new approaches were considered to further water cooperation.

Moreover, the EMP program, in cooperation with a group of authors, is finalizing the Training Module for mid-level government officials in Kyrgyzstan and Tajikistan as a reflection to the recommendations received from the UN Institute for Training and Research (UNITAR). After completing all the work, the module will be posted on the online learning resource <http://elearning.carececo.org>.

In addition, the program prepared and published two articles in the journal *Ecology and Industry of Kazakhstan* (No. 3 (55) 2017): «Strategic Assessment in Central Asia», «Ramsar Regional Initiative of Central Asia».

A «Review of the implementation of the three conventions (UNFCCC, UNCCD and CBD) in Central Asia» was prepared. This review is designed to provide general information on the participation of Central Asian countries in the process of global environmental policy and international environmental law. The review provides a summary of international environmental laws and the participation of Central Asian countries in its development, the status of ratification of major international environmental agreements (MEAs) in Central Asia, and analysis of country participation in selected MEAs: United Nations Framework Convention on Climate Change (UNFCCC), The United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD).

In addition to the aforementioned achievements, the EMP program team members participated in the preparation of the report on the Greening of the Silk Road Initiative proposed by China aimed at implementing large infrastructure projects in the field of transport and energy. The report aims to help understand the relationship between the Initiative and the environmental, social, economic and governance aspects of sustainable development. The report also explores ways to integrate sustainable development into the key components of the Initiative in order to stimulate the exchange of ideas and practices.

A significant step forward in dissemination of CAREC’s knowledge and information products was the publication of the comprehensive research paper on «Rethinking Water Issues in the Central Asian Context: Damage from Inaction and the Benefits of Water Cooperation» carried out by CAREC in conjunction with the German public policy consultancy “adelphi” with the support of the Swiss Agency for Development and Cooperation (SDC). The paper presents a comprehensive analysis of the so-called «price of inaction», which means the difference between the advantages of the current limited cooperation in the field of water resources management and the likely benefits of full-fledged comprehensive cooperation. Given only some of the relevant costs, the total damage due to insufficient cooperation could amount to more than \$ 4.5 billion for the countries of the region. Thus, this report aims to raise awareness of the high cost of inaction and provide recommendations for decision-makers to expand the regional cooperation on water issues and improve the water management system.

Research activity is a strategically important component of CAREC’s work, which contributes to the formation of a knowledge base and innovative approaches in solving problems in the field of environmental protection. In the future, CAREC plans to expand its research activities and evolve into a think tanking organisation.

CAREC IN FIGURES

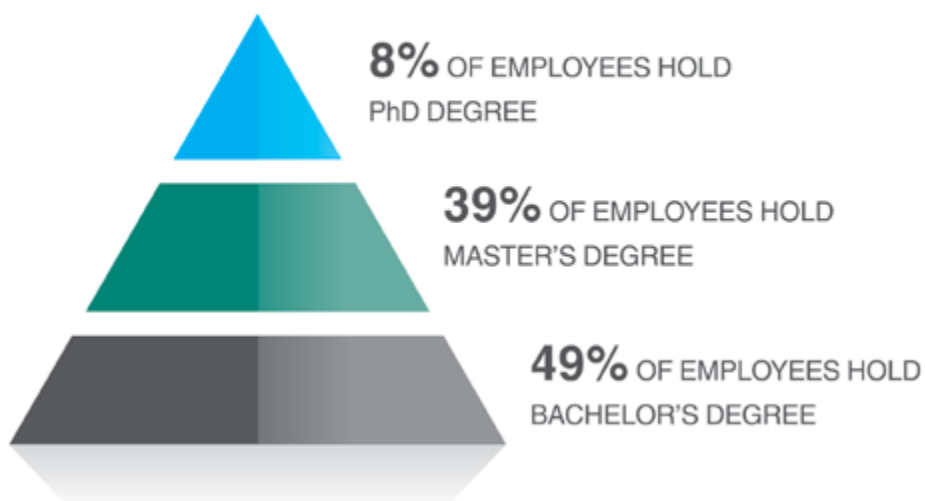
GENDER BALANCE



SHARE OF YOUNG PROFESSIONALS



ACADEMIC POTENTIAL

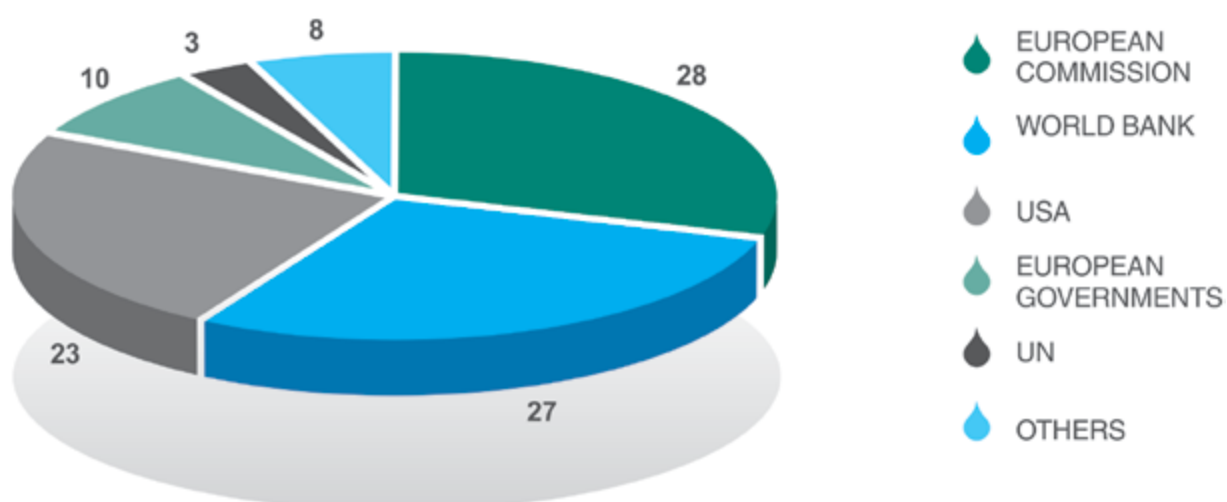


ANNUAL TURNOVER, 2001- 2017



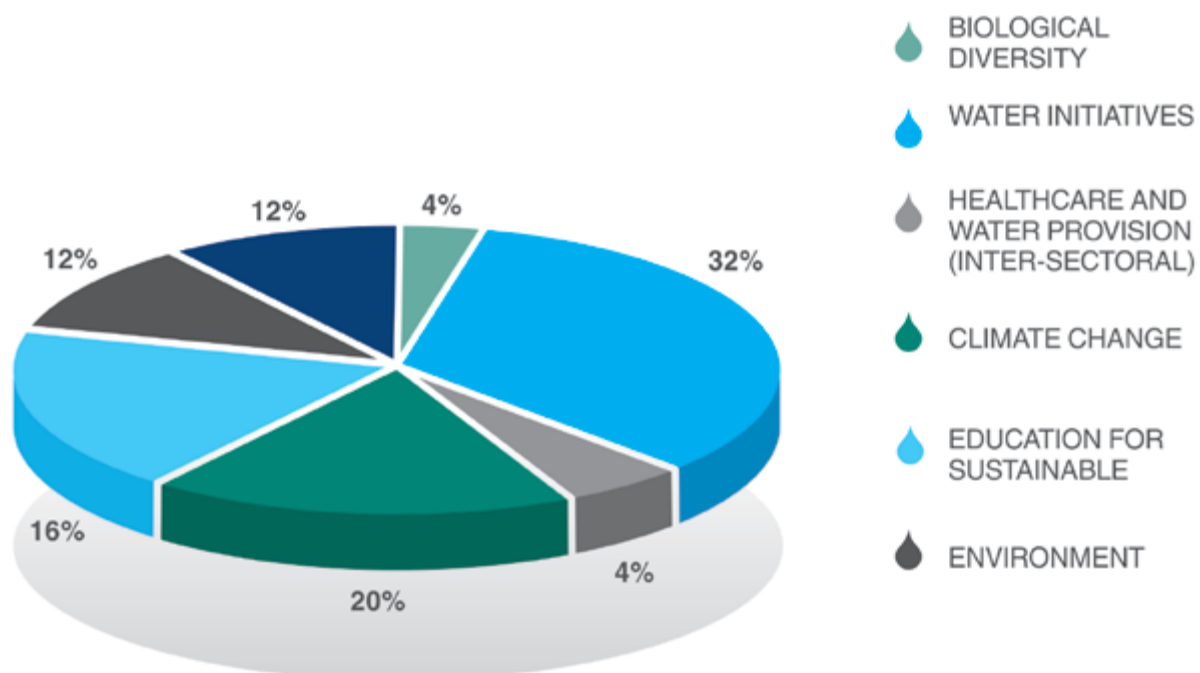
* NOTE: DATA FOR 2017 IS ESTIMATED

FINANCIAL SUPPORT FROM DONORS 2001-2017, %

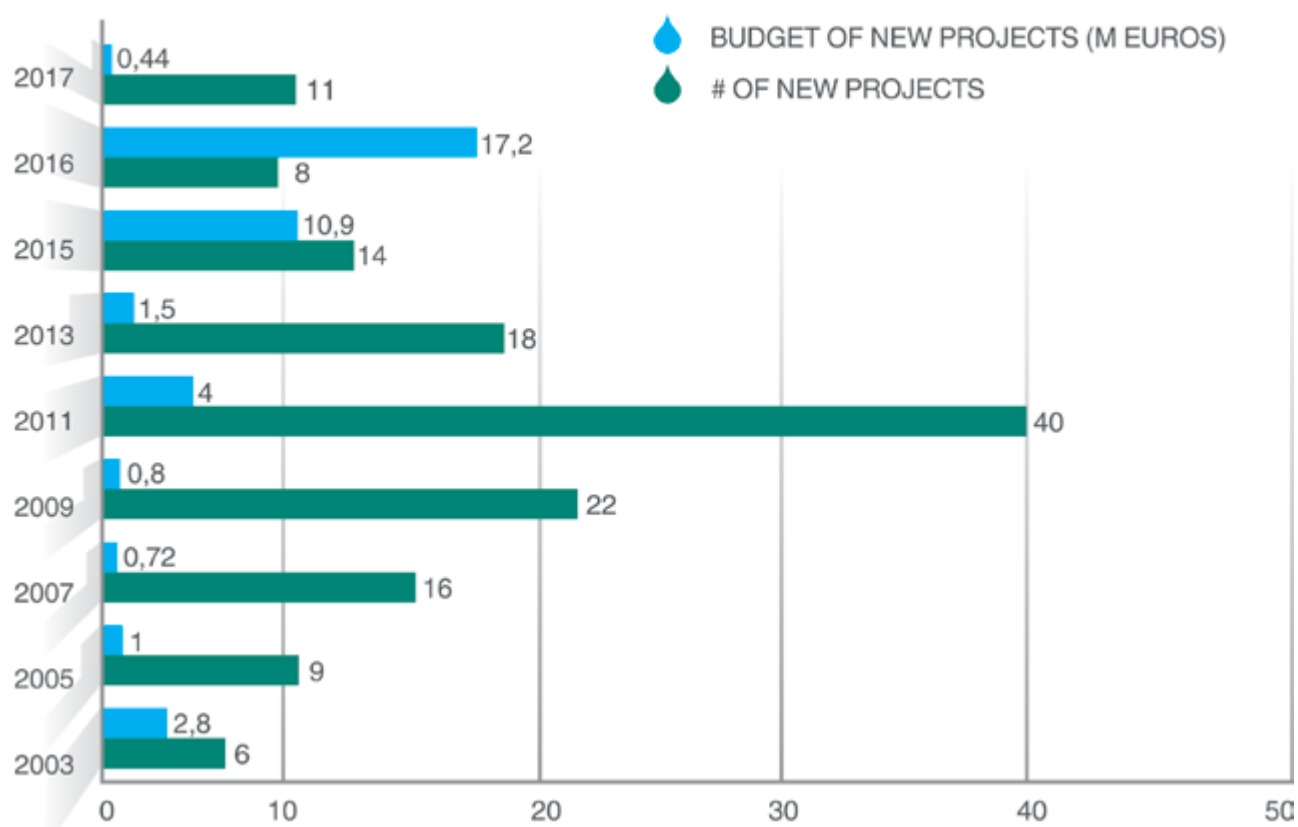


*NOTE: THE SHARE OF THE WORLD BANK IS MAINLY MADE UP BY THE CURRENT CAMP4ASB PROJECT

DISTRIBUTION OF PROJECTS BY THEMATIC AREAS

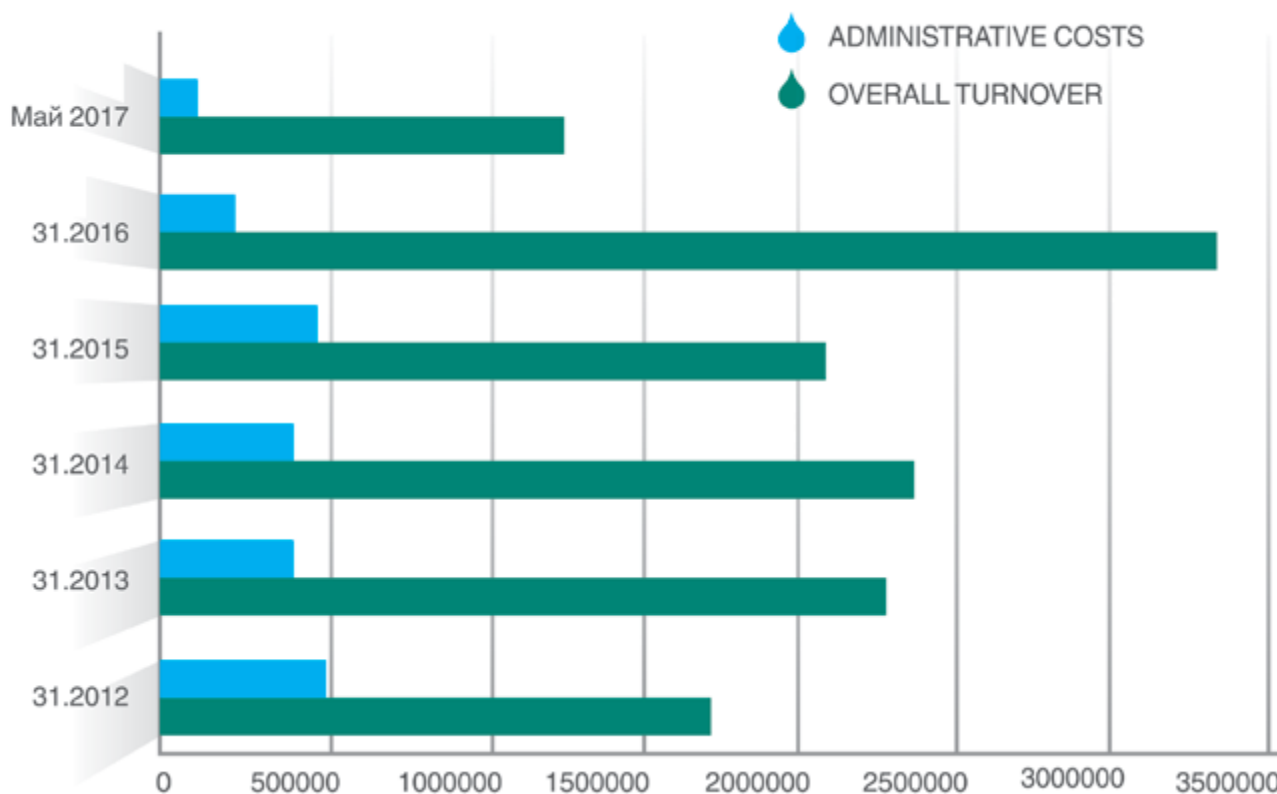


MOBILIZATION OF THE RESOURCES, 2001-2017

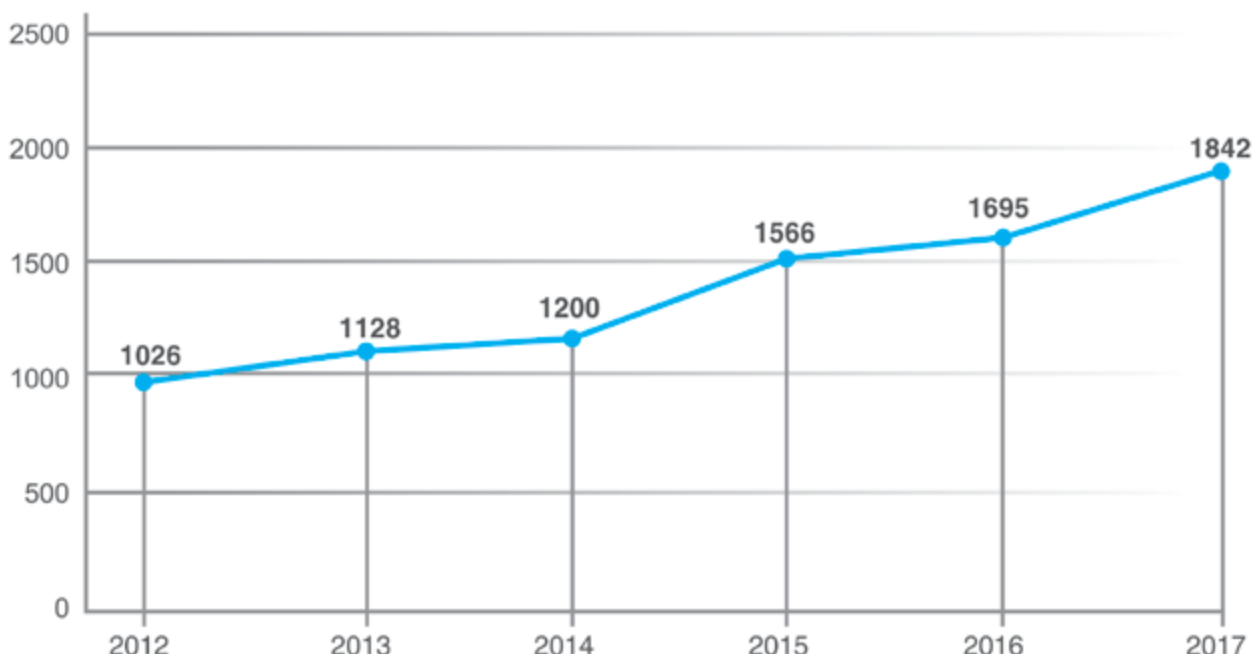


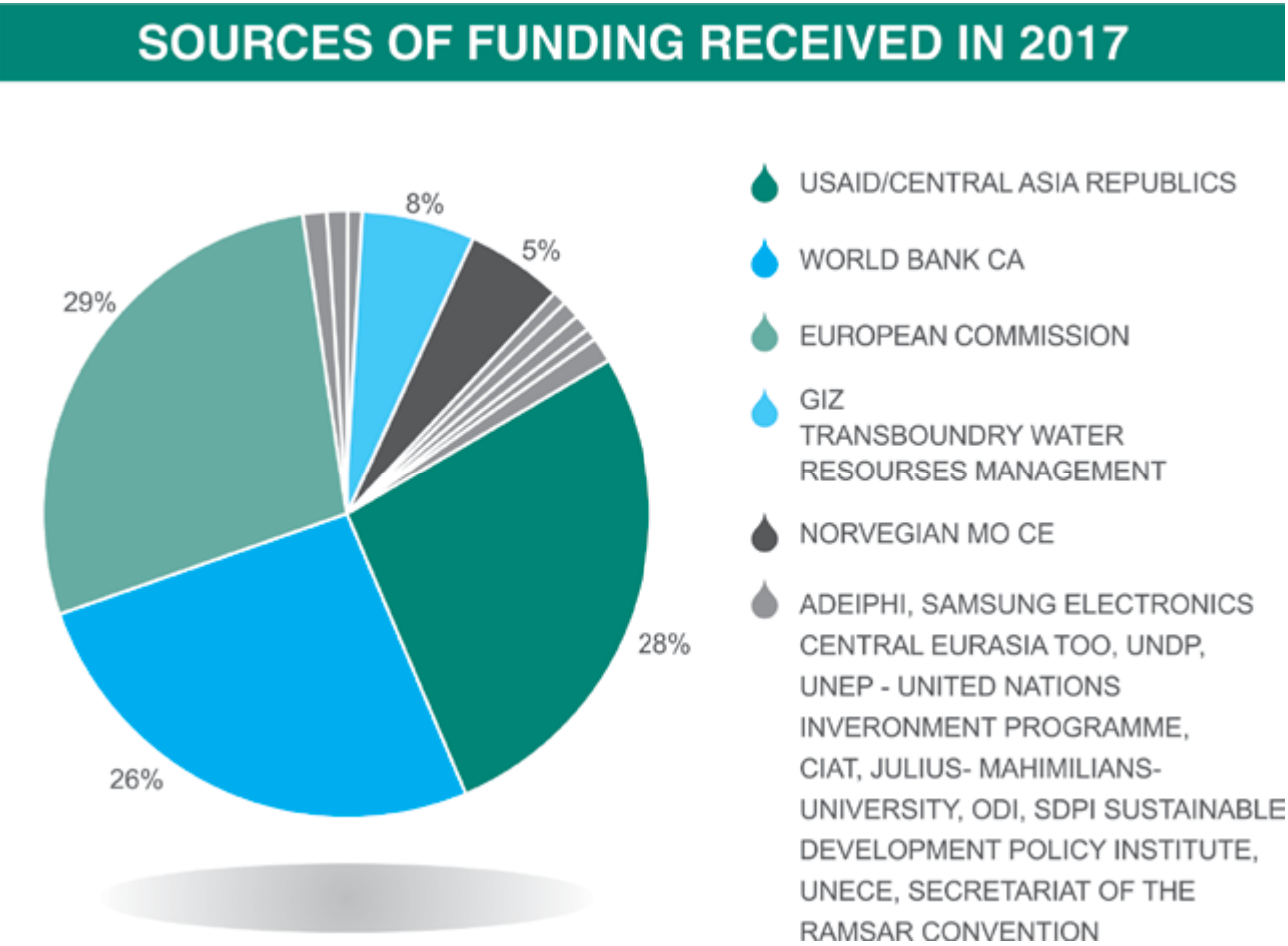
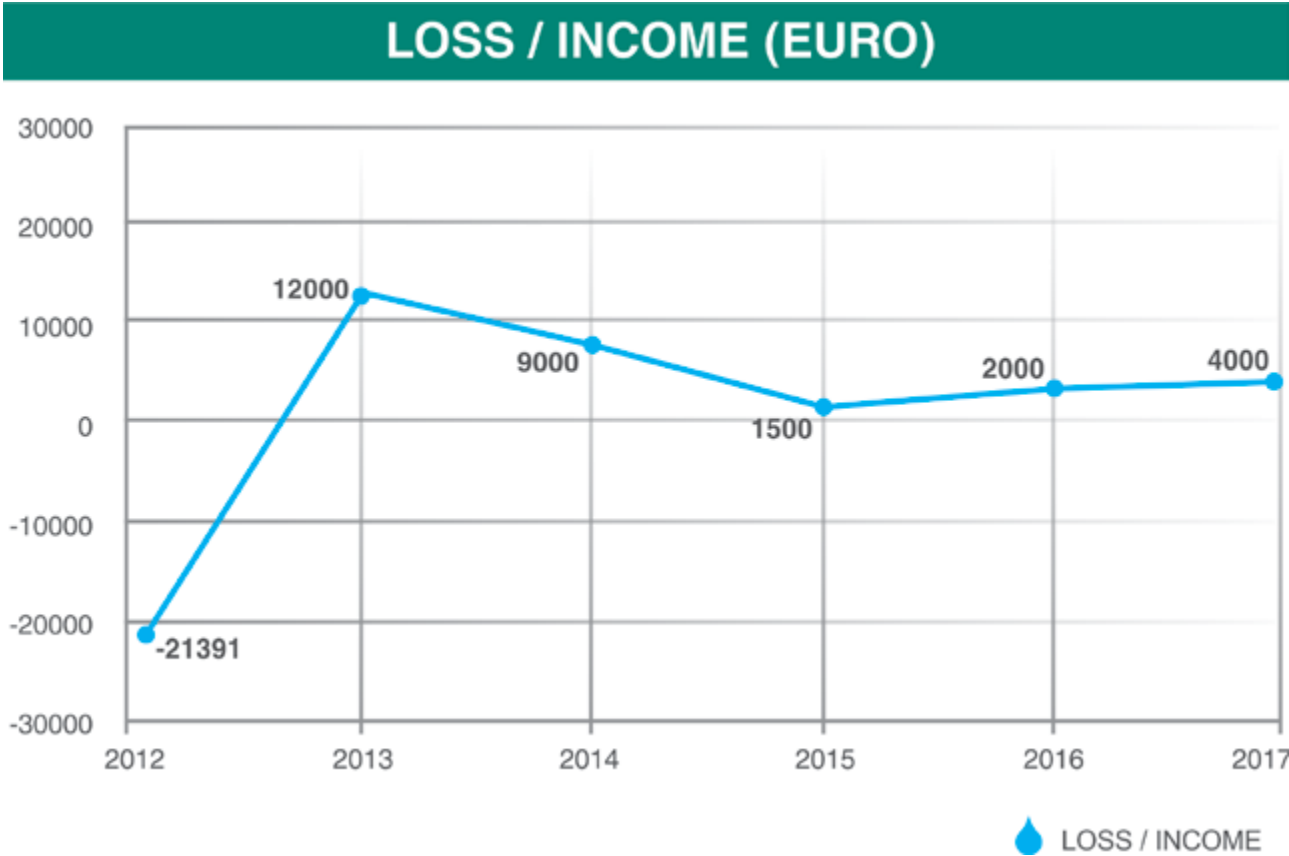
FINANCIAL REPORT

INDICATORS ON TURNOVER (EURO)



AVERAGE SALARY (EURO)





VISION 2020

The work undertaken by CAREC in 2017 demonstrates positive headway in achieving performance targets in specific activity areas. Yet, the ever-changing trends and requires the ability to adapt to the changes. Therefore, CAREC plans to continuously expand its areas of interests and expertise, to seek new opportunities by applying innovative approaches in the implementation of projects.

The CA region is plagued by serious problems related to water quality deterioration, degradation of the water ecosystem and land resources, natural disasters, shrinking biodiversity, destruction of ecosystems, and climate change. To resolve such problems, multilateral efforts and a multi-faceted approach has to be applied. In this respect, CAREC's core activities include enhancing coordination and cooperation between national and international players to prevent redundancy of efforts and ensure mutual awareness of environmental protection issues among regional institutions. The "Environment for Central Asia" (EfCA) process will serve as a key instrument in implementing projects in this area.

Apart from coordinating cooperation and efforts in the region, CAREC's priorities also include effective knowledge generation and dissemination. To achieve that, we work on positioning CAREC as a regional environmental "knowledge hub" that would be recognised at the national, regional and international levels. By 2020, CAREC aims to become a source of knowledge and best practices on sustainable energy, climate change mitigation and adaptation, environmental management, water management and education in the field of sustainable development. The website of the knowledge hub will help our partners and stakeholders to have access to up-to-date

information and state of knowledge on environmental issues in the region. The online educational platforms aimed at the general public, private sector and the civil society, will boost innovation-driven development.

This report reveals key programme areas being implemented by CAREC to address environmental issues in Central Asia. By 2020, we intend to further expand our activities and introduce new targeted programmes of immediate interest to the Central Asian region. CAREC will focus on developing the capacity of CA countries in areas such as biodiversity, introduction of sustainable environmental practices in the region's forestry and agriculture sectors, assessment of environmental impact on sanitation, and urban environmental management.

A particularly important area for CAREC is sustainable institutional development. To this end, we will move from competitive grants to structural methods of financing, involving not only government and international organizations in the long-term partnership, but also the private sector. An equally important priority will be the improvement of the HR policy. First of all, this means increasing the competitiveness of the organization by attracting highly-qualified specialists and creating better conditions for their professional growth. This will allow CAREC to maximize efforts in the implementation of projects and use the individual qualities of each employee for the benefit of the organisation.

Overall, CAREC will continue functioning as a coordinating centre of partners' initiatives in Central Asia in a broad range of issues, including the "green growth" strategy, international initiatives on climate change, energy aspects of the foreign policy, as well as other environmental protection issues.

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