

The Regional Environmental Centre for Central Asia

Knowledge and expertise for better environment

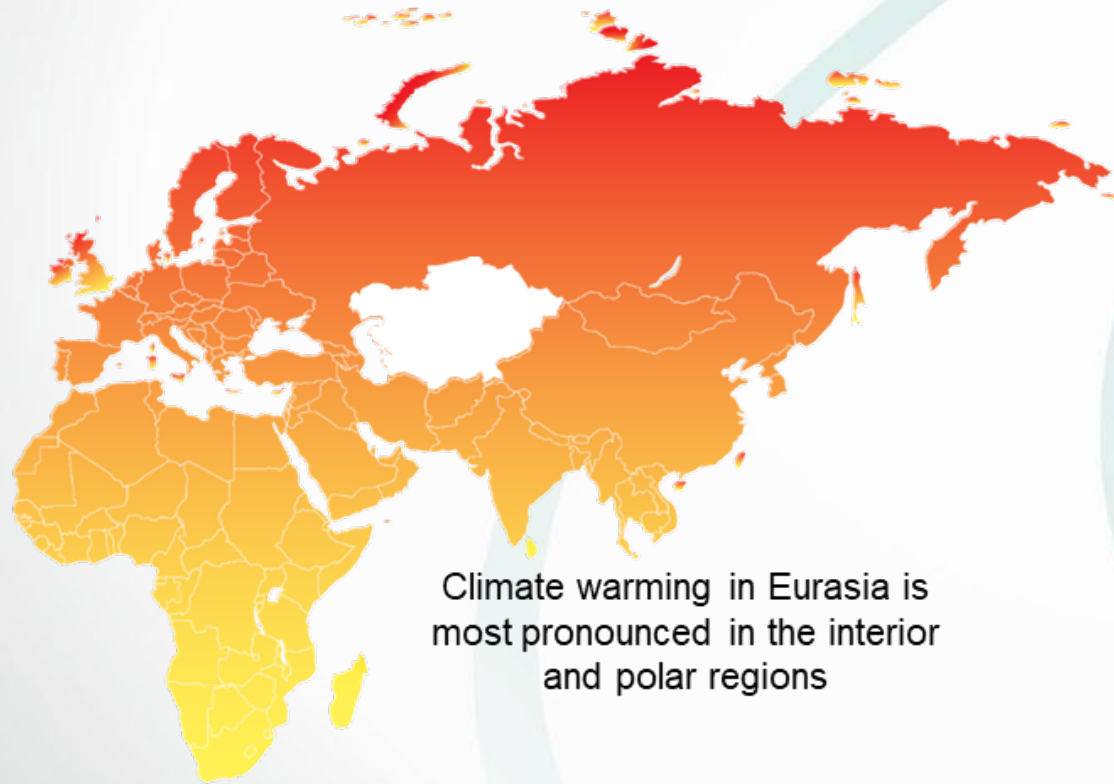
Climate Adaptation and Mitigation Program for Aral Sea Basin (CAMP4ASB)

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Overall Project Implementation, status of ongoing activities

In the warming world **Central Asia** until recently remained a white spot on the global map



Climate warming in Eurasia is most pronounced in the interior and polar regions

Program goal:

Addressing challenges related to climate change impacts across Central Asia

Objectives:

To enhance **regional access to information and knowledge** on climate change for Central Asia countries;

To catalyze **climate investments and build the capacity** to solve problems related to climate change and hazards.



Time frame

Project timeline



Financing from IDA (\$15 million) 2016-2021

Component activities include:

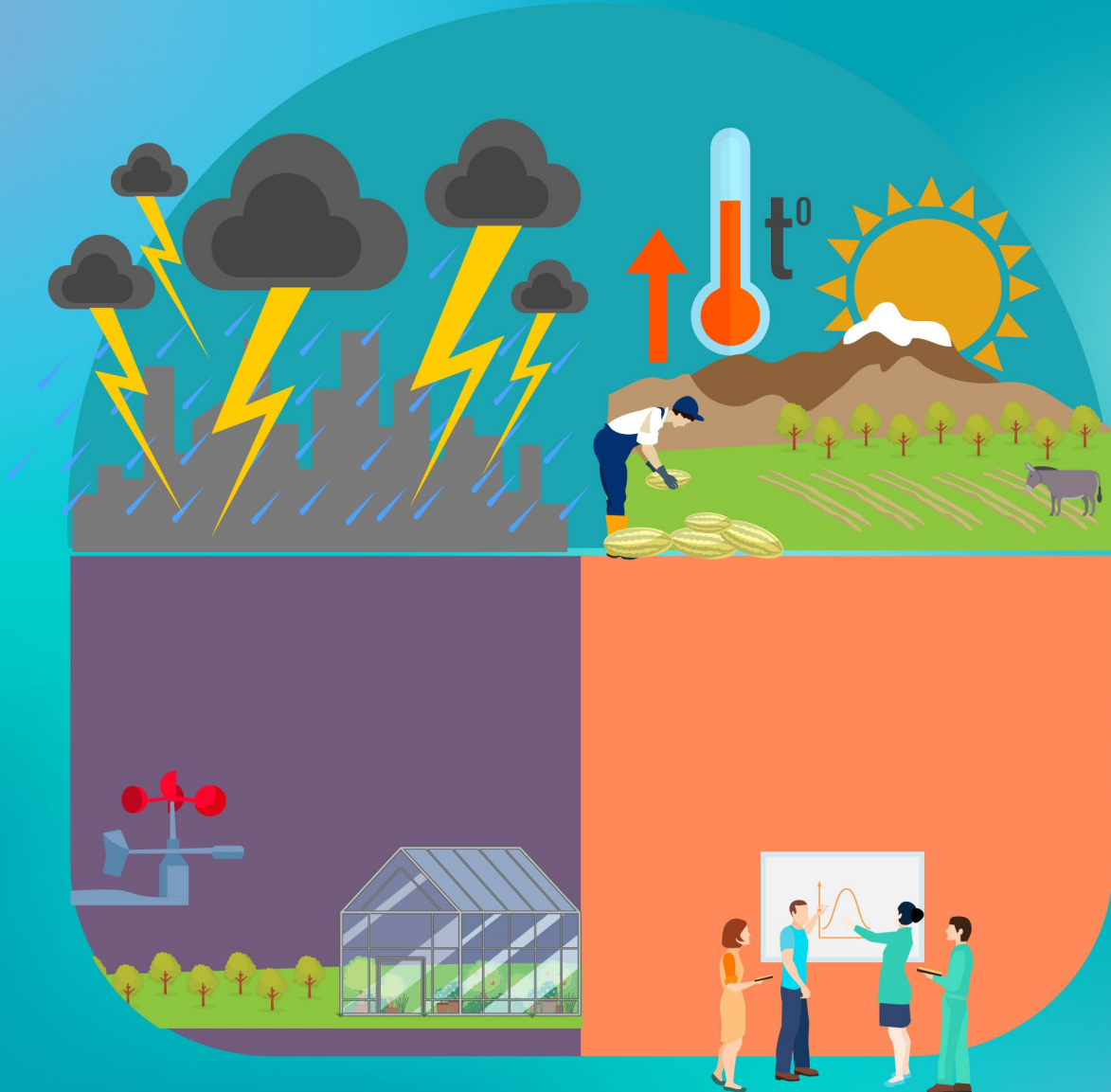
- Strengthening the Information Platform for Central Asia;
- Targeted upgrading of climate-related monitoring systems;
- Developing methodologies, approaches, and tools for decision support;
- Developing knowledge products;
- Building capacity;
- Setting up a Climate Investment Assessment Mechanism;
- Outreach and coalition building

Additional financing from GCF (\$1 million) 2022-2024

Component activities include:

- Strengthening the Information Platform for Central Asia;
- Scaled up the Climate Investment Assessment Mechanism;
- Outreach and coalition building

CAMP4ASB Project Description Overview



The Project is financed by the World Bank and the International Development Association and Green Climate Fund;

The Project is implemented under the auspices of the International Fund For Saving the Aral Sea

The role of CAREC: regional coordination and implementation of regional components

Regional activities and components budget (managed by CAREC): \$15 million IDA + 1 million Addition financing from GCF

Credit and grant portfolio and development measures budget **at the national level**: \$41 million (Tajikistan and Uzbekistan participate)

Implementation period: 8 years (2016-2024)

CAMP4ASB Project Description Overview



1.1 Regional Climate Information Platform

1.2 Modernization of weather and climate observation systems



1.3 Development of methodologies and tools for climate change assessment

1.4 Human Resources Development - trainings, exchange of experience, courses



1.5 Development of information products and dissemination of climate knowledge and solutions

1.6 Climate Investment Assessment Mechanism



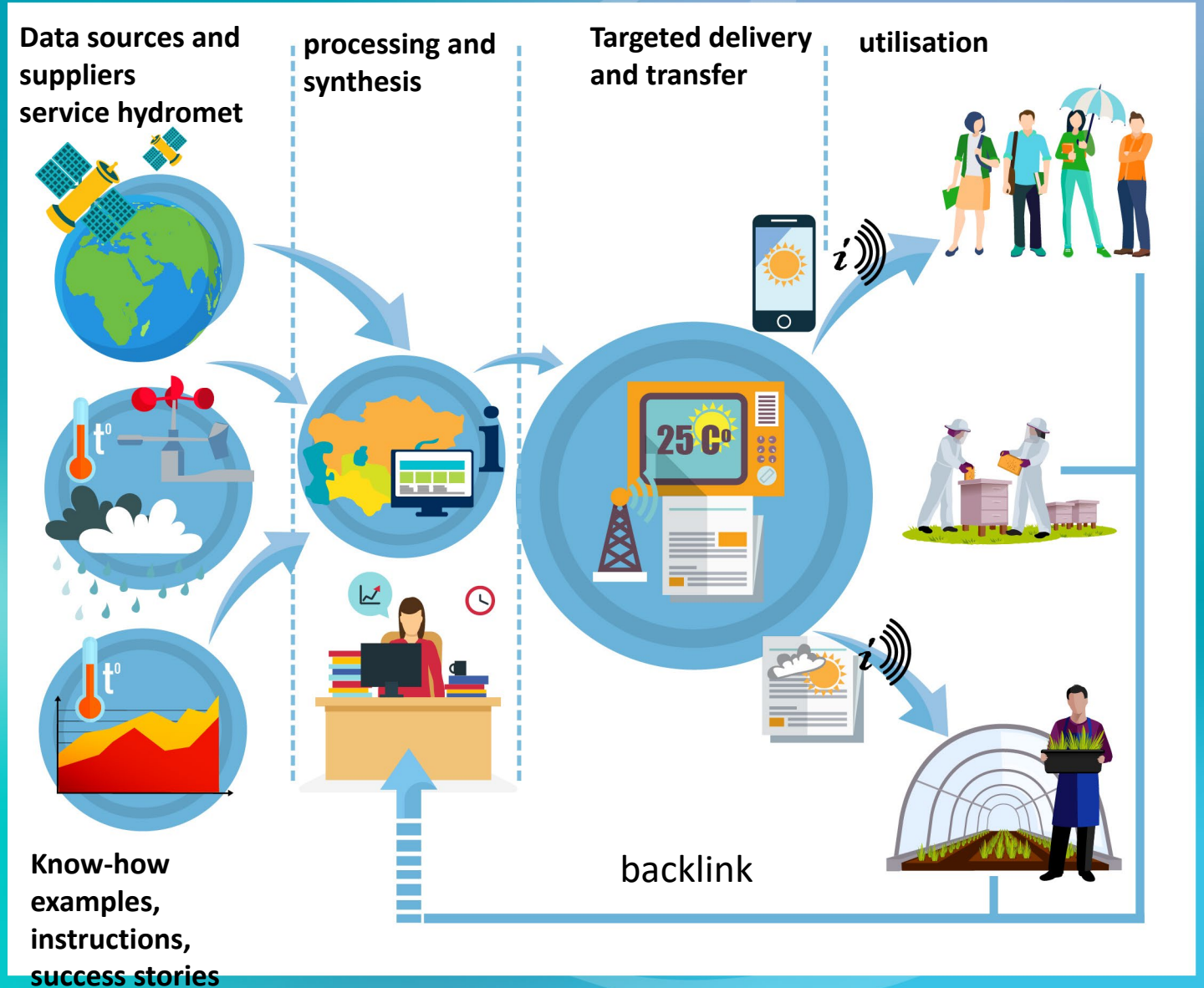
1.7 Educational Outreach Activities

Progress in the Regional Components Implementation



1.1 Regional Climate Information Platform

Development and content of the regional information platform will be carried out in cooperation with suppliers and users of climate information in 2019



Progress in the Regional Components Implementation



1.2 Modernization of Weather and Climate Observation Systems

The Finnish Meteorological Institute (FMI) conducted an assessment of proposals from national hydro meteorological services in Tajikistan and Uzbekistan in 2018.

Technical specifications for the equipment have been developed, and more than 50 automatic weather stations and environmental monitoring stations, new sensors and data transmission and processing systems will be purchased, as well as training on the use of equipment and forecasting methods will be conducted in 2019 .



Hydrological Forecasts with the Use of MODSNOW (in collaboration with CAWA)

The **MODSNOW Tool** (Gafurov, et al., 2016), developed at GFZ Potsdam under the CAWA Project (Water in Central Asia) allows to combine MODIS data from satellite monitoring of snow cover in mountains with additional modules, as well as to estimate seasonal, monthly or decadal availability (and forecast) of water for selected river basins.

30 experts have already been trained in hydrological forecasting using MODIS data on snow cover (> 30 experts).

Hydrological forecasting for 18 river basins, with use of the MODSNOW tool, is planned in 2019, as well as assessment of accuracy of forecasts at the end of the vegetative period.

It is also planned to continue training seminars in hydro meteorological services in order to improve knowledge of hydrological forecasting.



Progress achieved in the implementation of the regional components of CAMP4ASB



Development of methodology, information products and capacity-building (1.3., 1.4., 1.5.)



Research papers on modelling and assessment of climate change impacts on river flows:

Kazakhstan: Bukhtarma, Yessil and Zhabay;
Kyrgyzstan: Aspara and Isfara;
Tajikistan: Kafirnigan;
Turkmenistan: Murghab;
Uzbekistan: Zeravshan;
Popular generalization of scientific results.



2 regional trainings on climate and hydrological modeling;



4 national technical workshops on hydrological models and the study of snow cover monitoring tools;



Development of information products and dissemination of climate knowledge and solutions



student's competitions, work with Higher Education Institutions and summer educational programs;



A total of 122 specialists were trained



development and introduction of training materials;



Assessment of climate risks in priority sectors and regions is planned



It is planned to conduct activities for the exchange of experience

Progress in the Implementation of Regional Components



1.6 Climate Investments Assessment Mechanism

Together with national components, CAREC participated in the field assessment of climate investments in Tajikistan and Uzbekistan and the preparation of an assessment methodology and mechanism

Types of Climatic Anomalies



Rise of temperature



Spring frosts



Heavy precipitation - thunderstorm, hailstorm, heavy shower



Drought and heat wave



Winter warming



Strong wind



Dust-storm



Sharp fluctuations in temperature and precipitation



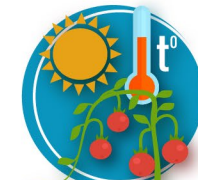
Water deficiency



Plants diseases



Spring frostbite of plants



Thermal stress of plants and agricultural animals from heat

Negative consequences in agriculture



Land degradation



Mudflows



Occurrence and dissemination of pests



Водная эрозия почвы



Soil salinization



Under flood / flooding of fields

Examples of Information Products, Knowledge and Human Resources Development

Climate Investments in Central Asia:

Preliminary results of the International Development Association loan programme



Climate Change and Hydrology in Central Asia

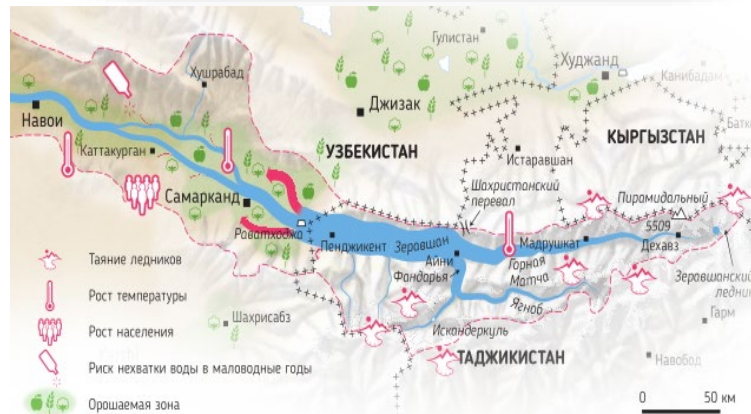
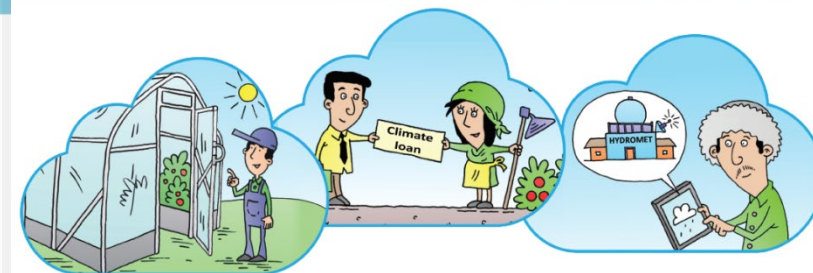
A Survey of Selected River Basins



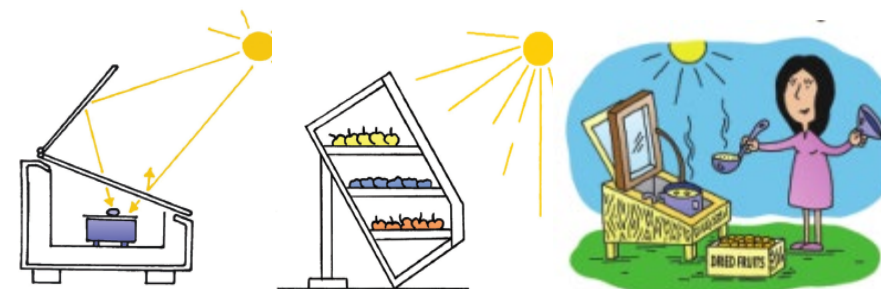
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Green technologies and climate information: application guide in cartoons



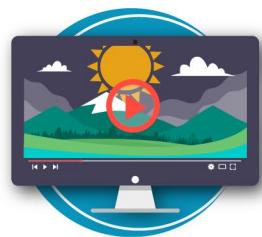
Река Зеравшан: прогнозируемые изменения гидрологического режима



Progress in the Implementation of Regional Components



1.7. Educational Outreach Activities



MOVIES. A series of short informational films, video interviews on climate change and project activities.



JOURNALISTS and Media. Coverage of the process of the 24th Conference of the Parties to the Framework Convention on Climate Change in Poland (2018), involving TV companies for informational support.



WORKSHOP SESSIONS for the media on climate change and its popular presentation. Students' contests.



TRAININGS for students and young scientists, development of the academic communications and contacts. Leading universities of the Central Asian region are involved in the work.



MEETINGS
Regional Climate Change Conferences 2018-2024



PHOTO-contest in 2018 and 2020: 600 works were sent in total, of which 350 were selected as meeting the criteria

- artistic integrity of the image;
- emotionality;
- compliance with the plot;

20 winners from all 5 countries



Regular dissemination of the project news, information in social media (2000 users)



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Thank you for your attention!

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