**Ecosystems, Society and Economics of the Region of Aral (ESERA)**

**Background information:** The region of the Aral Sea is one of the most vulnerable part of the region of Central Asia. Climate change puts additional stress on water resources, the agriculture and social sector and will likely have consequences for locals as well as the region as a whole.

The problem of the sea itself, the Aral Sea region and their future should have a clear perspective and analysis. What can happen if current trends continue? What danger does this pose to nature and the population? In this regards, there is a need for studying current state of ecosystems, society and economics, as well as impact the climate change on the region.

It is also crucial to raise awareness of the Aral Sea desiccation and how this man-made environmental tragedy continues to affect local population, who had to migrate and leave their homes. Young water leaders are future decision-makers, who will influence development of the Central Asian region and beyond.

The activities under this project should contribute to raise awareness and increase the attraction of science and research on issues within environmental and human sciences in the region of Aral.

**The overall** **aims** of the project are twofold increase the scientific and research capacity of young researchers through the case studies’ directed at the regional security of the socio-economical pathway, including the challenges related to biodiversity, water quality, the dramatic changes in agricultural productivity questioning food and social aspects, as well as raise awareness about the importance of cooperation and governance at all levels as a cross-cutting issue crucial for the improvement of socio-economical pathway in Central Asia.

**Project Objectives:** The objectives of the case studies’ research are to:

* conduct a scientific research on ecosystems, society and economics in the selected case studies in the region of the Northern Aral Sea;
* publish scientific articles and/or a book based on the results of the case studies;
* conduct 2nd CAY4W network Summer School on Aral for young generation of water managers and specialists of Central Asia;
* enhance the awareness through the conduct of the field research and 2nd CAY4W network Summer School on Aral.

**Research topics**

1. Ecosystems: (water quality, Biodiversity, Climate change impact)
2. Social aspects (demography, employment, healthcare, education)
3. Economics (irrigated agriculture, land use management, fishery, etc.)

**Methodology:** These aims are to be achieved through the case studies’ research covering the climate change impact on natural resources, society, and economics. Each of the case studies will serve for a scientific analysis of the collected data to evaluate the current state of the socio-economic indicators in the region.

Awareness raising activities aims will be achieved through organizing 1-week Summer School on Aral for early career water specialists.

Participants for both components will be selected as a result of open call. Selection process will be selected according to their Motivation letters and topic related background (CV)

The initial and preliminary results will be extensively reported at the online workshops, and the final results of the case studies will be presented during the final conference, where the participants of the research-groups will present their research results.

**Duration:** 3 years