

This project is funded by

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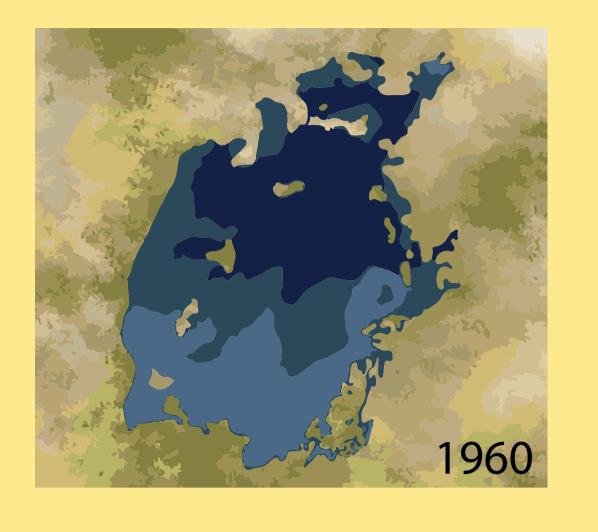


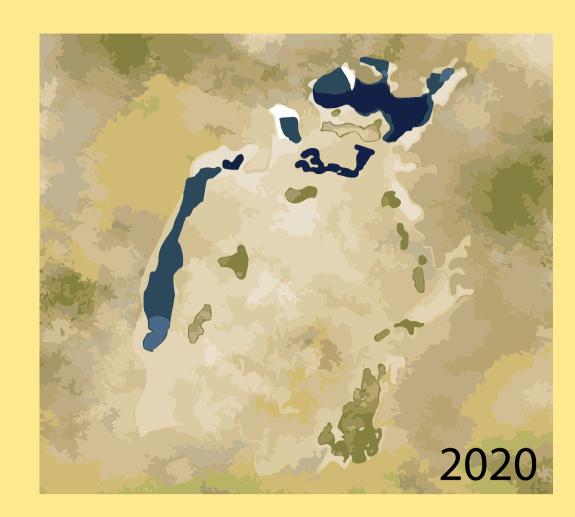


KAZAKHSTAN NATIONAL DEMONSTRATION PROJECT:

"Afforestation of the dry bed of the Aral Sea: piloting a closed root system"

Objective - To contribute to the afforestration of the dry bed of the Aral Sea through innovative solutions ensuring a high survival rate of planted saxauls and efficient water, energy and human resources





Implemented and co-financed by: Executive Board of The International Fund for saving the Aral Sea in Kazakhstan

Implementation period: November 2020 – December 2022

Location:

70 km from the town Aralsk in the Kyzylorda Oblast

Beneficiaries:

Population affected by the impact of the Aral Sea ecological catastrophe, local governance, saxaul nurseries, private sector

Supported by:

European Union funded project «Nexus Dialogue in Central Asia»

Aral Sea:

Total area of dry bed of Aral Sea exceeds 5.5 mln ha (2.5 mln ha in Kazakhstan and 2.8 mln ha in Uzbekistan) with 14% of this area afforested over the past few decades. More than 100 mln ha of toxic salts are annually disbursed across Central Asia and beyond, negatively affecting public health, economic activity, and the environment

Activities to be implemented:

Task 1

Construct 2 green houses and 1 shade cloth structure with a total area of 150 m² and a drip irrigation system on the premises of the National -Touristic Centre «Eco-Aral» (70 km from Aralsk)

Task 2

Plant 2 000 black saxaul seeds in the closed root system and subsequently re-plant them after 12 months on the dry bottom of the Aral Sea in the Kyzylorda Oblast

Task 3

Conduct scientific observation of the growth and survival rate of seedlings with the closed root system

Expected results from planting saxaul seedlings with a closed root system in the dry bed of the Aral Sea

- Retention of 8 000 tons of sand;
- Afforestation of 10 ha of the dry bottom of the Aral Sea dessert;
- Collection of seeds after 3 years of cultivation;
- 90% higher survival rate of seedlings;
- Application of a closed root system in saxaul nurseries;
- · Efficient use of natural and human resources during cultivation of saxaul seedlings.

Long term impact

- · Survival of environmental situation in the Aral Sea;
- Retention of dust transfer and reduction of the area of desert lands;
- Reduction of negative impact on population health;
- Revival of economic and agriculture activities.

Implementation process:



Piloting a closed root system of growing black saxaul on the premises of National Touristic Centre «Eco-Aral» 2 greenhouses and **Closed root system** Existing solar plant and wind farm shade cloth structure one hole at the bottom of the bag Trench: \cdot a mixture of 1/3 soil, depth 35 cm 1/3 rotted manure, length 3-5 m 1/3 coarse sand · width 60-70 cm • 5-10 seeds in each Kamystybas Lake Water pump Water tank

