



**Executive Committee
of the International Fund for saving the Aral Sea
(EC-IFAS)**

**Restoration of degraded land through afforestation of
the dried out Aral Sea bed**

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Restoration of degraded land through afforestation of the dried seabed of the Aral Sea area

- **Aims of the project are:**

- to improve ecological and socio-economic situation in the region, particularly:
- to reduce wind erosion, fix moving sand dunes, minimize the process of deflation (removal of salt, dust and sand) on the protected area, improve air quality - all these measures are aimed at improving population health;
- to improve environmental situation through disengaging of oxygen, absorption of carbon dioxide and accumulation of dust by trees and shrubs, which would lead to reduction of morbidity of the population;
- possibility to involve the drained areas in economic activities through development of animal husbandry and cultivation of medicinal plants, which in the future will provide the population of the Aral Sea with additional livestock production;
- restoration of the local fauna and flora.

Sand dunes





Restoration of degraded land through afforestation of the dried seabed of the Aral Sea area

Project objectives correspond to the following international conventions:

- Convention to Combat Desertification (Paris, 1994); United Nations Framework Convention on Climate Change (New-York 1992); The Convention on Biological Diversity (Rio Janeiro, 1992); The Ramsar Convention on Wetlands (Ramsar, 1971), as well as the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992).

It is essential to mention that the Republic of Uzbekistan, Republic of Kazakhstan and Turkmenistan have joined the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, which highlights the need to preserve and restore ecosystems.

Project area:

The project is regional. Participating countries: Uzbekistan, Kazakhstan and Turkmenistan.

According to the preliminary assessment of biodiversity state undertaken in 2008 by the FAO project on "Development of a project proposal for the establishment and organization of a protected natural site in the project area", it was determined that these habitats are of great importance not only for birds, but also for other fauna and flora species that make up desert ecosystems.

The site is located on the dried out bottom of the former Aral Sea (absolute desert).



Main project activities:

- Carrying out planting of forest plantations on the dried seabed of the Aral Sea;
- Fixation of shifting sands;
- Establishment of eight nurseries for growing planting material for desert species
- Organization of permanent monitoring of new forests;
- Identification of biodiversity of the most valuable ecosystems, organization of monitoring and development of measures for their conservation and restoration;
- Monitoring and implementation of measures to combat fires, identification of the centers of diseases of forest crops, carrying out of sanitary measures to eliminate diseases on the basis of chemical and biological control methods;
- Further training of manpower and strengthening of material-technical base of forestry organizations;
- Organization of regional workshops to exchange experience.

Planting of saxaul



Cellular mechanical protection



Mechanical protection



Fixing of moving sands



Nursery of seedlings



Sand accumulating capacity of desert plants

In terms of sand accumulating capacity of desert plants, a 7 year-old shrub of black saxaul *H.aphyllum*, 265 cm high and 320 cm in crown diameter, accumulates around itself 10,61 cubic meters of sand, and 28% of its height is drifted by sand.

Salsola Richteri, 220 cm high and 260 cm in crown diameter, accumulates around itself 5,6 cubic meters of sand, and 23% of its height is drifted by sand.

Kandym *Calligonum L*, 110 cm high and 210 cm in crown diameter, accumulates around itself 6,9 cubic meters of sand, and 55% of its height is drifted by sand.



Creation of green shelter belts around settlements



Artesian well





- **Estimated project budget** – \$ 9 000 000
 - Co-financing: \$ 1 500 000
 - Amount of requested funds: \$7 500 000
- **The project:**
 - was included in the Action Program to assist countries in the Aral Sea Basin for the period 2011-2015 (ASBP-3) designed according to the mandate of Heads of States-Founders of the IFAS;
 - reflects priorities of all countries and provides a unique opportunity for the IFAS member-states to combine more effectively national and regional efforts to improve environmental conditions and socio-economic situation in the region.

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THANK YOU FOR ATTENTION!

