

February 2024

ARTIK CITY CLOSED STONE PIT WASTE AND FLOOD MANAGEMENT PILOT PROJECT

– Artik, Armenia



In a nutshell

Artik joined the Covenant of Mayors in June 2014 later on in December 2022 the community joined the new Covenant of Mayors for Climate and Energy.

The project implemented by the “Environmental Project Implementation Unit” (EPIU) State Agency with the financial support of the Adaptation Fund (AF), seeks to improve resilience of highly exposed Artik city of Armenia to hydro-meteorological threats that are increasing in frequency and intensity as a result of climate change.

The specific objectives of the project are:

- Increase adaptation level of natural and agricultural landscapes;
- Prevent floods and eliminate their consequences;
- Restore the natural landscape of the area affected by climate change and anthropogenic impacts;
- Improve the adaptation potential of community producers, institutions, and other relevant stakeholders regarding to climate change under current climate change conditions.

Background

More than 60% of the construction stone (tufa) products of the country have been produced in Artik. Long-term exploitation of stone pits has had negative impact on the environment of the community. Hundreds of hectares of agricultural and natural landscapes were degraded and lost its natural way of restoration due to the exploitation of mines.

In addition, dust through strong winds and solid remnants through snowmelt and rainfall spread over great distances polluting natural agro landscapes. As a result, there is a decrease in the yield of agricultural crops, crop quality, and adaptation level of natural landscapes to climate change. Another problem is increasing the frequency of severe floods in the last 20 years, which is due to the spring temperatures that are not typical for the region. As a result, this accelerates snowmelt causing the emergence of strong floods. Flood that occurred in June 2016 caused more than 210,000 USD damage to Artik city infrastructures and population.

In order to address the mentioned problems and increase adaptation capacities of Artik, the EPIU has successfully mobilized a total of USD 1435100 from the AF for the implementation of the project”.

Description of the action

01

Component #1: Restoration, management, and increase of adaptation potential of natural landscapes of the area affected by climate change and anthropogenic factors. Activities: Restoration of 40 hectares of un-operated stone pit, establishment of forested park and recreational zone, construction of irrigation system.

02

Component #2: Increasing adaptive capacity of 300 hectares of arable land, 190 hectares of pastures, 15 hectares of hay meadows to climate change. Activities: Increasing fertility of arable lands and resilience of pastures and meadows, restoration of vegetation cover of pastures and meadows.

03

Component #3: Prevention and management of floods. Activities: Water flow mitigation measures in gorges, reinforcement of earth dam and stability increase, stabilization of the most degraded slopes, introduction of early warning system, installation of garbage bins along storm sewer passing through Artik city, cleaning of storm sewer, renovation of Artic city meteorological station.

04

Component #4: Raising awareness and knowledge level of population for the management of stone pit wastes and floods. Activities: Capacity building of community on climate change challenges, promotion of awareness of population on climate change adaptation measures and natural disasters, involvement of mass-media and NGOs in the implementation and promotion of project outcomes.

Focus on

The project is in line with the objectives of a number of strategic documents aimed at biodiversity conservation (Second National Environmental Action Programme of RA), and conservation, sustainable use and regeneration of the landscapes (Strategy of RA on Conservation, Protection, Reproduction and Use of Biological Diversity) and, specifically, it is compliant with the objectives of the National Action Program of Adaptation to Climate Change of Armenia aimed at reduction and management of climate risks in Armenia through addressing the impacts of climate change, taking full advantage of emerging opportunities, reducing socio-economic vulnerabilities, and avoiding losses and damages due to climate change.

Artik, Armenia



Population:

52 263

Area:

416 km²

**Signatory to the
Covenant of Mayors
since:**

20.06.2014

**CO₂ emission reduction
target:**

35%

Targeted sector, climate hazard(s), and vulnerable population group addressed

Target sectors to be addressed by the project are: Agriculture & Forestry, Land Use Planning, Waster, Waste, Environment & Biodiversity, and Civil Protection & Emergency.

Climate hazards to be tackled by the project are: heavy precipitations, floods, flash floods, mudslides and landslides.

Vulnerable population groups to be addressed by the project are: small villagers, adults, women and children, population without permanent jobs and low-paid populations and other target groups suffering most from natural disasters and that have no sufficient means to eliminate the damage caused to their property by natural disasters due to climate change.

THE PROJECT HAS REACHED SIGNIFICANT RESULTS AND OUTCOMES:

Adaptation and sustainability of natural landscapes of the area affected by climate change and anthropogenic factors are increased.



Social, economic, and environmental threats caused by floods as a result of climate change are reduced.



Awareness and knowledge level of the population on the recovery of agro landscapes and flood risk reduction are raised.



USEFUL LINKS

<https://www.adaptation-fund.org/project/artik-city-closed-stone-pit-waste-flood-management/>

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Financing the project

- Financing source(s):**
The project is fully financed by the Adaptation Fund through the grant funding
- Total amount :**
USD 1.435.100

Key figures



Total number of project beneficiaries both direct and indirect – **15.000**



Share of women beneficiaries – **60%**



Total area of land rehabilitated and with increased adaptation capacity - **30** ha of land (**75%**) rehabilitated



Parks and recreational zones established - **2** ha of park and **10** ha of recreational zone created



Restored of soil layer protected against the winds and intense adverse effects of rain – **30** ha



Total length of an irrigation water system installed – **500** m



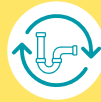
Area of perennial sowing areas of perennial plants are created – **300** ha



Area of hay meadows and arable lands / pastures established – **15** ha / **190** ha



Slopes with geonets and grass sowing reinforced – **500** m³



Storm sewer cleaned – **120** m



Number of garbage bins installed in Artic municipality – **150**

CONTACT

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