Residents of three Turkmen communities – the desert community of Karakum, Nohur village in the Kopet Dag mountains, and the Sakarchaga oasis - are working to increase their resilience to climate change by implementing water efficiency and irrigation measures, and developing water user associations benefiting over 30,000 farmers.

A DESERT, A MOUNTAIN, AND AN OASIS

Promoting climate-resilient farming in Turkmenistan
Roughly 80% of Turkmenistan consists of desert rangeland. The country is naturally arid, and dependent on agriculture for sustenance and commerce, rendering water an especially valuable resource. Climate change is expected to diminish water supplies, increase temperature, further aridification and desertification, and exacerbate regional competition for water.

With funding from the Adaptation Fund and championed by the Government of Turkmenistan, UNDP and the Ministry of Nature Protection of Turkmenistan are working together to implement the Addressing climate change risks to farming systems in Turkmenistan at the national and community levels. The project seeks to strengthen water management practices at both local and national levels in response to climate change-induced water scarcity.

To enhance climate-resilient farming practices, the project held workshops introducing new methods for maintaining soil moisture, and new types of fertilizers such as bio-humus and compost to increase efficiency of water irrigation, soil fertility, and crop productivity.

Communities are also establishing nurseries for growing seedlings of indigenous species. The project provided fencing materials, tools, and equipment for nurseries, and conducted a series of training courses to enhance methods of seed harvesting, processing, and planting. These activities are helping to sustain and promote reforestation efforts. The residents of Nohur, for example, have come together to plant 1,250 juniper trees. These trees are working to counteract soil erosion, water scarcity, and degraded vegetation.

The Adaptation Fund was established to finance concrete adaptation projects and programmes in developing countries that are particularly vulnerable to the adverse effects of climate change. Since 2010 the Adaptation Fund has committed US$ 318 million to finance climate-resilient activities in 50 countries.

For more information on the project, please visit: www.undp-alm.org/projects/laf-turkmenistan