

Adaptation Story

**MONGOLIA** 

atsuuri Lhamsuren, a 60-year resident of Ulaangom in western Mongolia, recalls seeing as a child "lots of melting snow in spring, rainy summers and warm autumn days." However in recent years these seasonal differences have blurred, with less rain and snow and more frequent droughts and dzuds (harsh winters) resulting in fewer water resources and wildlife. Farmers and pastoralists relying on life-giving rivers that descend from the region's glacial Altai Mountains find themselves struggling to adapt to a drier climate, while political and economic



pressure for commercialization of agriculture and more intense use of land and water resources further disrupts their traditional way of life. With mountain snow-fed streams drying up amid unsustainable water use practices and many pastures degraded due to overgrazing from livestock, the majority of Mongolia's 40% rural herding population finds themselves at increasing risk.

In 2012, an Adaptation Fund project began to deliver sustainable ecosystem-based approaches linking herders' survival with environmental health. The project supported establishment of the Uvs Lake/Tes River Basin

Administration to develop and implement an integrated water management plan, combining ecosystem-based adaptation techniques with both simple and high impact technologies such as advanced irrigation systems. It focuses on maintaining critical ecosystems and natural water-provisioning catchments with capacity building activities designed to improve livelihoods of small-scale rural farmers and pastoralists through climate-smart use of land and water resources. Batsuuri heads an Adaptation Cooperative in Ulaangom, one of the project's 12 agricultural demonstration sites along the Kharkhiraa and Ulz Rivers involving area farmers in skill-building trainings to learn water-saving irrigation approaches, pasture rotation, organic gardening and agro-forestry techniques that prevent soil erosion. The cooperatives have led to a marked expansion in the variety of vegetables and fruits grown, water conservation and sharing lessons with neighboring farmers.

Strong implementation through UNDP and coordination with NGOs and Mongolia's Ministry of Nature, Environment and Tourism further ensures synergy between project activities and national policy and planning on climate change and water resource management.





Altai Mountains

### **PRIMARY**

- Combat water loss in mountain and steppe ecosystems to maintain water provisioning services
- Build capacity of stakeholders in ecosystembased adaptation to climate change risks
- Transfer water conservation technology to small-scale farmers, herdsmen and riparian land owners
- Mainstream ecosystembased adaptation and integrated river basin management into national policy and planning



# Adaptation Story Adaptation Fund Adaptation Story

### **MONGOLIA**



We benefited a lot from this Adaptation Fund project by increasing our income, diversifying food resources and most importantly saving our labor and water use. By using sprinkling irrigation in our vegetable field without expanding its size, we increased harvest by at least 25% and used 30% less water. 77

— Jargalsaikhan Shagdarsuren, 58, Adaptation Cooperative leader of six households, Dornod Province, Mongolia

## PROJECT

- Develop integrated water management plans on river basin scale
- Sustainable grazing management training for herders in 17 districts
- Introduce drip/sprinkling irrigation systems to replace inefficient furrow irrigation
- Rehabilitate natural springs to reclaim abandoned pastures and reduce degradation of main river channels
- Establish tree nurseries to supply ongoing riparian reforestation efforts
- Water quality monitoring by school eco-clubs in 13 districts
- Establish 4 surface water quality monitoring stations; and glacier monitoring post for measuring ice levels
- Place 2 Automated Weather Stations and train 40 meteorology/ hydrology technicians; Enhance university curriculum for teachers-intraining on Ecosystem-based Adaptation
- Mainstream Ecosystem-based Adaptation principles in national climate adaptation programs

#### BY THE NUMBERS

**ABANDONED PASTURES RESTORED THROUGH REHABILITATION OF 26 SPRINGS AND 6 WELLS** 

**RIVER BASIN OFFICIALS** & MEMBERS TRAINED **IN INTEGRATED** WATER MANAGEMENT, **ECOSYSTEM-BASED ADAPTATION** 

**HERDER COMMUNITIES ENGAGED IN SUSTAINABLE PASTURE MANAGEMENT TO RESTORE TRADITIONAL ROTATION PRACTICES AND GRAZING MONITORING** 

**EXPANSION OF PROTECTED AREAS IN UPPER WATERSHEDS** 

**CATTLE RECEIVE** WATER SUPPLY DURING **EXTENDED DRY SEASON THROUGH ESTABLISHMENT OF RAIN/SNOW MELT CATCHMENTS** 

**SEEDLINGS** PRODUCED ANNUALLY **FOR RIPARIAN REFORESTATION BY** 10 HA SMALL-SCALE **NURSERIES, 41.5 HA IMPROVED THROUGH REFORESTATION** 

**COMMUNITIES ENGAGED IN 52 SMALL PROJECTS** TO INCREASE WATER **EFFICIENCY,** HERD MANAGEMENT, AND PROTECTION OF **NATURAL SPRINGS** 

**CONSUMERS IMPROVED SKILLS IN WATER-SAVING** AND HARVESTING **TECHNOLOGY** 

**ENERGY-EFFICIENT DWELLINGS** CONSTRUCTED