



Community-Based Adaptation FAST FACTS

KAZAKHSTAN

Autumn/Winter irrigation as an adaptive mechanism for more efficient use of water resources in Sady Shakirov

Grantee: Kogal Public Association

Type of organization: CBO

Number of participants: about 1,462 (266 households)

Location: Sady Shakirov settlement, Talas area, Zhambyl, Kazakhstan

Project Partners: Limited Partnership "Zhardemshi"

CBA Contribution: \$43,140 USD

Co-financing: Kogal Public Association (\$29,705); Limited Partnership

"Zhardemshi" (\$800)

Project Dates: April 2009-April 2011

BACKGROUND

The Community-Based Adaptation Programme (CBA) is a five-year United Nations Development Programme (UNDP) global initiative funded by the Global Environmental Facility (GEF) and implemented through the Small Grants Programme (SGP) delivery mechanism. The UN Volunteers partners with UNDP and GEF/SGP to enhance community mobilization, recognize volunteers' contribution and ensure inclusive participation around the project, as well as to facilitate capacity building by partner NGOs and CBOs. In addition, funding is provided by the Government of Japan, the Government of Switzerland and the Government of Australia. The CBA's goal is to strengthen the resiliency of communities addressing climate change impacts.

This CBA project aims at reducing climate change-driven soil degradation and salinization in Kazakhstan's Sady Shakirov village. Located in Central Asia, Kazakhstan is the world's ninth world largest country. Its climate is continental with average temperatures varying from -12°C in the winter to 30°C in the summer. Although Kazakhstan's economy relies mainly on the export of oil, minerals and metals, agriculture remains an important economic activity. The site of the project, Sady Shakirov, has a population of approximately 1,462 people and is located in the Talas area of the Zhambyl region. The majority of families are engaged in cattle breeding and subsistence farming. During the last few years, there has been a steady decrease in both summer and winter precipitation in the region, which has resulted in a decrease in Talas River water levels. The water is usually used for irrigating farmlands before it reaches the pastures of local communities. The reduction of available river water has led to unsustainable methods of irrigated agriculture, resulting in salinization and other forms of degradation. The use of already damaged lands for unsystematic livestock grazing leads to further degradation, which is amplified by climate change.



A view of the diminishing autumn water supply in degraded lands and pastures

CLIMATE CHANGE RISKS

Long-term climate change projections for Kazakhstan forecast an increase in temperatures, especially in winter, and more evaporation in summer. In the project area, climate change will have a strong influence in the future. It will affect the balance of water resources, the condition of top soil and the composition

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and growth of species. Furthermore, climate change and subsequent aridity will lead to worsening pasture conditions, thereby decreasing crop capacity, species composition and feeding value.

PROJECT DESCRIPTION AND ADAPTATION MEASURES

The main objective of this project is to promote the sustainable development of Sady Shakirov through the introduction of new water and land resource management techniques that will increase its resilience to climate change risks. Public Association "Kogal" has formulated the project through a participatory process involving a variety of local stakeholders. The main adaptive mechanism of the project is the irrigation of the fields and pastures in early spring and autumn periods, allowing for the efficient use of water resources. The activities addressed by this objective include:



Reconstruction of water channels ensure water supply to degraded lands

- The development of water and land resource management to reduce the impact of climate change on degraded lands
- Increased community capacity to implement climate resilient livelihood techniques for water and land management
- The reduction of additional climate change drivers of land degradation
- Raising awareness of climate change risks among the local population

The community will benefit from sustainable agricultural practices and efficient water management techniques that will increase pasture fertility and cattle productivity while decreasing climate change vulnerability.

FOCUS ON...

Global environmental benefit

The project will implement two new water resource management technologies and will restore 60 hectares of degraded land. The project will also put 250 hectares of land under sustainable management practices.

Community participation and sustainability

The local community has played an important role in the formulation of the project, and is responsible for its management. The project has helped empower community members with methods for sustainable water use and the restoration of degraded lands. NGO "Kogal" has committed itself to obtaining the resources necessary to extend the activities started within the framework of this project.

Policy influence

The project will disseminate lessons learned from its implementation for replication and to inform future policies in Kazakhstan and the wider Central Asia.

For more information about CBA or CBA projects visit: www.undp-adaptation.org/project/cba

Further information, lessons learned, and experiences gathered from climate change adaptation activities globally can be found at the Adaptation Learning Mechanism: www.adaptationlearning.net

