

Community Gardens as an Alternative to Livestock and a way to Combat Land Degradation, Mongolia



Project Description

Due to the adverse effects of climate change and the frequent occurrence of droughts in Mongolia, many springs, small streams, natural ponds and even lakes in the country have dried up over the last 15-20 years. The Haraa River is one of the biggest contributors to Selenge River which supplies 60% of the Baikal lake that accounts 20% of world's fresh water resources. In parallel with these adverse effects, there have been rapid increases of livestock heads after livestock privatization in the early 1990s that have also contributed to overgrazing and pasture depletion around the country.

When the community started to experience difficulties with grazing animals and keeping the livestock safe over harsh winters, the "Esun balt" community based organization created an initiative to develop a community garden in a soil eroded and pasture degraded land to demonstrate that planting fruits is a win-win option. On one hand it is a solution to land degradation and an opportunity to generate new livelihood alternatives for herders. To date, this option proved to be so successful that other herders started to follow.

The grant was approved to stop soil erosion, pasture depletion and the destruction of the Haraa river willow trees in the middle stream (close to the grant site) by enhancing the capacity and knowledge of the community members and other immediate neighbors.

Background

In Mongolia, 73.9 percent of the land is occupied by agriculture, 9.4 percent by forests, 15.6 percent by reserve land, 0.6 percent by water resources land, 0.3 percent by cities, villages or other settlements, and 0.2 percent of land is covered by transportation and networks respectively. Land degradation is the most pressing concern in the country, including desertification. According to Ministry of Nature and Environment (MNE) 78% of pastureland is degraded and 20% has a tendency towards degradation.

Causes of land degradation can be divided into human-induced and natural causes. Human-induced causes include weak enforcement of laws and regulations, inadequate cultivation, bad farming practices, overgrazing, poor supply of pastoral irrigation, growing number of livestock, and extensive migration of herder families to the urbanized areas creating more pressure on the surrounding pastoral lands.



Implementing Organization: Esun balt CBO

Location: Selenge province, Bayangol soum, Mongolia

SGP Contribution: US\$8,165

In Kind Co-financing: US\$ 5'200

In Cash Co-financing: US\$2,302

Number of Beneficiaries: 28 members and their families

Duration: May 2005 - April 2006

Awards and Recognition: Recognized by the Selenge province Governor in 2009 for its outstanding contribution to local development.

Implementation

The main activities of the project included: fencing, land cultivation, tree plantation, creation of a wind protection belt and the establishment of a tree nursery to raise seedlings. In particular, the project supported the community in the cultivation of 3 hectares of Glycyrrhiza, a native medicinal plant which has been under serious threat of extinction in the last 15 years, as a measure against soil erosion and land degradation.

One of the key innovations in terms of implementation is the fact that it was led and implemented entirely by a herder group to combat land degradation and soil erosion. Mongolian herders are commonly involved in livestock so this project represents an important change of priorities in the sector and an example on how a community can combat land degradation.

The project also involved the local authority and raised awareness about the issue. As a result, the local Governor and other authorities are very supportive of sustainable projects and added environmental sustainability as a element in the planning process of the village.

The main challenge the community faced during the implementation was to raise awareness among the neighbors of the importance of combating land degradation as some herders were complaining of decreasing pastureland and blocking passage of livestock to wider pasture areas. To overcome this challenge, the community cooperated with a local TV station and newspaper to raise awareness at the community level of the importance of these sustainable projects and the benefits for the community in terms environment and livelihoods. The local government greatly supported this community activity and called on many others to do the same.

Environmental Impact

Before project implementation, the land was overgrazed, degraded and suffered from droughts frequently. Through the project the community fenced 2 hectares and planted over 2000 sea buckthorn seedlings with many other fruits including black currant, apple, wild cherry, raspberry and sweet brier in response to land degradation. A wind protection belt was established around the garden with the plantation of over 1500 aspen trees and a community tree nursery that produces about 200,000 tree seedlings a year was created.

Sea buckthorn is a drought resistant crop and one of the most suitable fruit trees to grow in the harsh continental climate conditions of Mongolia. The roots go deep into the soil and get stronger year after year. Being a fruit tree with high regenerative capability, the sea buckthorn can be used to combat soil erosion, land degradation and to fix sand movement. It is also useful in keeping water and soil moisture balanced in river banks and for creating green belts.

Four years after the creation of the garden the community was able to harvest 1.8 ton of sea buckthorn, 300 kg of black currant and some quantities of other berries. The community started beekeeping in 2009, and harvested 200 kg of honey from their 15 bee colonies in 2010.

Land degradation and soil erosion stopped and the land is fully recovered. In addition, the community is deeply engaged in the protection of Haraa river ecosystem.

Given their initial success, in 2008, the community was given 20 hectares of land to spread or replicate the good practice. Ten hectares of the allocated land is now going to become a community protected area.

The community also organizes awareness raising events and conducts training seminars for village residents and families. As a result, over 230 individual families in the village have gotten fruit trees planted in their plots and many of them have already started harvesting fruits.

The next challenge of the community is to set up a workshop to process fruits and make local brand named juice, jam, honey, wine and other products.

Socio-Economic Impact

Since 2005, the annual income of every member of the community has increased by least 2.5 times. Eight families are gradually getting out poverty and are now able to invest in their children education and health. The project site has become a workplace for all family members elder or younger, educated or not educated.



As of 2011, the community owns 2500 sea buckthorn bushes, approx. 1000 other berries bushes, 1500 decorative trees, 2 wells, and 3 greenhouses. Since 2005 the project has continued to grow and expand on a yearly basis and has been able to hire more people.

Through the project, the community has become capable to invest in farm equipment or homemade product technology. Awareness of protecting and conserving the nature, while making profits is well spread over many communities around. The next challenge of the community is to set up a workshop to process fruits and make local brand named juice, jam, honey, wine and other products.

Policy Impact

Since the beginning of the project the local government has been very supportive of the project and has been greatly influenced by the results achieved by this and other communities that followed their example.

In particular, the community has been successful to influence policy at the soum level (an administrative unit under the province) with the demonstrated and sustained results of the project which has led the local government to become the first “green village” in the country.

Gender Equality and Women’s Empowerment

As a community consists of families, SGP ensures equal participation of family couples. At the beginning of the project the roles of women were modest, (i.e. assistance in planting trees, planting seeds in greenhouse and sometimes irrigating) through the development of the project their roles have increased by actively participating in harvesting and fruit processing, selling products, etc.

In some few cases, females are dominant, because of woman headed families among community members. Half of the immediate beneficiaries are women: 8 immediate beneficiaries and 7 secondary beneficiaries.



“If community members are united and understand each other well, everything can be done successfully”.

– Mr. Dagvadorj, Community Leader

Sustainability

This project has proved to be sustainable over the years. Some of the key elements for their success are the continued community participation, the support of the government and the media and the capacity building activities that provided the community the knowhow and skills needed to carry the project as well.

A training workshop organized by SGP in 2008 was useful for further development and sustainability .

Contribution to the MDGs



- Increased income by at least 2.5 times
- Created additional jobs for the community and neighboring communities
- Increased the assets of the community



- Created job opportunities and increased income of 15 women
- Trained women in fruit harvesting and processing
- Bolstered the involvement and bargaining power of women in the community



- Recovered degraded land and soil moisture
- Protected the Haraa River ecosystem
- Increased community-based conservation and management of forests

Replication and Upscaling

The project has been replicated by 4 neighboring communities and 11 individuals and small companies in the Bayangol soum area alone. In addition, the project has been up scaled by the community with great rates of success. Mr. Darvadorj, one of the active grantee partners, has presented the model to other communities and SGP grantees.

In terms of replication, the project would be easy replicate in other communities. In Mongolia “we say it is better to see once rather than listen 100 times.”

A few considerations for the successful replication of the project include: Ensure regular knowledge exchange visits to the project to learn from their experience, and careful selection of fruits and other tree types in relation to the local environment.



Lessons Learned

Tree planting is successful when it is community based and when the interests of the communities and the benefits to the global environment are met.

Community gardens raise awareness for people and bring great benefits to communities in terms of improved land conditions and increased income.



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Community Global Impact