

Food Assistance for Assets: Building climate resilience and enhancing livelihoods opportunities in Badakhshan, Afghanistan

Badakhshan is one of Afghanistan's most remote provinces. This remoteness has limited access to markets and jobs for residents of eastern Badakhshan where over 90% of the population relies on subsistence agriculture and livestock production for their livelihoods. Yet in recent years, deforestation and overgrazing have aggravated soil erosion, which in turn has reduced crop and livestock production in the area. Moreover, the region is highly vulnerable to natural hazards, such as droughts, earthquakes, and flash floods. Climate change is expected to further exacerbate these challenges, including through changes in weather patterns, and increasing water scarcity as glaciers retreat and snowfall is reduced.

In 2014, WFP teamed up with the Rupani Foundation (RF), UNDP and UNEP to establish the Green Badakhshan Initiative (GBI), targeting six districts in eastern Badakhshan—Ishkashim, Shughnan, Wakhan, Zebak and Warduj*—all classified as having emergency or crisis food insecurity levels on the IPC scale. The project began with community-based planning consultations during which community members identified the activities they felt would have the greatest impact in building their resilience to shocks and stressors and improving their food security situation. The community-identified assets, including irrigation canals, flood protection walls, roads, orchards, vegetables gardens, and land

LIVES

^{*} Activities in Warduj were discontinued in 2016 due to security concerns.

Key achievements:

Over 2,133 hectares of land, including in valleys and on slopes, have been planted with trees and shrubs, helping to stabilize slopes and control erosion, improve water retention and soil fertility. It is anticipated that reclaimed land will also provide livelihood benefits, such as new income from selling sea buckthorn berries for oil production for cosmetics, fodder, fuelwood and construction material for houses.

Irrigation canals have helped to ensure that reclaimed and agricultural land receive adequate supplies of water.

Flood protection walls have been constructed to protect villages and reclaimed land from flash floods.

Roads and trails have increased access to markets allowing villagers to buy and sell items.

Programme participants have observed an increase in their dietary diversity and an increase in their income as a result of the vegetable gardens.

Gender mainstreaming in FFA programming

In addition to ensuring the equal participation of men and women in the planning phase of the GB Initiative, to encourage their economic empowerment, women have specifically been targeted for several garden and tree planting projects. In total 1.1 million trees have been planted by 2,000 women. Poplar trees in particular, cultivated by many of the programme participants, can be a significant source of income as each poplar can be sold for US\$ 50 to US\$ 60 three years after being planted.

reclamation through the planting of trees and shrubs, were implemented under WFP's Food Assistance for Assets (FFA) programme in partnership with RF. While implementing these assets, FFA participants and their families received food rations on a monthly basis for a period of three to five months. Assets were implemented on common land in every village as verified by the District Governor's Office and District Agriculture Officers. Every household irrespective of wealth or gender has equal access and ownership of the assets created. The FFA intervention was complemented with activities undertaken by UNDP, including the provision of fuel-efficient stoves to programme participants to encourage a reduction in firewood collection, and activities undertaken by UNEP, which has led on environmental education.

PROGRAMME IMPACT

The integrated interventions implemented as part of the GB Initiative have contributed to building the resilience and improving the food security and nutrition of beneficiaries in a holistic and sustainable manner. Vegetable gardens and orchards have allowed for more diverse and nutritious diets for beneficiaries and their families as well as an additional source of income. While tree planting activities require time to mature in order for communities to experience their full benefits, it is anticipated that they will allow for a number of environmental benefits, including contributing to the stabilization of slopes—trees and shrubs have been planted in valleys and on hillsides—and erosion control, improving water retention and soil fertility. Additionally, trees and shrubs will provide for livelihood benefits such as new income from selling sea buckthorn berries for oil production for cosmetics, fodder, fuelwood and construction material for houses. Newly built and rehabilitated irrigation canals have helped ensure that reclaimed





Key achievements (contd.):

20,416 households and over 157,051 people have directly benefited from FFA food rations and from the community assets created.

170 community forests have been established through the planting of 6 million non-fruit trees and shrubs. 1.1 million of these trees were planted by 2,000 women.

More than 2,133 hectares of wasteland have been planted with shrubs and trees.

2,600 fruit and vegetable gardens were established with 53,000 fruit trees planted and 2,470 trees grafted.

375.5 kilometers of irrigation canals were built or repaired to improve water supply to agriculture and reclaimed land.

224 kilometers of access roads and trails were built or repaired. Seven villages now have road access for the first time.

To protect agriculture and reclaimed land, 5,670 meters of protective flood protection walls have been built protecting over 500 hectares of land and over 250 houses.

World Food Programme

Photos by: Rupani Foundation unless otherwise specified. Prepared WFP Afghanistan Contact: hafizurahman.nasiri@wfp.org "Years ago, when we returned from Pakistan, there was nothing to do and our men did not have enough work. Now, both women and men are busy in their fields, we have a road to our village, we have gardens and our lives are improving" – Muzghan, GB Initiative participant

land and agricultural land receive adequate supplies of water. Roads and trails have provided communities with access to health clinics and markets to sell and purchase items. Flood protection walls have been constructed to protect villages and reclaimed land from flash floods.

Muzghan, an FFA programme participant, lives in Wakhan corridor with her husband and children. She spent her childhood in a refugee camp in Pakistan, where she fled with her family during the 1979–1992 Afghan-Russian war. "I remember seeing and tasting fruit in Pakistan, but never since I returned to Wakhan," remarks Muzhgan. Since participating in the Green Badakhshan Initiative, Muzghan grows her own fruit trees and cultivates vegetables on a small plot of land close to her home. "Years ago, when we returned from Pakistan, there was nothing to do and our men did not have enough work. Now, both women and men are busy in their fields, we have a road to our village, we have gardens, and our lives are improving," she says. Her husband Ramazan is happy that his wife now owns a garden: "Our life has improved a lot. We receive food from WFP every month and we work together to grow our own fruit." Muzghan adds: "Our children will be eating fruit from their own trees."

The positive impact that the GB Initiative has had across Ishkashim. Shughnan, Wakhan and Zebak has been achieved through the use of nature-based solutions that seek to rebalance the ecosystem and render it productive for local communities in a sustainable manner. Native trees and shrubs well suited for the local environment, including poplars, willows, tamarisks, sea buckthorns and alfalfa, were planted to help restore soil fertility and rehabilitate barren land, stabilize slopes, improve water retention, reduce pressure on natural vegetation, and provide protection from wind. Alfalfa will have the added benefit of improving livestock productivity—this forage crop can be used for animal grazing, hay, silage and can also be used as a cover crop to improve soil quality. Vegetable gardens and orchards were planted with fruit tree species chosen based on suitability for the local soil and climate conditions and programme participants were trained on grafting and cultivation of fruit and trees. Protective flood walls and irrigation canals were constructed or rehabilitated using stones collected locally and transported to project sites by communities.

Beyond utilizing locally-available natural resources to strengthen the integrity of the ecosystem, the GB Initiative also promoted low-tech solutions based on local capacities ensuring that communities are fully able to maintain and expand the investments made. Community Development Councils (CDCs) formed as part of the GB Initiative have supported communities to become the custodians of their local ecosystems. Each CDC oversees the regulation of resource use, including by controlling firewood harvesting and ensuring that livestock does not graze in reclaimed areas for a period of ten years. Additionally, caretakers have been appointed by communities to water trees and shrubs as well as monitor forests for any unauthorized activity and irrigation canals for any repair needs. In exchange, each household pays their respective caretaker seven to fourteen kilos of wheat annually depending on the size of the land being monitored.

On right: in 2015 shrubs and trees were planted across 82 hectares of barren land in Qilla-ePaja, Wakhan. Satellite imagery from WFP's Asset Impact Monitoring System (AIMS) captures the area before (2012) and after (2018)

Below: FFA programme participant Muzhgan and her husband Ramazan. Muzghan is cultivating fruit trees and vegetables on a small plot of land next to her home.

Photo by WFP/ Wahiduallah Amani





