



COMMUNITY BAKERIES IMPROVE LIVELIHOODS

A collaborative solution to address environmental, economic and social issues

Up to now, bread baking was involving considerable expenses in time, energy and money for the population of Kahmard's district in Afghanistan. While children and men had to harvest or buy shrubs for fuelwood, women had to bake the bread. Moreover, the Kahmard's region has been facing flash flood events, destroying people's crops and jeopardizing their livelihoods. The flood intensity has increased due to the degraded land cover, resulting from intense grazing and shrub cutting. Thus, community bakeries with their energy-efficient and cost-effective technology have been a seminal response to watershed restoration concerns as well as for improving people's livelihoods.

“The whole village is profiting very much from the bakery, there is unity in the village, they [villagers] have more time to visit each other, and the bakery has also become a meeting point in the village. ”

Testimony from a focus group discussion with male CDC – Laghaki.

CONTEXT

Over 80% of the population of Afghanistan lives in rural areas. After 30 years of war, food shortages and poor living conditions, especially in rural areas, pose a major threat for the longer-term recovery and stability of economic growth in the country. Over the last years, the situation has further deteriorated because of severe weather conditions (persistent droughts, flash floods), growing insecurity and poor infrastructure conditions.

Kahmard, located at 1,475 meters above sea level, is a district of Bamyan Province in central Afghanistan. Livelihoods of the district's rural population (about 8,000 families) depend on limited irrigated land at the bottom of the valley, where mainly wheat, potatoes and fodder crops are grown. Farming is mainly subsistence based and livestock is an important source of livelihood. Over many years there has been a persistent overuse of Kahmard's watershed resources as a result of over-grazing and over-harvesting of shrubs for fuelwood. This uncontrolled use of degraded watersheds is leading to severe flash floods in the valley, destroying houses, farmland and infrastructure, thus jeopardizing people's lives.

The Kahmard population now realized that flash flood problems can only be solved through improved management of watersheds where runoff and erosion originate.

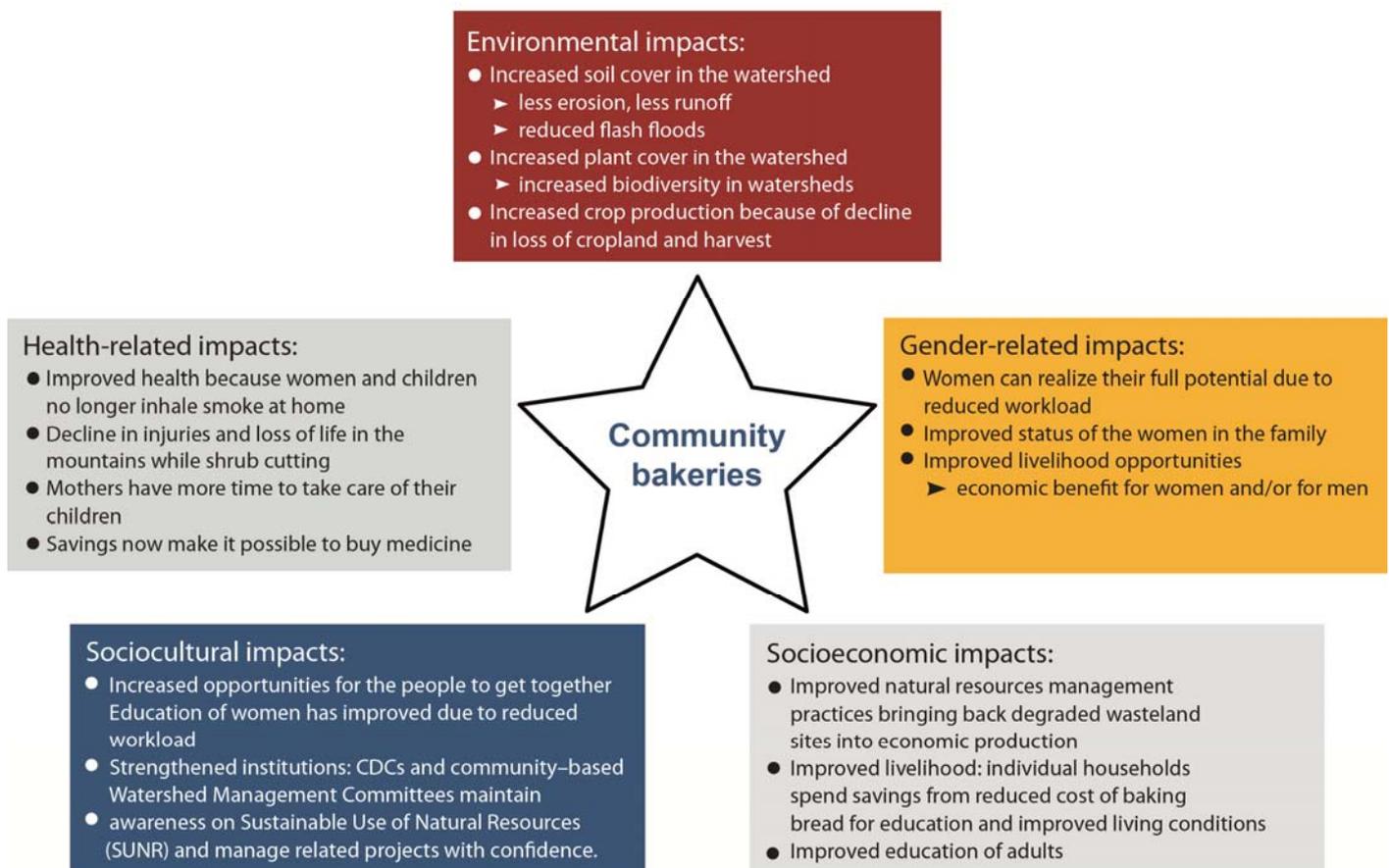
HELVETAS SUPPORT

To address these challenges Helvetas launched a community-based watershed management project in 2008. A series of structural, biological and management measures have been taken in order to reduce flood risk and to improve fodder. Watershed Management Committees (WMCs) in association with existing Community Development Councils (CDCs) are responsible for the project's implementation.

Re-establishing plant cover in the watersheds was one of the pre-requisites for improving water infiltration in the soil, buffering downstream water flows and enhancing the potential of land production.

A viable option for reducing shrub use suggested by the communities was the establishment of coal-based "community bakeries". The people pointed out that large amount of shrub were being burnt as fuel for home-based bread baking and that this could be avoided if people had access to community bakeries. Kahmard district is famous for its coal mines and all families regularly buy coal to heat their homes during the cold season. Taking this opportunity, Helvetas promoted energy-efficient community bakeries in the frame of integrated watershed management, with important interrelated benefits (see figure below on impact hypothesis).

Impact Hypothesis of introducing community bakeries



RESULTS



View on the bare hillsides of Kahmard District (Photo Helvetas)

The 13 community bakeries operating since October 2009, have been built in the Kahmard district as a part of an overall approach to sustainable and productive management of degraded watersheds. An impact study (“Results Survey of Community Bakeries Kahmard District, Bamyan Province, Afganistan”), was carried out in August 2010, showing a series of important results:

Next to the contribution to limit land degradation and to prevent flood damage, the reduced shrub use for fuelwood improves socioeconomic, socio-cultural, and health conditions.



Donkeys, loaded with shrubs (Photo: Helvetas)

The monthly cost of the bakery for each family is equivalent to the amount of money men can earn in a day’s work, and to the price of a load of shrub that only lasts 2-3 days. Since the bakeries have been introduced, shrub use has declined by 90% and the household monthly savings are up to 16 days work equivalent, allowing diversifying food, buying medicine or school supplies.

Many women are now convinced that coal is an excellent fuel alternative for community bakeries and that in turn it will exert a positive impact on natural resources in the watersheds. Shrub cutting has declined since people bring

their dough to the community bakery, contributing to a better watershed management and flood risk reduction. A few months after the bakeries operated, vegetation cover showed signs of recovery. However, the buffer effect on surface runoff and infiltration needs more time to become significant during extreme rainfall events.

The bakeries reduced the daily workload of women, men and children and improved the health of all family members. Women and men were able to spend their time on more productive activities and more children attended school. The bakeries also fostered a deeper sense of community. Families now spend less money on shrub. Savings and additional income are used to buy extra food and non-food items, which in turn improves the livelihood situation of individual households.

Almost 75% of the women mentioned that they

““ Now we have enough money to buy school books for our children, enough time to look after their health and children can go to school after breakfast. The bakery is a real blessing in our life. ””

Female bakery customer Shireen Gul – Laghaki

are very happy with the bakeries and most of the men said that there are no negative aspects to the bakeries. Looking at the different advantages of the community bakeries, replication potential of the approach becomes evident. Thus, by women’s request, Helvetas has now extended its support to the neighbouring districts for bakery building.

““ The bakery brought equal advantages for the male and the female groups in the village: we male are not doing the heavy work of collecting shrubs in the mountain anymore and the women are free from the heavy burden of baking bread and being exposed to heat and smoke. ””

Male bakery customer Khair Mohammad – Sangchel.

““ If we stop cutting shrubs in the watersheds, we reduce the risk of runoff destroying our gardens and houses. ””

Female bakery customer Najiba Jan – Roye Sang



Traditional tandoor oven for baking bread: shrubs are used for fuel, fire is placed in the same chamber as the bread; smoke escapes into the room (Photo: Helvetas)



New energy efficient stove: coal is used as fuel, fire is set in a separate chamber which is accessed only from the outside; smoke escapes via chimney out of the building. (Photo: Helvetas)



Community members checking and trying bread which has been baked in the newly established energy efficient community bakery stoves (Photo: Helvetas)

“ There is a clear economic benefit arising from the bakery; before we had to spend a great deal of time gathering shrub or even money to buy it. ”

Statement from a focus-group discussion with male CDC – Laghaki

Since 2003, Helvetas is implementing a development programme in Afghanistan, addressing issues of rural water supply, sanitary facilities, watershed management, disaster risk reduction (DRR), infrastructure, vocational training and skills development. For more information, please see:

http://www.helvetas.ch/wEnglish/competencies/documented_experiences/doc_resources.asp?navid=16
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