



# **Empowering Women to Drive Sustainable Energy Access in Rural Tajikistan**

A Catalyst for Community Development  
and Wellbeing



# Context

In Central Asia, energy access challenges persist. These significantly impact the lives of rural communities, with women being disproportionately affected. Rural women still carry out the bulk of traditional household chores, which hinders their participation in economic activities, education, and healthcare. However, if provided with the right tools and renewable energy solutions, women could play a pivotal role in the energy transition and act as agents of change to contribute to the overall resilience and sustainability of their communities, while also having a positive impact on the environment.

The Yaghnob valley is frequently exposed to natural hazards including heavy snowfalls, floods and avalanches. As a result, from the winter to spring, its limited road infrastructures become unavailable, and the valley's population of 449 people completely isolated.

To help overcome these challenges, the Organization for Security and Co-operation in Europe (OSCE) conceived a **pilot initiative to test and evaluate the impact of solar-powered devices on women living in this valley.**

The OSCE provided **20 households with off-grid clean energy technologies and trained the women** whose homes received the new technology.

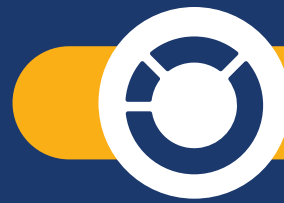
**Gharmen, Khishortob and Qul villages**, which lie at an altitude of up to 2,700m above sea level and are isolated from central energy networks, were selected for this initiative. The three villages rely on firewood, manure and coal for cooking and heating needs.

This activity was part of the OSCE project: "Promoting Women's Economic Empowerment in the energy sector in Central Asia", which was financed by Austria, Germany, Italy, France, Norway, and Poland.

## Yaghnob Valley



# Key Facts



## About the women

Average age group: **30-40 years**

Average household size: **6.3 family members**

**56%** have children under the age of 18 in their household

**82%** have only a basic level of education

**14%** lead the households as their husband migrated for work

## Access to Energy

**68%**

Use firewood/manure as the main source of fuel

**8.6%**

use liquefied coal/natural gas

**17%**

turn to firewood/coal

**4.3%**

use liquified gas



## Fuel used for cooking

**52.1%**

Firewood/coal

**34.7%**

Liquefied gas

**21.7%**

Firewood/manure

Most women spend **4-5 hours** a day collecting fuel and preparing firewood, and **3 hours** per day cooking. This means 7-8 hours total are spent to prepare food daily.

These fuels use for cooking generate a lot of smoke, which can **irritate the eyes and respiratory tract.**

About **68%** walk more than **40 km** (twice per month, during the summer season) to procure firewood.

**No participant uses electrical devices** at home due to the lack of electricity nor have knowledge on alternative energy sources.



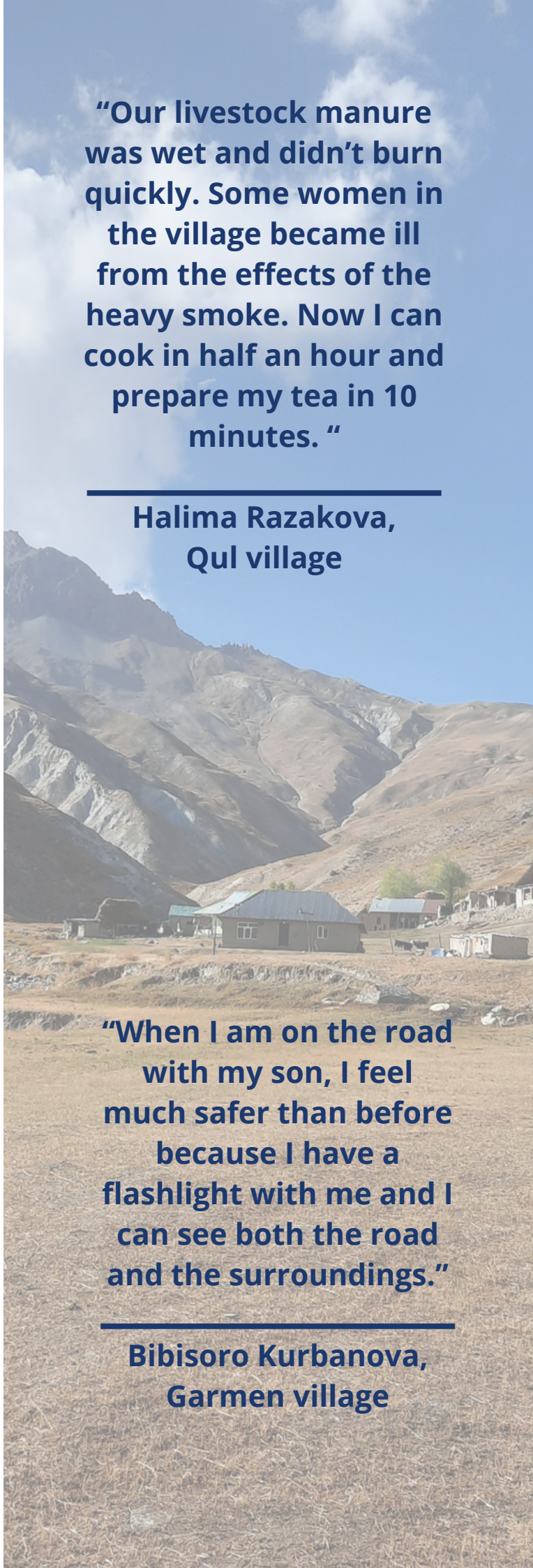
# Activity

The OSCE provided women from the Yaghnob Valley with the off-grid clean energy technologies of **solar parabolic cookers and mini-solar power stations, and trained the women on how to use them. We also provided training on the basics of renewable energy as well as teaching them soft skills** to build their capacity in this regard, ultimately empowering them to drive positive change in their communities through clean energy access.

Since embracing the clean energy devices provided by the OSCE, these women report a remarkable reduction in household tasks, which now takes **2.5 hours per day. They also produce less biomass to meet their energy needs.** This not only enhances their health and benefits the environment, but also holds the promise of long-term financial savings for the entire community.

The portable solar power stations include a **flashlight, which is proving extremely valuable for the safety of these remote communities,** especially during evening journeys as residents often walk through narrow, snow-covered roads inhabited by prairie dogs and wolves.

Family members are also using the flashlights at night to tend to their livestock, highlighting the crucial role of the initiative and off-grid clean energy technologies in supporting local livelihoods.



**“Our livestock manure was wet and didn’t burn quickly. Some women in the village became ill from the effects of the heavy smoke. Now I can cook in half an hour and prepare my tea in 10 minutes.”**

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**Halima Razakova,  
Qul village**

**“When I am on the road with my son, I feel much safer than before because I have a flashlight with me and I can see both the road and the surroundings.”**

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**Bibisoro Kurbanova,  
Garmen village**



# Impacts



## Reduced time poverty

The free time won through the use of off-grid technologies can now be used for other meaningful activities and to rest. If adequately supported, this could lead to new training or income-generating opportunities.



## Improved Health

Thanks to the off-grid clean energy technologies we provided, women in the villages can now cook safely, without being harmed or affected by the health risks posed by the smoke from animal manure or solid fuels.



## Enhanced Safety

Women and their families now live and work in safer conditions. The flashlight included in the mini solar station provides lighting in rooms and outdoors. Villagers reported that they feel safer when they walk across villages or have to finish work after sunset.



## Community Benefits

While women are the primary beneficiaries of these devices, the positive impacts are being enjoyed by the whole family and neighbours. For instance, children and husbands use the flashlight at night to keep an eye on the cattle.



**“My hands were cracked due to the cold water. They hurt on cold days and the traces of dirt would still remain. In the evening my clothes used to smell of ash and smoke... (now) my clothes are cleaner and don't smell like smoke, and the scars on my hands are less.”**

**Gulbibi Sattorova,  
Khishortob village**