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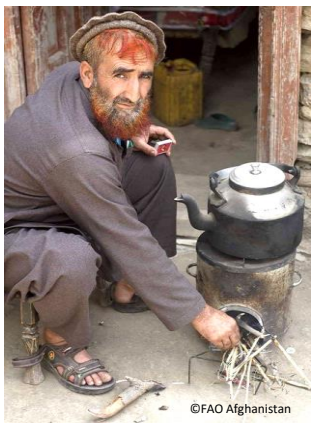
REDUCING GREENHOUSE GAS EMISSIONS THROUGH COMMUNITY FORESTS AND SUSTAINABLE BIOMASS ENERGY IN AFGHANISTAN

In Afghanistan, the harvesting of biomass fuels (wood, shrubs, crop residues and dried animal dung) to supply energy for cooking and heating has resulted in substantial deforestation and land degradation. This has been accelerated by the disruption of socio-economic structures and widespread environmental damage caused by decades of instability and violent conflict. The Government of Afghanistan has acknowledged the importance of adopting improved practices for natural resources management (NRM) and increasing access to sustainable, affordable energy. However, the introduction of sustainable alternatives to traditional practices, for example improved forest management or alternative cooking fuel techniques, requires sustained technical support and investments in research, monitoring, capacity building and awareness raising. Against this background, the project aimed to reduce greenhouse gas (GHG) emissions by promoting community-based management of forests and natural resources, and removing barriers to sustainable biomass energy in two target districts (Salang and Dara-e-Noor) in Afghanistan.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WHAT DID THE PROJECT DO?

The implementation of selected interventions in Salang and Dara-e-Noor districts resulted in a significant reduction in GHG emissions. These interventions included the establishment of woodlots, the construction of check dams and protection walls, the design, testing and adoption of innovative sustainable biomass energy systems (SBES); as well as improved management skills on forestry and rangelands. The community-based natural resource management (CBNRM) approach and SBES were mainstreamed into national policies and frameworks for renewable energy and forestry. Ten Forest Management Associations (FMAs) were established and officially registered with the Ministry of Agriculture, Irrigation and Livestock (MAIL), and received support on sustainably managing their natural resources; including the preparation and implementation of CBNRM plans. Capacity building was a fundamental part of the project, as training was provided for FMA members and staff from government line departments on energy-efficient thermal devices, CBNRMs, and forest inventory and carbon measurement, among other things. A total of 28 169 beneficiaries in both project sites were reached through awareness-raising and training activities.

KEY FACTS

Contribution
USD 1 735 160

Duration
August 2016 – July 2019

Resource Partner
Global Environment Facility (GEF)

Partners
Ministry of Agriculture, Irrigation and Livestock (MAIL), National Environmental Protection Agency (NEPA), Ministry of Energy and Water (MEW), Ministry of Rural Rehabilitation and Development (MRRD), Kabul University, *Welthungerhilfe* (WHH), and *Mission d'Aide au Développement des Économies Rurales en Afghanistan (MADERA)*

Beneficiaries
Participating local communities, particularly through representatives of District Development Assemblies (DDAs); Community Development Councils (CDCs); Forest Management Committees (FMCs); local people; and private sector

IMPACT

The project succeeded in reducing GHG emissions from land degradation, deforestation and biomass burning, thus generating global benefits through the mitigation of climate change effects. Specifically, the total amount of GHG emissions was reduced by 12 429 tonnes C02 equivalent (tCO2e) per year in both project sites, owing to the adoption of SBES; and wood consumption was reduced by around 50 percent, directly alleviating the pressure on forest. In addition, for the beneficiary families, more available time and fuel-efficient cooking and heating technologies have resulted in larger household incomes; as well as improved health and well-being. As one of the project beneficiaries, Abdul Malik, pointed out: “For my wife, going to the woods every day is rapidly becoming a distant memory, and now she can help take care of the home and children much more”.

MAIN ACHIEVEMENTS

- Three strategic/planning documents, including revised Renewable Energy Strategy and Action Plan, National Forest Management Plan, and Renewable Rural Energy Strategy, reviewed and promoted; and technical inputs provided to integrate CBNRM approach and sustainable biomass energy systems into these documents.
- Ten FMAs established in two targeted districts and formally registered at district, provincial and national (MAIL) levels.
- Ten CBNRM plans, including establishment of FMAs and forest use rights, developed in two pilot districts, and approved/endorsed at FMA, district, provincial and central (MAIL) levels.
- Forest inventory and carbon measurement at forest sector conducted in both target locations, in 10 FMAs.
- 70 ha of deforested area of Salang district reforested, through five registered FMAs of the district.
- Community forest and natural-resource management plans implemented in 24 000 ha of forest in two target districts.
- 38 ha planted with total of 32 576 saplings (fruit and non-fruit) in two target districts.
- Fuel-efficient thermal devices, including cooking stoves (1 420), *bukharis*/air heaters (900), *tandoors*/ovens (160), solar cookers (20), and biogas digesters (40), demonstrated and deployed to 2 540 households in two target districts; and 5 910 fuel-efficient cooking stoves distributed in Kuanr and Paktiya provinces.
- 20 local artisans/tinsmiths trained on production of fuel-efficient stoves and *bukharis* in both target provinces.
- 21 masons trained on construction of biogas digesters, and training provided for 40 biogas digester beneficiaries on their operation and maintenance.
- 35 staff members from government line departments, with representatives from both districts, received training on SBES and biogas digesters.
- Two popular/‘grey literature’ articles developed to promote SBES, and disseminated through government media; and two “best practices” reports and two policy briefs developed.
- Total of 2 379 awareness-raising sessions conducted on NRM, SBES, deforestation, etc. for 28 169 participants (10 076 men and 18 093 women).

Project Code
FAO: GCP/AFG/081/GFF
Donor: 5610

Project Title
Reducing Greenhouse Gas emissions through Community Forests and Sustainable Biomass Energy

Contact
FAO Representation in Afghanistan
FAO-AF@fao.org

Partnerships and Outreach
For more information, please contact: Reporting@fao.org

Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome, Italy

SUSTAINABLE DEVELOPMENT GOALS