



## CASE STUDY TITLE

### The W+ Standard™ Applied to Biogas Stoves Project in Nepal



#### SUMMARY

The W+ Standard™ is a unique certification label developed by WOCAN that endorses projects that create increased social and economic benefits for women participating in economic development or environment projects, including those that provide renewable energy technologies, time and labour-saving devices, forest and agriculture activities, and employment opportunities.

The W+ measures women's empowerment in six domains: Time, Income & Assets, Health, Leadership, Education & Knowledge and Food Security. It produces quantified women-benefit units that contribute towards post-2015 Sustainability Goals (SDGs), Climate Financing or Corporate Social Responsibility (CSR) targets. The units generated by the measurements can be monetized and sold through brokers and platforms that transact sales for carbon emissions. Twenty per cent of the value of the units sold is channelled to women engaged in the project.

The Biogas Stoves Project was implemented by the Alternative Energy Promotion Centre (AEPCC) in Nepal and provided rural communities with biogas cookstoves. Before biogas systems, women in these communities spent several hours each day gathering and processing fuelwood in the forest for cooking. The shift to biogas not only transformed women's lives by relieving them of the need to collect fuelwood from the forest but also reduced the pressure on forests.

The W+ Standard™ measured the time saved for 7,200 rural Nepalese women in Kavre and Sindhuli districts who replaced their wood-generated stoves with biogas stoves, relieving them of the need to collect fuelwood from the forest. Women now have the opportunity to pursue income generation, community leadership, and leisure and self-improvement activities. After the sales of some of the W+ Time units were generated, payments made to 12 women's groups provided them with funds to

#### AT A GLANCE

##### COUNTRY

- Nepal

##### LEVEL

- National

##### SDG ADDRESSED

- SDG 7 - Affordable & Clean Energy

address their self-identified needs for a water supply system, diversified agricultural crops, and group savings accounts. The W+ Standard™ was awarded the Women for Results Momentum for Change award of the United Nations Framework Convention on Climate Change (UNFCCC) based on the application of the W+ to this project in 2016.

#### BACKGROUND

The W+ Standard and its complementary Program Guidance Document were developed in 2012 and 2013 in response to the concern that women - who are often primary farmers and environmental managers in developing economies - are not compensated for benefiting from climate change adaptation and mitigation efforts.



## BACKGROUND

Climate and carbon financing mechanisms were identified as providing opportunities to provide benefits to women and support their empowerment, through specific project design enhancements that could improve both women's well-being and carbon project outcomes.

WOCAN selected Nepal to implement the first W+ application, in partnership with the Alternative Energy Promotion Centre (AEPC), South Pole Carbon, HIMAWANTI and AASTHA (two national level federations of women's groups engaged in the forest and agriculture sectors). The project was implemented with 7200 women who had been using biogas digesters distributed through the Biogas Distribution Program of AEPC in Kavre and Sindhuli districts.

The main objectives of the project were as follows:

- To quantify the time saved by women through the use of biogas using the W+ Time methodology and understand how women biogas have used the time saved;
- To identify mechanisms for revenue sharing with women beneficiaries
- To generate W+ Time units that can be sold
- To sell these units and return revenues from the sales to women of the project area

## STRATEGY

The implementation of the W+ Time method adhered to the following steps:

- Stakeholder consultations in the 2 districts: The main aim of the consultations was to introduce the W+ Standard and generate discussions on existing benefit-sharing mechanisms of resources.
- Implementation of the survey with biogas users and a comparable sample of non-users to establish a baseline: A total of 20 women (18 female and 2 male) were trained as enumerators to implement the survey. The surveys were coded and translated into Nepali, and the training was conducted in each district for a day each. Each enumerator was responsible for conducting interviews with 25/26 households
- Collection and analysis of data: Analysis was done by the women of the selected villages, who were trained and paid for the gathering of baseline and results from data. This itself was an empowering activity, as these women had never been asked to collect data and had only been the subjects of others' research.
- Establishment of a revenue-sharing mechanism: HIMAWANTI was selected to manage the payments to the women's groups. It held consultations and a planning session with women leaders to determine how to best use these funds to address their self-determined needs. HIMAWANTI prepared a report on the use of the funds, showing that most groups used them for climate-resilient activities, such as increasing the agrobiodiversity of their home gardens, building water supply systems, etc.
- Project validation and verification: verification was done by two verifiers from the Social Auditor's Network, which is the official W+-approved verification body.





## RESULTS & IMPACT

Results from the application of the W+ Time method showed that biogas technology had the greatest impact on women in terms of time savings. The overall results found that women saved 136 minutes or 2.26 hours per day as a result of using biogas technology. For biogas users of less than 2 years, the total savings generated over this period amounted to 286,508,222 minutes or 4,775,135 hours. For biogas users of more than 2 years, the total savings generated over this period amounts to 2,539,304,737 minutes or 423,217, 45.61 hours of time saved. The largest amount of time savings was generated by reduced cooking time, followed by time reductions in cleaning utensils, water collection, firewood collection, preparation of organic manure from livestock and household waste.

The time saved by women biogas users was reallocated to other activities. Women biogas users reallocated comparatively more saved time to productive activities (e.g., labour, crop and livestock, home-based income generation) though only 18% reported increased productivity. Relatively less time (saved) was reallocated to household activities such as cleaning the house, leisure and rest, caring for children, etc.

A large percentage of respondents said that the time saved had freed up more time for them to attend group activities such as meetings and training. A similarly large percentage of respondents reported no biogas related fire accidents had occurred, though those that did said that the accidents were related to burning from hot water spills and touching hot utensils.

## CHALLENGES & LESSONS LEARNED

One of the key challenges has been the sale of the W+ units generated. There is not yet a market for such social impact units readily available, so it is necessary to build this market with corporates, investors, donor funds and individuals. The innovative nature of this is not easy to communicate to potential buyers. As well, without similar products and services on the market, it is difficult to build awareness of the W+ Standard and its value.

## POTENTIAL FOR REPLICATION

Since this project was conducted, the W+ Standard has expanded to several other projects and domains. Due to the strong interest of corporates and funds in Sustainable Development Goals and the lack of other means to measure, quantify and monetize social impacts that can be used for SDG 5 for gender equality and women's empowerment, it is believed that the W+ Standard has strong potential for application, once it is more widely known. The possibility to use the W+ alongside of standards that measure greenhouse gas reductions (such as the joint mechanism for Verified Carbon Standard and W+) that generate greenhouse gas units with a social (and SDG) co-benefit makes it very attractive to entities that strive to show support for both climate action and gender equality.

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