

## Rural Biogas Promotion leads to Social Inclusion and Sustainable Energy

Kalikot is one of the more remote and poverty stricken districts of Karnali. Over 70% of the district's 105,000 population have an income less than \$1 a day. The district's energy sector is primitive, and the almost exclusive use of traditional fuel wood not only has a negative impact on the livelihood of the population (particularly the Dalits, women and children) but also degrades the environment (causing indoor air pollution and associated health problems).



As Bal Bahadur Shahi (62) says "It was difficult and time-consuming to collect the fuel wood, it was difficult to light in the stove and re-ignite when it went out, and it left a very smoky atmosphere around the kitchen area".

SNV's Renewable Energy Sector Support (RESS) programme in Nepal identified an opportunity to increase the living standards of rural people in this district and improve the environment through the active promotion of Renewable Energy Technologies, in this case, Biogas plants which convert readily available cow dung into gas.

SNV worked closely with local stakeholders, especially the local NGO HURENDEC (the Human Rights and Environment Development Centre) and Kalikot's own District Development Committee. It strengthened the local agencies' capacity, helped form the District Energy Committee (which promoted renewable energy opportunities and allocated a budget specifically for the promotion of biogas in Dalit communities) and established a renewable energy promotion centre to ensure the replication, up scaling and long term sustainability of biogas plants in the area.

As a result of SNV's interventions, some 400 people in Kalikot will have gained access to more than 40 Biogas plants by 2010, more than a third of whom are Dalits. SNV also intends to up scale its operations into neighbouring districts.

Bal Bahadur Shahi is very enthusiastic about the biogas plant installed in his house, "After the installation everything is improved with this kitchen: it is easy to ignite and with no smoke so pots remain clean after cooking. Time is saved with the reduced need to collect fuel wood, and there is no more tension when competing for fuel wood in the rainy season. If I had used such stoves in my earlier life, I might not have suffered with eye problems and asthma. Even the slurry produced from the plant outlet is very fertile for my vegetables."

As Bal points out, impact is not only achieved in access to renewable energy but also in reduced air pollution, improved farm sanitation with improved agricultural production with bioslurry, reduced workload of women, but also increased income and employment for construction workers.

By the end of 2008, some 250,000 biogas installations had taken place in Asia (nearing 200,000 in Nepal alone) benefitting some 1.65 million people. As a result of SNV's involvement, its profile has increased tremendously, with the ADB asking SNV to assume a leading role in the "Energy for All" initiative in Asia. SNV has also been asked to start and support biogas programmes in Indonesia and Pakistan.