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Community driven initiative to reduce fossil fuel consumption for environmental protection and associated economic benefits

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Naran is a famous tourist attraction in Pakistan in Khyber Pakhtoonkhwa province. Naran hosts high-rise Himalayan mountains covered with snow and lakes. Summers are cool, which attracts hundreds of thousands of tourists. Hotel industry here has a strong base with modern accommodation facilities. There was no power supply from the national grid to Naran in 2012 due to disruption of power supply resulting from heavy snowfall in previous years. People had to use fossil fuels i.e. diesel, gasoline, and firewood to operate power generators and to use heat for cooking and water heating. Firewood from forest cutting is a major environmental concern in Naran and surrounding valleys. It impacts the local environment negatively which is evident from the complaints of locals that rain and snowfall have reduced considerably in the last decade while flash floods are now common with landslides and road blockades. In an effort to control forest cutting, reducing the use of fossil fuels and improving the hoteling business, Tourism Promotion Association of Kaghan (TPAK) along with 3 hotels and 15 houses agreed in 2012 to install a micro hydel unit of 75 kilowatts on a local stream. WISIONS institute of Germany provided funding for the technology while TPAK and local partners funded construction component. Miro hydel project started production of electricity in late 2014. A local SME, created for the sustainability of the project, owns the micro-hydel system. This study focused on electricity production through renewable resource and its contribution in avoidance of addition of carbon in the atmosphere. Data collected for the last three years indicates that the micro hydel project contributed in avoidance of 386.65 tons of carbon into the atmosphere in the last three years. The carbon avoidance in the year 2015 was 122.02 tons, in 2016 it was 135.10 tons and it was 129.53 tons in 2017. The project has contributed considerably to the reduction of wood and fossil fuel usage in Naran. Previously, the Diesel usage by 3 hotels in Naran in 2012 was 48,421 liters, gasoline usage was 19,696 liters and wood usage was 80,290 kg. The project is ready for carbon credit mechanism.

Biography

Sardar Ahsan Younus has completed his Ph.D. at the age of 40 years from England. He is the Head of Environment Department for USAID funded Energy Projects in Pakistan while serving at Techno Consult International, Islamabad, Pakistan. He has vast experience of working on Environmental Projects both in Public as well as Private sector.

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