

# Mains Electricity makes all the Difference

Dust hangs in the air. Clouds of mist descend from the mountains upon the clay-coloured slopes, repeatedly shrouding the power line that snakes tirelessly through the landscape.

The 20 kilovolt cable transports energy over 45 kilometres from the power substation in Mazar-e Sharif in northern Afghanistan to the remote district of Marmol, surrounded by mountains. Eight transformers reduce the voltage to 230 volts. Eighteen kilometres of low voltage power lines then supply energy to families who are now finally connected to the public electricity grid. Mohammad Nasim Ganji is head of the national power utility Da Afghanistan Breshna Sherkat (DABS) in the province of Balkh and is responsible for the district of Marmol. He reflects, 'The new electricity grid operates in line with international standards. Many of our power lines are old and degraded, which results in a considerable loss of power as well as power cuts, especially during rain and stormy weather. We have none of these problems whatsoever with the new supply system.' At its current stage of development, the supply network in Marmol can serve up to 1,300 families.

In order to increase the power supply to Marmol, KfW has invested 2.5 million euros on behalf of the German Government. Construction work began in 2014 and the first residents of the remote mountainous region were connected to the mains power supply in 2018.

For Mohammad Ishaq, a resident of Marmol, the stable energy supply is a blessing. Many of the district's problems are now a thing of the past. 'We used to have solar panels but as soon as it turned cloudy, the pumps delivering drinking water stopped working. We were unable to receive any news and the children would often have to study by the light from kerosene lamps', he recalls. Today, drinking water is pumped from a well into a storage container from which the local people can take water whenever they want. Every day there is fresh bread because the oven in the bakery no longer fails. According to Ishaq, it is often the little things that make life pleasant: 'We can watch the news on television and know what's happening in our country. We can use electricity from the socket to charge our mobile phones and young people are now using computers and the internet, and are connected to the rest of the world. All of this makes a huge difference.'

Before the district of Marmol was connected to the grid, its inhabitants were completely cut off from the wider world. Information for example regarding vaccination campaigns and health education, for example, failed to reach them. The vaccination specialist Dr Mohammad Ismail from the



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Martyr Zabihollah Hospital is seeing a fundamental change in the behaviour of residents: 'In the past, preventive health care was not an issue that people here paid any attention to. Child and maternal mortality was therefore very high. Health awareness has now increased considerably because national information campaigns on the television regarding health care and vaccinations reach the people.'

Education in Marmol also benefits. Especially on short winter days, lessons in the small school of the district were only possible to a limited extent. It was simply too dark. With electric light, the pupils can now be prepared for life all year round.

Governor Fazloddin Khorrami Jesur highlights another positive factor: 'Lights in people's homes improve safety and security. In the dark, nobody sees what happens but lights deter criminals.' Both greater security and the power supply are also beneficial to the region's economic development. Irrigation pumps for agriculture and for growing fruit and vegetables are working well, yields are increasing and jobs are being created as a result. People living in the district are confident that agricultural produce will make their region more attractive to investors and that trade will thrive.

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**Partners:** Afghan Ministry of Energy and Water, Da Afghanistan Breshna Sherkat (DABS – Afghanistan's national power utility company)

**Implementing organisation:** KfW Development Bank

**Provinces:** Balkh, Samangan

**Programme objective:** Provision of a reliable and suitably high-quality electricity supply to locations in northern Afghanistan that are currently underserved.

