Imran Khan pushes Pakistan to unlock hydropower potential

By Saleem Shaikh and Sughra Tunio

MATTA, Pakistan (Thomson Reuters Foundation) - Standing on the balcony of his two-story riverside hotel, Bilal Mustafa enthuses about the inauguration of a micro-hydroelectric power station in his town in Pakistan's scenic Swat district.

"The cheap electricity from the station will boost the hotel industry in the area and slash the cost of running hotels and motels," Mustafa predicted. "Escalating fuel wood prices pose a threat to the sustainability of our hotel businesses."

Perched along the lower reaches of the Swat River, which snakes through Pakistan's mountainous northwest province of Khyber Pakhtunkhwa, Matta is popular with tourists who come to see the breathtaking waterfalls and lakes that feed the river, a major tributary of the Indus River.

More than two million people are estimated to visit the district's valleys annually to enjoy views of the Hindukush mountain peaks and meadows. Mustafa says that 70 percent of local people here earn a livelihood from tourism.

'JUST A BEGINNING'

The new 140 kilowatt hydroelectric plant now running on the Swat River is just one of hundreds of small hydro projects planned in the province, and will provide off-grid power directly to around 700 households.

"This is just a beginning of unleashing the province's tremendous green energy potential," said Imran Khan, a former international cricket star and now leader of the province's governing party, Pakistan Tehreek-e-Insaf (PTI), at the launch of the project.

"We are committed to (using it) to cut pressure on forests, get rid of reliance on polluting, environment- and health-damaging sources of energy, and provide the people with cheap, clean and reliable energy," he said.

Lack of alternate power sources to wood has taken its toll in the region. The mountains around Matta are no longer lush and densely forested as they once were, said Ghulam Mustafa, a 52-year-old fuelwood trader and resident of Kalam village.

Most mountains, he said, have been deforested over the past 25 years due to pressures from population growth in the mountain villages and the increasing number of hotels and motels in the valley, which rely on fuel wood from the nearby forest areas for cooking and heating.

Pakistan's federal government is planning to expand the use of coal – as well as renewable energy – to meet rising power demand. But Khan opposes investment in coal-based power projects, which he said will produce costly electricity and increase the country's carbon footprint, damaging the environment.

The PTI plans to build as many as 356 micro-hydroelectric power projects in the province's mountain villages, officials said.

Former state minister for the environment, Malik Amin Aslam Khan, is the brain behind the ambitious plan, which is part of the PTI's Green Growth Initiative (GGI), launched earlier this year. The GGI aims to boost the province's socio-economic development by efficiently using natural resources without compromising the ability of future generations to meet their own needs.

Malik Khan said that the new hydro-electric plants, with capacities ranging from 10 to 500 kilowatts, will be completed in the next 18 months at a cost of around 5 billion Pakistani rupees ($49 million).

"Eighty percent of the cost will be borne by the provincial government, (and) 20 percent by the community organisations in the form of labour and construction material," Malik Khan said. The beneficiary communities will also contribute land for the structures needed for each project, he added.

According to Khan, the projects will produce a combined 35 megawatts of power and provide electricity to 85,000-90,000 households. They will generate 10,000 indirect and 4,000 direct jobs in the province through cottage industries and tourism services.

LACK OF ELECTRICITY

A recent World Bank report indicates that one-third of the 180 million population in Pakistan has no access to electricity from the national grid.

According to a World Health Organization report, nearly 72 percent of the country's population depends on traditional biomass energy sources such as wood, dung and agricultural waste for fuel for cooking and heating.

Zeenat Fatima, a 36-year-old housewife from Kalam, contracted asthma at the beginning of this year because of chronic exposure to wood smoke.

Women in Kalam also walk several miles at least twice a week to collect fuel wood from local forests, she said.

"We don't want to do this job anymore or want our children and coming generations to be trapped in the vicious cycle of such a strenuous life, which leaves little time for other social and economic activities," Fatima said.

She hopes that the new power plant will make life easier for her and other residents of Kalam.

HYDROPOWER POTENTIAL

Pakistan has tremendous potential for hydroelectric power, which costs half as much to produce as power from coal-based plants, and is just one-third of the cost of electricity from oil-based plants, according to Pakistan's Federal Water and Power Ministry. A further advantage is that hydro power produces few carbon emissions.

Officials of Pakistan's Alternative Energy Development Board say the country has a total hydroelectric potential of 100,000 megawatts, over half of which is located in the northwest, where the Himalaya, Karakoram and Hindukush mountain ranges cross.

However, hydro power accounts for less than 35 percent of the current total of 14,000 megawatts of electricity generated in Pakistan, according to the 2014 Economic Survey of Pakistan.

The report warns that failure to invest in the power sector and related infrastructure in Pakistan will slow economic growth, deepen poverty and joblessness, and hinder efforts for achieving development goals.

(Reporting by Saleem Shaikh and Sughra Tunio; editing by Laurie Goering)