

Hydroelectric Power in Afghanistan's Jawzareen Valley

Core Proposal:

The aim of this project is to supply the village of Yatimak and the surrounding villages in the Jawzareen Valley (Urgash, Qala, and Sar-e-Jawzareen) with hydroelectric power. This will be accomplished by the placement of a turbine and generator at the Yatimak hot springs. Because of thermal heating, this section of the river does not freeze during the winter, and therefore hydroelectric power would be possible year round.

Background:

The province of Bamyan in Afghanistan, despite its political stability, has received little development funding from the International Security Assistance Force (ISAF), state-based development agencies, the UN, and NGOs. For example, the 100 mile trip from Kabul to Bamyan takes about eight hours on poor quality unpaved roads. The trip from Kabul to Mazar-e-Sharif, at a distance of almost 200 miles, takes about six hours on paved roads.

As a result of low aid levels and sparse engagement, villages in the rural area of Bamyan have seen few benefits from Western involvement in Afghanistan. They are largely ignored by the Afghan government and Westerners.

The villages in the Jawzareen Valley are no exception: although they are only an hour's drive away from Bamyan City, there is little to no contact with the provincial government and the local ISAF Provincial Reconstruction Team (PRT). The majority of villagers in Jawzareen are subsistence farmers or herders, with little if any disposable income. Winters in Jawzareen are extremely cold with large snowfall and the threat of avalanches. Fuel is scarce, so families spend their summers gathering felled trees and brush in preparation of the cold. It is not uncommon for poor or disabled families or abandoned children to freeze to death during the winter due to a lack of fuel.¹

The Impacts of Hydroelectric Power

Hydroelectric power provides a fuel alternative to villagers. Electric heaters can be utilized in place of wood burning fires. The advantages are two-fold: vulnerable families can use public electric heaters as life support during the coldest parts of winter; this will reduce weather-related mortality rates. Secondly, families can use electric heaters and take the time they spent gathering fuel and instead focus on growing crops and herding livestock. This additional labor provides the opportunity to rise out of a subsistence-based economy and creates a possible stream of income.

In addition to the life saving capacity of electric heaters, there are a number of large and small practical advantages to electrification of the valley. Lights are generally not used after dark, due in large part to the scarcity of fuel, but with a hydroelectric generator lightbulbs can be utilized. Electricity can replace short-lived, unreliable batteries that currently power radios. In the long-term, electric motorcycles and utility vehicles could help counter the relative isolation of the Jawzareen Valley, and facilitate the transportation of agricultural goods to the markets in Bamyan City. For the most part,

¹ Interview by author with residents of the Jawzareen Valley.

villagers rely on pack animals to transport their goods to town, which is a slow, expensive, and difficult process. In general, the introduction of electricity to the Valley will greatly improve the quality of life in the area.

At an abstract, but no less important level, the construction of a hydroelectric generator is a symbol of international engagement in the province. Many of the villagers that this author has met have expressed frustration at being cut out of development funding.² There is a sense that the reason the southern and eastern provinces in Afghanistan receive lots of attention from development agencies is because they are violent, ethnically Pashtun, and Sunni Muslim. The Hazara in Jawzareen, part of the Shiite Muslim minority, feel that the international community discriminates against them. Some individuals have even suggested to this author that if the Hazara began to act more hostile, they would receive more international aid. A large scale construction project that provides a much needed service to a poor and isolated area is therefore of symbolic importance. It can be a sign that the international community is aware of, and engaged in, the needs and desires of this often overlooked part of the country.

Implementation

Both village officials and NGOs will be involved in implementing this project. Of primary importance will be Idris, the son of the *wali* of Yatimak, and the man who is the *de facto* head of his village. The concept of this project actually began with a discussion between this author and Idris that took place over the previous summer. He has promised to support the project and engage the village to provide labor for constructing the generator. This project must also engage the heads of the other villages in the Valley, to reach communal decisions about how the electricity should be allocated between the villages. This will involve meeting with Akil, an important headman in Urgash, and possibly the mullah of Sar-e-Jawzareen, among other interested parties. In terms of NGO support, the primary actor will be Physiotherapy and Rehabilitation Support for Afghanistan (PARSA), a longstanding, primarily Afghan, NGO that now works with the national orphanage system and rural wealth development projects. This author will work with Marnie Gustavson, the international director of PARSA, and Yasin Farid, the national director. PARSA's support will primarily be logistical: providing transportation, housing, and language assistance for the duration of the project.

The specific costs of the program are outlined on the next page, but a general run through of the expenses are as follows. The largest cost will be purchasing a heavy-duty industrial generator. Transportation will be the second largest cost for two reasons: transporting the generator to Bamyan will be difficult and costly because of the poor roads and the lack of large-scale trucking, and transporting the generator to the Jawzareen Valley will be equally if not more difficult for the same reason. The transportation cost also includes a discretionary budget for repairs of malfunctions and breakdowns, as the roads have the tendency to destroy vehicles very quickly. The logistical support category includes the cost of living expenses, language assistance, labor costs paid to the villagers for helping to install the generator, and the cost of a driver hired from PARSA to travel to Bamyan and the Valley. The miscellaneous expenses category is a discretionary buffer, in case there are unseen difficulties in implementation, or an unplanned deficit in one of the other categories.

² Interviews by author in Qala, Urgash, Yatimak, Angaran, Sar-e-Jawzareen.