

# 2018

## Providing a Solution for Energy Problem In Minus 37

### BIARAS SHP DRASS



Latitude	34°25'33" N
Longitude	75°45'21" E



**[BIARAS SMALL HYDRO ELECTRIC POWER PROJECT (2X750 KW)]**

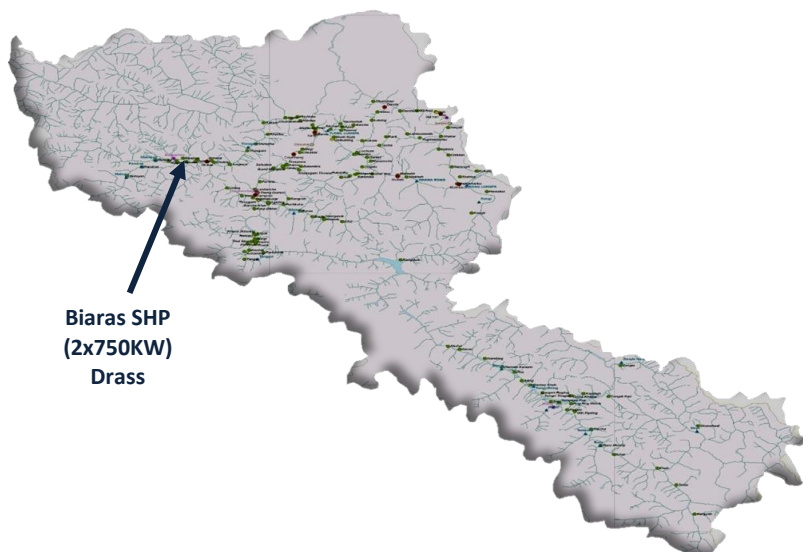
Hydro Project Commissioned By KREDA In The Second Coldest Inhabited Place On The Globe

## Brief Note

### **Small Hydro Electric Power Project Commissioned of KREDA in the Second Coldest Inhabited Place on the Globe**

*Kargil Renewable Energy Development Agency (KREDA) has been working to familiarize the mass with varied aspects of Renewable at the same time promoting commercial exploitation of know how. The most prominent aims and objectives of KREDA is to promote sustainable development of the area by harnessing the immense potential of renewable energy from Solar, Wind and Hydro sources in a sustainable manner contributing towards reducing scarcity of energy generation and the cost. The agency's one of important objectives is to develop and strengthen the facilities and capabilities and undertake human resource development programmes to build a sustainable economy in the region of Kargil. Since Renewable Energy Technologies/Devices are very new to the region/people, KREDA faced lot of problems in the initial phase of implementation of these programmes. But gradually and slowly the people have become educated and supportive towards the schemes. The main obstacle in implementing the programmes of renewable energy is lack of awareness among the commoners.*

Kargil Renewable Energy Development Agency (KREDA) has successfully commissioned a 1.5 MW (2x750 kW) Small Hydro Project in Biaras Drass. The project is one of the seven SHPs being sanctioned to KREDA under the Ladakh Renewable Energy Initiative (LREI) program of the Ministry of New and Renewable Energy (MNRE), GoI. Kargil is endowed with enormous economically exploitable



and viable hydro potential. Development of these SHPs under KREDA shall bring much relief to the Power Development Department (PDD). Development of these hydel projects can provide a solution for the energy problems in remote and hilly areas like, Drass, Zaskar, and Kargil. Few years back, KREDA – Kargil, moved with the objectives of “planning, investigation, design and preparation of Detailed Project Reports and subsequently executed the project with the financial support from MNRE, GOI. KREDA decided to utilize the water released from existing Bairas Nala for setting up of Small Hydro Electric Project under the renewable energy program (LREI).

Drass Kargil is one of the most beautiful lands where earth and sky seem to meet. The Biaras Small Hydro Power Plant, recently commissioned, is supplying electricity to local community living in the local villages and Dras Town. Nearby,

beneficiary villages are Biaras, Goshan, Bazar, Holiyal, Ranbirpora, Muradbag, Yulboo, Lhamochan, Trongjein, Haripora, Fravo, Mushko etc. connected through four feeders. Defence establishments, GREF and other government organisations located in the area are also the targeted beneficiaries to get power from the Project. The project is envisaged to generate 1500 KW of power which will generate about 12.46 MUs of electrical energy annually. The surplus power can be fed into the newly established grid.

### **Scenario of Drass on the eve of the Biaras Small Hydro Project:**

Nearly entire permanent population remains engaged in agriculture. At the same time more than one fourth of the total population works as unskilled labourer with BRO, Army, civil contractors locally as well as in other parts of this region. Around 2% of the population is employed in Govt. sector. Small percentage of population is also engaged in the tourist and transportation industry. Branches of willow and poplar trees, local thorny shrubs and cattle dung are used as fuel for heating and cooking food. Part of cultivable land is having facilities of irrigation and a major chunk remains un-irrigated, which can be made fertile by using lift irrigation in case power is made available to such schemes.



### **Benefits:**

Renewable energy has begun making visible impact in the District energy scenario of Kargil. The projects of KREDA have benefited thousands of rural folk by meeting their lighting requirements in an environmentally benign manner.

- The Biaras Hydro Project has become a great alternate for saving thousands of liters of diesel in the coming future, resulting in saving of lacs of rupees annually and it will bring down the load in already running DG Sets.
- Has there been DG Sets installed in place of the SHP, it can be said that the region would have spending lacs of rupees on diesel and the atmosphere too should have been polluted to a large extend.
- The SHP has no adverse environmental impact. It rather improves the status of environment by eliminating the harmful gases, which the diesel stations emits into the atmosphere (per 50,000 liters of diesel emits up to 128 ton of CO<sub>2</sub>).

Moreover, the project will provide stable electricity supply to the neighbouring villages in an otherwise unelectrified or partially electrified region. The availability of assured power in Drass will enhance the living standard of the people here. Power will primarily be used for the following uses:

- Electricity for lighting and appliances (cooking, heating, radio, TV, computer etc.) in homes and public buildings such as schools and clinics, in public places and collective events.
- Electrical or mechanical power for lift irrigation, local service and cottage industries and for agricultural value adding industries and labour saving activities.
- Improve and further promote tourism in the valley.
- Reduce dependence of diesel generation.
- Opportunities for sources of employment and income generation in the area are enhanced.

It is a great honor for KREDA to express that the Small Hydro Power Project Biaras in Drass is continuously supplying electricity to the public since November 2017 effectively for 24x7. **The project faced extreme cold during the winter of 2017-18 (December to January), when the minimum temperature of the region came down to minus 37°C.** But the SHP did not stop providing service to the people of Drass.

More Hydro Electric Projects under KREDA:

1. SHP Sangrah (2x750 KW).
2. SHP Chilong (2x500 KW), which has recently tested and power shall soon be evacuated. The project will electrify more than 16 villages with approximately 1115 households.

Sd/-  
*(Kacho Ahmed Khan)*  
 Project Director/CEO  
 KREDA-Kargil

*KREDA, since its inception, has been working hard on several projects with decisive steps to tap immense potential for renewable energy sources such as solar, wind, biomass, small hydro etc. in Kargil, so that the power requirement in the district can be mended and at the same time the contribution of renewable energy, in the total energy generation, can be increased. Renewable energy is a promising resource of energy for the future. The wise harvesting of renewable sources, available in the Region, can reduce the energy scarcity and the cost. Through this project the people of the remotest areas of the district have been mobilized and they have been trained in understanding the immense wealth of nature, thus developing an institution of learning renewable.*

**SHP Biaras  
Winter  
Picture  
Inside and  
Outside**

