



An Educational Tour Report



One day Educational trip was organized by Department of Physics, Centre Of Excellence Govt. College Sanjauli, Shimla under UPSS (Undergraduate Physics Students Society on September 6, 2019 to visit a domestic Hydroelectric power generation plant at Sh. Naresh Thakur's House at village Aslu near Darlaghat, Distt. Solan, Himachal Pradesh. The tour comprised students of B.Sc. VIth semester (SEC) accompanied by faculty members, Prof. Kirti Singha and Prof. Monika Chandel from Deptt. Of Physics. All the students were directed to gather at College Hostel gate at 9:30 AM. Principal of the college Dr. C.B. Mehta ji wished all the students best and safe journey.



We started our journey at 10 o'clock with *Lalit Bus Service* and reached at 12: 50 PM at the location. Sh. Naresh Thakur and his family members warmly welcomed all of us. Tea and snacks were served to all guests. After that all students along with faculty members were taken to the site, where the plant to generate the electricity was installed. Mr. Naresh Thakur and his brother told us that they started the project in 2012 and demonstrated different components used for electricity generation. The water from a local river called 'Aligaad' was channelized to fall from a suitable height (about 20ft) to rotate the turbine. Primarily the concept was taken to make traditional water flour mill (gharat) and further extended to generate electricity. It was an amazing effort by Mr. Naresh to make the concept practically happen.

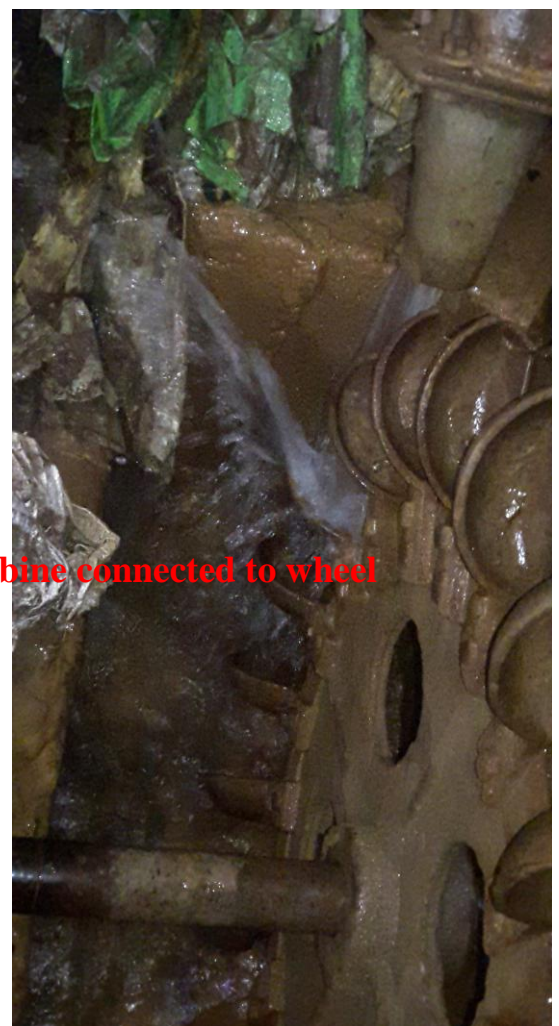
Working: The channelized water was allowed to fall on the turbine to make it rotate in turn, was making wheel rotate, which was connected to alternator, converting mechanical energy into electricity. The plant



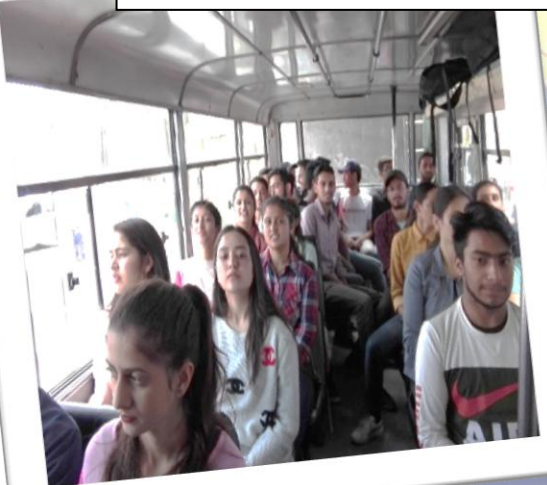
Was producing 200KWatt power. To get 220V supply, it all depends on the how fast the water make to flow. Every student asked many questions about the plant and saw the things practically what they keep on studying in Physics books. Overall, it was a great experience.

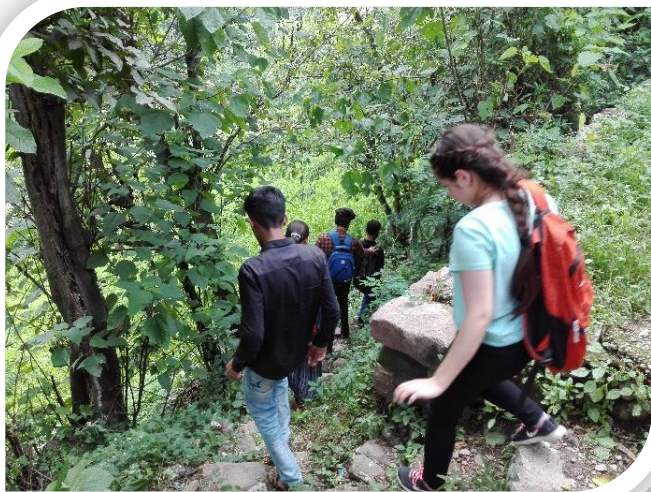


Turbine connected to wheel



It was a new, interesting and informative experience for all of us. We visited the river spot as well. Thakur family also arranged delicious lunch for us followed by jam session on request from Thakur family, in which all enjoyed by singing and dancing. Then, we took group photographs with Thakur family and thanked them for their hospitality. We departed at 4:00 PM from there to Shimla. We all had safe and enjoyable journey with lots of information.







On behalf of Centre of excellence Govt. degree College Sanjauli-06, We presented Mr. Naresh thakur a token of regard for his outstanding co-operation and amazing hospitality.



Report compiled by Kapil, BSc.VI th semester.

Edited and submitted by Kirti Singha(HOD), Deptt. Of Physics.