

**TRAINING CUM DEMONSTRATION CAMP ON CONVERSION OF PINE NEEDLES BIOMASS INTO BRIQUETTES TO 100 VILLAGERS ON DATED 22<sup>nd</sup> SEPTEMBER,2015 BY APPROPRIATE TECHNOLOGY CENTRE, STATE COUNCIL FOR SCIENCE TECHNOLOGY & ENVIRONMNET AT GRAM PANCHAYAT CHHAMYAR DISTT. MANDI.**

Organized one day training cum demonstration camp on conversion of pine needles biomass into briquettes on dated 22<sup>nd</sup> September, 2015 by Appropriate Technology Centre at village Kutehchi, Gram Panchayat Chhamyar Distt. Mandi. The participants were registered by Mrs. Neena Sharma, Data Entry Operator, Appropriate Technology Centre, Sundernagar. Literature (Pen, Pad & Pamphlet) about the conversion of pine needles biomass into briquettes was distributed to the participants.



Er. Kalit Bhardwaj, STA, Appropriate Technology Centre, Govt. Polytechnic, Sundernagar briefed the participants about the purpose of workshop. He thereafter, explained about the Briquetting Equipment to participants and the basics involved in conversion of the pine needles biomass into briquettes. The detail of the Briquetting Equipment along with the accessories was elaborated to the participants. Also the design, quality and cost etc., how the Briquetting Equipment is fabricated by the welders was explained in detail for their understanding by Sh. Kalit Bhardwaj.



(Sh. Tajender demonstrating the technology for conversion of pine biomass into briquettes)

The process of carbonization was demonstrated to the participants by Sh. Tajender Kumar and steps to be followed for conversion into carbonized biomass were explained to the participants by Sh. Kalit Bhardwaj, STA along with the precautions to be taken by the participants during carbonization in the Briquetting Equipment. Approximate 25 kg of pine biomass was used for conversion into carbonized biomass during the process at the venue. Thereafter, the Equipment was kept for cooling by covering it through the covering lid. The smoke pipe was removed before covering the lid. Water was filled in the periphery of the lid. The mid pore was covered by the paste of clay soil after the smoke emergence from the mid pore discontinued for better carbonization of the biomass.



Thereafter, the participants were asked to follow the burning process to convert the pine needles into biomass. A working lunch was also provided to the participants.



During the technical session about one hundred villagers and Panchayat representatives participated in the programme. A set of equipment was handed over to the Pradhan Gram Panchayat Chhamyar Distt. Mandi for making Briquettes using pine needles. During technical session information regarding Council's programmes like solar passive housing, rainwater harvesting, intellectual property rights, ban on plastic, eco clubs etc. was given to the participants.

