## One Week Farmers' Training under VVK on 'Nursery Management and Value Addition of Bamboo and Rattan.'

Venue: ARCBR, Aizawl, Mizoram

Duration: 21 to 25 August 2017

One week training programme for 20 farmers from two localities namely Bethlehem Vengthlang, and Armed Veng South was organised by ARCBR in the ARCBR campus. The training programme was inaugurated by Sh. Ritu Raj Singh, IFS Conservator of Forests, Research and Development circle, Environment, Forests and Climate Change Department, Government of Mizoram as a Chief Guest The main objectives of this training are to give awareness on the importance of bamboo and rattan cultivation and their value addition.

Inaugural session started with the welcome address and brief introduction about the research activities of ARCBR by Sh. M. Z. Singson, Director, ARCBR. In his brief speech, Sh. Ritu Raj Singh, IFS had highlighted the potential of bamboo and rattan sector. He also shared some of the success stories in entrepreneurship.

On 21st August 2017, Sh. Rongura Hrahsel, ACF, Aizawl Forest Division delivered a presentation on Bamboo nursery management and Plantation technique. Sh. H. R. Bora, Scientist B took all the participants for field visit in the bamboo and rattan trail of ARCBR for describing different species of bamboo and rattan.

On 22<sup>nd</sup> August 2017, Scientists of ARCBR imparted hand-on training on Bamboo Charcoal and vinegar making.

On 23<sup>rd</sup> August 2017, Sh. Lalmuankima, lab assistant explained Mizo dub scientific documentary on Bamboo cultivation. Sh. Hans Raj, Scientist – C gave a presentation on Diseases of bamboo and rattan and their management. Sh. Lalmuankima, Technical Assistant, Mizoram university gave a presentation on prospects of bamboo in Mizoram.

On 24st August 2017, Smt. Lalhminsangi, entrepreneur imparted training on Bamboo shoot processing and value addition.

On 25th August 2017, Sh. Sandeep Yadav, Scientist C gave hands on training on Bamboo charcoal soap making. Participants were awarded certificate in the concluding valedictory session.



Figure 1: Sh. M.Z. Singson, Director, ARCBR welcoming the participants in the inaugural session.



Figure 2: Sh. Ritu Raj Singh, CF (R & D), EF&CC Department, Government of Mizoram highlighting the importance of bamboo and rattan sector.



Figure 3: Sh. Rongura Hrahsel, ACF delivered a lecture on Bamboo nursery management and Plantation technique.



Figure 4: Sh. Lalmuankima, Technical ASssistant, Mizoram university gave a presentation on Prospects of bamboo in Mizoram.



Figure 5: Sh. Lalmuankima, lab assistant explained Mizo dub scientific documentary on Bamboo cultivation.



Figure 6: Smt. Lalhminsangi, entrepreneur imparted training on Bamboo shoot processing and value addition.



Figure 7: Smt. Lalhminsangi, entrepreneur imparted training on Bamboo shoot processing and value addition.



Figure 8: Bamboo Shoot Candy prepared by participants during training.



Figure 9: Bamboo shoot pickle prepared by participants during training.



Figure 10: Participants visiting Bamboo and Rattan Trail of ARCBR to know more about bamboo and rattan.



Figure 11: Bamboo Charcoal Kiln in operation during training.



Figure 12: Raw Bamboo Charcoal prepared in kiln.



Figure 13: Raw Bamboo Charcoal is crushed to make bamboo charcoal briquettes.



Figure 14: Powered Bamboo Charcoal is mixed with suitable binder to make briquettes.



Figure 15: Mixture of powdered bamboo charcoal and binder is compressed through moulds to make briquettes.



Figure 16: Bamboo Charcoal briquettes are placed under sunlight for drying.



Figure 17: Using powdered Bamboo Charcoal, Sh. Sandeep Yadav, Scientist C gave handson training on Bamboo charcoal soap making.



Figure 17: Participants visited plant pathology laboratory and learned about different pathogen and disease symptoms in forest plant species.



Figure 17: Participants visited plant Tissue Culture laboratory and learned about micropropagation of Bamboo, Orchids, and forest plant species.



Figure 17: Participants visited Lichenology laboratory and learned different lichens and their role in environment.



Figure 17: Participants visited Bamboo and Rattan museum and get acquainted with all the preserved samples.



Figure 17: Participants were awarded certificate of participation in the training on the last day by Sh. Ritu Raj Singh, CF (R & D), EF&CC department, Government of Mizoram.