

## Patent granted

| Sl. No. | Technology patented  | Present status   | Details  |
|---------|--|--|--|
| 1       | A Muga Weft Yarn Reeling Machine                                     | Patent No. 300573 (India)<br>Date of grant: 31.08.2018<br>Applicant: CMER&TI | A reeling machine ( <i>BANI</i> ) has been designed for weft Muga yarn reeling which is a motor cum pedal operated, single basin, 4 end capacity machine. The machine works on cottage basin principle and produces zero twist flat Muga yarn suitable for weft in weaving. It can be operated by a single person in sitting posture and productivity is more than double than <i>Bhir</i> (120-140 g/day) against 80-100 g by two persons. The machine can also be used for mulberry cocoon reeling.  |
| 2       | Muga cocoon dryer.   | Patent No. 297680 (India)<br>Date of grant: 15.06.2018<br>Applicant: CMER&TI | This machine was fabricated for stifling and drying of Muga cocoons using locally available fuels like firewood, dry leaves etc. Muga cocoon dryer works on hot air drying principle and its capacity is 8000 number of Muga cocoons at a time. Approx. 40,000 numbers of cocoons can be stifled and dried uniformly in 8-9 hours without loss of yarn quality. This is very useful in areas where electric power is not available for drying of cocoons. Silk recovery and productivity increases from the cocoons stifled and dried by this method. Cocoons dried in the dryer are suitable for longer storage and is technologically better than sun drying and smoke stifling. |
| 3       | A chemical formulation for cooking Muga cocoon for higher silk yield | Patent No. 297680 (India)<br>Date of grant: 07.08.2017<br>Applicant: CMER&TI | Muga silk plus - an effective cooking chemical for Muga cocoon A chemical formulation has been developed for cooking Muga cocoon which can enhance the Muga silk recovery up to 55%, against 40- 48% silk recovery in traditional <i>Khar</i> and soda cooking method. This low cost chemical (Rs. 30/ per 500 gm) is soluble in water. Hence, the cooking process is simple. The quality of reeled yarn is also improved by this chemical   |