

State Award - Mizoram

## Laddu Making Machine and Large Scale Spindle Making Machine

Chhuanmawia Lunglei, Mizoram Scout: Direct

Chhuanmawia (58) is a mechanic workshop owner and a serial innovator from Central Mizoram. He has been a prolific innovator since beginning his journey of experimentation many decades ago. Some of his works include a three-way telephone for talking with his neighbour friends (1988), an improvised weaving machine (1992), a fish scale remover (2010), a betel leaves washer (2015), wild plantain chipping machine for pig feed (2016), spindle machine (2016); rice processing machine (2016), and a weaving machine for small cloth (2017) design for scarf or turban.

The laddu-making machine was initially developed for making sesame bolus (laddu) prepared with hot sugar. While the sugar is hot, the mixture is rolled into a small ball with bare hands. While doing so, sometimes the

palm gets burnt. Chhuanmawia wanted to develop a mechanical device to replace the hand-rolling process. The raw material, i.e. sorghum/sesame/ wheat mixed with hot sugar, is placed and pressed into a hopper using a metallic spoon. In an hour, 50 kg of the mixture can be processed to make laddus of 18mm diameter. At four different speeds, the machine's production capacity ranges from 20 laddus per minute to 50 laddus per minute.

He has also developed a large-scale spindle machine. Usually, looming threads is done with hands, which is a slow process. Spindling lengthy threads is quite difficult and takes a lot of time. Chhuanmawia has developed a spindle machine that has 20 slots of bobbins to loom at once. The speed of the looming can be adjusted to 1x, 2x and 3x times.





