



State Award – Tamil Nadu

Jacquard Lifting Machine

P Ravi
Tiruvannamalai, Tamil Nadu
Scout: SEVA

Ravi (56) was interested in electronic gadgets from a very young age and started tinkering with old TV sets and audio players, familiarizing himself with different aspects of these gadgets. In 1999, he developed a novel way to manufacture quality audio cassettes at a cost that was cheaper than the ones available in the market. However, as time passed the technology evolved, making audio cassettes obsolete. Thereafter he started to work on a mechanized model to resolve one of the issues faced by the weaver community.

Weavers face problems while working with Jacquard handlooms due to heavy weight of Jacquard box (housing the whole mechanism), which has to be lifted by the weaver manually using his leg and a wooden lever. The weight of the mechanism coupled with the amount of repetitions, subject the weaver to physical strain and fatigue. This led

to decline in quality at the end of the day as well as lower productivity. To reduce the drudgery, health related ailments and increase in production speeds, Ravi designed a simple yet durable mechanism in 2009 that could be used to lift the Jacquard box with a simple press of a pedal.

Ravi's motorized Jacquard lifting mechanism is an attachment, which can be used in any Jacquard handloom for lifting the Jacquard box. The main function of Jacquard lifting box is to convert electric power into rotating motion by a single phase motor, which is later converted to linear motion. Several variants, compatible with different designs of Jacquard handlooms, costing between Rs. 15000 - 16000 are available and around 9000 units have been sold since 2009.

