

**Department of Jute and Fibre Technology, Institute of Jute
Technology,
University of Calcutta**

**Syllabus for Vocational Workers' Training for Jute Sector to be Conducted by Department of
Jute and Fibre Technology, Institute of Jute Technology, University of Calcutta, Under
Integrated Skill Development Scheme Project (ISDS) Sponsored by Ministry of Textiles,
Government of India**

Module: XI, Weaving sardars' training

Total Contact Hours 150 (One month Training)

Theoretical Syllabus (50 Hrs.)

Introduction and objective of weaving sardars training:

- Knowledge about Jute loom and weaving process and important parts of Jute loom.
- Knowledge of Jute cloth and its quality.
- Some basic mathematical calculations regarding cloth production on Jute looms.
- Knowledge about different motions of looms.
- Looms- its drive and different parts.
- Looms crank cycle and synchronisation of different motions.
- Proper setting and positioning of different parts of looms for correct tuning.
- Setting of two leaf wipers and proper method of camb fixing on Hessian looms with careful measures.
- Setting of three leaf wipers of sacking looms and careful measures of camb fixing.
- Careful measures for setting of combination of different parts for picking mechanism.
- Correct setting of different parts for take-up motion with careful measures.
- Careful measures for proper method of setting of shuttle box in loom.
- Proper positioning and setting of Lay with reed and allied parts.
- Proper method of positioning and setting of warp protection motion with necessary care.
- Auto-cop loading mechanism and setting of related parts with careful measures.
- Overall technical know-how of loom maintenance.
- Proper measurement of different parts of Looms.
- Discussion of loom speed, its reduction and loss of production.

- Causes and remedies of knock-off of looms.
- Different faults of jute cloth and remedial measures.
- Duties and responsibilities of weaving sardars.
- Weaving sardars job Do's and Don'ts.

PRACTICAL (100Hrs.)

- Brief description of Machines & its Motions.
- Different type of Motions and involvement of Loom parts for particular Motions.
- Different measurement for alignment/proper tuning of the Loom. Uses of Hand tools and gauges.
- Uses of Lubricants and method of Lubrication.
- Measurement of Reed porter, Cloth porter, shots.
- Calculation of Reed porter to be used for weaving a fabric.
- Calculation of Loom constant and use of shotting pinions to obtain desired shots/inch.
- Method of Beam tyeing on Loom.
- Method of insertion of weft yarn through spears.
- Calculation of Loom efficiency.