

TYPES OF MECHANISM USED TILL DATE FOR DEVELOPMENT IN RURAL TECHNOLOGY: A CRITICAL REVIEW

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Bullock Driven Tractor

Design of tractor driven by bullock

Developed by Davinder Pal Singh, Raj Kumar Gupta, Mangal Sharma of IIT Delhi and A.Kumar of IGNOU, New Delhi.

Mechanism used in DBT are

Chain-Sprocket Mechanism

Winch and Wire Rope Mechanism



Bullock Driven Tractor (BDT)

Main-Sprocket Mechanism

A sprocket, sprocket-wheel is a profiled wheel with teeth, that mesh with a chain, track or other perforated or indented material. The name 'sprocket' applies generally to any wheel on which radial projections engage a chain passing over it.

This mechanism was in this machine for lifting and lowering of the movable frame of the tractor.

Common general application

Usage in bicycles, Rigging and moving heavy materials, Overhead hoists, Operating conveyor belts, Conveying materials.

Winch and Wire Rope Mechanism

In this study this mechanism was also used for lifting or lowering the movable part of the frame.

A winch is a mechanical device that is used to pull in or let out or otherwise adjust the tension of a rope or wire rope. In its simplest form, it consists of a spool (or drum) attached to a hand crank. It might include a solenoid brake and/or a mechanical brake or ratchet and pawl which prevents it unwinding unless the pawl is retracted. The rope may be stored on the winch.



Cow Lift for Downer Cow

In this work a system is designed for lifting a downer cow.

This system is based on chain pulley mechanism.

The chain pulley mechanism is a basic mechanism used in our daily lives.



→ Top supporting frame

→ Chain pulley

→ Extra support for stability

→ Hexagonal supporting frame

→ Nine feet long MS pipe

→ Base

Thank you