

Project Report on

**“DESIGN AND FABRICATION OF MANUAL RICE
TRANSPLANTER”**

(Sponsored by KSCST)

Submitted to



Visvesvaraya Technological University
Jnana Sangama, Belagavi.

In partial fulfillment of the requirements for the award of Degree in
Bachelor of Engineering in Mechanical Engineering

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ABSTRACT

India is an agricultural nation and PADDY is its primary crop. This project is focused on developing a manually operated rice transplanter for small scale Indian paddy cultivators. Since more than 80% of Indian rice landholdings is less than two hectares, there is an urgent need to develop farm machineries for highly labour intensive farm activities, as the labour availability is declining rapidly.

Rice transplanters were first developed in Japan in the early 1960's. Since then technology has been contributing very much in this field by providing improved mechanism. Mechanical transplanting of rice is the process of transplanting specifically raised seedling of rice as a mat (mat type nursery) using a self-propelled mechanical rice transplanter at pre-determined and desired spacing. It consists of mechanical linkages to plant the seedling, a tray to hold the saplings, a gear which drives the links and a mechanical pedal to drive the gear. It can plant two rows of seedlings at a time and at a constant distance.