

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM - 590 018**



**PROJECT REPORT
On**

**“DESIGN AND FABRICATION OF MULTI PURPOSE
BICYCLE FOR AGRICULTURE BASED APPLICATION”**
Sponsored by “Karnataka State Council for Science and Technology” (KSCST)
Bangalore.

Submitted as a part of

**Bachelor of Engineering
in
MECHANICAL ENGINEERING
By**

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ABSTRACT

Due to electricity power fluctuation, we have a lot of problems to operate the agriculture based pumps, power generation and paint spraying, which are the prerequisites of irrigation, domestic water supply etc. India is a country in which manpower or population is so adequate.

Thinking on the above said facts, a project work, which is entitled as **“Design and fabrication of multipurpose bicycle for agriculture based application”**, is designed and fabricated.

The Bi-cycle is designed for rigidity and strength considerations moving parts, with this cycle one person can easily operated by reciprocating the piston to get water and compressed air. The main purpose is to lift water and to get compressed air to generate electricity and paint spraying. The main principle consists of creating a vacuum by piston movement inside the cylinder. This vacuum is then occupied by the flow of water through it and pressurizes the water and compress the air by pneumatic cylinder.

The salient features are

- ✓ It is portable
- ✓ Compact device and easy to install
- ✓ Care of operation and handled by one person
- ✓ No electric power is required