

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM -590 002**



**PROJECT REPORT
On
“DESIGN AND FABRICATION OF MULTIPURPOSE
COMPRESSOR UTILIZATION FOR AGRICULTURAL
ACTIVITIES”**

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**Bachelor of Engineering
In
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Project Associates

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ABSTRACT

The Indian agriculture sector is now moving towards another green revolution. The transformations in the sector are being introduced by factors like new found interest of the organized sector, new and improved technologies, mechanized farming, rapid growth of contract farming, easy credit facilities, etc. Department of Agriculture and Cooperation under the Ministry of Agriculture is the nodal organization responsible for development of national policies and programmes aimed at achieving rapid agricultural growth through optimum utilization of land, water, soil and plant resources of the country. In the present work the solar panel fitted/mounted at the top of the unit is the main source of energy. The solar panel derives energy from the sun rays and this energy is stored and transferred to the DC battery of 12 volts provided at the bottom of the unit. The battery gets energy from the solar panel and the battery is further connected to the DC motor of 12 volts. The DC motor is connected to an air compressor. The DC motor rotates at a speed of 2800 rpm. As the compressor is attached to the motor with a shaft, the compressor too rotates at the same speed of 2800 rpm. Due to the rotation of the compressor, it creates a suction pressure because of that the air is sucked in the compressor and further the air is discharged at the top of the unit. The air discharged at the top is the main source of all the activities being carried out in the unit.