

**K.L.E. Society's**  
**B. V. B. COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**HUBLI -31**  
(AUTONOMOUS INSTITUTION WITH ISO 9001:2008 CERTIFICATION)

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**DESIGN AND DEVELOPMENT OF UNIVERSAL WEED  
REMOVAL EQUIPMENT**

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**KSCST SPP Reference No: 36S0728**



A report submitted in partial fulfillment of the requirements for award of the degree of

**BACHELOR OF ENGINEERING  
IN  
INDUSTRIAL AND PRODUCTION**

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## **ABSTRACT**

This project is majorly based on weed control which is the most important Agricultural task facing farmers in developing countries. Considerable efforts have been invested in developing alternatives to traditional smallholder weeding technologies and replace the conventional methods of weeding in order to reduce work load, labor and human effort, save time, improve yield of crop, enhance proper weed control and finally reduce the cost involved in farming.

The problem has been identified in one of the Farms of Nippani (Karnataka) where to carry out the weeding process & spraying herbicides three farmers are employed which consumes more labor and time which intern increases the cost of farming. So in order to overcome this problem Designed Prototype of Farm equipment which would be an easiest way of manually weeding, spraying chemical and seeding, altogether consisting of three functions in one design and making the design a universal fit has been Analyzed, Fabricated, Tested and Evaluated based on the considered design criteria's.

Hence the proposed Design is a double wheeled manually operated one, which accompanies three functions as a weeder, chemical sprayer and seeder with simple nut-bolt attachment and mechanisms. The design is detachable & provides the flexibility to use with provision such as change in plow for various applications, wheel adjustments from two wheels to one, row markings and Consistent seed spacing. The design concept is one of its kinds. It is the easiest way of manually weeding, spraying chemicals and seeding long rows.