

"DESIGN AND FABRICATION OF TAMARIND SEED SEPARATING MACHINE"

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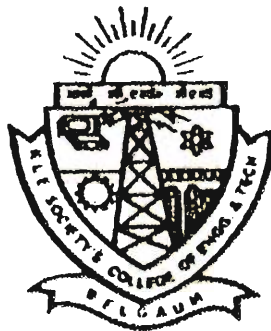
A Project Report
submitted in partial fulfillment of the requirements
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SYNOPSIS

Agricultural machinery is one of the most revolutionary and impactful application of modern technology. The process of separation of seeds from tamarind is quite tedious as because it involves manual operations which leads to consumption of more time, relatively cost and less efficient. To overcome these, mechanization has been introduced, and hence an effort for designing seed separating machine is being carried out. The tamarind seed separating machine works on destining method and saves both time and labour.

As we know that tamarind cultivation is one among the commercial cultivation. There are however few problems facing tamarind growers. One among them is difficulty in getting manual labour needed for cultivation and separating seeds from pulp. This can be partly solved and hence time and effort are substantially reduced, if mechanization can replace manual labour. In order to achieve this objective it is proposed to design and fabricate tamarind seed separating machine. As per as our concern this kind of machine has not yet developed. We made an attempt to develop the machine to separate seeds.

A single phase induction motor is used as prime mover with speed of 1440 rpm. Speed reduction is achieved by intermediate pulley arrangement. Tests were conducted on this machine and it was found to be partially succeeded.

Test results and detail design procedure along with necessary sketches are given in the ensuring chapter.