VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM, KARNATAKA

A PROJECT REPORT
ON

"PASSIVE INDIRECT TYPE SOLAR - COCONUT DRYER"

(Approved by Karnataka State Council for Science and Technology)

Submitted in partial fulfilment of the requirements for the award of the degree of

BACHELOR OF ENGINEERING
In
MECHANICAL ENGINEERING
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ABSTRACT

The art of drying food using solar energy is a little more complicated than we might think. This project is driven by the need for solar dryers in where coconut is grown in plentiful areas, but because there is no simple and economical method to preserve it, much of it is left to rot. Present day solar dryers are bulky in nature; hence we have made an attempt to reduce the size as well as cost and make it more portable so that it can be moved any where in farm or the house top with ease.

The solar dryer which is fabricated in this project operates simply by natural convection. It can dry full lot of coconut powders in two sunny to partly sunny days in our humid climate or a smaller load in one good sunny day. Obviously the amount of sun shine and humidity will affect performance, with better performance on clear, sunny and less humidity days. However, some dryers do take place on partly cloudy days and coconut can be dried in humid climate.