VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

BELAGAVI 590018

A project report on

"DESIGN AND FABRICATION OF SOLAR POWERED MANUAL CUTTING DEVICE FOR HARVESTING TEA LEAVES"

Submitted in partial fulfillment of the requirements for the degree of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING

By

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2023 – 2024

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CERTIFICATE

Certified that the project work entitled "**DESIGN AND FABRICATION OF SOLAR POWERED MANUAL CUTTING DEVICE FOR HARVESTING TEA LEAVES**" is a bona fide work carried out by

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ABSTRACT

Our project is focused on the construction and design of the solar tea leaf cutting apparatus. These locations are great places to get tea because it is possible to grow tea leaves there. Tea leaves are often chopped by hand using a larger workforce. In addition to being labor-intensive, this takes a long time. The consistency of the tea that is made could be affected because the leaves are not cut into equal pieces. We suggest a basic solar tea leaf cutting device to get rid of these kinds of drawbacks. Our device is lightweight and manageable to carry with just the hands. Our automated procedure allows for faster leaf cutting and eliminates the requirement for an external power source for operation. The device has a blower on the side to help loosen leaves that have become stuck in its teeth. The entire system is powered by the backpack-mounted solar panel, which transforms solar energy into electricity. Project components were designed and constructed using Solid Works software, and then they were manufactured.