A

Report on

ANTI SMUGGLING DEVICE FOR SANDAL WOOD TREES

A report submitted for the partial fulfillment of the requirements for Mini Project of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

BALIJI YAMINI (19811A0404)

Under the guidance of

Mr V Raju M.Tech

Assistant Professor

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

TAMARAM, MAKAVARAPALEM, NARSIPATNAM-531113

2021-2022

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Tamaram, makavarapalem, narsipatnam road, Visakhapatnam dist-531113

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

MINI PROJECT

(ANTI SMUGGLING DEVICE FOR SANDAL WOOD TREES)

BY

NAME: BALIJI YAMINI

REG NO:19811A0404

INTERNAL COORDINATORS

EXTERNAL EXAMINER

HOD, ECE

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-531 113.

ANTI SMUGGLING DEVICE FOR SANDALWOOD TREES

ABSTRACT

In present days many trees like Sandal wood, Sagwan, Rose wood; Teak wood and many other trees are being poached and smuggled. These trees are very costly and are used in the medical sciences, cosmetics, furniture, industrial raw materials, constructions etc. And due to rapid deforestation there is rise in the pollution which is indirectly leading to global warming. So, to avoid such situations several anticipatory process requests to be installed. So, we have proposed a method which can be used to control poaching of trees. According to previously published journals Anti-smuggling of trees was designed using flex sensors and ZigBee. The main disadvantages of this system are Wireless Communication in this system a use ZigBee Module which is very slow and has lesser range than WiFi Module which is used in Proposed System. Flex Sensors are merely sensors and are not accurate enough. And the existing system is not practically implemented. Our main idea is to design a portable wireless antipoaching system. This is an IOT based project where the sensor data is continuously uploaded to cloud server over a Wi-Fi module. Here we are using the accelerometer to detect the impact and tilting of the tree. When the impact is sensed or when tree starts bending the buzzer turns on and a notification will be sent to the nearby forest department. In case if the temperature rises above a given threshold value then a "forest fire" notification goes to the respective departments. Here we use a sound sensor as well as a vibration sensor to detect the cutting of trees and also use air quality sensor and temperature sensors to detect forest fires.