ANTI-SMUGGLING SYSTEM FOR TREES IN FOREST

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Abstract- We come across the smuggling of trees such as Sandal, Teak and African - Black wood etc. These trees are very and less available in the market, which are used in Medicines and Cosmetics. Due to high cost, these trees are being cut and smuggled which leads to Ecological imbalance in the Nature. To avoid such kind of Ecological activities, we are developing such a system which would restrict smuggling and also to prevent fire in order to save the Forest.

Index Terms - RENESAS micro-controller, Flex sensor, LM35, ADXL335, GSM & GPS module.

I. INTRODUCTION

Nowadays, smuggling of costlier trees have been increasing day by day because of man's greed. The right for disintegrating sandalwood for manufacturing and selling of sandalwood oil with government for sandalwood related offences has been drawn up[1]. So, we are developing a system to avoid poaching of trees which would in turn stop Deforestation and uphold the environmental stability, which would help to solve one of the issues with the Global warming. Each tree contain one electronic division which consisting of RENESAS microcontroller, Flex sensor, LM35, ADXL335, GSM & GPS.

II. LITERATURE SURVEY

[1] NARESH K(2016): THE PAPER HAS IMPLEMENTED A MODEL FOR EXPENSIVE TREES PROTECTION WITH BLUETOOTH TECHNOLOGY TO THE NODES WITH 99% ACCURACY.

[2] SMITA GAIKWAD(2015): IN A NETWORK, A CLUSTER OF 15-20 NODES CAN BE FORMED WITH A MASTER NODE TO COMMUNICATE WITH BASE STATION. IT REQUIRES LOW COST & CONSUMES LESS POWER.

[3] NICOLAS PRIMEAU(2017): SWANS ARE OF SIMPLE STATIC SENSOR NODES THAT FORWARD SENSED DATA TO SINK NODES. SUCH NETWORKS SUFFER FROM COMMUNICATION DISRUPTIONS. THEREFORE THE SENSOR ACTUATION NETWORK, ADDS ACTUATOR NODES CONTROLLED BY THE SINK NODE.

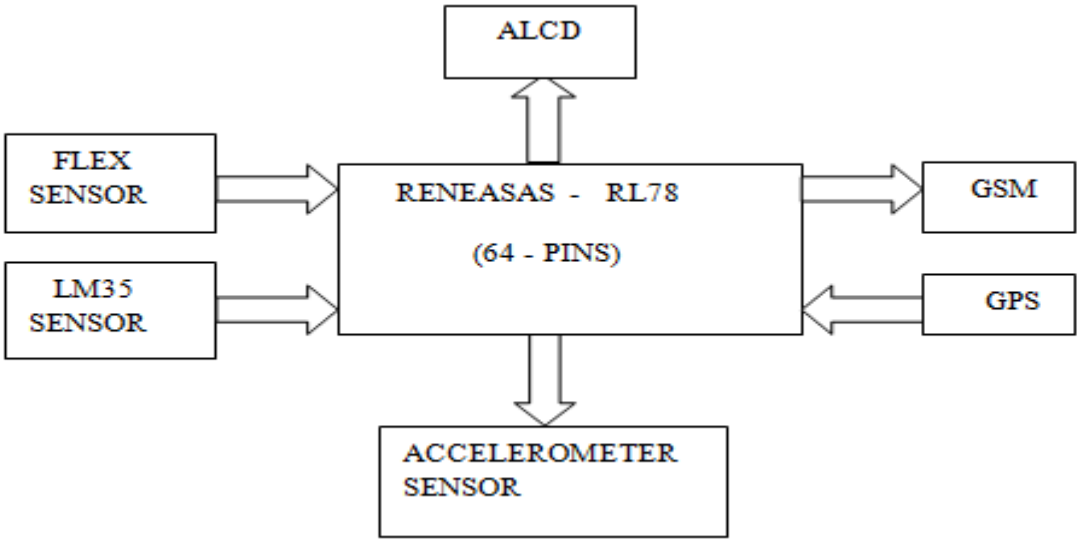
[4] ABHINAV(2018): USING THE TREE BASED CLASSIFIER, FAVOURABLE PERFORMANCE INCREASED IN THE DATA SET AGAINST A SINGLE DEEP CNN CLASSIFIER.

[5] MOHAN SAI GANESH(2016): THE IR IMAGES ARE USED IN TRACKING WHICH REDUCES THE ILLEGAL USAGE OF SANDALWOOD TREES.

III. TOOLS USED

- **Cube Suite+:** Cube suite+ is the basic software for developing RENESAS micro controller immediately after initial installation. CS+ is also comfortable with RENESAS tools including E1 & E2 on hip de bugging emulators which facilitates advanced de bugging. CS+ now supports smart utilities quick & effective tool solutions, which are available as solution tool kits. This represents a step forward from exciting tools. For receiving the messages the software is used.
- **Eclipse**: It gives you access to other android development tools from inside the eclipse ID. Android development tools are plug in for eclipse IDE i.e., designed to give powerful, integrated environment in which to build android application. ADT extends the capability to eclipse to quickly set up new android projects & export signed.apk files in order to distribute applications. Developing eclipse with ADT is highly recommended and is the fastest way to get started. It provides tools integration, custom XML editors & debugs output. ADT gives incredible boost in developing android applications.
- **Categories:** Mobile & device development
- **Tags:** Android, mobile smart phones, mobile apps, tablet and Google.

IV. BLOCK DIAGRAM



V. CONCLUSION

We are developing a system which will restrict smuggling of trees and fire in the forest. This system provides protection for the costlier trees and controls smuggling of trees in forestry where the human being not capable to provide security. From this system we can easily track the activities done by smugglers such as cutting, bending and firing which can be detected and stop the Deforestation and maintain ecological balance. Thus, protecting Wild life from this system.

VI. REFERENCES

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