



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 11, Special Issue 1, April 2022

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.118

9940 572 462

6381 907 438

ijirset@gmail.com

www.ijirset.com

International Journal of Innovative Research in Science, Engineering and Technology

An ISO 3297: 2007 Certified Organization

Volume 11, Special Issue 1, April 2022

9th National Conference on Frontiers in Communication and Signal Processing Systems (NCFCSPS '22)

28th -29th April 2022

Organized by

Department of ECE, Adhiyamaan College of Engineering, Hosur, Tamilnadu, India

IOT Based Weed Detector in Agriculture

A.Mamatha, Dr.G.Santhosh Reddy

Research Scholar, Chaitanya Deemed To Be University, India

Assistant Professor, Chaitanya Deemed To Be University, India

ABSTRACT: in this paper discuss about the Agriculture is the science and art of nurturing plants and cattle. Conferring to modern appraisal, about sixty percent of the world's residents rest in farming. An insufficient mineral in the soil and the syndrome leads to the lack of plant growth. To avoid this situation, a clever technology will be more helpful in sustaining growth and plant health. This technology will explore minerals present in the soil and inform the farmer about the state of the soil and solves the problem by providing the food in the correct composition depends on the insufficiency. Also contains an image processing system to find the disease accurately. It's it can be operated efficiently from one's own home. Around eighty percent of problems can be repaired using this smart technology.

I. INTRODUCTION

farming is the foundation of Indian economy. Agriculture is the back bone of Nation and Economy. When the land is in number of Acres and Hectares people will undergo pressure and stress due to their work and circumstances. This may ultimately lead the farmer to spend lots of money on man power. Smart intelligent Technology will be more useful for those farmers and land owners to maintain the land and crops. Deficiency of minerals in soil can be examined by that technology and intimate their condition. The weeds present among the fields can be captured by the camera and it will analyse the input. Then it reports the circumstance to the owners. This definitely will help the farmers and landowners to save their valuable time, man power, money and so on.

II. LITERATURE SURVEY

Karunakanth M and et al designed a pattern-based monitoring control for different type of irrigation required for the crops. The sensors have been used for gathering information and thereby readings accordingly, water has been provided to the plants and trees. The readings are also successfully moved to the Firebase using cloud environment for future.

Dr. Ananthi Sheshasaayee and et al implicated a technic of "resource provisioning" in cloud technology to reduce execution costs and delay in data transmission used in continuous and large scale organisations. Waqas Riaz et al proposed a "Hydraulic structure method", to measure the flow of water in the small irrigation outlets. Due to major reporting problems of manual measurement and lack of precision in measurement, the system became completely infeasible. And as an advantage Hydraulic method is also employed in the area of instantaneous and the continuous flow measurement.

III. PROPOSED SYSTEM

For analysing the soil in the land, we need some of the sensors, Testing kit and Chemicals. For analysing the minerals present in the soil, there are so many tests in general. By testing the soil using the proposed methods, we can determine the quantity of minerals present in the soil. Depending on the test results, we can be able to come to a solution on which fertilizers which we need to supply on what composition. Weeds are one of the major problems in agriculture lands. To solve this problem we used image processing method. This can capture the image and process the image by analysing the shape of leaves, stem, height of plant, colour of plant and fruit. If any discrepancies found, this can intimate the land lord about the weeds in land. This bot can move around the land and spot the weeds present among the fields. Then the land lord can take step against it by spraying pesticides and all.

International Journal of Innovative Research in Science, Engineering and Technology

An ISO 3297: 2007 Certified Organization

Volume 11, Special Issue 1, April 2022

9th National Conference on Frontiers in Communication and Signal Processing Systems (NCFCSPS '22)

28th -29th April 2022

Organized by

Department of ECE, Adhiyamaan College of Engineering, Hosur, Tamilnadu, India

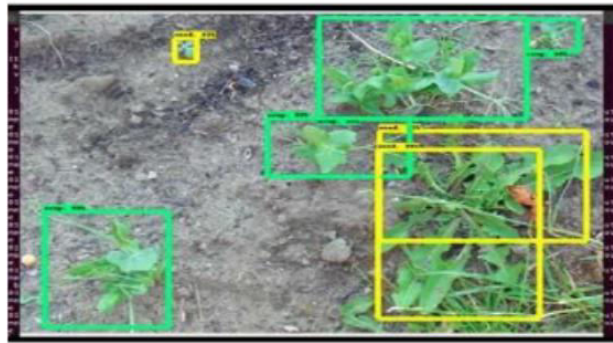


Figure: Method of Image Processing

Image processing is used to find the weed in between the cultivated crops. Depending upon the picture captured by the camera in the moving bot, it will analyse the shape of leaves, colour, height of plant, and everything. In case any discrepancies found among them it can intimate the land lord. The bot can be moved by motion sensor, gesture control. The bot can charge itself from the solar panel. The programme can be executed by the specialised software which can program in the mobile app itself.

IV. CONCLUSION

in this paper discuss about the sixty percent of the world's residents rest in farming. To improve the insufficient minerals in the soil and the syndrome leads to the lack of plant growth. This technology will explore minerals present in the soil and inform the farmer about the state of the soil and solves the problem by providing the food in the correct composition depends on the insufficiency. Also contains an image processing system to find the disease accurately. It's it can be operated efficiently from one's own home. Around 80% of problems were repaired using this smart technology.

REFERENCES

1. Y.-H. Lin, S.-Y. Chang, H.-M. Sun, CDAMA: Concealed Data Aggregation Scheme for Multiple Applications in Wireless Sensor Networks, *IEEE Transactions on Knowledge and Data Engineering* 25.
2. W. He, X. Liu, H. Nguyen, K. Nahrstedt, T. Abdelzaher, PDA: Privacy Preserving Data Aggregation in Wireless Sensor Networks, in: *26th IEEE International Conference on Computer Communications*, 2007, pp. 2045–2053.
3. S. Pai, S. Bermudez, S. Wicker, M. Meingast, T. Roosta, S. Sastry, D. Mulligan, Transactional Confidentiality in Sensor Networks, *IEEE Security & Privacy* 6 (4) (2008) 28–35.
4. J. Chen, X. Du, B. Fang, An Efficient Anonymous Communication Protocol for Wireless Sensor Networks, *Wireless Communications and Mobile Computing* 12 (14) (2012) 1302–1312.
5. R. Pries, W. Yu, X. Fu, W. Zhao, A New Replay Attack Against Anonymous Communication Networks, in: *IEEE International Conference on Communications (ICC '08)*, 2008, pp. 1578–1582.
6. M.K. Gayatri, J. Jayasakthi, Dr. G.S. Anandhamala, "Giving Smart Agriculture Solutions to Farmers for Better Yielding Using IoT", *IEEE International Conference on Technological Innovations in ICT for Agriculture and Rural*.
7. Nikesh gondchawar, kawitkar, "iot based agriculture", all-embracing almanac consisting of contemporary analysis smart minicomputer additionally conversation planning (ijarce), vol.5, affair 6, june 2016. *Overall Journal on Recent and Innovation Trends in Computing and Communication* ISSN: 2321- 8169 Volume: 5 Issue: 2 177 – 181.



INNO SPACE
SJIF Scientific Journal Impact Factor
Impact Factor: 8.118



ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 **9940 572 462**  **6381 907 438**  **ijirset@gmail.com**



www.ijirset.com

Scan to save the contact details