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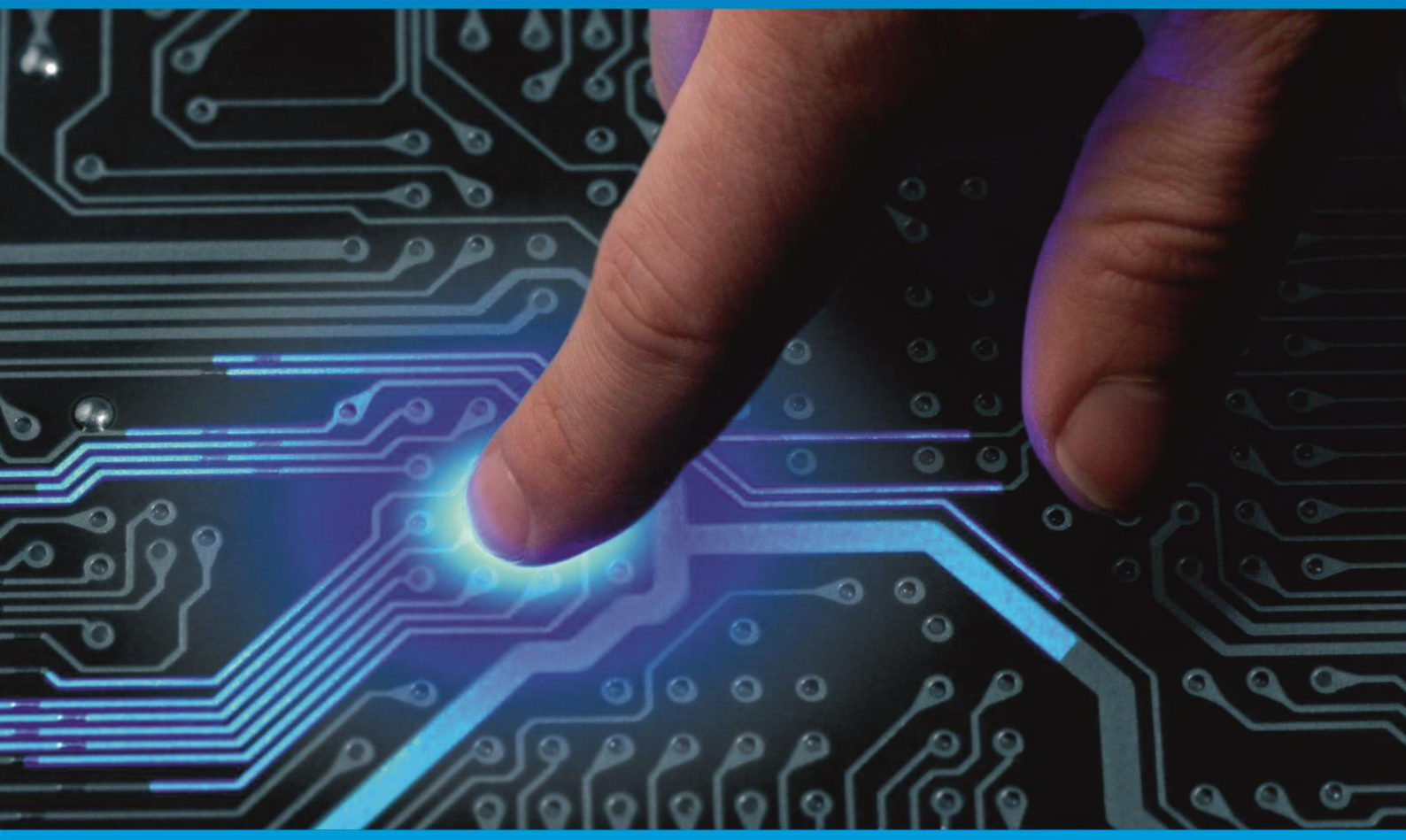

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Modern Agriculture with Insect Killer and Voice Alert Using IOT

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ABSTRACT: Development of commercialism utilizing innovation square measure getting to be lots of valuable in development. for a further cultivation zone, whereas not knowing or observant the various boundaries of the dirt, development square measure getting to be tough therefore the ranchers endure money connected misfortunes. This enterprise provides a short diagram of the dirt observant framework utilizing sensors. entirely completely different soil sensors areutilised to live temperature, damp and light-weight, body and pH esteem. the data from the sensors at intervals the dirt is shipped off the PIC16f877a A/D device then from A/D device it ship off the cloud through Nodemcu. eventually we have a tendency to square measure able to see the Info spared to cloud on telephone at the same time as pc. supported info we've got a. tendency to note that yield is reasonable with given soil boundary consequently this forefront innovation causes the ranchers to know the precise boundaries of the dirt so making the dirt testing methodology simpler. Fly insect killer machine assists to attract flying insects towards a system that works on decoy principle. The insect killer light-weight has been fitted to kill the insects with high voltage wires on the point of tube-light .thus on differentiate sensible and dangerous insects here we've got an inclination to implemented video observation system victimization raspberry pi and camera. to boot to it device is extra to activate or deactivate the killer machine.

KEYWORDS : Arduino UNO ,NPK sensor, soli sensor, moisture sensor, blower, nodeMCU

I. INTRODUCTION

When the ball of fireplace gets cool and anxious, the planet has fashioned. the person started his civilization life before eighteen,000 years past. Accidentally he has changed into a domestic life by the invention of fireplace. It ends up in cookery and had his differing kinds of food. He began to establish the edible crops from the wild varieties. Thus, the cultivation of crop is originated. The origin of cultivation starts with kingdom eras. Later, he started exploitation tools to arrange the land and he termed the animals in cultivation. This leads the person to begin his agriculture technique in crop development. ab initio it had been through with the assistance of plough and basic tools. because the population inflated, man started thinking of advanced technologies to boost agriculture. Some mortal like Dr.M.S. Swaminathan brought revolution in our country.

There square measure differing kinds of revolution like blue revolution, white revolution and sliver revolution. These square measure eminent turning purpose in Indian agriculture system by the continual increase in population. It becomes population explosion and increasing of industry, urbanization and settlement ends up in shortage and shrinking of cultivatable lands. so population, flood, famine and starvation square measure wide unfold that don't seem to be avertable.

Agriculture is that the basic would like of each human during this world. Asian nation is associate degree agriculturally based mostly country seventieth of the Indians square measure either directly or indirectly concerned in agricultural works. Indian economy depends on the assembly of agricultural product. The growing countries like Asian nation occupied with giant population with meagerly food provide and food production. this is often because of varied factors like urbanization, settlement and industry. The individuals started moving towards cosmopolitan cities besides their native villages. This causes the poor improvement of Agricultural and farming Technologies. Failures of monsoon, inaccessibility of water, improvement of concrete jungles square measure the key factors that act as desolation of

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cultivatable lands to regulate and produce back the traditional saturated conditions by provision adequate quantity of food to every and each subject in our country. we've got to adopt fashionable digital ways in scientific discipline. Introducing this sort of intervention of IoT and digital sensors in agriculture practices can enhance the yield of pure line breads this can additionally promote pure line choice of individual species Through this technique endanger and extinction species are often developed. because the completely different branches in biology like biotechnology, biology and technology, there'll not be a major development determined in cope.

Swarms of locusts have invaded large swathes of land in Asian nation since April eleventh this year. They entered many districts of Rajasthan via Pakistan's Sindh province. Few days later, they entered the neighboring State of Madhya Pradesh. several districts in state have currently been placed on alert. This locust attack has affected regarding ninety,000 hectares across twenty districts in Rajasthan.

The poor data of farmers regarding scientific discipline leads less production of grains. the continual industry and state drawback provoke the poor settlement of agriculture technology. because of population explosion we've got to adopt intensive ways to boost crop production. the prevailing techniques result in revolution. At constant time production ways additionally decreased because of the non-availability of advanced technology that is needed permanently agricultural apply. Therefore, we've got to follow bound productivity- based mostly technology within the improvement of crop production . the prevailing technologies like technology, biology and biotechnology tried its best outcome within the field of agriculture and farming

II. EXISTING SYSTEM

Agriculture is that the very important resource of our nation. Crops square measure mature and plants are often cultivated in a very appropriate atmosphere in keeping with their nature. Farmers will grow healthy and high yielding plant with the develop a healthy crop in a very explicit space while assistance of world concern. In advanced scientific discipline IOT square measure introduced to not loss of one grain. As per the literature survey the system consists of few methodologies to create exactitude farming like continuous watching of soil wetness, temperature and sensing element knowledge are going to be given to the farmer's data. throughout the expansion of the plant there could also be an opportunity for reason for blighter supported the plants. there's a system to regulate the over usage of plant food and chemical pesticides that ends up in the poor yield and cause loss to the farmers. but, there square measure some factors like insects, animals will have an effect on the expansion of the crop

III. PROPOSED SYSTEM

The project consists of system that will readily give the preference to crops for cultivation, rather than going to agriculture department. When a crop is cultivated in the field it requires periodic irrigation, production of the crops and the humidity of the soil. It consists of set of integrated sensors which will give the data about all the soil parameters which is in necessity to produce high yield. The serious problem that afarmer faces is the unpredictable amount of fertilizers required to feed to the crop. The installed NPK (nitrogen, phosphorous, potassium) system will give the information about the NPK nutrients value at all time . The proposed system will reduce the use of chemical pesticides and promotes the growth of crops as organic and prevents air pollution and affect of the plants by animals and insects were reduced by using smart insect killer and voice alert model for animals thread using IOT

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BLOCK DIAGRAM

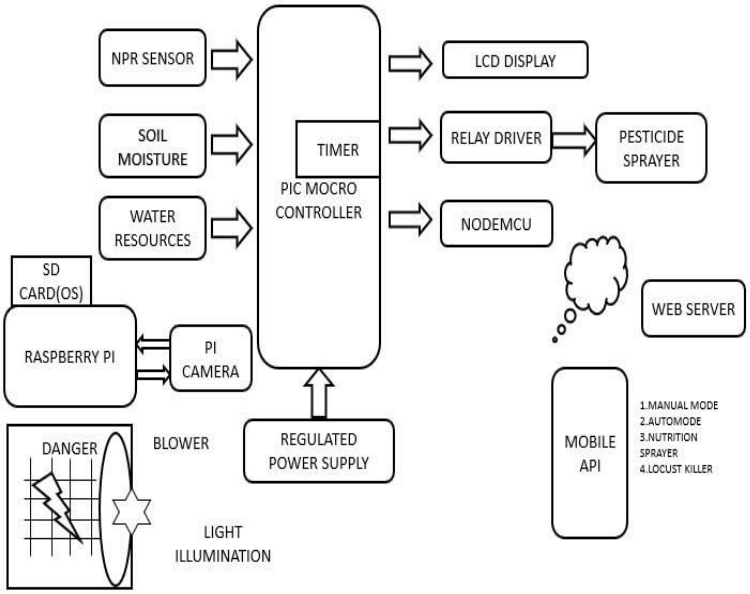

Figure 1.1 block diagram

V. CONCLUSION AND FUTURE ENHANCEMENT

The current generation farmers are facing several problems in agriculture and they do not get proper guide to proceed. They had been looking forward to technologies to improve their farming quality and quantity. The IoT and data analysis will be very useful to them and influence their agriculture in the positive way to get precise knowledge in soil parameters. Pure line breeding can be done with this method. Wastage of grains is much reduced. The set of integrated sensor technologies help them to get the information about their field in their hands at any time. This would play a vital role in water management, selecting the appropriate crop for cultivation and also to reduce the use of chemical fertilizer and pesticides. It also promotes the economic level of the farmers. The growth of healthy crop can be developed.

If any deficiency of nutrient occurs, the optimal level should be supplied automatically. Renewable energy like solar can be integrated and used as power source. Soft marketing can be designed so that the farmers can able to sell vegetables in profitable manner. Controlling temperature and humidity as like green house farming can be implemented in outdoor farming too. Image processing technology can be implemented to check the crop ripened state. Short term decomposition technique can be formed to decompose insects caught by pest eradication technique to feed as organic manure to field.

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PROTOTYPE MODEL

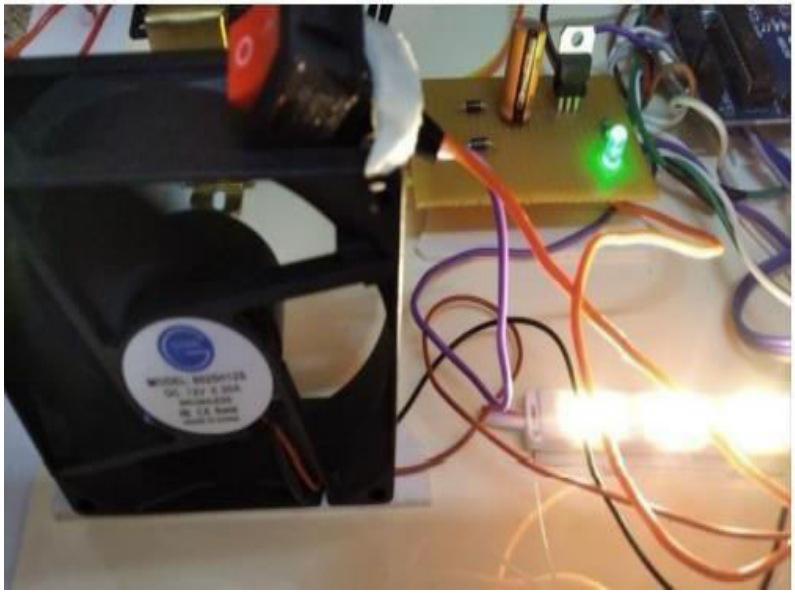

Figure1.2 prototype model

REFERENCES

1)Department Of Computer Science And Software Engineering, Swinburne Universit OfTechnology, Melbourne 3022, Australia; Dgeorgakopoulos@Swin.Edu.Au (D.G.); Amorshed@Swin.Edu.Au (A.M.)
2) International Conference On Advanced Computing & Communication Systems (Icaccs) Devi Kala Rathinam. D Computer Science And Engineering Sri Krishna College Of Engineering And Technology Coimbatore, India
3) International Journal Of Computer Applications (0975 – 8887) Volume 146 – No.11, July 2016
4) J. Balendonck ,J Hemming, B.A.J Van Tuijl, Incroci, A.Pardossi P. Marzialetti Wageningen Ur Greenhouse Horticulture, Bornsesteeg 65,6708 Pd Wagenngen, The Netherlandse
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