LITERATURE REVIEW

[1] Priyanka Deotale, Prasad Lokulwar (2021) have presented the paper titled “Smart Crop Protection System from Wild animals Using IoT” . Crops in the agricultural land are destroyed by the domestic animals and wild animals ,it is one of the reason for low productivity . Farmers can't be there for entire 2 hours so we have make use of IOT to control the animals destroying the field . Once the animal is detected the system will larm and start lightning in the corner of the farm . It will not harm any animals and we can also protect the crops.

[2] R.M. Joany ,E.Logashanmugam , E.Annai Devi , S.Yogalakshmi , L.Magthelin Therase , G.Jegan (2022) have proposed a paper titled “IoT based Crop Protection System during Rainy Season” . Water is progressively turning into the foremost limited resource required to satisfy the developing populace. Its important part in the life of human beings is emphasized in arid lands, wherever is recognized by low annual downfall. Moreover the irregular temporal and spatial dissemination ensues dry and damp periods. This type of environmental circumstance impacts water expediency and crop yielding permanency. Thus, farming is challenging and this is credited to unsuccessful access of water. The chief and much needed agricultural element in arid lands is potency of agriculture water use. Beneath reduced and changing downfall circumstances, reasonable irrigation administration may be a great way for up water-use potency. The Internet of Things (IoT) is associate degree future technology that connects numerous devices through the web. Within the field of agriculture, the IoT technology provides varied advantages to the farms by addressing numerous problems faced by them. Such techniques facilitate to boost the standard, amount and property of agricultural merchandise. During this paper we’ve projected associate degree innovative approach for irrigating and persecutor watching and dominant for the crops. Towards this objective, associate degree IoT based mostly sensible irrigation system is projected, which calculates the exact water supply of the crop that aids in its life cycle and climate. When this calculated crop water demand is mistreated, there is a pump motor that operates instinctively each time the dampness of the soil goes low beyond the enduring welting purpose. The motor is closedown once the desired water is wired resolute crops. This ensures acceptable level of water is used for watering the crops that might aid in higher quality crop production. During this work, numerous parameters like wetness, wetness and temperature area unit being monitored endlessly mistreatment acceptable sensors. The information nonheritable by these sensors area unit collected mistreatment Arduino microcontroller. The pump motors and therefore the RF / GSM transceivers area unit operated mistreatment AT Mega controllers.

[3] N.S. Gogul Dev , K.S. Sreenesh , P.K. Binu (2019) has presented a paper titled “IoT Based Automated Crop Protection System” . Low productivity of crops is one of the main problems faced by the farmers in our country. This can be because of two main reasons. Crops destroyed by wild animals and because of bad weather condition. This paper provides a solution to the destruction of crops by animals. This system will provide a complete technical solution using the Internet of things (IOT) to the farmers to prevent their crops from wild animals and provide information to the farmers to maximize their production. Animals are detected using PIR sensors and cameras where animals are identified using TensorFlow image processing Techniques. Raspberry PI is used as the processing unit of the system and sound buzzers are used to emit the ultrasound frequencies.

[4] Shishir Bagal , Krunal Mahajan , Riya Parate , Ekta Zade , Shubham Khante (2021) have investigated the title of “Smart Crop Protection System Using IOT” . The Smart protection system defines that this project help to farmer for the protection of a farm. We have designed this project for the only secure from animals but we this project have the provision to secure from the human begins also. This can achieve by the help of IOT device that we are discuss in this paper. The SCPS work on the battery so that this project can be
easily portable and also we are add solar panels and converter modules this can help the battery to charge from solar energy. The IOT device is used to indicate the farmer by a message while someone enter into the farm and we are used SD card module that helps to store a specified sound to fear the animals.

[5] R. Nageswara Rao , B. Sridhar (2018) have proposed a paper titled “IoT based smart crop-field monitoring and automation irrigation system” . Agriculture plays vital role in the development of agricultural country like India. Issues concerning agriculture have been always hindering the development of the country. The only solution to this problem is smart agriculture by modernizing the current traditional methods of agriculture. Hence the proposed method aims at making agriculture smart using automation and IoT technologies. Internet of Things (IoT) enables various applications crop growth monitoring and selection, irrigation decision support, etc. A Raspberry Pi based automatic irrigation IOT system is proposed to modernization and improves productivity of the crop. main aim of this work to crop development at low quantity water consumption, In order to focus on water available to the plants at the required time, for that purpose most of the farmers waste lot time in the fields. An efficient management of water should be developed and the system circuit complexity to be reduced. The proposed system developed on the information sent from the sensors and estimate the quantity of water needed. A two sensors are used to get the data to the base station the humidity and the temperature of the soil, the humidity, the temperature, and the duration of sunshine per day. The proposed systems based on these values and calculate the water quantity for irrigation is required. The major advantage the system is implementing of Precision Agriculture (PA) with cloud computing, that will optimize

the usage of water fertilizers while maximizing the yield of the crops and also will help in analyzing the weather conditions of the field.

[6] Damini Kalra , Praveen Kumar , K Singh , Apurva Soni (2020) has presented the paper under the heading “Sensor based Crop Protection System with IOT monitored Automatic Irrigation” . Agriculture assumes a significant job for advancement in nourishment creation and crop protection in India. Here, agriculture relies upon disproportionate rain which thereby affects India's agriculture. There arises a need for effective irrigation for the agricultural production. The control over how much water is to be supplied and when it is to be applied determines the uniformity which is key to maximizing the irrigation efforts. The proper irrigation management takes careful consideration and vigilant observations. It has many benefits. Keen water irrigation and protection system framework is in this way accepted to be a significant arrangement. The paper along these lines presents an effective water system framework that advances the accessible water in the water supply and in this manner giving an effective and powerful mechanism for the irrigation purposes. Irrigation framework would automatically begin/stop water siphons, on the agricultural site depending upon the dampness content obtained by the moisture sensor as soon as it senses the level of water in the reservoir. The deliberate sensor estimates are sent to the Arduino Uno microcontroller for arranging the controlled calculation. The protection is done through the voice detection and movement detection methods to enable high frequency sound, hence protecting the crops from insects, pests and small animals.

[7] S. Karthika , Kalyana Rangan V , Aditya k , Anand Ani Kumar , D. Selvakumar (2021) have presented a paper titled “IOT BASED CROP PROTECTION SYSTEM” . The effect of insects in farmland has been very high in certain areas. The climatic changes even add to the woes of a farmer. Widespread adoption of chemical pesticides has resulted in unprecedented crop yields. The agriculture pest monitoring device is a moving bot or a line following bot which monitors the amount of pest in farmland. The image that is captured using camera module is processed using convolution neural network involving processes like image acquisition, preprocessing, gray scale conversion blurring, max pooling and using ReLU for faster training of dataset. It calculates and sends the amount of pest present in a particular crop and suggest the amount of pesticide to be sprayed.

[8] Dugyala Karthik , R Ramesh Babu (2017) has presented a paper under the title “International Journal of Advanced Information Science and Technology (IJAIST)” . The problem of wild animal attacks on crop fields ie crop vandalization is becoming a very common phenomenon in the state of Himachal Pradesh, Punjab, Haryana and many other states. Wild animals like monkeys, estray animals especially cows and buffaloes, wild dogs, nilgais, bisons, elephants deer, wild pigs and even birds like parakeets cause a lot of damage to crops either by running over them or eating them and vandalizing them completely. This leads to poor yield of crops. These animals attack on fruit orchards and destroy the flowerings and fruits. In both cases, this leads to significant financial loss to the farmers and orchard owners. The problem is so pronounced that sometimes farmers decide to leave the area barren due to these animal attacks.