Abstract

The nation's economy and quality of life depends on the agricultural yield and the storage of food grains has been an age long practice with cultivators and traders. Good storage facilities are important to the farmers all over the world as they ensure household and community food security until the next harvest. Though considerable losses occur in the field, both before and during harvest, the greatest losses are noticed during storage. Considerable losses both in quality and quantity of food-grains take place in storage due to a number of factors. A Smart Sensor System is proposed to monitor grains in storage depots. The damage of grains can be controlled by monitoring the parameters like temperature, humidity and light which influence the storage of grains. The insects and fungus are the two prominent factors which damage and spoil the grains in the depot and are controlled by temperature, humidity and light. The low cost, low power smart wireless sensor network system is designed to monitor the parameters influencing the storage of grains in depot. The open source technology-ARDUINO (open electronics prototype and open source) is used to develop the system.
Smart Sensor Network System based on ZigBee Technology to Monitor Grain Depot

References

- Santoshkumar, Dr. D. G. Wakde, "Development of Wireless Sensor Node for Precision Agriculture", IEEE International Conference on Computational Intelligence and Computing Research (IEEE-ICCIC-2011) at Kanyakumari, India.

Index Terms

Computer Science Wireless

Keywords

Arduino, temperature, humidity, light, ZigBee