

DESIGN OF IOT BASED CHICKEN CAGE CLEANING SYSTEM USING SOLAR ENERGY SOURCES

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ABSTRACT

The quality of cage cleanliness plays a vital role in preventing the spread of bacteria and ammonia gas which causes disease in chickens. The author developed an automatic dirt cleaning system based on the Internet of Things (IoT) to overcome this problem. This system is specifically designed to make it easier for farmers to control, monitor cage conditions and clean chicken droppings, as well as reducing ammonia gas levels to below 10 PPM. This research also utilizes Solar Power Plants (PLTS) to convert solar energy into DC electricity, creating a sustainable and environmentally friendly resource. It is hoped that the automatic manure cleaning system will increase the operational efficiency of chicken farms, support a healthier coop environment, and improve the welfare of chickens. The presence of IoT and PLTS technology is an important breakthrough in increasing livestock productivity and providing a sustainable food supply for society.

Keywords: *Automatic Cleaning System, IoT, PLTS*