DESIGN AND CONSTRUCTION OF AUTOMATIC CHICKEN MANURE CLEANING CONVEYOR PROTOTYPE IN MULTI-STOREY CHICKEN COOP

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ABSTRACT

Chicken farms produce ammonia waste that can pollute the environment and cause unpleasant odors. If the cleanliness of the cage is not maintained, then chicken droppings will accumulate, so that the cage has the potential to become a source of disease for chickens and farmers. Therefore, this prototype of an automatic chicken manure cleaning conveyor is expected to be able to maintain the cleanliness of the cage, especially in the disposal of chicken manure with a cage equipped with an automatic manure cleaning system so that it can help farmers clean chicken manure in an easier and more efficient way. The way this system works is when the chicken defecates, the manure will fall and collect on the conveyor belt, then when the cleaning time set on the timer arrives, the conveyor will run automatically directing the collection of chicken manure towards the scoop and will fall towards the container. The results of the tests that have been carried out are that the system can work well according to the predetermined time settings. The conveyor runs to clean chicken manure towards the container according to the time setting on the timer. Therefore, the success rate of the overall system performance can be said to be 100% successful.

Keywords: Conveyor, Timer, Chicken Farmer