

The use of automation to improve the agricultural production of small farmer

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Abstract: The present paper aims to automate the processes that are still manual, focusing on increasing the production success rate through a simple and effective system that aims to increase productivity and reduce waste. The methodology used consists of bibliographic research on the subject and prototype creation with reduced implementation cost that uses Arduino, sensors and actuators for automation. By reading the data collected by the sensors, measures will be taken to intervene in the internal parameters, such as irrigation, artificial lighting or nutrient injection, in order to maintain the ideal environment for the best plant development. Producers will also have greater control over of cultivation, as reports obtained through the collection of extracted data will be presented to assist them in making decisions.

Keywords: Arduino. Sensors. Nutrients. Agricultural production.

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