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| **Title:** | IOT Based Solar Powered Automated Fish Feeding System | | |
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| **Published Journal Name:** | Agricultural Engineering International: CIGR Journal | | |
| **Type of Publication:** | Journal | | |
| **Volume:** | 24 | Issue | 4 |
| **Publisher:** |  | | |
| **Publication Date:** | 24 December 2022 | | |
| **ISSN:** | 1682-1130 | | |
| **DOI:** |  | | |
| **URL:** | https://cigrjournal.org/index.php/Ejounral/article/view/8303 | | |
| **Other Related Info.:** |  | | |
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| **Abstract:** |  |
| To minimize manual labor in aquaculture, this paper proposed an IOT-based solar-powered automated fish feeding system. Fish feeders will be readily managed from mobile phones utilizing the mobile app and the dashboard with only one click at any time and from anywhere. To create such a system, we utilized Arduino, DC gear motor, ESP32+SIM800L, and MATLAB Simulink to analyze the system outcome. The simulation of our design was done in MATLAB Simulink. In MATLAB Simulink from the DC power generation unit, the monitoring data will be the generated DC voltage, current, power, etc. The hardware design of the prototype is also demonstrated. The individual is capable to instruct the system through a wireless connection at a specific time to supply food to the fish. The major goals of this project are to offer consistent feeding without interfering with the owner's job. An IOT-based and smart power managing system confirmed the feasibility of the use of the proposed system with a prototype hardware system including simulation results. | |