Design and Implementation of an Automatic Fish Feeding Tool and Pond Monitoring Using Autodesk Inventor

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ABSTRACT

This study aims to develop an Automatic Fish Feeding Device design that can improve efficiency in freshwater fish farming. The research methods include literature review, tool design, design testing, and stress analysis simulation. This device is designed with a maximum capacity of 10 kg and the ability to be easily moved, thus allowing users to manage fish feeding more efficiently. The design feasibility test was conducted through a questionnaire with a Likert scale, which showed an 80% approval rate. The results of the stress analysis simulation indicate that this design meets the required safety and reliability standards. The implementation of the frame using hollow iron and angle iron materials was successfully carried out, demonstrating adequate strength and durability in accordance with occupational safety standards. Thus, this research makes a significant contribution to improving the efficiency of the freshwater fish farming process, as well as providing a foundation for the development of automation technology in the fisheries sector.

Keyword: *Design, Automatic Fish Feeder, Freshwater Fish*