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## Design and fabrication of manually operated paddy transplanter machine

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## Abstract:

Rice is staple food in many Asian countries Most of the agriculture process are manual process and this needs to mechanize. Most of the farmers belong to lowincome background and cannot afford equipment's due to its high initial investment. In our research work we propose an idea of manually operated paddy transplanter that can transplant paddy when it is being pulled. The machine shall be mainly designed for farmers so as to mechanize the farming process and benefit to the income of the farmer. The project aims to design and fabricate a manually operated paddy transplanter machine for enhancing the efficiency of paddy cultivation. design incorporates user-friendly features, The ergonomic considerations, and an adjustable mechanism to accommodate various paddy varieties and field conditions. The fabrication process involves precision cutting, shaping, and machining of selected materials, ensuring high-quality components. Integration of mechanical systems, including spacing and depth control mechanisms, is optimized for planting efficiency. Safety features are integrated to comply with industry standards. The fabrication process is followed by thorough testing, documentation, and packaging for shipment. The project encompasses user training, post-delivery support, and continuous improvement based on user feedback, aiming to provide a reliable and efficient solution for manual paddy transplantation.