## DESIGN AND DEVELOPMENT OF A WEB-BASED PALM OIL PLANTATION MANAGEMENT APPLICATION

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## **ABSTRACT**

Oil palm plantations play an important role in Indonesia's economy, both as a source of employment and foreign exchange. However, many farmers still manage their plantations manually, leading to inefficiencies and difficulties in recording activities such as fertilization, maintenance, and harvesting. This study aims to design and develop a web-based oil palm plantation management application to assist farmers in managing financial records, maintenance, fertilization, and harvest activities. The application was developed using the PHP programming language with the Laravel 10 framework and MySQL as the database. The core features include recording plantation data, purchases, fertilizer usage, maintenance, harvests, and automated report generation. To ensure that the system meets user needs, testing was carried out using the Black Box Testing method. The result of this research is an application that enables both administrators and farmers to clearly track and evaluate plantation activities, thereby supporting better decision-making.

**Keywords:** Application, Management, Palm Oil, Website, Laravel.