INTERNET OF THINGS (IOT) RESEARCH AND APPLICATIONS IN PLANTATION INDUSTRY IN ASIA: A SYSTEMATIC LITERATURE REVIEW.

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ABSTRACT

INTERNET OF THINGS (IOT) RESEARCH AND APPLICATIONS IN PLANTATION INDUSTRY IN ASIA: A SYSTEMATIC LITERATURE REVIEW.

The demands of agriculture products supply keep on rising with the increasing of human population. In order to sustain the demand, the use of Internet of Things (IoT) in plantation sector is a necessity in this 21st century. This study was conducted to review and analyze the current progress of research and applications of IoT in Asia. The methodology employed in this study was Systematic Literature Review (SLR), by screening and collecting related articles from reputable database journals such as "Scopus" and "Science Direct". The keywords used to search the articles were "Internet of things in Plantation" and "E-agriculture". Initially there were 122,648 articles were found using both keywords described earlier. After careful and meticulous selection, there were altogether 21 selected final articles that met the criteria and then the articles were reviewed and analyzed according to the SLR methodology. The results of the data extraction analysis showed that the researches and applications regarding the use of remote sensing and sensors to increase the crop yields was the highest frequency. Besides, the trends of publication regarding IoT studies starts to grow in 2016. China and India were the leading country in Asia in publications of this study. In conclusion, the results of this study helped researchers to understand the importance of IoT researches and applications in plantation industry especially in Malaysia and Asia.

Keywords: Internet of Things, E-agriculture, Plantation Industry, Asia, Systematic Literature Review.