Adoption of Digital Technology: Mapping the Important Roles in Current Agriculture Ecosystem Before & During Pandemic Covid 19 in West Java

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ABSTRACT

Indonesia is the 4th most populous country in the world (Infoplease, 2021), and Indonesia is one of the world's largest producers and exporters of agricultural crops (Statista, 2022). In 2019, FAO estimated that the agricultural area in Indonesia is around 62.300.000 ha (FAO, 2021). Around 60 percent of the total population is in Java island and Bali which are only about 7 percent of the total country's area (FAO, nd). These islands are believed to be the most fertile of any other island in Indonesia. That's why Indonesia is called an agrarian country. Indonesia's agriculture industry is a huge contributor to the Indonesian economy. More than 29 percent of the Indonesian workforce are working in agriculture. It is why agriculture become important to Indonesia. According to Indonesia Statistic Data (BPS, 2019), Agriculture in Indonesia contributes more than 13 percent, which is the third most biggest-contributor after manufacturing and trade. With this performance of Indonesia's agriculture, Indonesia has a great opportunity in the future to give a contribution to the food supply of the world. But according to Indonesia's Statistic Data stated in The Jakarta Post, Indonesia already lost 5.1 million farmers between 2003 and 2013 (The Jakarta Post, 2020). This condition is the consequence of the beliefs of the young people that farmers are low-wage workers, which is suitable for those who have a poor background and limited educational background (SMERU Research Institute, 2016). The issue is limited to human resources and according to Indonesia Statistic Data, Indonesia's agricultural land has decreased from 7.75 million hectares to 7.46 million in just 6 years (The Jakarta Post, 2020).

Keywords: Agriculture, Agriculture Ecosystem, Digital Ecosystem