

PAPER • OPEN ACCESS

An android-based start-up app for self-agriculture and food

To cite this article: A Pangestu *et al* 2023 *IOP Conf. Ser.: Earth Environ. Sci.* **1133** 012070

View the [article online](#) for updates and enhancements.

You may also like

- [Mitigating PEMFC Degradation During Start-Up: Locally Resolved Experimental Analysis and Transient Physical Modelling](#)
Elena Colombo, Andrea Bisello, Andrea Casalegno *et al.*
- [Remote health diagnosis and monitoring in the time of COVID-19](#)
Joachim A Behar, Chengyu Liu, Kevin Kotzen *et al.*
- [Experimental and numerical modeling of plasma start-up assisted by electron drift injection on J-TEXT](#)
Junli Zhang, Zhifeng Cheng, Yanli Peng *et al.*



245th ECS Meeting • May 26-30, 2024 • San Francisco, CA

[Learn more & submit!](#)

Present your work at the leading electrochemistry & solid-state science conference.

Network with academic, government, and industry influencers!

Submit abstracts by December 1, 2023



An android-based start-up app for self-agriculture and food

A Pangestu¹, R R Al-Hakim^{1,2,3}, H A Hidayah^{4*}, A Jaenul¹, Y Z Arief^{1,5}, and R Ekawati⁶

¹Electrical Eng. Dept., Jakarta Global University (JGU), Depok City, Indonesia

²Graduate Study in Primatology, IPB University (Institut Pertanian Bogor), Bogor City, Indonesia

³School of Computer Sci., Nusa Putra University, Sukabumi City, Indonesia

⁴Faculty of Biology, Universitas Jenderal Soedirman, Purwokerto City, Indonesia

⁵Electrical & Electronics Eng. Dept., Universiti Malaysia Sarawak (UNIMAS), Samarahan City, Malaysia

⁶Informatics Eng. Dept., Jakarta Global University (JGU), Depok City, Indonesia

*Corresponding email: hexa.apriliana6@gmail.com | ORCID ID: 0000-0002-5516-9546

Abstract. Several sectors, including technology, influence the need for food to date. Global heating conditions also impact the existing food system since poor agricultural conditions reduce farm product output and increase famine risk. As cybernated start-ups develop, it enables multiple parties to develop start-ups in farming and food sectors. This study aims to develop a self-agriculture and food start-up app based on Android OS. This application allows each user to prepare and commercialise food items autonomously. The system is intended to encourage individuals to perform tasks such as cultivating and selling harvests, purchasing dietary commodities, and monitoring current microclimate circumstances.

1. Introduction

Decreased cropland and shrinkage of agricultural land encourage every human to self-sufficient agriculture. Besides, climate change also influenced the existing food system [1]. There are many things that everyone can do to start instilling agricultural independence, such as start-up-based agriculture [2]. This idea can also support sustainable development goals (SDGs), including the form of agriculture and food, undoubtedly.

In the industrial revolution era, the agricultural sector was also developed as a start-up and innovated by modern agrarian start-ups [2]. Economically, start-up-based agriculture can increase the agricultural enterprises, environmental safety, and efficiency of the existing production system, respectively [2,3]. One of the big problems in the farming sectors is self-agriculture and the food chain. Technology undoubtedly influences these roles, so every agrarian needs to adapt due to agricultural technology [4]. Besides, in the new standard era after the pandemic, the requirements of working in space together are needed [5,6]. Start-up technology provided the concept of real-time connection with working together, sometimes also in different places and times.

Today, in the era of digitalisation, agriculture sectors have been influenced, and new policymakers suggested digitalised agriculture [7]. Besides, it is crucial for the subsequent economic development of

