

Summary of Indonesia's Startups in Agriculture and Fisheries Field

President Joko Widodo officially launched the roadmap called "Making Indonesia 4.0" on April 4, 2018. Industry 4.0 is a term that refers to the fourth industrial revolution in manufacturing and industry. This details the country's vision to boost the manufacturing industry's competitiveness using technology. Prioritizing the food and drink, automotive, textile, electronics and chemicals sectors, the government hopes the roadmap will help create 10 million new jobs by 2030.

As Indonesia pushes to create more digital startups and prepare the manufacturing industry to embrace digital technology, within the last 5 years, startups have become a part of our daily lifestyle, alongside the increase in internet access penetration among Indonesians. According to the start-up ranking issued by TechInAsia, the top 5 start-ups in Indonesia are still dominated by e-commerce. But agriculture and fisheries field are seen become the next sector that can develop as startups. The manifestation of creative economy is evident as more and more agricultural, and fisheries start-ups have been established in the last five years in Indonesia and they have played key role in reshaping the landscape of agriculture and fisheries in Indonesia as follows:

1. TaniHub

Founded in 2015, Tani Group is a tech startup engaged in two main enterprises. Aside from TaniHub, an e-commerce platform that connects farmers with individual customers as well as supermarkets, hypermarkets, hotels, and restaurants so supply chain will simpler and farmers can earn more, and buyers can get cheaper prices. There's also TaniFund, which gives farmers the chance to manage crowdfunding campaigns. Only TaniHub farmers can apply for loans at TaniFund. The funds that they provide are also distributed to TaniHub in the form of seeds, fertiliser, and so forth. If the farmers need cash, they help manage their finances to ensure that the funds can be processed properly. All harvested goods will be absorbed through TaniHub.

2. TaniJoy

TaniJoy is a sharia investment platform which connect farmers to working capital. The goal is to increase the livelihood of farmers. They empower smallholder farmers in the horticulture sector by providing training and education about the agriculture technology and basic financial management. TaniJoy partners with landowners who own land that meet their terms and conditions. They also strive to work closely with local farmers. After an agreement is made between the two

parties, TaniJoy will train the local leaders to be a Field Manager. After the training for local leaders and farmers are completed, TaniJoy will launch investment projects accordingly. Investors will then be ready to invest in our projects. After an agreement is made between the investor and TaniJoy, the farmers will start with the cultivation of the appropriate crops. Due to their transparent Sharia-like policy, all financial activities will be recorded, processed, and reported to the investor's dashboard. TaniJoy also provides a monthly report to display the progress of the project.

3. Ur-Farm.com

Ur-Farm is a start-up social business that empowers small coffee farmers in Indonesia to reach a wider market. Ur-Farm empowers more than 50 coffee farmers in East Java and Bali. Ur-Farm uses organic farming techniques and our coffee products have been certified by natural coffee. Ur-Farm's mission is to cut out the involvement of middlemen in the coffee commodity supply chain, therefore we use the concept of "Farmer Grown, Farmer Roasted Coffee". With this concept consumers know firsthand where the product comes from and enjoy a new way of drinking coffee that is directly grown and roasted from its source.

4. Pak Tani Digital

Pak Tani Digital is a startup that tries to take the role of connecting farmers with all players in the agricultural industry from upstream to downstream, from suppliers to household customers. This startup has a vision to solve agricultural problems in Indonesia, such as farmer not proficient using technology to get information and connect with markets. The average age of farmers who are not young anymore makes them far from digital technology. While the use of technology has the potential to help develop their business. For this reason, Pak Tani Digital actively educates farmers by approaching young farmers and farmer groups to conduct socialization. Pak Tani Digital has been operating since November 2017, to date we have more than 28,000 application users.

5. Pasarlaut.com

With the mission of making Indonesia a global maritime center through digital technology, PasarLaut.com started the initial step by creating an online marine product trading portal, the goal is to move this offline transaction to digital so that market share will be more widely open both for sellers, also for buyers in order to fulfill their objective of buying marine commodities, with the transfer of this transaction it is hoped that more parties will be involved in the fisheries and marine industry.

6. eFishery

Founded in 2013, eFishery is the first 'fishtech' startup in Indonesia, provides an Internet of Things (IoT) solution and data platform for fish and shrimp farming businesses. The startup's device allows for smart automatic feeding, making it easier for farmers to monitor and schedule feeding

times using a smartphone app. This technology can also help to increase feed efficiency as well as daily growth; multiplying the profit of fish and shrimp farmers. Until today, eFishery has been deployed to thousands of farms in 16 province and 67 cities/districts in Indonesia; from North Sumatera to Maluku. With that outreach, eFishery continuously develop product and services that can add value for the stakeholders in aquaculture and solving some of the biggest challenges that farmers face.

Related to develop startups in Indonesia, Ministry of Communication and Information officially launched Ignite the Nation National Movement 1000 Digital Startup Program in Jakarta, Friday (06/17/2016). In the event, the Minister of Communications and Information Technology Rudiantara convey the launch of this program is the shape of the new movement in the digital industry. National Movement 1000 Digital Startup will begin with 10 cities, namely Jakarta, Bandung, Surabaya, Yogyakarta, Semarang, Malang, Medan, Bali, Makassar, Pontianak. In 10 of the cities will set up an innovation center as the rallying point of the technology community, creativity, and culture, as well as provide co-working space so that local actors and creators can collaborate to create solutions for the needs of society, both in the local and national level. The Minister of Communication and Information hopes that the Ignite the Nation National Movement 1000 Digital Startup Program can create new unicorns in Indonesia and startups can go through good stages until they are able to gain capital and continue to grow.