

Sustainable Agriculture through Public-Private Partnership for Alleviating Poverty (A Study of PT. Hikmahfarm Partnership).

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ABSTRACT:As an agricultural country, Indonesia depends on its economic development through the agricultural sector. However, based on Indonesia Central Bureau of Statistics data, 49% of the poor Indonesian population lived in rural areas and worked in the agricultural sector. Sustainable development in the agricultural sector is an important focus to overcome poverty and improve social welfare; one strategy to achieve sustainable agriculture is through Public-Private Partnership (PPP). PT. Hikmahfarm is one of the agriculture businesses that implement the concept of PPP by building partnerships with farmers in rural areas, the government sector, and the non-government sector in building an ecosystem for sustainable agricultural production. This study aims to describe the partnership in PT.Hikmahfarm as one strategy to reach Sustainable Agriculture for poverty alleviation, using qualitative methods through documentation study, observation, and in-depth interview. The result of this study identified that partnership in PT. Hikmahfarm can encourage Sustainable Agriculture through sustainable food needs, sustainable farmers' organizations, and the improvement of socio-economic welfare. PT.Hikmahfarm, in this partnership, plays a significant role as a service provider and intermediaries to overcome the problem of small farmers through providing cultivating land for farmers, provision of agricultural facilities and infrastructures, increasing small farmer capacity, and market certainty for agricultural products.

KEYWORDS -a public-private partnership, sustainable agriculture, farmer poverty

I. INTRODUCTION

As an agrarian country, Indonesia has many types and contours of the land, altitude, and tropical climate. Such elements become precious capital in producing good quality agricultural commodities. Agriculture plays a strategic role in supporting national economic growth, especially in achieving food security, increasing competitiveness, labor employment, and reducing poverty. According to the BPS research[1], the Indonesian Agriculture, Forestry, and Fisheries Business Fields have made the second-largest contribution to the gross domestic product, amounting to 13,23 percent. The progressive development of the agricultural sector from year to year, agricultural sector potential, and the production rate of agricultural commodities reflect a promising business field for economic growth. However, it does not necessarily make business actors in the agricultural sector free from poverty. The Central Statistics Agency noted that the number of poor people in Indonesia in September 2020 was 27.54 million, increasing 1.11% from the previous year, and 49% or 15.1 million of them live in rural areas and depend on their lives in the agricultural sector [2].

The World Bank states that the agricultural sector is one of the crucial focuses to overcome poverty, improve people's welfare, and maintain food security. The agricultural sector growth will effectively increase the income of the poor two to four times compared to others [3]. Some solutions to poverty alleviation have been found in rural areas in a developing country like Indonesia, such as a shift towards a high-quality agricultural sector, decentralizing the non-agricultural economics, and providing sufficient assistance in the agricultural sector [4]. Sustainable agricultural development is the key to building economic and community sustainability [5]. Thus, it is crucial to develop a sustainable and environmentally friendly agricultural system

that applies advanced technology to prevent negative externalities to the biophysical and socio-economic environment at the micro and macro levels [6].

Agricultural development can be carried out through various approaches, one of which is the Public-Private Partnership (PPP) method. The Public-Private Partnership means collaborative efforts between public and private sectors in contributing to one or more functions such as planning, resources, and activities needed to achieve common goals set by the partners [7]. Meanwhile, according to Brinkerhoff, the partnership between the government and the private sector consists of partnership-forming elements, namely mutuality and organizational identity [8].

Mutuality describes a condition of cooperation between the government and the private sector in achieving specific goals. Mutuality includes commitment, mutual control, and shared responsibility in the partnership [8]. Several assumptions underlie the definition of a partnership. First, there is a form of synergy; second, partnerships involve the development and delivery of particular strategies, set of projects, or an operation in which each actor does not have an equal role; third, in PPP partnerships, the government sector is not necessarily aimed at pursuing commercial goals, so partnerships are merely on social aspects [9].

PT. Hikmahfarm is one of the agricultural companies in Indonesia that runs its business through a Public-Private Partnership mechanism. It was established in 1962 by the pioneer, the late H. Moch. Andung and his wife Hj. Aucun Cunarsih. It was initially named UD. Hikmah was engaged in potato cultivation agribusiness, and now it has been well-developed into PT. Hikmahfarm. In running its business, PT. Hikmah applied the PPP Partnership concept concerning partner farmers, government institutions, universities, donor agencies, and other private companies. The established partnership aims to achieve sustainable agricultural sector development for the company, partner farmers, and social welfare for traditional farmers and the surrounding community—currently, PT. Hikmah supplies 5 percent of the national fresh potato needs, and a private potato seed breeder supplies about 30 percent of Indonesia's potato seed needs.

Several studies in Indonesia have examined and discussed the importance of implementing sustainable agriculture, especially in managing and implementing these agricultural methods. The practice of partnership in agriculture has also been carried out for a long time, so several researchers have conducted that research on related topics. However, based on some reviews and findings [10];[6];[11];[12];[13];[14], there have been found several research gaps, including:

- Research on agricultural partnerships discusses a lot about how the concept of partnership patterns among the partners (companies, government, and partner groups) is related to the use of technology and increasing farmers' income and benefits for agriculture. However, it has not explicitly investigated how partnership in agriculture can encourage sustainable agricultural development.
- Previous research has not discussed in detail the role of each actor involved in partnerships in promoting sustainable agriculture development and how the obstacles and challenges faced by agricultural actors in realizing sustainable agriculture.

Based on the research gaps mentioned above, the purpose of this research is to identify how sustainable agricultural development for poverty alleviation can be achieved through a Public-Private Partnership and to investigate the role of each actor involved in the partnerships of PT. Hikmah Farm, with the research locus in Bandung regency, Pangalengan sub-district, West Java, Indonesia.

II. RESEARCH METHODS

This research aims to provide clear descriptions of the implementation of the Public-Private Partnership/PPP as a strategy to achieve sustainable agriculture and identify each stakeholder's role by collecting data and information from related parties. Based on these objectives, this research uses a qualitative approach. Qualitative research allows the researchers to observe social aspects in their natural habitat. This type of research will result in a higher understanding of a social phenomenon that other observation methods cannot achieve. It also allows a researcher to conduct research intentionally, well-planned, and is actively involved in the research [15]. By taking a qualitative approach, the researchers can obtain better findings from a more comprehensive perspective by directly involving the social phenomena being studied and conducting

comprehensive observations. The researchers can also gain a deeper understanding and recognize some nuances of attitudes and behaviors that may not be examined when using other methods [16].

The research data are collected using documentation, observation, and in-depth interviews. The research informants are selected using a purposive sampling method in which the samples are taken using a pre-planned purpose and have specific characteristics according to the research objectives. There are nine informants in this research, i.e., the management of PT. Hikmah Farm, Head of Farmers Group, Labor Farmers, and the parties representing donor agencies and government.

III. RESULTS

Bandung regency has become one of the agricultural centers in West Java. Traditional agriculture is managed by home-scale farmers, government-owned farms/plantations, and private agribusiness companies that apply a partnership pattern. It produces cabbage, big chilies, potatoes, and mustard [17]. Specifically for potato products, Bandung regency is the second-largest potato production center in West Java. Garut regency with a production output of 33.27% of the total production in West Java [17]. Pangalengan sub-district is one of the largest agricultural centers in the Bandung regency, and it is where PT. Hikmahfarm operates its business activities.

The main problems found in the research site are the limited land owned by farmers (most of them carry out their farming activities on leased land), limited knowledge about good agricultural practices, limited funding for farmers related to purchasing seeds and other agricultural supporting materials, limited knowledge and ability in terms of technology transfer to support agriculture, limited marketing opportunities for small farmers, and government policies that are not in favor of the local farmers. These problems are in line with research conducted by Susilowati, who states that there is still a high level of poverty in the agricultural sector due to some limitations such as limited access to productive land, limited abilities (human resources and capital) to carry out good farming practices referring to Good Agricultural Practices (GAP); limited quality of infrastructure; and agricultural development policies that have not been entirely evenly distributed to various regions and aspects [18].

One of the agribusiness companies located there is PT. Hikmahfarm was initially been a trading company named PD. Hikmah and was established in 1962. PT Hikmah Farm focuses on potato commodity cultivation, including potato products and certified potato seeds. In 1980, PD Hikmah started planting imported seeds from the Netherlands and Germany, as well as transferring technology and seeding techniques, so in 1990 PD Hikmah could produce high-quality certified potato seeds independently. It was trusted to be a supplier of fresh potato needs for industrial markets, supermarkets, and local markets. In 2005, after going through a long process and considering the company's strengths and weaknesses, it was then revitalized and restructured to become PT. Hikmahfarm.

Besides focusing its business on cultivating certified potato seeds and potato products, PT Hikmahfarm also produces substitute vegetables for potatoes, namely carrots, cabbage, mustard greens, and any vegetables as substitute crops in one harvest period. In running its business activities, PT Hikmahfarm has partnered with seven assisted Farmer Groups in land management and vegetable production planting (potato seeds, potatoes, and other vegetable substitutes). Some partnerships are also built with other related institutions, namely donor organizations, and government agencies, to increase agricultural production capacity, technology transfer, and marketing.

The partnership can form constructive modifications of some aspects in the agricultural sector, namely Information Management, Technology Management, Community Mobilization, and Economic Empowerment [7]. In encouraging the development of a sustainable agricultural sector, the partnership has been widely applied in several countries, such as Collaborative Cooperation between Local Government - Private, NGOs, and small-scale farmers in sustainable agricultural development in Brazil, where small-scale farmers can overcome structural barriers through innovation, entrepreneurship, and renegotiation of agricultural contracts [19]. Meanwhile, in Sri Lanka, the CSV (Creating Shared Value) partnership is realized in Contract Farming between agricultural businesses and government agencies.

This partnership helps small-scale farmers to increase their income and have more access to global markets. On the other hand, this partnership allows business corporations to meet the global demand for agricultural products [20]. In this research, three issues will be investigated further to answer how the Public-Partner Partnership/PPP can encourage sustainable agricultural development, in order to overcome farmers' poverty. The first thing to do is look at the form and type of partnership at PT. Hikmahfarm and the stakeholders involved; the second one identifies the PT. Hikmahfarm partnership can help overcome farmers' problems and encourage a sustainable agricultural development ecosystem. The last one is observing the obstacles and challenges faced in realizing sustainable agriculture from the side of Agricultural Companies and Partner Farmers.

III.1. Pattern and Types of PT. Hikmahfarm Partnership

PT. Hikmahfarm has established a public-private partnership pattern to develop the agricultural sector. It is a joint effort that is strategically structured to reduce poverty, overcome inequality, and uphold social justice through redistribution of resources and social-economic development programs [21]. In running its business, PT. Hikmahfarm built a partnership with seven farmer groups to cultivate potatoes and other vegetable crops. Agricultural production is influenced by many aspects such as weather, agricultural techniques, and technology, selection of seeds and fertilizers, pest control, and good marketing techniques in terms of agricultural production with farmer groups, PT. Hikmahfarm provides production capital such as seeding, fertilization, chemicals, and other necessities to be further managed by partner farmer groups.

In terms of land, technology transfer, and pest management, PT Hikmahfarm also provides a Standard Operation Procedure (SOP) that can be used as a reference for good land cultivation management (Good Agricultural Practices) where according to FAO, GAP the implementation of agricultural patterns that emphasize technology adoption to be environmentally friendly, safe harvested products for human consumption, and sustainable production system to achieve socio-economic welfare [22]. With the established SOP and technical assistance carried out regularly, partner farmers have specific guidance and uniformity in the cultivation process. Each partner farmer group will produce the same quality products and distribute them well according to market demands. According to an informant of PT Hikmahfarm, "... Every month, we have meetings and technical assistance for each farmer group to discuss the latest knowledge about fertilizers, pesticides, or new products in each season. We also talk about how to mix fertilizer methods more effectively and efficiently, so that later it will help farmers, groups, in producing higher-quality agricultural products..." (Informant 1, personal interview, October 12, 2021).

In the marketing aspect, specifically for potato seeds, potatoes, and industrial potatoes, PT. Hikmahfarm is fully responsible for all products produced by the seven partner farmer groups. PT. Hikmahfarm markets potato products through partnership contracts with West Java and Jakarta retail supermarket consumers. Meanwhile, potato seeds sell the products through various markets, both directly and online marketing throughout Indonesia. PT. Hikmahfarm also establishes cooperation in the form of a partnership contract with PT. Calbee Wings, wherein the potatoes are further processed into potato chips.

Beside having a partnership with the Partner Farmer Groups, PT. Hikmahfarm also has good cooperation with several other institutions (Non-Government Organizations) such as several donor agencies from abroad, in which it is still occurring its partnership with (JICA (Japan International Corporation Agency) through a project called the Indonesia Japan Horticulture Public-Private Partnership (IJHOP4). The partnership experiments on planting carrot seeds from Japan, namely Kuroda, planting industrial potato varieties, and marketing industrial potatoes through PT. Calbee Wings (Japanese multinational company) [23]. In this case, the donor (JICA) has a different role for each project carried out as stated by a JICA representative in an interview with the researcher "... for experimental projects in cultivating new varieties, we act as an agent for cultivation methods, while for industrial potato planting, we are a liaison, connecting Hikmahfarm with Calbee Wings for marketing industrial potatoes..." (Informant 8, personal interview, November 12, 2021).

PT. Hikmahfarm also connected with the government/agricultural services in technical assistance and PT. Hikmahfarm has ever been the speaker in various activities carried out by the government. The government

also provides direct supports to the partner farmer groups of PT. Hikmahfarm in the form of subsidized fertilizers/chemicals and technological tools to increase production capacity. Another partnership has been established with some universities to research projects and develop potato seed varieties.

According to the Agricultural Business Partnership Guidelines of the Minister of Agriculture (No. 940/Kits/OT.210/10/1999), the partnerships established at PT. Hikmahfarm can be categorized as Agribusiness Operational Cooperation (KOA), where the partner group provides facilities and human resources. In contrast, the partner company provides costs/capital and infrastructure to cultivate an agricultural business. According to Brinkerhoff's partnership theory, the partnership established by PT Hikmahfarm can be classified as a type of partnership with the aim of Capacity Building and Economic Development. These partnerships have some objectives of improving skills, systems, and cultivation capabilities, the establishment of partner farmer groups which result in increasing economic growth and overcoming poverty problems. The partnership pattern of PT. Hikmahfarm can be presented in Fig. 1.

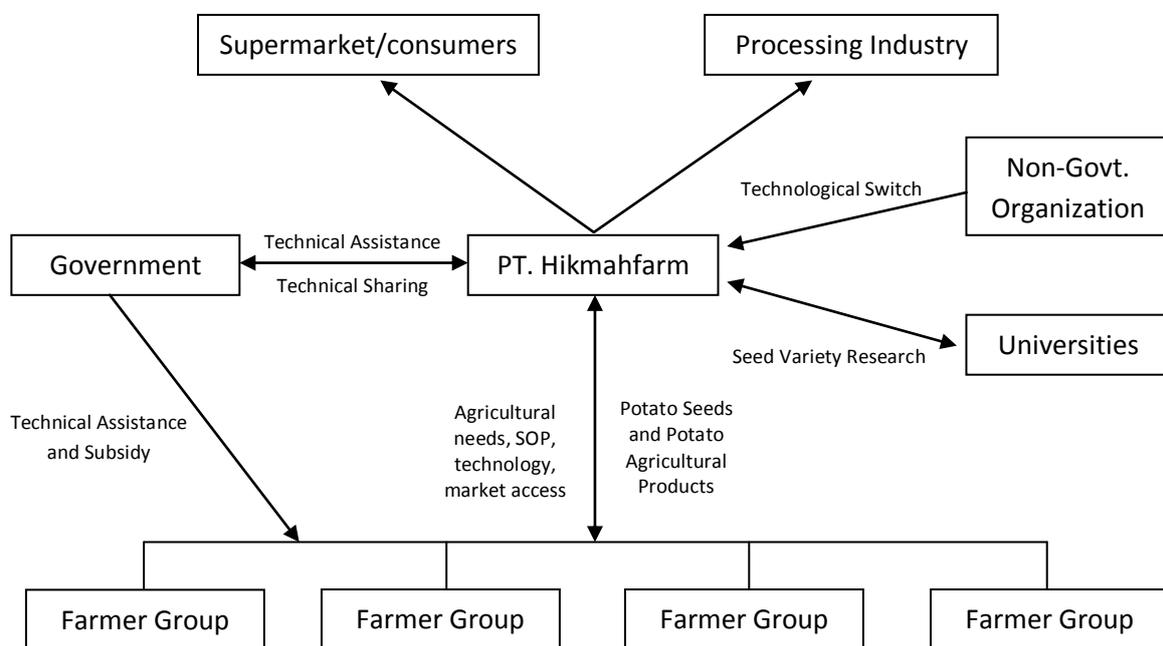


Figure 1. partnership pattern of PT. Hikmahfarm

III.2. The role of partnership in overcoming agricultural problems

In a study on agricultural revitalization in 2010, the National Development Planning Agency (Bappenas) revealed fundamental problems in the agricultural sector in Indonesia. The problems include many farmers who are still working individually, the scarcity of land ownership documents, difficulties in accessing banking funds, low capacity of human resources to practice good agricultural governance, and barriers in accessing market shares. The issues follow the field observations, where the farmers in the research site also face such issues. Other problems are closely related to structural factors, such as inadequate government support. The farmers have difficulties accessing good quality seeds and fertilizers, the subsidy programs are not optimally implemented, and policies that are not in favor of traditional farmers. The lack of institutional sense between farmer groups and government agricultural assistance also complexity problems for the farmers to develop themselves.

PT Hikmahfarm offers assistance to the farmer groups through various roles. For instance, the land managed by the even Farmer Groups is owned by PT Hikmahfarm to solve land scarcity problems. In terms of the limited capacity of human resources, PT Hikmahfarm has prepared specific SOP that can be used as guidelines for cultivating and carrying out land management according to Good Agricultural Practices (GAP).

The SOP also aims to ensure that the products produced by the farmers are under the standards demanded by the market to minimize the non-absorption of agricultural products. PT Hikmahfarm also holds regular meetings with the farmer groups to discuss agricultural governance and reforms in the breeding and fertilization stages.

In terms of marketing, PT Hikmahfarm assures the farmers that the potato seeds, potatoes, and industrial potatoes will be fully absorbed and marketed by PT Hikmahfarm itself. Besides, using a grading system, the selling price for potato seeds produced will be adjusted to their grade. For the problem of limited farmers' capital, PT Hikmahfarm provides seeds, and other agricultural production needs to produce according to the target in each planting season.

With the establishment of a good relationship between PT Hikmahfarm and the government, the company can liaison farmer groups with government institutions to be prioritized in activities and assistance opportunities provided by the government. Likewise, with a strong connection with donor agencies, PT Hikmahfarm can provide recommendations for its farmer groups to get technical assistance and marketing opportunities from outside of regular donors. For improving the economic and social conditions, PT Hikmahfarm has also provided job opportunities for 700-800 local people to work as the farmworkers on the land it owns, warehouse, and sales department. Also, as a form of CSR, PT Hikmahfarm established the Sastrabakti Foundation, which oversees several social activities such as the Al-Hikmah clinic, Islamic schools (Madrasah), and mosques which are not only intended for employees but also for the surrounding community.

III.3. Barriers and Challenges in Partnership

Both PT Hikmahfarm and the incorporated Farmer Groups have several internal and external obstacles in running their business. The internal constraint includes limited human resources. Most farmers are agricultural workers with a hereditary pattern, where 70% have been above 40-years old. It is certainly not ideal for their sustainability and productivity. However, the company cannot just terminate the employment relations for elderly workers who are no longer productive considering the kinship system that has been established. The limited workforce is also due to a shift in young workers in the surrounding area who prefer to work outside the agricultural sector, such as construction workers, porters, or working abroad. They assume that the jobs provided in the agricultural sector do not have the opportunity to develop and are at high risk.

The external barrier is related to government policies that often do not favor local farmers. The provision of unequal subsidies and the establishment of multinational companies with significant capital to run farming businesses in the Pangalengan area, of course, can have significant impacts on local farmers with only have limited capital. In an interview, one of the farmer group leaders said that "... sometimes there is less attention to local farmers. Before the pandemic, the subsidies have been greatly reduced, or even there was nothing at all. Sometimes, there are rules that make it difficult for us to develop ourselves, for example, the regulation on potato seeds in 2016, where we must degrade our potato seeds. Of course, it reduces our production rate..." (Informant 3, personal interview, October 11, 2021).

Another issue is the difficulty obtaining funds for business development, considering that the current form of banking capital cannot be adjusted to the farmers' production cycle. They must be intensely dependent on the provision of seeds and infrastructure provided by the company. For other vegetable products, currently, the farmer groups still have to market them privately, so they must look for market opportunities and get assistance from middlemen to deal with cash flow problems in their products other than potatoes.

IV. DISCUSSION

Sustainable agriculture sector development is one kind of social development. J. Tait and D. Morris (2000) stated that the idea of Sustainable Agriculture had been started since the publication of the Brundtland Report in 1987, along with the emergence of the sustainable development concept [24]. U.S. Farm Bill in 1990 defined Sustainable Agriculture as an integrated system of livestock and agricultural production practices with specific arrangements which in the future ensure the achievement of the following: (a) fulfilling the food needs for humankind; (b) improving the quality of the environment; (c) the use of non-renewable natural resources and agricultural resources and integrate biological cycles and controls; (d) ensuring the viability of economically

sustainable agricultural operations, and; (e) improving the quality of farmers' life [25]. Meanwhile, the Food and Agriculture Organization/FAO stated that to achieve a sustainable agricultural sector, it must meet the needs of current and future generations, ensuring the achievement of profitability, environmental sustainability, and social and economic justice. Thus, the critical points of sustainable agricultural sector development cannot be separated from the sustainability of meeting food needs, the sustainability of agricultural organizations, and the creation of socio-economic welfare for farmers and society at a large scale while paying attention to and maintaining the minimum negative impacts on the environment [26].

Regarding the sustainability of providing food for the society, the partnership between PT. Hikmahfarm and the Farmers Groups have consistently for 60 years been able to provide potatoes and other vegetable products, where the total production of potatoes supplied by PT Hikmahfarm currently stands at approximately 30 tons per month for one retail supermarket. For potato seeds, from each hectare of land owned, PT. Hikmahfarm can produce approximately 45 tons of seeds where this number exceeds the national average productivity, which only reaches 16 tons/hectare.

The high productivity of potatoes and potato seeds produced by PT Hikmahfarm is related to the methods applied by land management, selection of quality seeds, and product maintenance to the post-harvest period. PT Hikmahfarm has adopted agricultural governance that is environmentally friendly and reduces the side effects of chemicals usages on plants. To maintain the land fertility that has been planted for almost 60 years, Hikmahfarm also applies environmentally friendly procedures through the reconditioning system using products with minimal environmental excess. It is considered more effective than having to open and move land, which has terrible impacts on the surrounding environment. In carrying out sustainable agricultural governance, PT Hikmahfarm also provides education for other potato farmers through various videos uploaded to its Youtube channel to learn to apply good agricultural land management to increase their productivity.

Trust is the principal capital that PT Hikmahfarm highly upholds to maintain and ensure sustainable agricultural organizations. The company and partner farmers are open to discussing everything related to agricultural production, such as the distribution of seeds and other agricultural facilities and the production results in each harvest. The company's computerized control and recording mechanism offer more effective ways to maintain trust and partner farmers. The company guarantees the distribution of all potatoes and potato seeds produced by partner farmers at the marketing and product prices. The selling price is also set by taking into account the product's price that has been agreed with the partner farmers' groups.

To maintain the sustainability of farmworkers, the company implements a monthly wage system that is paid every two weeks to obtain specific and fixed incomes. The company also gives bonuses to them every year if the production exceeds the set target. They are also given the convenience to access health services at the Al-Hikmah clinic and facilities for attending *madrasah* established by the Sastrabakti Foundation. By maintaining a sustainable agricultural organization and implementing good CSR, Hikmahfarm's partnership also provides social and economic benefits. It improves the farmers' quality of life and the surrounding community in its area.

In the Public-Private Partnership (PPP) pattern, it is essential to understand the role of the actors involved in the partnership in the development process [27]. The role of each actor/stakeholder involved in the PT Hikmahfarm Partnership as a strategy for sustainable agriculture sector development (Sustainable Agriculture) can be seen in Table 1.

Table 1. Role and Implementation of PT.Hikmahfarm Partnership Stakeholders

Actor/Stakeholders in PPP	Role	Implementation of PT.Hikmahfarm Partnership
Government	<ul style="list-style-type: none"> - Regulators/Policy Maker - Funding Provider - Mediator - Coordinator 	<ul style="list-style-type: none"> - Providing Subsidies to Partner Farmer Groups - Providing technical assistance in terms of agricultural support tools - Providing easy access to services and extensions for Partner Farmer Groups
Company and Business Holder(PT. Hikmahfarm)	Service Provider in terms of funding and provider of	<ul style="list-style-type: none"> - Production area provider for Partner Farmer Group - Provider of seeds and other agricultural

	experts/Intermediary	production facilities - SOP for implementing Good Agricultural Process (GAP) for Partner Farmer Groups - Capacity Building for Partner Farmer Groups - Pricing and market certainty for products - Intermediary between partner farmer groups and Government/Donor Agencies
Non-Government Organization (Donor Agencies, Universities)	- Experts - Social Agents Change	- Technical Assistance and Knowledge Transfer of Technology - Open access to markets - Cooperation in research and development of new varieties

V. CONCLUSION AND SUGGESTIONS

Based on the research objective, describe the implementation of the Public-Private Partnership (PPP) at PT. Hikmahfarm to encourage the development of a sustainable agricultural sector, some conclusions can be drawn:

- Related to the concept of Sustainable Agriculture, the partnership implemented by PT. Hikmahfarm can encourage the achievement of the following objectives, i.e, the fulfillment of sustainable food needs, the creation of sustainable farmer organizations while minimizing negative impacts on the environment, as well as encouraging the improvement of socio-economic welfare, especially for farmers and generally having an impact on the community around.
- To make the Partnership work well and achieve win-win solutions for the company and its partners, trust and openness are two main capitals that must always be preserved. Also, there should be appropriate Standard Operational Procedure (SOP), periodic monitoring and reporting, increased capacity building, transparency in the pricing system, and market certainty in implementing the partnerships.
- To encourage the development of a sustainable agricultural sector, it is important to understand the roles and responsibilities of each actor involved in the partnership. Each of them must carry out specific roles in a balanced manner without dominating one party above another while still listening to the partners' opinions so that the ultimate goal of the partnership to improve welfare can be achieved.

The Public-Private Partnership pattern as implemented at PT. Hikmahfarm can be an effective strategy to achieve sustainable agriculture sector development. The main purpose is enhancing welfare of the farmers and surrounding communities in economic and social aspects. It can be done through the concept of meeting sustainable food needs and running farmers' organizations sustainably to provide socio-economic benefits for farmers and the community.

PT Hikmahfarm has successfully implemented a form of partnership that not only plays a role as a service provider of funding and experts in overcoming common problems faced by the farmers but also acts as an intermediary among partner farmer groups and the government, and donor agencies. As a service provider, PT. Hikmahfarm provides land for farmers and capital through providing agricultural facilities and infrastructure; it improves the farmers' skills through various capacity-building activities and marketing certainty for their agricultural products.

PT. Hikmahfarm partnership also impacts the improvement of the welfare of the local people through providing employment opportunities, income certainty with a monthly wage system, and many forms of business programs through CSR, which is channeled through the Sastrabakti Foundation. The partnership is not only intended to gain profit for the company but also to improve economic and social welfare for the farmers and surrounding communities. This can be stated as a poverty alleviation strategy.

Related to the obstacles and challenges of the partnership built by PT. Hikmahfarm, the researchers suggest several adjustment steps that can be taken by each stakeholder. In overcoming labor problems, the company is advised to consider transferring modern agricultural technology with the mechanization of agricultural tools. To overcome the marketing issue, the company can open more channels with supermarkets that have been collaborating in marketing potato products.

The government as the important stakeholders of the partnership is suggested to pay attention to the

needs and constraints faced by the company and partner farmer groups. The issued policies in the agricultural sector should adapt to the actual conditions of the local farmers. The government is also advised to prepare guidelines for implementing sustainable agricultural production to increase the capacity of local farmers and increase the role of mediators in the supply chain to open wider market opportunities for agricultural products and find new funding sources. To overcome funding problems, especially for small-scale farmer groups, alternative forms of funding are needed by adjusting the farmers' production cycle and focusing on the cash flow needs of farmers, either through conventional funding institutions or other alternatives.

REFERENCES

- [1] **Badan Pusat Statistik.** *Produk Domestik Bruto Indonesia Triwulanan 2015-2019*. Jakarta : Badan Pusat Statistik, 2020.
- [2] —. www.bps.go.id. [Online] 2021. [Cited: Februari 15, 2021.] <https://www.bps.go.id/subject/23/kemiskinan-dan-ketimpangan.html>.
- [3] **The World Bank.** www.worldbank.org. [Online] September 30, 2020. [Cited: February 16, 2021.] <https://www.worldbank.org/en/topic/agriculture/overview#1>.
- [4] —. *World Development Report 2008 : Agriculture for Development*. New York : The World Bank, 2007.
- [5] **Takai, Fumiyo.** PPP Applicability Study in Agriculture in Indonesia - trough Reconsideration of Micro-finance and Assistance of Small Scale Farmers. 2019.
- [6] *Pengembangan Sistem Usaha Pertanian Berkelanjutan*. **Adnyana, Made Oka**. 2016, Forum penelitian Agro Ekonomi.
- [7] *Public-Private Partnership in Agriculture : A Stern Review*. **Rai, Chandan Kumar, et al.** 2017, International Journal of Microbiology and Applied Science, pp. 3510-3517.
- [8] *Public-private partnerships: Perspectives on purposes, publicness, and good governance*. **Brinkerhoff, Derick W and Brinkerhoff, Jennifer M.** 2011, Public Administration and Development, pp. 2-14.
- [9] **Osborne, Stephen.** *Public-Private Partnership : Theory and Practice in International Perspective*. New York : Routledge, 2000.
- [10] *Konsep Pengelolaan Lingkungan dan Pertanian Yang Berkelanjutan di Indonesia*. **Pangihutan, Josua Crystovel**. 2018.
- [11] *Collaborative Governance dalam Pembangunan Sektor Pertanian di Kabupaten Bandung*. **Iyoga and Ramadhona, Rofi**. 2020, Perspektif, pp. 54-65.
- [12] *Analisis Pola Kemitraan Petani Kapas Dengan PT. Nusafarm Terhadap Pendapatan Usaha Tani Kapas di Kabupaten Situbondo*. **Jasuli, Affan, Sunartomo, Aryo Fajar and Ridjal, Julian Adam**. November 2014, Berkala Ilmiah Pertanian, pp. 1-7.
- [13] *Kemitraan di Sektor Perikanan Tangkap : Strategi Untuk Kelangsungan Usaha dan Pekerjaan*. **Nawawi and Asiati, Devi**. 2016, Jurnal Kependudukan Indonesia, pp. 103-118.
- [14] *Peran Teknologi Informasi dan Komunikasi Pada Program Kemitraan PT.Tanifund Madani Indonesia (Tanifund)*. **Kusnadi, Lydia Maria and Adi, Isbandi Rukminto**. 2021, Jurnal Pembangunan Manusia.
- [15] **Babbie, Earl.** *The Practice of Social Research*. 14th. Boston : Cengage Learning, 2016.
- [16] **Rubin, Allen and Babbie, Earl. R.** *Research Method for Social Work*. 9th. Boston : Cengage Learning, 2017.
- [17] **Badan Pusat Statistik Jawa Barat.** *Produksi Hortikultura Sayuran dan Buah Semusim Provinsi Jawa Barat 2019*. Bandung : BPS Jawa Barat, 2020.
- [18] **Susilowati, Sri Hery.** Dinamika Kemiskinan Rumah Tangga dan Hubungannya dengan Penguasaan Lahan pada Berbagi Agroekosistem. [ed.] Bambang Irawan, Ening Ariningsih and Effendi Pasandaran. *Panel Petani Nasional: Rekonstruksi Agenda Peningkatan Kesejahteraan Petani*. s.l. : Badan Penelitian dan Pengembangan Pertanian, Kementerian Pertanian Republik Indonesia, 2015, pp. 287–300.
- [19] *Farmers and Social Innovation in Rural Development : Collaborative Arrangements in Eastern Brazillian Amazon*. **Futemma, Celia, Castro, Fabio De and Brondizio, Eduardo S.** 2020, Land Use Policy.
- [20] *Creating shared value through partnerships in agricultural production in Sri Lanka*. **Senevirathna, Priyan**. 2018, Geoforum, pp. 219-222.
- [21] *Challenges for Building Partnership in Social Development*. **Lombard, Antoinette and Preez, J. du.** 2014, Social Work.
- [22] **FAO.** *A Scheme and Training Manual on Good Agricultural Practices (GAP) for Fruit and Vegetables*. Bangkok : FAO, 2016.
- [23] **Republic of Indonesia Ministry of Agriculture.** *Public-Private-Partnership Project for the Improvement of the Agriculture Product Marketing and Distribution System in the Republic of Indonesia*. Jakarta : Japan International Cooperation Agency IMG Inc, Task Co, Ltd, 2021.
- [24] *What is Sustainable Agriculture? A Stern Review*. **Velten, Sarah, et al.** [ed.] Marc A. Rosen. 2015, Sustainability, pp. 7833-7865.
- [25] **National Agriculture Library.** www.nal.usda.gov. [Online] August 2007. <https://www.nal.usda.gov/afsic/sustainable-agriculture-definitions-and-terms#toc2>.
- [26] **Food and Agriculture Organizations.** <http://www.fao.org/>. [Online] 2021. <http://www.fao.org/sustainability/en/>.

- [27] *Public-Private Partnership in a Swedish Rural Context - A policy tool for the authorities to achieve sustainable rural development.* **Bjarstig, Therese and Sandstrom, Camilla.** 2017, *Journal of Rural Studies*, pp. 58-68.
- [28] **Badan Perencanaan Pembangunan Nasional (Bappenas).** *Kajian Evaluasi Revitalisasi Pertanian Dalam Rangka Peningkatan Kesejahteraan Petani.* Jakarta : Badan Perencanaan Pembangunan Nasional (Bappenas), 2010.