

## **The Relevance of Agrarian Reform to the Sustainable Development Goals: Analysis of Community Land Empowerment for Food Sufficiency and Gender Equality through the Fishbone Diagram Method**

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**Abstract:** This study aims to examine the state of food sufficiency and gender equality in Purwabakti Village and the relevance of community land empowerment programs in achieving food sufficiency and gender equality. The research follows a qualitative case study approach, collecting data through interviews, observations, and document analysis. Data were analyzed qualitatively using the fishbone diagram method, focusing on four primary variables: human resources, machinery, methods, and materials. Data on malnutrition and stunting indicate that issues of food vulnerability compromise food sufficiency in Purwabakti Village. Furthermore, gender equality remains a challenge within this predominantly patriarchal society. Women tend to fulfill traditional gender roles with domestic responsibilities, while men assume public roles. This patriarchal rural society generally accepts the predominant land ownership by men (as heads of households), reflecting gender inequality. The fishbone diagram analysis indicates that, despite some progress, community land empowerment programs still exhibit limitations in addressing the SDGs, particularly the goals of “zero hunger” and gender equality.

**Keywords:** Access regulation, Rural Communities, Gender inequality, Patriarchal Culture, Woman Empowerment

### **INTRODUCTION**

Food sufficiency and gender inequality are critical issues central to achieving sustainable development goals. The term ‘gender’, as defined by Nurjannah & Nurhayati (2017) encompasses attributes, roles, positions, or statuses of men and women that are shaped by specific societies and time periods. This definition contrasts with the terms ‘female’ and ‘male’, which denote inherent biological differences. While sexual identity is linked to the natural attributes of men and women, gender identity pertains to what it means to be male or female within a particular culture.

Gender inequality poses a significant threat to sustainable development and contributes to poor food quality among women, infants, and children (CARE-USA, 2020). Dodson & Goebel (2014) assert that gender inequality triggers food vulnerability, observing that “the more gender inequality there is in a country, the hungrier people are.” Higher levels of gender inequality correlate with increased food insufficiency. CARE-USA (2020) reports that 150 million women worldwide experience food insufficiency, with 126.3 million of these being over the age of 15—a number significantly higher than that of food-

insecure men. In terms of food access, women continue to face disparities (Verhart et al., 2015; Zakariah-Akoto & Armar-Klemesu, 2021; Zhao, 2022). This clearly highlights that gender inequality adversely impacts household food sufficiency (Tanziha et al., 2023).

Ironically, the precarious situation of women with respect to food sufficiency underscores their role as key actors in maintaining food sufficiency (Dodson & Goebel, 2014). Women play a crucial role in supporting family and community food sufficiency, not only as processors of food brought home by men but as direct providers of food; a solid fact that can be found all over the world (Jullimursyida et al., 2021). Research by (Astuti, 2023) in Tasikmalaya District demonstrates that women are central to food sufficiency, as it is through their role that household food needs are met. Similar findings are reported in studies by Ningsih (2024) in Yogyakarta and Atem (2023) on the Sambas Malay community, which reveal that women serve as the principal actors in the household food chain. The sustained fulfilment of family food needs cannot be separated from the role of women. This situation highlights that women are not only involved in reproductive roles but also play a crucial productive role, fulfilling the right to food. Women constitute a vital pillar in food production and presentation at the family table. Ishfaq et al. (2022) in their study in Pakistan conclude that women's empowerment is a strategic effort to enhance food sufficiency. Addressing gender inequality and food sufficiency within empowerment schemes is essential. Just as the right to food is a human right, gender equality is also a fundamental human right.

One strategic empowerment scheme for women involves granting them access to and control over productive resources, particularly land (CARE-USA, 2020). Agrarian reform programs, which include asset management and access regulation, can facilitate access to and control over productive land resources. The goal of Agrarian Law No. 5 of 1960 is to make sure that everyone has an equal share of land ownership for the public good. The 2023 Technical Guidelines for Agrarian Reform Access Management (PARA) call this process "Community Land Empowerment" (PTM) (Chavunduka et al., 2021; Doly, 2017; Alvian & Mujiburohman, 2022; Sihombing & Lisdiyono, 2017; Widodo, 2017). Agrarian reform goes beyond mere land certification; it ensures that land is effectively utilised to improve welfare (Fauzi, 2002; Santosa et al., 2019; Zein, 2014; Arisaputra, 2016; Boberg-Fazlić et al., 2022). Agrarian Reform Access Management (PARA), or Community Land Empowerment (PTM), is implemented through initiatives that foster, develop, and enhance knowledge and skills, as well as raise awareness about resource utilisation based on the socio-economic conditions of the community (Rohman & Astuti, 2019). Beyond the agrarian reform objectives, Community Land Empowerment (PTM) is also designed to fulfil two of the 17 Sustainable Development Goals: zero hunger and gender equality.

Previous research has extensively examined community empowerment through agrarian reform access schemes. Hastutiningsih et al., 2023 studied the transformation of

livelihood assets in the coastal community of Ambulu Village, West Java, following intervention through agrarian reform access programmes. A similar study was conducted by Fajri et al. (2024) on urban communities in Surakarta, investigating changes in livelihood assets post-agrarian reform access. Both studies, however, focused primarily on post-program livelihood changes without addressing women as programme subjects or food sufficiency issues. Meanwhile, Kurniawan dkk. (2023) examined the development of access planning based on regional potential and economic conditions as a strategy for optimising access reform goals, a focus shared with the study by Sudibyanung dkk. (2023). Both studies concentrated on regional potential or programme objects rather than programme participants. Several studies on agrarian reform access have also focused on post-programme welfare outcomes, identifying the limited effectiveness and suboptimal implementation of access management initiatives (Ahbar, 2021; Anida et al., 2018; Latifah et al., 2022; Rohman & Astuti, 2019).

However, a review of existing literature reveals a gap, as no studies have explicitly connected community land empowerment with issues of gender and food sufficiency. Gender and food sufficiency are core components of the Sustainable Development Goals (SDGs), specifically regarding "gender equality" and "food sufficiency." Previous research has yet to explore the relevance of empowerment activities to achieving the SDGs. Empowerment initiatives in other fields, such as tourism empowerment in Bira Village, housing and seed assistance in Johunut Village, and local tourism development in Kemiren Village, have already demonstrated relevance to SDG attainment (Irwan & Agustang, 2021; Latifah et al., 2022; Taufik, 2022). It is also crucial to note that rural communities often exhibit distinct characteristics. As (Pitaloka et al., 2024) explain, gender status for women in rural contexts remains limited, whereas men's roles and positions are highly prioritised, especially in community decision-making and institutional governance.

This study will explore the implementation of community land empowerment in Purwabakti Village, Pamijahan Sub-district, Bogor Regency. This village serves as a model location for community land empowerment initiatives, making it an ideal case for addressing the following research questions: What is the state of food sufficiency and gender equality in Purwabakti Village? How relevant is the community land empowerment program in achieving food sufficiency? How relevant is the community land empowerment program in promoting gender equality? This research aims to examine the extent to which community land empowerment programs can address food sufficiency issues at the domestic or household level, particularly in terms of improving food access and control for women.

## METHODS

This study uses a qualitative research method to look into the relationship between access regulation programs and the SDG indicators in more detail. It also looks at the history of putting PTM into action using empowerment strategies and models. Field research was conducted in Purwabakti Village, Pamijahan Sub-district, Bogor Regency, with primary data collection taking place over a one-week period, from 2 to 8 March 2024. This study employs a case study approach as its qualitative method, which focuses on an in-depth exploration of a specific case by gathering information from multiple sources. Specifically, this research uses a descriptive case study to illustrate phenomena or realities associated with the case under investigation.

Data for the study were collected through interviews with 15 informants, including officials from the Bogor Regency Land Office, Agrarian Reform Task Force members, daily staff (field staff) from the Bogor Regency Agrarian Reform team, the Purwabakti Village Government, village-owned enterprises, the head of the village farming group (GAPOKTAN), neighborhood leaders (RT), small and medium-sized enterprise (SME) practitioners, and program beneficiaries. In addition to interviews, observations were conducted to assess the conditions within the village and the sites of program beneficiaries, focusing on road and infrastructure access, local tourism sites, as well as agricultural and economic activities in the village. Further data collection was carried out through document analysis involving regulations, books, journals, technical guidelines, maps, records, and literature related to Community Land Empowerment (PTM) and the relevant SDG indicators. Data analysis employed a qualitative approach using the fishbone diagram method, a visual tool for identifying the root causes of issues (Robert, 2021). The four main variables were examined: man (human resources), machine (tools), method (techniques), and material (resources).

## RESULTS AND DISCUSSION

### Food Sufficiency in Purwabakti Village

Food is a fundamental need for human survival and daily activities, while food sufficiency ensures individuals can lead healthy lives and work productively (Saliem & Ariani, 2002). Within the context of food production, Pamijahan Sub-district ranks among the most productive areas in Bogor Regency, with an average rice yield of 6.4 tons per hectare in 2021. In addition to high yields, Pamijahan consistently produces high-quality rice (Frans, 2023). This productivity is supported by the significant portion of the population engaged in agriculture and plantation sectors. Among the community, 438 people work in agriculture, with 86 as farmers and 352 as farm labourers (Hafielda, 2023).

Purwabakti Village is the primary rice supplier within Pamijahan Sub-district. It covers an agricultural land area of 228 hectares (or 2.28 km<sup>2</sup>), producing approximately 5.3 tons of rice per hectare annually.



Figure 1. (a) Rice field in Purwabakti, (b) Rice Production from Purwabakti Village  
Source: Researcher's Documentation, 2024

The rice production machine in Purwabakti Village has a capacity of up to 10 tons per day. This capacity allows it to process rice harvested not only from within the village but also from neighboring villages. Staple crops like rice, corn, cassava, and sweet potatoes, along with horticultural crops like chili peppers, cucumbers, cabbages, and various other vegetables, occupy the majority of the agricultural and plantation lands in Purwabakti Village. These yields serve as the primary source of income for the community and are sufficient to meet the village's food needs, with surpluses available to supply other villages in Pamijahan Sub-District, as noted in the following statement:

"It is sufficient for the village's food needs. Purwabakti's 228 hectares of farmland can meet our needs and even provide surplus for other areas, given that only four villages in Pamijahan engage in farming" (A, Ketua Gapoktan, 6 Maret 2024).

The distribution of agricultural products from Purwabakti Village predominantly occurs through intermediaries (*tengkulak*) as the primary buyers. However, some farmers choose to sell directly at the nearest market, Ciasmara Village Market. Horticultural farmers primarily distribute their produce to both intermediaries and markets. The Village-Owned Enterprise (BUMDES) contributes by packaging products and adding labels to enhance

appeal. Packaged products are then exhibited, promoted, and distributed to local shops and kiosks by BUMDES. Products packaged by Village-Owned Enterprise (BUMDES) include low-glycemic rice, palm sugar, and coffee. The village has one Agricultural Group Association (GAPOKTAN) encompassing ten farmer groups (POKTAN). Among these, the Poktan Dapur Tani group is currently developing organic liquid fertilizers (POC) and pesticides, including emulsifiers made from organic ingredients, particularly sulphur.

The agricultural sector in Purwabakti Village faces a significant challenge in obtaining subsidized fertilizers due to complex procedures that require farmers to possess a farmer's card. Additionally, the cost of purchasing unsubsidized fertilizers remains high. Farmers also face crop losses due to pests such as monkeys, sparrows, wild boars, brown planthoppers, and rats.

According to Saliem & Ariani (2002), one of the indicators for assessing food conditions includes food expenditure, household food consumption, and community nutritional status. The Bogor City Land Office conducted a social survey on 32 families eligible for agrarian reform access programs, finding that their monthly food expenditures averaged between IDR 1,000,000 and IDR 1,500,000. This expenditure accounts for 32% of the minimum wage in Bogor Regency, which stands at IDR 4,579,541. This level of food expenditure falls within the "low" category, as it is below the 60% threshold, which serves as the dividing line: food expenditure is considered low if it constitutes  $\leq 60\%$  of total expenditure, and high if it exceeds this threshold. However, the majority of residents in Purwabakti Village, who work as farmers and casual laborers, do not have fixed monthly incomes.

Table 1. Monthly Food Expenditure of Potential Beneficiaries

No.	Monthly Food Expenditure Range	Number of Families
1	$\leq$ Rp500.000	0 family
2	Rp500.001 – Rp1.000.000	9 families
3	Rp.1.000.001 – Rp1.500.000	11 families
4	Rp1.500.001 – Rp2.000.000	10 families
5	Rp2.000.001 – Rp2.500.000	2 families

Source: Social Mapping Data of the Bogor Regency Land Office I

Although known as a significant rice-producing village, it is paradoxical that the Pamijahan subdistrict is recorded as one of the areas in Bogor Regency with the highest incidence of stunting cases, ranking second in West Java Province (Arifin, 2024). The number of stunting cases in Pamijahan has reached 502. This situation indicates a serious issue regarding food sufficiency within the community, as stunting signifies that household-level food sufficiency tends to be low. Stunting cases are more likely to occur in food-insecure households, primarily due to inadequate nutrient intake, both in terms of

quantity and quality, failing to meet the recommended nutritional standards (Masrin et al., 2016; Sihite et al., 2021; Mumtaza, 2024). Stunting thus highlights a significant issue with food sufficiency at the domestic level in rural households.

### **Gender Equality in Purwabakti Village**

Gender equality refers to the equal conditions for men and women to access opportunities and rights as individuals, enabling both to participate in political, legal, economic, social, cultural, and educational activities. Gender equality also encompasses the elimination of discrimination and structural injustices against both men and women (Faridah, 2018). In terms of population distribution in Purwabakti Village, men comprise 52.45% and women 47.54%, indicating a slightly higher male demographic. Additionally, among the 2,140 households in Purwabakti Village, 12.61% are headed by women.

In this rural agricultural setting, women in Purwabakti are actively engaged in farming activities, often working in the fields to support their families' daily needs.

“Here, there are female farmers, each with their designated tasks,” (A, K Ketua Gapoktan, 6 Maret 2024).

Beyond farming, many women earn additional income through small-scale home businesses, such as catering and snack box services, clothing sales, or running small home-based shops. Generally, gender roles in Purwabakti follow traditional patterns, with women largely responsible for domestic duties while their participation in the public sphere remains limited. In public settings, such as village events, women's groups from the PKK (Family Welfare Movement) actively support the activities of BUMDES (Village-Owned Enterprises). The following statement reflects the frequent need for women to manage catering for events.

“During the Indonesian Tourism Village Association event recently, we needed the mothers for catering as they're more knowledgeable,” (I, *field staff* Kantah Kab. Bogor I, 4 Maret 2024).

In Purwabakti, socio-economic vulnerability is apparent from data on land ownership. While women participate actively in various activities, the proportion of land ownership shows that men hold a larger share of land rights than women. Data indicate that only 31.25% of land certificates are held in women's names, compared to 68.75% for men. This aligns with what Tessa (2018) asserts; in areas where patriarchal traditions remain strong, especially in rural Java, ownership documentation tends to favour men's names. Such phenomena are common, given that men are often perceived as more agile, assertive, and able to negotiate effectively. Women's land, in practice, is frequently entrusted to male relatives, including husbands, brothers, sons, or uncles. Faridah (2018)

similarly underscores that land ownership in Indonesia is highly patriarchal. This system privileges men as the primary authority in political leadership, moral authority, social rights, and property ownership. As a result, land certification programs often overlook the involvement of women, leading many rural Javanese women to delegate certificate registration and naming rights to male family members.

### **Relevance of Community Land Empowerment for Food Sufficiency**

The empowerment of community land in Purwabakti Village is conducted using the first scheme (access following assets), which involves asset organization followed by access arrangement. The initial target set by the Bogor Regency Land Office I for the 2023 Agrarian Reform Access Arrangement was 300 households, specifically 200 households in Gunung Bunder II Village and 100 households in Purwabakti Village. However, since only 32 households in Purwabakti have registered land, the remaining target of 68 households was transferred to Gunung Bunder II. Consequently, the subjects of the agrarian reform access arrangement (PARA) in Purwabakti Village in 2023 are 32 households, comprising 16 male and 16 female respondents.

One of the development directives for access in Purwabakti Village is the utilization of land resulting from the land redistribution of 2021 in agricultural and plantation sectors. This is implemented through programs to be executed by the Food Sufficiency Office, including the licensing process for agriculture and food safety education. Furthermore, the Office of Food Crops, Horticulture, and Plantations of Bogor Regency has a program aimed at providing free insurance premiums for the Rice Farming Business Insurance (AUTP) (financing for ID stamps at 10,000 IDR per group). The subsequent access arrangement planned for 2024 involves enhancing the quality of agricultural equipment to meet standards and improve farmers' safety. In the fisheries and livestock sectors, the access development plan for Purwabakti Village includes providing assistance of 10,000 freshwater fish seeds and 400 native chickens per group from the Bogor Regency Fisheries and Livestock Office. In the context of access arrangement activities, a classification is conducted to identify activities relevant to food sufficiency indicators. The food sufficiency indicators in this context are differentiated into: 1) food resilience and 2) sustainable agriculture, as reflected in Table 2.



Table 2. Analysis of Community Land Empowerment (PTM) Relevance with Food Sufficiency Indicators

No.	Program Type	1	2
1.	UMKM product packaging	√	-
2.	Provision of uniform clothing for ADWI assessment	-	-
3.	KUR	-	-
4.	PESAT (Community Economic Empowerment)	-	-
5.	BJB Mesra (Prosperous Economic Community)	-	-
6.	Assistance in obtaining business identification numbers	-	-
7.	Establishment of cooperatives	√	-
8.	Homestay training	√	-
9.	Food safety extension	√	√
10.	Agricultural distribution license process	√	√
11.	Food safety education	√	√
12.	Rice Farming Business Insurance (AUTP))	√	√
13.	Environmental health extension	-	-
14.	Guidance on establishing PIRT (home industry food)	√	-
15.	Assistance of 10,000 freshwater fish seeds	√	-
16.	Assistance of 400 native chickens	√	-
17.	Education and facilitation in obtaining distribution and business licenses	√	-
18.	Education related to export-import	√	-

Note: 1=food sufficiency; 2=sustainable agriculture

Source: Research Analysis, 2024

The packaging of UMKM products can represent a contribution to food resilience by enhancing the utilization of food produced by the community. The establishment of cooperatives plays a significant role in the distribution of resources and the access of their members, including food, to the distribution and marketing processes. The homestay training for managers can facilitate smoother distribution and marketing of village food for food sufficiency. This relates to the catering systems provided by each homestay, which also aid in utilizing food produced by the community. The agricultural distribution license process and the establishment of PIRT can provide assurance that agricultural products can be marketed in accordance with recognized standards. This can open broader and more advantageous market access, thereby supporting the affordability and distribution of food as components essential for achieving food sufficiency. Food safety education can equip farmers with knowledge regarding safe agricultural practices that adhere to sustainable agricultural practices, particularly by reducing the use of hazardous chemicals that may damage crops.

The Rice Farming Business Insurance (AUTP) with free premiums is a government initiative aimed at protecting farming activities from agricultural losses, thus ensuring the continuity of farming operations. Farmers will receive protection for their crops against damage caused by disasters such as floods, droughts, pests, and diseases, as well as other

risks. This support is crucial for farmers, the primary actors in agriculture, as it helps mitigate risks associated with uncertainty that may lead to losses, thus encouraging agricultural sector initiatives. This program is vital, considering that food crops are a fundamental component of ensuring food sufficiency (Azriani et al., 2018). The provision of fish seeds and native chickens constitutes a program that bolsters food sufficiency by enhancing the variety of local food sources and increasing the availability of animal protein. This diversification can mitigate the risks associated with reliance on a single food source. Additionally, the provision of livestock assistance can aid farmers in reducing their capital expenditures. Furthermore, the presence of export-import education related to the marketing of community-produced food can broaden marketing reach and equip the community with knowledge regarding the availability of production data and information.

The arrangement of access to support food sufficiency is reflected in activities aimed at developing access, focusing primarily on the agricultural sector. These agricultural activities are intended to support hunger alleviation through food nutrition by enhancing food sufficiency and implementing sustainable agricultural practices. The model of access development established in the PAR (Agrarian Reform Access Arrangement) in Purwabakti Village is an integrated farming model. This model was selected based on the village's characteristics, where the majority of livelihoods are centered around agriculture, with potential for the development of palm sugar production and POC (community-organized palm sugar). The livestock managed by households also provides additional support in integrating plant and animal management into a cohesive unit.

The results of social mapping for the first-year agrarian reform access arrangement in Purwabakti Village indicate that all families benefiting from the program are deemed capable of meeting their basic needs or daily food requirements. The access arrangement activities do not specifically focus on food sufficiency or food sufficiency, but rather on sustainable agriculture and environmentally friendly technologies.

In the context of empowerment in Purwabakti Village, the empowerment activities undertaken involve an integrated farming model that combines agricultural, livestock, and aquaculture practices. This integrated farming model is considered suitable for the agricultural potential of Purwabakti Village, including the production of palm sugar, POC, and livestock activities that are part of the community's daily routines. These activities are expected to enhance agricultural production in the village while contributing to the conservation of natural resources and the economic well-being of the community. Furthermore, the potential of the Community Land Empowerment Program (PTM) concerning food sufficiency can be identified through a fishbone diagram analysis, as illustrated in Figure 2.

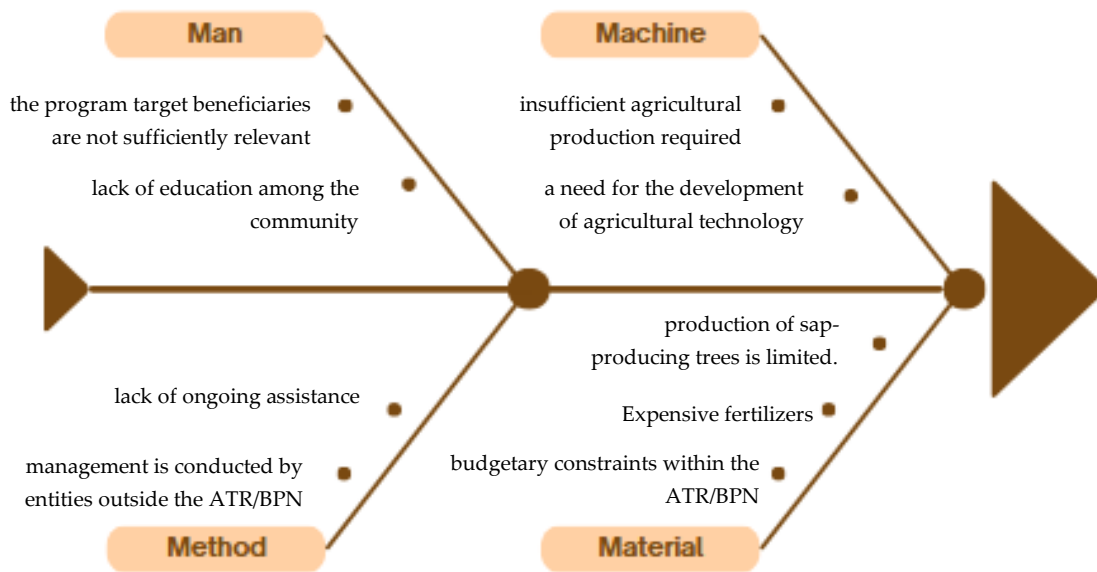


Figure 2. Fishbone Analysis of PTM Program Relevance to Food Sufficiency  
Source: Author's Compilation, 2024

The weaknesses of community land empowerment (PTM) in addressing food issues can be observed from the aspects of man, machine, method, and material. Regarding the aspect of man, the factors contributing to the ineffectiveness of the PTM program include the lack of relevance of the program beneficiaries and the continued need for skill enhancement among community members. In terms of machine, the inadequacy of PTM stems from insufficient support for improving agricultural production tools and the development of agricultural technology. Regarding method, the lack of sustainable support in the agricultural sector and management by entities outside the ATR/BPN is a cause of PTM's weaknesses. Lastly, in the material aspect, the limitations of PTM potential can be seen in the high costs of fertilizers, which create difficulties for farmers, as well as the limited production of sap-producing trees to meet the demand for palm sugar.

However, it is important to emphasize that the opportunities provided by PTM are not sufficiently robust to meet the Sustainable Development Goals (SDGs) indicators, particularly concerning food sufficiency. There exists a problem of food vulnerability in Pamijahan District related to malnutrition (stunting). This issue of malnutrition must be approached effectively within community land empowerment programs. The essence of agrarian reform itself aims to encourage productive land utilization; therefore, the primary key to productive land utilization must also include the identification of socio-cultural factors. This is necessary because the issue of food vulnerability, especially in relation to malnutrition, is part of socio-cultural factors such as traditions, beliefs, and habits. These socio-cultural factors significantly influence food consumption diversity, dietary patterns, and food choices (Wardani et al., 2024). Food vulnerability is an issue closely tied to culture,

as an individual's dietary patterns are shaped by their cultural background, influenced by various social and cultural changes (Purnamasari A, 2022).

### Relevance of Community Land Empowerment for Gender Equality

The fifth Sustainable Development Goal (SDG) aims to achieve gender equality and empower all women and girls. In this context, sustainable development seeks to end violence and discrimination against women and ensure that they have equal opportunities in all aspects of life (Muhartono, 2020). In the implementation of the agrarian reform access arrangement in Purwabakti Village, the integration of gender can be observed at each stage of the activities undertaken, specifically in the first year's stages, which include location determination, recruitment and selection of field officers, introduction and technical guidance, social mapping, analysis of social mapping results, and the formulation of models and development access directions. The realization of planning and formulation can be identified through the gender mainstreaming in the technical guidelines of the activities.

The Land Office recruits support personnel based on their qualifications to aid in the implementation of the agrarian reform access arrangement. The Land Office mentions gender equality as one of the qualification points for support personnel. The direct mention of gender equality in the qualification criteria for the recruitment of support personnel embodies the aspect of participation, providing women with the opportunity to engage in the access arrangement activities.

Table 3. Involvement of Women in Access Arrangement Activities in 2023

No.	Activity Type	Yes	No	Note
1	Location Determination	√		Women's participation in the activity
2	Recruitment and Selection of Field Officers	√		Recruitment conducted without regard to gender
3	Introduction and Technical Guidance	√		Women's participation in the activity
4	Extension Services	√		Women's participation in the activity
5	Social Mapping, Inventory, and Identification of Various Needs	√		Gender-neutral data collection
	Data Input into Applications	√		
	Data Analysis for Policy Formulation	√		
	Analysis of Social Mapping Results	√		
6	Analysis of Social Mapping Results	√		Invited 12 stakeholders, village representatives, and Gapoktan

Source: Social Mapping Data, Bogor I Land Office

Overall, activities that provide opportunities for women's involvement in Purwabakti Village include cooperative assistance, homestay training, small and medium-sized enterprises (SMEs), and capital facilitation and education. The provision of capital programs for entrepreneurs encourages women to enhance their access to business development. This is expected to be particularly beneficial for women entrepreneurs who are primarily housewives seeking to establish side businesses to increase their income. The cooperative assistance that ensures all members, including women, are involved in decision-making and have greater control over economic resources is also an effort to promote women's participation. Furthermore, women predominantly manage the homestay and SME training, which can equip them with skills and opportunities to participate in the village's small business-based tourism industry. This can enhance the economic independence of women and their families. Moreover, the relevance of community land empowerment in promoting gender equality in Purwabakti Village can be identified through a fishbone diagram analysis, as illustrated in Figure 3.

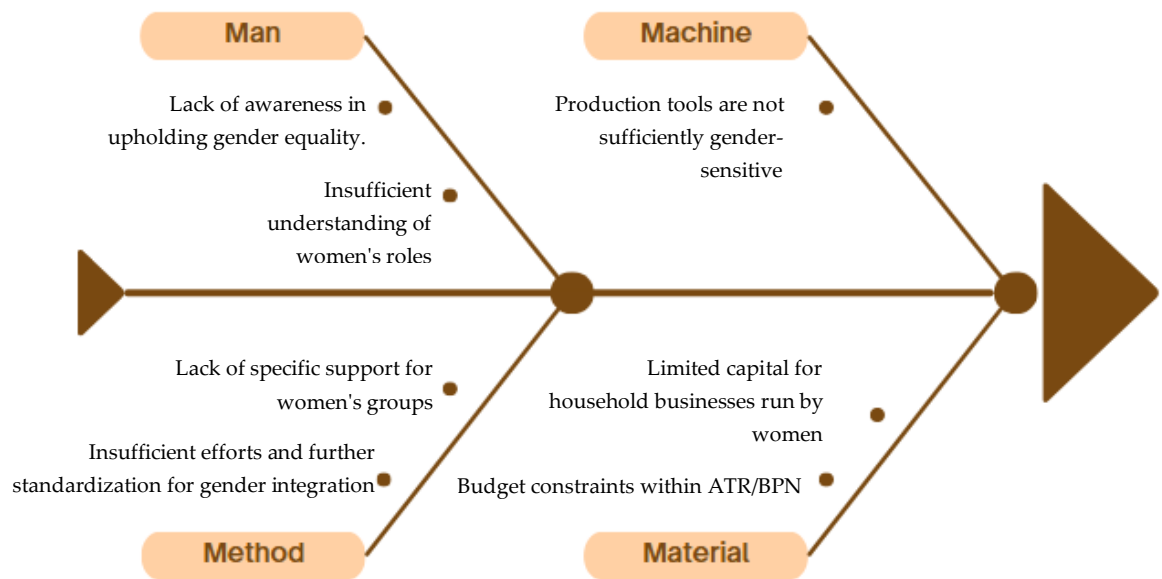


Figure 3. Fishbone Analysis of the Potential of Community Land Empowerment Program for Gender Equality  
Source: Author's Compilation, 2024.

Regarding the "man" aspect, the involvement of women in every activity is of primary importance. In this regard, it is essential to raise awareness among both the community and the organizers to accommodate gender equality. Upon examining the "method" aspect, it becomes clear that women's groups receive no specific assistance. This condition can hinder women's access to and control over productive resources. Regarding the "machine" aspect, there are still issues related to the support provided for the facilitation of production tools.

In the "material" aspect, the weaknesses of community land empowerment (PTM) are reflected in the lack of special attention given to the limited capital faced by women, especially those whose income relies on the head of the household, thus encountering difficulties in developing their businesses.

No programs specifically address the disparities in women's access and control over productive resources, as gender equality has not received priority. Initiatives related to community land empowerment have not yet directly addressed the vulnerabilities associated with land ownership. Although women's involvement in activities is relatively balanced, the percentage of land ownership reveals that the number of men holding rights to land significantly exceeds that of women. The community land empowerment activities have not adequately addressed this situation.

## CONCLUSIONS

The food sufficiency conditions of the community in Purwabakti Village indicate the presence of food vulnerability challenges. The data on malnutrition, specifically stunting, clearly demonstrates this. The state of food vulnerability is particularly ironic when juxtaposed with the characteristics of Purwabakti Village, which is a productive agricultural village serving as a rice supplier for communities outside the village. Meanwhile, the general conditions prevalent in a patriarchal society exemplify gender equality. Traditional gender roles assign domestic responsibilities to women, and public responsibilities to men. Men (heads of households) hold the dominant land ownership, reflecting gender inequality. Rural, patriarchal cultures generally do not perceive this condition as a problem.

The relevance of community land empowerment in supporting the second SDG, "Zero Hunger," still exhibits weaknesses. The weaknesses of community land empowerment (PTM) in responding to food issues can be analyzed through the aspects of "man," "machine," "method," and "material." In the "man" aspect, the factors contributing to the weakness of the PTM program include the lack of relevance of the program beneficiaries and the need for skill enhancement within the community. In the "machine" aspect, the weakness of the PTM program arises from insufficient support for improving agricultural production tools and the development of agricultural technology. Regarding the "method" aspect, the absence of sustained assistance in the agricultural sector as well as the involvement of parties outside of ATR/BPN contributes to the weakness of the PTM program. In the "material" aspect, the limitations of the PTM potential are evident in the high cost of fertilizers, which creates difficulties for farmers, as well as the limited production of sugar palm trees in meeting the demand for and production of palm sugar.

The importance of community land empowerment in promoting the fifth Sustainable Development Goal, "Gender Equality," also highlights its shortcomings. Regarding the

"man" aspect, it is crucial that women actively participate in all activities. In this context, raising awareness among both the community and the organizers regarding gender equality is essential. Regarding the "method" aspect, it is clear that women's groups have not received any specific assistance. This condition may hinder women's access to and control over productive resources. In the "machine" aspect, issues related to the support for facilitating production tools remain. In the "material" aspect, the weaknesses of PTM are reflected in the lack of special attention to the limited business capital faced by women, especially those whose income depends on the head of the household, which complicates their ability to develop their businesses.

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