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PARTNERSHIP PATTERN AND HOUSEHOLD WELFARE LEVEL OF SUGARCANE FARMERS

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ABSTRACT

Partnering with a sugar factory is the main choice for sugarcane farmers in Bone Regency because they are unable to process their own farm production, obtain market guarantees, and obtain production facilities. The aims of this study were to: (1) Identify the partnership pattern between sugarcane farmers and PT Perkebunan Nusantara *XIV* (PTPN XIV) Camming Sugar Factory, (2) Analyze the income of sugarcane farmers, (3) Analyze the welfare level of sugarcane farmers' households. The respondents were 35 sugarcane farmers who had partnerships with PTPN XIV Camming Sugar Factory, and two key informants fromthe company who supervised the partnership which were expected to be able to provide information about the partnership pattern. The analytical method used is descriptive statistical analysis, income analysis, farmer's household income structure analysis, household expenditure structure and welfare level analysis. The results showed that: (1) The partnership pattern run by sugarcane farmers and PTPN XIV Camming Sugar Factory isplasma-core pattern, where core being the nucleus and plasma the smallholding farmers. (2) The average income per harvest season of sugarcane farming is Rp. 13.991.923. (3) Sugarcane farmer households are categorized as prosperous with an average of 37.6% of total household expenditure is on food.

Keywords: Sugarcane farmer, Partnership pattern, Household's welfare level, Income, household expenditures.

INTRODUCTION

Starting with an economic, ecological, and sociocultural standpoint, plantations are one of the strategically important subsectors that contribute significantly to the growth of the country. The

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plantation sub-sector, with its relatively steady growth, plays a crucial role in reacting to global concerns as well as in the development of the national economy.In addition to contributing to economic growth and employment, the plantation sub-sector also helps to reduce poverty, preserve the environment, and generate foreign exchange. Using sugarcane (Saccharum officinarum L.) budchip technology instead of traditional sett planting, which uses removed auxiliary buds as planting material, is a feasible option(Rehman et al. 2021).

One of the sugar factories managed by PT. Nusantara Plantation XIV is PTPN XIV Camming Sugar Factory. PTPN XIV Camming Sugar Factory implemented a cooperation program with farmers in order to meet their raw material needs, balance sugar production, and assist them earn more money from their sugar cane farms.Sugarcane is one of the fourteen priority crops in the Indonesian Agricultural Revitalization Program for the years 2005–2025, and agricultural extension is essential to the program. The goal of offering agricultural extension services was to boost sugarcane growers' earnings and output. Therefore, offering agricultural extension services is sufficient to raise the financial performance of sugarcane growers(Rokhani et al. 2021).Herbicides, labor, fertilizer, and seeds are not the only production factors that influence the growth in sugarcane productivity and output. Other variables that have an impact on sugarcane productivity and output include economic orientation and environmental awareness. Because of this, farmers had a relatively high level of economic orientation and environmental consciousness, which might boost sugarcane production and productivity(Putra, Irham, and Waluyati 2019).

Collaborations between small and medium-sized (partner companies) businesses that are mutually beneficial are known as farming partnerships(Prasetyo, Fahmi, and Wibisono 2015). One of the communities that provides the most amount of raw materials to the PTPN XIV Camming Sugar Factory for the manufacturing of sugar is Paccing Village in the Patimpeng District of the Bone Regency. For Paccing Village sugar cane producers, partnering with PTPN XIV Camming Sugar Factory is the ideal option. This is a result of their inability to guarantee their market and handle their own agricultural output. Forming partnerships also makes it easier for sugarcane growers to acquire the infrastructure and production facilities they need to boost their output. A further incentive for farmers to farm is the ability to produce crops that are both highly valued and of excellent quality. According to Saptana et al. (2007), the income and welfare of farmers' households will rise with superior commodities that have high production and high selling prices, and also due to the availability of marketing.

Numerous studies about farmers' partnerships with large corporations have been conducted. Nevertheless, none of these studies have examined the welfare level of farmers' households or the collaboration between PTPN XIV Camming Sugar Factory and sugarcane farmers.

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Therefore, the research objectives are to: (1) Identify the partnership pattern between sugarcane farmers and PTPN XIV Camming Sugar Factory, (2) Analyze the income of sugarcane farmers, (3) Analyze the welfare level of sugarcane farmers' households.The agriculture industry cannot successfully industrialize without the integrated value chain. Farmer engagement in sugarcane CF is significantly impacted by factors such as age, education, and type of cultivated land. In the meanwhile, farmer engagement in sugarcane CF is positively impacted by land tenure, cultivated area, cropping system, certified seed, cooperative membership, access to extension services, and farmer association membership. Strengthening the information provided by CF to farmers who cultivate a vast area is the policy implication for boosting farmer participation in CF. Given that these farmers typically take part in CF in order to foresee marketing hazards(Rokhani et al. 2021).

MATERIAL AND METHODS

Income analysis is used to answer the second objective. The second objective is to analyze the income of sugarcane farmers in partnership with PTPN XIV Camming Sugar Factory in Paccing Village, Patimpeng District, Bone Regency.

The respondents were 35 sugarcane farmers who had partnerships with PTPN XIV Camming Sugar Factory, and two key informants from the company who supervised the partnership which were expected to be able to provide information about the partnership pattern.Farmer living expenses is the sum of household income from sources other than farming and income from agricultural operations. It is anticipated that family income will indicate the degree of wealth and capital that farmers possess. The high income is indicative of enough money being available for farming. Understanding the complete cost and total revenue associated with farming operations is essential to calculating the amount of income. The value of the farm's output, or the product's price multiplied by the total amount produced over a given time period, is the total farm revenue. The values of all the production components utilized to manufacture the sugarcane within a specific time frame make up the total costs or expenses. The entire income of a farm is the sum of its total revenue and total expenditure. The formula for total revenue, total costs and income is (Suratiyah, 2021):

$$\pi = TR - TC$$

Where:

π : Farming income or profit (Rp)

TR: Total farm revenue (Rp)

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TC: Total cost of farming (Rp)

Rich people lead secure and tranquil lives because they are not burdened by poverty, ignorance, fear, or anxieties(Sugiyono, 2013). The degree of welfare of farmer households is typically assessed using a number of factors, which can be examined using indicators like household income allocation and household expenditure structure(Putri, CK & Noor 2018).

The income structure shows the main source of income for farming families can be calculated using the following formula:

$$PPSP = \sum (TPSP / \sum TP) \times 100\%$$

Where:

PPSP = Agricultural sector income share (%)

TPSP = Total income from agriculture (Rp/year)

TP = Total household income (Rp/year)

The percentage of income from the agricultural sector to farmers' household income is shown using the agriculture sector income share (PPSP). The household welfare of a farmer is categorized as good the larger the share of revenue derived from the agricultural sector (Datau et al. 2019).

Analysis of household expenditure structure is calculated using the following formula:

$$PEP = \sum (PEn / \sum TE) \times 100\%$$

Where:

PEP = Expenditure share for food (%)

Peen = Expenditure on food (Rp/year)

TE = Total of farmer’s household expenditure (Rp/year)

The welfare indicator of a farmer's household is listed below:

- Food expenditure < 50% of total expenditure = prosperous household

- Food expenditure 50% - 60% of total expenditure = pre-prosperous household.

- Food expenditure >60% of total expenditure = poor household

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The development of the share of expenditure on food can be used as an indicator of the success of rural development. The larger the share of expenditure on food indicates that the income of farm households is still concentrated to meet basic needs.

RESULTS AND DISCUSSION

I. Farmer Partnership Pattern with PTPN XIV Camming Sugar Factory

The plasma core partnership pattern, subcontract partnership pattern, general trade partnership pattern, agency partnership pattern, and agricultural operational cooperation partnership (KOA) pattern are the five types of partnerships(Sumardjo, 2004). The plasma core partnership pattern, in which farmers are the plasma party and PTPN XIV Camming Sugar Factory is the core party, is the model of cooperation used at the sugar factory with smallholder sugarcane growers. As the main supplier, PTPN XIV Camming Sugar Factory offers a factory for production as well as professional advice on sugarcane cultivation up until post-harvest. Aside from providing land for sugar cane cultivation management, labor, maintenance costs, transportation costs, and other expenses, farmers also produce sugar cane, which is one of the raw materials for sugar, and meet the milling capacity installed in the PTPN XIV Factory. In this way, farmers act as plasma parties. The form of the plasma core partnership pattern can be seen in the following figure 1.

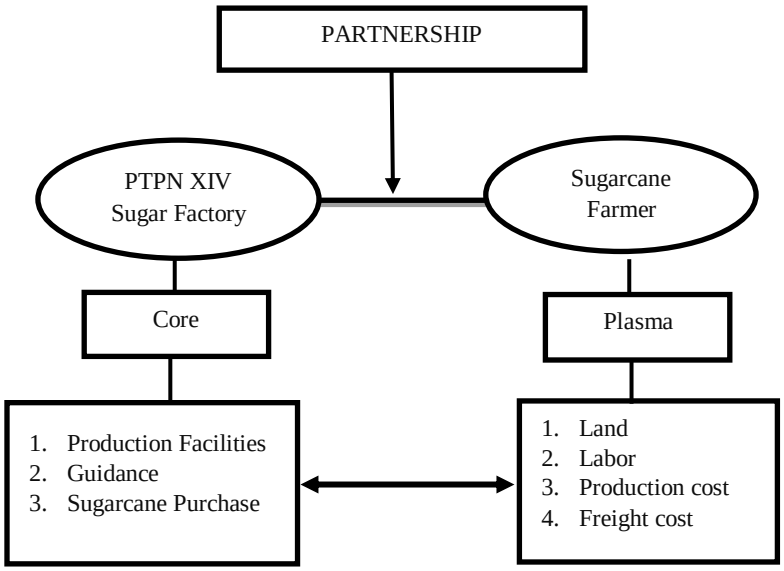

Figure 1: Partnership Pattern between Sugarcane Farmers and PTPN XIV Camming Sugar Factory

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a) Partnership Mechanism

The collaboration between the company and the farmers has certainly gone through a process that resulted in agreements that have been approved, agreed and signed by both parties, of course with certain considerations. Partnerships can last a long time when both parties involved in the partnership benefit from the cooperation.

The mechanism for the partnership of PTPN XIV Camming Sugar Factory and farmers is as follows:

1. Become a partner farmer of PTPN XIV Camming Sugar Factory.

Before collaborating with PTPN XIV Camming Sugar Factory, farmers must first submit an application and as for data. After that, the next stage is that PTPN XIV Camming Sugar Factory measure the farmers' land area to be planted with sugarcane, when farmers have gone through the stages above and are approved by PTPN XIV Camming Sugar Factory then farmers join to become members of farmers group then immediately become a partner of PTPN XIV Camming Sugar Factory.

2. Farmers carry out cultivation activities through guidance from PTPN XIV Camming Sugar Factory

After becoming a partner of PTPN XIV Camming Sugar Factory, farmers carry out their duties as partners of PTPN XIV Camming Sugar Factory. Farmers then carry out sugarcane cultivation activities on land that has been registered. PTPN XIV Camming Sugar Factory provides guidance to farmers from the beginning of planting to post-harvest. The guidance is intended to monitor all farmer activities related to sugarcane processing, with the aim that farmers can produce sugarcane with good quality and in accordance with the provisions set by PTPN XIV Camming Sugar Factory.

3. Milling process

The produce that categorized as Cane Suitable for Cuttingand Cane Worth Milling are then handed over to the factory according to the schedule that has been determined by the factory. Farmers are then required to follow the progress of weighing and milling of the sugarcane carried out by the factory,as from this stage the farmers could know how much results they will get in accordance with the provisions for profit sharing that have been set and agreed upon by both parties.

b) Profit Sharing System and Partnership Rights and Obligations

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The profit sharing system in partnership activities at PTPN XIV Camming Sugar Factory with partner farmers is determined through yields. The yield itself is the percentage level of sugar content in the cane stalks, meaning that from 100 kg of sugar cane milled at the factory, 10 kg of sugar will be obtained.The yield determination system at PTPN XIV Camming Sugar Factory is commonly referred to as the overlay method, which is to make an assessment of each sugarcane field and determine the initial and final estimated yield value, the yield will be determined from the average value of all processed sugarcane. The provision for sugar production sharing is that 34% belongs to PTPN XIV Camming Sugar Factory and 65% belongs to sugarcane farmers, while for molasses PTPN XIV Camming Sugar Factory will provide as much as 3 kg of molasses per quintal of sugarcane belonging to smallholder sugarcane farmers.

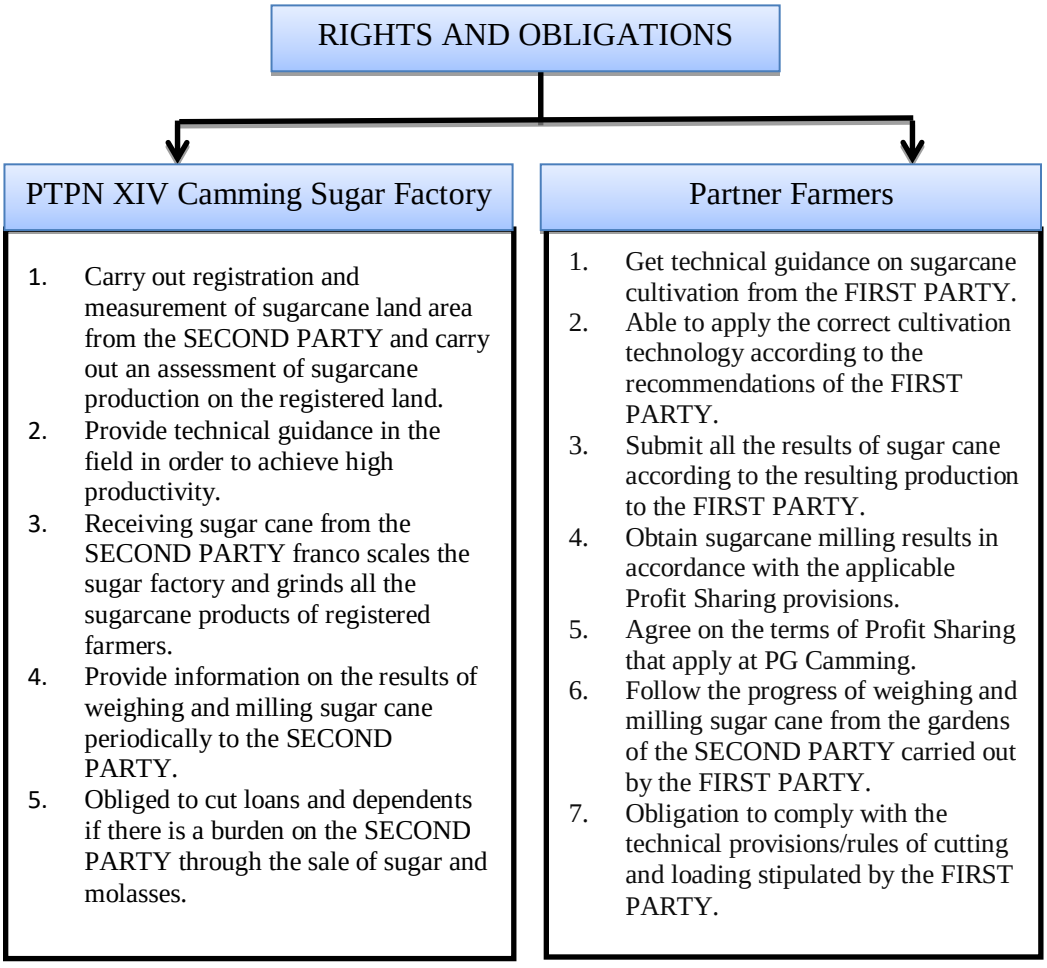

Figure 2: Rights and Obligations of Sugarcane Farmers and PTPN XIV Camming Sugar Factory.

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There are rights of each party that they are entitled to from the other party, such as the rights that are entitled to get by the first party is receiving sugarcane from the second party and grinding all the sugarcane farmers' produce. registered and eligible to be milled, this means that partner farmers are not allowed to give their products to other parties other than PTPN XIV Camming Sugar Factory. Farmers can commercialize and advance quickly toward agro-processing with the support of private sector partnerships. When creating and developing rural agricultural support programs tailored to specific regions for community farmers, it is imperative to give priority to both identified dangers and successes(Ndlovu, Mwale, and Zuwarimwe 2021).

The next right is to receive sugar cane that meets the requirements as agreed before.Those conditions are regulated in the article of the agreement in the form of Suitable Cutting Sugar Cane, that is sugarcane that has met the requirements such as plant age between 11 to 13 months, with minimum of 22 segments, yields of the upper stem, middle and lower stems were almost the same, and based on the results of the ripeness analysis. Meanwhile, Milled Worthy Sugarcane is sugarcane that meets the criteria for sweet, clean, and fresh with the following details: what is meant by sweet is having an average brix value of>18%, based on the results of preliminary analysis or field brix, then what is meant by clean is a maximum of dirt or trash is 5%, and fresh is the time difference between cutting and milling (cut to crush) < 36 hours and does not burnt.The next right is to cut all loans and dependents that are the burden of the second party through the sale of sugar and molasses. Among other things is if sugarcane farmers use or rent land processing equipment and transportation from the factory, as well as seed loans made at the beginning. So before submitting all their produce, farmers must pay these obligations, or give authority to the factory to cut sugar production according to the farmer's loan amount.

The first party is also required to perform certain tasks, such as registering the land, measuring its area, and calculating the amount of sugarcane that would be produced on it. Farmers who wish to be partners with PTPN XIV Camming Sugar Factory must register. Following registration, the Sugar Factory measures the area of land that the farmers plan to plant with sugar cane; this is a very helpful service for the farmers, as most of them are unaware of the exact dimensions of their land.In order to determine how much sugarcane can be produced from the farmer's land, the factory estimates sugarcane production on the registered land at the acceptance step of being a partner farmer. Land is the primary input in agricultural production and a valuable resource that helps farmers create riches.A farmer's performance is directly impacted by the three types of agricultural land ownership that are most common: owned land, rented land, and sharecropped (kedokan) land. Therefore, the greatest financial option for the landlord was sharecropping, also known as ngedok, an informal contract farming arrangement between farmer and landlord. Additionally, landless farmers should be given the opportunity to possess their own land in order to improve their wellbeing(Rondhi et al. 2018).

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Furthermore, the obligation that must be carried out by the first party or the sugar factory to its partners is to provide technical guidance in the field in order to achieve high productivity. Technical guidance is that the factory sends a supervisor who directly communicates with partner farmers on the land. The guidance provided by the supervisor is related to the cultivation of sugar cane, from land processing to harvesting. In connection with the above obligations, then the sugar factory is also obliged to analyze the potential yield of sugarcane farmers and provide information about the results of the analysis to the second party or partner farmers.

The next obligation carried out by the sugar factory is to provide information on the results of sugar cane scales. The sugar factory is obliged to provide information on how much weight the sugar cane scales for partner farmers during the cutting and transport process. Their obligation is also to provide information related to the results of milled sugarcane periodically and profit sharing on the production of sugarcane that has been submitted by a second party or partner farmer party based on applicable regulations. This is done so that there is transparency regarding the milled results that have been obtained.

It is also necessary for farmers to concur on the decided profit-sharing terms. Of course, both parties have given careful thought to the profit-sharing provisions that have been established. Farmers also have a duty to monitor the growth and milling of sugar cane; this is necessary to provide them with information about the preliminary loading and unloading procedure up to the milled results are obtained. Additionally, Wulandari et. al. (2020) found that Farmers are encouraged to produce crops that are both high-quality and high-priced through a partnership connection.

II. Source of Income

The income received by sugarcane farmers' households are from sugar cane farming, income from rice farming, and non-farming income. It is represented as follows.

Table 1: Types and Average Income/year of Sugarcane Farmers' Households in Paccing Village, 2022

No.	Income Type	Average (Rp/year)	Percentage (%)
1.	Sugarcane Farming	13,991,923	26.61
2.	Other Farms	7,828,571	14.89
3.	Non-Farming	30,731,428	58.14
	Total	**52,551,922**	**100**

Source: Author's elaboration.

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Farmers' households income are generated from three sectors. Their income was dominated by their off-farm jobs, which is amounted to 58.14% of the total household income. Referring to Achmad and Diniyati (2018), Farmers came to the realization that depending solely on revenue from the agriculture industry would not be sufficient to provide for their family. Since these activities are what generate the majority of their family's total revenue, they had to turn to off-farm sources of income. Furthermore, Ngwako et. al. (2021) also stated that farmers that participate in a cooperation are anticipated to earn more money.

III. Farmer's Household Expenditure

Household expenditures are generally grouped into two parts, namely expenditure on food and expenditure on non-food. The amount of household expenditure is influenced by the number of household dependents and also the habits of each family in meeting their needs. The types of farmers' household expenditure can be seen below.

Table 2: Average Expenditure/year of Sugarcane Farmers' Household in Paccing Village, 2022

No.	Types of Expenditure	Average (Rp)	Percentage (%)
A	**Food**		
	1. Staples	5,456571	10.4
	2. Side dishes	5,184,571	9.9
	3. Vegetables	548,229	1.04
	4.Fruits	488,285	0.9
	5. Seasoning	2,208,543	4.2
	6. Drinks	508,114	0.9
	7. Snacks	437,726	0.8
	8. Cigarettes	4,947,428	9.4
Total		**19,779,469**	**37.6**
B	**Non Food**		
	1. Electricity	1638,857	3.1
	2. Gas	754,285	1.4
	3. Fuel oil	1,357,714	2.6
	4. Health Cost	209,143	0.4
	5. School Fee	1,114,286	2.1
	6. Toiletries	1131,357	2.2
	7. Clothes	1,314,285	2.5
Total		**7,519,929**	**14.3**

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C	1. Savings	25,252,524	48.1
Total		**25,252,524**	**48.1**
Total Expenditure		**52,551,922**	**100**

Source: Author's elaboration, 2021.

The income of a household determines their degree of consumption (Utami and Ayu 2017). A household's expenditure on non-food products is higher than its expenditure on food when its income rises (Basole et al. 2015). Households with sugarcane farmers spend an average of 37.6% of their yearly income on food, with savings accounting for the majority of spending (around 48.1%). Overall, the amount of money spent on food is smaller than the percentage of money spent on non-food items. A prudent family should allocate the general to specialized social capital establishments, as each greater share of the latter might significantly contribute to the individual's well-being.

IV. Farmer Household Welfare

a) Farmer Household Income Structure

The structure of the household income of sugarcane farmers in Paccing Village which was used as a sample in this study to measure the level of welfare was obtained from two categories, namely: (1) Income derived from agricultural activities (on-farm) and (2) income from activities outside the agricultural sector (non-farm).The performance indicators of household income of sugarcane farmers in Paccing Village can be seen in the table below.

Table 3: Income Structure/year of Sugarcane Farmers' Household in Paccing Village, 2022.

No.	Income Type	Average (Rp/year)
1.	Sugarcane farming + other farming (TPSP)	21,820,494
2.	Total household income (TP)	52,551,922
3.	Share of agricultural sector income (PPSP) (%)	41.52

Source: the writer's elaboration, 2022.

Numerous studies have demonstrated that the majority of rural households depend on employment outside of agriculture to provide for their families. The majority of the respondents are employed as laborers at the PTPN XIV Sugar Factory, according to the field interviews. One of the best ways for farmers to increase their income is to work outside of the farm(Vatta and Sidhu 2010). For the respondents, the revenue contribution from off-farm activities amounted to 41.52%, a larger percentage of income than that from on-farm activities.According to Vatta et. al. (2008), Lack of access to land ownership is one of the factors contributing to farmers'

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decision to take an off-farm job. Conversely, farmers with land tend to shy away from taking on side employment as labor.

b) Household Expenditure Structure

The household expenditure structure of sugarcane farmers in Paccing Village can be used as an indicator to measure the level of farmers' households welfare. The household expenditure structure of sugarcane farmers in Paccing Village is presented in Table 4.

Table 4: Sugarcane Farmer's Household Expenditure Structure/year in Paccing Village, 2022

No.	Types of Expenditure	Average (Rp/year)
1.	Food Expenditure (PEn)	19,779,469
2.	Total Household Expenditure (TE)	52,551,922
3.	Share of Expenditure for Food (PEP) (%)	37.6

Source: the writer's elaboration, 2022.

It is evident from the preceding figure that just 37.6% of the household expenses of sugarcane farmers go toward food. We may deduce that the families of the sugarcane growers are prosperous because a family is considered to be more prosperous if the percentage of expenses that they spend on food is significantly lower than the percentage of expenses that they spend on non-food products (Deaton 1980). In general, The consumption patterns of a society are indicative of its level of welfare, and examining the quantity and trends of household consumption is one way to gauge household welfare as well. The proportion of spending allocated to personal or household consumption is a determinant of a region's economic growth and development (Damanik, 2018).

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that:

1. The form of partnership pattern carried out by PTPN XIV Camming Sugar Factory with sugarcane farmers is the plasma core partnership pattern. This partnership pattern was chosen to achieve a common goal, where the Sugar Factory aims to add raw material for sugar, and fulfill milling capacity so that self-sufficiency of sugar also increases, while farmers make partnerships to utilize unused land as well as for market certainty.

2. The average income per harvest season of sugarcane farming is Rp. 13,991,923, which consists of income in the form of sugar and molasses.

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3. Sugarcane farmer households are categorized as already prosperous with an average food expenditure is 37.6% of total household expenditure.

REFERENCES

[1] Saptana, Kurnia Suci Indraningsih and Endang L. Hastuti. 2007. "Analisis Kelembagaan Kemitraan Usaha Di Sentra Sentra Produksi Sayuran (Suatu Kajian Atas Kasus Kelembagaan Kemitraan Usaha Di Bali, Sumatera Utara, dan Jawa Barat" *SOCA: Jurnal Sosial Ekonomi Pertanian*.

[2] Achmad, Budiman, and Dian Diniyati. 2018. "The Income Structure of Smallholder Forest Farmers in Rural Sumbawa, Indonesia." *Biodiversitas Journal of Biological Diversity* 19(3):936–46. doi: 10.13057/BIODIV/D190324.

[3] Basole, Amit, Deepankar Basu, by Basole, and Amit Basu. 2015. "Non-Food Expenditures and Consumption Inequality in India." *Economics Department Working Paper Series*. doi: https://doi.org/10.7275/7088892.

[4] Damanik, Rohni Apriana. 2018. "Analisis Faktor-Faktor Yang Mempengaruhi Pengeluaran Pangan Rumah Tangga Di Kecamatan Medan Denai."

[5] Datau, Tity Iriani, Syarwani Canon, Amir Halid, Badan Perencanaan, Pembangunan Daerah, and Provinsi Gorontalo. 2019. "Tingkat Kesejahteraan Rumah Tangga Petani Menurut Tipologi Masyarakat".*Jambura Agribusiness Journal* 1(1):26–35. doi: 10.37046/JAJ.V1I1.2447.

[6] Deaton, A. 1980. "Demand Analysis." *Princeton University* (July):1–23.

[7] Ndlovu, Wiseman, Marizvikuru Mwale, and Jethro Zuwarimwe. 2021. "Challenges and Critical Success Factors for Rural Agrarian Reforms in Limpopo Province, South Africa." *AGRARIS: Journal of Agribusiness and Rural Development Research* 7(2):191–206. doi: 10.18196/AGRARIS.V7I2.11272.

[8] Ngwako, Gomolemo, Mary Mathenge, Eric Gido, and Keneilwe Kgosikoma. 2021. "Effect of Market Participation on Household Welfare among Smallholder Goat Farmers in Botswana." *Journal of Agribusiness and Rural Development* 60(2):151–60. doi: 10.17306/J.JARD.2021.01362.

[9] Prasetyo, Dian Widi, Idqan Fahmi, and Yossi Wibisono. 2015. "The Modeland Performance Of Partnership Between Seed Companyand Farmers." *Indonesian Journal of Business and Entrepreneurship (IJBE)* 1(1):1–1. doi: 10.17358/IJBE.1.1.1.

[10] Putra, Ungki Prabowo, Irham, and Lestari Rahayu Waluyati. 2019. "Pengaruh Orientasi Ekonomi Dan Kesadaran Lingkungan Terhadap Produktivitas Dan Rendemen Tebu Rakyat Pabrik Gula Wonolangan." *AGRARIS: Journal of Agribusiness and Rural Development Research* 5(2):162–72. doi: 10.18196/AGR.5285.

[11] Putri, CK & Noor, TI. 2018. "Analisis Pendapatan dan Tingkat Kesejahteraan Rumah Tangga Petani Padi Sawah Berdasarkan Luas Lahan Di Desa Sindangsari, Kecamatan Banjarsari, Kabupaten Ciamis, Provinsi Jawa Barat." *Jurnal Ilmiah Mahasiswa Agroinfo Galuh* 4(3):927–35. doi: 10.25157/JIMAG.V4I3.1678.

[12] Rehman, Abdul, Farwa Hassan, Rafi Qamar, and A. R. Atique-ur-Rehman. 2021. "Application of Plant Growth Promoters on Sugarcane (Saccharum Officinarum L.) Budchip under Subtropical Conditions." *Asian Journal of Agriculture and Biology* 2021(2):1–10. doi: 10.35495/AJAB.2020.03.202.

[13] Rokhani, Ahmad Asrofi, Ad Hariyanto Adi, Ahmad Fatikhul Khasan, and Mohammad Rondhi. 2021. "The Effect of Agricultural Extension Access on The Performance of Smallholder Sugarcane Farmers in Indonesia." *AGRARIS: Journal of Agribusiness and Rural Development Research* 7(2):142–59. doi: 10.18196/AGRARIS.V7I2.11224.

[14] Rondhi, Mohammad, Ad Hariyanto Adi, Pengaruh Pola Pemilikan Lahan Terhadap Produksi, Alokasi Tenaga Kerja, and dan Efisiensi Usahatani Padi. 2018. "The Effects of Land Ownership on Production, Labor Allocation, and Rice Farming Efficiency." *AGRARIS: Journal of Agribusiness and Rural Development Research* 4(2):101–10. doi: 10.18196/AGR.4265.

[15] Sugiyono. 2013. *METODE PENELITIAN KUANTITATIF, KUALITATIF, DAN RND*. Penerbit Alfabeta Bandung.

[16] Sumardjo. 2004. "Teori Dan Praktik Kemitraan Agribisnis / Sumardjo, Jaka Sulaksana, Wahyu Aris D" edited by J. Sulaksana and W. A. Darmono.

[17] Suratiyah. 2021. "Manajemen Usaha Tani.Pdf." iv + 156.

[18] Utami, Jana Putri, and Sri Fajar Ayu. 2017. "Food and Non-Food Consumption Expenditure In Medan City and Its Affecting Factors (Case Study of Java and Batak Tribes)." *Proceedings of the 2nd International Conference on Social and Political Development (ICOSOP 2017)* 136:488–501. doi: 10.2991/ICOSOP-17.2018.75.

[19] Vatta, Kamal, B. R. Garg, and M. S. Sidhu. 2008. "Rural Employment and Income: The Inter-Household Variations in Punjab." *Agricultural Economics Research Review* 21.

[20] Vatta, Kamal, and R. S. Sidhu. 2010. "Rural Non-Farm Employment, Income Distribution and Poverty: Micro Level Evidence from Punjab." *Indian Journal of Agricultural Economics* 65(4):1–17. doi: 10.22004/AG.ECON.204720.

[21] Wulandari, Maria Winanda, and Hendrik Johannes Nadapdap. 2020. "Pengaruh Kemitraan Terhadap Kondisi Sosial Ekonomi Petani Dan Lembaga Mitra (Suatu Kasus Di Asosiasi Aspakusa Makmur)." *JIA (Jurnal Ilmiah Agribisnis) : Jurnal Agribisnis Dan Ilmu Sosial Ekonomi Pertanian* 5(3):84–92. doi: 10.37149/JIA.V5I3.12304.

