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WELFARE LEVEL OF RUBBER TAPPERS IN THE SUNGEI PUTIH RESEARCH UNIT, GALANG SUBDISTRICT, DELI SERDANG DISTRICT

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Abstract
This study aims to analyze how the level of welfare of rubber tappers who are in the Sungei Putih Research Unit, the relationship between the formal education successfully completed by rubber tappers in the Sungei Putih Research Unit to their level of welfare, and the relationship between the employment status of rubber tappers in the Sungei Putih Research Unit to the level of welfare. This research was conducted at the Sungei Putih Research Unit, Galang District, Deli Serdang Regency. This research is a descriptive research. The sampling method is by using the Quota Sampling technique. The research sample is 32 people who are rubber tappers. To find out whether the rubber tappers in the Sungei Putih Research Unit have or have not reached a level of welfare, the welfare indicators developed by the National Population and Family Planning Agency (BKKBN) are used. The results showed that the welfare level of rubber tappers in the Sungei Putih Research Unit was in the low category, the higher the level of formal education completed by rubber tappers did not improve their welfare, and the higher the employment status of rubber tappers, the better their welfare.
Keywords: *Rubber Tappers, Welfare Level, Formal Education, Employment Status*

PENDAHULUAN

Indonesia is an agricultural country where the majority of its population makes their living in the agricultural sector, this is because Indonesia is crossed by fertile mountain ranges. The fertile agricultural land in Indonesia is also due to the country's location in a tropical climate, making the rock weathering process that occurs in Indonesia occur perfectly, making the soil fertile. Indonesia is also the largest archipelagic country in the world with 17,508 islands and a land area of 1,922,570 km². The vast land area that stretches across Indonesia, with the fertility of its soil, makes the agricultural sector have an important contribution both to the economy and to fulfilling the basic needs of society, especially with the increasing population which means that the need for food is also increasing. Apart from that, there is an additional role for the agricultural sector, namely improving the welfare of the community, most of whom are now below the poverty line (Ayun et al., 2020).

According to Andreiany et al., (2020) Plantation is one of the agricultural sub-sectors with the activity of cultivating certain plants on soil or other growing media in a suitable ecosystem, marketing goods and services from these plants with the help of technology and science, as well as capital and management to create prosperity for plantation business actors and the community. One of the plantation commodities that is quite important in terms of income, employment and source of foreign exchange is rubber plants.

Overall, the area of rubber plantations in Indonesia reaches 3,776,300 hectares, spread across almost all regions of the archipelago, one of which is North Sumatra Province. North Sumatra Province is one of the rubber producing provinces in Indonesia which is included in the five largest dry rubber

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producing provinces in Indonesia (Indonesian Rubber Statistics, 2020). The area of rubber plantations in North Sumatra province reaches 394,100 ha with production of 330,900 tons (Indonesian Statistics, 2022). One of the largest districts in this province which is an area with a large rubber plantation area is Deli Serdang Regency (Table 1).

Table 1. Area and Total Production of Rubber Plantations from People's Plantations in Deli Serdang Regency in 2020-2021

Kecamatan	Luas Areal (Ha)		Produksi (Ton)	
	2020	2021	2020	2021
Bangun Purba	859,4	859,4	661,3	661,3
Biru-Biru	240,1	240,1	135,2	135,2
Deli Tua	1,9	1,9	1,6	1,6
Galang	265,6	265,6	173,6	173,6
Gunung Meriah	271,4	271,4	185,6	185,6
Kutalimbaru	549,7	549,7	321,2	321,2
Namo Rambe	123,5	123,5	81,5	81,5
Pagar Merbau	9,8	9,8	6,3	6,3
Pancur Batu	95,5	95,5	51,0	51,0
S.T.M Hilir	603,7	603,7	410,4	410,4
S.T.M Hulu	1.756,1	1.756,1	1.308,7	1.308,7
Sibolangit	347,9	347,9	200,6	200,6
Tanjung Merawa	40,2	40,2	27,7	27,7
Kecamatan Lainnya	-	-	-	-
TOTAL	**5.164,8**	**5.164,8**	**3.564,7**	**3.564,7**

Source : Deli Serdang Regency Agriculture Service, 2022

Based on table 1 above, it can be seen that Deli Serdang Regency has quite extensive land availability which has the potential to be supported by the local government in the process of developing rubber plants, this will of course have a direct impact on rubber plantations in the Regency itself. In 2021, the area of rubber plants in Deli Serdang Regency was recorded at 5,164.8 ha with total production reaching 3,564.7 tons spread across 22 sub-districts. One of the sub-districts in Deli Serdang Regency that contributes to rubber plantations is Galang Sub-district, this is because there are many smallholder plantations spread across the sub-district (Table 2).

Table 2. Area and Production of People's Rubber Plantations in Galang District 2019-2020

No	Tahun	Luas Areal (ha)	Produksi (ton)	Perkembangan (%)
1	2018	271,0	177,2	-
2	2019	265,6	172,4	-2,7
3	2020	265,6	173,6	0,7

Source: Deli Serdang Regency Agriculture Service, 2021

One of the rubber plantations located in Galang District which is still managing rubber plants is the Sungei Putih Research Unit which is located in Sungei Putih Village. The Sungei Putih Research Unit is a rubber plantation which has an area of 427 ha and it is recorded that 157.9 ha of the land is a rubber plantation area with rubber plants that are already producing (Sungei Putih Research Unit, 2022). The rubber plants that have produced are plants managed by the Sungei Putih Research Unit, consisting of planting years 2006 to 2012. There are several groupings of types of rubber plant clones spread across the rubber plantation area (Table 3).

Table 3. Area of Producing Plants (Ha) and Types of Rubber Plant Clones in the Sungei Putih Research Unit Planting Year 2006-2012

Tahun Tanam	Jenis Klon dan Luas Tanaman Menghasilkan (Ha)					Jumlah (Ha)
	PB 260	IRR 39	IRR 42	IRR 112	Mix Klon	
2006	3,0		4,5		11,5	19,0
2007	33,0					33,0
2008	14,0			11,5		25,5
2009	10,0	0,5		21,4	3,5	35,4
2010	26,1				7,3	33,4
2012	6,5			5,0		11,5
TOTAL	92,6	0,5	4,5	37,9	22,3	157,8

Source : Sungei Putih Research Unit, 2022

The Sungei Putih Research Unit is a company operating in the plantation sector by managing various types of rubber plant clones in Deli Serdang Regency. One of the professions found on rubber plantations with a fairly high labor absorption capacity is tapping workers. Tapping is an activity to harvest rubber plants. Tapping of rubber plants is carried out by workers called tappers or tapping workers (Kumalawati et al., 2019).

The tapping workforce at the Sungei Putih Research Unit is divided into three levels of formal education, namely the Basic Education level (not finished elementary school (SD) - finished junior high school), the Middle Education level (graduated high school), and the Higher Education level (high school and above), then the tapping workforce is divided into several types of employee status, namely non-class permanent employees or employees with an Indefinite Time Work Agreement (PKWTT) and group permanent employees or Permanent Daily Employees (KHT) as well as laborers or Contractor Workers (TP). Each employment status has different provisions ranging from the term of employment to

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employee rights which of course will have an impact on the level of welfare of the tapping workforce itself.

Welfare issues are always related to the level of fulfillment of people's living needs. A person is said to be prosperous if they are able to fulfill their basic life needs, such as clothing, food, shelter, health, employment, and other basic needs such as a clean, safe and comfortable environment. (Pranata et al., 2016).

RESEARCH METHODS
Time and Location of Research
This research was conducted at the Sungei Putih Research Unit, Galang District, Deli Serdang Regency in January 2023. The location selection was carried out deliberately (purposive sampling).

Data Types and Sources
The research method used in this research is a descriptive research method with a qualitative approach. The type of data used is primary data obtained directly through interviews and secondary data obtained from literature and other references which are of course related to this research. The sampling technique in this research was carried out using a quota sampling technique. According to Sari and Wibowo (2019), quota sampling is a sampling technique that determines the number of samples from a population that has certain characteristics until the desired quota number is achieved. The sample taken in this research was 50% of the total population or 32 people consisting of three employee statuses, namely Permanent Daily Employees (KHT), Employees with an Indefinite Time Work Agreement (PKWTT), and Contractor Workers (TP).

Data Analysis
The data analysis method in this research is qualitative descriptive analysis, namely by explaining and interpreting the conditions that occur in the field in narrative form. To analyze the level of welfare of rubber tappers in the Sungei Putih Research Unit, Galang District, Deli Serdang Regency, welfare criteria according to the National Population and Family Planning Agency (BKKBN) were used. The welfare criteria according to the BKKBN are by analyzing 20 indicators of welfare levels, including the need for food, clothing, shelter, health, family planning, education, religion, income, interaction within the family, social interaction with the environment, information and communication, and role in public. Criteria for family welfare according to BKKBN (2017), can be categorized into several stages, namely:

1. Pre-Prosperous Families (KPS)
   Namely families that do not meet one of the 6 indicators in Prosperous Families I (KS I).
2. Prosperous Family I (KS I)
   Namely families that are able to fulfill the 6 indicators in Prosperous Family I, but do not fulfill one of the 7 indicators in Prosperous Family II (KS II).
3. Prosperous Family II (KS II)
   Namely families that are able to fulfill 6 indicators in Prosperous Family I and 7 indicators in Prosperous Family II, but do not fulfill one of the 5 indicators in Prosperous Family III (KS III).
4. Prosperous Family III (KS III)
   Namely families that are able to fulfill 6 indicators in Prosperous Family I, 7 indicators in Prosperous Family II, and 5 indicators in Prosperous Family III, but do not fulfill one of the 2 indicators in Prosperous Family III Plus (KS III +).
5. Prosperous Family III Plus (KS III +)
   Namely families that are able to meet all welfare indicators starting from Prosperous Family 1 (KS I) to Prosperous Family III Plus (KS III+).

RESULTS AND DISCUSSION

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Overview of the Sungei Putih Research Unit

The Sungei Putih Research Unit is a rubber research center located in Sungei Putih Village, Galang District, Deli Serdang Regency. The Sungei Putih Research Unit is located around 45 km south of Medan City and around 27 km from Lubuk Pakam District. The location of the Sungei Putih Research Unit is located at an altitude of around 80 m above sea level (masl). The means to reach the location from Medan City to Sungei Putih Village are asphalt roads and the remaining roads are half asphalt. The area boundaries of the Sungei Putih Research Unit are as follows:

North : Pertumbukan Village and PT. Perkebunan Nusantara III

South : Tanjung Purba Plantation

West : Bangun Purba area and PT. Single Serdang.

East : Galang District and PT. Perkebunan Nusantara III

1. Welfare Level of Rubber Tappers in the Sungei Putih Research Unit

This research was conducted to analyze the level of welfare of rubber tappers at the Sungei Putih Research Unit based on the welfare stages that have been developed by the National Population and Family Planning Agency (BKKBN). The welfare measuring tool that has been developed consists of 20 indicators and is divided into 5 stages, namely Pre-Prosperous Families, Prosperous Families Stage I (KS I), Prosperous Families Stage II (KS II), Prosperous Families Stage III (KS III), and Prosperous Families. Stage III Plus (KS III+).

Table 4. Distribution of Welfare Levels of Rubber Tappers in the Sungei Putih Research Unit, Galang District, Deli Serdang Regency, 2023

No	Tingkat Kesejahteraan	Jumlah (Penyadap)	Persentase (%)
1	Keluarga Pra Sejahtera	12	37,50
2	Keluarga Sejahtera I	15	46,87
3	Keluarga Sejahtera II	2	6,25
4	Keluarga Sejahtera III	2	6,25
5	Keluarga Sejahtera III+	1	3,13
	Jumlah	32	100

Source: Appendix 7

In table 4 it can be seen that there are 12 rubber tappers who fall into the Pre-Prosperous Family (KPS) category, namely 37.50%, while the highest percentage is found in rubber tappers who are in the Prosperous Family Phase 1 (KS I) category, namely equal to 46.87%, followed by rubber tappers in the Prosperous Family Stage 2 (KS II) category, namely 6.25%, and the percentage of rubber tappers in the Prosperous Family Stage 3 (KS III) category was 6.25% , as well as rubber tappers in the Prosperous Family Phase 3 Plus (KS III+) category as much as 3.13%. Rubber tappers who do not meet one of the indicators from the BKKBN do not mean they cannot fulfill the requirements of the next indicator stage, but this is caused by a strict and hierarchical categorization or phasing system which is a characteristic of the family welfare measurement model to obtain the appropriate level of welfare. actually both economically and socially.

2. Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Based on Last Level of Formal Education

This research was conducted to analyze the level of welfare of rubber tappers at the Sungei Putih Research Unit based on the last level of formal education that the tapper had taken. Researchers divided education levels into 3 categories, namely Basic Education (not completed elementary school-middle school), Secondary Education (completed high school), and Higher Education (high school and above). The final distribution of education completed

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by rubber tappers at the Sungei Putih Research Unit is as follows:

Table 5. Distribution of Final Formal Education for Rubber Tappers at the Sungei Putih Research Unit in 2023

No	Pendidikan Terakhir	Jumlah (Penyadap)	Persentase (%)
1	Pendidikan Dasar (tidak tamat SD-SMP)	12	37,50
2	Pendidikan Menengah (tamat SMA)	20	62,50
	Jumlah	32	100

Source: Appendix 2

Based on the table above, it can be seen that there are no rubber tappers who have successfully completed their final education at the higher education level, namely education up to university. The most recent formal education achieved by rubber tappers at the Sungei Putih Research Unit was secondary education (graduated from high school), namely 20 people or 62.50% of the total sample, and basic education (not graduated from elementary school-middle school) as many as 12 people or 37.50% of the total sample. The level of welfare of rubber tappers in the Sungei Putih Research Unit when viewed from the last format of education successfully completed can be seen from table 6 below:

Table 6. Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Seen from the Last Formal Education in 2023

Jenjang Pendidikan	Tingkat Kesejahteraan Keluarga										Jumlah	
	Pra Sejahtera		KS I		KS II		KS III		KS III+			
	F	%	F	%	F	%	F	%	F	%	F	%
Dasar	6	50	4	33,30	0	0	1	8,35	1	8,35	12	100
Menengah	6	30	11	55	2	10	1	5	0	0	20	100

Source: Appendix 7

Based on the table above, it can be seen that the level of welfare at the Pre-Prosperous Family (KPS) stage is dominated by rubber tappers with basic education levels (not completed elementary school-middle school), namely 50%. Furthermore, at the KS I and KS II welfare levels, it is dominated by rubber tappers with the last formal education at secondary education level (graduated from high school), namely 55% at KS I and 10% at KS II, then at the KS III and KS III+ welfare levels it is actually dominated by basic education level (not completed elementary school-junior high school) which is 8.35% for KS III and 8.35% for KS III+.

3. Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Based on Employment Status

This research was conducted to analyze the level of welfare of rubber tappers at the Sungei Putih Research Unit based on employment status. Researchers divide 3 categories of employment status based on Employment Law no. 13 of 2013 concerning labor classification, namely Permanent Daily Employees (KHT), Permanent Employees or Employees with an Indefinite Work Agreement (PKWTT), and Contractor Workers (TP). The distribution of employment status of rubber tappers in the Sungei Putih Research Unit is as follows:

Table 7. Status Distribution of Rubber Tapper Employees in the Sungei Putih Research Unit, Galang District, Deli Serdang Regency in 2023

No	Status Karyawan	Jumlah (Penyadap)	Persentase (%)
1	KHT	2	6,20
2	PKWTT	15	46,90
3	TP	15	46,90
	Jumlah	32	100

Source: Appendix 2

Based on the table above, it can be seen that there are 2 rubber tappers with Permanent Daily Employee (KHT) status or often referred to as permanent employees with a percentage of 6.20% of the total sample, and there are 15 rubber tappers with Employee status with a

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Time Work Agreement. Not Certain (PKWTT) or often referred to as non-class permanent employees with a percentage of 46.90%, and there are 15 rubber tappers with Contractor Worker (TP) status with a percentage of 46.90% of the total sample. The level of welfare of rubber tappers at the Sungei Putih Research Unit based on employment status is as follows: Table 8. Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Seen from Employment Status in 2023

Status Karyawan	Tingkat Kesejahteraan Keluarga										Jumlah	
	Pra Sejahtera		KS I		KS II		KS III		KS III+			
	F	%	F	%	F	%	F	%	F	%	F	%
KHT	0	0	1	50	0	0	1	50	0	0	2	100
PKWTT	4	26,70	9	60	2	13,30	0	0	0	0	15	100
TP	8	53,33	5	33,33	0	0	1	6,67	1	6,67	15	100

Source: Appendix 7

Based on the table above, it can be seen that the level of welfare at the Pre-Prosperous Family (KPS) stage is dominated by rubber tappers with employee status as Contractor Workers (TP) with a percentage of 53.33%, then the welfare level at the Prosperous Family I (KS I) stage dominated by rubber tappers with employee status as PKWTT with a percentage of 60%, then at the welfare level of the Prosperous Family II (KS II) stage it is also dominated by rubber tappers with employee status as PKWTT with a percentage of 12.30%, and in the Family welfare category Sejahtera III (KS III) is dominated by rubber tappers with employee status as KHT with a percentage of 50%, and in the Welfare Family Welfare category III Plus (KS III+) it is dominated by rubber tappers with employee status as Contractor (TP) with a percentage of 6.67%.

Welfare Level of Rubber Tappers in the Sungei Putih Research Unit

The research results show that the level of welfare of rubber tappers in the Sungei Putih Research Unit is still in the low category, this is because there are still 37.50% of rubber tappers who are still unable to achieve prosperity in their lives (pre-prosperous). The level of welfare of rubber tappers in the Sungei Putih Research Unit cannot be said to be good

because the majority of rubber tappers are still at stage 1 (KS I) welfare level, which is the first level of welfare, namely 46.87% of rubber tappers. of the total sample. Then there are 6.25% of rubber tappers who are in the welfare category stage 2 (KS II), and 6.25% of rubber tappers who are in the welfare category stage 3 (KS III), as well as 3.13% of rubber tappers who are in welfare category stage 3 plus (KS III+).

Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Based on Latest Educational Level

From the results of categorizing the level of welfare based on the latest level of education in table 6, it can be seen that there is no significant difference between the formal education that has been successfully completed and the level of welfare of the rubber tapper himself. Based on the data that has been processed, it shows that the Pre-Prosperous Families (KPS) category is dominated by rubber tappers with a basic education background (not completed elementary school-junior high school) with a percentage of 50%. Then in the KS I and KS II categories, it is dominated by rubber tappers who have secondary education (High school graduates) with a percentage of 55% in KS I and 10% in KS II, however in the Prosperous Family III (KS III) and Prosperous Family categories 3 Plus (KS III+) is actually dominated by rubber tappers with a basic education background (not completing elementary school-junior high school) with a percentage for each level of 8.35%. This shows that the higher the formal education that a rubber tapper successfully attains, the better the rubber tapper's welfare will be. The conclusion is that the higher the level of education completed, the more theoretically it can improve the welfare of life, but it cannot improve the welfare of rubber tappers at the Sungei Putih Research Unit.

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Welfare Level of Rubber Tappers in the Sungei Putih Research Unit Based on Employment Status

From the results of categorizing welfare levels based on employment status in table 8, it can be seen that there is a significant difference between employment status and the welfare level of rubber tappers in the Sungei Putih Research Unit. Where the welfare level category of Pre-Prosperous Families (KPS) is dominated by rubber tappers with the status of Contractor Workers (TP), which is the lowest status compared to other statuses, namely 53.33%. Then in the KS I category it is dominated by rubber tappers with PKWTT status, namely 60%, then in the KS II category it is also dominated by rubber tappers with PKWTT status, namely 13.30%, and in the Prosperous Family 3 (KS III) category it is dominated by Rubber tappers with KHT status are 50%, and in the KS III+ category there is one rubber tapper with the status of a contractor (TP) and is the only rubber tapper who has succeeded in meeting all the welfare indicators of the BKKBN. This shows that a person's high employment status will have an impact on their level of welfare, this is because employment status will affect incentives and income while working, be it salary, allowances, and so on. The conclusion is that the higher the employment status of the rubber tappers in the Sungei Putih Research Unit, the higher the level of welfare.

CONCLUSION

Based on the results of research and data processing, it has been concluded that the welfare level of rubber tappers in the Sungei Putih Research Unit is in the low category, this is because the data shows that there are still some rubber tappers who are in the Pre-Prosperous Family (KPS) category. Meanwhile, rubber tappers in the Sungei Putih Research Unit dominate the KS I welfare category, which is the first level of welfare. The level of welfare of the rubber tapper seen based on the latest education attained does not make a very significant difference to the level of welfare of the rubber tapper himself, the higher the level of education achieved, the more the rubber tapper can improve his welfare. The level of welfare of rubber tappers seen based on employment status makes a difference to the level of welfare of rubber tappers in the Sungei Putih Research Unit. The higher the employment status of rubber tappers in the Sungei Putih Research Unit, the more incentives they will receive, which will have an impact on increasing their welfare.

SUGGESTIONS

Based on the results of this research, the author can provide advice, namely that rubber tappers are expected to be able to be more effective and efficient in using their time, so that they are able to obtain side income which will encourage lifelong prosperity from an economic perspective and be able to interact with the surrounding environment as an effort to improve life's welfare in terms of social, so that true prosperity in life will be obtained, namely economically and also socially.

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