



The Impact of Social Forestry Utilization Permit (IPHPS) Towards the Community Income

Annis Nurfitriana Nihayah^{1✉}, Nurjannah Rahayu Kistanti², Phany Ineke Putri³,
Ayuntavia⁴

Development Economic Study Program, Economics Faculty, Universitas Negeri Semarang

Permalink/DOI: <https://doi.org/10.15294/efficient.v6i1.65706>

Received: June 2022; Accepted: September 2022; Published: December 2022

Abstract

This study aims to determine and analyze the impact of the implementation of the Social Forestry Utilization Permit (IPHPS) on income. The research took location in Perhutani KPH Telawa, Central Java. This study was a descriptive qualitative and quantitative research. The types of data used were primary and secondary data. The method used first was to conduct interviews with respondents. After that, the authors applied statistical descriptive analysis and Multiple Linear Regression. The results point out that the IPHPS has increased the production and income of the Forest Farmer Group. Multiple linear regression analysis proves that the length of the IPHPS received, land area, number of workers, type of partnership, and input costs have a positive effect on income. The types of partnerships that have been executed are in the form of counseling, training, buying products, providing capital assistance and mentoring. Obstacles faced by Forest Farmer Group receiving the Social Forestry Utilization Permit (IPHPS) are limited access to raw materials, access to capital, market access, and traditional equipment.

Keywords: Social Forestry, IPHPS, Community Income, Partnership, Perhutani

How to Cite: Nihayah, A., Kistanti, N., Putri, P., & Ayuntavia, A. (2023). The Impact of Social Forestry Utilization Permit (IPHPS) Towards the Community Income. *Efficient: Indonesian Journal of Development Economics*, 6(1), 33-45. <https://doi.org/10.15294/efficient.v6i1.65706>

© 2023 Semarang State University. All rights reserved

✉ Correspondence Address :

Address: Gedung L2 Lantai 2 FE Unnes
Kampus Sekaran, Gunungpati, Semarang, 50229
E-mail : annisnurfitriana@mail.unnes.ac.id

INTRODUCTION

Indonesia is one of the countries in the world that has tropical forests with very high biodiversity, which plays an important role in protecting global ecosystems. In this case, the

Government of Indonesia implementing forest management is not only oriented to the economic value only wood, but also the entire forest ecosystem with various functions. The aim of forest management is to provide optimal

benefits, both environmental, social, and economic for the life and welfare of the Indonesian people and play an active role in reducing the impact of climate change as a form of global responsibility (Dayneko et al., 2021). Forestry sector policies are important from a development perspective national level, due to their enormous use in development sectors' good relations forward and backward nationally. Therefore, the forestry sector is one of the important sectors including attention to forestry programs social.

Ministry of Environment and Forestry in accordance with the mandate that has been stipulated in Law Number 41 of 1999 concerning Forestry and Law Number 32 of 2009 concerning Environmental Protection and Management, that the implementation of forestry aims for the greatest prosperity of the people (benefits that optimal) that is just and sustainable (sustainable). The social forestry program is a national policy that is one of the main programs for the Government in specific sector policies, and the government targets the SDGs in general (KLHK, 2022).

The Minister of Environment and Forestry issued Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 83 of 2016 concerning Social Forestry and Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 39 of 2017 concerning Social Forestry in Perhutani Working Area with the aim of providing legal certainty to the implementation of social forestry programs.

These regulations are made to reduce the inequality of control, ownership, use, and utilization of land resulting in inequality in the economic structure of society (Perhutani, 2021). Social forestry is a form of sustainable forest

management where the implementation is in state forests or customary forest rights/forests implemented by local communities or indigenous legal communities as the main actors to improve their welfare, environmental balance, and socio-cultural dynamics in the form of village forests, community forests, people's crop forests, people's forests, indigenous forests, and forestry partnerships.

In addition, social forestry is also the embodiment of the seventh Nawacita President, namely realizing economic independence by driving the strategic sectors of the domestic economy (Marroli, 2019). The purpose of social forestry is to achieve the equalization of the economic sector in society and to reduce inequality in the economic sector, which is pursued through three pillars, namely land, business opportunities, and human resources. With the social forestry program, village communities around the forest are given legal access to access forests in the country's forest areas through a licensing issuance mechanism issued by the minister in the form of a decree.

The decree is the basis of the community around the forest area to be able to own land with the right to use and can not sell it. Social forestry is expected to be able to utilize sleeping areas to be cultivated productively by strengthening the production of food-based sectors, namely fisheries, agriculture, and livestock, opening access to wider employment opportunities and expected to contribute to improving national economic performance (Dayneko, Dayneko and Dayneko, 2021)

The implementation of social forestry in Java, as an implication of Government Regulation No. 72 of 2010, State Gazette of the Republic of Indonesia of 2010 No. 124 concerning Public Forestry Company delegated its authority

to Forestry Company. Social Forestry Program in Forestry Company is dynamic to develop according to the conditions of the times. In 2017, Regulation of the Minister of Environment and Forestry Number 39 the year 2017 concerning Social Forestry in Forestry Company Working Areas was issued (Pemerintah Republik Indonesia, 2021).

This Ministerial Regulation is a follow-up to the agrarian reform program in the forestry sector. This ministerial regulation regulates the granting of forest utilization permits for the development of Social Forestry in areas managed by Forestry Companies. The community can apply for the utilization of the Forestry Company area to develop Social Forestry. When compared to the previous Social Forestry program in Forestry Company, then this program is slightly different because the initiator of the program is not Forestry Company.

This initiator change is thought to affect the institutional social forestry in the field, one of which is the reduced dominance of Forestry Company in forest management. Various Social Forestry programs, both initiated by Forestry Company and other institutions, are actually rooted in the same goal, which is to reduce the dominance of the country. The dominance of the state is too strong to hinder participation and independence in the state.

State dominance also occurred in the mining and forestry sectors. Social forestry, such as SFUP, is one way to reduce the dominance of the state in forest management while encouraging community empowerment efforts in forest management. Community empowerment began by granting Forest Utilization Permits for Social Forestry for 35 years. The granting of this permit is a guarantee of the legality of forest management rights by

the community. It is expected that with this guarantee of management rights the community will have awareness, and ability in recognizing, addressing, maintaining, protecting, and improving their welfare through forest management.

Forest management aims to benefit from the existence of forests. The optimal value of benefits can be obtained through good management. Good management includes planning, organizing, leadership, and control. These stages of good management must be supported by an independent, strong and effective organizational structure. Forest Farmer Group as part of the forest management organization has been highly dependent on forest stakeholders (Forestry Company) so that the independence, strength, and effectiveness of the organization are hampered.

Table 1. The Forest Area of Perum Perhutani

No	Forest Function	Area (Ha)	Percent (%)
1.	Production Forest	1.418.833,0	58,2%
2.	Limited Production Forest	380.931,2	15,6%
4.	Protection Forest	637.323,5	26,2%
Total Area (Ha)		2.437.087,7	100%

Source: Annual Report Perum Perhutani, 2021

The presence of IPHPS is expected to be able to change the structure of forest management and increase the independence of forest farmer group so that the goal of improving the welfare of forest farmers and forest sustainability can be achieved (Raharjo, Hastanti and Haryanti, 2020). Based on the 2021 Potential Evaluation (Evapot), the forest area of Perum Perhutani is 2.437.087,7 ha spread across Banten, West Java, Central Java, and East Java which can

be seen on table 1. Community participation in forest management activities through the Social Forestry program is expected to improve the standard of living of the people living around the forest.

Driving factors that influence community participation namely understanding, opportunity and attitude (Witno et al, 2020). The Social Forestry Group is a forum for forest village communities involved in the management and utilization of forest areas in the Social Forestry program. In accordance with the goal of Social Forestry in improving the standard of living of forest village communities, Perhutani encourages each Social Forestry Groups to form a business group, in the Forest Village Community Institution (LMDH) in total of 5.307 groups.

Table 2. The Forest Village Community Institution (LMDH)

No.	Division	LMDH
1.	Central Java Regional Division	1.934
2.	East Java Regional Division	1.834
3.	West Java and Banten Regional Division	1.539
Total LMDH		5.307

Source: Annual Report Perum Perhutani, 2021

The potential area for granting Forestry Company IPHPS in Central Java is 64,532 Ha. Realization of IPHPS Decree (DECREE) that has been received by Forestry Company Central Java Regional Division until 2020 as much as 23 The decree covers an area of 8,800 ha with a total of 9,687 cultivators. KPH Telawa serve as an IPHPS pilot area in Central Java. According to Ria (2021), farmers Forest or KTH Wono Lestari 2 which is in Wonoharjo Village, Kecamatan Kemusu, Boyolali Regency which is included in

the limited production forest area in the working area of Forestry Company RPH Rejo Sari BKPH Karang Winong KPH Telawa is one of the successful KTH in the Forestry program Social with 5 SFBG (Social Forestry Business Group).

Farmers at KTH Wono Lestari 2 has a permit with the IPHPS scheme which has been down since 2017 with 345 family members. The area of this KTH is 400 hectares with a land area of an effective amount of 334 Ha (64 Ha in the form of roads, irrigation, rivers, etc.)(E, 2021). KPH Telawa provide reinforcement that social forestry programs are very urgent to be implemented properly because it can be a good solution needed by the village community around the forest to prosper their life.

Before the birth of the social forestry program, there were several issues such as forest destruction and forest looting which were very massive processes and had been structured by the community. This is due to the closed access of villagers around the forest to the forest, whereas the life of the villagers around the forest depends heavily on the forest land.

Based on the above explanation, it can be concluded that the utilization of forest areas managed by Forestry Company and local communities in social forestry programs is very important to reduce poverty, disruption, and inequality of management or utilization of forest areas, as well as to prosper rural communities around the forest and to reduce territorial conflicts that have tended to occur in forest management practices (Piabuo et al.,2022).

This study aims to find out and analyze the impact of Social Forestry Forest Utilization Permit (IPHPS) Towards Community Income in the Forestry Company Area and to find out the variables of the influence of the length of time

the IPHPS DECREE was received, land area, number of workers, type of partnership and input costs to Revenue Communities in the Forestry Company.

RESEARCH METHODS

The unit of analysis in this study is the individual. This type of research is qualitative descriptive research. While the design of this research is quantitative research. In preparing the research the types of data used by researchers are primary data and secondary data. Identification of the economic impact of IPHPS was carried out in the perhutani area in Central Java. The location of this research was chosen because KPH Telawa was used as an SFUP

pilot area in Central Java. Forest Farmer Group or KTH Wono Lestari 2 located in Wonoharjo Village, Kemusu Subdistrict, Boyolali Regency which is included in the limited production forest area in the working area of Forestry Company RPH Rejo Sari BKPH Karang Winong KPH Telawa is one of the successful KTH in the Social Forestry program with 5 KUPS (Social Forestry Business Group).

The data used in the research includes primary data and secondary data. Primary data obtained from field surveys and interviews of farmers respondents who obtained an IPHPS permit. In this study secondary data was obtained from various secondary sources (related institutions) and other data sources from internet network access (journal articles, reports that support this research).

Cluster sampling is used when elements of the population are geographically dispersed so it is difficult to arrange a sampling Cluster sampling is also known as area sampling. Cluster sampling is used when elements of the population are geographically dispersed so it is

difficult to arrange a sampling frame. Advantages of use this technique is to make the sampling process cheaper and faster than if used random sampling technique. The technique of determining respondents using purposive sampling (a purposeful sample).

The analysis unit in this study is a member of the Forest Farmer Group (KTH). Sampling techniques are done by purposive sampling method. The technique of determining respondents using purposive sampling (sample aims). This technique is a deliberate sampling in accordance with the requirements of the sample required for example related to properties, characteristics, criteria, and so on. Respondents in the study were members of the Forest Farmer Group (KTH) holders of IPHPS.

The number of respondents for each KTH is 30 people. To sharpen the analysis, researchers also conduct interviews with other informants. The analysis in this study was conducted with a descriptive approach. Descriptive analysis provides a consistent picture of patterns in the data, so that the results can be studied and interpreted briefly and meaningfully. In descriptive analysis, interachievement of data and relationships in the study was conducted. In addition, comparative results are also done between the results of the study and the results of related research and conducted correlation between the results of the study with the relevant theory or concept.

Furthermore, descriptive analysis can also be done with relatively simple statistical techniques, such as using tables, graphs, and central tendency sizes i.e., average values, middle values, and models. By referring to the definition of descriptive analysis, even though the analysis method used in this research is relatively simple, but can provide adequate

information in accordance with the purpose of research.

The data analysis method used in this study is multiple linear regression methods. Linear regression analysis between two or more independent variables with dependent variables. This analysis is to determine the direction of the relationship between independent variables and dependent variables whether each independent variable is positive or negative and to predict the value of dependent variables if the value of an independent variable increases or decreases. The data used for regression is interval-scaled or ratio data.

In the analysis of multiple regressions, the results of the model estimates were conducted several econometrics assessments that include test the violation of classical assumptions, which consists of Multicollinearity test, Heterodecreedastisity test, and autocorrelation test, goodness of fit and statistical test, in this case goodness of fit is seen from the coefficient of determination (value R^2 or adjusted- R^2) while statistical test consists of F test and t test. The models used in multiple linear regressions are:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + e$$

Where Y is the Community Income (Responde), X_1 is Old DECREE SFUP received, X_2 is the Land Area according to DECREE SFUP, X_3 is the Number of Workers, X_4 is the Types of Partnerships, X_5 is the Input Cost, β is the Regression Coefficient, e is the Error.

RESULTS AND DISCUSSION

The presence of IPHPS is expected to be able to change the structure of forest management and increase the independence of KTH so that the goal of improving the welfare of forest farmers and forest sustainability can be

achieved. The area of potential provision of IPHPS in Perhutani working area of 537,668 ha spread in Banten, West Java, Central Java, and East Java. Forestry Company KPH Telawa is a one of the management units in the Disvisi region Central Java Region.

KPH Telawa is at an altitude of 17 to 379.3 meters above sea level with geological conditions consisting of limestone, other rocks, and volcanic. Area telawa KPH work of 18,735.48 ha, consisting of production forest covering an area of 17,485.78 ha and Limited Production Forest covering an area of 1,249.70 ha.

The administrative area of KPH Telawa includes Boyolali Regency with an area of 12,479.62 ha, Grobogan Regency 5,549.40 ha, and Sragen Regency 706.46 ha (Forestry Company, 2019). The potential area of IPHPS Forestry Company in Central Java is 64,532 ha. Realization of SFUP Decree that has been received by Forestry Company Central Java Regional Division until 2020 as many as 23 decrees covering an area of 8,800 ha with a total of 9,687 people.

KPH Telawa is used as an IPHPS pilot area in Central Java. Forest Farmer Group (KTH) Wono Lestari 2 located in Wonoharjo Village, Kemusu Subdistrict, Boyolali Regency which is included in the limited production forest area in the working area of Forestry Company RPH Rejo Sari BKPH Karang Winong KPH Telawa is one of the successful KTH in the Social Forestry program with 5 KUPS (Social Forestry Business Group).

As the implementation of agrarian reform with social forestry scheme on the island of Java, the president in October and November 2017 handed over decree IPHPS to 4 forest farming groups (KTH) namely KTH Wono Makmur I, KTH Wono Makmur II, KTH Wono Lestari I and

KTH Wono Lestari II in the working area of KTH Telawa, boyolali district to realize economic equality through community-managed access to forests. The area of IPHPS KTH Wono Makmur I and II objects in decree IPHPS covers an area of 433 ha, while the area of IPHPS objects KTH Wono Lestari I and II covers 295 ha, the area of each group can be seen in Table 3.

Table 3. Decree IPHPS at KPH Telawa

Farmer Group	Village	DECREE SFUP	Area (ha)
Wono Lestari I	Wonoharjo	DECREE.5841/MENLHKPDECREEL/PSL.o//11/2017 Date.October 31 th , 2017	33,0
Wono Lestari II	Wonoharjo	DECREE.5917/MENLHKPDECREEL/PSL.o/11/2017 Date.November 2 nd , 2017	400,0
Wono Makmur I	Gondanglegi	DECREE.5842/MENLHKPDECREEL/PSL.o/11/2017 Date.October 31 th , 2017	55,0
Wono Makmur II	Gondanglegi	DECREE.5918/MENLHKPDECREEL/PSL.o/11/2017 Date.November 2 nd , 2017	240,0
Total			728,0

Source : Annual Report Perum Perhutani, 2021

The granting of decree IPHPS to KTH, means to provide certainty of forest management rights for KTH, especially in the right to manage the land area that they have been working on. The certainty of this management right economically provides added value for their assets, especially land assets and plantation tree trunk assets. The certainty of ownership of these assets is expected to increase the spirit of production without worrying that what KTH is doing is unlawful.

Over time, it is known that many people who process land within the SFUP area but has not been registered as a recipient of decree IPHPS. Therefore, an addendum or change of IPHPS is required. In May 2018, proposed changes to the IPHPS Decree that accommodates the community of tenants who have not IPHPS. The addition of members was not served. In KTH Wono lestari which originally numbered 59 people, then increased to 404 people, and last 571 people. In KTH Wono

Makmur which was originally 73 people, it increased to 233 people, and then became 567 people. The addendum process continues processed at the Ministry of Environment and Forestry to date.

The number of KTH members in one IPHPS is large enough that it is divided into small groups led by the chairman of a small group. Various information and decisions related to IPHPS are delivered to members through the chairman of a small group. In addition to small groups there are also social forestry business groups, this group is more specialized in running productive economic businesses such as making tortila chips by mothers in KTH Wono Lestari. Just like the PHBM program, IPHPS also conducts productive economic efforts that are not land-based.

IPHPS program implemented to the community in the Forestry Company KTH Telawa is an effort to improve the welfare of the community forest to be able to provide goods

public goods related to investments in environment, including the availability of clean water, biodiversity conservation, and carbon reduction. One of the important expectations of the program Social Forestry is improving the standard of living of the villagers around the forest. The economic impact is seen from three things, namely income, employment, and business partnerships.

Table 4. Regression results of factors that affect KTH income at KPH Telawa

Model	Coefficient	Std. Error
(Constant)	3,420	1,462E7
How Long For SFUP To Be Received	-4,325	-1,352E6
Land Area	3,827	2,341E6
Partnership Type	4,428	2,102E6
Input Cost	2,865	1,251E6
Adjusted R ² = 0,68	2, 352	1,013E6
F-Statistic = 62, 74		

Source : Data Processed eviews, 2022

On other aspects of economic impact i.e., employment, already seen the addition of new jobs, namely forest farmers have more land areas and legal and lawfully manageable. With oil production cooperation eucalyptus with Forestry Company in optimization of eucalyptus stand assets belonging to Forestry Company, there is a type of work new for farmers, namely wood leaf pickers white, white leaf carrier, up to eucalyptus leaf distiller in oil mill eucalyptus.

A total of 75 percent of respondents stated that their crop production after they received SFUP decree. The increase in farmer's production will have an impact on the income received. Of course, this depends on fluctuations in the price of commodities produced and sold

to the market. Of the 4 Forest Farmer Group (KTH) recipients of IPHPS decree in KPH Telawa, commodities produced are almost the same among others the cultivation of corn crops, soybeans, oyster mushrooms, and producing eucalyptus oil.

This is accordance with Ragandhi *et al.* (2021) that states the Ministerial Regulation provides opportunities for local communities to obtain a greater share of the profit from forest utilization. Under the provisions for profit-sharing in PHBM as stipulated in the SFC director's decree No: 436/KPTS/DIR/2011, the maximum profit share of the harvested staple crops for the local community is 25%, which is further reduced by certain correction factors that are burdensome for local communities (Djamhuri, 2012).

Besides, the determination of profit-sharing is often carried out unilaterally and does not appear to be transparent (FUJIWARA *et al.*, 2012). The implementation of IPHPS is expected to address these problems by increasing the role, bargaining position, and profit-sharing percentage for the local community in order to improve local community welfare. IPHPS wonolestari farmer group, has produced the main commodities of teak tree crops, eucalyptus oil, bamboo and mixed crops of corn and bananas and papaya, through agroforestry patterns.

IPHPS wono lestari farmer group, run the main commodity namely eucalyptus oil production, with the harvest of eucalyptus leaves as much as 98 tons with an area of 60 ha with a production of 596 liters, which is able to produce an economic value of 157 million per 7-9 months. KLH also helps with productive economic tools, business capital, and facilitates the marketing of products to these business

groups. In studies conducted in the field, implementation of IPHPS programs in the region KPH Telawa has not shown any improvement in significant public income but has brought up additional sources' new income for the community.

Addition income earned specifically for the Group Tani Wono Lestari and Wono Lestari II in the form of distribution of oil production eucalyptus done with Perhutani as a form of business partnership between FFG and Forestry Company in cooperation in the picking of eucalyptus leaves and production of eucalyptus oil. Cooperation set forth in the employment agreement on September 11, 2019. To find out the factors that effect KTH income in KPH Telawa is done with multiple regression analysis. With dependent variables namely KTH income, while independent variables i.e., old IPHPS received, land area, number of labors, type of partnership and input costs.

Adjusted value R^2 of 0.68 this indicates the variation of changes in all independent variables in the model i.e., the length of decree IPHPS received, land area, number of labors, type of partnership and input costs are able to explain the change in total revenue variation by 68 percent and the remaining 32 percent described by other variables that are not included in the model.

Furthermore, the statistical F value is 62.74 and significant at $\alpha=1$ percent. The F statistically significant figures show that all independent variables i.e., the length of decree IPHPS received, land area, number of labors, type of partnership and input costs together in the model significantly affect respondents' income at a confidence level of 99 percent. In the model is considered no violation of the classic assumptions that include multicollinearity,

heteroscedasticity, and autocorrelation. The old variable decree IPHPS received negative and significant effect on the total income of respondents/KTH.

This shows that the shorter the IPHPS is received, the higher the total income of respondents. In other words, the faster the granting of IPHPS to forest farming groups, the potential for increased income will be greater because KTH already has the legality to manage the land to become its livelihood. Land area variable positively and significantly affects the total income of respondents/KTH.

This shows that the wider the land received by forest farming groups (KTH) the more crop cultivation that can be managed by KTH and increased production will encourage increased income, *ceteris paribus*. This result is consistent with Chu et al. (2019), which stated that farmers with larger forestry land area have more chance to increase their household income.

Land productivity is also closely related to farmer capacity and access to resources, as well as access to markets (Borrella, Mataix and Carrasco-Gallego, 2015). In the other study by Desmiwati et al. (2021) states that there are two agroforestry factors that influence farmer income, namely age and land area. Age has a negative influence direction, which means that as age increases, farmer income will decrease, due to the contribution of agroforestry income also decreasing as farmers get older and the limited area of land that can be managed.

Agroforestry activities require farmers who are in the productive age (18–50 years) due to intensive workload (Suhardi, Amanah and Muljono, 2015). However, in the research conducted by (Kuncoro and Cahyani, 2018) states that This means economic variables (land

area. transport costs. input costs). social variables (assistance. knowledge on community forests. and constraints on community forest management), and environmental variables (fire, core crops, participation in planning. and participation in money) has not significantly affected the revenue of respondents. This possibility is caused by the relatively short period of implementation of social forestry (3-4 years).

Variable number of labor has a positive and significant effect on the total income of respondents/KTH. With the increasing number of workers involved in activities on IPHPS land, there will be an increase in productivity it will also increase the revenue received, *ceteris paribus*. This result is accordance with the research conducted by Ning et al. (2022) which states that labor input plays a mediating role in both the labor migration effect and the labor remittance effect on forest management income.

From the perspective of labor migration, role in the effect of remittance effect on forest management income, with the mediation effect being 29.3%, and it also played a mediating role in the effect of labor migration effect on forest income, with the mediation effect being 15.3%. Moreover, the main reason why agricultural mechanization cannot completely replace the labor is that the production capacity of the existing forest production equipment is far less from the ideal level of people, and the government and scientific institutes should strengthen the research and development of forest production equipment.

Furthermore, this type of partnership has a positive and significant effect on the total income of respondents/KTH. This result is accordance with a research conducted by

Kuncoro and Cahyani (2018) where they proves that the number of workers, log stealing, core crops cultivated, and partnership have a positive effect on revenues. The types of partnerships that have been done in the form of counselling, training, buying products, providing capital assistance, and mentoring. Both partnership and number of workers influence revenues positively.

The higher the farmers involve in partnership the higher the probability of the respondent's revenues to increase. The higher the farmers employ workers the higher the probability of the respondent's revenues to increase. This can be interpreted as more and more types of partnerships that can be done then various facilities such as mentoring, mentoring, and other assistance will be obtained by forest farming groups. With the various facilities of the partnership, the business activities of KTH will be better, and in turn the revenue will also increase, *ceteris paribus*.

Actors or business units usually need support from partners who will help in the production process, help harvest and post-harvest, help capital and marketing and provide various information in farming. A wide variety of partnerships is to buy farmers' production, provide capital assistance, providing training, provide assistance, and provide extension.

Variable input costs have a positive and significant effect on the total revenue of respondents/KTH. With the increasing cost of inputs used in the production process will be considered as the cost or cost of production that will determine the selling price of the product produced, and it will affect the increase in income. Problems experienced by respondents are combination of limited access to raw

materials, access to capital, market access, and still traditional equipment.

CONCLUSION

The IPHPS program run by the Ministry of Environment and Forestry is focused on the communities around the forest. In KPH Telawa there are 4 groups of forest farmers (KTH) who have received the decree PHPS. Economic impact can be seen from the aspect of income received by the community after the IPHPS program. The community or respondents in this study have received a positive impact with the IPHPS.

This can be seen by the increase in production and revenue after receiving decree IPHPS. The Social Forestry Program is believed to be one of the important instruments that will be able to improve farmers' welfare, reduce the unemployment rate, and lower the poverty level. Forestry policy is closely related economic, social, and ecological aspects. This is a fundamental aspect of meet the needs of the community from the results of forest resources and community involvement in forest management.

Multiple linear regression analysis proves that land area, number of workers, type of partnership, and input costs have a positive effect on income. And the length of the IPHPS received have a negative effect on income. The types of partnerships that have been executed are in the form of counseling, training, buying products, providing capital assistance, and mentoring. Obstacles faced by KTH receiving the IPHPS are limited access to raw materials, access to capital, market access, and traditional equipment.

IPHPS implementation process in the forest area of Perum Perhutani KPH Telawa was

implemented starting in 2017 so it still needs improvement and adjustment to social conditions Public. Duties and roles of each IPHPS implementing elements are not optimal, among others.

First, establishment of IPHPS Working Group Central Java Province level is late so that its roles and functions have not been running optimally. Second, still lack of quantity companion, companion training still less so there are still many farmer groups who do not understand their rights and obligations, the role of Perhutani needs to be increased. And the last, commitment building, communication, coordination, integrity, and infrastructure is important to implement as a foundation in the implementation of IPHPS.

REFERENCES

- Asmin, F. (2021). Social Forestry and Natural Resource Management In West Social Forestry And Natural Resource Management In West Sumatra. doi:10.13140/RG.2.2.12077.00487.
- Borrella, I., Mataix, C. and Carrasco-Gallego, R. (2015). Smallholder Farmers in the Speciality Coffee Industry: Opportunities, Constraints and the Businesses that are Making it Possible. *IDS Bulletin*, 46(3), pp. 29–44. doi:10.1111/1759-5436.12142.
- Chu, T. Van *et al.* (2019). Contribution of forest to rural households' livelihood: Evidences from da river basin in the northwest mountainous region of Vietnam. *Forest and Society*, 3(2), pp. 235–247. doi:10.24259/fs.v3i2.7050.
- Dayneko, D., Dayneko, A. and Dayneko, V. (2021). Problems and Prospects of the Forest Industry Development in Russia: A case study of Baikal region. *E3S Web of Conferences*, 247, pp. 1–7. doi:10.1051/e3sconf/202124701033.
- Desmiwati, D. *et al.* (2021). Contribution Of Agroforestry Systems To Farmer Income In State Forest Areas: A Case Study Of Parungpanjang, Indonesia. *Forest and Society*, 5(1), pp. 109–119. doi:10.24259/fs.v5i1.11223.
- Djamhuri, T.L. (2012). The effect of incentive structure to community participation in a social forestry program on state forest land in Blora District,

- Indonesia. *Forest Policy and Economics*, 25, pp. 10–18. doi:10.1016/j.forpol.2012.02.004.
- E, R. (2021). [*Perhutanan Sosial Tingkatkan Geliat Ekonomi Masyarakat Boyolali*]. *bappeda.jatengprov.go.id*. Available at: <https://bappeda.jatengprov.go.id/perhutanan-sosial-tingkatkan-geliat-ekonomi-masyarakat-boyolali/> (Accessed: 9 February 2023).
- Forestry Company. (2019). [*Profil KPH Telawa Perum Perhutani KPH Telawa Divisi Regional Jawa Tengah*, *perhutani.co.id*]. Available at: <https://www.perhutani.co.id/tentang-kami/struktur-organisasi/divisi-regional/jateng/kph-telawa/> (Accessed: 28 November 2022).
- Fujiwara, T. *et al.* (2012). Changes in local social economy and forest management through the introduction of collaborative forest management (PHBM), and the challenges it poses on equitable partnership: A case study of KPH Pemalang, Central Java, Indonesia. *Tropics*, 20(4), pp. 115–134. doi:10.3759/tropics.20.115.
- Kuncoro, M. and Cahyani, D. (2018). Performance of social forestry on farmers' revenues: lessons from Yogyakarta and Lampung, Indonesia. *The Business & Management Review*, 9(4), pp. 275–289.
- H. B., G. (2022). Sustainable Social Forestry in Riau Province. *Proceedings of the 2nd Riau Annual Meeting on Law and Social Sciences (RAMLAS 2021)*. 659 (Ramlas 2021), pp. 84–89. doi:10.2991/assehr.k.220406.020.
- Kementrian-Kehutanan. (2011). [*Pembangunan Kesatuan Pengelolaan Hutan (KPH)*]. p. 138.
- Liani, M.F., Roslinda, E. and Muin, S. (2015). [*Partisipasi Masyarakat Dalam Pengelolaan Hutan Adat Di Dusun Sungai Utik Desa Batu Lintang Kecamatan Embaloh Hulu Kabupaten Kapuas Hulu*]. *Jurnal Hutan Lestari*, 4(3), pp. 273–281.
- Mahardika, A. *et al.* (2021). [*Analisis Legalitas Perhutanan Sosial Dalam Meningkatkan Kesejahteraan Masyarakat Di Kabupaten Asahan*]. *Jurnal Administrasi Publik dan Kebijakan (JAPK)*, 1(1), pp. 1–9. doi:10.30596/japk.viii.6484.
- Marliyana, T. (2020). [*Pengorganisasian Kelompok Tani Dalam Memperjuangkan Perhutanan Sosial (Studi Kasus Pengorganisasian Stam Di Desa Mentasan, Kecamatan Kawunganten, Kabupaten Cilacap)*]. *Jurnal Analisa Sosiologi*, 9, pp. 376–395. doi:10.20961/jas.v9i0.41369.
- Miller, D.C. *et al.* (2021). Forests, trees and poverty alleviation: Policy implications of current knowledge', *Forest Policy and Economics*, 131. doi:10.1016/j.forpol.2021.102566.
- Mutaqin, D.J., Wahyuni, I. and Rahayu, N.H. (2022). [*Analisis Kegiatan Perhutanan Sosial dalam Peningkatan Kualitas Lingkungan dan Peningkatan Ekonomi Masyarakat Pasca Pandemi Covid-19*. *Bappenas Working Papers*, 5(2), pp. 159–175. doi:10.47266/bwp.v5i2.135.
- Ning, C. *et al.* (2022). Impact and mechanism of rural labor migration on forest management income: Evidence from the Jiangxi Province, China. *Frontiers in Environmental Science*, 10(September), pp. 1–17. doi:10.3389/fenvs.2022.902153.
- Pemerintah Republik Indonesia (2021). [*Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia Nomor 9 Tahun 2021 Tentang Pengelolaan Perhutanan Sosial*. *Angewandte Chemie International Edition*, 6(11), 951–952., pp. 1–268.
- Perum Perhutani. (2021). *Annual Report Perum Perhutani*, *perhutani.co.id*. Available at: <https://www.perhutani.co.id/en/laporan/laporan-tahunan-2021/> (Accessed: 25 January 2023).
- Suherdi, S., Amanah, S., & Muljono, P. (2015). [*Motivasi Petani dalam Pengelolaan Usaha Hutan Rakyat Desa Cingambul, Kecamatan Cingambul, Majalengka*]. *Jurnal Penyuluhan*, 10(1). <https://doi.org/10.25015/penyuluhan.v10i1.9916>.
- Piabuo, S.M. *et al.* (2022). Community forest enterprises (CFEs) as Social Enterprises: Empirical evidence from Cameroon. *Forest Policy and Economics*, 135(November 2021), p. 102664. doi:10.1016/j.forpol.2021.102664.
- Putri, D.F., Mindarti, L.I. and Shobaruddin, M. (2020). [*Perencanaan untuk Monitoring pada Skema "Izin Pemanfaatan Hutan Perhutanan Sosial" di Kabupaten Tulungagung*]. *Jurnal Ilmiah Administrasi Publik*, 006(02), pp. 224–230. doi:10.21776/ub.jiap.2020.006.02.9.
- Rachmawan, D., Seda, F. and Siburian, R. (2022). The Social Forestry in Forest Farmer Group Gunung Gajah Lestari, Pemalang, Indonesia: Encouragement Hope beyond the Limited Choice. doi:10.4108/eai.14-9-2021.2317169.
- Ragandhi, A. *et al.* (2021). Why do greater forest tenure rights not enthruse local communities? An early observation on the new community forestry scheme

- in state forests in Indonesia. *Forest and Society*, 5(1), pp. 159-166. doi:10.24259/fs.v5i1.11723.
- Raharjo, S.A.S., Hastanti, B.W. and Haryanti, N. (2020). [Dinamika Kelembagaan Perhutanan Sosial di Wilayah Pehutani: Studi Kasus di KPH Telawa, Jawa Tengah]. *Politika: Jurnal Ilmu Politik*, 11(2), pp. 183-197. doi:10.14710/politika.11.2.2020.183-197.
- Rakatama, A. and Pandit, R. (2020). Reviewing social forestry schemes in Indonesia: Opportunities and challenges. *Forest Policy and Economics*, 111(1), p. 102052. doi:10.1016/j.forpol.2019.102052.
- Rondonuwu, G.Y., Walangitan, H.D. and Sumakud, M.Y. (2021). [Peranan Perhutanan Sosial terhadap Pendapatan Masyarakat (Studi Kasus Proyek Penanaman di Desa Nanasi Kecamatan Poigar Kabupaten Bolaang Mongondow)]. *Cocos*, 7(7).
- Situmorang, M.T.N. and Noviana, L. (2022). [Peningkatan Pendapatan Masyarakat dan Pelestarian Hutan melalui Program Pengelolaan Hutan Bersama Masyarakat]. *Arus Jurnal Sosial dan Humaniora*, 2(2), pp. 68-75. doi:10.57250/ajsh.v2i2.68.
- Supriyanto, H., Sudarmo, S. and Setyowati, K. (2021). Implementation of Social Forestry in Perum Perhutani Kph Telawa. *Jurnal Analisis Kebijakan Kehutanan*, 18(1), pp. 31-43. doi:10.20886/jakk.2021.18.1.31-43.
- Tiara Nur Khanifa, Syarli Syanurisma, A.N.L. (2021). *Jurnal widya bhumi*, 1(2), pp. 101-124.
- Utomo, M.M.B. (2021). Kawasan Dataran Tinggi Kph Ciamis', pp. 107-113.
- Wiebe, P.C. et al. (2022). What is the contribution of forest-related income to rural livelihood strategies in the Philippines' remaining forested landscapes?. *Forest Policy and Economics*, 135. doi:10.1016/j.forpol.2021.102658.
- Witno, W., Maria, M. and Supandi, D. (2020). [Partisipasi Masyarakat Dalam Pengelolaan Hutan Kemasyarakatan (Hkm) Tandung Billa Di Kelurahan Battang Kota Palopo]. *Jurnal Penelitian Kehutanan BONITA*, 2(2), p. 35. doi:10.55285/bonita.v2i2.556.
- Yudistira, D., Fadilah, R., & Setiawan, A. (2020). The Impact of Merapi Mountain Eruption on the Community Economy. *Efficient: Indonesian Journal of Development Economics*, 3(1), 719-725. <https://doi.org/10.15294/efficient.v3i1.36695>
- Zeilika, E., Kaskoyo, H. and Wulandari, C. (2021). [Pengaruh Partisipasi Dalam Pengelolaan Hutan Kemasyarakatan Terhadap Kesejahteraan Petani (Studi Kasus Gapoktan Mandiri Lestari Kph Viii Batu Tegi)]. *Jurnal Hutan Tropis*, 9(2), p. 291. doi:10.20527/jht.v9i2.11277.