

**The Contribution of the Community Forest Program to the Income of the Lumban Lansang Forest Farmer Group, Siantar Utara Village, Parmaksian District, Toba Samosir Regency.**

*Kontribusi Program Hutan Kemasyarakatan Terhadap Pendapatan Kelompok Tani Hutan Lumban Lansang Desa Siantar Utara Kecamatan Parmaksian Kabupaten Toba Samosir*

*Gita Perdamen<sup>1</sup>, Nurul Qomar<sup>1\*</sup>, Yulia Andriani<sup>2</sup>*

<sup>1)</sup> Department of Forestry, Faculty of Agriculture, Riau University, Bina Widya Campus Km. 12.5, Riau, 28293, Indonesia.

<sup>2)</sup> Department of Agribusiness, Faculty of Agriculture, University of Riau, Bina Widya Campus Km. 12.5, Riau, 28293, Indonesia.

\*Corresponding Author : nqomar @ lecturer.unri.ac.id

**ABSTRACT**

*Community Forest is a state forest concession that is utilized and aimed at empowering and increasing the income of local communities by improving community welfare. North Siantar Village is a Community Forestry location in Toba Samosir district with the Lumban Lansang Forest Farmer Group (FFG) as the manager of the area. The purpose of this study was to analyze the contribution of Community Forest concessions to the income of Lumban Lansang FFG. This study uses observation and interview techniques with all members of the Lumban Lansang FFG (55 persons) to collect primary data which includes how to manage Community Forest by FFG, FFG knowledge of Community Forest, problems faced by FFG while managing Community Forest, and FFG income from Community Forest management. Documentation studies are obtained by studying several books, journals, the internet, and documents from related institutions. The analysis used to calculate the contribution of Community Forest is quantitative analysis and analysis of income from data that has been obtained in the field by adding up income from agricultural, non-agricultural activities, activities in Community Forest and other income. The results showed that the concession of Community Forest could contribute income to Lumban Lansang FFG of Rp. 269.950.000/year for all members of the Lumban Lansang FFG, and contributes to the total income which is 23.91%.*

**Keywords:** *community forest, forest farmer group, income*

**ABSTRAK**

Hutan Kemasyarakatan adalah hak pengusahaan hutan negara yang dimanfaatkan dan ditujukan untuk memberdayakan dan meningkatkan pendapatan masyarakat setempat dengan meningkatkan kesejahteraan masyarakat. Desa Siantar Utara merupakan lokasi Hutan Kemasyarakatan di kabupaten Toba Samosir dengan Kelompok Tani Hutan (KTH) Lumban Lansang sebagai pengelola kawasan. Tujuan dari penelitian ini adalah untuk menganalisis kontribusi HKm terhadap pendapatan KTH Lumban Lansang. Penelitian ini menggunakan teknik observasi dan wawancara dengan seluruh anggota KTH Lumban Lansang (Sensus) untuk mengumpulkan data primer yang meliputi cara pengelolaan HKm oleh KTH, pengetahuan KTH terhadap HKm, masalah yang dihadapi oleh KTH selama mengelola HKm, dan pendapatan KTH dari pengelolaan HKm. Studi dokumentasi diperoleh dengan mempelajari beberapa buku, jurnal, internet, dan dokumen-dokumen dari lembaga terkait. Analisis yang digunakan untuk menghitung kontribusi Hutan Kemasyarakatan adalah analisis kuantitatif dan analisis pendapatan dari data yang diperoleh di lapangan dengan menjumlahkan pendapatan dari kegiatan pertanian, non pertanian, kegiatan di HKm dan pendapatan lainnya. Hasil penelitian menunjukkan bahwa pengusahaan HKm dapat memberikan kontribusi pendapatan bagi KTH Lumban Lansang sebesar Rp. 269.950.000/tahun, dan memberikan kontribusi terhadap total pendapatan sebesar 23,91%.

Kata kunci: hutan rakyat, kelompok tani hutan, pendapatan

**INTRODUCTION**

Forests are one of the gifts of God Almighty and are regulated by the government so that their utilization is equitable and sustainable. For people who still have traditional cultures, forests are not new and are not only seen as a source of wood, but also as a source of food, medicine, clothing, and family income (Purwoko, 2002). Forest utilization without conservation efforts will cause disruption to the productivity of these forest resources. One of the reasons for the disruption to the productivity of forest resources is the increase in population and the availability of agricultural land has not increased, so people have started to encroach on the forest to be used as land for farming and gardening. Community participates in sustainable forest management (Ferbryano *et al*, 2014)

This causes the rate of forest destruction in the 2009-2013 period to reach 1.1 million ha per year (Forest Watch Indonesia, 2015). However, community needs remain unmet more and more forest destruction is occurring. The government has issued a Social Forestry policy to help resolve forest area tenure conflicts by providing access to forest management to the community with 5 forest concession schemes. According to Raja (2003), one of the important problems faced by Indonesian forestry is conflict with local communities. Community Forest is one of the schemes of the PS which aims to improve the welfare of the community through the use of forest resources as well as help restore the function of forest areas so that their sustainability is maintained. The Lumban Lansang Forest Farmers Group (FFG) of North Siantar Village, Parmaksian District, Toba Samosir Regency is one of the groups that received a Community Forest concession area of ±285 ha (SK.2052/Menlhk/PSKL/PKPS/PSL.0/4/2017) . One of State forest designated as work area Community Forest are protected forests (Winarni *et al*, 2016).

The Community Forest is intended so that the government and the Lumban Lansang FFG can work together so that the forest can remain sustainable and fulfill its function. This study aims to analyze the contribution of Community Forest concessions to the income of FFG Lumban Lansang.

**RESEARCH METHODS**

This research was conducted in North Siantar Village, Parmaksian District, Toba Samosir Regency in October 2021. This study using observation and interview techniques with all members of the Lumban Lansang FFG (Census) to collect primary data. All FFG Lumban Lansang become respondents so that it can be called census research (Sugiyono, 2014). The primary data collected were: how to manage Community Forest by FFG, problems faced by FFG while managing Community Forest, and FFG income from Community Forest management. Primary data were collected by conducting interviews with all members of FFG Lumban Lansang as many as 55 people. The data obtained were tabulated and then analyzed descriptively (Madyantoro *et al.*, 2015). Farmer income is calculated by adding up income from agricultural, non-agricultural activities, activities in Community Forest areas such as the use of pine resin and other income. According to Dewi *et al.* (2018), the formula used is:

- a. Total farmer income is the income earned in the last year.

$$\text{Income (I)} = I_F + I_{NF} + I_{\text{Community forest}} + I_{Nw}$$

Information :

- I : Income
- I<sub>Farm</sub> : Total Farm Income
- I<sub>non-farm</sub> : Total non-farm income
- I<sub>Community forest</sub> : Income from Community Forest activities
- I<sub>Non-work</sub> : Other income (non-work)

- b. Income Contribution from Community Forest :

$$C_{\text{Community forest}} = (I_{\text{Community forest}} / I) \times 100\%$$

- C<sub>Community forest</sub> :Contribution of Community Forest to income
- I<sub>Community forest</sub> : Income from Community Forest activities
- I : Total household income during the last year

**RESULTS AND DISCUSSION**

**Characteristics of Respondents**

Characteristics of respondents in this study were described based on age, gender, and last education. The subjects of this study were all 55 members of Lumban Lansang FFG.

**a. Age**

Ages that are still in their productive period usually have a higher level of productivity compared to workers who are old so that their physical possessions become weak and limited (Mahendra *in* Aprilyanti, 2017). The age of the Lumban Lansang FFG members greatly affects the Lumban Lansang FFG members in managing the Community Forest area. Members of FFG Lumban Lansang are dominated by productive age, namely 71% with the age range of respondents being 17 to 55 years and 29% members of FFG Lumban Lansang who are not productive with an age range of 56 to more than 65 years, according to the results of an interview with Mr. Gabariel (82 years old. ) and Mrs. Elmina (83 years old) who are members of FFG Lumban Lansang, find it difficult to manage Community Forest areas of unproductive age because they have limited personnel and focus on maintaining health. This is in accordance with the opinion of Fitrianto (2009) that at the age of 65 and beyond is a period when some people really enjoy their free time and some people have difficulty focusing on maintaining their health. This goes hand in hand with the work of susanti (2016), which states that farmers in the productive category (30-59) years are physically and receive innovation more quickly, while petain over 59 is less smooth and sometimes rejects innovation. The age grouping of Lumban Lansang FFG is as presented in Table 1.

Based on Table 2, the members of FFG Lumban Lansang are 29 men (52.7%) and 26 women (47.3%). Based on the results of an interview with Mrs. Rumondang (50 years old) who is a member of FFG Lumban Lansang, during the application for utilization business license of Community Forest for FFG Lumban Lansang, will require as many as 100 members with a short amount of time but little enthusiasm for the company that only 57 registered members and have a husband and wife share the list. According to Purwanto (2011), one cause of members in following social forestry activities is the government's role in influencing the

motivation in the program. Therefore, the role of government is still needed here to increase the motivation and build up FFG 's members .

Table 1. Characteristics of respondents by age

No	Age (Years old)	Frequency	Percentage (%)
1	17-25	3	5.5
2	26-35	11	20
3	36-45	14	25.5
4	46-55	11	20
5	56-65	7	12.7
6	> 65	9	16.3
	Total	55	100

Source: results of interviews with FFG

**b. Respondent's Gender**

Table 2. Characteristics of respondents by gender

No	Gender	Frequency	Percentage (%)
1	Man	29	52.7
2	Woman	26	47.3
	Total	55	100.0

Source: results of interviews with FFG

**c. Respondent's last education**

Table 3. Characteristics of respondents based on last education

No	Education	Frequency	Percentage (%)
1	Primary	9	16.4
2	Junior High School	5	9.1
3	Senior High School	34	61.8
4	Bachelor	7	12.7
	Total	55	100

Source: results of interviews with FFG

Members of FFG Lumban Lansang have varying degrees educations, ranging from elementary school graduates to undergraduate graduates (Table 3). People who have higher education will have more cognitive abilities as well, so that it will affect the ability to work, both in terms of quantity or in terms of quality of work and this condition will affect their income. Education level with income has a positive correlation (Guhardja, 1993). Based on Table 3, of the 55 members of FFG Lumban Lansang, most of them have the latest high school education, namely 34 people (61.8%) and at least 5 people are junior high school students (9.1%).

**Community Forest Contribution to Forest Farmer Group's Income**

**a. Sources of Community Income Members of Lumban Lansang FFG**

In general, members of FFG Lumban Lansang's live lihood as farmers and make Community Forest activities as a source of income. According to the results of interviews with FFG members, the company's license was a great help to the FFG members in providing for the families. According to Tanjung (2014) Forest income is income derived from forest management activities. In addition to cultivating land in the Community Forest area, FFG members also cultivate their own land. Some of the Lumban Lansang FFG members also work as private employees, trade, teachers, village officials, and tailors.

Based on Table 4, it can be seen that the total income of FFG Lumban Lansang members is Rp. 1,128,996,080 per year or an average of Rp. 20,527,201 per member per year. The largest source of income earned by members of KTH Lumban Lansang is from the Non-Farm sector, which is Rp. 625.600.000 per year, with the average income of each member of KTH Lumban Lansang is Rp. 11,374,545 per year. Some of these non-agricultural sectors include private employees, teachers, government employees, entrepreneurs or tradesmen and factory workers, where this type of profession is the main job of the community in addition to managing HKm. This income is received in the form of money or goods in the form of crops. According to Sukirno (2005), the revenue structure is a building block that is acquired at any given time from goods or money by the entire family.

Table 4. Sources of income for Lumban Lansang FFG members for one year

Source of Income	Income (Rp)	Member's Average R Income (Rp)	Contri bution (%)
Community Forest	269,950,000	4,908,181	23.91
Farm	221,446.080	4,026.292	19.61
Non-Farm	625.600.000	11,374.545	55.41
Non work	12,000,000	218,181	1.06
Total Income (Rp)	1,128,996,080	20,527,201	100

Source: results of observation and interview with FFG

The contribution given by Community Forest concessions to the total annual income of Lumban Lansang FFG is 23.91% or Rp. 269,950,000 /year The largest contribution given is still from the non-agricultural sector, which is 55.41%, then the agricultural sector, which is 19.83%. Some sources of income from the non-agricultural sector include honorariums for private employees, teachers, government employees, entrepreneurs or tradesmen and factory workers, where this type of profession is the main job of the community in addition to managing Community Forest.

**b. Income from Community Forest Concession for One Year**

Commodities in the Community Forest area that contribute to income are rice, corn, coffee, areca nut and pine resin. The Community Forest area used is very helpful for FFG Lumban Lansang's members to increase household income. The activities carried out by households have relatively the same goals and expectations, namely to meet household needs from time to time, so that there will be no shortage of income supply to finance daily living needs. (Haryanto, 2008).

Table 5 shows the income of Lumban Lansang FFG members from each type of commodity produced from the Community Forest area.

Table 5. Income of Lumban Lansang FFG members from Community Forest concessions for one year

Commodity Type	Income by commodity (Rp)	Proportion (%)
Rice	55.800.000	20.67
Corn	5.100.000	1.98
Coffee	25.200.000	9.34
Betel nut (Areca)	1.350.000	0.50
Pine Resins	182.500.000	67.61
Total income	269.950.000	100
Average Income (Rp)	6.277.907	

Source: results of observations and interviews with FFG

Based on Table 5, the commodity cultivated in the Community Forest area that has the highest contribution to the income of the Lumban Lansang FFG is pine resin with a total annual contribution of Rp. 182,500,000 or 67.61%. Pine sap harvesting in the Community Forest area of Lumban Lansang FFG members is carried out by PT. Global, this is because members of FFG Lumban Lansang do not have the expertise and ability to tap pine sap. Therefore, FFG Lumban Lansang cooperates with PT. Global to utilize pine resin in the Lumban Lansang Community Forest FFG area. Profit sharing from the harvesting of pine sap tapped by PT. Global is given to every Head of Family member of FFG Lumban Lansang once a year. In the Community Forest area where there are no pine trees, Lumban Lansang FFG is used to plant several commodities such as rice, corn, coffee, and areca nut. Community forest managed by FFG Lumban Lansang forest has an area that is not necessary.

FFG Lumban Lansang chose some of these commodities because they were easy to breed independently. This is in accordance with the opinion (Wardoyo, 1997) that the socio-economic conditions for commodities that must be planted in Community Forest areas are commodities that must have high economic value and are liked by the community/participants and according Zega (2013) The more the area of land owned by farmers, the more types of plants planted by farmers farmers and the higher the level of income earned by smallholders.

**Average Public Expenditure for One Year**

To see how far the income earned by Lumban Lansang FFG members can meet the needs of the community, the average expenditure of Lumban Lansang FFG members is calculated for one year (Table 6).

Table 6. Average expenditure of Lumban Lansang FFG members for one year

Type	Total Expenditure (Rp)	Average Expenditure (Rp)	Expenditure Percentage (%)
Principal	486,192,000	8,839,855	48.06
Non-principal	357,308,000	6,496,509	35.32
Educational	96,876,000	1,761,382	9.58
Etc	71,184,000	1,294,255	7.04
Total	1,011,560,000	18,392,000	100.00

Table 6 shows the total expenditure and average expenditure incurred by Lumban Lansang FFG members in one year. The amount of expenditure incurred by the community is influenced by various factors, such as: the area of land managed, how many family members are financed in 1 home, children's education, and forth (Deslan, 2008). In all, the average percentage of expenses for the average of FFG Lumban Lansang members per year is 91.35%.

This shows that the total income of members of FFG Lumban Lansang is greater than the total household consumption expenditure of members' households, meaning that members of FFG Lumban Lansang have been able to meet their economic needs.

After divided by the average number of family members of FFG Lumban Lansang, then the average income per capita is Rp. 475,166.7/month. Per capita income is only a general description of the welfare of the population (Astuti, 2012). Per capita income describes the real amount of income received by each individual in the household of Lumban Lansang FFG members per month. Based on the poverty line indicator, where the determination of the national poverty line in 2020 is Rp.454,625 /capita/month, which includes food and non-food needs (BPS, 2020), the living standards of members of FFG Lumban Lansang are already above the line poverty or prosperity. This is in line with Agustina's research (2017) which says that Community Forest has a contribution to forest farmer groups to meet their daily needs.

### CONCLUSION

The contribution of Community Forest concessions to Lumban Lansang's FFG income per year is Rp. 269,950,000 or 23.91% of the total revenue. The commodities cultivated in the Community Forest area that have the highest contribution to the income of the Lumban Lansang FFG are pine resin, by 67.61%.

### REFERENCES

- Agustina, A. S. 2017. Kontribusi program hutan kemasyarakatan terhadap pendapatan masyarakat (studi kasus di desa ambololi kecamatan konda kabupaten konawe selatan). *Jurnal Ecogreen* 3(2): 89-95.
- Aprilyanti, S. 2017. Pengaruh Usia dan Masa Kerja Terhadap Produktivitas Kerja Pengaruh Usia dan Masa Kerja Terhadap Produktivitas Kerja (Studi Kasus: PT. OASIS Water International Cabang Palembang). *Jurnal Sistem dan Manajemen Industri* 1(2): 68-72.
- Astuti, W. W. A., Fakhrudin., Joko, S. 2013. Peran ibu rumah tangga dalam meningkatkan kesejahteraan keluarga di desa bejen kecamatan bejen kabupaten temanggung. *Journal of Non Formal Education and Community Empowerment* 1(2): 39-51.
- BPS. 2020. *Profil Kemiskinan di Indonesia Maret 2020*. Badan Pusat Statistik. Jakarta. <https://www.bps.go.id/>. Diakses tanggal 10 Februari 2022.
- Deslan, A. 2008. Kajian Sosial Program Hutan Kemasyarakatan (HKm) dan Kontribusinya Terhadap Pendapatan Masyarakat (Studi Kasus Desa Gudang garam Kecamatan Bintang Bayu Kabupaten Serdang Bedagai). Skripsi. Universitas Sumatera Utara. Medan.
- Dewi, I.N., Awang, S. A., Andayani, W., Suryanto, P. 2018. Karakteristik petani dan kontribusi hutan kemasyarakatan (HKm) terhadap pendapatan petani di Kulon Progo. *Jurnal Ilmu Kehutanan* 12: 86-98.
- Fitrianto, A. R. 2009. Hubungan antara Usia dan Masa kerja Kinerja Dosen. Skripsi. Universitas Sanata Dharma. Yogyakarta.
- Forest Watch Indonesia. 2015. Potret Keadaan Hutan di Indonesia Periode 2009-2013. Bogor. Forest Watch Indonesia.
- Guhardja, S. 1993. Pengembangan Sumber Daya Keluarga. Gunung Mulia. Jakarta
- Haryanto, S. 2008. Peran Aktif Wanita dalam meningkatkan Pendapatan Rumah Tangga Miskin (Studi Kasus Pada Wanita Pemecah Batu di Pucanganak Kecamatan Tugu Trenggale), *Jurnal Ekonomi Pembangunan*, 9(2). 216-227.
- Madyantoro, A., Muttaqin, Z., Lidiawati, I. 2015. Kajian kontribusi sistem agroforestri terhadap pendapatan petani (studi kasus: desa cibatok dua, kecamatan cibungbulang, kabupaten bogor, provinsi jawa barat). *Jurnal Nusa Sylva* 5(1): 11-16.
- Purwanto, S. 2011. Dinamika Kelompok Dalam Pengelolaan Hutan Rakyat (Kasus Pada Kelompok Tani Hutan di Desa Jugalajaya, Kecamatan Jasinga, Kabupaten Bogor). Skripsi. Program Sarjana Institut Pertanian Bogor. Bogor.
- Purwoko, A. 2002. Kajian Akademis Hutan Kemasyarakatan (HKm). USU Digital Library. Medan.
- Raja, S. 2003. Perjalanan Hutan Kemasyarakatan Di Indonesia. Forum Komunikasi Kehutanan Masyarakat. Jakarta.

- Sugiyono, S. 2014. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: CV. Alfabeta.
- Sukirno, S. 2005. Mikro Ekonomi, Teori Pengantar. PT. Raja Grafindo Persada. Jakarta
- Susanti, Dian et al. 2016 Pengaruh Umur Petain, tingkat Pendidikan dan Luas Lahan terhadap Hasil Produksi Tanaman Sembung. *Jurnal Tumbuhan Obat Indonesia* Volume 9 No. 2.
- Tanjung, F.M. 2014. Kontribusi Hutan Rakyat Terhadap Pendapatan Usaha Tani di Desa Bayasari, Kecamatan Jatinegara, Kabupaten Ciamis. Skripsi. Institut Pertanian Bogor. Bogor.
- Wardoyo, E. 1997. Hutan Kemasyarakatan, Pengelolaan Hutan Partisipatif. PUSKAP FISIP USU, WIM dan Yayasan Sintesa. Medan.
- Winarni, S., Yuwono, S. B., dan Herwanti, S. 2016. Struktur pendapatan, tingkat kesejahteraan dan faktor produksi agroforestri kopi pada kesatuan pengelolaan hutan lindung batutege (studi digabungkan kelompok tani karya tani mandiri). *Jurnal Sylva Lestari*. 4(1):1- 10.
- Zega, S.B., P. Agus., T. Martial. 2013, Analisis pengelolaan agroforestry dan kontribusinya terhadap perekonomian masyarakat. *Jurnal Peronema Forestry Science*. 2(2):152- 162.

