Evaluation of work plan implementation of community forest management business license case study in Karya Lestari farmers group, Sibaganding Village, Girsang Sipangan Bolon Sub-district, Simalungun Regency

Rio Frenky Sitanggang¹, Rahmawaty² and A Zaitunah³

¹ Master of Forestry Study Program, Faculty of Forestry, Universitas Sumatera Utara, Medan, Indonesia
² Faculty of Forestry, Universitas Sumatera Utara, Medan, Indonesia
³ Faculty of Forestry, Universitas Sumatera Utara, Medan, Indonesia

E-mail: rio21032014@gmail.com

Abstract. One of the Social Forestry schemes is the Community Forest (CF) which aims to empower communities around forest areas. CF Management Business Permits are given to the community through Farmers Groups and are obliged to make a Business Work Plan for a period of 10 years and an Annual Work Plan. The purpose of the study was to evaluate the implementation of the Annual Work Plan for Community Forest management in the Karya Lestari Farmer's Group, Sibaganding Village, Girsang Sipangan Bolon District, Simalungun Regency, based on technical, socio-economic and institutional aspects. The research was carried out between October 2020 and January 2021. The data used are primary and secondary data with the method of taking the object of research by census. Data were analyzed using reduction method, presentation, verification and drawing conclusions. The results showed that the implementation of the Annual Work Plan in 2019 FG Karya Lestari was in 4 activities (14.29%) and 24 activities (85.71%). The four activities can be carried out because of the assistance from the local Forest Management Unit, the activities do not require funds and can be carried out in mutual cooperation. The cause of the other activities has not been carried out due to inadequate facilities and infrastructure, lack of funds and low human resources.

1. Introduction

Community Forests (CF), which is one of the Social Forestry schemes, are state forests whose main use is aimed at empowering local communities. Empowerment of local communities is an effort to increase the ability and independence of the community to obtain the benefits of forest resources optimally and fairly. These efforts are carried out through capacity building and providing access in order to improve the welfare of the local community. CF work area is a unified expanse of forest area that can be managed by a group or a combination of local community groups in a sustainable manner (Regulation of the Minister of Environment and Forestry No. 9 of 2021)[1].

Community Forests management can be carried out in Production Forest and Protection Forest areas. Activities in Protected Forests can be in the form of utilization of environmental services, utilization of areas and utilization of non-timber forest products. Timber forest product utilization activities can only be carried out in Production Forests [2]. Community Forest Utilization Business
License (CFUBL) Business Plan is a work plan prepared by the CFUBL holder which contains activities for marking work area boundaries, dividing blocks or zoning work areas, forest utilization, protection, forest security, and developing local wisdom based on planning participatory (Regulation of the Directorate General of PSKL No. 16 of 2016) [3].

The Technical Implementation Unit (TIU) of Pematangsiantar Region II Forest Management Unit (FMU), the Forestry Service of North Sumatra Province has several Farmer Groups (FG) and Farmer Group Associations (FGA) which have received CFUBL. In this area there are 9 CF permits with a total utilization area of around 1,917 Ha in Production Forests, Limited Production Forests and Protection Forests recorded in 2019. Of the total permits, only 3 managers are still active and have a Business Work Plan (BWP) and Annual Work Plan (AWP). The Karya Lestari Farmer Group in Sibaganding Village, Girsang Sipangan Bolon District, Simalungun Regency, is one of the FGs that has the CFUBL. This group makes an BWP for a period of 10 years and an annual AWP as a guide in preparation for the implementation of CF management. To support the achievement of objectives, evaluation is necessary. The evaluation aims to determine the results of the implementation of CF management based on the work plan that has been made. This FG makes BWP for the 2019-2028 period and AWP for the 2019 period. This FG has not carried out an evaluation of the implementation of the 2019 AWP so it is not known to what extent the results of the activities in that period are. The results of the evaluation are very important as a guide in the preparation of the AWP for the next period.

Given these problems, it is necessary to evaluate the implementation of the Karya Lestari Farmer Group's AWP based on environmental, socio-economic and institutional aspects. From the results of the evaluation, the problems faced by FG will be obtained in achieving the objectives of the work plan. Previously, research on evaluating CF management had been carried out on Lombok Island [4] and West Lampung [5]. The purpose of this study was to evaluate the implementation of the Annual Work Plan (AWP) for CF management in the Karya Lestari Farmers Group, Sibaganding Village, Girsang Sipangan Bolon District, Simalungun Regency based on technical, socio-economic and institutional aspects.

2. Research methods

2.1. Location and time
The research was carried out at UPT. KPH Region II Pematangsiantar. This KPH located at 02° 35’ 49” – 03° 40’ 35” North Latitude and 98° 32’ 02” – 99° 47’ 12” East Longitude. The map of the research location is presented in Figure 1. The study was carried out between October 2020 and January 2021.
2.2. **Tools and materials**
The tools used in the research are; stationery, laptops, cameras and recording devices. While the material used is a questionnaire containing the implementation of the 2019 AWP in the Karya Lestari Farmer Group.

2.3. **Data collection**

2.3.1. **Primary data.** Primary data is data obtained directly from data sources. Primary data includes general data on farmer households such as name, age, address, occupation, gender, last education, and number of family members. This data was obtained by direct observation by researchers to determine the state of the soil, socio-economic conditions and institutions. Data was collected through interviews conducted directly with the respondents. Questions and answers were conducted using a questionnaire to obtain primary data. The questions compiled are the work plans that have been implemented and compare them with those written in the AWP, namely marking the boundaries of the work area or zoning, forest utilization, forest protection or security, development of local wisdom and monitoring and evaluation.

2.3.2. **Secondary data.** Secondary data is data supporting research which includes the general condition of the research location, both the physical environment, socio-economic community, statistical data on population identity, farmer group data, both active and inactive members in the institution, BWP data for the 2019-2028 period and AWP period 2019 Karya Lestari Farmer Group, as well as other data related to research sourced from libraries or related agencies.

2.4. **Object collection method**
The method used is to conduct a census of the CFUBL management population. In this study, the population is all members of farmer groups and their administrators. The total number of farmers who are members of the Karya Lestari Farmers Group is 126 people.
2.5. Data analysis technique

2.5.1. Data reduction. Data reduction is a form of analysis that categorizes, directs, discards unnecessary and organizes data in such a way that conclusions can be drawn and verified. At this data reduction stage, the researcher will carefully sort out the data that can and cannot be used as the main basis before being presented in this study.

2.5.2. Data presentation. Presentation of data is limited as a set of structured information that provides conclusions and taking action. Technically, the data that has been selected is then organized into a matrix which will be presented in the form of narrative text. The presentation of the data is done by describing the findings from interviews with informants and displaying documents as supporting data.

2.6. Verification and conclusion drawing

Conclusions are drawn on the results of the interviews carefully. Verification is a review of field notes so that the existing data can be verified.

3. Results and discussion

3.1. Evaluation of the implementation of the CFUBL work plan

The work plan in the Karya Lestari Farmer Group consists of the BWP for the period 2019 – 2028 and the AWP for the period 2019. The details of the BWP are presented in Table 1 and the details of the AWP are presented in Table 2.

| No | Work Plan | BWP Amount | Information (Years) |
|----|-----------|-------------|---------------------|
| 1  | Work area boundary marking or zoning | 4 | I,II,III dan IV |
| 2  | Forest utilization | 67 | I,II,IV, V, VI, VII, VIII, IX, X |
| 3  | Forest protection or security | 6 | I,II,IV, V, VI, VII, VIII, IX, X |
| 4  | Development of local wisdom | 13 | I,II,IV, V, VI, VII, VIII, IX, X |
| 5  | Monitoring and evaluation | 2 | I,II,IV, V, VI, VII, VIII, IX, X |
|    | Total    | 90          |                     |

Table 1. Details of the BWP for the Period 2019 – 2028.

| No | Work Plan | Plan Amount | Information |
|----|-----------|-------------|-------------|
| 1  | Work area boundary marking or zoning | 4 | 2019 |
| 2  | Forest utilization | 11 | 2019 |
| 3  | Forest protection or security | 6 | 2019 |
| 4  | Development of local wisdom | 5 | 2019 |
| 5  | Monitoring and evaluation | 2 | 2019 |
|    | Total    | 28          | -           |

Table 2. Detail of AWP 2019 period.

Based on the results of interviews with 126 Farmer Group members who have CFUBL, a summary of the 2019 AWP implementation is obtained as presented in Table 3.
| No | Work Plan                          | Plan Details                                                                 | Implementation of Work Plan |
|----|-----------------------------------|-----------------------------------------------------------------------------|----------------------------|
|    |                                   | Already | Not Yet |
| 1  | Work area boundary marking or zoning | 1.1. Installation of 12 stakes on the outer boundary and CF parcelsm       | 126                        |
|    |                                   |         |         |
|    |                                   | 1.2. CF work area mapping                                                   | 126                        |
|    |                                   | 1.3. Procurement of areca nut seeds for marking the outer boundary of CF as | 126                        |
|    |                                   |         |         |
|    |                                   | 1.4. Planting 25,000 areca nut seeds at the outer boundary of CF and land   | 126                        |
|    |                                   |         |         |
| 2  | Forest utilization                | 2.1. Construction of 1 agroforestry plant nursery location                   | 126                        |
|    |                                   |         |         |
|    |                                   | 2.2. Seed procurement                                                        | 126                        |
|    |                                   |         |         |
|    |                                   | 2.3. Implementation of honey bee cultivation training for 20 people         | 126                        |
|    |                                   |         |         |
|    |                                   | 2.4. Availability of honey bee cultivation facilities                       | 126                        |
|    |                                   |         |         |
|    |                                   | 2.5. Implementation of poultry farming training for 20 people              | 126                        |
|    |                                   |         |         |
|    |                                   | 2.6. Construction of 20 poultry cages                                       | 126                        |
|    |                                   |         |         |
|    |                                   | 2.7. Procurement of 2000 native chicken seeds                              | 126                        |
|    |                                   |         |         |
|    |                                   | 2.8. Maintenance of native chickens as much as 70%                          | 126                        |
|    |                                   |         |         |
|    |                                   | 2.9. Implementation of training on the cultivation of young plants         | 126                        |
|    |                                   |         |         |
|    |                                   | 2.10. Preparation of land for planting food crops and horticulture         | 126                        |
|    |                                   |         |         |
|    |                                   | 2.11. Implementation of training on pine sap collection as many as 15 people | 126                        |
|    |                                   |         |         |
| 3  | Forest protection or security     | 3.1. CF protected area mapping                                              | 126                        |
|    |                                   |         |         |
|    |                                   | 3.2. Construction of a 1.5 Km patrol path and construction of 2 guard posts | 126                        |
|    |                                   |         |         |
|    |                                   | 3.3. Carry out patrols every 2 months as much as 2 people                  | 126                        |
|    |                                   |         |         |
|    |                                   | 3.4. Formation of community groups partnering Polhut as many as 2 people   | 126                        |
|    |                                   |         |         |
|    |                                   | 3.5. Procurement of calliandra plants for protection locations as many as 4000 stems | 126                        |
|    |                                   |         |         |
|    |                                   | 3.6. Planting 4000 stems calliandra                                         | 126                        |
|    |                                   |         |         |
| 4  | Development of local wisdom       | 4.1. Construction of 1 CF secretariat unit                                  | 126                        |
|    |                                   |         |         |
|    |                                   | 4.2. Procurement of 1 set of computers, printers, scanners, tables, chairs, | 126                        |
|    |                                   |         |         |
|    |                                   |         |         |
|    |                                   |         |         |

Table 3. Summary of 2019 AWP Implementation Interview Results.
4.3. Mapping of donors supporting CF activities 126
4.4. Submission of proposals to 10 donors 126
4.5. Collaborating with 5 donors 126

5 Monitoring and evaluation

5.1. Implementation of activity monitoring 126
5.2. Implementation of activity evaluation 126

Figure 2. Interview with KTH Karya Lestari Management.

Based on the data presented in the table above, the percentage of AWP implementation in 2019 is only 14.29% (4 activities) and 85.71% (24 activities) have not been implemented. Four activities can be carried out because they receive assistance from the local FMU, so the activities do not require funds and can be carried out in mutual cooperation. While the reasons for the 24 activities that could not be carried out are presented in Table 4.

Table 4. Factors Causing Activities Not Implemented in AWP.

| No | Work Plan                           | Technical                                                                 | Causative Factors | Institutional |
|----|-------------------------------------|---------------------------------------------------------------------------|-------------------|---------------|
| 1  | Work area boundary marking or zoning| The group does not understand the boundaries of the CF permit area and how it is implemented | There is no budget for implementing the boundary data | Lack of communication between the management of the Farmers Group and the FMU |
| 2  | Forest utilization                   | Facilities and infrastructure do not support such as land processing and production equipment | Group cash is still minimal, there are still members who do not pay their obligations | Group administrators are still confused about the procedure for collaborating with relevant agencies and companies that allow them to work together |
| 3  | Forest protection or security        | Inadequate facilities and infrastructure                                   | Farmer group cash which is still minimal because | Lack of communication between group |
From the results above, it can be seen that there are three factors that hinder the implementation of group AWP, namely technical, socio-economic and institutional factors. This is in line with Nandini's (2013) [4] statement that the technical aspects consist of the biophysical conditions of the place, the potential of stands or plant types, the suitability of the species on the land, farming techniques (combination of planting, cropping patterns,), the application of conservation techniques and silviculture. Silvicultural techniques consist of species selection, soil cultivation, seeding, planting maintenance, which is accompanied by harvesting). Economic aspects which include potential economic value, product marketing techniques and institutions which include CF management profiles and systems.

The work plan for marking the boundaries of the work area or zoning has 4 activities that will be carried out and are planned to be completed in the current 4 years. Based on interviews with groups, all of these activities have not been implemented. As a technical factor, the inhibiting factor is that when a permit is granted and a work plan has been made, the group does not understand the biophysical conditions of the area's location so that they do not know where the boundaries of the area that are given a permit for use are. For institutional factors that have just obtained a utilization permit, they do not yet understand how to carry out consultation and coordination regarding the implementation of the boundary demarcation, even though there are already assistants from the local FMU. For socio-economic factors, the implementation of boundary demarcation activities requires funds for the fulfillment of equipment and personnel equipment. The personnel referred to come from the local FMU assisted by group members. The lack of adequate funds is an obstacle in the implementation of activities. Good communication and cooperation between the group and the FMU can carry out this work plan well.

The forest utilization work plan consists of 11 activities to be implemented and only 2 activities have been implemented. As a technical obstacle is the unavailability of adequate land management and production facilities and infrastructure. With a large land area, more supporting equipment is needed such as mechanical equipment that uses engine power. Fulfillment of these equipment requires a very large cost. With the condition of the group being new, it is very difficult to meet these needs in the first year. Therefore, assistance is needed from various parties engaged in such fields as agriculture, fisheries, animal husbandry, plantations and forestry. Institutional groups that are still less communicative and have not cooperated, it is certain to be an obstacle in obtaining such assistance. The implementation of 2 activities in the first year was with the assistance of the Forestry Service
through the local FMU. The implementation of this kind of cooperation should be developed by the group to other agencies so that the work plan goes well without waiting for its implementation in the following year.

The implementation of the forest protection or security work plan has 6 activities and only 1 activity has been implemented. The five activities this year are physical activities in the form of roads, seeds and planting as well as training activities. In particular, the activities that have been carried out are voluntary and mutually agreed upon from group membership without incurring any costs. Activities that have not yet been implemented require substantial procurement costs and require good cooperation between the group and the FMU. Specifically for the physical development and procurement of seeds and their planting, the group cooperates with other parties engaged in the field such as BPDAS, the Public Works Department as the provider of heavy equipment and the group as the executor of the planting activities. For the formation of POLHUT partners, the group establishes communication with FMU so that activities are included in the work agenda of the regional stakeholders.

One of the local wisdom possessed by the community is the nature of mutual help and cooperation. With this wisdom the group can build a place as the secretariat of the farmer group. For other work plans that require large funds and are not sufficient only through collaboration between members in the group, then this wisdom is developed outside the group. Finding donors and collaborating with companies, government agencies and even entrepreneurs by offering sustainable development of CF potential is one of the strategies that the group must implement. To find out how the procedures and processes are, groups can search for information via the internet, visit government agencies, nearby companies and continue to consult with FMUs as group partners.

In carrying out the overall work plan, there is a need for supervision through monitoring and evaluation of activities. Monitoring and evaluation need to be carried out to find out where the implementation of activities has reached. Within the group institution, there is already a supervisory section whose job is to monitor and evaluate group members in managing CF. They are chosen based on their understanding of the condition of the area, management and cultivation efforts, and can protect each member to minimize social conflicts. The overall supervision of group activities is carried out by the Forestry Service through the local FMU. Through monitoring and evaluation by these parties, it will be known whether the implementation of the use of the area is in accordance with the rules or not. The FMU has the right to issue a warning and propose the termination of the permit if the error is very fatal. Therefore, it is very necessary to have good cooperation between the group and the FMU to support the successful implementation of the permit for sustainable use of the area.

3.2. **Strategy to Support the Implementation of the CFUBL Work Plan**

The results of the evaluation above can be used as guidelines in implementing the AWP in the next period. Several strategies that can be implemented to support the smooth implementation of the work plan can be seen in **Table 5**.

| No | Obstacle Factors | Support Strategy |
|----|------------------|------------------|
| 1  | Technical        | 1.1. Socialization of the implementation of the use of CF to groups which includes the making of BWP and AWP<br>1.2. Carry out training to improve group human resources (technical cultivation, use of production facilities and infrastructure, pre- and post-harvest or marketing)<br>1.3. Socialization of standard operating procedures management and implementing regulations for CF |
| 2  | Socioeconomic    | 2.1. Carry out regular assistance activities from social forestry group facilitators to increase group confidence in the CF program |
2.2. Collaborating with relevant government agencies and companies around the CFUBL area to obtain assistance, both capital and facilities and infrastructure

3 Institutional

3.1. Carry out regular internal group meetings to evaluate the process of implementing CF business
3.2. Disseminate CFUBL together with FMU as forest area holders to the local government, surrounding communities adjacent to the permit area
3.3. Group revitalization if there is an inability of the management and members to follow the rules of the CFUBL

The making of a work plan is carried out by the permit holder facilitated by a designated assistant. The ratification of the BWP and AWP is carried out by the assistant extension worker or the head of the FMU. The group of permit holders must cooperate with the facilitator especially in facilitating each group meeting. To obtain capital assistance, facilities and infrastructure from parties outside the group, the facilitator assists group administrators in making proposals. Proposals can be addressed to government agencies such as the Forestry Service, the Agriculture, Fisheries and Plantation Service, the Cooperatives Office for Micro, Small and Medium Enterprises (MSMEs) and companies related to CF businesses. According to Lubis et al (2020) [6] assistance and supervision by forestry agencies is very much needed that is adjusted to the group's capabilities such as marketing facilitation, access to loans, forming cooperatives and opening partnership networks.

To reduce disputes and conflicts among group members, regular meetings need to be held. This meeting is a form of evaluation of the implementation of the business that has been planned so that any problems can be solved together. According to Saraan et al (2020) [7] the monitoring and evaluation program consists of monitoring and evaluation activities, conducting regular meetings to discuss the development of activities, and evaluating activities. If the structure within the group needs to be revised, then group revitalization can be carried out which is facilitated by the facilitator. So that conflicts do not occur between CF permit holders and the surrounding community, it is necessary to carry out socialization of the implementation of the CFUBL work plan. This socialization aims to provide comprehensive information regarding the efforts carried out by the permit holder so that it is known together. The role of assistant extension agents is very important in the success of CF management. According to Purbawiyatna et al (2011) [8] to support the community to be able to improve their forest management performance, it is necessary to increase the capacity of extension organizations and coordination with related agencies. According to Wulandari and Inoue (2018) [9] CF assistance encourages groups to actively participate in increasing income to support their lives. The group seeks its own information from various parties to increase the production of its forest products. A proper understanding of the social characteristics of CF groups can make Social Forestry programs more efficient in terms of funding and more effective in achieving their objectives.

4. Conclusion

The implementation of the 2019 AWP for the Karya Lestari Farmer Group includes 4 activities (14.29%) and 24 activities that have not been carried out (85.71%). Four activities can be carried out because they receive assistance from the local FMU, so the activities do not require funds and can be carried out in mutual cooperation. The causes of other activities have not been carried out due to inadequate facilities and infrastructure, lack of funds and a low number of human resources.

References
[1] Government Regulation of the Republic of Indonesia 2021 Concerning the Implementation of Forestry (LN.2021/No.33, TLN No.6635, jdih.setkab.go.id)
[2] Minister of Environment and Forestry Regulation 2021 Concerning Social Forestry Management
[3] Regulation of the Directorate General of PSKL 2016 Concerning Guidelines for the Preparation
of Village Forest Management Plans, Business Plans for Business Permits for Utilization of Community Forests and Business Work Plans for Business Permits for Utilization of Timber Forest Products from Community Pl

[4] Nandini R 2013 Evaluasi Pengelolaan Hutan Rakyat (HKm) pada Hutan Produksi dan Hutan Lindung di Pulau Lombok [In Bahasa Indonesia] J. Penelit. hutan Tanam. 10 43–55

[5] Sanjaya R, Wulandari C and Herwanti S 2017 Evaluation of Community Forest Management (CF) at the Association of Rukun Lestari Sejahtera Farmers Group in Sindang Pagar Village, Sumberjaya District, West Lampung Regency [In Bahasa Indonesia] J. Sylva Lestari 5 30–42

[6] Lubis A Z and Harahap R H 2021 Institutional evaluation of the community plantation forest (CPF) permit holders in Langkat District IOP Conference Series: Earth and Environmental Science vol 782 (IOP Publishing) p 32001

[7] Saraan M and Harahap R H 2020 Analysis of community participation at Community Forestry Group (HKm) in Forest Management Unit (KPH) Region XIV Sidikalang, North Sumatera Province IOP Conference Series: Earth and Environmental Science vol 454 (IOP Publishing) p 12089

[8] Purbawiyatna A, Kartodihardjo H, Alikodra H S and Prasetyo L B 2011 Analysis of Sustainability of Community Forest Management in Protected Areas [In Bahasa Indonesia] J. Nat. Resour. Environ. Manag. 1 84–92

[9] Wulandari C and Inoue M 2018 The Importance of social learning for the development of community based forest management in Indonesia: The case of community forestry in Lampung Province Small-scale For. 17 361–76