



ITTO Project PD 646/12 Rev. 3 (F)

**Initiating the Conservation Cempaka Trees Species (*Elmerrillia* sp.) through
Plantation Development with the Local Community Participation in North Sulawesi**

Technical report

Execution of activity 2.4

**TO COLLABORATIVELY IDENTIFY AND INTRODUCE
APPROPRIATE INCENTIVES FOR LOCAL COMMUNITIES TO
PLANT CEMPAKA TREES**

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“To collaboratively identify and introduce appropriate incentives for local communities to plant cempaka trees”

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May 2020

PROJECT & ACTIVITY 2.4 DESCRIPTION

Project Title : Initiating the Conservation of Cempaka Tree Species (*Elmerrillia spp.*) through Plantation Development with Local Community Participation in North Sulawesi, Indonesia

Project Number : PD 646/12 Rev.3 (F)

Host Government : Government of Indonesia

Executing Agency : Environment and Forestry Research, Development and Innovation Agency (EFORDIA), Ministry of Environment and Forestry, Indonesia

Implementing Agency : Manado Environment and Forestry Research and Development Institute (MEFORDI)

Project Coordinator : Diah Irawati Dwi Arini

Activity Starting Date : 1 December 2019

Activity Duration : 6 months

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Summary

Incentive is something that can be given in the form of material and nonmaterial in order to encouraging/stimulating an activity. The right form of incentive can produce appropriate result, in line with the purpose of the programme. However, an incorrect incentive can bring the opposite result and even becoming a barrier.

Although cempaka demand becomes higher, the interest of people for cultivating cempaka are still low. Unappropriate or low community incentives are expected to be one of the reason.

The collaboration between ITTO and Manado Forestry Research Institute on Activity 2.4 is aimed to identifying the right incentives for local community that can encourage them for cultivating cempaka and to identifying the implementation strategy. In achieving these targets, Activity 2.4 has made some discussions with the local communities in the form of Village Meeting. It was executed in 21 villages spread over in 3 districts (South Minahasa, Minahasa, and North Minahasa). The need and problems of local community for planting cempaka found through these village meetings. The results were forwarded to FGD in district and province level, to formulating the appropriate form of incentives and the implementation strategies.

The barriers that weaken the community interest for planting cempaka can be described as follows : 1) lack of seedling (in terms of quantity and quality); 2) obstacle in marketing the timber (timber legality); 3) lack of knowledge in Cempaka Wasian cultivation (nursery and marketing); 4) inexpert local community; 5) Low capital for cultivating cempaka (fund, equipment, and land).

The forms or incentive that are needed by local community can be explained as follows : 1) cempaka tree seedlings are accessible; 2) regulate the forest operation by issuing decree of Governor or Forestry Department head of North Sulawesi Province; 3) strengthening communities capacity in cultivating cempaka through extension program, accompaniment, information media, and demonstration plot; 4) empowerment of local communities; 5) social forestry, revolving fund, program socialization, and simplifying the program.

In order to achieving the initial purpose, the distribution of incentives must pay more attention to these things : 1) Target; 2)Time; 3)Place. Some stakeholders that can be incentive providers are government (central and regional), private sector, or non-governmental organization (NGO).

Providing incentives can be done to the community in accordance with their needs (initial data is needed), so that the incentive is suitable to their needs. However, incentives can be given in an integrated manner, or a combination of several forms. By implementing these, the results will have greater impact.

I. INTRODUCTION

1.1. Background

Interest is a sense of preference and desire for a thing or activity without a command, an impulse in an individual which then gives an increasing to a desire to participate or engage in an interest. It is driven by social motivation which its purpose is to getting recognition and appreciation from the community where someone being involved.

Factors that affect Interest including an understanding to an object as something that will fulfil their needs. There are feeling and emotion that affect the object. The example is like a successful journey used by individual in a particular activity. It can increase the enthusiasm or strong interest of the people, surrounding environment (economy, problem, culture) and certain parties to give some support / facilitation to the activity.

Community interest in the development of cempaka cultivation is still weak. Although there is a strong demand for cempaka wood by the wooden house industry, local communities are still not interested in cultivating cempaka. The need for cempaka wood increase continuously with the development of the furniture industry and the Minahasa Wood House Industry. Not only do the wooden house industry meet the needs of the Minahasa people but they have also reached the National market and even export to foreign countries.

Nowadays, there is an increasing of cempaka enthusiasts. It's because of the fact that this type of wood is an earthquake-resistant for wooden houses. The Minahasa Wooden House industry which was originally developed in Woloan Village (so it is often called the Woloan House), has been developed to form the wooden House industry centres in other areas such as in the Village Mokobang - Modinding; Sion Village - Tompaso Baru and Tombasian Village - Kawangkoan.

Cempaka wood has been used for a long time by the Minahasa people as raw material for house construction, including door, window, and furniture, such as cabinet and kolintang music instrument. The use of cempaka wood has become a prestige (often being proud for house or furniture derived from cempaka wood), especially if the cempaka wood was Cempaka Wasian (*Elmerrillia ovalis*) species.

Cempaka Wasian tree is a plant that easy to be cultivated. It does not require high soil fertility requirements, can live on moist soil and rainfall ranges from 1400-2600 mm / yr, with an average of 9 months wet month and 2 months dry month. Cempaka Wasian trees thrive in community forests (including in plantation) as well as natural forests in North Sulawesi (Minahasa, Tomohon, South Minahasa, Southeast Minahasa and Bolaang Mongondow).

So far, most people still assume that planting Cempaka is unprofitable compared to Clove which is also one of the mainstay commodities in North Sulawesi. This causes Cempaka to be less optimally cultivated, especially compared to the harvest time. Cloves can bear fruit at the age of 5 years, while Cempaka can only be harvested at around 15-35 years. But along with the rise and fall of Clove prices on the market, Cempaka began to be widely cultivated in the form of community forest.

Low interest is allegedly related to the low incentives for the people to plant cempaka trees. Therefore, there is a need to identify and introduce incentives for local people to plant cempaka in various forms including materials, such as seeds, fertilizers, and in the finance aspect. Tax exemptions and land tenure policies can also contribute for the developmet of cempaka timber harvested from plantation.

For the above reason, ITTO is collaborating with Manado Forestry Research Institute in the Project PD 646/12 Rev.3 (F), specifically in Activity 2.4 "to collaboratively identify and introduce appropriate incentives for local communities to plant cempaka trees".

1.2. Purpose

In Activity 2.4, the dialogue and FGDs with community groups will be conducted in 21 Villages through 3 Regencies. This activity requires the involvement of the stakeholders at the Regency and Provincial level. The objectives of this activity are mainly concern in identifying the forms of incentives needed by local communities to cultivate cempaka and developing the implementation strategies.

1.3. Expected Outcomes

- 1) Forms of incentives that needed by local communities to cultivating cempaka trees.
- 2) Strategy of the application of identified incentives developed.
- 3) Consolidated reports presented to a stakeholder at the provincial and districts level to summarize the types of incentive that could be realistically afforded by the government.

II. APPLIED METHODOLOGY

To achieve the expected results, the following methods have been arranged :

Phase I : **Preparation**, the first phase that include a preparation material for socialization to related parties and Materials for Village Meetings. A preparatory meeting must be conducted in order to achieve the objectives of Activity 2.4. This activity must be Implemented consecutively with Activity 2.1.

Phase II : **Socialization**, the second phase that must be carried out to related parties namely the North Sulawesi Regional Forest Service; KPH and the Village Government. The expected result from this socialization is to find out the villages that can be the target of the project. It's is being implemented simultaneously with activities 2.1.

Phase III : The third phase is **Village Meetings**. Activities were carried out in 21 villages spread over 3 regencies (Minahasa, South Minahasa and North Minahasa). It is expected that the incentives needed by the village community to plant cempaka trees will be identified through this phase. The process flow of the meeting will be arranged in the form of a village-level FGD module which will be made during the first phase (preparation). It's is also being implemented simultaneously with activities 2.1.

Phase IV : The fourth phase is the **FGD meeting in district level**. The incentives identified from the Village FGD will be collected and deepen in the District FGD to produce more detailed incentives and implementation strategies as an effort to foster community interest in planting cempaka trees in the district. This FGD activity was carried out in 3 districts, Minahasa, South Minahasa and North Minahasa Utara. To achieve the expected results, a preparatory meeting of the FGD was conducted in the early activity process.

Phase V : The fifth phase is **Provincial FGD meeting**. FGD are carried out at the provincial level involving stakeholders (community, NGOs and related institutions). The expected outcome of this FGD is that a joint movement strategy is formulated from the parties to foster community interest in planting cempaka in the form of a strategic plan. To achieve maximum results, FGD was prepared in phase 1 (preparation).

Phase VI : The next phase is **Evaluation**. Each stage of the activity need an evaluation. Achievement of the activity was carried out using the forms prepared in the beginning of the activity such as pretest, posttest, and achievement sheet of other activities, all of which will be an evaluation material for the achievement of the objectives of the activity 2.4.

Phase VII The last phase is **Compilation of Reports**. At the end of the activity, a report on the implementation of activities will be made to strengthen the implementation process and the achievement of results and recommendations.

Table 2.1 : The time-line phases of Activity 2.4

No	Kegiatan	Oct. 2019				Nov. 2019				Dec. 2019				Jan. 2020			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1	Phase I	x															
2	Phase II		x	x	x												
3	Phase III				x	x	x	x	x	x	x						
4	Phase IV											x	x				
5	Phase V														x		
6	Phase VI															x	
7	Phase VII																x

2.1 Preparation

In obtaining the expected results, the preparation, collection of materials and equipment are necessary. These were carried out during the preparation stage. It's also including meeting and discussion process.

Incentives are things that encouraging or have a tendency to stimulate an activity. In addition, incentives are also motives and rewards formed to provide more productivity. The incentive is usually something that is needed by the recipient of the incentive.

For the purpose of increasing interest in cultivating cempaka, the form of incentives needed for answering the needs of the community, which become a problem and an obstacle in cultivating cempaka. As the result, these problems weaken their interest. The form of incentives can be given in the form of material and non-material incentives.

By considering the ability of incentive provider, the incentive should be a stimulus, catalyst, and facilitator, so that it can evoke the motivation to participate and for being an active role. By gaining all of these, the recipient of incentives can achieve their needs, become sustainable, and has a broad impact.

The process of identifying forms of incentives is through discussions at village meetings. The purpose of the meeting is for finding problems that becoming their obstacles to cultivating cempaka and the reason behind their low interest. The topic of discussion is including their need to address the identified problems.

Furthermore, the results of problems identification and needs of the community are used as FGD materials at the district and provincial level to produce relevant forms of incentives and their implementation strategies. The guidances for the FGD are shown on the following table:

Table 2.2: Identifying priority problems

Problems	Criteria					Total values	Rank
	I	II	III	IV	V		
Description:							
I. Felt by many people							
II. Awfully							
III. Inhibiting Increased Interest in Planting.							
IV. Frequent Occurrence							
V. Available Potential That Solves Problems							

The grade standard is between one and ten (1-10). The more people experience the problem, the higher the value, and the more severe the problem condition, the higher the value. Ranking are based on the highest value to lowest.

The following table was compiled after the alternative identification and relevant action found for solving the problem.

Table 2.3: Table Format for Solving the Problem

The Problem	Alternative Measures Troubleshooting	Relevant action needs

The incentives, forms of incentive, and incentive providers must have been identified after solving the problem. It's as shown on Table 2.4.

Table 2.4: The Incentives Provider

No	incentive	Forms of Incentive	Those who can provide incentives

In order for achieving the program objectives, the incentives that is given must have these following criteria: 1) Right on target; 2) On time; and 3) Right Place. The table format can be seen on Table 2.5.

Table 2.5: Strategy for Providing Incentives

No	incentive	Targets	Time	Place

2.2. Socialization

According to the results of the socialization and consultation, 21 villages out of 6 villages in 3 districts were selected. These villages can be seen in the following table.

Table 2.6 Selected Villages Become the Target of Activities

No.	Region	Village	Description
1	South Minahasa District		
	Tareran,	1. Rumoong Atas 1 2. Rumoong Atas 2 3. Lansot	✓ they have potential for the development and conservation of cempaka wasian. ✓ they have potential for the development of community forests.
	Amurang Barat,	1. Podos 2. Wanga 3. Tewasen	✓ they have potential for the development and conservation of cempaka wasian.

		4. Elusan	<ul style="list-style-type: none"> ✓ there are forest areas and social forestry activities. ✓ they have potential for the development of community forests.
2	minahasa district		
	Tondano Selatan,	<ol style="list-style-type: none"> 1. Peleloan 2. Tonsaru 3. Urongo 4. Koya 	<ul style="list-style-type: none"> ✓ they have potential for development and conservation of cempaka wasian. ✓ tondano lake buffer zone. ✓ They have potential for the development of community forests.
	Tombulu,	<ol style="list-style-type: none"> 1. Kembes 1 2. Kembes 2 3. Koka 	<ul style="list-style-type: none"> ✓ they have potential for development and conservation of cempaka wasian. ✓ buffer city of manado. ✓ They have potential for the development of community forests.
3	north minahasa district		
	Dimembe,	<ol style="list-style-type: none"> 1. Tatelu 2. Tatelu Rondor 3. Wasian 4. Lumpias 	<ul style="list-style-type: none"> ✓ they have potential for development and conservation of cempaka wasian. ✓ there are forest areas and social forestry activities. ✓ They have potential for the development of community forests.
	Wori,	<ol style="list-style-type: none"> 1. Talawaan Atas 2. Wori 3. Tiwoho 	<ul style="list-style-type: none"> ✓ they have potential for development and conservation of cempaka wasian. ✓ bunaken marine national park buffer zone ✓ They have potential for the development of community forests.

2.3. Village Meetings

Place and time of the village meeting activities can be seen in the table 2.7.

Table 2.7 : Time and Place of Implementation of Village Meeting Activities

No.	Region	Date	Place
South Minahasa District			
1	Tareran, Minsel	25 Oktober 2019	Rumoong Atas 2 Village Hall
2	Amurang Barat, Minsel	31 Oktober 2019	Pondos Village Hall
Minahasa District			
3	Tondano Selatan, Minahasa	8 November 2019	Peleloan Village Hall
4	Tombulu, Minahasa	15 November 2019	Kembes 1 Village Hall
North Minahasa District			
5	Dimembe, Minut	21 November 2019	Tatelu Village Hall
6	Wori, Minut	29 November 2019	Talawaan Atas Village Hall

Participants in the dialogue came from 3 districts: South Minahasa, Minahasa and North Minahasa. Participants from South Minahasa were 109 persons. They came from 2 Regions (Tareran and Amurang Barat) and 7 Villages. For Minahasa District, it was attended by 105 persons from 2 regions (South Tondano and Tombulu) and they were from 7 villages. Participants of the village meeting in North Minahasa also came from 2 regions (Dimembe and Wori) consisting of 7 villages with the number of participants 105 people.

There were 319 participants person came from 21 villages, spread over in 3 regencies. It is as shown in Table 2.8.

Table 2.8 : Number of participants in the village meeting

No.	Region	Participants		
		Male	Female	Total
South Minahasa District				
1	Tareran,	37	11	48
2	Amurang Barat,	40	21	61
Minahasa District				
3	Tondano Selatan,	42	18	60
4	Tombulu,	28	17	45
North Minahasa District				
5	Dimembe,	33	27	60
6	Wori,	33	12	45
	Total	213	106	319

Based on the gender of the participants who attended the village meeting, 33 % were female and the rest were 67 % male. It's as shown in the table above.

2.4. District level FGD meeting

Time, Place, and the participant of FGD district level (South Minahasa; Minahasa and Minahasa Utara) can be seen in the following table.

Table 2.9 : FGD on district level

Districts	Implementation FGDs		Participant		
	Date	Location	Male	Female	Amount
South M/ainahasa	December 6, 2019	Hotel Prince Amurang	18 (78 %)	5 (22 %)	23
Minahasa	December 12, 2019	Tumou Tou, Tondano	19 (76 %)	6 (24 %)	25
North Minahasa	December 20, 2019	Talawaan	17 (77%)	5 (23 %)	22

The discussion process began with the presentation about results of the village-level meeting. Problems faced by the community in the cultivation of cempaka and the solution for problems were presented in the FGD, and then it continued with the presentation by the speakers about the ways to enrich the understanding of participants regarding the program or action that can be taken to solve the problem.

The activity is in the form of a focused discussion for formulating the problems and actions needed with the guidance matrix of the formulation and problem solving that has been prepared at the preparatory stage (Phase I).

III. RESULTS OF ACTIVITIES

3.1. Community Barriers/Problems in Cultivating Cempaka

The problem faced by the community in planting cempaka wasian and their interest can be seen in the Table 3.1.

Table 3.1: Community Problem

No.	Problems	Description
1	Human Resources Lack of knowledge; o Nurseries o Planting o Handling of cempaka trees o Timber legality and regulations	<ul style="list-style-type: none"> o Unequal knowledge of farmers about cempaka wasian cultivation. o Lack of information about cempaka wasian culture. o Lack of socialization of the regulations on the use and distribution of wood. o No training.
2	lack of working capital (funds, equipment and land)	<ul style="list-style-type: none"> o Cempaka wasian cultivation requires a long maintenance time before it can be harvested. o There is no knowledge of a good business plan. o Relationship with other parties must be made. o Joint venture capital hasn't been established. o Existing land has been planted by other plants (cloves, nutmeg, coconut, etc.).
3	Seed availability (quantity and quality) is lacking / not owned	<ul style="list-style-type: none"> o Nursery knowledge is limited. o Too much depending on seeds that grow naturally. o Hard for getting the broodstock (except in southern Minahasa). o Community don't have information about the availability of seeds that is provided by the government.
4	Constraints in Marketing of Timber Products (Timber Legality)	<ul style="list-style-type: none"> o The government made it difficult for the shipment of timber. o Regulations that support cempaka cultivation do not exist yet. o Prices are regulated by the wholesaler. o Price competition among farmers. o Difficulties in Seed / Seed Marketing.
5	Farmer groups that are not healthy. <i>Assistance / incentives from the government and other parties is usually through farmer groups</i>	<ul style="list-style-type: none"> o AD / ART Groups are not organized by mutual agreement. o The function of the group management body is still weak. o The formation of groups for certain interests is not due to common interests (members). o Group hasn't been managed very well.

According to the table 3.1, some problem faced by the community in planting cempaka wasian are the lack of knowledge in cultivating cempaka (seeding to maintenance) and growth failing (bad seed and even died seed). Mostly, these reason make the farmer becoming lazy to replant cempaka.

The unavailability of cempaka seedlings also becomes an obstacle to planting cempaka. The seeds provided by the government, but the information about it has not yet reached them. The cost of transportation is also one of the problems.

Legality of cempaka wood is another problem that is felt by the farmers. It becomes the factor of their low interest of planting. This problem also makes them having difficulty in marketing the wood products. The legality problem continues to happen while they're installing the wood. Although there is a regulation in the distribution of cultivated wood in the Community Forest, namely PERMEN 85 of 2014, cempaka wasian has not registered as a type of cultivated wood yet, while in the Minahasa region (Minahasa, South Minahasa and North Minahasa), cempaka plants, have been cultivated by all of the society since the 1990s.

In addition, there are problems in the organization of farmer groups that are less professional and their business have low capital. However, the capital problem can be surmounted by themselves.

Based on the analysis of the problems, Obstruction of Interest Growth in Planting; The Frequency; and the Availability of Potential Problems that Solve the problem, then the order of problems, can be explained as follow:

Table 3.2: Problem Analysis

Rank of Priority	Problem
First	Seed availability (quantity and quality) is lacking
Second	Constraints in Marketing of Timber Products (Timber Legality)
Third	Knowledge is still lacking in the cultivation of Cempaka Wasian (Nurseries - Marketing)
Fourth	Farmer groups that are weakly
Fifth	Lack of Capital for cultivation cempaka(Funds, Equipment and Land)

Based on the problems / constraints faced by the community, which make interest of planting cempaka became weak, the solution for increasing their interests are arranged. Relevant action to solve this can be seen in the following Table;

Table 3.3: Relevant Action for the problems

The Problems	Alternative Measures Troubleshooting	Relevant action
Seed availability (quantity and quality) is lacking		
<ul style="list-style-type: none"> ○ There are seeds prepared by the government, but the access is remoted and 	<ol style="list-style-type: none"> 1) Provide cempaka seedlings that are easily accessible to people who are 	<ol style="list-style-type: none"> 1) Establishment of a seedling garden that is close and easily accessible to the community.

<p>have not reach the farmers.</p> <ul style="list-style-type: none"> ○ Lack of nursery knowledge. ○ There are no broodstock / rare trees except in Tareran. ○ There is no companion / instructor for nurseries. 	<p>interested in cultivating cempaka.</p> <ol style="list-style-type: none"> 2) Making demonstration plots in farmer groups. 3) Held nursery training / counseling (increased knowledge). 4) The group conducts comparative studies to farmer groups that have succeeded. 5) Identifying good parent trees for seedlings. 	<ol style="list-style-type: none"> 2) Demonstration plots The nursery involves a local farmer group. 3) Intensive counseling / assistance from PKSM, Extension, NGO. 4) Procurement of nursery information media Booklets, leaflets, posters, print media, electronics, online media, videos about cempaka cultivation. 5) Survey / certification of broodstock.
Constraints in Marketing of Timber Products (Timber Legality)		
<ol style="list-style-type: none"> 1. Supporting regulations are not yet adequate. 2. Lack of information / socialization on timber administration (there is Permen No. 85). 3. Cempaka Wasian have not been accommodated on the list of cultivated wood. 	<ol style="list-style-type: none"> 1) Provide understanding to the community, about timber administration. 2) Making the Governor Decree or Kadishut, which states that the Cempaka / Wasian tree becomes a cultivation tree on the Minahasa peninsula. 	<ol style="list-style-type: none"> 1) Counseling and socialization of timber administration regulations 2) Media of Information: Booklets, liflets, posters, print media, electronics, online media, videos about timber administration regulations.. 3) Regulation on provincial level TUK (Issuance of Governor / Kadishutda Decree of North Sulawesi Province).
Low knowledge of cempaka cultivation		
Lack of Knowledge in Cultivating Cempaka (Nurseries - Marketing).	Increased knowledge of farmers, about Cempaka cultivation.	<ol style="list-style-type: none"> 1) Training / training on cempaka cultivation. 2) Counseling / assistance, comparative study. 3) Nursery / cultivation information media, booklets, leaflets, posters, or videos about cempaka cultivation.
The Powerless Farmer Groups		
<ul style="list-style-type: none"> ○ Farmer groups are still powerless/helpless. ○ Lack of assistance. ○ Legality of farmer groups. ○ Farmer groups haven't been organized well. 	<ol style="list-style-type: none"> 1. Assisting farmer groups to operate properly. 2. Establish district / provincial level farmer forums. 	<ol style="list-style-type: none"> 1) Assistance from related agencies. 2) Information media, group guidebooks. 3) District / city / provincial level forum formation meeting.
Lack of Capital for cultivation cempaka (Funds, Equipment and Land)		
<ul style="list-style-type: none"> ○ There is no cultivation fee. ○ Harvest results is quite long. ○ No land. 	<ol style="list-style-type: none"> 1) Credit facilitation for farmers interested in cempaka cultivation. 2) Development of the Agroforestry system. 3) Provide land in the forest area. 4) Cooperation with other parties. 	<ol style="list-style-type: none"> 1) Business development plan training. 2) Assistance and Counseling of cempaka cultivation business. 3) Cempaka cultivation business information media (booklets, leaflets, posters, or videos). 4) Social forestry.

3.2. Incentives

Based on the farmer needs, the incentives that can be raised to increase their interest in cultivating cempaka are analysed as follows:

Table 3.4 : Incentives

No	incentive	Incentives	Those who can provide incentives
1	Cempaka Seedlings	<ol style="list-style-type: none"> 1) Giving Cempaka Seeds 2) Establishment of a seedling / demonstration plot that is easily accessed by the community 	<ol style="list-style-type: none"> 1) Provincial / Regency Government. 2) Forestry Service of North Sulawesi Province 3) Private Sector 4) NGO
2	Regulation on cempaka Timber Administration at the provincial level	Issuance of Governor / Kadishut Decree of North Sulawesi Province Socialization Timber Administration Cempaka	<ol style="list-style-type: none"> 1) Provincial Government. 2) Forestry Service of North Sulawesi Province
3	Capacity building in cempaka cultivation	<ol style="list-style-type: none"> 1) Training / Counseling about cempaka cultivation 2) Cempaka cultivation demonstration plot 3) Providing media for cultivation cempaka, including regulations, in the form of booklets, liflets, posters (print media), and electronic media (video) 	<ol style="list-style-type: none"> 1) Forestry Service of North Sulawesi Province 2) Private Sector 3) NGO
4	Farmer Group Empowerment	Organizing and Assistance of farmer groups in cempaka cultivation	<ol style="list-style-type: none"> 1) Provincial / Regency Government. 2) Forestry Service of North Sulawesi Province 3) Private Sector 4) NGO

Providing incentives Provision of cempaka tree seedlings that is easily accessible to people who have an interest in cultivating cempaka can be given in the form of cempaka seedlings directly at their location, or establishing nurseries that are close to them, and creating nurseries in the form of demonstration plots that involve them, so that besides getting the seeds, those things can also empower and increase their knowledge in cempaka nurseries.

In increasing the capacity of the community for cempaka cultivation, it can be done in the form of training and counselling as well as mentoring. In addition, it can also be done with information media (printed and electronic) such as leaflets, booklets, videos and others. Another way is by setting cultivation demonstration plot around them. It involves farmer groups, which at the same time empowering farmer groups.

Regulation that support cempaka cultivation is another incentive that is recommended. It is by issuing a Governor Decree or Forestry Service of North Sulawesi Province, regarding the circulation of cempaka wood from cultivation. As well as socialization to the public, especially those who cultivated cempaka, socialization can be in the form of counselling or through information media. The other things are such as increasing community knowledge in cempaka cultivation; and regulations including their socialization, which supports legality in marketing the results; as well as giving awards to the people who practice cempaka.

Regarding the problem about Lacking of Capital for cultivation cempaka (Funds, Equipment and Land), can be surmounted by themselves. On the other hand, if the government could facilitate the land and capital, it will encourage the community in cultivating cempaka.

The forms of relevant incentive are explained as follows:

- 1) Providing seedlings / nursery demonstration plots that are accessible for the communities or farmers.
- 2) Issuance of Governor / Forestry Service of North Sulawesi Decree on cempaka trees has become a cultivation crop.
- 3) Intensive counselling / assistance from PKSM, Extension, NGO.
- 4) Cempaka cultivation information media (booklets, liflets, posters, print media, electronics, online media, videos).
- 5) District / city / province level farmer forum meeting.
- 6) Social Forestry (HKM, HD, HTR).
- 7) Loan / revolving fund.
- 8) Agro Forestry tree seeds available.

3.3. Strategies in Providing Incentive

Incentives that are provided must focusing on 1) Target ; 2) Time ; 3) Place. By doing this, the incentives can reach its goal, which it is for encouraging / stimulating the community to plant cempaka trees.

Table 3.5 : The Strategies in Providing Incentive

No	incentive	Targets	Time	Place
1	Cempaka Seedlings	Incentive recipients (individuals or groups) must be those who are interested in planting cempaka and the location is suitable for cempaka cultivation, need to identify recipients	Providing incentives needs the right time, according to the right planting season, planning for incentives is needed	The location of the incentive is not far from the incentive recipient, so it is easily accessible

2	Regulation on cempaka Timber Administration at the provincial level	Unlimited	Unlimited	Unlimited
3	Capacity building in cempaka cultivation	Incentive recipients (individuals or groups) must be those who are interested in planting cempaka and the location is suitable for cempaka cultivation, need to identify recipients	Can be done at any time	Can be done anywhere and easily followed by the recipient
4	Farmer Group Empowerment	Incentive recipients (farmer groups) must be those who are interested in growing cempaka and the location is suitable for cempaka cultivation, need to identify recipients	Can be done at any time	Can be done anywhere and easily followed by the recipient and where the group is

The implementation of incentives, by seeing *Table 3.5*, it can be done to people who are interested in cempaka cultivation. The area must be suitable for growing cempaka trees, and an appropriate time must be arranged. In the provision of incentives process, it is necessary to survey the initial data regarding the condition of the recipients, location and good planting season.

The provision of incentives can be given in an integrated manner or a combination of several forms. By doing these, the impact would be greater.

An example of the provision of cempaka seed incentives given in the form of cempaka nursery demonstration plots, carried out at locations in accordance with cempaka growth conditions (system) and involving farmer groups who have an interest in cultivating cempaka. Therefore, preliminary surveys are needed before implementing the incentives. In addition, in order to producing the seeds, they need, there has also been an increasing in the capacity of communities and farmer groups. It's because providing incentives is accompanied by other forms of incentives, such as counseling / training, mentoring and empowering these groups.

IV. CONCLUSIONS AND RECOMMENDATIONS

4.1. CONCLUSIONS

Incentives are things that encouraging or have a tendency to stimulate an activity. The incentives are expected to encourage the community for planting cempaka trees. The incentives provided can be in the form of materials or non-materials.

The incentives needed by the community to increase interest in cultivating cracks are as follows:

- 1) Cempaka Seedlings,
- 2) Regulation on cempaka Timber Administration at the provincial level,
- 3) Capacity building in cempaka cultivation and,
- 4) Farmer Group Empowerment.

In providing incentives, it must refer to the problems and constraints of the community in the cultivation of cempaka trees. Incentives can be provided by the Government (central or regional) as well as other parties (such as the private / private sector or NGOs).

4.2. RECOMMENDATIONS

Incentives must focus on: 1) Targets; 2) Time; and 3) Space, so that the incentives can reach the goal which is for encouraging / stimulating the community for planting cempaka trees.

Providing incentives can be done to the community in accordance with their needs (initial data is needed), so that the incentive is suitable to their needs. However, incentives can be given in an integrated manner, or a combination of several forms. By implementing these, the results will have greater impact.

ANNEX 1

FGD Documentation

1. District Level FGD



South Minahasa



Minahasa



North Minahasa

2. Provincial FGD



Ir. Yopi D. Goliath, DEA was presenting the FGD Material



The participants