

THE COMMUNITY SUPPORT FOR THE ENFORCEMENT OF SANDALWOOD (CENDANA)'S REGIONAL REGULATION: A SUSTAINABILITY INTENSIFICATION OF CENDANA MANAGEMENT IN EAST NUSA TENGGARA PROVINCE, INDONESIA

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ABSTRACT

Sandalwood (Santalum Album Linn) which is its translation in Indonesian Language (Cendana) is one of the most important endemic plants and commodities that has ever succeeded in East Nusa Tenggara Province (Provinsi Nusa Tenggara Timur or NTT), Indonesia. Therefore, some various regional legal products are sought by the NTT's Government as a management measure in the context of preserving cendana which can ultimately provide economic benefits, ecological and inner satisfaction for the community in NTT Province. This is evident in the latest legal product namely Regional Regulation Number 5 Year 2012 concerning The Cendana's Management which contains the substance of protection and sustainable management of cendana itself. However, the problem that the authors raise in this study is that how's thus far the community's legal compliance with regards to the cendana's regional regulations. Community compliance is the benchmark of the analysis on this research. It reflected in individual/community's power to behave in support of established laws i.e community's legal compliance and cendana's regional regulation. We agree about community compliance is reflected in individual/community's power to behave (human behavior) as the valuable strength lies in the people (individual / community) themselves. Community compliance in different setting of society in NTT Province is dealing with flood disaster management and resilience in West Malaka Subdistrict, that a strength reflects the irregular system and also it runs in the regulation or statute law, policy, and implementation of regulations and policies for the benefit of the community. Thus, even though, this implemented concept is in different setting of society and case study, this conception base-fact (fieldwork) is complimentary and contains a mutual-supportive to each legal analysis, for this research. It means that there should be a sustainability intensification of cendana management which is also crucial to be reviewed in its implementation for a long-term preservation as there should be balanced-or mutual-corporation from the people to utilize the natural resources. The degree to violate should be less than the degree to protect the natural resources. Resource quality and quantity are heavily influenced by human behavior and the sustainability – or lack of sustainability – of management practices.

The purpose of this research is to find out the obedience law of the community towards the cendana's regional regulations. The research method was used on this study was the empirical legal research that examines people's legal behavior linked to legal norms. It was observed on the theory of obedience law. The result of this study indicates that the people obey the Regional Regulation Number 5 Year 2012 concerning Cendana's Management which appears through the behavior of cendana Law itself in the form of cendana cultivation, which was present already before the cendana's regional regulation was existed. There is also a group of community who plants cendana when the regional regulation applies because of the ease of seedlings. However, some various constraints were experienced by that group community including the limited land, theft, land use change and the limited trade which cannot be controlled by the Regional Government in NTT Province, Indonesia

Key words: sandalwood (*cendana*), obedience law, sustainability intensification, community in NTT Province, Indonesia

INTRODUCTION

Introduction to the Study's Problem

Maintaining *cendana* (*Santalum Album Linn*) as an endemic crop and the most important commodity which has encountered obstacles in its development in NTT Province, Indonesia among others: silvicultural technology (seedling, planting in the field, and harvesting) and also community involvement from the aspects of community knowledge and skills that are found still minimum. Some types of disturbances that often occur are a natural disaster and/or climate change (drought) which has an impact on *cendana* plants. It is over the function of *cendana* plant's field for its usage for community's benefits, human intervention leads to a damage; by cutting off the *cendana* trees for a livestock (making a cattle's cage for the purpose of keeping pets while their pets are left hanging around, so there is no good reason why they must cut down the *cendana* trees for no purposes). Every plant that grows naturally or because it is planted by individual/community in his/its own land or nearest forest, is a valuable natural asset owned by them, which he/community needs to use it appropriately and knowledgeably or skillfully, without neglecting the element of ecosystem balance in the perspective of the natural environment. The use of *cendana*'s body and trunks to make cattle-cage is necessary and important to protect and secure the livestock, if each individual/community has a good awareness and sense of belonging to protect and secure their livestock in a cattle- cage and have a thought that livestock is paramount important (human's daily behavior), if not, that is a waste or useless. If we compare to other region in NTT Province i.e the community in West Malaka Subdistrict who has to overcome the flood disaster seasonally, with regards to enhance their natural resilience becomes economic resilience, they thus made use very well a cattle-cage to protect and secure their livestock as it results as an economic resource for them (selling the livestock in the market; it is indeed marketable). This idea was supported by da Costa (2018:149) who mentions that the livestock is paramount important to the West Malaka's community in the phase of ex-ante or before flooding occurs, during, and in the phase of ex-post or after flooding occurs.

Noting, the history of regional law (West Timor's Regional Regulation Number 4 of 1953 concerning *cendana*) was regulated only as a distribution of *cendana* yields for the benefit of a handful of local rulers who are in the leadership strata of the Timor's tribe and the regional Government on Timor Island (Pello, 2001). The regional legal product does not contribute to the benefit of

cedana yields to the community related to the distribution of *cedana* management results even though *cedana* is harvested from community-owned land. The law is used by the regional Government as an instrument to control people's behavior so as not to use (make an economic benefit) of the community's *cedana* products and not to exceed the percentage which are expected by the regional Government in NTT Province. This is seen critically as *cedana* must be controlled by the regional Government in the Province (owned by the State) as it was over exploited in the past which was not a pro-preservation and the weak supervision of the sale of *cedana* products proves a fact that was revealed that a chance to be in a group of corruption in the Forestry Agency in South Central of Timor District (Timor Tengah Selatan or TTS) may occur. At the moment, the *cedana* trees are harvested, and they are also prone to theft or stealing, illicit trade due to regional regulations / legislation that are not a pro-community, burning down fields and the forests scorch for of *cedana* trees. According to the Master Plan of *Cedana's* Development and Conservation for 2010- 2030 in NTT Province, it is stated that 'Based on agro-climate zones and growth suitability, Sandalwood trees should ideally grow in areas around NTT Province such as Komodo Island, Adonara Island, Solor Island, Lomlen, Alor, Pantar, Sabu, and Rote'. The regional government in NTT Province is trying to preserve *cedana* trees as the trees have not shown an encouraging increase in their population, and the support of community participation related to *cedana* for its cultivation business. The NTT's Regional Regulation Number 5 of 2012 concerning *cedana* management, has two aims, they are. First, the implementation or realization of a *cedana's* sustainable management system. Second, the implementation or realization of a guaranteed certainty of rights to *cedana* trees. This research of this study shows that there is indeed a programme implemented on Sumba Island of Sumba (East Sumba) which has an aim to encourage the community to cultivate the *cedana* trees that are constrained by the limited number of the trees 'seedlings in NTT Province.

RESEARCH PROBLEM

Cedana plants are conserved through the enforcement of *cedana* regulations / legislation and preservation programs from the regional Government in NTT Province which are really essential to be implemented. This research addresses two questions in order to examine or reveal its implementation. The two research questions are (1) how is the community response to the enactment of the *cedana's* regional law in NTT Province? (2) what is the regional Government's efforts to support community participation in implementing the conservation law of regional *cedana* in NTT Province?

METHOD

This research method consists of types of research, scope of research, research approach, aspects were being studied, legal material sources and research technique method, analysis of law records (legal material). These are discussed on this section.

Type of the Research

This research was in a basis of a normative law and the law empirical studies which mean a research puts forward law reference aspect. Especially with regard to the formulation of concrete legal rules governing human behavior in general while describing a particular event in connection with environmental protection more specifically to the protection of *cedana*. Mertokusumo S (2011:50) then analyzes the relationship between legal provisions in a particular legal category and the relationship between legal categories related to the implementation of the legal content of *cedana* management (Hutchinson. T,2002:9).

This research is directed at the normative aspect that questions the legal regulatory aspects from a technical juridical point of view (*Dutsch* Language: *Tecnischjuridisch begrippen*) and also in the realm of legal theory is questioned aspects of the concept of legal observance. However, to strengthen the conceptual aspect, a little empirical legal thinking was included to strengthen the conceptual analysis of legal norms (*Dutsch* Language: *algemene begrippen*) (Hadjon & Tatik Sri Djatmiati 2005).

Research Scope

Empirical legal research was applied on this study to examine the legal behavior of people which is linked to legal norms contained in NTT Province's Regional Regulation Number 5 of 2012 concerning *cedana* management (Machmud, 2005:171). Authors were collected the qualitative data through observation and interviews using the "live case study" approach which aims at engaging community, so called community engagement approaches in several Regions in NTT Province, Indonesia i.e. Kupang City, Waingapu District, Soe City of TTS District, and Belu District.

Research Approach

This research was carried out based on several approaches which according to (Hutchinson T, 2002: 9) can be detailed as follows:

1. *Statue approach* namely the approach addressed to the NTT Province's Regional Regulation Number 5 of 2012 concerning *cedana* management in connection with community legal compliance.
2. *Conceptual approach*, that is, the approach aimed at the concept of legal obedience theory which is divided into three types :
 - a. Compliance obedience that is if someone obeys a rule, only for fear of being sanctioned. The weakness of this type of obedience, because it requires continuous supervision.
 - b. Identification obedience, that is, if someone obeys a rule, only for fear that his good relationship with another party will be damaged.
 - c. Internalization obedience, that is if someone obeys a rule, really because he feels that the rule is in accordance with the intrinsic values that are adopted.

The Aspects were being Studied

As mentioned previously, this section details the aspects were being studied which consist of two points as presented below.

1. Community legal observance that is shown by community response to the enactment of NTT Province concerning *cedana*
2. law.

3. Government's efforts in supporting community participation in implementing regional *cendana* conservation law in NTT Province.

The Source of Legal Material and Technical Research

Primary legal material is NTT Province’s Regional Regulation Number 5 of 2012 concerning *cendana* management as a legal document. According to Campbell (1996:2-3), *the authoritative records of the law made by the law-making authorities*. Likewise, as added by Watt (2001) who reveals that *the primary sources of law are those authoritative records of law made by law-making bodies*. Furthermore, empirical data was collected in the field in the form of notes and observations and the results of interviews with related parties. This research consists of several research informants. They are five technical services, twenty *cendana* cultivating communities, twenty-seven communities who are affected by local government programs, and three *cendana* company representatives. Thus, the total of informant is fifty-five. In addition, a Focus Group Discussion (FGD) was also used. Besides, benefiting secondary legal material sources such as reports on the results of publications from the Government, relating to the existence of *cendana* is very useful to support this research study.

Analysis of Law Records (Legal Materials) with regards to Community Compliance

The management and analysis of legal material, beginning with an analysis of the legal provisions of NTT Province’s Regional Regulation Number 5 of 2012 concerning “*cendana* management“ in relation to public law observance, through interpretations of the legal behavior symptoms of the regional *cendana* conservation. It is including mindset, ability to interact in groups in realizing the ideals of *cendana* law in NTT Province. All authors, however, agree the idea of da Costa (2018:157) concerning community compliance which she witnessed through a research about community compliance is reflected in individual/community’s power to behave (human behavior) to tackle the flood disaster; where human behavior as the valuable strength lies in the people (individual / community) themselves. She argues about community compliance in different setting of society in NTT Province dealing with flood disaster management and resilience in West Malaka Subdistrict, that a strength reflects the irregular system and also it runs in the regulation or statute law, policy, and implementation of regulations and policies for the benefit of the community (da Costa 2018:157). Thus, even though, in different setting of society and case study, this conception base-fact is complimentary and contains a mutual-supportive for this research. She suggests about the human behavior with regards to natural resources protection (in this case *cendana*) for its long-term maintenance that, “there should be a balanced-or mutual corporation from the people to utilize the natural resources. The degree to violate should be less than the degree to protect the natural resources. Resource quality and quantity are heavily influenced by human behavior and the sustainability – or lack of sustainability – of management practices” (da Costa 2018:138). The authors discussed this which linked to a sustainability intensification in the next discussion.

RESULTS AND DISCUSSION

Community Respond towards the Enforcement for Regional Regulation of *Cendana* in NTT Province, Indonesia

Based on the results of this study, it can be seen that the Provincial Government of NTT Province has developed the 4,750,000 of *cendana* trees to prevent damage to fragrant trees in seven Districts in the Province which are endemic to *cendana* since 2010. These actions are related to Government’s efforts to restore a glory or development for the Province as the most *cendana* producing area in Indonesia. A total of 2,800,000 *cendana*’s saplings of which have been developed on community land covering an area of around 3,500 hectares (ha), spreading over seven Districts in the Province. Meanwhile, the remaining 1.95 million saplings of *cendana* is aiming to meet the needs of supporting the mass movement to plant *cendana* in all Districts / Municipalities in NTT Province, Indonesia. The support of mass movement in planting *cendana* in all Districts / Municipalities in the Province is discussed below.

Community Obedience towards the Regional Regulation of *Cendana* Number 5 Year 2012

The result of this research dealing with community adherence towards *cendana* Regulation Number 5 of 2012, which is presented in Table 1. In general, the existence of *cendana* is based on a study about Regulation Number 5 of 2012 concerning *cendana*’s management.

Table 1. The Existence *Cendana* in General Based on Authors’ Research Study (result of authors’ fieldwork 2019) about Regulation Number 5 of 2012 Concerning *Cendana*’s Management

List of District/City in NTT Province	The Owners of <i>Cendana</i> ’s Tree	Age of <i>Cendana</i> ’s Tree	Total of <i>Cendana</i> ’s Tree
Kupang City	5	3-17 Years Old	2.568
Kupang District	5	5-25Years Old	2.250
South Central of Timor (<i>Timor Tengah Selatan</i> or TTS) District	10	2 - 45 Years Old	2.244

Noth Central of Timor (<i>Timor Tengah Utara</i> or TTU) District	9	5-40 Years Old	2.487
Belu District	6	4-35 Years Old	2.395
East Sumba District	10	2-15 Years Old	2.249
Southwest Sumba District	10	5-20 Years Old	1.387
Total	55	2-45 Years Old	15.580

Data Source: Authors' Result of Fieldwork 2019

Statements of legal observance must be juxtaposed as the causes and consequences of legal awareness. In connection with legal awareness and legal obedience, legal obedience is based on legal awareness, reflected in two types of awareness, namely: Community compliance with sandalwood law can be seen in the involvement of community members in the *cendana* conservation and cultivation development program, as desired by Regional Regulation Number 5 of 2012 concerning *cendana* management which is seen in community participation in the implementation of the provisions of the regional law in the region. It shows the level of community support for government efforts to preserve NTT's endemic tree is influenced by people obedience to the law on the basis of legal awareness.

Communities' Implemented-Management of *Cendana*

Cendana management implemented by the community can be seen from the behavior and patterns of the community in complying with *cendana* law. Based on the fifty-five informants' opinions, it is found a significant information about the implementation of *cendana* where law behavior supports the enactment of local regulations of *cendana* in NTT Province. Thus, it is actually a form of community obedience to *cendana* regulations which can still be divided into two parts, namely:

1. Legal consciousness as within the law, legal awareness as obedience law, is in law, according to the law rules that are realized or understood and;
2. Legal consciousness as against the law, legal awareness in the form of opposing the law or breaking the law. The selection of informants was relied on who have *cendana* trees. It aims at finding out the owner's level of obedience of *cendana* in the form of law behavior that complies with the content of the prevailing *cendana* regulation. The result of research outreached information dealing with implementation of *cendana* cultivation owned by fifty-five informants whom representing communities in NTT Province. Several variants of law behavior using the (H.C. Kelman's criteria in Achmad Ali) indicated three patterns or forms of community law observance. *First, legal observance.* It is a "compliance" which is understood it occurs due to fear of the threat of a local regulation). *Second, legal obedience.* It is an "identification" which is understood as it occurs due to fear of good relations with others which is expected to not be in a bad relationship. *Third, legal observance.* It is understood as internalization which it is about obedience to *cendana* law. Legal observance contains living values in society. In general, people in NTT Province support the implementation of the *cendana* Regional Regulation Number 5 of 2012 in accordance with Article 3 concerning the purpose of establishing a regional regulation on *cendana*, namely:
 - 1) The implementation of a *cendana* management system that is sustainable
 - 2) The implementation of certainty guarantee of *cendana* rights
 - 3) The implementation of a participatory, innovative and creative society in developing, preserving and utilizing potential funds.
 - 4) The implementation of the welfare improvement for the people.

Dealing with the purpose of *cendana* regulation and its implementation, a participatory discussion through interviews that involves communities is crucial as they have also their own *cendana* trees and the way of implemented-management such as in developing, preserving and utilizing the potential of *cendana* in creatively and innovatively ways. Authors understand that elements or factors of community obedience are insisting in themselves which will be important and valuable, when the mindset, initiative, and efforts are supposed to be implemented, in the movement for the good of themselves and the natural environment and social environment. da Costa (2018:157) adds and agrees about community compliance is reflected in individual/community's power to behave (human behavior) as the valuable strength lies in the people (individual / community) themselves. Community obedience depends on the legal provisions governing their behavior and the appropriate management pattern of the target or object being utilized (natural resources i.e. *cendana*). Therefore, da Costa has also invented and proven, that with her research about community obedience / compliance in different setting of society in NTT Province dealing with flood disaster management and resilience in West Malaka Subdistrict, a conclusion was drafted, that a strength reflects the irregular system and also it runs in the regulation or statute law, policy, and implementation of regulations and policies for the benefit of the community (da Costa 2018:157). This is in a different setting of society and case study which however brings a new insight and harmonious conception base-fact which is complimentary and contains a mutual-supportive to this research's analysis on *cendana* regulation and its implementation.

This research is directed to fifty-five informants who have the *cendana* trees. Whilst, of seven informants are adult-aged i.e. over 25 years old. Specifically, distribution of ownership of *cendana* tree in three Districts i.e. South Central of Timor (*Timor Tengah*

Selatan or TTS), North Central of Timor (*Timor Tengah Utara* or TTU), and Belu. In TTS, there are eighty-three trees ownership while there are fifty-six is found in TTU, and the rest is forty-seven in Belu. These trees are ready for harvesting, said by the informants in three Districts. According to informants, they are basically not influenced by the enactment of the *chendana* regulation Number 5 of 2012 which is currently in force, as well as local regulations that applied in their District. Furthermore, there are seven informants with their own point of views about the *chendana* ownership, where *chendana* tree they owned is ready to harvest while it cannot be cutting down for trade (economic purpose), as it has emotional meaning for the owners of the *chendana* tree (they love to see it grows without exploiting it). This is thus categorized as a unique thing that rarely found.

In addition to, the reasons for the limitations of *chendana* trees that are ready to be harvested is that the tree is a source of seed once harvesting, which can produce three-four kilograms (kg) of *chendana* tree per year with a selling price per kg, can reach 10 United States (US) \$ (100.000 Indonesian rupiah (Rp)) per kg. Thus, forty-eight informants behaved as the will of the *chendana* legal provisions because they were influenced by the implementation of the *chendana* seedlings planting program which was activated by the regional Government in each District in the form of seed distribution, and the free *chendana* saplings ready for planting that had been programmed by the regional government through the red wine program. The program is a form of commitment of regional leaders in supporting the potential of local biological natural resources which are also a mainstay of local communities whose existence is seriously threatened due to erroneous regional policies related to the rights to *chendana* in the past. Theoretically, the existence of the implementation of the program shows that *chendana* law is applied in the sense that the law functions: "regulate relationships in the community and solve problems that arise in relation to *chendana* management". In a more detail, the function of *chendana* law in the society's development today has its point of view about law. Law is seen as a regulator of the rules of public relations: in a sense, the law serves to show related to the behavior of managing *chendana* which is good, and which is bad. Therefore, *chendana* management can run orderly and regularly.

As a means of realizing social justice, the law has the characteristics which are being able to give justice to those who are wrong, and who are right; it can force regulations to be obeyed with the threat of sanctions for violators. This can be seen in the provision of Article 3 point b concerning the regional Government purpose. Regional Government aims at ensuring the certainty of *chendana*'s rights. Hereinafter, Article 3 point d concerning the implementation of improving people's welfare and continued with its provision, has an earnestly aim to implement the improvement of people's welfare, is part of auctioning social justice. This is in accordance with economic policies related to *chendana* management that *chendana* (*Santalum Album Linn*) is one of the plants that has high economic value and is a type of plant that has a superior fragrant oil content and its products are very reliable in the market. Therefore, it is expected that a *chendana* tree enables to support the people's economic life in NTT Province. The NTT regional Government is currently still pursuing an economic welfare for the people and eradicating poverty. It accentuates here that, law is used as a tool to bring people towards a more advanced areas of *chendana* in the field of environmental conservation, specifically the conservation of special biodiversity of *chendana*. This thought can be seen in Article 3 point c concerning regional regulation's aim at creating a participatory based-community who is innovative and creative in developing, preserving and utilizing the potential resources of *chendana* (in accordance with Indonesian Forestry Government Regulation Number P. 30 / Indonesian Minister of Forestry-11/2012 concerning Forest Product Administration, which is came out from the Private Forest).

As a means of dispute resolution, such as disputes of ownership of *chendana*; it can be obviously resolved immediately. According to the fifty-five informants, they said that there is a community participation which is also shown in the form of an establishment of *chendana* regulation which is contained in Chapter IV concerning *Chendana* Conservation and its Conservation Planning. Furthermore, the provisions in Article 5 stipulate the following points.

- 1) The Provincial Government and Regency / City Government are obliged to prepare a plan for the preservation and development of *chendana* in their respective regions;
- 2) The obligations of the Provincial and District / City Government as referred to in paragraph (1) shall be adjusted to the potential and land suitability for the development of *chendana* in their respective regions and;
- 3) The conservation planning referred to in paragraph (1) shall be arranged in a long-term plan in the form of a master plan for the preservation and development of *chendana* for a period of thirty years according to the *chendana* technical cycle and a five year planning.

The previous *chendana* regulation regulates self-growth on community-owned land in the regional Government offices (Article 4 point c, except where Government property is planted by regional Government staff to be looked after, and cared for, by the community). When the local regulations were implemented for a long time, the community withstands a fact through a response towards *chendana* trees' owners who have to take their own risk where their trees were stolen by people; this is an unexpected situation that the *chendana* trees' owners are really happy for the trees are going to soon be harvested (harvest season) and to be selling on the market which in turn, however, such conduct or treatment of the trees are also damaging the community's own *chendana* trees, instead of trading aims. This is a crucial issue, where the confusion of the *chendana*'s trade in the past has caused its existing, especially those trees are classified as not yet ready for harvest, while they have been marked by the Government by labeling the importance of *chendana* tree. However, most of people were destroyed by the other people who refused the *chendana* ownership by the NTT Province's forestry Agency. In spite of, on one hand, the community does not agree with the regional Government dealing with the ownership of *chendana* and on the other hand, the regional Government uses the power of local law to annex the rights for shaping a community's *chendana*. Recently, the new regulation shows that the *chendana* regulations that have been enacted have four elements, they are:

1. In the *cendana* regulations therein contained rules or provisions of commands and prohibitions or compulsory for legal subjects regarding the planting of *cendana*.
2. The form can be written (*cendana* regulations that have been revoked in written form)
3. These rules or regulations govern the life of the community in relation to the issue of fund management.
4. There is a financial penalty of a number of fees for violators.

When it is applicable, *cendana* regulations that have been cancelled, such as the NTT *cendana* law Number 16 of 1986; in Article 4, it is emphasized that based on the *cendana* ownership, there are three distinguishable points as presented.

1. *Cendana* that grows on state land and regional Government land belongs to the Regional Government.
2. *Cendana* that is cultivated, planted and maintained by an individual or legal entity on the land of the individual or legal entity is the property of the individual or legal entity itself.
3. For instance, if the *cendana* trees are being grown, the natural environment that is being cultivated is the property of the regional Government.

Since, these above regulations were applied, it is revealed that the *cendana* trees that were ready to be harvesting, were found on the informants (owners) whom under 25 years old. Based on the *cendana* regulations, community has already paid attention to the destructive behavior of the *cendana* tree which means the Government would not claim it. Notwithstanding, as according to Regional Government actions (Forestry Agency) which is based on Article 4 point c, it is mentioned that *cendana* that grows naturally on the land of individuals or legal entities and that are being cultivated, it is owned by the Regional Government.

Another interesting story from the fifty-five informants which explained their point of views about their actions in cultivating and preserving *cendana* trees could be turned into a future solution, which is it is a hope, there will be harvests promises and high selling points of their trees. In addition, in ecological aspect, it is also hoped a benefit could be earned. Considering, *cendana* tree grew in community house's yard which brings on an environmental aesthetic value and which beautifies the garden in their house. There is also a view related to a hope dealing with a success of ecological maintenance to be used as a source of seeds. However, it was realized in economic aspect, that the *cendana* law will be addressed by the urban community as if it did not promise to enjoy the beautiful yields of *cendana* due to a plant disease, a limited land to plant *cendana*, natural disaster (drought) and the ignorance of caring for *cendana* trees that live in the community's house yard is thus a challenge that puts on an effort to realize *cendana* legal behavior in the Kupang City, NTT Province.

Based on our research on people who have *cendana* trees in Kupang City i.e three Districts (*Maulafa* District; *Penfui* Village, *Maulafa*, *Kolohua Fatukoa*, *Alak* District; *Manulai*; 2 Villages, and *Manutapen* Area; and *Kota Raja*; *Arona* Village). These three Districts are preserved as it is near to water sources and urban forest areas. The desire of the community to plant *cendana* is in a very limited number reasoned by the spirit of greening their own settlements coincides with the supply of *cendana* trees which are free of charge. As for, community who's planting *cendana* has a purpose to obtain an economic success experience; if *cendana* can be successful when it is harvested and being well- maintained by them (a hope which reveals a baffling futuristic condition; in between certainty and uncertainty, it is a hope though).

Based on the authors' field observations, it has shown that there are thirteen respondents who were working both as activists of *cendana* plants and they had also land at their house and were planting *cendana* seedlings. The personal economic benefits, was the main reason. It is then related to the implementation of formal legal norms or informal norms, resulted in various economic calculations including the interests of inner satisfaction of every community. This can be seen from the actions of the informants who have *cendana* trees, but they are still very limited in number ranging from one to five of *cendana* trees' ownership. Meanwhile, in generally the community has one *cendana* tree. *Cendana* tree's age ranges from three to sixteen years living, with a stem circumference of nineteen centimeters (cm) to forty-two cm as measured on the circumference of the rootstock near the root of the tree, which is a five cm above the ground surface of the *cendana* tree. *Cendana* tree's height which is 1.70 meter (m) to 4.98m has a good fertility as it is often being cared for by its owner.

Cendana trees that are planted and grown in Fatukoa Village, NTT Province are quite fertile living on a land owned by the Forestry Agency. In spite of that, there are 2,357 and 184 *cendana* trees were burned to death due to a land grabbing by the community. Some threats of *cendana* trees' life in Kupang City are implemented through confiscating of forest land between the community and local government, limited land, drought due to natural disaster and/or climate change factors and also the threat of disease to the trees which are marked by the drift of branches and sandalwood trunks. Based on this fact, it is known that *cendana* trees are classified as plants that are of interest to the community with the following considerations:

1. *Cendana* tree is a unique tree which produces *cendana* oil and it is very fragrant; it requires a special care (for tree lovers, this condition is a challenge for *cendana* cultivation, in addition to the threat of drought and diseases that may harm or devastate anytime).
2. *Cendana*, is perceived by the tree farmers/planters as a high economic value as the sale value is quite expensive (42,5 US \$ or 425.000 Indonesian Rupiah (Rp) to 70 US \$ or 700.000 Rp / kilograms (kg)) depending on the size of the tree and the age of harvest (thirty to forty-five years).

The *cendana*'s Regional Regulation in Chapter VIII is regulated on ``*Cendana* Commerce'', specifically, on the provisions of Article 15 are regulated:

- 1) The Provincial Government has the authority to regulate trade arrangements for Districts / Cities to the Region.
- 2) The District / City Government has the authority to regulate trade outside the District / City area within the territory.

- 3) The authority to regulate the *cendana*'s trade as referred to in paragraph (1) and paragraph (2) shall be carried out through a planning, coordination, supervision and supervision activities according to the respective scope of authority.

In connection with the *cendana*'s trade system, it has been regulated separately by regional Governments in NTT Province. As with the regulation on *cendana*, for some Districts such as TTS, TTU, and East Sumba; such regulation has an aim to protect its tree in each of this respective region. It is done after the revocation of *cendana*'s provincial regulations and before the issuance of its new regulations. Dealing with the act of theft for *cendana* trees owned by certain parties of the community, it is thus, a solution to overcome this type of vulnerability i.e. theft of *cendana*, which is through the stipulation of the Regional Regulation Number 5 of 2012 contains the anticipation of the stipulation of Article 16, which stated out that: „Sale of *cendana* is originating from community-owned land and / or business entities is sold freely by the owner after obtaining the Origin Certificate of *Cendana* (Surat keterangan Asal Usul or SKAU) from the authorized official“. Furthermore, in Article 17 it is emphasized that:

„Further provisions regarding the trading system as referred to in Article 15 shall be regulated by a Governor's Regulation“.

The emergence of the provisions of this Article is based on the community's past experience and is greatly disturbed by the application of old *cendana*'s regulation. In addition, the community responded to the situation in the form of destructive actions such as stealing the *cendana* from other people whom they were ready to harvest *cendana* and selling it in “the black market“ (Indonesian language: pasar gelap). This is caused by the problem of ownership of *cendana* trees that live on community land that is shackled by regional regulations, so the wisest solution is that the ownership of the *cendana* trees belongs to the regional Government's.

Furthermore, the problem of limited land to planting *cendana* saplings for residents in Kupang City is an obstacle in realizing the desire of the *cendana*'s regulation which is related to its cultivation, except for city residents who live and have ample land on the outskirts of the City. These city residents were continuing to maintain the *cendana*, even though the number is limited to a high dozens of trees up to twenties trees.

Regarding urban land perspective, there are six informants with their point of views who explained that *cendana* is an excellent plants while it is difficult to be well-maintained and/or care for. This condition indicates there is obviously a hope of the community to planting *cendana* at their house's yield and getting its harvest, seasonally. The main problem can be encountered by the community is in its maintainance process, which is still doubtful of their expectation due to the threat of natural disaster and/or climate change (drought), *cendana*'s disease, long harvest, and aged of 35-45 years despite the high price. Some informants who have the experience in maintaining and trading *cendana* tree, have shown their optimistic attitude towards *cendana* cultivation. On the situation, it is yet found that other community members who having with a very limited experience, are willing to maintain it though.

The problem of *cendana*'s breeding is the biggest problem in the community as they have no experience in having the *cendana* seeds for their breeding and its future preservation or maintenance. Besides, it is indeed very limited also to get a quality seeds of *cendana*, (Article 6 paragraph (6) concerning the breeding arrangements).

Later problem is that, community still remembers the poor security from the implementation of *cendana* regulations in the past that befell those who have *cendana*. This is still found in the community today though, due to a limited information about the implementation of a new *cendana* regulation that actually has governed the differences between the regional Government and the *cendana*'s community; where the regional Government intends to encourage all parties to preserve *cendana* through its cultivation and well-known as a NTT Province's favorite tree.

Community involvement in planting *cendana* trees was growing up, due to the strong desire to have *cendana* that is ready to be harvesting with a little hope that the tree is still a unique tree component that can complement community plant collections in the yard of the house. Seeing the condition and response of the community, authors were drawing several significant points which are presented as follows:

- 1) The involvement of the people of Kupang City to planting the *cendana* saplings and maintaining *cendana* trees is determined by the area of land owned by an average land area of five square meters to twenty-five square meters.
- 2) Community involvement is hindered by the area of land owned and the desire to grow *cendana* commercially and is very desirable economically but other obstacles in the form of soil fertility, and the limited water supply in the dry season that threatens the life of the *cendana* tree.
- 3) The results of the study paid attention to the condition of the community when it is associated with local regulations regarding the strong allegation of the involvement of urban communities related to the planting of *cendana* saplings and their maintenance. This is due to community wants to arrange a beautiful and comfortable home yard in a residential environment. This is an embodiment of the provisions of Article 3 of the *cendana* Regional Regulation with regards to the setting goals for the establishment of *cendana* Regional Regulation, namely: the realization of a sustainable *cendana* management system. The realization of a participatory, innovative and creative society in developing, preserving and utilizing the potential of *cendana* in accordance with Article 13 regarding the ownership of *cendana* has also been recognized by the community as the owner as regulated below:

- a. *Cendana* trees that grow naturally and / or are cultivated on a land owned by individuals / customary groups and / or other legal entities; these *cendana* trees are owned / controlled by individuals, customary groups or legal entities.

- b. *Cendana trees that grow naturally and / or are cultivated on a State land become the State property.*
- c. *Cendana trees that grow naturally and / or are cultivated on a land owned by the provincial government become the property of the provincial government.*
- d. *Cendana trees that grow naturally and / or are cultivated on a land owned by the district / city government belong to the district / city government.*
- e. *Cendana trees that grow naturally and / or are cultivated on a State land owned by the provincial government, district / city government in which there is a business license for the use of the area by the community, or customary groups or entities; the ownership is adjusted to the provisions of the legislation and the type of licensing which is given.*

Community involvement in planting *cendana* saplings is based on participatory, innovative and creative ideas in developing, preserving and opportunities for the potential to grow plants and the availability of locations for green open spaces of the city to be used to grow sandalwood is currently very limited even though it is largely utilizing sandalwood and its potential economically. However, in general the behavior of the community's obedience to the Regulation of Sandalwood Number 5 Year 2012 is classified as good, especially related to cultivation efforts in accordance with Article 14 as follows:

- 1) *Local and district / city governments were carried out cultivation and facilitate communities to plant on community-owned land.*
- 2) *Business entities and individuals who are engaged in the business of buying and selling, and managing cendana are required to carry out cendana cultivation.*
- 3) *Obligations of individuals who are engaged in the business of buying and selling, and processing cendana as referred to in paragraph 2. These are carried out on the results of cendana from community's land and / or a land owned by provincial / district / city / city governments and / or production forest areas.*

The result of this study shows that the *cendana* legal behavior of the people in NTT Province appears to spread an influence on some factors i.e economic, ecological, and inner satisfaction of the offender. It was also proven by informants that the economic calculations of planting *cendana* were more accountable about the uncertainty of obtaining economic benefits, in which the satisfaction of planting *cendana* at this time was a positive individual choice in supporting the law of *cendana* cultivation and its preservation, as contained in the *cendana* regulations. This research also reveals that *cendana* trading have absolutely no information for the community to plant *cendana* in NTT Province. This has something to do with the lack of information about *cendana* trade and also due to its producing areas are still very limited. In addition, the community is still confronted with the problem of theft of *cendana* trees which are used as a source of seeds which is in a limited number; they are often targeted by thieves. This theft action was done and usually occurs at night when the owner is off guard (asleep, weak supervision due to certain activities outside the settlement, etc.). Moreover, this theft action currently carried out recklessly against *cendana* trees that are not sufficient yet in harvest, problem in harvest age and of a low quality; in the same time these are needed for souvenirs as it has a concern of its aesthetic (arts) and economic benefits, in accordance with Article 10 of the *cendana* Regulation that emphasizes: *cendana* can be made as souvenirs. This means that the community has the opportunity to result a value which is economically through the production of *cendana* itself, in the form of art objects, worship equipment, and various incense materials.

In addition, *cendana* trading is still found individually in NTT Province, and tends to be limited and somewhat closed because *cendana* trees are ready to harvest while they are still limited in number, controlled by the regional Government. Also, there is still a mass trauma and the number of trees that are ready for harvest are indeed very limited and there is no clear information and guidance or any socialization from the Regional Government. This situation can also happen as community it self, has not informed yet about the administrative process for planting *cendana* to the regional Government and lack of controlling and well-sufficient information as well as socialization were not given by the regional Government to community. With regard to *cendana* trading it self, the number of sales is very limited and the community does not know the exact mechanism of trade. Based on the result of an interview with regional Government (Department of Environment and Forestry); it is informed that *cendana* trading in NTT Province has decreased. *Cendana* production has declined since the revocation of the 2006 *cendana* Regional Regulation. Moreover, *cendana* has ever been processed by the Tropical Oil Company while it has stopped its production due to the absence of *cendana* raw material.

Then in 2005 there were three *cendana* management Company i.e Commanditaire Vennootschap (CV) or Persekutuan Komanditer, namely CV Fadalín, CV. Horas, CV. Surya Nirmala) who have tried/did an effort to work on the management of *cendana* trees, namely terraced *cendana* trunks and white *cendana* trunks without terraces (white *cendana*) which produce *cendana* powder for incense, tasbi-rosary for the worship of Christians. However, this business is constrained by the stock of raw materials. Based on the authors' interviews with the Company on August 12, 2019, it was revealed that *cendana* was ready for a harvest was limited, the community also did not want to sell their *cendana* trees which are ready for a harvest as the numbers were limited. Besides the selling price of the unit of kilograms (kgs), set by the regional Government was considered as unbalanced by the community themselves as for *cendana* maintenance may be complicated and security costs may be further higher than before as what it was planned for.

Community Respond in Kupang District, NTT Province, Indonesia

According to authors' field-research and analysis, the existence of *cendana* trees is maintained by the community in Kupang District. Community engagement i.e. activities does support the existence and implementation of the *cendana* Regional Regulation Number 5 of 2011. This is an embodiment of the idea of guaranteeing the State to integrate components of the environmental life and regional development in a space, known as environmentally sustainable development. In connection with the preservation of *cendana*, local Government in East NTT Province, Indonesia has a role in mobilizing local communities.

Details of the local Government's role are presented in Table 2. Community Law Behaviour towards *Cendana* in Kupang District.

Table 2. Community Law Behaviour towards *Cendana* in Kupang District

No.	Community	<i>Cendana</i> 's Tree	Width of Land/Area (ha)	Ownership's Information
1.	Sub-District of Taebenu			
	Baumata Village (<i>Desa</i>) Central of Oeltua & Tuaklalo	244	7	Saemone Village (<i>Kelurahan</i>), The Nakmofa's Family, The Konis's Family & The Sonbai's Family
	East Baumata Village	1.183	87	The Manu's Family (21 ha), The Nautu's Family (23 ha), The Baitanu's Family (26 ha), and The Masu's Family (17 ha)
2.	Sub-District of South Amfoang	894	16	The Be's Family, The Es's Family, and The Mano's Family
3.	Sub-District of Central Amfoang	1.429	39	The Nome's Family (18ha), The Saefatu's Family (14 ha), and The Tabais's Family (7ha)
4.	Sub-District of Amarasi	1.653	20	Community
Total		44.703	169	

Data Source: Result of Fieldwork, Authors 2019

Based on the Table 2, Community Law Behaviour towards *Cendana* in Kupang District, some descriptions about ownership and threat of *cendana* trees are poured into following points.

1. Ownership of *Cendana* Trees

Cendana trees in Kupang District are generally owned by families whose land and trees are inherited from their parents/ancestors. It is found through interviews with several research informants dealing with *cendana* trees that are owned by the community, these trees' seeds are generally have grown naturally in the community's garden / forest. Also, the condition of *cendana* if we can relate to Government's program about provision of *cendana* seedlings assistance that is to be directed to villages; we can found that these villages have no or only less amount of *cendana* that is well-growing.

2. Threats to the Life of *Cendana* Trees

Some threats should be anticipated are mainly about leaf pests, white lice causes curling of leaves and for trees to attack *cendana* trees resulting in dead trees. In addition, other threats in the form of land fires by humans related to dry leaves in the summer / dry, especially attacking saplings of trees 0 - 5 years. Other threats also including the theft of *cendana* trees, especially those aged over 20 years and over and are very disturbing for the people who own *cendana* trees, specifically, those whose forest land is far from the settlement where their owners live.

Thus, the analysis towards this condition, with regards to participation of the community for *cendana*'s culture and its preservation, we can conclude several responses related to the implementation of *cendana* Regional Regulation Number 5 of 2012. These several responses are mentioned as follows:

1. Communities in Kupang District generally consider that *cendana* is a unique plants that NTT Province has, which in further it must be preserved, reasoned by its historical / cultural values. Maintenance is the wisest thing to implement.
2. Communities are very interested in planting *cendana* trees in order to fulfill the wishes of the regional regulations even though, in fact they do not know that a new *cendana* regulation has been enacted which gives ownership rights to the community separately from those controlled by the regional Government. This condition results a feeling of uncertainty from the community sides, in which, in efforts to obtain a business result from the cultivation of *cendana* trees might be useless. In addition, community expectations for the success of the *cendana* business due to the harvest time of *cendana* with a long-aged, ranging from the age 35-40 years; the spirit to care for *cendana* becomes very less and also a threatening drought due to a climate change and/or natural disaster must be a considerably point to be paying attention for.
3. The young generation in NTT Province that cultivate *cendana* recently, in general have not planted *cendana* trees yet, but they have a *cendana* tree. They have large tracts of land and there have been *cendana* saplings that grow on their family land.
4. Current owners of *cendana* tree in NTT Province have never been involved in the *cendana* trade which leads to the economic issue for themselves. Lack of motivation for *cendana* cultivation, it is not economically having a bright future in terms of *cendana*'s economic benefits. In addition, there is still a sense of distrust from the owners of *cendana* tree to the regional Government that one day they can enjoy the results of their own *cendana* cultivation as experience they went through, they took a lesson about the implementation of the old *cendana* regulations.
5. In terms of Indonesian Government' management actions and commercial policies in the mass media toward *cendana*; it is thus assessed by the communities as being less open-public where the Government tends to only show various programs (temporary campaign without a long-term commitment) on the cultivation and distribution of *cendana* seedlings through the Environmental Agency and Forest Agency' programs.

Therefore, by paying attention to the community's response about the Indonesian Government' efforts in implementing *cendana*'s preservation from the Regional Regulation Number 5 of 2012. It can actually be divided into the behavior of *cendana*

seedlings. Nonetheless, overall, the informants have shown their desire to plant *cedana* tree. In the maintenance phase, in order to reach the age above 10 years, community gave a less clear response and argument of maintaining a *cedana* tree though. A simple perception of community about maintenance of *cedana* which requires a very limited care and it depends really on natural conditions, is true but maintenance is crucial though from any vulnerable situations such as the threat of death, theft and disease, pest, conversion of *cedana*, were indeed slowing down the pace to other development activities such as settlements, roads and other agricultural businesses. Besides, community's expectations to enjoy *cedana* yields were unimaginable and huge that has a contrary action with what they've expected so far. The owners have never provided some significant results (maintenance and economic results) of *cedana* tree.

Community Respond in South Central of Timor (Timor Tengah Selatan or TTS) District

Community's life in TTS District with regards to the preservation of *cedana* trees, it is indicated that community concentrates more their lives on cultivation sector for *cedana* tree. This happens as *cedana* trees has a good story in the past where the trees have been excellent for the people in TTS District in terms of economic benefits while it was at the same time strongly rejecting the implementation of *cedana* regulations that may be harmed the community in the past in the form of *cedana* damage. Community has a strong commitment and loyalties to not give up to cultivation and maintenance of *cedana* trees up to harvest time. Nonetheless, community interest in this TTS District is also high due to *cedana* growing land is classified in accordance with the quality life of *cedana* trees themselves, and in general the community still has a fairly large area of land at least 0.5 ha and above which help them to be more focusing on *cedana* tree maintenance. The community today has also a huge willingness to plant *cedana* trees although they experienced some obstacles in *cedana* harvest (limited amount of a success of planting the tree), as confirmed by all respondents (100%). This condition triggered an increase of the community's desire to plant *cedana* saplings and re-develop *cedana* businesses around their respective homes. However, threats to *cedana* trees to be more survival and successful must be facing a climate change and/or natural disaster problem (drought). In addition, the change of *cedana*'s land function to attack *cedana* trees is a frequent occurrence including theft, committed by unknown people to the *cedana* tree's owner. Along with development activities that require land in TTS District, this has become a threat to the area of *cedana* trees, including the breakthroughs in planting other types of trees such as teak which are needed by settlements with a faster harvesting period and quite profitable for their owners. Besides, the land use change is also related to breakthroughs from agricultural businesses such as horticulture, making the pattern of owner care for *cedana* trees is not as intensive as the community caring for a short-lived plants rather than caring for *cedana* trees and it is left to the natural conditions.

Community Respond in North Central of Timor (Timor Tengah Utara or TTU) District

Cedana tree is also perceived by the community in TTU District as the excellent tree. Normatively, the management of *cedana* at TTU is authenticated in Regional Regulation Number 2 of 2004 concerning *cedana* which was passed on May 7, 2004 of the "Regional Gazette of the TTU District, Number 2 Series E-Number 2" and "Supplement to the Regional Statute Book Number 2" which requires that *cedana* management can be carried out normatively after the revocation of the NTT Province's *Cedana* Regulation in 1996. The law stipulates in Article 2 that *cedana* management includes: breeding, planting, maintenance, protection, exploitation and transportation. The management was regulated concerning *cedana*, in this article, is carried out by the regional Forest Service. At this time the enactment of the Regional Government Law 23 of 2014 and all the changes, and the authority of the forestry service in the district / city are withdrawn to the Provincial Living and Forestry Curvature Office; The area of *cedana* management is controlled by the regional technical implementation unit (Unit Pelaksana Teknis Dinas Daerah or UPTD).

Dealing with, *cedana* population, it is also found in TTU District that it is planted by the community or is self-grown on community-owned land and the regional Government's land and it is in State's forest areas as shown in the next discussion part about "Adverse on Regional Law Arrangements concerning *Cedana* in NTT Province, Indonesia" (Table 3 The Forest Land Owners of *Cedana* in NTT Province, Indonesia, Year 2019).

Cedana that is ready to be felled has been cutting down since 2004 in TTU District and this also has an effect on the stopping of the operation of three *cedana*'s holding Companies in Kupang City. Moreover, currently, the *cedana* trees that grow in TTU District were planted around 2000 and grown on their own, in the land of the community and the regional Government of TTU District, with an average age of about a dozen years. *Cedana* trees that grow are also supported through the Red Wine (*Anggur Merah*) program related to *cedana* cultivation so that the tree began to be seen growing in several Districts.

Community Respond in Belu District

Based on the result of a research was done through interviews with several informants in Belu District, it is shown that the community response towards *cedana* regulations looks to be positive with the level of its ownership ranging from 0-10 years. This was supported by the NTT provincial Government program on mandatory planting of *cedana* trees. Community in Belu District, especially those who own a large area of half of a hectare or more, wished to plant *cedana* seedlings in Lamaknen Subdistrict, especially in Dirun Village as they have never been enjoyed *cedana*'s trade results. Community in Belu District prefers to plant *cedana* in the yard at their house, because it is easy to care for and control by them. In addition, with regard to its protection, *cedana* is damaged due to the threat of fire in the dry season, which is able killing the *cedana* trees.

The Threat to *Cedana*'s Cultivation in Belu District

The threat to *cendana* that belongs to the community is mainly about theft problem, on land owned by communities that are far from where the owner lives. This can occur due to a weak supervision of the owner and also the regional Government. Nonetheless, the result of an interview with E.S. Koli, Y. Tabun at a Government's Institution i.e Regional Management Body for Watershed and Forest Protected Area (Balai Pengelolaan Daerah Aliran Sungai dan Hutan Lindung or BPDAS), he was on behalf of BPDAS, argues that "they were intensively informing about the Benenain and Noelmina forests protected areas to the local community in the District". The community has an interest too to plant *cendana* tree. Thus, a regrowth of *cendana* was related to its cultivation saplings and this was marked by increasing the activity of *cendana* saplings, which was carried out by the community to the Permanent Nursery for *Cendana* seedlings, and this was cultivated by the NTT regional Government i.e. two Government's Institutions (Body for Management of Benenain Forest Protected Areas and a Body for Noelmina Forest Protected Areas).

In conclusion, this multifunctional plant has a significant distribution of its existence in several areas (Districts) in NTT Province, Indonesia. This discussion is presented.

Community Respond in East Sumba District

Based on data from informants, from field-research in East Sumba District, it is found that „the behavior of *cendana* law in the community“ is in fact the community obeys to the behaviour law of cendaan. It is not as similar as other social observance and legal observance which are an obligation that must be carried out and if it is not implemented there will be sanctions (social obedience of community; if it is not carried out or carried out, a social sanction may judge them). It is not excessive if obedience in law tends to be forced through the involvement of local Governments through the mandatory program to plant *cendana* trees. Community in East Sumba District planted *cendana* to coincide with the implementation of the NTT regional Government program which is about *cendana* cultivation for families and communities. In line with the presence of the new *cendana* regulations, it is indirectly encouraging community in the District to carry out ist individual *cendana* conservation.

Community Respond in Southwest Sumba District

The community's response towards *cendana* regional regulation, was observed, that it is seen in the behavior of legal compliance, which is in essence it's the loyalty that a person has as a legal subject to the rule of law manifested in the form of real behavior. As a concern, while, the public legal awareness is something that is still abstract in nature which has not been realized in the form of real behavior to fulfill the will of the law itself. Many of the people truly realize the importance of *cendana* law and respect for the law as a rule that needs to be obeyed by them, either because of its instinctual or rational impulse. Likewise, the importance of legal awareness possessed by the community, but can easily wear off by opportunistic behavior that allows one to be able to get greater benefits both from the material of *cendana* trees especially the *cendana* trees that are ready for the harvest. This behavior is found in the behavior of non-compliance from the community (if it does not obey the law). In this case, the person's interests will be more accommodated by not obeying the law even though they have to harm or potentially harm the interests of many people such as stealing *cendana* trees above the age of 15-20 years.

The Ownership of *Cendana* Based on Regional Regulation Number 5 Year 2012

According to the Regional Regulation of *Cendana* that it is belonging to the regional Government's is affirmed in the provisions of Chapter III specifically in Article 4, regulating the ownership of *cendana*, which is distinguished it into three points as presented below.

1. *Cendana* that grows on the State's land and Regional Governments belong to the Regional Government's.
2. *Cendana* that is cultivated, planted and maintained by an individual or legal entity on the land of the individual or legal entity is the property of the individual or legal entity itself.
3. *Cendana* that grows naturally on the land of individuals or legal entities that is being cultivated, it is owned by the Regional Government.

Normatively, it can be seen that the rule of law as a rule applies as juridical if its determination is based on a higher level's rule or is formed on a predetermined basis. The rule of law applies sociologically if the rule is effective it means that the intended rule can be enforced by the authorities even though it is not accepted by the citizens (the theory of Power). The rule of law applies because of recognition from the public. Likewise, the rule of law applies philosophically that is in accordance with the ideals of the law as the highest positive value.

Local legal provisions concerning sandalwood show the sociological aspects as well as the philosophical aspects of sandalwood as a source of community life. Meanwhile, the involvement of local government in the sense of being controlled by the regional government so that there is an orderly management for the community does not have a direct source of income from the sandalwood yield desired by Regional Regulation Number 5 of 2012 concerning "*Cendana* Management" in particularly, Article 13 regulates the ownership of *cendana* trees as follows:

1. *Cendana* trees that grow naturally and / or are cultivated on land owned by individuals / customary groups and / or other legal entities become owned / controlled by individuals, custom groups and legal entities.
2. *Cendana* trees that grow naturally and / or are cultivated on state-owned land become state property
3. *Cendana* trees that grow naturally that are cultivated on land owned by the Provincial Government become the property of the Provincial Government.

Furthermore, dealing with social forestry, it is a development subject that prioritizes the community as a subject of development related to the conservation and cultivation of *cendana*. As for the ideal model of institutional development of social forestry have its development characteristics as follows:

1. Institutions are formed on the initiative of their own group members.
2. The willingness from each of us to be an initiator (initiative to work)
3. Integrated institutional
4. Has a clear vision and mission
5. Has a clear and workable work plan
6. Has a clear organizational structure and division of tasks and venture capital

Based on the result of a research was conducted in several Districts in East Nusa Tenggara Province, Indonesia (East Sumba, Kupang, TTS and Belu), it is found that there are farmer groups which are engaged in horticultural agriculture while they are obviously not farmer groups that specifically deal with *cendana* tree cultivation. This effort was also formed to facilitate the management of various assistance that came from the Indonesian Government and helped a lot in improving the farmers' economy in various regions in the area which was also used as a *cendana* concentration area. Indonesian Government's efforts were released, in this case the provincial and district Forestry Agency in East Nusa Tenggara Province are seen to be now more dominant in conducting *cendana* cultivation by involving the community and individual are to be not in the form of groups to restore the glory or development of *cendana* in the Province as well as an effort to increase community's income in the future.

The Actions of NTT Province's Regional Government in Implementing the Purpose of Conservation Law of *Cendana*

Noting the wishes of the regional government to restore the glory or development of *cendana* in ENTP Province, using the theoretical role of law in the nature of the law includes regulating human behavior, forcing people to obey, and protecting the rights of the community. The law regulates human behavior or actions in social life that contain commands and prohibitions. The function of *cendana* law in general is to regulate and regulate relationships in society and resolve problems that arise in social life related to sandalwood processing. The law also has a supervisory function, a dispute resolution function, and a social engineering function. There are also many theories about the function and purpose of law put forward by experts and legal experts. There are several theories regarding the function and purpose of law, both universally and in the opinion of experts. A universal legal purpose. The purpose of the law is to have a universal nature in the fabric of the environment of people's lives. The law creates order, peace, peace, happiness, and prosperity. The existence of law makes every problem can be resolved fairly through the court by implementing the applicable legal provisions. With the law, it can prevent people from behaving arbitrarily towards other communities. The law can also protect people's rights from possible violations by other communities. In this connection, a theory about legal objectives can be used in the legal literature, namely ethical theory and utilities theory, to understand sandalwood legal behavior.

The Cause of Disruption of the *Cendana*'s Plant in the Past

The results of the study revealed that the cause of the decline in sandalwood population in the province of East Nusa Tenggara in the past was due to several factors including:

1. Forest Burning's Impacting on the *Cendana* Plants

Forest fires occur every year. This occurs as a result of the traditional slash-and-burn agricultural system which is still strongly held by the local community when opening fields. The combustion system will destroy the *cendana* plants.

2. *Cendana* Prices

Previously, the low price of *cendana* was in accordance with government regulations. This has contributed to illegal logging, illegal trade, smuggling and theft. In many practices, sandalwood prices set by the government are 7 dollar (\$) of United States of America (USA) (7,000.00 Indonesian Rupiah (Rp) / kilogram (kg)). While entrepreneurs offer prices around 15 .25 \$ US or 15,000-25,000.00 Indonesian Rupiah/kg. Here it is seen, how low the price of sandalwood that the government sets compared to the price offered by entrepreneurs. Indirectly, *cendana* does not have any economic benefits for farmers.

3. Extracting *Cendana* Tree' Roots

Cendana root excavations are carried out by many people because the roots have the highest sandalwood oil content so the price is the most expensive. As a result of taking these roots, many *cendana* trees have collapsed and natural vegetative regeneration with root buds has been disrupted.

4. Over Exploitation of *Cendana*

Exploitation activities carried out so far have been excessive. This is compounded by efforts to neglect or no attempt to replant. Except during the reign of Governor Fran Leburaya *cendana* tree conservation is done through the Red-Wine (Anggur Merah) program.

5. Slow Growth of *Cendana*

The waiting period for *cendana* harvest was quite long, which is ranged from 30-35 years. This makes farmers reluctant to plant *cendana*. In addition, the people's presumption that has been passed on from generation to generation is that *cendana* cannot be cultivated, but rather grows naturally. This is certainly inseparable from the limitations of public knowledge about *cendana* cultivation technology itself.

6. Adverse on Regional Law Arrangements concerning *Cendana* in NTT Province

In reality, regional Government policies through the Regional Regulations are not beneficial to farmers or the community but are detrimental. Authors have a concern about the existing policies were deemed unprofitable; the community then destroyed the *cendana* seedlings on their own land in their fields, and gardens and shifting cultivation systems. Overall, it is related to the

history of the development of regional regulations which harms the survival of *cendana* and poses threats related to the preservation of *cendana* on the basis of the application of the following *cendana* law products: Pursuant to the aforementioned regional regulation, which is basically for the regional Government who has long recognized for the existence of community-owned forests. Indeed, community can manage them sustainably based on applicable legal provisions.

The NTT Province Regional Government and district / city, understood how the importance it is sustainability of the *cendana* ecosystem by involving the community as a conduct of *cendana*'s preservation. Current efforts of the regional Government is implemented for the community is by developing community' stories about the life of *cendana* so that the cultivation of *cendana* can also be a tourist destination in terms of maintenance as well as to fostering a sense of wanting to have *cendana* trees that indirectly support the family's economy in the future. The result of a research was conducted by authors in several areas are presented in Table 3 The Forest Land Owners of *Cendana* in NTT Province, Indonesia, Year 2019 below.

Table. 3 The Forest Land Owners of *Cendana* in NTT Province, Indonesia, Year 2019

No	Land Owners of <i>Cendana</i> (Community)	District/City	Land Ownership	Width of Land /Area
1	15	Kupang City	Private	15,5 ha
2	10	Kupang District	Private	86 ha
3	10	South Central of Timor (<i>Timor Tengah Selatan</i> or TTS) District	Private/Family	125 ha
4	10	North Central of Timor (<i>Timor Tengah Utara</i> or TTU) District	Private/Family	92 ha
5	10	Belu District	Private	83 ha
6	15	East Sumba District	Family/Private	167 ha
7	12	Southwest Sumba District	Private	39 ha

Data Source: Department of Environment& Forestry, NTT Province, Indonesia, 2019

There is community-owned forest in NTT Province with an area of at least 1 ha in its management by regional legal instruments as stipulating in Article 3 paragraph (3) as mentioned, that: "The use of privately owned or other forests must not be conflicted with the purpose of forest protection". This means that the private forest' land can be used by the owner or other parties for a specific purpose and must be based on the agreement of the owner and must pay attention to the legal rules regarding forest management in Indonesia. Furthermore, the regulation also regulates the legal protection of forest vegetation on the prohibition of burning forests without permission from the regional Government. This regulation is presented into three points as follows:

- 1) *In forest areas and reserve forests are prohibited from burning except with the permission of the authorized official;*
- 2) *Outside of forest areas and reserve forests are prohibited from burning, except at locations that must obtain written permission from the Regent of the local Region, or other appointed official.*
- 3) *The written permission referred to in paragraph (2) of this article must state the place, area and purpose of the use of the land to be burned as well as the procedure for burning and the duration of the permit.*

Dealing with, burning in the forest, it has permits, which is normatively requires that the location of burning be set and a distance of less than 1 (one) km from the boundary of the forest area should not be done before around the land to be constructed a safety line / firebreak pathway with a width of at least 20 meters and all grow plants that have been cut off in the path, are gathered in the midst of those who will be burned. If the burning as mentioned above, is carried out at a distance of less than 50 meters from the boundary of the forest area must first obtain approval from the Head of the Forest Service. During the burning, the permit holder must guard the fire so as not to spread out the location and all equipment needed for it must be provided in advance; the permit holder may not leave the burned location.

In forest areas and reserve forests are prohibited from grazing cattle, except in locations that are possible with the approval of the Regional Head Governor through the Head of the Forest Service. The taking of grass and other fodder in the forest area and the reserve forest by residents around the forest, can only be done in places a place provided specifically for this purpose or at a place designated by the Head of the Forest Service.

Institutional Cooperation in Regional/Local Areas of NTT Province

The result of the 2019's research has shown that the regional Government understood the importance of the preservation of *cendana* as a superior product of NTT Province must be maintained and preserved as it has historical values, ecological values, and cultural values that can change economic of families for a better one in the future, that carry out *cendana* cultivation. This view has been realized through various efforts including the following ways:

Empowering Community through the Implementation of Regional Regulation of *Cendana* in NTT Province

Law is a regulation in the form of norms and sanctions that are made with the aim of regulating human behavior, maintaining order, justice, and preventing chaos. There are many legal classifications based on several things. The general function of law is to uphold justice and guarantee justice for the community. The function of law in general is to discipline and regulate

relationships in society and resolve problems that arise in social life. The law also has a supervisory function, a dispute resolution function, and a social engineering function. The *chendana* Regional Regulation was formed by the regional Government together with the regional legislative Body of NTT Province which has an aim to preserve *chendana* and encourage the community to cultivate *chendana* as well as improve the community's economic progress through the management of *chendana*.

With regards to this situation, Robert Seidman stated in his book, *The State Law and Development* (1978) that a person may obey the law or the rule of law, if the benefits or advantages of his obedience exceed his losses if he violates the law (Indonesian language: *seseorang barangkali akan mematuhi undang-undang atau aturan hukum, bila kebaikan atau keuntungan dari kepatuhannya itu melebihi kerugiannya bila ia melanggar hukum*). This means that the rule of law has its own subjectivity for community members in implementing the rule of law. Meanwhile, many people are of an opinion that compliance with the law is influenced by the example set by law enforcers (reference groups) for example; local/regional Government, prosecutors, judges, or police officers in anticipating crime in the region that leads to the theft of *chendana* trees as if it is not taken seriously and if it lasts a long time, it will prevent the maintenance of *chendana*. Thus, law enforcers are considered by the community as being the most knowledgeable about the intricacies of the law including its enforcement which can help the community to safely and fully guarantee the law of maintaining *chendana* law for its smooth-way along its preservation while reducing disquiet and uncertainty of its law for community businesses who carries out *chendana* cultivation. Psychologically, community members obey the *chendana* law because there is a kind of stimulus to obey it to make it easy to manage biological natural resources that provide economic benefits for the welfare of people's lives. Apart from that, legal compliance may be caused by the person who has such a concern, also wanting to maintain a good relationship with the social environment or the authorities (in this case the authorities or the Government). Besides that, actually, there are still other factors that influence why a person complies with the law; namely the suitability of legal values and the rule of law with aspirations that grow among the people. From these things, there will probably be forms of community obedience to the law. However, there is no denying that sometimes the community obeys the rule of law as it is forced (either it is forced or it is voluntary). It is said to be forced as it is not voluntary, as it is indeed not an uncommon for a person or apparatus to have physical and non-physical strength that can influence every citizen to comply. Thus, it is understandable why there is still someone showing that legal behavior arises when there are officers or when there is strictest supervision. From that phenomenon, the question that arises is; does this indicate that the legal awareness of our society is still low? To answer this problem is not easy and simple. As legal awareness does concerns effectiveness, and the functioning of the law is highly dependent on the effectiveness of instilling the law, then the community's reaction and time period to instill the values of the provisions of the law. That is, as long as people do not understand and do not understand the meaning of the law implanted, so long as it is also the violation of the law will occur. So the process of legal awareness is a psychological process that is found in human beings, which may or may not appear. As each citizen has their own sense of justice. Whether we realize it or not, legal awareness in society actually depends very much on the climate and the example of law enforcement officials. The connection with *chendana* legal behavior which is required by the public perception about their trust in law enforcement and law in East NTT Province; it thus must be able to bring up a sense of justice for the conservation of *chendana*.

Overall, a common conclusion can be drawn with regards to the behavior of *chendana* law, which is seen from the aspect of community response to being in compliance with NTT Province's regional regulations on *chendana*, influenced by the sense of ownership of *chendana* trees as NTT's endemic growth-plants. From the aspect of *chendana* law and as theoretically, the behavior of *chendana* law in NTT Province is caused by several factors that can also cause the community to obey its law based on the existence of its legal awareness which these are realized through legal behavior as discussed below.

Compliance, is a compliance based on the expectation of a reward and efforts to avoid punishment will be imposed if someone violates the provisions of the law. Compliance is in no way based on a belief in the objectives of the rule of law but rather based on the control of the holder of power. As a result, legal compliance will exist if there is strict supervision of the implementation of these legal norms.

Identification, occurs when adherence to the rule of law exists not because of its intrinsic value, but so that group membership is maintained and there is a good relationship with those who are given the authority to implement these legal norms. The attraction to be obedient is the benefits derived from these relationships so that compliance also depends on the merits of the interaction.

Internalization, at this stage a person obeys the rule of law because it is intrinsically compliance, has rewards. The contents of these rules are in accordance with the values of the person concerned, or because he changed the values that he is originally held. The result of this process is a conformity based on an intrinsic motivation. The central point of the power of this process is the person's confidence in the objectives of the relevant rules, regardless of their influence or values on the group or the holder of power or its guardians.

Effort in Increasing the Law Awareness of *Chendana*

The results of a research was conducted by the authors in seven Districts has indicated that in the realm of applying the era of the *Chendana* Regional Regulation Number 5 of 2012 since in the past, until now revealing the threat of thieves against *chendana* trees over the age of twenty years, continues to occur every year with a limited number of trees for *chendana* tree owners who were used as informants in this study. This condition if left unchecked from the aspect of law enforcement, then *chendana* law awareness to carry out conservation for all farmers in NTT Province, in the future it will disrupt the conservation and *chendana* cultivation efforts for *chendana* farmers who is working on maintaining *chendana* trees. This can also reduce the enthusiasm of farmers considering that planting and maintaining *chendana* is difficult and waiting for a long harvest period (35 to 40 years). On the other hand, those who steal are always looking at *chendana* forest commodities that are of high economic value by stealing, can get money easily and quickly from the black market and in considerable amounts of money. It was also noted that

there was a regional effort to address the theft indirectly which is related to the regulation of *cendana* trading system. It was stated in the regulation that the *cendana* pieces that sold were need to mention the origin of *cendana*.

The planting of *cendana* saplings has been symbolically carried out mainly by regional Government's officials. This shows that the number of sandalwood seedlings development increased by 2012 as many as 286,145 tillers increased to 513,291 tillers in 2013. The increase was triggered by one of them being the increasing area of land used by the East Nusa Tenggara Province community and local government regarding the area of sandalwood plantations recorded in 2012 covering an area of 2012 535 Ha increased to 7,216.6 07 Ha in 2019. There are also limited sources of seeds and seed preparation even if there is a price of seeds in the community which varies depending on the age of the seed. The following is the location and source of sandalwood seed shown in the following Table 4. Location and Source of *Cendana* Plant's Seeds in NTT Province, Indonesia.

Table 4. Location and Source of *Cendana* Plant's Seeds in NTT Province, Indonesia

Location	District/City	Width (ha)	Class
Lew Oeleng	Lembata	2,50	TBT
Meredadana	Southwest Sumba	2,03	TBT
Kampung Wotok	Manggarai	0,75	TBT
Adang kokar	Alor	5,55	TBT
Pagomogo	Nagakeo	4,09	TBT
Noenbila	South Central of Timor (<i>Timor Tengah Selatan</i> or TTS)	1,60	TBT
HTI Polen	TTS	0,10	TBT
Pusu	TTS	1,17	TBT
Nepala Oelbubuk	TTS	4,09	TBT
Oebatu	Rote Ndao	5,34	TBT
	Total	27, 22	

Data Source: Rahardjo, 2017

Based on Table 4 Location and Source of *Cendana* Plant's Seeds in NTT Province, Indonesia, authors also discuss on the availability of *cendana* seeds at present year (September 2019), which the *cendana* seed' sources can still be obtained in the community and the hatcheries can be obtained by paying a fee or without a fee (free) for people who want to plant / cultivate *cendana*.

Land Use

Based on its ability, the area of land use can be divided into three categories, namely:

1. Medium poor area covering an area of 1,697,000 ha (36%) which spreads across the Flores and Sumba Islands;
2. Nearly poor, covering an area of 1,697,000 ha (36%) which is found in Timor, Flores and Sumba Islands;
3. Poor area covering an area of 310,000 ha (6.56%) which is found in parts of the Flores and Sumba Islands and;
4. Very poor, covering an area of 1,031,000 ha (21%) which spreads over the Timor Island region.

The potential land that can be planted with a minimum of *cendana* area, covering of 6,316,607 in 2019 has increased from 1,679,093 (1.67 million) ha in 2012, which the trees were growing in uplands, fields, yard and idle land and cultivated by the people. This occurs along with the enactment of Regulation Number 5 of 2012 which returns people's rights and desire to preserve *cendana* tree as it is a profitable business both in the present and in the future conditions. In terms of handling the *cendana*'s management and maintainance that would me matters, reaffirmation that, this can be seen in the provisions of Chapter IV concerning planning for the preservation and development of *cendana* in NTT Province, which was regulated through the provisions of Article 5 of Regional Regulation 5/2012, as follows:

1. The Provincial Government and District / City Government of NTT, are obliged to prepare a plan for the preservation and development of *cendana* in their respective regions.
2. The obligations of the Provincial Government and District / City Government of NTT, as referred to in paragraph (1) shall be adjusted to the potential of *cendana* and land suitability for the development of *cendana* it self in their respective regions.
3. The planning referred to in paragraph (1) shall be prepared in the form of a long-term plan in the form of a master plan for the preservation and development of *cendana* with a period of thirty years in accordance with the technical cycle of *cendana* and a five year plan.

The legal provisions Article 5 of the *Cendana* Regional Regulation Number 5 of 2012 shows the principle of environmental management which confirms the principle of responsibility of the rule of law to control natural resources and maintain their habitats. This right is manifested in the form of "obligation equal to the meaning of the government's responsibility to protect the components of the living natural resources entrusted by all Indonesian citizen to the Regional Government of NTT Province (Provincial and District / City Regional Government)". The NTT Province's regional Government plans to actualize the contents of the regional regulation through the establishment of programs dealing with the implementation of pre-planned disasters such as Conservation Actions in order to realize the *cendana* conservation law. This conservation actions has been carried out by the provincial government through *cendana* conservation programs such as the *Cendana* Plantation Programme (HTC), the Village

Seedling Programme (KBD), the Community Plantation Seed Programme (KBR), and the Family Sandalwood Movement Programme (GCK) (results of interviews with field officers in East Sumba and the NTT Provincial Environment and Forest Agency in May 23, 2019 and August 2019). These efforts were undertaken by the regional Government in NTT Province as its regional regulation aims at implementing the protection and preservation of *cendana* was obviously contained in sandalwood regulations Chapter V concerning Protection and Preservation of the Potential Resources of *Cendana*.

The provision of Article 6 which emphasizes the need for protection and preservation of the potential resource of *cendana* potential, stipulate standardization and guidelines related to *cendana* products based on the regional Government's authority in NTT Province. Furthermore, in order to achieve these regional regulations, the regional Government begins their actions by establishing the nursery centers in several Districts in NTT Province such as Waingapu, Southwest Sumba, Kupang City, Kupang Regency, TTS, TTU and Belu. In general, the community planted in the yard of their house due to a limited land along the problem of less quality and quantity of the availability of *cendana*' seeds. Nonetheless, the results of this study has shown that the community's interest in planting sandalwood saplings was very positive. In other words, the enactment of regional Regulation Number 5 of 2012 concerning *cendana* is effective. It is effective as community consciously accepts the implementation of the regional legal provisions, implemented by the regional Government. Moreover, it is recognized from the state of ownership rights to *cendana* plants as a private property.

A Sustainability Intensification of *Cendana* Management

A sustainability intensification is used on this research study as a reference for a new green revolution to achieve an appropriate and a good management of natural resources (*cendana*) where human carrying capacity is also crucially needed in order to reduce environmental vulnerability to natural disasters or climate change (drought) and legal and policy vulnerabilities that must not be vulnerable in an effort in its implementation as to discipline human behavior in utilizing natural resources (*cendana*) and to ensure community to planting, caring for and maintaining the survival of the endemic plant (*cendana*) which is, it must be preserved from now on (the present time) for the future time, for the next generation/successor. Therefore, the theory of sustainable intensification is needed as a supporting legal-material for a long-term consideration and analysis on this study, in which the legal products and policies implemented in NTT Province, Indonesia (community obedience law and *cendana* regional regulation) are complementary, and supporting to each other, for the goodness and obedience of human beings themselves in practising a good behavior in understanding, in responding, and in utilizing the nature environment and social environment.

Indeed, a sustainability intensification is not a new or unfamiliar reference for developed countries. In developing countries like Indonesia, in applying the importance of sustainable natural resource management within a community support which puts a new power in supporting community obedience law and *cendana* regional regulation in NTT Province, Indonesia. Authors agree with the Frankenberg's theory about sustainability intensification regarding sustainable natural resources management, that "sustainable intensification is achieved through sound management of natural assets including land, water, forests, and fisheries which provide multiple benefits to food production, environmental health, and nutrition. Properly managed watersheds, rangelands, agricultural lands, forests, and fisheries enhance ecosystem functions that boost agricultural productivity, replenish aquifers, retain soil nutrients, mitigate damage from storms and floods, and reduce environmental vulnerability to the shocks and stresses associated with climate change" (Frankenberg et al. 2013:15). To support this theory, an understanding of da Costa leads us to an agreement that the need for the balancing of cooperation between humans and nature (especially plant that grows naturally: *cendana*) is indeed demanded. Human efforts are about their efforts that need to be only a reliable observant in understanding the characteristics of natural resources i.e plants that grow and / or planted by themselves on their land or nearest forest. There should be balanced-or mutual-corporation from the people to utilize the natural resources. The degree to violate should be less than the degree to protect the natural resources. Resource quality and quantity are heavily influenced by human behavior and the sustainability – or lack of sustainability – of management practices (da Costa 2018:138).

For the *cendana* owners/farmers, they require a sustainable way mindset of *cendana*, that through an intensification of sustainable resources of *cendana* can ensure an economic future of life or ease the debate over future's economic issues. Intensifying agriculture in a sustainable way that meets future food demands will require us to improve the resilience of these farmers to climate variation, ensure there are institutions and policies to support them, nurture the ecosystem services that underpin the production of healthy crops and address gender inequalities, The Future of Our Food, Water, and Environment or THRIVE's Programme (Consultative Group for International Agricultural Research or CGIAR 2018). Furthermore, The CGIAR Research Program on Water, Land and Ecosystems (WLE) has implemented the best ways to assist rural farmers, governments and the private sector achieve this aim. WLE implements three interlinked thematic areas. These are:

1. Ensuring we use resources efficiently so as to promote long-term sustainability with limited environmental impact;
2. Restoring the productive capacity of degraded rainfed and irrigated agricultural landscapes by strengthening ecosystem services and laying the foundations for sustainable agricultural intensification; and
3. Reducing risk and uncertainty associated with rainfed and irrigated landscapes by facilitating the sustainable management of land and water resources.

Implicit in each of these principles are the roles men, women and young people play in using, managing and governing land and water resources, together with associated institutional and political frameworks. If we are to meet future goals for minimizing hunger, poverty, inequity and environmental damage, we must make sustainable agricultural intensification the cornerstone of our agricultural systems. This requires us to radically shift our mindset and view our agricultural production systems as wholly owned subsidiaries of the ecosystems and natural capital on which they depend.

In this paper, authors propose that a new conception for a sustainability intensification of *cendana* management might be normatively conceived from the legal products on *cendana* which help improve community awareness and obedience for a routine treatment of *cendana* trees. This can be a persuasive indicator for succeeding their expectation about economic resilience i.e. income through *cendana* trading (marketable) without however over-exploiting it. Hence, to develop a stable income for fulfilling the daily- necessities of community through a trading system (marketable) of *cendana* should consider the sustainability of *cendana* resources. Increased food demands and market forces have encouraged the replacement of the locally adapted varieties of both fruit trees and field crops with high yielding cultivars, hence hampering the gene pools of these crops (El-Beltagy 2002:245). Rockstörm et al. (2016) agree with the authors and El-Beltagy's conceptions, that "We suggest adding a new dimension to sustainable agricultural development, namely managing natural capital for long-term productivity and social-ecological resilience at field, watershed, and regional scales, in agricultural systems that operate within planetary boundaries to safeguard Earth system" which in return, supported by the idea of da Costa, that "Natural assets are a marketable business for the people's economic capital in the contextual of resilience in the West Malaka Subdistrict. She found that fisheries and shrimp pond businesses (natural resources of the area) also generates regular income" (da Costa 2018:167). Natural Asset includes access to land, water, and wildlife, from which households engage in agricultural pursuits and/or resource collection for both sustenance and income generation (Carney 1999:19) qtd. in (da Costa 2018:138). Therefore, natural resources (*cendana*) must be utilized by community as best and as wise as possible. To achieve a sustainable resource of natural aspect of the community, the solution based approach must be implemented and supported concerning agro-diversity and biodiversity. Advisory and support services for the people focus on the sustainable and equitable use of natural resources to improve livelihoods and conserve agro-diversity and biodiversity (GITEC-IGIP GmbH 2016:1) qtd. in (da Costa 2018:138). Authors admit and agree that the community supports with various groups, local leaders, and government involvement through the implemented-legal products of NTT Province, are very beneficial for the orderly of sustainable use of natural resources management (*cendana*). Although, *cendana* might become a profitable income for the community's economy (welfare), as expressed by authors themselves and previous authors/researchers on this study who also emphasized about the use of natural resources, to improve community livelihoods and to preserve biodiversity; it is thus necessary to integrate both. We should remain on the implementation of the *cendana* Regional Regulation Number 5 of 2012 in accordance with Article 3 concerning the purpose of establishing a regional regulation on *cendana*, namely:

- 1) The implementation of a *cendana* management system that is sustainable
- 2) The implementation of certainty guarantee of *cendana* rights
- 3) The implementation of a participatory, innovative and creative society in developing, preserving and utilizing potential funds.
- 4) The implementation of the welfare improvement for the people.

CLOSING OF THE RESEARCH WAS STUDIED

The closing of this study consists of conclusion as presented in this section and recommendation as presented in the next section which presents law and policy coherence about *cendana* from the study as a whole.

CONCLUSION

1. Community in NTT Province has a good response towards the enactment of Regional Regulation Number 5 of 2012, concerning *cendana*. In general, the community complies with the *cendana* law. The form of compliance is based on the expectation of a reward from *cendana* cultivation activities at harvest with high selling value, despite of facing the threat of cultivation failure such as the threat of *cendana* disease, climate change and/or natural disaster (drought) and theft by other parties. Such a good response from the community about *cendana* regulations lies on the contents of these rules are in accordance with property rights and values that live in the community.
2. Some of the Indonesian Government's efforts have achieved significant, positive, and effective outcomes from the community. Through, a supporting system is implemented for the community i.e. community involvement (community participation) in implementing the regional *cendana* conservation law, and through a mobilization actions by mobilizing and channeling the community in understanding the regional regulations. Hereinafter, these two significant, positive, and effective efforts were conducted by the Indonesian Government configured as a form of increasing community legal awareness and strengthening institutional capacity in the region.

RECOMMENDATION

The authors provide coherence and brief recommendations with regard to *cendana* on this study, as follows:

1. The community behavior related to *cendana* cultivation's needs is needed to be supported by various groups in NTT Province such as businessman/woman in *cendana* (trading sector), the active involvement of community, traditional leaders and religious leaders to deal with the theft of *cendana* trees.
2. The need to increase the amount *cendana*'s seedlings and its provision of its seeds as to be distributed to the community. This action is hoped to be held continuously so as to overcome the absence of *cendana* seeds in the community who needs them and;
3. The need for parties from the Forestry Agency in NTT Province to conduct a regular outreach with community to planting *cendana* and urging them to stop the act of stealing other's *cendana* trees, is important and crucial. It is thus

expected to be always including the updating data about *cendana* as a step of controlling over its existence. Besides, the need for the latest existence of *cendana* statistic data which is also significant important though.

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