

CHAPTER I. INTRODUCTION

A. Research background

Indonesia has diverse natural wealth that can support and sustain community life. In general, classification of natural resources are divided into different categories such as agricultural land, forest with a variety of outputs, inland fisheries, marine fisheries, energy source as geothermal, solar, the wind, water power sources, tidal waves. Forest is part of natural resources, which plays an important role in various aspects of social life, development, and environment. Forest benefits are obtained if the forest is assured of its existence so that ecological, social, and economic will provide real roles if the management of forest resources in line with conservation efforts in order to realize sustainable development (Zain, 1998).

The deforestation in Indonesia is largely the result of the failure of a political and economic system, which considers forests, as a source of revenue that could be exploited for political ends and personal gain. Today Indonesia is a major producer of logs, sawn timber, plywood, pulp and paper, in addition to some plantation crops such as oil palm, rubber and cocoa. According *Forest Watch Indonesia* economic growth achieved regardless of sustainable forest management or the rights of local residents. Forest management in Indonesia has not reflected adherence to the principles of good forest governance (good forest governance), thus encouraging forest degradation and deforestation are significant. Analysis of National Development Planning Agency in 2010 related to the fundamental problems in Indonesia's forestry sector shows that poor governance, spatial planning are out of sync between the center and regions, unclear land tenure rights, as well as weak capacity in forest management (including law enforcement) be the fundamental problems of forest management in Indonesia that led to the destruction of forest resources (Forest Watch Indonesia, 2011).

One of community forest management considered the benefits and sustainability of forests named agroforestry. Most of Indonesian people have been

managing forests for life depends on. They use to local knowledge to protect and preserve the forest.

In Indonesia, the term for the practice of agroforestry is very diverse. The Sumatran knew agroforestry as *parak*, *pelak*, and *repon*. While, the Javanese people known agroforestry as *talun*, *wono*, and *tenganan*, but Kalimantan's people familiar with the practice as *tembawang* and *kebun*, up to the eastern region of Indonesia they knew *amarasi* as agroforestry. Despite having multiple names, conceptually and practically, a combination of forest and farm management is classified into agroforestry systems (World Agroforestry Centre, 2012).

Realizing the forest is an area that most easily plundered by human hands in achieving the demands of life, especially by residents living around the forest. Forest edge community see the forest around besides as a source of their life, as well as a reserve for expansion of their farms when farmers were in need of additional farmland because of population growth.

Studies have shown that 25% of the incomes of the people who live in or near forests come from forest resources. This figure may be higher using multifunctional management approach that targets all potential revenue sources of forests, trees and environmental services, rather than focusing only limited to the harvesting of the types of high value. Several trees found in agricultural land has great potential to increase incomes in rural areas. Approximately, 10% of forest tree cover on agricultural land there and this number continues to increase contribution. In some developing countries, agroforestry systems provide fodder and non-timber forest products are very important, and contribute significantly to household revenues. Various types of wild trees have the potential to play an important role in improving the livelihoods of small-scale farming (CIFOR, 2011).

The important factors that promote sustainability of this system are clarity over land tenure and security of land rights are cultivated. Quoting from a statement Lawry (2015) in The Impact of Land Property Rights Interventions that, most of the population in Western countries assumed that the land rights certification, registration or ownership are essential elements for any kind of system of tenure or property.

Thought that formal registration of land rights are equally important to convincing farmers on the certainty of their land rights.

Conceptually, property rights or "tenure" refers to control over and access to resources, namely, the way in which people (individually or collectively) holds the rights and responsibilities for land and natural resources on it. Thus, the issue of property rights raises fundamental questions which claimed the rights to what the source, who has access to land and related natural resources, and which has responsibility to manage the land. What is interesting, then how land and property rights create incentives or disincentives for sustainable management and governance of natural resources such as agroforestry practices (USAID, 2006)

The number of agroforestry areas in Indonesia are millions hectares, almost of all farmers agroforestry do not have official proof of ownership to their land. Many agroforestry areas reported in the state forest areas, and are allocated to large plantation companies and other large construction projects. The clarity about land tenure and security of property rights will affect to the pattern of agroforestry land management, so as to produce forest products that also takes into account sustainability as a basic principle of this practice in conserving forest resources owned.

Tenure security is important, without a security guarantee their rights, the parties will have an incentive to use the forest relatively small, its can even lose, that legal status in investing, managing and protecting forest resources. One important factor as the persuasive power of the "tragedy of the common" (written Garet Hardin, 1968) is the belief that private land tenure (private land ownership) will increase the incentives of individuals to manage natural resources sustainably. So that people who have security of land tenure will be motivated to invest long-term and responsible for certainty of continuity of production. In Vivian (1991), refers to the paradigm of the right of ownership in the farm life, loss of tenure security lead farmers are not convinced that they can benefit from their own land and capital. Under conditions like this, farmers prefer to current consumption needs, rather than long-term investment, and maximize land use and sources of wood rather than implementing

strategies for sustainable production. It is necessary to study the tenure security of agroforestry management.

B. Research problem

In administratively, Padang City is the capital of West Sumatra province located on the west coast of the Sumatra Island and that are between $0^{\circ} 44' 00''$ and $1^{\circ} 08' 35''$ south latitude and between $100^{\circ} 05' 05''$ and $100^{\circ} 34' 09''$ Longitude East. According to the PP 17 in 1980, Padang City area is 694.96 km², equivalent to 1.65 percent of the West Sumatra Province. Padang city composed of 11 districts with the largest districts is Koto Tangah reaching 232.25 km². From the total area of Padang most or 51.01 percent is forest protected by the government. Most of the forest area in Padang located in Koto Tangah Sub District (BAPPEDA Kota Padang, 2013).

The traditional community forest edge in Koto Tangah, Padang, West Sumatra is an example of a farm community who do farming practices by implementing agroforestry. It is based on local knowledge in the management of land use. Amid the issue of environmental damage caused by the exploitation of forest resources, people began to realize the importance of preserving forest on the banks of the reality for the people of the forest, and the forest is a source of livelihood.

Land is an important asset for individuals and households to meet basic needs including food and shelter. Therefore, access to land and renewable natural resources are particularly important for the sustainability of land management with agroforestry systems. According to FAO (2002), land provide for the role of household income in rural majority. Rural households can generate income through crop production, or from the collection and sale of forest products, marine or coastal resources. Indeed, households with secure rights to land are usually better than the rights that are not safe, limited or no land. To that end, secure access to land is crucial for sustainable land use solutions and the utilization and management of natural resources, and poverty alleviation.

The results of previous studies show, that as many as 40% of the samples agroforesters already have agroforestry, meaning that people buy land on the edge of

forest to be managed with agroforestry systems. Clarity on land tenure is shown in the form of a valid certificate of ownership issued by the Provincial Land Office. In the other 60% that is agroforestry farmers who do not have official proof of ownership of their land. Uncertainty tenure will result in the reluctance of farmers to continue the present management system they have built. In addition, to the ownership of land and secure rights to land agroforestry will affect farmers in enjoying their crops. If there are no certainty and tenure security of the then anyone can manage agroforestry even to perform logging and clearing of land owned by the state which will lead to land conflicts in the area from Koto Tengah Sub District, Padang (Mutiani, 2014).

The property rights and the role farmers appear in the sustainable management of natural resources. Literature and practical experience increasingly attracted the attention of property rights as an important consideration in the empowerment of rural communities in particular, farmers and sustainable management of land and natural resources such as forests. In addition, the development agencies are increasingly recognizing the property rights as an important factor that determines how land and natural resources was used and managed, and how to benefit from these resources are distributed. Land tenure and lack of security on the rights are closely related to the management of natural resources, which in this case, the natural resources mean is on land management with agroforestry systems.

Tenure security involves the extent to which the rights granted together with the duration of rights and the risk of losing their rights. In addition, the security right depends on how people look and feel right, either the state or the rights of indigenous rights. Seeing the practice of agroforestry, forest users can be classified as authorized users, claimants and to some extent proprietors and owners. (Arnot et al, 2011).

Realizing the importance of land tenure, in this regard is the security of the right to the land as the basis of the use, users and management of forest resources. The authors assume that the land tenure status and security rights will also have an impact on the management of agroforestry. It underlies doing research about tenure security of agroforestry in Koto Tengah area from Padang City. From the description

above, the question in this research is how the tenure security of agroforestry management in Koto Tengah Sub District, Padang City.

C. Research objective

Based on the description in the background and research problem, the objectives of this study are as follows:

1. To describe the agroforestry management practices in relation with the tenurial security in Koto Tengah Sub District, Padang.
2. To analyze the factors that influence the changes of agroforestry practices in Koto Tengah Sub District, Padang.

D. Significance of the research

Research about tenure security to the management of agroforestry in Koto Tengah Sub District, Padang city is expected to be useful as follows:

1. As reference for the government in making decisions or policies related to land tenure of natural resources as a fundamental development of agroforestry areas in West Sumatra. So as to make the area sustainable of agroforestry as an agricultural base that is globally competitive and realizing local development.
2. Increasing the contribution of forests, agroforestry and trees for the production and income for the people who depend on forests and farmers catch and preserving biodiversity, including genetic diversity of trees, through the management and conservation of forests and trees in a sustainable manner and maintain or improve the environmental services of forests, agroforestry and tree in the landscape multifunctional and dynamic as forest conservation and reducing deforestation.