

CHAPTER I. INTRODUCTION

A. Research Background

Referring to Government Regulation No. 23 of 2021 concerning the Implementation of Social Forestry, Article 1 defines social forestry as a sustainable forest management system implemented in national forest areas or private forest/customary forests, which are managed by local communities or customary law communities as the main actors. Social forest management aims to improve welfare, environmental balance, and socio-cultural dynamics in the form of village forests (*hutan desa*), community forests (*hutan kemasyarakatan*), community plantation forests (*hutan tanaman rakyat*), customary forests (*hutan adat*), and forestry partnerships (*kemitraan kehutanan*).

Generally, there are two types of forest products, namely timber forest products which are wood and non-timber forest products (NTFP). The last being biological forest products, both plants and animals, along with derivative and processed products, except wood originating from forests (Permenhut No. 35 of 2007). Non-timber forest products can be by-products of a tree, such as sap, leaves, bark, fruit, or plants with special properties, including rattan and bamboo. Commonly, collecting NTFPs is part of a traditional activity for communities living around forests, in fact, this has become the main activity as a source of daily livelihood for communities in some areas.

Non-timber forest products have long been known to be a critical component of the lives of communities living around forests. For the majority of the population, non-timber forest products are a crucial resource compared to timber. Many households around this forest area depend on non-timber forest products as subsistence products and/or as a main source of income (Rum et al., 2018). The role and existence of non-timber forest products provide benefits both in terms of ecology, economy, social, and culture, as well as the environment for all levels of society. Non-timber forest products are a source of income for the community especially around the social forestry area and the government when viewed from an economic aspect. From a social and cultural perspective, the community plays an active role and contributes to the utilization and processing of

non-timber forest products (NTFPs). Production of non-timber forest products can increase the business and income of communities around the forest, one of which is the sugar palm commodity which has the potential to be developed (Haris et al., 2020).

Palm sugar is a sweetener made from sap sourced from *Arenga Pinnata* or the male flower bunches of the palm tree. Palm sugar is a type of brown sugar. The sugar palm is a plantation commodity that has significant economic value, making it highly promising for development and offering substantial opportunities to enhance the economic growth of a region (Sisi et al., 2023). Palm sugar as one of the non-timber forest products is widely used as an economic resource for the community, both individually and in groups. In terms of social forestry, the Ministry of Environment and Forestry of the Republic of Indonesia established Social Forestry Business Groups (*Kelompok Usaha Perhutanan Sosial*).

According to Presidential Decree No. 23 of 2018, Social Forestry Business Groups (KUPS) are holders of Social Forestry Permits or Rights who will and/or have carried out business and Community Forests which have been designated as KUPS (*Kelompok Usaha Perhutanan Sosial*) following applicable regulations. KUPS has a vital role as an instrument in encouraging a sustainable economy through various initiatives that focus on empowering the community around the forest.

Palm sugar, as one of the potential non-timber forest products, would help increase the community's welfare and can be considered as another source of livelihood. by KUPS Aren Antama and KUPS Mutiara Onau in Lima Puluh Kota Regency in 2023, have the highest economic value, with a total amount of IDR 306,590,000.00 among palm sugar commodity palm sugar KUPS in West Sumatra (Appendix 1). Both KUPS are highly potential especially as they develop diverse products such as block palm sugar (*gula batok*), granulated palm sugar (*gula semut*), liquid palm sugar (*gula cair*), and fresh sap (*nira segar*). However, the use and business of palm sugar are still carried out simply. The palm sugar supply chain remains relatively simple and lacks integration across its various stages, from raw material sourcing to distribution. Business operations are predominantly controlled

by intermediaries, which has hindered the growth and development of the palm sugar industry (Makkarennu et al., 2018)

According to Paudel et al. (2010), value chain is a chain of value-creating activities that are not isolated from one another. Each activity is interlinked with another and can influence the cost or performance of the others. Products progress through the chain sequentially, adding value at each step. Value chain analysis (VCA) reviews the activities necessary to develop a product from conception to market. A solid VCA provides an overview of a business at a specific time, while value chain mapping shows how a product moves from raw materials to the market. But in fact, findings in the field often show that supply chain and value chain actors still experience several obstacles.

Farmers or forest-dependent people who collect NTFPs receive a very small value of the NTFPs, whereas a higher value is enjoyed by people who live far from the forest (Sahidu et al., 2018). Social Forestry projects, such as SSF (Strengthening of Social Forestry), implemented as an effort to increase the value of NTFPs received by farmers. Strengthening of Social Forestry is a project that supports the acceleration of the Social Forestry program. This project is a collaboration between the Government of Indonesia, represented by the Directorate General of PSKL-KLHK, and the Global Environment Facility (GEF) through the International Bank for Reconstruction and Development (IBRD) or the World Bank (WB). This project had been implemented since 2021 and was lasted until 2025. SSF Project activities are focused on 6 Regencies/Cities in 4 Provinces in Indonesia: Lima Puluh Kota Regency in West Sumatra Province; Bima City, Bima Regency, and Dompu Regency in West Nusa Tenggara Province; South Lampung Regency in Lampung Province; and West Halmahera Regency in Maluku Province (SSF Provinsi Sumatera Barat, 2023).

People involved in the SSF Project are community forest users and dwellers including indigenous people and local communities (IPLSs), who are forest farmers, harvesters, collectors or pickers, women's groups, and other vulnerable groups. Other stakeholders are village government, regional government, central government, forest management unit (FMU), working group on social forestry, financial institutions, NGOs and universities as facilitators, and private sector that

is expected to absorb the output or products generated by the social forestry (World Bank, n.d.).

The SSF Project focuses on strengthening policies, enhancing community capacity, and protecting biodiversity. The SSF Project is assigned to achieve several objectives that are beneficial for various aspects. One of the aspects includes the environmental factor, namely providing legal access and sustainable forest management areas covering an area of 300,000 hectares to the community and mitigating greenhouse gas emissions with a target of 9.2 MT CO₂. In the social aspect, the SSF project is beneficial in increasing the involvement of women and young people in social forestry groups. SSF also plays an important role in the economic aspect, namely by assisting social forestry business groups in developing and increasing the value of community business products (SSF Project Sumatera Barat, 2022).

SSF supports improvement in added value and actively promotes value enhancement through various initiatives, including training on the canvas business model, assistance and support for product derivatives, the establishment of KUPS enterprise based on local commodities, facilitation in connecting with buyers and forming partnerships, provision of small grants, and assistance with licensing processes (such as halal certification and NIB). The initial design of this project includes business consulting services aimed at increasing the value of each commodity, with implementation being supported by a designated companion as per guidance from the center. To what extent SSF has been able to increase farmers' share in value chain remain to be seen. This research intends to fill the gap. The study focuses on the Value Chain Mapping of Non-Timber Forest Products (NTFPs) Palm Sugar Business Improvement under the Strengthening of Social Forestry (SSF) Project in Lima Puluh Kota Regency, West Sumatra.

B. Problem Statement

The value chain is the activities in a system with changes from input to output. Every activity in the system has a regular increase in added value. Suppliers and distributors in the chain collaborate to generate value within the framework of value chain management (Fu & Piplani, 2004). As the case of SSF Project, the existence NTFPs, including Palm Sugar, is still not being utilized optimally, even if

they are maximally utilized it only occurs in certain types, therefore these NTFPs are still local in nature.

KUPS (*Kelompok Usaha Perhutanan Sosial*) represents a strategic initiative by the government aimed at improving the socio-economic conditions of communities in social forestry areas by facilitating product diversification that improves value-added production and contributes to the welfare of farmers. Traditionally, sugar palm farmers primarily produced block palm sugar, and with the establishment of KUPS and the support of SSF Project interventions, farmers are now able to produce a range of products, including block palm sugar (*gula batok*), Granulated sugar (*gula semut*), liquid palm sugar (*gula cair*), and fresh sap (*nira segar*). KUPS sources raw materials from farmers at competitive prices, ensuring mutual economic benefit. Additionally, the products manufactured by KUPS are certified with product labels and home industry (*P-IRT*) certification, further strengthening its competitive edge.

Despite palm sugar products' potential in the social forestry scheme, in the value chain of non-timber forest products, the largest part of the value is enjoyed by communities outside the forest or far from the forest (Sahidu et al., 2018). The way its value chain operates has not yet provided fair benefits to farmers at the forest level. Palm sugar production is still dominated by small-scale farmers who mainly sell block palm sugar, while most value-added activities and market control remain in the hands of intermediaries. This leaves many agendas on how to make the value chain more equitable between the parties, especially those who are directly involved in the primary sector and live around the forest.

Social Forestry Business Groups (KUPS), such as Aren Antama and Mutiara Onau and the implementation of the Strengthening of Social Forestry (SSF) Project were intended to address these issues by encouraging product diversification, improving processing capacity, and strengthening market access. In spite of that, it is still unclear whether these efforts have significantly changed the structure of the palm sugar value chain or increased the share of value received by farmers. Therefore, there is a need for a clearer understanding of how the palm sugar value chain functions before and after the SSF Project and whether the interventions have

contributed to a more efficient and equitable value chain for forest-based communities.

Companies or businesses must know how the value chain occurs and whether the distribution of added value that occurs is under the control of each value chain actor, for this reason, value chain has a significant role in the business. The research questions are stated as follows:

1. How SSF Project improve palm sugar business value chain?
2. Who are the actors in the value chain of non-timber forest products of palm sugar before and after the SSF Project in Lima Pulu Kota Regency?
3. What are the value chain activities of non-timber forest products palm sugar before and after SSF Project in Lima Pulu Kota Regency?
4. How much value chain distribution among stakeholders throughout the value chain of non-timber forest products palm sugar before and after the SSF Project in Lima Pulu Kota Regency?

C. Research Objectives

Based on the formulation of the problem above, the objectives of this study are as follows:

1. Describing the SSF Project implementation in palm sugar business value chain improvement.
2. Identifying the actors of non-timber forest products palm sugar before and after the SSF Project.
3. Analyzing the value chain activities of non-timber forest products palm sugar before and after the SSF Project.
4. Analyzing the value chain distribution among stakeholders of non-timber forest products palm sugar before and after the SSF Project.

D. Research Contribution

The research results are expected to provide an overview and improve the value chain for NTFPs of palm sugar in the context of efforts to increase sustainability and competitiveness for value chain actors. This study also aims to help raise the potential for business partnerships with local communities around forests in West Sumatra and serve as a reference for future value chain research.