Policy Options for Enhancing Community-Based Commercial Forestry in Indonesia
RESEARCH REPORT

POLICY OPTIONS FOR ENHANCING COMMUNITY-BASED COMMERCIAL FORESTRY IN INDONESIA

by
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<th>Full Form</th>
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<td>APBD</td>
<td><em>Anggaran Pendapatan Belanja Daerah</em> (Regional Government Budget)</td>
</tr>
<tr>
<td>APHI</td>
<td><em>Asosiasi Pengusaha Hutan Indonesia</em> (Association of Indonesia Forest Concession Holders)</td>
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<tr>
<td>APKAR</td>
<td><em>Asosiasi Pengelola Kayu Rakyat</em> (community timber management association)</td>
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<tr>
<td>BAPPENAS</td>
<td><em>Badan Perencanaan Pembangunan Nasional</em> (National Development Planning Agency)</td>
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<tr>
<td>BKPM</td>
<td><em>Badan Koordinasi Penanaman Modal</em> (Indonesian Investment Coordinating Board)</td>
</tr>
<tr>
<td>BLU</td>
<td><em>Badan Layanan Umum</em> (public service agency)</td>
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<tr>
<td>BPDASHL</td>
<td><em>Balai Pengelolaan Daerah Aliran Sungai dan Hutan Lindung</em> (Management of Watersheds and Protected Forest Office)</td>
</tr>
<tr>
<td>BPHP</td>
<td><em>Balai Pengelolaan Hutan Produksi</em> (Production Forest Management Office)</td>
</tr>
<tr>
<td>BPKH</td>
<td><em>Balai Pemantapan Kawasan Hutan</em> (Forest Area Stabilization Agency)</td>
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<tr>
<td>BPN</td>
<td><em>Badan Pertanahan Nasional</em> (National Land Agency)</td>
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<tr>
<td>BPS</td>
<td><em>Badan Pusat Statistik</em> (Statistics Indonesia)</td>
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<tr>
<td>BUPPSHA</td>
<td><em>Bina Usaha Perhutanan Sosial dan Hutan Adat</em> (Business Development of Social Forestry and Customary Forests)</td>
</tr>
<tr>
<td>CBCF</td>
<td>Community-Based Commercial Forestry</td>
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<tr>
<td>CBFM</td>
<td>Community Based Forest Management</td>
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<tr>
<td>CCTV</td>
<td>Closed Circuit Television</td>
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<tr>
<td>DBH</td>
<td>Diameter at Breast Height</td>
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<tr>
<td>DG</td>
<td>Directorate General</td>
</tr>
<tr>
<td>DPR</td>
<td><em>Dewan Perwakilan Rakyat</em> (Indonesian House of Representatives)</td>
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<tr>
<td>DR</td>
<td><em>Dana Reboisasi</em> (Reforestation Fund)</td>
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<tr>
<td>ESDM</td>
<td><em>Energi dan Sumber Daya Mineral</em> (Energy and Mineral Resources)</td>
</tr>
<tr>
<td>EU</td>
<td>European Union (<em>Uni Eropa</em>)</td>
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<tr>
<td>FFG</td>
<td>Forest Farmer Group (<em>Kelompok Tani Hutan</em>)</td>
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<tr>
<td>FKKM</td>
<td><em>Forum Komunikasi Kehutanan Masyarakat</em> (Community Forestry Communication Forum)</td>
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<tr>
<td>FMU</td>
<td>Forest Management Unit (<em>Kesatuan Pengelolaan Hutan/ KPH</em>)</td>
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<td>FWI</td>
<td>Forest Watch Indonesia</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>Ganis</td>
<td>Tenaga Teknis (Technical personnel)</td>
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<tr>
<td>GCL</td>
<td>Gorontalo Citra Lestari</td>
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<tr>
<td>GSP</td>
<td>Generalized System of Preferences</td>
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<tr>
<td>HA</td>
<td>Hutan Adat (Customary Forest)</td>
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<tr>
<td>HD</td>
<td>Hutan Desa (Village Forest)</td>
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<tr>
<td>HIPKI</td>
<td>Himpunan Pengusaha Kayu Indonesia (The Indonesian Timber Entrepreneurs)</td>
</tr>
<tr>
<td>HKm</td>
<td>Hutan Kemasyarakatan (Community Forest)</td>
</tr>
<tr>
<td>HL</td>
<td>Hutan Lindung (Protection Forest)</td>
</tr>
<tr>
<td>HP</td>
<td>Hutan Produksi Tetap (Permanent Production Forest)</td>
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<tr>
<td>HPH</td>
<td>Hak Pengusahaan Hutan (Forest concessions)</td>
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<tr>
<td>HPT</td>
<td>Hutan Produksi Terbatas (Limited Production Forest)</td>
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<tr>
<td>HTI</td>
<td>Hutan Tanaman Industri (Industrial Plantation Forest)</td>
</tr>
<tr>
<td>IIUPH</td>
<td>Iuran Izin Usaha Pemanfaatan Hutan (Forest Utilization Permit Fee)</td>
</tr>
<tr>
<td>IPHPS</td>
<td>Izin Pemanfaatan Hutan Perhutanan Sosial (Permit for Utilization of Social Forestry)</td>
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<tr>
<td>IUIPHHK</td>
<td>Izin Usaha Industri Primer Hasil Hutan Kayu (Business License for Timber Forest Product Primary Industry)</td>
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<tr>
<td>IUPHHK</td>
<td>Izin Usaha Pemanfaatan Hasil Hutan Kayu (Business License for the Utilization of Timber Forest Products)</td>
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<tr>
<td>IUPHHK-HA</td>
<td>Izin Usaha Pemanfaatan Hasil Hutan Kayu Hutan Alam (Business License for the Utilization of Timber Forest Products in Natural Forest)</td>
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<td>IUPHHK-HTI</td>
<td>Izin Usaha Pemanfaatan Hasil Hutan Kayu untuk Hutan Tanaman Industri (Business License for Utilization of Timber Forest Products in Industrial Plantation Forest)</td>
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<tr>
<td>IUPHHK-HTR</td>
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<tr>
<td>IUPHH-HKm</td>
<td>Izin Usaha Pemanfaatan Hasil Hutan- Hutan Kemasyarakatan (Business License for the Utilization of Forest Product in Community Forest)</td>
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<tr>
<td>KK</td>
<td>Kemitraan Kehutanan (Forestry Partnership)</td>
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<tr>
<td>KL</td>
<td>Direktorat Kemitraan Lingkungan (Directorate of Environment Partnership)</td>
</tr>
<tr>
<td>MoEF</td>
<td>Ministry of Environment and Forestry, Republic of Indonesia (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia/ KLHK)</td>
</tr>
<tr>
<td>MoFor</td>
<td>Ministry of Forestry (Kementerian Kehutanan Republik Indonesia)</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>MPTs</td>
<td>Multi Purpose Trees</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NPWP</td>
<td>Nomor Pokok Wajib Pajak (Tax Identification Number)</td>
</tr>
<tr>
<td>PAD</td>
<td>Pendapatan Asli Daerah (Regional Income)</td>
</tr>
<tr>
<td>PAK</td>
<td>Penetapan Areal Kerja (Working area arrangement)</td>
</tr>
<tr>
<td>PELD</td>
<td>Pengembangan Ekonomi Lokal dan Daerah (Local and regional economic development)</td>
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<tr>
<td>Perda</td>
<td>Peraturan Daerah (Regional Regulation)</td>
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<tr>
<td>Permenhut</td>
<td>Peraturan Menteri Kehutanan (Regulation of Minister of Forestry)</td>
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<tr>
<td>PIAPS</td>
<td>Peta Indikatif Areal Perhutanan Sosial (Indicative Map of Social Forestry Area)</td>
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<tr>
<td>PKPS</td>
<td>Penyiapan Kawasan Perhutanan Sosial (Social Forestry Area Preparation/ under DG of PSKL)</td>
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<td>PKTHA</td>
<td>Penangganan Konflik Tenurial dan Hutan Adat (Tenurial and Indigenous Forest Conflict Management)</td>
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<tr>
<td>PMDH</td>
<td>Pemberdayaan Masyarakat Desa Hutan (Forest village community development)</td>
</tr>
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<td>POKJA PPS</td>
<td>Kelompok Kerja Percepatan Perhutanan Sosial (Working Group on Social Forestry Area Acceleration)</td>
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<tr>
<td>PSDH</td>
<td>Provisi Sumber Daya Hutan (Provision of Forest Resources)</td>
</tr>
<tr>
<td>PSKL</td>
<td>Perhutanan Sosial dan Kemitraan Lingkungan (Social Forestry and Environmental Partnership)</td>
</tr>
<tr>
<td>RPJMD</td>
<td>Rencana Pembangunan Jangka Menengah Daerah (Regional Medium Term Development Plan)</td>
</tr>
<tr>
<td>RPJMN</td>
<td>Rencana Pembangunan Jangka Menengah Nasional (National Medium Term Development Plan)</td>
</tr>
<tr>
<td>SF</td>
<td>Social Forestry (Perhutanan Sosial/PS)</td>
</tr>
<tr>
<td>SITU</td>
<td>Surat Izin Tempat Usaha (Business Place License)</td>
</tr>
<tr>
<td>SIUP</td>
<td>Surat Izin Usaha Perdagangan (Business License)</td>
</tr>
<tr>
<td>SKAU</td>
<td>Surat Keterangan Asal Usul (Certificate of origin)</td>
</tr>
<tr>
<td>SVLK</td>
<td>Sistem Verifikasi Legalitas Kayu (Timber Legality Verification System)</td>
</tr>
<tr>
<td>TDI</td>
<td>Tanda Daftar Industri (Industrial registration)</td>
</tr>
<tr>
<td>TDP</td>
<td>Tanda Daftar Perusahaan (Company registration certificate)</td>
</tr>
<tr>
<td>UPT</td>
<td>Unit Pelaksana Teknis (Technical Implementation Unit)</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>WFC</td>
<td>World Forestry Congress</td>
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</table>
Community-based forest management (CBFM) has been developed globally since the 1970s with various outcomes. In Indonesia CBFM policies began to be adopted and institutionalized in the 1980s. Indonesia is yet to achieve sustainable and equitable natural resource management, although some initiatives are developing community-based management alternatives. Over the past 40 years, the achievements of CBFM regimes have continued to expand across countries and regions with different political, historical, cultural and economic contexts. Some countries, such as Indonesia, have made major changes to forestry policy, through the introduction and institutionalization of CBFM. These changes have been triggered by:

- Deforestation, poverty and social movements;
- Changing mind-sets of some bureaucrats and policy-makers, both at national and local levels;
- Progress towards more democratic political systems;
- The dynamics of global geo-politics and local political conditions;
- Demands for enhanced governance within the forestry sector; and
- Demands for bureaucratic and institutional reforms.

Implementation of Indonesia’s CBFM policy and programs in the post-reform era has not been easy. This is due to:

- Limited institutional support at the local level (e.g. limited supportive policies from local governments);
- Extending market liberalization, and changes in the dynamics of the global market (i.e. forest certification and eco-labelling);
- The presence and influence of modern culture (i.e., consumptive behaviours);
- Disconnections between private sector (i.e. businesses within the timber industry) interests and community preferences regarding the timber species being planted;
- Disconnections between the objectives of social forestry (SF) programs, termed as Perhutanan Sosial (PS) within Indonesia forest policy (i.e., strengthening farmers institution of community forest plantation) and rural development programs (i.e. more focusing on infrastructure development program through paving the village road); and
- Complicated timber regulations and high transaction costs in the timber industry.

Indonesia’s national policy of allocating 12.7 million ha of state-owned land to be managed by local communities is an important political decision that is expected to be supported by all parties. Institutionalizing SF policies through various continuous improvements, in the context of institutional innovation through the establishment of SF working groups, bureaucratic and financial reforms, and mobilization of active participation of all relevant stakeholders, has brought new hope that more widespread CBFM can be achieved. It is intended that the national SF policy will improve the access rights of local people to forest resources, and the economic independence and welfare of local communities. This goal can only be realized if there is policy consistency across different sectors, continuous reform of relevant administration and bureaucracy (i.e., licensing procedures), and integrated related policies of different tiers of governments.
The policy of allocating 12.7 million ha of state-owned land to be managed by local communities will not automatically increase the welfare of timber growers. Better access to financial institutions, market information and post-harvesting technology, and a strengthening of farmer institutions providing legal access rights is also crucial.

Key informants from Indonesian Forest Business Association APHI believe the timber industry and timber trade in Indonesia are over-regulated. Developing of incentive mechanisms (i.e., imposition of tax allowance and tax holiday) is a much needed improvement now to improve timber business climate.

The growth of the timber industry is largely determined by the investment climate and low transaction costs. The government has identified problems with licensing, raw materials, export and import levies, and a lack of incentives for Timber Legality/SVLK that are blocking investment (See Berita Satu, 14 July 2018). According to the Capital Investment Coordinating Board (BKPM 2018), these problems are due to inconsistencies in regulations and taxes, the quality of labor, land availability, barriers imposed by establishment permits, and the quality of infrastructure. Kompas (3 November 2018) reported that Indonesian licensing costs are US $130 compared to Malaysia where it is only US $35. Additionally, Indonesia's investment climate (i.e. the ease of doing business) still ranks 73 out of 190 countries.

Enhancing the capacity of smallholders (i.e., the selection of trees species in accordance with the land conditions and markets, the development of value-added products, and the timber trade system and marketing of products, local institutions as well as the strengthening partnership with business sector) is one of the important points to be accelerated by related stakeholders.
CHAPTER 1. BRIDGING HISTORICAL CRACKS: A CRITICAL REVIEW OF CBFM IN INDONESIA

I. Introduction: the search for community-based alternatives

As a manifestation of the failure of states and a lack of market mechanisms to promote sustainable and equitable natural resource management, some developing countries have initiated community-based resource management alternatives (Li, 2002), including CBFM (Puhlin, Inoue & Enters (2007). Over the past 40 years, the achievements of CBFM regimes have continued to expand across countries and regions with different political, historical, cultural and economic contexts (Gilmour, 2016). Across Southeast Asia, at least 140 million people depend on forest resources and have developed their own forest-based livelihood systems based on local practices, rules and traditions (Chao, 2012). For Indonesia, CBFM emerged as a state initiative in the 1970s, and it has continued to develop alongside changes in the government. The Forest Land Allocation Policy (2015-2019) dedicated an area of 12.7 million ha of state-owned land for community-based management. This has been an important SF policy under President Jokowi’s regime. This policy is widely considered as an important leap in the changing politics of policy space of people’s control in forest governance (Hakim & Wibowo, 2017), and a new road for Indonesian forest management (Awang, 2018). This policy is also seen as a driver of crucial political momentum to address three major issues in the realm of forest resources governance, namely social justice, democratic land governance, and forest sustainability (Hakim & Wibowo, 2017).

The scope of this critical review of CBFM in Indonesia includes: first, the changing CBFM policy trajectory during various political regimes in Indonesia; and second, the surrounding issues and changes in global governance that potentially affect the CBFM policy. This paper seeks to provide a critical understanding of Indonesia’s CBFM policy and the influence of local, national and international political changes on the policy implementation. In this review, we propose that the success of the CBFM policy is not only determined by political changes not only determined by political and governance changes, but also the extent to which the state is able to organize, mobilize and recognize forest resource access rights of local communities and the collective actions of local, sub-national and national communities and institutions.

The point of departure of this critical review is from a variety of other critical Indonesian and international studies. For example, Puhlin, Inoe and Enters (2007) have conducted research focused on structural policy reform through CBFM policy in the Philippines. They concluded that CBFM can be viewed as radical and progressive. They further highlight that the CBFM policy has become a project rather than a paradigm shift from a large-scale commercial management model to being locally-based. Tesfaye (2011) examined the contribution of CBFM to the quality of life of poor forest-dependent people. He concluded that CBFM has not been successful in improving the quality of life of the poor. According to Shively (2010), this is due to the weakness of farmer institutions and associated leadership and power negotiations. In addition, Wibowo, Race and Curtis (2013) focus more on the factors that suppress and influence CBFM policies, such as migration and oil palm developments’. Suharjito (2009) compared studies on the process of the devolution of forest management, both in the Philippines and in Indonesia. In the Philippines, CBFM has not yet contributed to
significant improvements in forest quality and income, but it has improved local control over state-owned forests. Indeed, this level of control has reached 20%, which is far higher than in Indonesia. In another study, Moeliono et al. (2017) focus on the CBFM definition debate, its multiple objectives and the spirit of SF and its practical implementation.

In contrast to the previous studies and reviews, this section attempts to provide a new perspective that CBFM policy changes are not always linear, historical and evolutionary which tend to be a political. Borrowing from the Foucoults theory (Foucalt, 2012) on Archeology of Knowledge, we discuss the CBFM policy changes in Indonesia, but not in the form of a series of continuous events that are arranged chronologically or merely as a study of causality relations between past events and the aftermath. The perspective of the Foucoults theory is different from the historical approach and as such, it sees the trajectory of CBFM colored by historical cracks called discontinuities. This perspective is also consistent with Wiradi’s views in Hakim & Wibowo (2017), which on several occasions states that each regime has its focus agenda. The New Order regime (1966-1999) certainly produced different CPBFM policies which focus on limited access rights to local people and complicated processing procedures of getting licenses, compared to the reform regime (especially 2014-onwards), focus on the two main policies, namely access reform (SF) and assets redistribution (Agrarian Reform). Likewise, in the context of political change, CBFM policies are also strongly influenced or determined by the power relations between actors in each regime. Methodologically, this section is a literature review of CBFM policy.

The structure of this policy review includes four main topics:

1) the evolution of community-based forest policy;
2) the dynamics of policy, politics and community management;
3) the achievements of policy initiatives, and
4) international pressures that influence the policies that frame CBFM in Indonesia.

II. Evolution of CBFM policies and development

Community-based forest management (CBFM) concepts and models developed in Indonesia in the 1970s until the 1990s were variously termed community forest, collaborative forest management and SF (Asmin, 2016). CBFM is a policy of the central government which entitles rural communities to access state-owned forest areas to help them overcome poverty through the sharing of resources while also maintaining sustainability (Purnomo & Anand, 2014). Another scholar defines CBFM as a people-centered approach to development, which involves local people in decisions that affect their well-being (Duinker, Matakala & Zhang, 1991). It is seen as a “vehicle” and a “panacea” for improving local peoples’ livelihoods, conserving forest resources, and ensuring long-term sustainability (Nebel et al., 2003).

Deforestation has been one of the significant driving forces for the introduction and institutionalization of CBFM in a large number of countries (Hindra, 2005; Gilmour, Malla, & Nurse, 2004; Gilmour, King & Hobley 1989). In Indonesia, the CBFM policy was believed to be an important policy option to curb deforestation (Hindra, 2005; Lindayati, 2003). In many tropical countries, deforestation is occurring at an alarming rate (Gilmour et al., 2004). For instance, Forest Watch Indonesia (FWI) reported that deforestation ‘in the tropics’ during the 1980s-1990s reached 2 million ha per year
The political and government institutions and agencies (Pokharel et al., 2016). The emergence of social movements demanding forest management equity and justice for local people (Ribot, 2002; Di Gregorio, 2004; Peluso, Aff & Rachman, 2008; Fauzi, 2011).

The main goals of CBFM policies in the early stages of its implementation (e.g. 1970s) focused on halting deforestation (Hobley, 2007; Duinker et al., 2004) and enhancing a sense of ownership of forest resources by local people’ (Duinker et al., 1991). Today, CBFM efforts place more emphasis on improving the livelihoods of rural communities (Hobley, 2007; Charnley & Poe, 2007; Duinker et al., 2004).

Many scientists from different disciplines have studied the means of strengthening CBFM as a sustainable forest management model (Asmin, 2016). It is believed that CBFM can be used as an alternative to traditional industrial-scale forest management, helping to equitably share resources and better conserve the forest by engaging local communities (Purnomo & Anand, 2014). In practice, CBFM has contributed to the improvement of forest condition and people’s livelihoods in two main areas: Capital formation in rural villages, and policy and governance reforms of various institutions and agencies (Pokharel & Nurse, 2004). Further, in this section it is discussed how the Indonesian government has developed its CBFM policy, how this policy has changed over time (and the main drivers of these changes), how the country’s rural people have adopted it (Purnomo & Anand, 2014).

The emergence of CBFM policy in Indonesia is strongly influenced by the dynamics of both global geo-politics and local politics. Asmin (2016) noted that the World Forestry Congress in Jakarta in 1978 under the theme of Forests For People was an important moment for promoting the adoption of CBFM in various countries, particularly in developing countries. Resosudarmo (2005) argued that the CBFM policy in Indonesia at the time was seen by many stakeholders as a solution various problems that have been resulted in the policy on the capitalization forest management happened since the 1970s The capitalization of primary forests through a licensing regime not only produced revenue for the state, but according to Douvergne (1993) it also resulted in the destruction of forests. Contreras-Hermosillo and Fay (2005) suggested that this policy also produced social conflicts and threatened the livelihoods of over 10 million Indigenous people in rural communities (Rhee et al., 2004).

Forest policy discourse developed by various NGOs and environmental activists and academia have strongly influenced the development of CBFM policy in Indonesia (Di Gregorio, 2004). In fact, NGO movements and critical forest policy discourse have been intertwined with the growing movement against the New Order regime (Peluso, Aff & Rachman, 2008). The political peak of this movement was happening during the economic crisis and the political crisis that followed by the collapse of the New Order in 1998. In the early period of the political transition, the demands of the NGOs and civil society movements were to enhance forest resource access for local communities and improve governance in the forestry sector (Fauzi, 2011), which ultimately resulted in changes to the Forestry Law (Law No.1941/1999).

Since the fall of the non-democratic regime in May 1998, the state has paid more attention to CBFM (Kusumanto & Sirait, 2004). The political and government system is now more democratic, with strong demands for public participation in policy-making and greater access to forest management, and a more decentralized forest governance system (Safitri, 2006; Lindayati, 2003). The CBFM policy has a stronger
political and legal position since the state revised the Basic Forestry Law (Law No.5/1967 revised into Law No. 41/1999). The political demands for change in community engagement and access to forest resources was not receding in the era of transition; however, Safitri (2006) reported that the political changes made Indonesian community forestry more complex and were a long pathway to an effective law, even during the decentralization period. Djogo and Syaf (2004) stated the decentralization of forest resource management authority to local governments has led to a situation in which district governments are neither accountable to the central government or the local people.

As a result of the many early failures of CBFM in Indonesia, Sunito (2005) asserted that policy-makers in collaboration with activists continued to develop new concepts and strategies focusing on the engagement of local communities in managing forest resources. This included providing legal support and improved access with long-term management rights for the rural communities. Emila and Suwito (2007) stated that in 2007, the demands of society and social movements to improve access to production forest areas also indirectly correlated with the birth of the community forest plantation policy, which had the dual aims of improving the productivity of the production forests and enhancing the well-being of the local people. Moeliono et al. (2015) added that a year later, the government launched the Forest Villages Policy.

Meanwhile, on the one hand, the social movements demanding improved access and the recognition of Indigenous peoples as well as the exclusion of Indigenous territories from the state forest jurisdiction gained momentum after the Constitutional Court’s decision No. 35/2012. This great political momentum was then followed up by various social movements advocating for the recognition of the rights of customary communities (Arizona, 2013). On the other hand, the central government continued to improve the CBFM policy. In 2013, the government launched a new policy calling for ‘forestry partnership scheme’ operations in production forests (Diantoro et al., 2013). This policy is simpler than other CBFM schemes in terms of its technical and administrative procedures, such as the process of filing the permit. Even licenses under this policy can be issued at the site level by the head of the Forest Management Unit.

Essentially, the CBFM policy reform in Indonesia has been strongly influenced by three main factors: first, the emergence of alternative policy ideas supported by a variety of actors who develop strong networks; second, the emergence of a number of policy-makers who dare to to make politically risky decisions (Sutaryo, 2006); and third, changes in social and political institutions in line with changes in power relations and the distribution of authority as well as the emergence of political norms that are more democratic (Lindayati, 2003).

Figure 1 illustrates the evolution of CBFM policy in a constantly changing political regime in Indonesia. We split the CBFM policy evolution into two periods: non-democratic and democratic decentralization. This division does not mean there is a continuity of the policy evolution. In the period of non-democratic regimes, we consider that the development of CBFM policy was still in what Lindayati (2003) described as the formative stages. This is indicated by the efforts to test and craft CBFM through demonstration plots (Safitri, 2006). In addition, Sutaryo (2006) noted that during this time, some policy-makers were only beginning to learn about and recognize the concept of CBFM (Hindra, 2005; Lindayati, 2000). The period of democratic decentralization is one of institutionalization, consolidation and development, marked by the improvements in policy regulations and implementation. From the perspective of Foucoul in the Archeology of Knowledge (Foucoul, 2012), the period of democratic
decentralization is not a continuation of the previous regime. He views there are historical cracks and a discontinuity. In a non-democratic political regime, on the one hand, the power relations are more dominated by the role of the state; while on the other hand, the social movement that demands the active participation of local people in forest management is easily controlled through political actions that violate the principles of democracy. Therefore, it can be understood if the policy of forest management does not provide a sufficient space or participation and community access rights for the management of forest resources. Whereas in the era of democratic decentralization, the state provides a wider space for local community access to the forest. However, it is also very dependent on the regime that holds power and the structure of power relations between the state, pressure groups or social movements and other interest groups (Borras, 2016). Under the policy of Forest Land Allocation (2015-2019), allocating an area of 12.7 million ha of state-owned land for community management represents a crucial political leap and historical cracks of the CBFM policy under the Jokowi regime. This policy is a manifestation of a social and political contract between the Jokowi regime and his constituents that was promoted during the political campaign and in the early period of his government. This political commitment then translated into agenda setting within the Ministry of Environment and Forestry. This policy aims to narrow the discrepancy in land control between corporations (96%) and communities (4%).

In reality, the development of a variety of CBFM programs has failed to slow the rate of deforestation in Indonesia (Rosyadi & Sobandi 2014). Forest Watch Indonesia have reported that the rate of deforestation during the late 1996 reached 2 million ha per year. The highest levels of deforestation rates were recorded in the period from 1996 to 2000, at 3.51 million ha per year (MOEF, 2018), and about 1.5 million ha per year between 2000 and 2009, before declining to 1.1 million ha per year from 2009 to

![Diagram](image-url)
In 2014 to 2015, annual deforestation within the Forest Area was 0.82 million ha. Amongst the major drivers were the forest fires of 2015 (MOEF, 2018). The decline in the rate of deforestation is caused by the shrinking forest cover, not by the CBFM implementation (Manurung, 2014). However, differently, CBF schemes (i.e. community forest) implemented in Protected Area in Lampung could recover the degraded lands. The schemes have contributed to an increase in forest cover of about 14% the Protected Area (Syam et al., 2012).

Indeed, the CBFM policy has much potential to halt deforestation and combat poverty in rural areas; however, its implementation has been slow (Lindsayati, 2003; Hindra, 2005). For instance, during the first 10-15 years of CBFM implementation, the focus was on testing and institutionalizing effective approaches for encouraging community participation in the management and protection of forests. The main objective is to protect and rehabilitate the degraded forests (Gilmour et al., 2004). The main contributors to the slow progress of CBFM development are policy-related problems, especially the processes of policy-making and its implementation. First, at a policy development level, the problems are connected to ineffective public participation, poor policy communication, and inadequate tenure policy, especially related to the control of and access to forest resources by the local people. Secondly, at the policy implementation level, the problems relate to economic and political inequity, and inadequate institutional development, especially at the local level (Wibowo, Race & Curtis, 2012).

In summary, the challenge for CBFM policy implementation is a lack of economic and political equity (Agrawal, 2001; Agrawal & Ostrom, 2001; Mahanty et al., 2002). Equity means the fair distribution and allocation of socio-economic benefits and resources (Kellert et al., 2000). Political inequity means that the policies have strong control over the timber produced from the community-managed forests. In this situation, the rural communities must gain additional permits and licenses to harvest, transport and sell the timber, which is in contrast to large-scale commercial logging operations (Mahanty & Guernier, 2008).

III. Dynamics of the policy space

The transformation of CBFM policy continues in parallel with political change both at national (i.e. demand for decentralization) and local level (i.e. demand for active participation of local people). The configuration and domination of policy in the public space has witnessed changes and a significant structural transformation. Lefebvre (2009) defines space as a social product that is dynamic and shaped by actors and actor networks that have the control and dominance over the course of power (1991). Habermas (1989), in his book *The structural transformation of the public sphere: an inquiry into a category of bourgeois society*, defines public space as a medium in which various actors can communicate their ideas, views, values and interests. Public space may manifest physically, as a cafe, salon, discussion room or reading room, but also non-physically, such as with policy in the public space. For Habermas (1989), dominant power generally tries to influence, for instance the CBFM Policies, within public space for the sake of their interests. Bryant (1998) noticed that the social construction of the environment has facilitated the dominant forces for controlling of human and environmental policies in the public space.

Public space is the space that bridges the relations and interactions between the state and society. In summary, it can be said that the historical reality of policy in the forestry sector shows that there are some policy improvements. However, these are mostly the domain of interpretation and formulation of policies controlled by the ruling authority or policy-makers both at national and local levels, meaning the policy-
making has not involved the public at large. Bryant (1998), Castree and Braun (2001) argued that there is a battle of discourses, ideas and narratives as well as data related to CBFM policies between various actors. For example, the institution authorized to make a CBFM policy states that the total area of forest lands that can be allocated to the CBFM program is 12.7 million ha while civil society states more than that number. In connection with this battle for space, Gaventa (1980) saw space as a medium for citizens to influence political decisions or policies. Gaventa (2006) later asserted that the space itself is formed by the power relations system.

The mainstream public space of forestry policy in the New Order era continued experiencing a structural transformation in the post-New Order (Safitri, 2006). Forest policies oriented towards forestry investments which emphasize strengthening the large-scale timber industry to support high economic growth did not become the mainstream policy (Nurjaya, 2005). Kurniawan (2012) noticed that the classical model of development that puts people as static objects has resulted in acute social, economic and political problems. Thus, Lindayati (2003) saw saw the new policies, such as CBFM models that are more oriented towards the society, continue to be built and developed. The new policy are increasingly gaining powerful political positions in the public sphere of the forestry policy.

CBFM policies - through several schemes such as Community Forests (HKm), Village Forests (HD), Community Forest Plantations (HTR), Forestry Partnership (KK), and Customary Forest (HA) - are important policies for involving the public that have resulted from changes in the public space of forest policy. The allocation of 12.7 million ha of state-owned land to be managed by villagers through various community-based schemes is one of the most important forestry policy changes in contemporary forest management in Indonesia. The policy gives the impression that the changes will be implemented. This scheme became a symbol for the desired change of public expectations (Asmin, 2016).

The forest land allocation policy has become a symbol that the government is paying attention to public desires for an equitable distribution of the benefits from forest resources (Asmin, 2016). After the previous period, especially during the non-democratic regimes, the CBFM policies have not received serious attention in the mainstream legal policy discourse (Nugroho, 2002, cited in Awang, 2003; Lindayati, 2000).

There are some political meanings of the strengthening of CBFM policies. Political meaning behind the changes in the forestry policy space are:

- The belief of the government that the people are capable of managing the forest as part of the forest management devolution process;
- Their efforts to reduce the magnitude of inequality between communities and corporations in forest management (it is expected that the 3% of the forest area managed by the people will increase to more than 10 %), and;
- An effort to improve the livelihoods of rural communities and to overcome social conflicts. The Agrarian Reform Consortium (KPA) recorded around 1,772 cases of agrarian conflicts from 2004 to 2015 coverings an area of about 7 million ha (KPA, 2016). These conflicts involved many sectors of development, including forestry (Asmin, 2016), and;
- The policy also aims to support the development of sustainable forestry. The consolidation process and strengthening of CBFM policies, as mentioned above, is not without criticism and pessimism. Asmin (2016), for example, found that the complexity and bureaucratic licensing procedures are still major barriers. When various policy issues and technical implementation of the policy cannot be
resolved, then the CBFM policy run by bureaucrats at both central and local political levels becomes a ‘mere symbol’ for manipulating political alignments in order to achieve certain goals.

The aforementioned changes in the public space of forestry policy have been driven by changes in power relations between the state and the communities, civil society and activists as well as academia. The change from a centralized political system towards democratic decentralization has become one of the main drivers of change in the power system. Yasmi et al. (2005) stated that the paradigm of policy formulation and decision-making via a centralized and elitist technocratic approach is being increasingly abandoned, with a new paradigm that is a more participatory and emancipatory approach. Forest villagers and environmental activists are increasingly engaging in the forestry policy-making process. For example, Kurniawan (2012) pointed out that since the emergence of the environmental movement in the 1970s, and in response to the development policy of the New Order, some NGOs have become pioneers in the delivery of alternative discourses of human relations and the environment. This discourse has essentially played an important role in the formation of a new social reality in the forestry sector.

In addition to changes in power relations, the changing of the public space of forest policy has also occurred due to difficult-to-resolve existential problems (Asmin, 2016), such as land use and tenure conflicts, deforestation, forest fires and poverty. The existential problems have made the policy-makers, both at the national and local levels, more active in the field and increasingly open to the community’s voice. They can no longer be just office-based decision-makers, and must instead also venture into the field to hear first-hand the perspectives of many field-based actors (Sutaryo, 2006).

IV. Policy practices and achievements

The implementation of CBFM policies in the field varies greatly between different schemes and approaches. For example, the taungya system implemented in Java in the 1970s was known as a prosperity approach. However, this approach failed to address poverty and social conflict between forest villagers and a state-owned company. These failures then encouraged changes and the SF scheme developed into a collaborative forest management approach (Awang, 2003; Simon, 2006). In the outer islands, programs of collaborative forest management first emerged in the early 1970s with the Development Program of Forest Villages (PMDH). Then in 1995, the government, through the Ministry of Forests, developed the HKm policy implemented in production and protected areas (Hindra, 2005), followed by the HTR policy in 2007, and the HD policy in 2008 (Sardjono, 2013). Additionally, the government implemented the Custommary Policy in response to the decision of the Constitutional Court (MK No. 35/2012) in 2012 (Asmin, 2016).

During the 1970s-1990s, CBFM generally did not improve the well-being of local people, and it did not provide sufficient legal space for local people to promote their own interests (Mondia, 1997). For instance, in Southeast Asia, including Indonesia, CBFM only contributes to about 30% of total household income during this period (Levang et al., 2005). Since in the beginning the CBFM model was not specifically designed to improve the well-being of the poor, it had minimal capacity to generate benefits for this sector of the population (Mahanty et al., 2006). Thus, the CBFM policies generally did not answer the real needs and aspirations of the local people, such as poverty alleviation and long-term management rights (Safitri, 2006).
Indeed, the implementation of CBFM policies and programs in the post-reformation era has also not been getting easier. This is because the government is likely to impose a scheme regardless of institutional support at the local level. The planning and institutional patterns are also more likely to be via top-down approaches, and so it is feared these approaches will not match the local requirements (Asmin, 2016).

The licensing of HKM, HTR and HD forests has remained low compared to the licenses issued to corporations in the form of natural forest utilization (IUPHHK-HA) and plantations (IUPHHK-HTI) licenses. Although nearly 2 million ha of forest area has been designated as working HTR, HKM and HD forests, actual permits obtained by local communities has only reached around 374,000 ha (MoEF, 2015). This is in stark contrast to the total area of the permits issued to corporations, which has reached around 31 million ha (Asmin, 2016).

V. Contemporary policy issues

Environmental issues have been commonly discussed in policy and development discourses since the early 1970s. Mostly, the debate has been dominated by a tendency to position 'nature' and 'humans' as well as 'crisis of nature' and 'crisis of justice' in static dichotomies. A central theme in the discourse has been to not focus on the 'human' and 'nature' aspects in isolation, but on the relationship between the two. The challenge for sustainable development is to constantly redefine the relationship between humans and nature (Kurniawan, 2012).

In brief, contemporary issues in CBFM include:

- Extending market liberalization (Arnold, 2001) and changes in the dynamics of the global market that are more oriented toward strengthening of the green market (e.g. forest certification and eco-labelling);
- An ever-present and strengthening influence of modern culture that is exploitative in character. According to Kurniawan (2012), exploitative modern culture is regarded as the greatest threat to forest conservation and the livelihoods of local communities. Modern forestry management practices are often destructive; and
- The heterogeneity within CBFM management groups, including their socio-cultural backgrounds, will affect their capacity to manage collective actions associated with governance and forest management practices (Varughese & Ostrom, 2001).

VI. International pressure

An important moment that positioned the environment within the framework of development was the release the World Commission for Environment and Development report, better known as the Brundtland Commission, by the United Nations in 1987. In the report entitled ‘Our Common Future’, the concept of sustainable development was raised as a new global political agenda to consider ‘development’ and ‘environment’ in an integrated approach. According to the commission, development should be ecologically sustainable and a contributor to global justice (Kurniawan, 2012). Prior to the ‘Our Common Future’ report, the World Forestry Congress in Jakarta in 1978 under the theme of Forests for People was an important moment for the expansion of CBFM approaches (Asmin, 2016).

In the context of international pressures, it is important to discuss civil society organizations, especially non-governmental organizations. These organizations are
highly relevant to the debate on sustainable development and how the concept is operationalized through their working programs. The relationships between NGOs and global development agencies and donors, especially trans-national civil society organizations, have allowed them to become agents of production and reproduction of the environment and development discourse. This occurs because the donor agencies and international civil society organizations with financial strengths are capable of defining and prioritizing environmental issues in the agendas of NGOs working in Third World countries (Kurniawan, 2012).

Through these discourses, the environmental interventions in Indonesia have gained legitimacy and social justification (Kurniawan, 2012). CBFM policy is a form of policy intervention that has been developed and institutionalized through field-based programs. The objectives of the CBFM policy are to improve the well-being of local people, facilitate sustainable forest management, and improve the implementation of CBFM practices (Wordojo, 2003).

VII. Concluding Remarks

The mainstream public space of forestry policy in Indonesia’s New Order era has continued to experience a structural transformation in the post-New Order era, especially following the 2015 SF Policy which allocated 12.7 million ha of state-owned forest to be managed by communities. Changes in the public space of forest policy occurred due to a number of existential problems, which have been difficult to resolve. These include land use and tenure conflicts, discrepancies in land control, deforestation, forest fires and poverty. These problems have led to the policy-makers, both at the national and local levels, being more active in the field and increasingly hearing the voices of the communities. The shift in forest policy from one of a timber production focus to a community-based focus has also been driven by the dynamics of global governance that are demanding strengthened local democracy, social justice and the active participation of local people in managing forest resources. However, the implementation of CBFM policy and programs in Indonesia’s post-reformation era has not been getting any easier. This is because the government is likely to impose a scheme regardless of institutional support at the local level. There are many challenges that have been facing CBFM development. Two important challenges are: First, extending market liberalization and changes in the dynamics of the global market that are more oriented towards strengthening the green market (e.g. forest certification and eco-labelling); and second, CBFM is also confronted by the ever-present and strengthening influence of modern culture that is exploitative in character.
CHAPTER 2. CURRENT IMPLEMENTATION OF CBFM IN INDONESIA

I. Objectives

This section analyses the current policy context for community-based commercial forestry (CBCF) and the supporting policy reforms that enable it to become a profitable investment choice for smallholders. An analysis of the policies, programs and regulations that influence the adoption and viability of CBFM is undertaken, with an integrated analysis of the government, related stakeholders, and private sector perspectives. The study aims to answer the following research questions: How have the forest policy reforms to support communities been underway at the multiple tiers of government and how has the central government overcome the socio-economic and political handicaps?; How has the institutionalization of policy reform (i.e. CBFM) been undertaken at the multiple tiers of governments?; and how have related regulations vertically and horizontally connected to and influenced the smallholders and manufacturing industries?

II. Problem Statements

The Indonesian MoEF has been directed to allocate 12.7 million ha of state-owned land to forest communities under the banner of its SF policy. For Setyowati (2017), this initiative represents a promising policy direction for promoting inclusive and equitable local development since the SF policy can improve people's access to productive assets and forest resources. However, for other scholars, the policy is an ambitious one and the targeted area will be difficult to achieve without any support from related government institutions at the sub-national and site levels (Gilmour, 2016; Suharjito, 2017), without mobilising large financial, human resource, time and other resource investments (Setyowati, 2017), and without bureaucratic and market intervention reforms (Gilmour, 2016). Unpredictable change in regulations or rights is one of the greatest challenges facing the development of the CBFM policy in Indonesia (Wibowo et al., 2013). Commercialization of timber from CBCF management is often constrained by regulations (Maryudi et al., 2015). However, success in creating justice and welfare within the context of CBCF development is not measured by merely the implementation of policy ideas or the creation and implementation of related regulations, but rather the extent to which the policy has a positive impact on people's lives (Li, 2002). Getting a SF permit will not immediately guarantee improvements in local people's livelihoods, particularly due to the issue of elite capture (Setyowati, 2017).

III. Methodology

A. Methods and Analysis

We use a multi-level analytical approach involving macro-, meso- and micro-level analyses. The study aims to understand the interplay between these three levels of analysis within the context of CBCF policy development (Barbour, 2017). This analysis focuses on efforts to explain the relationship or relation of institutional functions in the form of formal regulations or regulations in the forestry sector and other related sectors. These regulations are among others related to the regulation of the right to access and control of forest resources, regulations related to timber trade.
systems and trade or product markets, and regulations governing the timber industry sector. This approach explains the relationship between regulations at the national, sub-national and local level. This approach considers institutional mechanisms to have a deeper cause because they determine the incentive (Mudiarta, 2009).

At the macro-level, Mudiarta (2009) stated that the analysis should focus on the dynamics of the policy environment, especially CBCF or SF. In this context there is a process of integration of formal and informal relationships at each causal level (i.e. at the micro-, meso- and macro-levels of the policy environment). But the integration process is not always successful. It is dependent on the equity of existing resources, including social networks (Nee, 2005).

Following the theory postulated by Eberlein et al. (2014), we take a ‘meso-level’ analytical approach which focuses on the interactions between different ‘private governance’ and state-based regulations. Barbour (2017) asserted that the meso-level has a focus on examining the interactions among micro and macro phenomena. In this analysis, we focus on the interactions between the SF schemes (i.e. HKm, HD etc) within a forest policy context. The focus is the sub-national level with the aim of understanding the connections to, and the influence by, higher level governance and vice versa. The multi-level analysis covers the national level down to specific case-study provinces and districts. According to Eberlein et al. (2014), this meso-level approach allows us to identify patterns, influences and the ways in which the SF schemes (i.e. HTR and farm forestry) are operating within wider regulatory complexes.

The micro-level analysis focuses on explaining the problems faced by both farmers as individuals and as members of farmer groups (Robbin et al., 1998). The project will also identify the local-level factors affecting the implementation of CBCF on state-owned land, seeking insights about the prerequisites for the success of CBCF programs (e.g. the HTR program). Figure 2 illustrated the framework of research analysis. We develop the model based on themes theories namely postulated by Barbour (2017), Eberlein et al. (2014), Mudiarta (2009) and Robbin et al. (1998).
This study also incorporates an analysis of the private sector's interests in CBCF. This was done using a staged process: review of policy and company documents; in-depth interviews with selected senior policy-makers, program managers and company staff; presentation and discussion of a draft report at a policy workshop; and a revised report and recommendations presented at policy workshops and labs.

The in-depth interviews were conducted with 14 national-level key informants that included policy-makers, university-based researchers and representatives from NGOs, the Indonesian Forest Corporation Association (APHI). Numerous provincial-level interviews were also undertaken. In Gorontalo Province, the 20 respondents included provincial policy makers from related institutions, i.e., Forestry Services, Watershed Management and Protected Forest Technical units Agency (BPDASHL), State Forest Technical Unit Agency (BPKH), NGO officers, farmers, the head of the Forest Management Unit (FMU), heads of farmer groups, a village chief the head of a youth organization, and the Director and Managers of an industrial forest plantation company. In Lampung Province, the 22 respondents included provincial policy makers from related institutions (i.e Forestry Services, Provincial Planning Agency, BPDASHL, BPKH, Production Forest Management Technical Unit (BPHP), NGO officers, timber traders, heads of cooperatives, farmers, the head of the FMU, heads of farmer groups, forest extension officers, owners of businesses within the timber industry, and the owners and Manager of timber corporation. The interviews with key informants lasted on average about 2-4 hours. Interviews were not only undertaken in the office but often conducted outside the office, such as at hotels or cafes, depending on the willingness and convenience for the targeted informants.

We also conducted a series of focus group discussion (FGDs) involving relevant stakeholders, both at the central government, provincial government, and village government level. At the central level, 30 stakeholders actively participated in the discussions. This FGD aimed to explore the current status of and the issues associated with SF (i.e. CBCF) policies. We also undertook provincial- and village-level FGDs. In Gorontalo Province, 15 stakeholders participated in the FGD, while the village-level FGD involved 20 farmers. In Lampung Province, the FGD involved 15 stakeholders, while the village-level FGD involved 7 farmers. Here, we also held a FGD with the Forest Management Unit involving 15 people. At the provincial level, the FGD aimed to identify problems associated with the institutionalization of the SF policy in the regions. The village-level FGDs aimed to explore the field-based problems experienced by farmers and farmer groups.

In Bulukumba Regency, both primary data and secondary data were used. The primary data were obtained in the field from structured, in-depth interviews with village chiefs, village apparatus, community leaders, timber traders, and Central Governors and Regional Government Technical Unit (i.e. BPDASHL Jeneberang Saddang, PSKL Agency Central Sulawesi, BPHP Region XV Makassar, Forestry of South Sulawesi Province and Environment and Forestry Agency of Bulukumba). The interviews were guided by a questionnaire. The interviewees were selected using purposive sampling. The total number of interviewees was 21, consisting of 8 respondents from Central Technical Unit (UPT Pusat) and 13 people in the region. The study was conducted in October 2017 - February 2018.

In addition to in-depth interviews using open-ended questionnaires, primary data collection was also conducted using structured questionnaire. We did interviews at central government level with 19 respondents, Lampung Province with 16 respondents, and Gorontalo Province with 7 respondents. This method aimed to explore the respondent’s assessment on the progress of the implementation of the SF Policy.
B. Case-Study Sites

Lampung Province was selected as a case-study site. This province was selected because it has a history of SF implementation and it has been the site of many land used and tenurial conflicts. Lampung Province is also one of the provinces beyond Java Island that is closest to the central government. It is assumed that the CBCF policy institutionalization and related communications are better in Lampung than in other provinces. At the site-level, we chose the Gedong Wani FMU located in South Lampung because this FMU has become a model that has developed the HTR approach. Another justification for the selection of this FMU is that like many other areas in Lampung generally, it faces high land use competition from the developing cassava industry.

Data obtained from the Lampung District Forestry Office (2017) showed that degraded forests cover around 53% of the province’s total forest area (Table 1).

Table 1. Forest function and degradation in Lampung Province

<table>
<thead>
<tr>
<th>No.</th>
<th>Forest Use</th>
<th>Total area (Ha)</th>
<th>Degraded forest</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Area (Ha)</td>
</tr>
<tr>
<td>1.</td>
<td>Conservation forest area (National Park, nature protection forest, forest park)</td>
<td>462,030</td>
<td>171,617</td>
</tr>
<tr>
<td>2.</td>
<td>Protected forest area</td>
<td>317,615</td>
<td>192,154</td>
</tr>
<tr>
<td>3.</td>
<td>Production forest area</td>
<td>225,090</td>
<td>172,138</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,004,735</td>
<td>535,909</td>
</tr>
</tbody>
</table>

Source: Lampung District Forestry Office (2017)

Verbist and Pasya (2004) noted that Lampung Province faces frequent land use and tenurial conflicts relating to forest management. The sharp increase in population and a confusing and contradictory land use policy (and its implementation) are two key variables that have contributed to the existing land use and tenurial conflicts. The Gedong Wani FMU, for example, is experiencing serious land-related conflicts due to: 1) land allocated for urban development has not been granted a principle permit from the MoEF; 2) overlapping forest areas with a state owned estate crop’s concession; 3) land certificate issued within state forest by local land agency; 4) a village located within a state-owned forest; and 5) there is a rice field owned by local communities within the state-owned forest (Provincial Forestry office Lampung, 2012). The following Figure 3, describes the research sites selected in the study, which included Lampung, and Gorontalo Province and Bulukumba District.
Gorontalo Province was selected for several reasons, including: it is one of the most remote provinces in Indonesia (in contrast to Lampung); and similar to Lampung, it is also facing a high level of tenurial conflicts. The FMU was chosen based on conversations with several respondents during the preliminary study that noted the location is one of the FMU considered to be advanced. The site has also been facing a high level of land use competition for the developing maize industry.

Gorontalo Province is located on the northern island of Sulawesi, consisting of one municipality and two districts, 21 sub-districts and 369 villages. The capital city of Gorontalo province is Gorontalo. The total area of Gorontalo Province is about 12,215 km², covering Gorontalo City of about 65 km², Gorontalo Regency of about 5,389 km², and Boalemo Regency of about 6,762 km² (Balitbangda, 2003).

The forest area of Gorontalo Province is 824,668 ha or about 68% of the total land area (1,221,544 ha). Potential production forests cover 340,000 ha with a designated area for Industrial Forest Plantation Permit (IUPHHK-HTI) and Community Forest Plantation Permit (IUPHHK-HTR) covering about 70,000 ha or 20% of the total production forest area (Forestry and Energy and Mineral Resources, 2015). The condition of forests in Gorontalo is concerning. A total area of forest cover loss since 2015 is about 17% (Forest Service and ESDM, 2015). Based on a report from the Gorontalo Watershed Agency, the total area of degraded land in forest areas is 400,472 ha, of which 93,424 ha is categorized as very alarming and 8,743 ha is categorized as alarming, while the remainder is somewhat seriously. The area of seriously land outside the forest area is about 305,515 ha, of which 109,435 ha is categorized as very alarming and 100,490 ha is categorized somewhat seriously (BPDAS, 2017).

Table 2. The size of Forest area based on Forest Types I in Gorontalo Province

<table>
<thead>
<tr>
<th>No</th>
<th>Forest types</th>
<th>Size (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conservation Forest (KSA/KPA)</td>
<td>196,653</td>
</tr>
<tr>
<td>2</td>
<td>Protected Forest (HL)</td>
<td>204,608</td>
</tr>
<tr>
<td>3</td>
<td>Limited Production Forest (HPT)</td>
<td>251,097</td>
</tr>
<tr>
<td>4</td>
<td>Production Forest</td>
<td>89,879</td>
</tr>
<tr>
<td>5</td>
<td>Convertible Forest Area (HPK)</td>
<td>82,431</td>
</tr>
<tr>
<td></td>
<td>Total area</td>
<td>824,668</td>
</tr>
</tbody>
</table>

Source: Dinas Kehutanan dan ESDM (2015)
Based on the Decision Letter of the Ministry of Environment and Forestry (SK.22/menlhk/setjen/PLA.0/1/2017 concerning indicative map), the total forest area allocated for SF in Gorontalo Province is set at 46,992 ha. In the Boalemo District, an area of 2,459 ha has been allocated. This is divided into 135 ha for Protected Forest (HL), 1,974 ha for Production Forest (HP) and 350 ha for Limited Production Forest (HPT).

The research also included field-work in Bulukumba Regency in South Sulawesi Province. We selected Bulukumba because it is one of the regencies in South Sulawesi where farm forestry is developing. Additionally, this farm forestry represents an example of CBCF management outside the state-owned forest area, and so there was a good opportunity to draw policy lessons from this site.

According Paembonan (2016), farm forestry across all districts and cities in South Sulawesi Province covers an area of approximately 295,000 ha. Bahar (2013) reported that the area of farm forestry within ten sub-districts of Bulukumba District covers approximately 22,148 ha, as presented in Table 3.

Table 3. Area of farm forestry in Bulukumba District

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gantarang</td>
<td>1,338</td>
</tr>
<tr>
<td>2.</td>
<td>Ujung Bulu</td>
<td>286</td>
</tr>
<tr>
<td>3.</td>
<td>Ujung Loe</td>
<td>1,132</td>
</tr>
<tr>
<td>4.</td>
<td>Bontobahari</td>
<td>4,051</td>
</tr>
<tr>
<td>5.</td>
<td>Bontotiro</td>
<td>1,549</td>
</tr>
<tr>
<td>6.</td>
<td>Herlang</td>
<td>1,013</td>
</tr>
<tr>
<td>7.</td>
<td>Kajang</td>
<td>4,371</td>
</tr>
<tr>
<td>8.</td>
<td>Bulukumpa</td>
<td>2,683</td>
</tr>
<tr>
<td>9.</td>
<td>Rilau Ale</td>
<td>2,683</td>
</tr>
<tr>
<td>10.</td>
<td>Kindang</td>
<td>2,439</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>22,148</td>
</tr>
</tbody>
</table>

Source: Bahar (2013)

IV. Research Findings

A. Transforming the Direction of Forest Policy in Indonesia through Social Forestry

Over 30 years, SF policies have been rolled out across three of Indonesia’s political and government regimes, namely from the New Order, and through the democratic transition to the period of democratic decentralization. Despite its many positive outcomes and limitations policy has gained political impetus within the realm of national forestry policy. According to key informants from the Directorate of PKPS, SF is a sustainable forest management system implemented by local communities within state-owned forest areas or customary forests for improved environmental outcomes and socio-cultural/welfare benefits for the participating communities.

Under the SF policy, there are at least five different models that are promoted to the public: 1) HKm; 2) HD; 3) HTR; 4) KK and; 5) HA. To facilitate SF operations in the field, the Ministry of Environment and Forestry has established a scheme and granted a license for communities to obtain their access rights to manage forest. This scheme will be applicable to three of the SF models (i.e. HKM, HD and HTR) and when
community proposals meet the specified requirements, the granting of permission will take only 22 working days, as illustrated in Figure 4.

Sources: PKPS (2017)
Figure 4. An outline of the scheme to support communities gain their forest access rights permission (for HD, HKM and HTR) proposed to the MoEF

The policy of allocating 12.7 million ha of state-owned land for SF programs was viewed by some stakeholders as a crucial political moment for change in Indonesia’s national forest policy and the management of other natural resources in the country. In fact, based on a review by the MoEF, it is estimated that the potential area allocated for SF is larger than the area initially stipulated. The total area is actually more than 13.5 million ha. This potential SF area includes approximately 5.9 million ha of production forest, approximately 3.1 million ha of protected forest, approximately 2.2 million ha of peat lands that have potential for the utilization of environmental services and non-timber forest products, and approximately 2.1 million ha of industrial forest plantation (HTI) for the development of community-corporation partnerships.

B. Social Forestry and the Shift in the Political Space of Forest Policy

In an environmental outlook presentation organized by the MoEF in mid-January 2018, the former Director General of Forestry Planology and Environmental Administration (PKTL) of MoEF asserted that SF is a new paradigm for forest management that is in accordance with the dynamic social context of Indonesian society. SF policy is a manifestation of a recognized need to transform a timber-focused forestry policy that has failed to support the welfare of local communities. The key informants affirmed that SF is an important and appropriate policy as the government has acknowledged the rights of communities to access and use the forest, and it also affirms the importance of sustaining forests through controlled management. The following Figure 5, describes the transformation in forest policy direction and on the one hand, the society have bigger role in forest policy making, and on the other hand the dominance role of the state reduced significantly.
The allocation of 12.7 million ha of state-owned land for SF programs confirms the direction where Indonesia's forestry policy should be heading. There are at least three directions of forestry policy in Indonesia. First, it is directed at positioning local people as the main actors in forestry development in the context of improving community welfare. In addition, the policy is also directed at reducing inequality of income and resolving land tenure conflicts since to date the discrepancy of income and land control and ownership is at alarming rate. For instance, Indonesia's Gini ratio (or Gini coefficient), which measures the degree of inequality in income distribution between population has reached 0.38 (Adhinegara, 2018), even though the ratio fell from 0.41 in March 2015, but it is still high, and the ratio of land tenure inequality between population has reached of 0.58 (Djalil, 2016). Meanwhile, based on licensing schemes, corporations control around 97% of the forest area, with local communities managing only 3%. Secondly, Indonesia's forestry policy aims to promote the role of the community in the raw materials supply chain and to enhance value-adding in the forestry sector. And third, forestry policy is directed at providing an important role for communities in sustainable forest management.

The direction of the SF policy continues to experience significant incremental change and policy space transformation. In the New Order regime, it was characterized by the dominance of the state's role in policy decision-making and provided a little role to community participation. Meanwhile, in the post-New Order era or democratic transition, the policy space provided more room for active community involvement. Currently, in the era of decentralized political democracy, there is political shift towards increasingly inclusive forest resource management, characterized by the government's decision to allocate 12.7 million ha of state-owned forest for SF programs.

One prominent forest industry stakeholder (from the DG of PSKL-MoEF confirmed that in the early period of the New Order, or Period I (1970-80), access to forest resources was limited to foreign actors (foreign investment) such as Weyerhaeuser and Georgia Pacific (USA), IFA (France), and Marubeni (Japan). During Period II (1981-99), the state began to involve and facilitate state-owned companies in managing forest resources through the concept of equality. During Period III (2007-present), the Ministry of Forestry (MoF) is encouraging and facilitating communities to access forest resources.

The SF policy demonstrates that the government is increasingly providing a management space and the right of access for communities to participate in forest
management. The shift in the political space of forest policy through the SF policy and programs not only represents a democratic transformation of forest management in Indonesia but also a transformation in social justice.

C. Social Forestry and a Road Map for the National Forest Industry

There are ongoing opportunities and challenges associated with the development of the timber industry in Indonesia. From 1980-1997, the plywood industry briefly expanded, but was then closed due to internal problems. Some industries are unable to innovate to adapt to developments in the timber market. However, some industries have adapted to market dynamics through revitalizing their machinery, such as PT. Sumalindo. Successful adaptation depends on internal management and currently only about 20% of the industry remains, especially in the plywood industry. Currently, some timber industries are beginning to re-emerge, which was confirmed by a respondent from the Association of Indonesia Forest Concession Holders (APHI).

The direction of forestry policy in Indonesia is geared towards using SF to strengthen timber supply for industry sectors. The government believes that SF programs will be able to sustain the forestry industry that has tended to show a decline in growth. The SF has the potential to sustain sectors of the industry, mainly through the supply of raw materials and an increase in value-adding.

Based on the interview with the key informant from APHI, the supply of raw materials has been heavily dependent on forest concessions (HPH) and HTI. Data from APHI (2016) shows that supply from HPH is targeted to reach 11 million m³ per year by 2015 but the 2015 realization was 5-5.5 million m³ per year. Unfulfilled targets are due to market and policy issues, such as tenure conflicts. Meanwhile, from the 10.59 million ha of HTI there is a planted area of 3.5 million ha which produces 30-40 million m³ of pulpwood per year. For HTI, the problem is land use conflicts and not all areas can be planted, as illustrated in the Table 4.

Table 4. Targets of allocation of production forest development in 2045

<table>
<thead>
<tr>
<th>Description</th>
<th>Gross Area Needed (million ha)</th>
<th>Realisation of area permit by 2015 (million ha)</th>
<th>Additional area needed (million ha)</th>
<th>Targeted plantation area by 2045 (million ha)</th>
<th>Realisation by 2015 (million ha)</th>
<th>Will be established (million ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTI (Pulp, Woodworking and energy)</td>
<td>14.01</td>
<td>10.59</td>
<td>3.41</td>
<td>9.70</td>
<td>2.60</td>
<td>7.105</td>
</tr>
<tr>
<td>HTR</td>
<td>5.22</td>
<td>0.75</td>
<td>4.47</td>
<td>3.55</td>
<td>NA</td>
<td>3.550</td>
</tr>
<tr>
<td>HD, HKm</td>
<td>1.47</td>
<td>1.22</td>
<td>0.25</td>
<td>1.00</td>
<td>NA</td>
<td>1.000</td>
</tr>
<tr>
<td>Sub-total</td>
<td>20.70</td>
<td>12.56</td>
<td>8.3</td>
<td>14.25</td>
<td>NA</td>
<td>11.655</td>
</tr>
<tr>
<td>Farm Forestry</td>
<td>4.00</td>
<td>1.89</td>
<td>2.11</td>
<td>2.80</td>
<td>0.911</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>24.70</td>
<td>14.45</td>
<td>10.24</td>
<td>17.05</td>
<td>1.89</td>
<td>12.616</td>
</tr>
</tbody>
</table>

Source: Road map for production forest development 2016-2045 (APHI, 2016)

The timber from farm forestry is generally produced by local communities and has its own market, especially bare core-produced timber industry. Raw materials from farm forestry are commonly sourced from sengon (Paraserianthes falcataria) and jabon (Antocephalus cadamba) trees. Businesses utilizing these resources include many that have ceased operating because there has been no modernization of machinery. The program to accelerate timber supply to strengthen the forestry industry continues. To achieve the 2045 targets, there are three acceleration scenarios - new HTI planting and replanting to support the pulp and paper and energy industries; reinforcement of the
HTR, HD, HKm and HTI Woodworking schemes to support new planting and replanting; and new farm forestry schemes planting and replanting through community empowerment schemes. These scenarios are depicted in Table 5.

Table 5. Acceleration of plantation development towards 2045

<table>
<thead>
<tr>
<th>Description</th>
<th>2015</th>
<th>2016-2020</th>
<th>2021-2025</th>
<th>2026-2030</th>
<th>2031-2035</th>
<th>2036-2040</th>
<th>2041-2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>New plantation (HTI Pulp, Paper and Energy)</td>
<td>-</td>
<td>1,163,814</td>
<td>1,163,814</td>
<td>1,163,814</td>
<td>1,163,814</td>
<td>1,163,814</td>
<td>-</td>
</tr>
<tr>
<td>Replanting</td>
<td>-</td>
<td>1,847,441</td>
<td>2,205,379</td>
<td>3,175,224</td>
<td>4,145,069</td>
<td>5,114,914</td>
<td>6,084,760</td>
</tr>
<tr>
<td>Sub-total</td>
<td>2,180,929</td>
<td>1,244,743</td>
<td>4,508,557</td>
<td>5,672,372</td>
<td>6,836,186</td>
<td>8,000,000</td>
<td>8,000,000</td>
</tr>
<tr>
<td>New plantation (HTI Woodworking, HTR, HKM, and HD)</td>
<td>-</td>
<td>1,167,186</td>
<td>1,167,186</td>
<td>1,167,186</td>
<td>1,167,186</td>
<td>1,167,186</td>
<td>-</td>
</tr>
<tr>
<td>Replanting</td>
<td>-</td>
<td>346,059</td>
<td>734,121</td>
<td>1,706,776</td>
<td>2,679,431</td>
<td>3,652,086</td>
<td>4,624,700</td>
</tr>
<tr>
<td>Sub-total</td>
<td>414,071</td>
<td>1,581,267</td>
<td>2,748,443</td>
<td>3,915,628</td>
<td>5,082,614</td>
<td>6,250,000</td>
<td>6,250,000</td>
</tr>
</tbody>
</table>

Source: Road map for production forest development 2016-2045 (APHI, 2016)

Meanwhile, the export performance of the Indonesian forestry industry showed a negative growth (-0.15%) over the last 5 years (2012-2016) but still contributed US $9.87 billion or 7.5% of Indonesia’s total oil and gas in 2016 (US $131.38 billion). The main export commodities of the forestry industry are paper, plywood, pulp, furniture and processed timber, with export values as of January-February 2017 amounting to US $559.70 million (34%), US $351.24 million (22%), US $235.64 million (15%), US $227.61 million (14%) and US $175.58 million (11%), respectively. The forest product export data is presented in Table 6.

Table 6. Actual exports (US $) of Indonesian wood products during the Period 2012 to 2017 (Jan-Feb).

<table>
<thead>
<tr>
<th>No</th>
<th>Type of product</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Trend (%) 2012-2016</th>
<th>Jan-Feb 2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paper</td>
<td>3,917.1</td>
<td>7.5</td>
<td>3,756.36</td>
<td>10,773.3</td>
<td>10,587.36</td>
<td>9,874.23</td>
<td>-0.2</td>
<td>1,661.91</td>
</tr>
<tr>
<td>2</td>
<td>Plywood (kayu api)</td>
<td>2,011.5</td>
<td>0.0</td>
<td>2,170.21</td>
<td>2,372.47</td>
<td>2,343.30</td>
<td>2,162.29</td>
<td>2.2</td>
<td>342.63</td>
</tr>
<tr>
<td>3</td>
<td>Pulp</td>
<td>1,546.9</td>
<td>0.0</td>
<td>1,845.81</td>
<td>1,721.46</td>
<td>1,727.15</td>
<td>1,491.11</td>
<td>-1.4</td>
<td>268.78</td>
</tr>
<tr>
<td>4</td>
<td>Furniture</td>
<td>1,111.2</td>
<td>3.0</td>
<td>1,197.42</td>
<td>1,269.90</td>
<td>1,318.11</td>
<td>1,266.51</td>
<td>1.8</td>
<td>222.72</td>
</tr>
<tr>
<td>5</td>
<td>Sawn timber</td>
<td>1,007.5</td>
<td>3.0</td>
<td>993.38</td>
<td>1,137.51</td>
<td>1,158.50</td>
<td>1,161.37</td>
<td>4.6</td>
<td>184.59</td>
</tr>
<tr>
<td>6</td>
<td>Chipwood</td>
<td>119.53</td>
<td>177.19</td>
<td>219.98</td>
<td>129.00</td>
<td>102.10</td>
<td>-6.3</td>
<td>10.53</td>
<td>17.13</td>
</tr>
<tr>
<td>7</td>
<td>Wood craft</td>
<td>127.92</td>
<td>98.58</td>
<td>105.02</td>
<td>71.87</td>
<td>74.13</td>
<td>-11.2</td>
<td>10.97</td>
<td>10.40</td>
</tr>
<tr>
<td>8</td>
<td>Veneer</td>
<td>13.91</td>
<td>31.45</td>
<td>39.27</td>
<td>10.14</td>
<td>40.72</td>
<td>10.2</td>
<td>6.98</td>
<td>7.30</td>
</tr>
</tbody>
</table>

Source: Road map for production forest development 2016-2045 (APHI, 2016)
The main export destinations for Indonesian wood products are China, Japan, USA, the EU and Korea, with Jan-Feb 2017 export values of US $330.63 million (20%), US $213.53 million (13%), US $188.40 million (12%), US $173.26 million (11%) and US $93.59 (6%), respectively. Compared to the same period in 2016, there was an increase in the export value of forestry industry products by US $5.68 million (0.35%), and the countries receiving the most exports were India (34%), Saudi Arabia (13%) and Taiwan (8%). Figure 6 depicts the business process associated with Indonesia’s SF programs. The development of SF businesses is closely related to other sectors and institutions. The success of these businesses is highly dependent on the extent to which sinergicstic policies and regulations between sectors and among institutions can be built.

<table>
<thead>
<tr>
<th>No</th>
<th>Type of product</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Trend (%) 2012-2016</th>
<th>Jan-Feb 2016</th>
<th>2017</th>
<th>Change (%)</th>
<th>Share (%) 2016</th>
<th>Share % Jan-Feb 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Wooden building</td>
<td>7.43</td>
<td>4.40</td>
<td>4.57</td>
<td>5.80</td>
<td>3.15</td>
<td>-12.2</td>
<td>0.37</td>
<td>0.15</td>
<td>59</td>
<td>0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>10</td>
<td>Particle board</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>20.5</td>
<td>0.00</td>
<td>0.00</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Other timber products</td>
<td>116.52</td>
<td>143.54</td>
<td>164.41</td>
<td>212.35</td>
<td>203.81</td>
<td>14.1</td>
<td>39.07</td>
<td>37.84</td>
<td>1.1</td>
<td>2.1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Source: BPS (Processed Tanhut Exports) (2018)

**D. The Timber Industry and Trade: Is it over-regulated?**

Currently, timber is under-valued in Indonesia. According to key informants from APHI, the timber industry and trade in Indonesia is over-regulated and there is a need for new incentives and disincentives rather than further regulation. For example if a timber processing company is able to meet the requirements for wood export production in accordance with the applicable regulatory provisions, then there should be incentives such as reducing export taxes. In Indonesia, there are many sectors and...
institutions governing the timber industry and trade. There are at least three main ministries governing different aspects of the timber industry; the MoEF which has the authority to regulate the upstream or primary/raw materials sectors; the Ministry of Industry which has the authority to regulate secondary raw materials of the forestry industry; and the Ministry of Trade which has the authority to regulate timber trade. Despite the industry regulation provided by these Ministries, the primary, secondary and tertiary sectors of the timber industry are poorly integrated’.

Indeed, key informants from industry acknowledge that wood products are over-regulated, but for them the regulation is not a problem if the regulation aims to encourage an increase in value-adding. The foundation of the regulatory authority of the Ministry of Industry is in accordance with Act No. 3 of 2014 concerning industry development, which encourages an increase in value-adding in the timber industry. One key informant commented: “… we are more focused on developing efforts in the secondary sector or intermediate products, such as veneer woods, and sawn timber”.

According to the key informant from the Ministry of Industry, the policy to ban log exports and encourage sawn timber production is a good step to boost the value-adding of wood products. According to this informant, the Ministry of Industry does not agree with the export of whole logs from Indonesia because it has negative outcomes for the country in terms of human resources development, technology adoption and advancements in research, development and innovation. This log export ban policy is based on Regulation No. 44 of 2014.

Key informants from the Ministry of Trade commented that this Ministry only regulates in relation to timber traceability. That is, this Ministry ensures that traded products meet the necessary environmental and sustainability requirements, which determines the legality of the timber being traded. The legal basis for the foreign trade policy in the export sector is Law No.7 of 2014. In Article 38 (1), the Government regulates foreign trade activities through policies and controls in the fields of exports and imports. This regulation is then reduced to the regulation of the Ministry of Trade (Permendag 13/2012 on general provisions in the field of exports).

According to the key informants from APHI, to advance the timber industry there should be regulatory integration between the Ministry of Industry, the Ministry of Trade and the MoEF. The government is seen too quickly develop regulations, with such regulations often being too detailed or rigid, such as with plant spacings and types of plants that can be planted. ‘For example, agroforestry is prescribed in the regulation as a system of 3 x 3 m spacings, but when there are rocks present then smallholders will necessarily adjust this spacing to avoid the rocks. But this could then present accountability problems for the smallholders’. The Agency goes out of its way to find smallholders to punish. There is a need for some brave/outspoken members of the Ministries to attempt to drive change from within, especially from auditors or monitoring and evaluation officers.

E. The weaknesses of and challenges for the Indonesian timber industry

One of the weaknesses of the timber industry in Indonesia is that its wood products often do not meet the quality standards set by the market, especially markets in the European Union (EU) and the United States (US). In the EU and the US, there are other problems associated with chemical treatments for wood products and high standard of moisture content (drought) in the range of 8% up to 12%. This moisture content will determine the quality of timber product such as furniture. The high standard of the moisture content applied in the US make some timber exporters...
difficult to meet this requirement. To compete with other countries, Indonesia's wood exports must meet the established standards, including design standards. The determination of technical specifications aforementioned call it as non-tariffs barrier instead of tariffs barrier. Another weakness of Indonesian timber products is their expensive transportation cost. For example, to send products from outside Java to Java costs more than to ship products directly to China. Tempo daily on 24 October (2016) reported that furniture entrepreneurs in Jepara Regency, Central Java, complained about the high cost of bringing timber from South Sulawesi. The cost of bringing raw materials is more expensive than the cost of shipping their products abroad. This is due to no direct shipment, and the small volumes.

From a timber industry business perspective, a weakness is that Indonesian businessmen are often unwilling to innovate Innovative ideas and actions can be considered burdensome and potentially costly for businesses. Generally, the Indonesian timber industry only focuses on production at the lowest cost. For instance, if a wood product produced with low quality, then such the economic activity will only create low labor demands, low taxes, and a low production value. Most Indonesian businessmen will not attempt to produce high-quality products professionally, because for them such innovation brings a high cost burden.

In contrast to Indonesia, China's timber production is large-scale and the goods can be competitive in international markets. Two factors contributing to this are that timber processing machinery is subsidized by the Chinese central government and that the provinces and local governments also facilitate the industry (interviewed with the owner of a timber industry based in Lampung Province). She said further that differences in production costs between Indonesia and China can reach 40% for the furniture industry. Countries such as China and Vietnam also generally avoid GSP (Generalized System of Preference), which is issued by Export Inspection Agency. Export Inspection Agency has offices in all major cities to serve exporters in maintaining best quality to meet the specification of buyer to have best quality management system for exporters or entry fee facilities for developing countries by smuggling their goods across international borders. According to one key informant, the Chinese timber industry is vertically integrated and so it is far more competitive than the Indonesian industry. Sellers of raw materials, processors and other downstream value-adding stakeholders are often well connected and closely located, so the cost of production can be efficient' could work.

The Indonesian furniture industry has a supremacy over the Chinese furniture industry, especially in terms of the quality of the products design. Informants from the furniture trade argue that the Indonesian industry should not focus on mass production but rather produce unique products that can fetch a higher price. Such a step could be economically profitable.

According to a key informant from the timber trade, it is now necessary to develop an industry that can produce timber products in an integrated manner. From a marketing perspective, a typology of the community must be considered. If the consumers live in four seasons, such as European communities, then the products or design of the furniture exported to those of countries should also consider the four seasons. From the consumer perspective, product price and available quantities have generally been the most important qualities, but now the market is constantly changing. Different countries such as China and others in Asia may require different product designs.

Now in Europe, businesses are increasingly developing a social media or online platform. People are increasingly purchasing products online. Many large
businesses like IKEA (Swedish furniture manufacturer) also have an on-line business model. Many European consumers do not want to buy immediately, preferring to shop around to locate their product of choice. Many also do not want to buy finished products, preferring custom-made products with special design features. Given this situation, it has been suggested that the furniture industry in Indonesia needs to produce for both an expensive niche market and a cheaper niche market.

If Indonesia’s timber industry wants to grow, then infrastructure and energy supply must be improved beyond Java. According to a key informant from the Ministry of Trade, there are many investors considering investing in Indonesia, but they are hesitant based on the country’s weak infrastructure. Shipping from outside Java to Java also needs to be improved because it is currently cheaper to ship from outside Java to Europe. In addition, selling the wood from Kalimantan to Java is far more complicated than selling to European countries. Most companies also bear the high cost burdens associated with power plants and temporary ports, which is in contrast with China where all things related to investments, such as machinery procurement, are facilitated by the state, in the form of subsidies. In addition, the bureaucracy at the ports in Indonesia remains unclear, and there are often illegal charges being imposed. The cost of parking for boats is also high. Under these conditions, businessmen may approach unscrupulous bureaucrats for assistance, so that they could get some facilities to shipment their timber products. However the cost that they incurred is much higher than if they use a normal process. The government is now pushing for greater downstream value-adding within Indonesia’s timber industry. A key informant from the Ministry of Trade asserted that value-adding will only be achieved when the product morphology changes and efforts to push raw or semi-finished goods into finished goods are well institutionalized in the industry. However, the key challenge of the next 20 years for the timber industry in Indonesia is the transfer of technology. According to the informant, even in 2016, the Indonesian furniture industry is now far behind that of China and Vietnam. CNBC (2019) reported that Indonesia ranking 19 (US$1.6 billion) compared to respectively China’s ranking of 1 (US$40 billion) and Vietnam’s ranking of 6 (US$7.1 billion). Indonesia is far behind China and Vietnam in terms of technology, design, capital, interest and labour force regulation (i.e. 48 working hours per week in Vietnam, compared to Indonesia that has 40 hours per week) (Detik 2014).

F. Institutional reform of social forestry

Institutional reforms to support SF involve two domains: internal bureaucratic reforms and regulatory reforms. For the first aspect, MoEF conducted bureaucratic arrangements through the establishment of the Directorate General (DG) of Social Forestry and Environmental Partnership (PSKL). This DG position within an organizational structure is at a higher level than the previous Director position. The DG of PSKL serves four directorates, namely the Directorate of Social Forestry Area Preparation (PKPS), the Directorate of Business Development of Social Forestry and Customary Forests (BUPSHA), the Directorate of Tenurial and Indigenous Forest Conflict Management (PKTHA) and the Directorate of Environment Partnership (KL). The Directorate of PKPS is in charge of preparing the SF area while the Directorate of BUPSHA is tasked with empowering the efforts of the social forestry community, including Indigenous peoples. The Directorate of PKTHA is focused on handling of tenure conflicts and the preparation of customary forests. The Directorate of KL is focused on efforts to organize policy formulation and implementation in the areas of increasing community participation in forest management, handling of customary forests and building environmental partnerships.
In addition, to improve institutional performance, the Director General of PSKL has established UPT at a regional level. These units include the PSKL Agency of Sumatra Region located in Medan, the PSKL Agency of Java, Bali and Nusatenggara region located in Denpasar Bali, the PSKL Agency of Borneo Region located in Banjarbaru South Kalimantan, the PSKL Agency of Sulawesi Area located in Gowa, and the PSKL Agency of Maluku and Papua Region located in Ambon. Further institutional reforms have involved institutionalization of the implementation of the SF at multi-tiers government. For instance the MoEF has encouraged the formation of Working Group on Social Forestry Acceleration (POKJA PPS) both at the national and sub national level. Membership of these working groups includes representatives from government, NGOs, Universities and other stakeholders. The main task of the social forestry working group is to ensure that the SF program runs safely, and achieves its targets.

The institutional reforms have been welcomed by stakeholders, despite much pessimism. One key informant from a university confirmed that the acceleration of SF cannot depend on only a limited number of technical services units. Accelerated SF requires support from key local and village governments, but support from local governments is currently low. Similarly, the commitment of regional heads is still weak both in terms of policy support and regional government budget (APBD) allocations.

In terms of the regulatory reforms, the MoEF has undertaken quick steps through harmonizing the regulations underpinning social forestry programs. The harmonization of this regulation is an important and strategic step to overcome the fragmentation of SF program arrangements. So far, five SF schemes have been established (i.e. HTR, HD, HKm, HA, KK), which is often confusing for smallholders. With the issuance of the Minister of Environment and Forestry Regulation (PermenLHK) No. P.83/2016 concerning SF, the policy is expected simplified and more efficiently implemented.

G. Policy Breakthrough for Accelerating Social Forestry

There have been a number of policy breakthroughs that are expected to accelerate implementation of the SF program. There are at least five national strategies contributing to an acceleration of SF. First, creating an indicative map of social forestry area (PIAPS). Second, conducting regulatory reform through the issuance of regulation P.83/2016 concerning SF and P.39/2017 concerning Permit for Utilization of Social Forestry (IPHPS) applied in state-owned corporations (Perhutani). Third, the government established a working group for SF and currently has formed 21 working groups scattered in various regions targeted for SF. Fourth, building SF online services and establishing guidelines for SF facilitation and creating procedures for SF working groups. Fifth, building financial institutions (BLU) and mobilizing funds from related parties. Figure 8 illustrates the strategies of the five policy breakthrough undertaken by the MoEF. This policy action was taken to accelerate the implementation of SF policies and to overcome hierarchical structure of bureaucracy and resources mobilization (i.e. human resources, capital).
Figure 7 illustrates that firstly, the government continues to work towards simplifying procedures and regulations related to social forestry. Secondly, the government developed a PIAPS that could be revised every six months. Thirdly, the government established a working group and currently has formed 21 working groups scattered in various regions targeted for social forestry. And finally, the government builds services with an online system for people who want access rights to manage social forestry.

H. Public Perceptions of the Social Forestry Policy

For some respondents interviewed during the fieldwork, the current SF policy is considered too ambitious and highly political, but others consider it rational and are optimistic about it. A respondent from APHI was somewhat pessimistic - ‘The land allocation policy of 12.7 million ha for SF has been issued during Jokowi’s reign and we don’t know what will happen after Jokowi’s government. This means whether SF policy will still be a national priority or not”. The informant suggests implementation of the SF policy is linked to the election cycle. The SF policy would have finished, when the policy was only used as a political vehicles to get and increase political support from the people. This means that the SF policy is largely used for raised politically interests and it is without a concrete institution and action. It needs policy consistency.

In contrast, there has been some optimism about the SF policy expressed by some members of the public. Approximately 79% of the 19 respondents interviewed in this study stated the direction of the SF policy has been very good. They believed that the coordination between stakeholders, including the timber industry, farmers, government departments and activists, is improving. They also believed that the SF policy is increasingly clear, for society and the environment. Meanwhile, 10.5% of respondents stated the policy direction has been good and the remaining 10.5% stated...
that the direction has been poor. The respondents who believed the policy direction is good had several reasons for this:

1) The issuance of better regulations (P.83/2016), which is considered to be more effective and simpler than previously fragmented regulations;

2) Within the regulation other than licensing, assistance is also more clearly arranged and the community is being supported in obtaining the right of access to the management of forest resources; and

3) The improved regulation has increasingly involved inputs from stakeholders, including academics, NGOs and farmers.

The respondents who believed the SF policy has been poor argued that the regulation is still complicated, especially for farmers. They also suggested that SF policies still do not represent the biophysical and social conditions of local communities. For example, some areas lack timber supplies and requires certain types of wood, but the type of timber from SF is not in accordance with the community needs. Perspectives of respondents to the direction of SF policy are described in the Graph 1.

![Graph 1](image-url)  
Source: primary data (2017)  
Graph 1. Respondent perceptions of the direction of the SF policy (n = 19)

In Bulukumba, based on interviewed with 21 respondents, the respondents' knowledge of SF policies (i.e. P.83/2016 concerning SF; P32/2015 concerning forest rights; and P.85/2016 concerning transportation of timber products) is still very limited, although most (82.4%) stated that the policy direction is improving because it is involving the community as partners. However, the majority of respondents more than (65%) are unaware of current central and local government regulations, as illustrated in Graph 2. According to the respondents, there are weaknesses in the policies or regulations for CBCF development, namely: 1) A lack of policy socialization; 2) Not connected to banking institutions; 3) Not connected to the private sector/industry; 4) A lack of assistance; 5) A weak culture of planting trees desired by the community; 6) Weak farmer groups; and 7) Not connected to the policies of related sectors.
In terms of policy-making, the respondents from Bulukumba believed the process is improving. This is based on the level of stakeholder representation or public participation, for which there has been an increase. Compared to the New Order era when the level of public participation reached only 20%, it has increased to 44% in the current era. This demonstrates that policy-making related to social forestry is increasingly inclusive of the community, as illustrated in Graph 3.

Source: primary data (2017)
Graph 2. Respondents’ knowledge (in Bulukumba) of government regulations (%) (n=21)

Graph 3. The level of stakeholder representation in the development of current commercial-based timber management regulations compared to the New Order and Reform eras.

Source: primary data (2017)
I. Mapping of Social Forestry Regulations and Regulation Efficiency

To encourage the success of social forestry policies, the government continues to implement regulatory reforms. New regulations have been issued to accelerate the implementation of social forestry policies. There are 4 ministerial-level regulations and 24 regulations at the same level as the DG. The latter regulations relate to the technical implementation of the social forestry program. The scope of these regulations covers the upstream to the downstream aspects of the social forestry program - from the process of gaining access rights permits, through cultivation and to the utilization of business licenses, as illustrated in Figure 8.

![Figure 8. Map of Social Forestry Regulations](image)

The study focused on understanding respondents' views of the efficiency of social forestry regulation, especially P.83/2016. In terms of public perceptions of the existence of the Regulation of the Minister of Environment and Forestry, 56% of respondents (n=16) stated the regulation was efficient, 31% said it was less efficient and 13% inefficient. For respondents who believed the regulation to be efficient, their stated reasons for this included that the social forestry regulations are becoming more orderly, the requirements document is easier to use, the path to access SF has become clearer, and the community is also given the opportunity to harvest timber products from the SF area. Respondents who believed the regulation was less efficient felt this was due to the authority of verification being delegated to regional agencies, the process remaining too long and complicated, the lack of facilitation, and the government's promise to push off the emergence of an off-taker, such as timber industries that are be able to buy timbers produced by community, has not been realized in the field. Respondents who stated the regulation was inefficient argued this was because the regulation has not been developed as expected by industry players because it tends to only focus on meeting targets.
Regulations can be inefficient due to various political, socio-cultural, economic, institutional and other factors. Of the respondents interviewed (n=16), 28% stated the determinant economic factors for the inefficiency of SF regulations included limited access to infrastructure, the dominant role of middlemen, and the unfavorable investment climate especially for the wood processing industry. The second most important factors were socio-cultural factors (26%). These included that some people, especially outside Java, still do not have a tradition of timber cultivation and that implementing traditional forest management through rigid administrative processes is unfamiliar to many smallholders'. Third most important factors were political (20%) and institutional factors (20%), such as weak political support from local governments and weak group assistance. The remaining respondents (3%) stated that there are other important influencing factors such as the substance of the rule itself being too complex and the absence of a clear monitoring or supervision mechanism and the other respondents (3%) did not give an answer to the question.

According to the key informants, efforts to review regulations to improve the efficiency of SF implementation should include: 1) stakeholder synergies and shortening of distribution/ market chains; 2) Representation of community interests in the development of wood products; 3) Availability of moral and material support for SF development from both the central and local governments; 4) Regulations related to industrial product development; 5) Input from stakeholders in all regions so that regulations are appropriate to the regional field conditions; 6) A better support system and program monitoring; 7) Clear regulations; 8) Improving the role of related institutions and disseminate regulatory information in the field; and 9) Regulations should be arranged with the parties using participatory approaches.

Graph 5 shows that the Minister of Environment and Forestry’s Regulation No. 85 of 2016 is the most recent regulation deemed most efficient (47.1%) for the transport of cultivated timber forest products from SF schemes. This is because with the enactment of this regulation, the transport of timber from farm forestry or community forests does not need to use a letter of timber origin (SKAU) as a timber transport document. Instead, transportation notes or advanced transport notes are adequate. The local regulation (Perda) of Bulukumba No. 4/2014 on the management, utilization and administration of forest products derived from forest rights or land owned is deemed the least efficient (5.9%) because many of the articles within the regulation are contrary to the central rules.
Graph 6 presents the respondents' rankings of the perceived efficiency of regulations related to the social forestry policy. The Ministry of Environment and Forestry KLHK regulation No. 85 of 2016 has the highest value (6.4 out of 10) because this regulation has made it easier for farmers to sell timber grown on their land.

According to the interviewed respondents from Bulukumba, the factors that lead to inefficient regulation are: (1) Economics (33.3%), (2) Politics (25%), (3) Institutional (20.8%) in capacity building, (4) Social culture (8.3%), and (5) Others (12.5%). In Bulukumba, there are three prominent factors considered to lead to inefficient regulations. These are economic, political and institutional factors, a limited capacity of farmers to understand and weak farmer's institution. A weak institutional capacity of
farmers to understand the regulation and levies imposed on community forest products have a heavy impact on the efficient implementation of regulations. For example, when the regulation regarding the obligation to levy community forest products was still in force, the regional government obtained economic benefits from community forest management for meeting the regional income (PAD) target, but this policy was not followed-up with the provision of sufficient incentives for farmers.

J. Effectiveness of regulations

Regulations must be effective and efficient, while also meeting the principles of legal certainty, benefit and justice for community. In terms of the respondents’ perceptions (n=16) of the effectiveness of regulation P.83/2016, 56% respondents from Lampung Regency believed it is effective, and 44% believed it is less effective. Most of the respondents believed the regulation is effective because it matches the community’s needs, timber species that can be planted more diverse, and easier and reasonable the licensing process. Reasons for believing the regulation is less effective were that the role of the FMU is still unclear, the regulation does not impose firm sanctions for violations, the substance of the regulation is still difficult for the community to understand, and there is no strict supervision mechanism.

Source: primary data (2017)
Graph 7. Perceptions of Respondents (Public) to the effectiveness of Regulation (P.83/2016)

Factors that determine the ineffectiveness of a regulation include economic, institutional, socio-cultural and political factors. According to respondents from Lampung Regency that 32% of respondents believed regulatory effectiveness relates to socio-cultural factors, 26% believe it relates to institutional factors, 21% believed it relates to political and 19% believed it reates to economy and 2% respondent believed it relates to others. The socio-cultural factors primarily concern a lack of regulation that accommodates diverse socio-cultural needs. For example, for areas outside Java, especially in the frontier communities, there is little knowledge and understanding of the modern administrative system of forest management mandated by regulations. Institutional factors include the belief that the timber industry is over-regulated. Political factors include the lack of an integrated program of activities in the region, especially among related institutions, and the lack of regional involvement. The 2% of respondents who answered that there are factors other than political, institutional and socio-cultural reasons did elaborate these other factors.
For respondents in Bulukumba, Graph 8 shows that regulation No. 85/2016 is the most effective regulation (52.9 %), it is compared to regulation P. No.83/2016 (29.4%), and P. No.32/2015 (29.4%) and regional regulation (11%). Since this regulation is considered to have the most direct impact on timber transportation produced by local people on their lands that is easier.

Graph 8. Respondents' opinions about the level of effectiveness of regulations related to SF

Graph 9 depicts that regulation P.No.85/2016 get the highest value (6.8 out of 10) followed by regulation P.No. 83/2016 (6.1), regulation P.No. 32/2015 (5.8) and regional regulation (Perda) No. 4/2014 (4.8)

Graph 9. Value of effectiveness of regulations related to social forestry policies voice form Bulukumba

In Bulukumba, respondents considered the factors that result in ineffective regulation of CBFM to include: 1) institutional factors (weak supervision and no role for financial institutions) (34.6%); 2) socio-cultural factors (low public understanding)
(26.9%); 3) economic factors (23.1%); and 4) political factors (indications of articles of political order) (15.4%). The institutional, socio-cultural and economic factors were the most prominent. As with regulatory efficiency, the effectiveness of regulation is determined by various factors. Institutional factors are considered the most decisive because it is a driver of farmers playing an active role in managing community forests. Socio-cultural factors concern the values and traditions of the people in obeying the rules, including for forest management. The economic factors affect how the community adheres to the rules, as long as this will provide benefits in meeting livelihood needs.

The respondents also indicated the factors they consider need to be improved so that the regulation becomes more efficient and effective, namely:
1) institutional factors (noted by 32.4% of respondents), i.e. farmers should play an active role in managing farm forestry;
2) policy factors (23.5%), such as how to maintain policy consistency;
3) social factors (17.6%), such as level of adoption of regulation;
4) economic factors, such as how to reducing transportation cost and increasing benefit (14.7%); and
5) political factors (11.8%), such as political support to the farm forestry program.

K. Achievements of the Social Forestry Policy and Programs

A major goal of the SF policy is to resolve tenure conflicts in state-owned forests. The conflict resolution achievements have been dynamic. For example, the targeted area for conflict resolution by 2015 was 200,000 ha but conflicts had been resolved in more than 318,000 ha. By 2016, conflicts had been resolved in approximately 2.1 million ha of the targeted 2.5 million ha, and by 2017 in only 82,000 ha of the targeted area of 270,000 ha (Graph 10).

![Graph 10. Social Forestry and Resolved Tenure Conflicts](image)

Source: DG of PSKL (2017)
Graph 10. Social Forestry and Resolved Tenure Conflicts

Field implementation of SF has been slow because of the many tenure conflicts that must be resolved, and then between sectors and institutions are also not well
connected to support this program. Another factor is that there are also some people who still reject the SF program, for example in Bengkulu.

Other major objective of the SF policy are to improve the welfare of local communities and the sustainability of forest management. As of September 2016, the DG of PSKL noted that the total area of SF implementation had reached 1,691,717 ha or 13% of the targeted area of 12.7 million ha. The latest data shows that SF has now been implemented on more than 1.9 million ha (DG of PSKL 2018). The area includes:

1. 429,108 ha of HKm;
2. 471,081 ha of HD;
3. 767,484 ha of HTR; and
4. 24,044 ha of KK.

Meanwhile, more than 1.5 million people are participating in the SF program, which equates to 10% of poor forest-dependent families across the whole country.

The area over which SF permits have been issued for the local communities, between 2007 and 2018 equals 1,331,883 ha. Of the five SF schemes, HD has the largest permitted area, covering more than 600,000 ha. The Customary forest has the least permitted area, covering just over 8,746 ha, as depicted in the Graph 11.

![Graph 11. SF achievements by Program Type: HKm. HD, HTR, HA and KK in 2007-2018](image)

Source: DG of PSKL (2017)

Graph 11. SF achievements by Program Type: HKm. HD, HTR, HA and KK in 2007-2018

**L. Some Causes of the slow Progress of Social Forestry**

The lack of synergy among SF industry sectors and institutions at national level has contributed to the slow progress of the SF policy. In response, the Coordinating Minister for Economic Affairs even issued a Decision Letter No. 73 on the Agrarian Reform Team on May 4, 2017. However, this regulation is not yet strong enough to
accelerate the implementation of SF programs. Achieving this will take a Coordinating Agency to mobilize related ministries as well as local governments. In addition, the issuance of the Agrarian Reform Team regulation will not be effective without an accompanying and sufficient budget allocation, as illustrated in Graph 12.

Figure 9. Social Forestry Policy Relationships at the Macro-Level

Figure 9 illustrates that the SF policy is not an isolated policy, but rather one with links to a range of Ministries and sectoral interests. Complex relationships between these Ministries and sectors can affect the implementation performance of SF in the field. Also affecting this performance is the lack of central budget to support implementation of the SF policy. Institutional and bureaucratic reforms and regulations will not be maximized if not accompanied by reforms in budgetary politics. A study conducted by the Partnership 2012, in FKKM (2016) reported that the costs required for organizing the community and getting the SF permit in Nusa Tenggara Barat Regency amounted to US$ 31.2 per ha, US$ 39.9 per ha for both Yogyakarta and Lampung provinces. Assuming that the cost is an average of US$ 31.2 per ha, then for the total SF area of 12.7 million ha the cost would equate to around US$ 395,278,840. However, a civil society coalition has estimated the cost would be US$ 286,206,896 (DPR 2017). A closer look at the SF program budget reveals a downward trend in allocations and expenditure over recent years. Based on official data from the DG of PSKL (2017), the allocated budget in 2015 was US$ 19,535,241, with US$ 16,809,793 expended. In 2016, the allocated budget was US$ 16,708,068, with US$ 11,689,724 expended, and in 2017 the budget was US$ 12,394,413, with US$ 1,885,103 expended. In 2018, it is planned to increase the program’s budget to US$ 26,177,655, as shown in Graph 12.
M. Achievements of social forestry programs in Lampung, Gorontalo and Bulukumba

1. Migration, Conflict and Deforestation

Data from the Lampung Forestry Office (2017) shows that approx. 53% of the Lampung Forest Estate has been deforested, or degraded forest destruction in Lampung can be traced back to the transmigration policies during the colonial and post-colonial eras. Benoit (1989) for example, has stated that for centuries Lampung Province has been a gateway for the migrant populations of Java and Sumatra. The Dutch government, for example, in the early 20th century, had established a transmigration program by moving people from densely populated Java (38 million in 1930) to Lampung, which at that time had a population of only 300,000. The Indonesian government continued the program until the 1980s. As a result, the population of Lampung increased more than 10-fold from 376,000 in 1930 to more than 6.7 million in 2001 (BPS Lampung Province, 2001).

The population of Lampung is still increasing as a result of ongoing migration from Java over the last decade. Most of the immigrants live in hilly areas and on mountain slopes where the land is suitable for coffee cultivation. Verbist and Pasya (2004) explain that currently, most of the land occupied by the new immigrants is in officially-declared protected forests or national parks. Between 1960-2000, many forest areas were converted to coffee plantation not only by new migrants, but also by private and state-owned forestry companies for large-scale plantation development. This forest clearing often triggers conflict (Intan 2011).

Even since the reform era, the conflict of use and the status of the land have increasingly surfaced. According to the Provincial Forestry Office report, 42% of the land conflicts occur on state and municipal forest land. Forested lands have turned into coffee fields and today many encroachers plant cassava for tapioca.

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Source: DG of PSKL (2017)
Graph 12. Changes in the SF budget allocation 2015-2018 (US$)
N. Examining the Implementation of Social Forestry in Lampung, Gorontalo and Bulukumba

1. Program Achievements

The SF policies and programs in Lampung have been introduced since the 2000s. The main purpose of this policy is to resolve land use and tenure conflicts. Verbist and Pasya (2004) argue that the collapse of a centralized system of power during the reforms following the fall of President Suharto in 1998 made the repressive measures of the past no longer acceptable. This led to new efforts and negotiations to implement HKm schemes. In 2000, ICRAF and Watala (NGOs) collaboratively facilitated forest utilization negotiations where the HKm scheme was used as an entry point for resolving land tenure conflicts at Sumberjaya. Of the 12 HKm groups (with about 1,035 peasants as members), three have obtained a temporary HKm License which is valid for 5 years and stipulated by the West Lampung Regent Office. They are the first HKm group authorized by a Bupati in Indonesia under the Decree of the Minister of Forestry No. 31 / Kpts-II/2001 on HKM. From the side of the issuance of IUPHHKm permit, until 2016 is quite good where the stipulation of working area (PAK) for HKm of 95,102 ha, the permit has been issued area of 93,178 ha. Of this total area, 16,013 ha (16.7 percent) has not yet been licensed. In another example on January 15, 2010 an area of HTR development reserves of 24,835 ha were determined based on the decree (Decree No. 47 / Menhut-II / 2010) but by 2016, the permits IUPHHK-HTR that had been issued were only 16,651 ha (67%). In another example, under the determination of HTR development reserves based on Decree No. 47/Menhut-II/2010 dated 15 January 2010, 24,835 ha have been issued as IUPHHK-HTR but by 2016 only 16,651 ha (67%) had been established. Development of partnerships in production forest areas has also been slow to progress. There is 225,090 ha of land under management permits for HTI and 115,834 ha under management permits for KPH, but to date the production partnerships in these forests has reached only 25,432 ha.

The results of studies by Watala show that many of the forests in Lampung Province were originally in a degraded condition. In addition to reforestation, the community is also greatly assisted by the management of community forests so that the local economy can be improved (Kagungan 2012). Nevertheless, in general the SF program in Lampung Province is still operating as a trial scheme and making slow progress towards achieving its expected economic, institutional, sustainability and target area outcomes.

The progress of community-based commercial timber policy (CBCF) elements of the SF policy’ faring better. This is at least acknowledged by some of the interviewees. One of the informants from the timber industry stated that the policy is good but the drawback is the limited technical personnel (Ganis), especially for the processing industry. Respondents from Lampung also admitted the timber product trading policy was more complicated than other region. The community timber trade planted from private lands (farm forestry) is simpler, especially from procedures of getting licensing. It is an obligation to report to the relevant agencies when logging is occurring, but this is often not done. The ease of procedure for obtaining community timber trade permit documents is often misused to trade timber originating from state forests in Lampung Province, the SF program has far exceeded the initial target area. This targeted area was 26,000 ha, but by December 2017 over 171,000 ha of various
permits of the SF schemes had been issued (Graph 13). HKm was developed since the 1990s contributed the largest area (over 109,000 ha) followed by HD (over 40,000 ha) and HTR (over 20,000 ha). However, if viewed from the perspective of institutional quality and planting and production, the outcomes are still far from expectations.

Source: DG of PSKL (2017)
Graph 13. Achievements of SF in Lampung and Gorontalo provinces as of December 2017

From the institutional perspective, for example, the results of Sanudin et al. (2015) reveal the emergence of new conflicts between farmers' cooperatives and their peasant members. This conflict occurs because the farmers consider the cooperatives do not provide legitimate representation of their interests'. As a result, most of the 68% of farmers who had previously committed their land to the IUPHHK-HTR area in 2013 submitted a proposal to the West Coastal Regency to cancel the IUPHHK-HTR because they believed the cooperative would actually take control of their long-held land. However, this proposal was rejected by the West Coastal Regent Office.

In Gorontalo Province, according to local NGO respondents, the SF policy objectives are very good but program implementation is not yet optimal. There are seen to be many weaknesses in the program, including the unavailability of timber markets and uncompetitive prices, especially when compared with other commodities such as maize. Another obstacle is a lack of integration with the timber industry meaning that products harvested through the social forestry program cannot be optimally utilized. Other weaknesses are the limited inter-agency coordination and local governments tending to support investors more so than community groups. There is also no clustering in the development of CBCF. For example, there is no identification of the best locations for sengon or teak plantations should be developed. There is also no supportive local regulation on social forestry in Gorontalo Province. Many forest communities still do not understood what SF is, and the relevant government agencies have not yet undertaken intensive fieldwork to investigate and promote the SF opportunities in the region.
O. Cassava and Agropolitan Policy and the Slow Progress of Social Forestry

Besides coffee, cassava is another crop that is commonly planted by farmers in Lampung Province. Cassava cultivation is key to the development of the tapioca industry in Indonesia. A report by the Agricultural Data and Information Center (2016) noted there are eight provinces that have become centres of cassava production in Indonesia. Data shows that Lampung Province had the largest average area of cassava harvested between 2012-2016, being 295,550 ha which equates to 27.71% of the total area in Indonesia. This is followed by East Java Province with a harvested area of 157,900 ha (14.8%) and Central Java Province with a harvested area of 155,660 ha (14.59%). The figures for the eight major cassava production provinces and other areas are shown in Graph 14.

Cassava production in Indonesia between 1980-2016 grew at a rate of 1.33% per year. In 2016, the area under cassava cultivation was projected to cover 1.11 million ha with an average productivity reaching 20.23 tons per ha (Pusdatin Pertanian 2016). In Lampung Province, cassava production averages 22.64 tons per ha (BPS 2010), but there can be seasonal variations. According to one respondent in Lampung, cassava production in the dry season reaches up to 16 tons per ha while in the rainy season it can reach up to 25 tons per ha. This informant also noted that the price of cassava has reached IDR1,450 per kg in 2017 and the cultivation time until harvest is 7-8 months.
Source: Lampung Province Agricultural Services (2015) and Republika (24 October 2017)

Graph 15. The price of cassava (IDR/kg) between 2011-2015

For farmers in Lampung, cassava is a very profitable crop. Compared to timber, cassava is a shorter-rotation crop, it is easier to sell the tapioca flour manufacturing industries based in Lampung Province with stable price. While, for farmers, timber is a much more regulated commodity. Table 7 compares the features of cassava and timber as agricultural commodities for farmers in Indonesia. Figure 10 shows farmers in Lampung harvesting cassava in their field and the other picture depict sengon trees planted in private land (farm forestry).

Table 7. A comparison between cassava and timber as farm enterprises

<table>
<thead>
<tr>
<th>Cassava (Singkong)</th>
<th>Remarks</th>
<th>Timber (Sengon/Albizia chinensis)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of production per ha</td>
<td>10-15 million per ha</td>
<td>Cost of production per ha</td>
<td>4-15 million per ha</td>
</tr>
<tr>
<td>Price per kg (IDR)</td>
<td>1,250</td>
<td>Price per m³ (IDR)</td>
<td>350,000-900,000</td>
</tr>
<tr>
<td>Period until harvest</td>
<td>7-8 months</td>
<td>Period until harvest</td>
<td>5-8 years</td>
</tr>
<tr>
<td>Yield per ha</td>
<td>22 ton</td>
<td>Yield per ha</td>
<td>10-70 million per ha/buy in bulk/estimated equal with 85 m³-187 m³</td>
</tr>
<tr>
<td>Gross income per month (IDR)</td>
<td>3,437,500</td>
<td>Gross income per month (IDR)</td>
<td>170,000-1,170,000</td>
</tr>
<tr>
<td>Market (manufacturing industry)</td>
<td>Easy</td>
<td>Market (manufacturing industry)</td>
<td>Limited</td>
</tr>
<tr>
<td>Regulations</td>
<td>Simple</td>
<td>Regulations</td>
<td>More complicated</td>
</tr>
<tr>
<td>Government facilitation</td>
<td>Substantial</td>
<td>Government facilitation</td>
<td>Limited</td>
</tr>
</tbody>
</table>

Gorontalo Province has been termed ‘the Hidden Paradise’ because it is famous for its extraordinary natural landscape and productivity, especially in the agriculture and fisheries sectors (Mopangga et al., 2013). Statistical records show the province has 390,929 ha of dry agriculture land. Of this area, approximately 220,406 ha is potentially suited to maize production but to date just under 100,000 ha has been utilized for this purpose. Hence, much of the potentially usable land remains under-utilized’ (Winarso, 2013).

Maize is well known as one of the main food sources for communities in Gorontalo Province. Given this crop’s importance, the provincial government issued the maize-based agropolitan policy as a leading provincial policy (Nurdin et al., 2009; Mopangga et al., 2013). Maize was selected as a priority commodity, because its cultivation and use is strongly linked with the culture of Gorontalo society (Herawan, 2013). Another reason for its selection is its short cultivation time until harvest, being 115 days. For a one ha planting of maize, farmers can earn 6 million - 8 million rupiah (Anugerah, 2010).

Since the Secretary General of the Ministry of Agriculture launched an Agropolitan Program based on maize cropping and beef farming on March 8, 2002, the area planted to maize has increased sharply. Around 7,900 ha were planted in 2002. By 2014, this area had increased to 39,214 ha (2015) as cited in Khasanah (2016), and to 82,263 ha by 2018 (Detik, 2018), as illustrated in Graph 16.
Before 2000, the average yield from maize crops was 1.5-2 tons per ha. But after implementation of the agropolitan policy, yields have reached up to 4-5 tons per ha, and sometimes even up to 8 tons per ha. In 2016, the average yield was 4.1 tons per ha (Kompas 2016). Total maize production in Gorontalo is typically around 750,000 tons per year’ (Agricultural Service and Food Security of Gorontalo Province, 2012).

In addition to local consumption, maize crops are also sent outside the region. This includes being exported to countries such as Korea, the Philippines and Japan. However, Indonesia still currently imports no less than one million tons of maize each year. High demand means the production in Gorontalo can not meet the local need. Therefore, in addition to buying maize from adjacent provinces, Gorontalo is also trying to increase its current level of maize production by more than 50 percent (Pranadji, 2008).

The rapid development of maize commodities is corroborated by three policies of the provincial and central governments. First, the agropolitan policy is strengthened on a legal basis by the Gorontalo Governor’s Decree regarding the price of maize in the province. Secondly, the Regional Regulation No. 2/2004 concerning Principles of Ease of Doing Business Investment has guaranteed a simplified licensing system and increased facilitation including land preparation assistance, in accordance with the designation plan and its goal of providing tax relief and business certainty’ is better (Herawan 2013). Second, , the government has also set the price of maize with a 15% moisture content at between IDR3,150 (lower limit) and IDR4,000 (upper limit).

While helping to improve community income, a negative impact of of the agropolitan policy is an increase in forest degradation in Gorontalo Province. The agropolitan policy has encouraged people to clear forest areas for agricultural production. The maize cultivation is not limited to flat lands but also hilly areas with steep slopes. Steeply-sloping land has been heavily logged to make way for maize cultivation. Currently there are many areas of barren hills which locals fear will be subject to landslides during the rainy season (Khasanah, 2016). Field observations confirm there are many deforested areas, with only some of these areas planted with maize(Figure 11).
Table 8 depicts that for farmers, maize is considered an economically more attractive crop than timber and so there is a preference for planting maize. Improving yields and market access are increasingly providing confidence that maize cultivation is far more profitable activity than timber growing. In addition, farmers can also access grower support and subsidies for the inputs for maize cultivation, such as for manure and seedlings.

Table 8. A comparison between maize and timber as farm enterprises

<table>
<thead>
<tr>
<th></th>
<th>Maize</th>
<th>Remarks</th>
<th>Timber (Jabon)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of production per ha (IDR/4 months)</td>
<td>3-7 million</td>
<td>Cost of production per ha</td>
<td>27 million (based on HTI GCL)</td>
<td></td>
</tr>
<tr>
<td>Price per kg (IDR)</td>
<td>2,500-3,200</td>
<td>Price per m³ (IDR)</td>
<td>1.2-2 million</td>
<td></td>
</tr>
<tr>
<td>Period until harvest</td>
<td>4-5 months</td>
<td>Period until harvest</td>
<td>5-8 years</td>
<td></td>
</tr>
<tr>
<td>Yield per ha/4 months</td>
<td>4.5-7 tons</td>
<td>Yield per ha (400 trees)</td>
<td>200 m³ (estimated)</td>
<td></td>
</tr>
<tr>
<td>Gross income per month (IDR)</td>
<td>1.375-2.250 million</td>
<td>Gross income per month (IDR)</td>
<td>2,700,000-4,160,000 (estimated)</td>
<td></td>
</tr>
<tr>
<td>Market (manufacturing industry)</td>
<td>Easy</td>
<td>Market (manufacturing industry)</td>
<td>Limited</td>
<td></td>
</tr>
<tr>
<td>Regulations</td>
<td>Simple</td>
<td>Regulations</td>
<td>More complicated</td>
<td></td>
</tr>
<tr>
<td>Government facilitation</td>
<td>Substantial</td>
<td>Government facilitation</td>
<td>Limited</td>
<td></td>
</tr>
</tbody>
</table>

Source: primary data (2017)
Development of the farm forestry industry in Bulukumba is showing much promise. The pattern of planting forest stands in Bulukumba is generally a system of polyculture or agroforestry, involving the planting of commercial timber trees such as Sengon (*Paraserianthes falcataria*), Mahogany (*Swietenia mahagony*), Gmelina (*Gmelina arborea*), Bitti (*Vitex cofassus*), Suren (*Toona suren*), and Teak (*Tectona grandis*), inter-mixed with multi-purpose trees (MPTs) such as Rambutan (*Nephelium oxidentale*), Durian (*Durio zibethinus*), and Mango (*Mangifera indica*). The timber species can also be integrated with other commercial plantations of Cocoa (*Theobroma cacao*), petai (*Parkia speciosa*), coffee (*Coffea sp*), cloves (*Eugenia aromatic*). The average area of land owned by farmers is between 0.5 - 1 ha. Data in 2011 showed that in a total area of only 22,500 ha, Bulukumba community forests were able to supply 24,236 m$^3$ of logs, with an estimated total turnover of IDR 1.2 billion (Sulawesi Community Foundation 2018). However, the average rate of timber production from community forests in Bulukumba is 20,000 m$^3$ per year (Bulukumba Forestry and Plantation Service 2012).

**P. Public and Private Partnerships**

The case-study evidence suggests there is little involvement of the private sector in the development of SF activities (i.e. CBCF production) in Gorontalo (Graph 17). In Lampung, 58% of respondents stated that there is no private sector involvement in these activities, while 33% stated there is a good level of private sector involvement. Respondents who perceive little involvement of private sector, argue that the private sector character is focused on production only. They also view there is no assistance programs and there is a lack of supporting regulation. While those who view good level of private sector involvement argue that timber growers can sell their timber to timber industries.

Private sector involvement in SF activities in both Gorontalo and Lampung provinces, generally is still lacking. This is not beneficial for the timber producers (i.e. community) as the community capacity to manage timber businesses is still low. In addition, public and private cooperation is still dominated by the private sector, so the people have not felt that their rights are being appropriately considered.
respondents in Lampung who stated there is a good level of private sector involvement often noted the case of PT Andatu (Plywood industry) and their sourcing of timbers from farm forestry, although the company has now ceased operations.

![Graph 17. Respondent perceptions of private sector involvement in social forestry activities in Gorontalo and Lampung provinces](image)

Source: primary data (2017)

According to one informant from a timber company in Lampung, a good private sector-community partnership relates to the sustainable supply of raw materials’. The community should then continue to be supported by the government to plant timber trees. The industry could then provide seeds and management guidance’. In addition, the community also needs to be encouraged to participate in the production process by making value-added products in accordance with products developed by the industry. On the other hand, the government also provides various supports and facilitations for industrial sectors that make cooperation with communities, as shown in Figure 13.

![Figure 13. A Public-Private and Community Partnership Model](image)

The above-noted timber industry informant from Lampung also commented that many farmers lack creativity, and tend to be lazy. The informant’s company has actually encouraged the community to participate in the production process by making broom handles, but apparently there has been little interest even though the
broomsticks would be purchased by the company. Overall, the community still requires much technical support for timber cultivation and harvesting.

The involvement of the private sector in SF activities in the two case-study locations is still voluntary, and should continue to be encouraged, especially by the local government. The level of involvement of the private sector also needs to be improved, especially in Gorontalo. For example, Gorontalo Citra Lestari (GCL) has implemented an agroforestry or intercropping program of 400 ha. The company has recruited a local labor force of 2,152 people to assist with planting and nursery work and also provides training sessions for 20 local farmer groups (Forest Service and ESDM 2015). However, the weakness of this private sector program and the company's focus on profits at the expense of community interests'. Table 9 depicts the structuring the utilization of business licences in Gorontalo. There are two HTI Business Permit that have been operating in the area, and 92 HTR business permit and primary industry business permit.

Table 9. Structuring the utilization of business licenses in Gorontalo

<table>
<thead>
<tr>
<th>No.</th>
<th>Types of permit</th>
<th>Total</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HTI Business Permit (IUPHHK-HTI)</td>
<td>2</td>
<td>Company (PT Gema Nusantara Jaya dan PT Gorontalo Citra Lestari)</td>
</tr>
<tr>
<td>2</td>
<td>HTR Business Permit IUPHHK-HTR</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Primary Industry Business Permit (IUIPHHK)</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>


To encourage increased private sector or industry involvement in the development of SF, it is necessary to regulate the partnerships. There is also a need for such regulation to be synchronization between central and local regulations. In addition to regulation, the government also needs to provide incentives and supports to appreciate the stakeholders who are active in developing the SF activity. For some regions, this level of government support is already optimal but this is not the case for Gorontalo Province. This government support depends on authority that their own and political support from related stakeholders, such as legislative body and also the local culture.

There is currently a need to encourage greater private sector involvement in SF activities, including the involvement of financial institutions to support the development of community-based timber production. Local governments can play an important role in improving the investment climate by providing incentives for timber industry stakeholders to develop local forestry initiatives. All governments are also obliged to protect the rights of smallholder timber farmers by restricting the influence on prices by middlemen and providing market certainty, including competitive prices. The government is obliged to provide market certainty, including competitive prices.

In Bulukumba, the respondents considered the current level of private sector involvement in SF activities to be good (Graph 18). This is because some industries have partnered with farmers in the provision of tree seeds for farm-based plantation development. Private sector involvement in the development of farm forestry in Bulukumba District during the New Order era was considered to be lacking, even though during this time there was a rural development program guided by forest concessionaires (HPH Bina Desa) at that time. In the post-reform era, there was an industrial cooperation between a number of industrial operators (PT PAL, PT Zanur and CV Syamsurya) and a Forest Farmer Group (FFG), involving seed distribution
(e.g. sengon and white teak), and the planting of forest crops. Currently however, there is no private sector involvement because the large industries in Bulukumba District have ceased their activities. In brief, the private sector involvement in SF activities in Bulukumba has fluctuated over recent times.

Source: primary data (2017)

Graph 18. Respondent perceptions of the level of involvement of the private sector in CBCF development (in Bulukumba)

Q. Public Perceptions of a Social Forestry Policy Breakthrough

Many respondents acknowledged that there has been a change in forest policy. In the previous period (2010-2014), SF was only handled by the DG and there were no incentives for local governments to initiate or support community forestry development. The SF permit procedure was complex, the forest management system complicated, there has been a lack of consistency between sectors and cross-level governments and the level of available assistance and counseling has not been optimal. Another policy weakness is that the SF policy has not been integrated with programs and policies that implemented by FMU.

From the interviews, 64% of respondents in Lampung and 60% in Gorontalo stated that there has been little progress in SF policy’ (Graph 19). Only 18% of respondents in Lampung and 20% in Gorontalo felt there had been many policy breakthrough. The same proportions of respondents in both provinces felt there had been no policy breakthrough. Reasons for beliefs that there has been policy breakthrough, were the simple system for obtaining documentation for timber trade and that the government has been trying to facilitate the supply of wood from farmers for the timber industry, especially for woodworking. For those who stated there has been little progress in SF policy. The main reasons were that the types of timber that can be developed remain limited, and that there remain regulations that make things difficult for farmers, such as the gaining of SVLK. Regulations related to existing timber crops in HTR areas were also considered to be confusing.
In terms of the efficiency and effectiveness of the progress in SF policy, it is apparent that the public in Lampung (n=13) considers the average value of efficiency and effectiveness in 7. In Gorontalo (n=7), the value for regulatory efficiency was 6 and for regulatory effectiveness it was 5, as illustrated in Graph 20.

According to a forestry official from Lampung Province, while SF has helped to resolve the problem of land tenure conflicts, it has not been able to increase the capacity of the community. Since the SF program is just seen as the only legal means for the community getting access rights to manage forest. On the other hand, while there are a large number of people who participate in the SF program, there is no firm law enforcement and ‘the encroachers seem safe’. According to one of the forestry officials, for the encroachers that do not participate there should be a temporary penalty, while there should be incentives for those who do become involved.

To date, there are still many people who are willing but have not become involved in SF activities as they are still waiting to see the success of those who are involved. Similarly, there is the case of FMU Gedong Wani where the community is now well settled in the region and they have obtained the appropriate forest management permit (IUPHHK-HTR), but they still do not have a clear plan for their social forestry program. In Gorontalo Province, the progress of SF and in particular the HTR scheme for Boalemo has been slow. By 2014, the the IUPHHK-HTR permits issued' covered 521 ha, or just 27 percent of the total reserved area. The permits are granted to 5 farmer groups in three villages, namely Rumbia, Wonggahu and Molumbulahe, and is based on Boalemo Regent Decree No. 231 of 2014. The remain
of the reserved area ‘cannot be used for SF activities because it is located in a limited production forest area (HPT), in accordance with a letter from DG of Forest Planning issued in November 2015. Based on field observations, there has been no planting of timber trees in the HTR area (Rohadi et al., 2016). Data from DG of PSKL (2017) shows that there has been an increase in SF activity in Gorontalo Province, but the total licensed area had reached only 701 ha of the targeted 6,981 ha. Other data from the MoEF (2017) suggests the licensed area had now reached 981 ha.

The ongoing progress of the SF program in Gorontalo is a result of several factors. One is the low interest of forest communities to plant timber trees. Farmers prefer to grow maize crops because they are faster producing and considered more financially promising. The growing of maize monocultures in Boalemo has increased five-fold over the period of 2002 – 2014. This has coincided with the launch of the Agropolitan Program by the Secretary General of Ministry of Agriculture on March 8, 2002. The area of maize planting increased from 7,932 ha in 2002 to 39,214 ha in 2014, with average productivity of 4.8 tons per ha (BPS Kabupaten Gorontalo, 2015 in Khasanah, 2016). Khasanah (2016) stated that the Agropolitan Program has improved community welfare in Boalemo Regency, and in 2011 the district was selected as one of the pilot areas for Local and Regional Economic Development (PELD) by the National Development Planning Agency (BAPPENAS).

Although able to improve the welfare of the community, the planting of maize monocultures has had significant negative impacts on the landscape, primarily due to the clearing of forests on steep slopes to establish the new cropland. There are now many barren hillsides and growing community fears about landslides during the rainy season (Khasanah, 2016).

The slow progress in SF program implementation is also a result of technical problems. Several locations submitted applications for utilization permits through the SF program but when verified by the PSKL the area was not included in the area reserved for SF, such as in Longalo Village in the Sub-District of North Bulango, and also in District Kabila. From the total area of SF based on PIAPS, only 25 percent enter into community empowerment block that means the rest of forest areas cannot be included in the SF program.

Another factor behind the slow implementation of the SF program is the low level of community participation in environmental conservation. Respondents from the MoEF said that participation is low due to lack of promotion and the limited flow of benefits from SF to surrounding communities, such as job creation and community welfare.

When respondents were asked their opinions regarding the current the SF policy breakthroughs to support SF success, one respondent stated that policy-makers need to make more field visits to witness the dynamics of the problems associated with SF implementation. The necessary policy breakthrough relates to regulation and incentive mechanisms, both for individual actors and for farmer groups. The government needs to intervene to shorten the timber supply chain, and support the involvement of social organizations in SF implementation. There is also a need to encourage investors to several areas to support the development of commercial timber products in accordance with the availability of raw materials.

According to key informants from Lampung, policy change is also needed at the local-level. The needed policy changes relate to partnerships between farmers' groups and communities, land preparation for industry to meet production targets, banning the trade of whole logs to other areas to encourage value-adding by farmers, and the
industry. SF programs could more easily integrate with regional programs’ (RPJMD). It is also necessary to reduce high cost economics transaction, and map the market while encouraging the emergence of young entrepreneurs by facilitating investment in different sectors of the timber industry.

One key informant (a policy-maker) stated that SF policy would not work if there were no bureaucratic reforms. Such reform has become an important consideration for SF policy-makers. Even small bureaucratic reforms could substantially improve the on-ground implementation of SF. However, another key commented that the SF program should not be a political vehicle over the five-year term of government. He noted a spirit of justice and equity must be the soul of the SF program or the improved management of the allocated 12.7 million ha would not be achieved. He further noted that development of the SF program must still involve entrepreneurs of the forest industry.

According to an official from the MoEF, the HKm scheme is the most advanced of the five SF program schemes. This is followed by the HD and the HTR schemes. The development of HTR is highly dependent on external financing. The government has investigated whether the Public Service Board (BLU) could provide financial support to the SF program, including HTR. However, it seems that BLU is still hesitant to lend money because it is feared there would be no return on the investment.

A critical issue that could hinder further progress of the SF program is conflict associated with associated with the forest reserve area. The area of reserve. The forest reserve area overlaps with areas targeted for peat ecosystem restoration. The role of the local government is related to the authority, funding and competence of of human resources for managing the forest reserves’. While the character of farmers is also culturally more concerned with how to make sure that they will meet their daily needs for their family members, and developing a diversity of plants. An absence of industry commitment to establishing timber plantations also makes farmers hesitant to develop their own plantations’. These potential investors need greater business and land tenure certainty. The challenge is getting local government support for such certainty’.

An important policy development at Bulukumba has been the emergence of community forest management initiatives at the village administration level, through the village regulation. This has been supported not only by village heads and village representative bodies, but also related agencies in the Bulukumba regional government. At an institutional level, another important development has been the re-emergence of the Association of Timber Entrepreneurs (HIPKI) in Bulukumba. This association is designed to help overcome problems faced by community forest farmers, such as the procurement of seeds.

R. Timber trading and the wood industry in Lampung, Gorontalo and Bulukumba

A key informant from a plywood processing company described the company’s transition from sawmilling to plywood production. The company began producing plywood in 2014 and its production capacity is now around 6,000 m³ per year (Figure 14). In all of Lampung Province, there are four plywood businesses, such as in Kotabumi and in Way Kanan.

The company’s investment to produce 6,000 m³ per year is about IDR10 billion not including the land. Their investment cost for the prior sawmill operation with a similar production capacity, was only about IDR2 billion. However, markets for the sawmill products were more limited because the output was restricted to pallets or boards, while the plywood market was found to be more flexible. The plywood mill’s
workforce is about 250 people, and about 50 percent of the total of these workforce is female. Similarly, the average of small sawmill workforce is only employed four people per machine with a wage of about two IDR million per month. These workers are paid according to regional minimum wage standards. Table 10 shows about conditions of Timber Industry Sectors in Lampung Province.

70%), with the remainder a mixture of sengon, jabon, mango and dadab. The company prefers not to process sengon because it is expensive and profits can only be made if it is exported. The company does not dare all sengon because sengon price is expensive and can only for if exported. The price of raw materials such as rubber is IDR340,000 per ton or per cubic meter. Meanwhile, the price at the farm level is only about IDR100,000 per cubic meter. The advantage of rubber, in addition to being relatively cheap, is that it also contains a high amount of glucose. Rubber logs with a diameter >14 cm can be used for raw materials. Similarly, other woods such as sengon with a diameter >14 cm are also accepted by the company.

To obtain raw materials, the company establishes relationships with about 40 suppliers. The company does not want to have just one supplier because this would pose a high supply risk. The company employs the suppliers because it does not have the resources to locate and cut the timber itself. In addition to buying timber directly from community gardens, the company has also entered into a purchase contract with a state-owned plantation company (PTPN VII).

The viability of all plywood businesses is dependent on the secure supply of raw materials. According to the key informant, their company was unable to acquire their own land for timber planting. The company is only able to provide assistance for nursery operations and not for tree planting.

According to the company informant, they have a secure five-year supply of raw materials from the community gardens and a contract with PTPN. Currently, due to the low prices for rubber, many rubber farmers are cutting down their trees to sell and then switching to other productive crops. The current price is only US$ 3.4 per kg. Farmers harvest rubber trees and then establish cassava and maize crops. The informant stated - “I do not know the condition of raw materials after five years into the future. I
hope HTR or Social Forestry can succeed but please be generated related to 
regulation and cultivation. If the program is successful then the need for raw materials 
is not a problem”.

The transportation of raw materials derived from community lands is not 
complicated, provided the delivery is accompanied by a declaration letter (note of 
transporting). However, the transportation of timber from state-owned forest is more 
complicated. If illegal charges are imposed by corrupted officials during the timber 
transportation, then the company provides compensation.

On average, the company sells 500 m$^3$ of plywood each month. The sales are 
concentrated on the domestic market, especially all of Sumatra except Medan and 
Aceh. Profit is about 5 percent and so far all plywood products produced by the mill can 
be sold to the market. The company produces two grades of plywood (Grades 1 and 
2), with a price difference of around US$ 0.14-0.21 per sheet. The president's policy on 
infrastructure in Sumatra has had an influence on the absorption of plywood products.

Table 10. Conditions of timber industry sectors in Lampung Province

<table>
<thead>
<tr>
<th>Company</th>
<th>Investments (US$)</th>
<th>Workers Human Resource Developm ent</th>
<th>Products</th>
<th>Market</th>
<th>Problems</th>
</tr>
</thead>
</table>
| CV JAE IN | More than 3,448 | 5 labourers | Shovel and broom handles | Turkey, Kuwait, Tunisia, Algeria, Canada, Arabic countries and some of North Africa, Europe and Australia | ● Complicated regulations  
● Lack of raw materials  
● Product quality  
● Lack of incentives  
● Illegal taxation |
| PT KPSA | More than 689 | 250 labourers | Plywood | Sumatra, except Medan and Aceh | ● The need for 5-years of raw materials certainty  
● Complicated regulations  
● Lack of incentives |

Source: primary data (2017)

Interviews were also conducted with two informants from a business engaged in 
the production of broom and shovel handles and pellets for bioenergy (Figure 15). The 
company exports to Canada, Turkey, Kuwait, Tunisia, Algeria and other Arabic 
countries in North Africa. They also export to Europe and Australia, but the quality 
requirements are much higher in these markets. The wood of Eucalyptus trees is 
required to supply products to these markets’ but is it also noting that there is a limited 
supply of wood from high quality of Eucalypts. Whereas if using Acacia mangium wood, 
the quality is less suitable because the stem is typically not straight.
The company was established in 1994 to meet a demand from Kuwait for broomsticks. In addition to the broom handle production, the company also produces timber furniture and clocks. The company has a zero-waste production policy, with any timber residues being processed into pellets for bioenergy.

According to the company owner and director, the industry still lacks a reliably supply of raw materials. There are several criteria for the quality of timber required by the company. In addition to straight logs, the timber must have soft fibers, otherwise the company cannot compete with China since there have a high quality of materials and products. The company owners have travelled to China several times and observed the country's HTI based on Eucalyptus trees that produce long and straight stems over a short rotation period of five to six years. Their industry is also strongly supported by substantial research and development investments. China can now export hundreds of containers of broom handle timber products to Indonesia every day, and the price for locally-produced products become lower, otherwise it cannot compete with china products.

In 1992, raw materials were sourced from nearby sawmills. The company purchased timber with dimensions of 120 cm in length, and 24 mm in diameter for 700 rupiah per stem. The company produces up to 4,000 broomhandles per month, which is enough to fill one shipping container. The weekly demand in Lampung alone is about 32,000 sticks with lengths of 90-100 cm and a diameter of 19 mm. The types of timber used include waru, pulai, durian, mahogany, melinjo and rubber. Sengon and jabon are less suitable because their timber is too soft and light.

The local selling price for the broomhandles is about US$ 0.1 per stem (length 1 m x diameter 19 mm), while the export price averages US$ 0.3 per stem (length 120-150 cm x diameter 22-25 mm). The price for export is about 0.18 mm in diameter of broom handle = US$0.3. For one container of exported product, the selling price is about US$12,000. For the domestic market, the price for one truckload is around US$ 2,424. The broomhandle company is also partnering with a local broomstick artisan that lacks the capital to purchase broomhandles.

The company is currently seeing a growing demand for its products from Korea and Japan, but it has a limited ability to meet this demand due to capital and electricity supply constraints. Currently the new electrical capacity is 10,000 watts, to operate one machine. The company has requested an additional electricity supply from the State Electricity Company (PLN), but this has not yet been fulfilled. The limited

Figure 15. Piles of broom handles produced by a small business in Lampung
electricity supply is a key constraint for the growth of small businesses. The use of diesel generators is costly noisy. An informant from the owner of the company from Lampung stated that – If we are using electricity from the Electricity Company (PLN) rather than using my generator, we can save 30 percent of the cost. We propose to increase our electricity demand from the State-owned Electricity Company (PLN), but as yet PLN has not met my request, so that it is why the small industry is difficult to advance. Now we are applying for a loan so we can use biomass for electricity. We are asking US$ 110,345 to buy machines in China for producing pellets at about 6 percent interest. 10 tons per month about US$ 100 per ton to the nestle for feedstock for that company’s bioenergy plant. This investment is US$ 103,448 already licensed and working capital”.

In addition she said that: “The company uses pellet-producing machines manufactured in China as they are around half the price of those from Europe. The quality of domestically-produced machines is lower than those from China and Europe. For pellet production, the company considers that only the machines from China are feasible. Around 60 percent of the production costs are for materials, machinery and labor. Machine operation requires up to five workers, and the profit margin is 10-15 percent”.

Currently, she said that the government should facilitate to providing raw materials (i.e. eucalyptus timber) for the company. Eucalyptus fiber from China is one type of raw material that is needed by the company. To buy raw materials, the company uses one or two suppliers, but if the quality of raw materials is poor then the product is returned.

The company has a partnership with a FMU that in charge to manage the production forest of Gedong Wani area, to help farmer groups. However, most of the farmers prefer to farm maize and cassava. The problem is most farmers are not foresters and most only want to plant timber trees around their property boundaries. The company’s monthly raw materials demand is around 150 m³ but it is only able to source around 100 m³ per month.

The Chinese timber industry benefits from subsidies from the government and international buyers that would buy timber products produced from China, are also providing loan to China’s timber industries. In addition, the timber industries are also exempted from export costs, and provided with working capital and simple procedures of timber regulations. In Indonesia, there is a lack of facilities and pellet-making machines must be imported from China. There are no reductions in import taxation provided by the government. While in other countries, such as in New Zealand, entrepreneurs continue to be supported by the government. If the company are doing business with Indonesia, the New Zealand government provides various form of business support to the company, such as accommodation, other policy incentives etc.

The People’s Industrial Creative Unit commenced work on November 6, 2017. The People’s Industrial Creative Unit is an registered institution that was built from some cooperatives to ensure that farmers are not taken advantage of by middlemen. This locally-based economic institution has been working really on its own working capital, meaning without any support from related timber industries and government. This organization works to encourage farmers to grow wood and coffee. The organization buys the wood or coffee from farmers at a high price. For example, if the price of wood offered by a middleman price was US$ 41.4 per m³, then this organization would buy at a higher price of US$ 55.2 per m³. The wood is then on-sold at a higher price to companies that have become colleagues (in local and national markets) and 25% of the profit is returned to the farmer. In selling timber, the
organization must ensure there exist a valid logging license, logging report and cruising report.

The price of wood depends on the species and diameter of the log. For mixed timber with a diameter of more than 25 cm, the price can reach US$ 41.4 per m³. With a diameter of 30 cm and above, the price can reach US$ 62.1 per m³. For Eucalyptus species, the price is between US$ 172.4-186.2 million per m³, depending on the quality.

The most widely circulated timber species in Lampung are teak, acacia, sengon and jabon. Other types also commonly traded in the market include cempaka, mahogany, sonokeling, durian, waru and rubber tress. The species most commonly traded in wood markets in Lampung Province is sengon, particularly in West, East and Central Region of the Lampung Province. The second most commonly traded species is acacia, which is widely cultivated around East Lampung, Tulangbawang and Selatan. Rubber trees are increasingly grown in almost all regions. Jabon timber plantations are mostly being developed in North and West Lampung.

According to an informant from the People's Industrial Creative Unit, usually the timber agents buy timber through the borongan mechanism that buy timber is not based of cubic meter but general timber-estimated by the buyer in particular size of area. This means the purchase is based on an assessment of one ha of forest. If within the one ha there are 400-1,000 trees with a variety of diameters breast height (DBH), the average cost is US$ 689.7, equating to around US$ 0. per stem. However, if in the one ha area there has been good management and according to silvicultural principles, then with 400 trees with an average diameter of 20 cm or greater, the price can reach US$ 10,345. Figure 16 depicts the value chain of the timber trade in Lampung. There are at least four common trade routes for the timber produced by farmers. First, the farmers sell to agents who then sell the timber to sawmills, with an average profit margin for the agent of 20-30 percent. Second, the farmers sell to a middleman who then sells the timber to manufacturing industries where it is processed and then sold to consumers. Third, the farmers sell to a middleman who sells the timber to another middleman two before it is sold to manufacturing industries and eventually to consumers. Forth, farmers sell to a middleman who then sells the timber to a sawmill and sawn products are then sold to consumers.

![Figure 16. The value chain of the timber trade in Lampung Province](image)

Timber produced from farm forestry requires the appropriate documentation that is different with timber produced from state forest. The timber produced from farm forestry transported to the timber market requires simple procedures of regulations. An
informant from the provincial Forestry Services, said that the growers just need a note of timber transportation. The farmers should manage the documents, but in reality the buyers are usually the ones who prepare and manage all documentation. Furthermore, an informant from the People’s Industrial Creative Unit said that there are sixth important factors in the management of commercial timber crops, such as community forests. First is the certainty of land tenure. Many residents manage the timber produced in their private lands, are only with the right of land certificates or girik. There is a single case in Central Lampung of 500 ha of farm forestry scheme but only 201 ha is recognized by the National Land Agency (BPN). Likewise in Lampung Timur where there is 178 ha of farm forestry scheme, but 33 ha is recognized. Second, the development of CBCF requires farmer capacity building, especially knowledge transfer. Third, the development of CBCF should be supported by strong institutions. Fourth, the development of CBCF needs to improve the quality of production. Farmers typically produce timber products of a low quality. They are not familiar with the standards of high quality products and also lack knowledge about timber production. The Timbers produced from farm forestry are only harvesting on as 'as needs' basis, and better planning and management could result in higher quality production. Fifth, farmers also need a clear business plan. Sixth, price stability is important and generally the price at the farm level is very low.

In Gorontalo, there are currently two HTI with plans to build local plywood businesses. One is PT GNJ, with an area of 27,000 ha for which the boundary is clearly defined. The other is PT GCL, with an area of 46,150 ha for which it has permission to manage for 60 years. Prior to HTI management, the area was utilized by Forest Concession Rights.

PT GCL obtained its license to manage forest in 2011. The company currently employs around 1,500 staff with a minimum regional wage (UMP) of US$ 140 per month. Of the company’s HTI area, 11,600 ha is claimed by the community and in this area there are social facilities, public facilities and settlements. In some locations, the community claims to have been undertaking a greening program with teak and pine trees. There are about 26 villages around the concession area. Of these villages, there are three villages (Kampongs) located in state forest area. The boundary of these villages are not clear defined.

The company is currently developing sengon and jabon plantations with a planned seven year harvest cycle. SK Permission was received in 2011 and planting commenced in 2013. The company plans to build plywood industry. The challenges for the company’s plans to develop a plywood business are: tenure issues; steep and hilly topography; and the location is within a Limited Production Forest.

Problem of lack of raw materials is also experienced by a small company in Gorontalo, such as sawmill. According to key informants from the sawmill company in Gorontalo, the company is currently facing difficulties sourcing raw materials. Once a week, the company receives supplies from HTI in the form of mixed jungle species, such as bugs and nyatoh. The company just employs 2-3 collectors or middlemen. The company has never purchased sengon, gmelina or teak because of the limited supply of these species. Consequently, "We accept the wood from the remaining stands of HTI GNJ and GCL".

Prior to the cooperation with HTI, the company sourced timber from certified land in Tolinggula, Gorut District. After a supply shortage, the company ceased its operations. The HTI then commenced, but there was a delay before harvesting began. Supply from HTI is now 60 m³ per week, but this is dependent on the weather.
Inclement weather can result in the company ceasing operations due to transportation problems.

The company’s products are sold to Java and local markets. At least one container per month is supplied to the Java market and as many as three containers per month to the local market. The Java market demands a better quality product.

According to a sawmill manager who has a long history of working for timber companies, to encourage farmers in Gorontalo to plant timber trees, it is necessary to:

1) establish demonstration plots;
2) encourage the formation of farmer groups and strengthen these groups; and
3) increase field-based activity of the forestry department, particularly to promote timber growing and train the farmers.

In general, the weaknesses of Community-Based Commercial Forestry (CBCF) include:

1) the availability of high quality seed of appropriate species;
2) misconceptions of a strong institutional capacity of farmers;
3) weakly implemented regulations and policies that often change;
4) a poor understanding of the community in terms of their timber market and harvesting period;
5) lack of promotion and dissemination of timber businesses;
6) the lack of certainty of product markets and prices that are less competitive than other agricultural commodities;
7) a non-existent or inadequate monitoring system;
8) technical regulations that do not coincide with the main regulations (i.e. P83/2016);
9) lack of support for farmer’s groups, especially in the preparation of their institutions; and
10) little integration with industrial outcomes of the planned SF program so that harvests are not optimally utilized.

One indicator when assessing the market structure is the number of marketing institutions. From a seller’s (farmer) perspective, there exists an oligopsony market. This is due to the number of farmers heavily outweighing the number of timber collectors (buyers), and the homogenous nature of the traded product. In addition, there are fewer barriers to farmers entering the market than for the timber traders. Thus, farmers cannot control the pricing. At the marketing level, the number of timber traders is more than the number of sawmills. The market structure formed, especially the supply of raw materials, is controlled by the sawmill industry. The sawmilling industry also has marketing options outside the region, however, the market tends to be dominated by the big company. But there are also obstacles for new market entrants due to the high capital requirement (Syah et al., 2018).

In Bulukumba, there are generally three channels for the marketing of community-sourced timber. The first involves farmers selling their timber to traders, who then sell to sawmills, with sawn products then sold to the retailers. Often, farmers will sell their standing timber by granting timber traders the right to selectively fell standing trees. Prices are determined by way of an agreement using only the estimates.
of the trader. The second channel involves farmers selling their crops to sawmillers who then sell their sawn products to retail traders. In this process, intermediaries or collectors are avoided, and this form of direct sale is more profitable for the farmers. The third channel involves farmers marketing their timber through a Community-Based Farmers Association (APKAR). Farmers need to follow the strict requirements of timber marketing documentation because farmers must complete demanding product verification documentation (Syah et al., 2018).

S. Complicated Regulations

Informants from Lampung believed that compared to China, Indonesia’s timber industry- and trade-related regulations are far more complicated. In particular, it is believed that there are many overlapping regulations. For example, to develop a production capacity of 6,000 m$^3$ per year, a permit must be issued by the Central Government, and this considered an inefficient process. For businesses with a production capacity of about 2,000 m$^3$ per year, the regulation requires a permit to be obtained from the District Government, and for a production capacity between 2,000-6,000 m$^3$, the permit is required from the Provincial government. Since in achieving a production capacity of 6,000 m$^3$, it needs a longer process in the Central Government, then the owner of the plywood company establishes a new company with a different company name. This process has been done in order to avoid the process required in the Central Government. According to informants that before simply imposing regulations, government officials should undertake site-visits to help them better understand the on-ground conditions of different sectoral businesses in the timber industry.

There are a number of factors contributing to the slow progress in the development of small- and medium-scale businesses within the timber industry. First, many industries do not have a Tax ID Register (NPWP). Secondly, small-scale timber businesses often have no monthly and annual reports. Thirdly, there are problems relating to the production process which must be certified (SVLK), requiring data of logs in and out the small scale timber business. Companies generally do not produce these reports because they do not have the Ganis to support the preparation of these documents.

The regulatory requirements to establish a business in the timber industry such as a broomhandle business include: 1) a business license for primary processing industry; 2) SVLK; 3) company registration certificate (TDP); 4) business place permit; 5) trading business license (IIUP); 6) industry register certificate (TDI); 7) business license for timber forest product primary industry (IUIPHHK); 8) a Tax ID Register (NPWP); and 9) Notary Act. In brief, there are at least 12 permits to be obtained by a business in the timber industry, and this does not include regulations relating to the trading of timber products. Based on interviews with owners of a sawmilling business, Table 11 outlines some of the regulation-related costs that are incurred by timber businesses.

Table 11. Costs of regulation for businesses in the timber industry

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of permits</th>
<th>Cost (US$)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Place Permit (SITU)</td>
<td>241.4 per year</td>
<td>Depends on the size of area (business footprint)</td>
</tr>
<tr>
<td>2</td>
<td>Retribution (Local taxation)</td>
<td>12.8 per year</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Company Registration Certificate</td>
<td>41.4 per year</td>
<td></td>
</tr>
</tbody>
</table>
Informants saw a need for regulatory support to prevent the imposition of illegal levies. Eventhough within a office in charge to issuing permit have installed closed circuit television (CCTV) to monitor every regulation transaction, in practical level, the imposition illegal levies to timber company often occurs. Indonesia, it is difficult to eliminate illegal levies, even though businesses are installing CCTV to monitor and record the business activities. As stated by one informant, "Often in the office waiting room, there has been a warning not to carry out illicit fees in the form of words written on a wide banner, but in reality it is harder to avoid for getting licence (i.e., SITU and SIUP). Only on the table, the head of the sub-district does not ask fees, but the other employees sometimes ask the fee ". According to the same informant the regulations need to be simplified and the government should also provide facilities and land to support raw material production and processing industry development. Essentially, the central and district governments should work to develop policies that will better connect the upstream and downstream sectors.

Regarding timber certification, some informants who have been active in SF programs stated that a major problem is the legal title to land, because without the legal land tenure, production activities will not be certified. The National Land Agency (BPN) should also provide active support for the certification program because the issuing of legal title to land is a function of this institution. For example, if a community forest has no land certificate, the BPN can intervene and provide mapping to support verification of the land tenure.

Associated with An informant from the broomhandle business commented that SVLK is a financial burden for company - "SVLK makes us scream a little". For this licensing, small-, medium- and large-scale businesses are treated equally, with all incurring an average cost of IDR25 million. Companies are also required to have at least two technical personnel on their staff, which incurs high costs for their technical training.

In Gorontalo, especially in the SF regulations are considered to be improving. For example, according to owner of the sawmilling business in Gorontalo, the existence of SVLK makes the legality of timber products much clearer. Before receiving SVLK, companies found it more difficult to sell products in the foreign market, the timber products can only be sold in the local market. To obtain SVLK, the company will spend around IDR27 million and the certification will be valid for six years. Evaluations under the SVLK certification will include the source of raw materials, monthly production reports, labor, health insurance and health facilities. The SVLK-certified products can achieve a 25% price premium. However, certified companies also expect incentives from the central and local governments, but these have so far not eventuated. Figure 17 depicts the timber collected in the sawmilling business and certificate of SVLK received by the sawmilling business.
In terms of regulatory costs, the sawmilling timber business must pay for the SITU each year, with the amount depending on the area of land occupied by the business. So far, the sawmilling business has paid US$ 241.4 per year. Then the local tax is paid by the sawmilling timber business some of US$ 0.1 per year and it goes to the district income service. In addition, companies also have to pay US$ 41.4 per year for TDP, TDI and SIUP. The sawmilling timber business also have to pay the interruption permit (with the validity period of these permits being different in different regions.

The trade of timber from farm forestry is currently subject to the PermenLHK 30/2014 regulation. Regulation (PermenLHK 30/2014 regulation), which has been viewed favorably by some timber businesses and smallholder. This regulation will help to minimize government interference and enable farmers to undertake self-assessments of timbers that will be harvested for sale. Timber originating from forest rights such as farm forestry can be harvested on the basis of the legal title (i.e. Ownership Land Certificate (SHM), letter C or Girik land letter), and confirmation from a village chief that the timber was produced in the local area. In contrast, for timber sourced from state-owned forest, the administration mechanism for timber trading under Regulation No. 71/2016 applies. Timber business companies must pay reforestation fund (DR) and a levy in the form of provision of forest resources (PSDH). The most important thing is that these timber businesses must employ a ganis, sawn wood officers and log officers themselves.

Lessons from Bulukumba show that the issuance of local regulations is sometimes counterproductive to the development of CBCF. For example, the local regulation No 4. Year 2014 concerning the management, utilization and administration of forest products originating from forest rights or farm forestry is contradictory with central government regulation. Almost two years after this regulation was introduced, it was revoked because many of the articles in the local regulation were contrary to the central government’s policy. For example, in the case of logging permits, in the Central Government Regulation is not applied logging quota, but in the local regulation is applied the quota system. For individual licenses are applied maximum logging quota of 200 m³ and business entities licences are applied 1,000 m³ per year.
I. DISCUSSION

1. Crafting Forest Policy for Communities

The growing global interest in CBCF and the transformation of forest tenure with the objective of involving communities and smallholders in forest management has been remarkable over the last 40 years. It is therefore not surprising that under various CBCF management regimes there has been a substantial increase in the role and participation of communities and smallholders in forest management. It is estimated that the area under CBCF management regimes has reached 732 million ha, or about 28% of the total forest area in 62 countries. The total forest area in these 62 countries represents 65% of the world’s forests (Gilmour et al., 2016).

There is a great belief in the global community that CBCF can be a vehicle and a panacea for improving people’s welfare, conserving forest resources and ensuring long-term forest sustainability. A useful definition of CBCF is that it is “…locally-based management of forest and tree resources” (Nebel et al., 2003). Various factors driving the emergence and development of CBCF management regimes are deforestation and the degradation of forests, poverty, and changes in political systems that bring democratic values and respect for the rights of indigenous peoples. Deforestation, for example, is occurring at an alarming rate in many tropical countries (Gilmour et al., 2004). In Indonesia, a total amount lost of forest cover during 1990 reaches 1.7 million ha (FWI, 2017).

In many Southeast Asian countries, forestry policy is undergoing a process of transformation to curb the loss of the remaining treecover (Poffenberger, 2006). The change was triggered by increased concerns about deforestation in the region in the 1980s. This led policy-makers and scientists from various development agencies to review the role of the forest industry, and the capacity of state agencies to protect forest resources and promote rural development, especially for marginalized and poor communities. Since then, CBCF management has been introduced and widely promoted as a new development model with the support of donor agencies and other relevant development institutions (Nurjaya, 2005). For example, in Indonesia, the forestry reform process placed the issues of decentralization and CBCF management on a high-level political agenda in 1999 (Safitri, 2006; Poffenberger, 2006; Lindayati, 2003; Kusumanto & Sirait, 2002). In the Philippines and Thailand, this kind of reform has also become a top priority at the national political level, while changes have also occurred in Cambodia and Vietnam but the transformation has been slower in these countries. As a consequence of these reforms, over the past 15 years there have been new policies and laws implemented to provide communities with greater legal rights and responsibilities in the management of state-owned forests (Poffenberger, 2006).

The forestry sector is important from social, economic and political perspectives (Brown et al., 2005). Indeed, it plays a crucial role within the socio-cultural systems of forest communities (Sunderlin et al., 2005). One of the crucial roles of the forest is as a source of income for communities and farmers, including from the harvest of timber (Mejia et al., 2015). It is therefore not surprising that over the past decade, governments in Southeast Asian countries have begun to increasingly promote CBCF (Nugroho et al., 2013).

Public policies relating to CBCF have been created within the framework of fostering economic development through forest-based enterprises to improve rural livelihood systems, reduce deforestation and promote sustainable forest management...
(Wibowo et al., 2013). For a range of reasons, many communities and smallholder farmers now want to commercialize forest products, especially timber, to increase their income. In Indonesia, for instance, there has been a decline in timber production from the industry (e.g. from Forest Concessionaires and Industrial Forest Plantations), and on the other hand, there has been a rise in demand and the price of timber. These factors have become the driving forces for communities and smallholders to develop commercial timber operations (Maryudi et al., 2015). In neighboring countries, such as Laos, many socio-economic benefits and environmental services (Phimmavong et al., 2009) and encourage sustainable natural resource management are also driving forces for smallholders to develop timber plantation (Mahanty et al., 2006).

A the policy level, the development of CBCF has been challenged by at least three main interrelated issues: first, a highly dynamic and unstable policy environment; second, the diverse and conflicting perspectives of different interest groups; and third, centralized decision-making. These three key issues drive and influence why and how political power at the national level can secure the usufruct and tenurial rights of communities and smallholders in CBCF management areas. But these rights often remain unstable (Pulhin & Dressier, 2008), often because bureaucrats and policy-makers the ‘living far away from the forest areas’ and the associated implication being the development of ‘out of context decision-making and policy development’ (Lindayati, 2003; Suhart, 2001; Tole, 2010). In addition, a process by which legal policy frameworks are formulated to accommodate community involvement in forest management in state-owned forest areas varies widely from country to country, depending on the political environment, government, legal institutions and donor influences (Poffenberger, 2006). Specifically in Indonesia, research conducted by Wibowo et al. (2013) confirms that the implementation of CBFM policies always faces multiple pressures. One of the biggest challenges facing the development and implementation of CBCF policies is the complex land tenure contestations.

2. Political Momentum for Developing CBCF in Indonesia

The early stages of CBCF development in Indonesia and many other developing countries were initiated through only small-scale policy experiments where essential inputs such as technical and budgetary skills were often provided by agencies outside the government. In Thailand for example, CBCF implementation has been no more than a series of pilot projects (Gilmour, 2016). However, the implementation of CBCF policy and programs in Indonesia is experiencing a rapid and dynamic development. For example, within the National Medium-Term Development Plan (RPJMN 2015-2019), the MoEF has allocated 12.7 million ha of state-owned forests for community use under the banner of the national SF policy. Within five years, many of the SF policy’s planned targets are expected to be achieved.

The SF initiative is a promising policy direction for promoting inclusive and equitable local development, given that it intends to improve people’s access to productive forest resources (Setyowati, 2017). Indeed, the SF initiative is seen as providing pivotal political momentum for further developing CBCF in Indonesia, with much hope that it can be a vehicle for reducing income and forest land tenure inequality in the country. The SF policy is also consistent with the nine priorities of the Jokowi government’s Nawa Cita program, particularly for the development of rural frontiers’. This is because the SF policy is being implemented nationally and it is intended to provide management rights for communities living in forest fringe areas (Herawati et al., 2017). So that many stakeholders therefore believe the SF policy is a rational and realistic initiative. Nevertheless, other stakeholders and scholars consider
the policy is an ambitious one and the targeted area will be difficult to achieve without any supports from related government institutions at the sub-national and site levels (Gilmour, 2016; Suharjito 2017). They argue that 12.7 million ha is an almost impossible target to achieve by 2019 because speeding up implementation of the policy requires an improved permitting process and needs to mobilizing ‘large financial, human resource and other investments’ (Setyowati, 2017). Unpredictable changes in regulations or forest user rights are great challenges facing the development of the SF policy in Indonesia (Wibowo et al., 2013).

3. Slow Progress of social forestry program implementation

Despite efforts to meet the SF policy target of 12.7 million ha under SF programs by July 2017 progress has been slow. From January to July 2017, there was only around 358,000 ha of forest allocated to communities through social forestry licenses. This slow progress is partly due to different levels of government having different development priorities and intensifying competition between state agencies (Setyowati, 2017). Data from the DG of PSKL at the MoEF in Setyowati (2017) suggests that for verification processes, the government allocated only US$ 0.9 per ha in 2017. Indeed, the slow progress is also due to the multiple and conflicting interests and pressures facing Indonesia’s multi-tiers of government (Wibowo et al., 2013).

If the current SF policy focuses only on targets without policy measures to strengthen facilitation at the community level, then the outcomes will be merely administrative mobilization’. Institutional restructuring and budgetary reforms at the central government level would be ineffective if it not accompanied by similar reforms at the site level. Such as implementation of the policy Not 23/2016.

Institutional innovation through the formation of SF working groups and a field-based teams that so called flying team, which in charge of on-ground implementation’, will not be effective if not accompanied by sufficient authority to moving the bureaucratic and institutional reform at the site level. Such institutional reforms are leading to institutional involution that will not necessarily result in better SF implementation. Additionally, the SF program currently lacks reward (incentive) and punishment (sanction) mechanisms’. The absence of such mechanisms has resulted in some forest communities currently not involved in SF programs having no interest in engaging with them.

The transfer power through the SF schemes often does not work at the local level, and even is often misleading. For example, HTR licensing is often interpreted as a transfer of burden for local government, particularly when the process is not accompanied by a sufficient policy dialogue and budget. Thus, the delegation, although politically normative, will strengthen the political position and authority of the local government. But in reality, local governments are often reluctant to take on the delegated power and authority.

The formalization of innovative institutional structures for the implementation of SF policy involving active officials as leaders (such as with working groups - pokja) always departs from the theoretical assumption that active officials will be powerful to accelerate the SF implementation. This innovative institutional reform is more likely to effectively mobilize working groups rather than surrendering the process of institutionalizing working groups through democratic mechanisms . Such institutional innovation represents a stagnation of innovation and ignores the great potential role of flexibility and critical power and informal institutional mobility. In practice, working
groups led by active officials are not always effective because of insufficient time for the appointed leader and a limited budget for running the planned program activities.

In terms of institutional strengthening at the farmer level, based on the FGD results show that the farmers group institution often does not know what is the next program after establishing the farmers group and getting HTR permit. They do not know what it should be done. The farmers were confused and did not know what to do once a permit has been issued. Similarly, the Pokja of SF has not been able to work in facilitating the farmers group optimally. The working groups is still function of an institutional accessory of the SF policy and are unable to leverage the capacity building of farmer groups, due to limited budget and the weak capacity for resource mobilization. From an economic perspective, there have been few benefits for farmers and from a resource sustainability perspective, progress in the development of plantations such as on the western coast of Lampung is also not on target.

There is an urgent need for the PIAPS function to better support implementation of the SF program. When officers from forestry services conducted a ground-truthing exercise, the real location of designated area for CBFM at the field level is different with what has been set up under the PIAPS. For example, there were cases where PIAPS had designated high-quality forests as SF sites but there are no communities living near these areas.

Optimizing SF policies and accelerating the implementation of SF programs will not be easy. The very large scale of the program (at 12.7 million ha) does not necessarily mean it will lead to greater success. It would also be naïve to consider the SF policy reform successful when viewing it from the perspective of changes in the political space. Herawati et al. (2017) points out that in the next 10 years, there will be six major driving forces affecting the success of SF implementation. These include: 1) the dynamics of SF regulations including for forestry businesses; 2) economic options created by communities to improve livelihoods; 3) community ownership rights over forest resources; 4) budget support from local governments; 5) the human resource capacities of agencies such as the Provincial Forestry Service, FMU and NGOs; and 6) clarification of the roles of stakeholders including for raising public awareness.

Farmers in both Lampung and Gorontalo are rational farmers. They will cultivate only the most profitable commodities. Their preference is to grow maize or cassava rather than timber trees, because these two commodities have many advantages over wood production. Clear markets and larger profits with shorter waiting periods are key considerations. There is little field-based evidence or examples demonstrating that timber cultivation can be more profitable than the cultivation of maize and cassava.

It will not be easy to encourage farmers that are culturally and technically more accustomed to planting more profitable commodities such as maize and cassava to participate in SF programs. Achieving greater farmer participation in tree planting will require a compromise in planting designs, especially for farmers with a narrow land-base and livelihoods that are highly dependent on their land. This means there needs to be greater flexibility in what are currently rigid technical regulations relating to planting layouts (e.g. the numbers of plants/ha and their spacing).

Timber commodity-related regulations in Indonesia are still complex, although there have been some improvements for timber production from SF programs. The complex regulations are particularly relevant to the industrial sector, where they can inhibit development such as if a business is seeking to increase its capacity of timber production. The burden of regulations can also deter business establishment. The transaction costs for timber industry businesses are also high. In contrast, similar
businesses in China are supported by government in the form of subsidies also even the buyer of the timber product was given the ease of doing business.

An absence of policies that encourage the integration of upstream and downstream processes has resulted in lower profits for farmers. Middlemen still play a key role in determining the price. More organizational units that are willing to buy at a higher price than the middlemen are needed. Limited capital is a major limitation of these organization Government support in the form of working capital is needed to increase the capacity of these organizations to buy timber from farmers.

II. CONCLUSIONS

The very large scale of the program (at 12.7 million ha) does not necessarily mean it will lead to greater success. Despite efforts to meet the SF policy target of 12.7 million ha under SF programs by July 2017 progress has been slow. Some stakeholders said that 12.7 million ha is an almost impossible target to achieve by 2019 because to speeding up implementation of the policy requires an improved permitting process and needs to mobilizing large financial human resource and other investments. However we should appreciate any efforts and what the government have done. The Central Governments initiatives to accelerate SF implementation through institutional reform would be effective if it is followed by institutional reform at local level. Acceleration of SF policies with large targets can result in merely administrative targets and not quality outcomes being met if it is not followed by improving the farmers institution and deregulating timber business sector.

Agropolitan policies have proven to be very powerful in shaping and strengthening smallholder cultivation of cassava and maize' However, these policies have failed to mediate the contradictions embedded in the policies, especially relating to environmental impacts. In this context, CBCF policy is present in the cassava and maize-based farming culture, but the further development of this culture has been limited by a lack of communication of policy details. Clashes between the cassava industry and agropolitan and CBCF policies are inevitable. We mention that these phenomena as class of forestry and agriculture and development paradigm. In such situations, there is a need for dialogue and consensus at the policy and technical implementation levels.

The transformation of CBFM policies continues in parallel with national political and socio-economic developments. The public policy space has witnessed a significant structural transformation. Whereas in the era of democratic decentralization, the state provides a wider space for local community access to the forest. However it is also very dependent on the regime that holds power and the structure of power relations between the state, pressure groups or social movements and other interest groups (Borras 2016). Under the Policy of Forest Land Allocation (2015-2019) allocating an area of 12.7 million ha of state-owned land for community management represents a crucial political leap and historical cracks of the CBFM policy under Jokowi regime.

Complicated regulations make the implementation of CBCF difficult, particularly due to the resultant high transaction costs of timber business. Policy deregulation is a rational option to make timber products more competitive and generate greater benefits for small-scale timber growers. However, the case of Bulukumba shows that farm forestry needs regulation in order to protect from social and landscape changes due to land use change and land transfer from farmers to the rich people in and outside the village.
CHAPTER 4. RECOMMENDATIONS

Despite efforts to meet the SF policy target of 12.7 million ha under SF programs by July 2017 progress has been slow. Acceleration of SF policies with large targets, can result in merely administrative targets and not quality outcomes being met if it is not followed by improving the farmers institution and deregulating timber business sector. For that we give some recommendations include:

- The local government law (23/2014) that removes the authority of the forestry sector at the district level will greatly affect the speed and success of the SF program at the site level. This regulation frees the district governments and weakens the efforts to consolidate forest management at the site level. Consequently, for optimal and effective management of SF, it is necessary to reconstruct power relations between the central, provincial and district governments. The legal framework governing power relations between these three primary stakeholders needs to place the district government as an equal and not subordinate partner.

- Internal institutional changes with the presence of UPT PSKL and the changing role of UPT BP2HP, especially related to the funding process for facilitation of farmer groups and HTR assistance, for example, have made farmers group and the FMU experience difficulty in providing facilitation for farmers groups. Therefore, it needs regularly coordination and a synchronization of related programs between those of institutions.

- The regulation providing the authority for provincial government s to grant permits to the farmer groups does not encourage the provincial government interests to gain this authority. The regulation providing the authority for provincial governments to grant permits to the farmer groups does not encourage the provincial government interests to gaining this authority. This due to limited provincial government budgets. In Lampung Province, the provincial government is interested in gaining the authority if the central government provides the necessary financial support. In brief, the delegation of authority should provide a 'transitional period' until the region or province is ready from a fiscal perspective. This transitional period should not be generic for all provinces but dependent on considerations such as institutional readiness, and regional wealth and income. For the wealthy provinces, the delegation authority could take place without financial support.

- The SF should use cultural approach in the policy implementation. This approach means for the transmigration, which differs from the cultures of the indigenous community or local community, although both are associated with forestry cultivation, should have different treatment and approach than local community.

- Strengthening the FMU is crucial for improving the success rate of the SF program, since the FMU is a forestry institution established for strengthening forest management at site level. The FMU should make sure that SF schemes under its jurisdiction achieving the target set up by the Central Government.

- Build better institutional relationships with farming communities, for example between cooperatives and their members.

- There is an urgent need for site-level mainstreaming of SF schemes involving village governments, since especially after the enacted new Law (UU No.6/2014), the village governments has authority to manage their assets, including natural resources. In addition, the village governments have also regularly funding
allocated (Village Budget Fund) from the Central Government which can be used for improving SF schemes. Therefore, SF schemes should be included in or to be part of the village program. In addition, there is a need for a roadmap for the acceleration and optimization of SF programs, especially at the village level.

- The agropolitan policies encouraging cassava and maize cultivation have proved to be very powerful in shaping agricultural and forestry landscape changes and strengthening the culture of seasonal cultivation. While, the CBCF policies have several limitations, including a lack of central government communication with the district government and local farmers. As a result, cultural clashes between the cassava and maize-based agropolitan policies and the CBCF policies are inevitable.

- In respond this situation, the governments, both the central and local governments have to be proactive to take policy action in mediating the contradictions between the agropolitan policies and the SF policies. These policy actions could be undertaken through policy dialogue with relevant stakeholders, communication and synchronization of the programs. In addition, policy dialogue with farmers who have a longstanding culture of cassava (Lampung) and maize-based farming practices and village government is key success in changing this culture of cassava and maize-based practices that can disturb state forest areas. However, both farmers in Lampung and Gorontalo are rational farmers. They will cultivate their land based on the most profitable commodities. For CBCF to be more widely accepted, it needs a meeting point of agropolitan and CBCF policies and at technical level, such as the number and line spacing of plants that should be planted in a unit of ha. The project implementers should consider local needs and aspirations. In addition, at the field level, CBCF requires greater attention to cultural approaches rather than technical approaches.

- Central and local governments need to simplify the currently complicated CBCF regulations to reduce the processing time and costs of permits. As found in the field, there are at least 12 permits required by an timber-based manufacturing industry and this does not include those required for the transportation and trading of forest products. The government should also provide facilities and land to support raw material production and processing industry development. Essentially, the central and district governments should work to develop policies that will better connect the upstream and downstream sectors.

- There is a need to strengthen and scale-up the emergence of organizational units that are willing to purchase timber at a higher price than middlemen. Limited capital is a major limitation of these cooperative organizations. The government should assist by strengthening the working capital of these organizations so they have a greater capacity to purchase timber products.

- The lack of communication between farmers and businesses within the timber industry is problematic because the timber produced by the community is difficult to sell to timber businesses. A particular problem is the government's timber planting program is also often not adapted to the industry's preferred timber species and quality standards. Currently, there is no initiative to address this problem.

- For CBCF to succeed both in state-owned and other forests areas, there is a need for strengthened partnerships between private sectors, small timber growers and government is needed. This could be achieved through efforts by central and local governments that have the power and authority to support this action. However, this step is inadequate without the development of incentive mechanisms and
harmonization between timber production and timber-based manufacturing industry sector regulation (i.e., timber sawmilling business). For instance, the government could provide incentives for growers in the form of free or subsidised manure and better quality seedlings, along with tax deductions (i.e., tax holiday program) for businesses within the timber industry.

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