# Assessing the new social forestry project in Indonesia: recognition, livelihood and conservation?

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## SUMMARY

Indonesia is undergoing major policy changes, seeking to expand social forestry designations from less than 1% (1.1 million hectares) to over 10% (12.7 million hectares) of the Forest Estate. Expanding designations is at once a landmark reform and a call for caution, raising questions about policy intentions, and practical concerns about legal, technical, and implementation mechanisms. Social forestry literature highlights three key tenets, namely efforts that: confer *rights* to local communities, support *livelihoods*, and achieve *conservation* outcomes. This paper examines social forestry implementation from a cross-section of sites in South Sulawesi by reflecting on sustained action research between 2012–2016. The approach critically juxtaposes social forestry policy intent with implementation at three different sites. Findings indicate social forestry implementation suffers from historically problematic state enclosures and flawed land administration processes, entrenched political-economic interests among local actors, and lack of institutional engagement beyond the permitting process. Shortcuts to addressing entrenched conflict will only heighten tensions or further marginalize the most vulnerable, without guarantees to conservation outcomes.

Keywords: social forestry, community-based natural resource management, Indonesia, decentralization, action research

## Evaluation du nouveau projet de foresterie sociale en Indonésie: reconnaissance, revenus et conservation?

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L'Indonésie est témoin de changements majeurs de politique, alors qu'elle cherche à étendre les désignations de foresterie sociale de moins de 1% (1.1millions d'hectares) à plus de 10% (12.7 M ha) du bien forestier. Cette extension des désignations est à la fois une réforme de taille et un appel à la caution, soulevant des questions quant aux intentions politiques, et des soucis pratiques quant aux mécanismes légaux et aux techniques de mise en application. La littérature de la foresterie sociale met l'accent sur trois points-clé: les efforts visant à octroyer la conférence de droits aux communautés locales, un soutien aux sources de revenus, et une production tangible de résultats positifs de conservation. Ce papier examine la mise en place de la foresterie sociale dans une variété de sites au sud du Sulawesi, en étudiant une recherche soutenue de l'activité en question entre 2012 et 2016. Cette approche juxtapose une critique de l'intention de politique de foresterie sociale, la contrastant avec sa mise en application dans trois site différents. Les résultats indiquent que la mise en place de la foresterie sociale souffre historiquement de sites d'état clôturés problématiques et de processus défectueux d'administration des terres, d'intérêts politico-économiques bien ancrés chez les acteurs locaux, et d'un manque d'engagement institutionnel au-delà des processus d'octroi des permis. Tout raccourci pris pour faire face aux conflits endémiques ne parviendrait qu'à faire entrer les tensions existantes en ébullition ou à marginaliser davantage les plus vulnérables, sans garanties de résultats de conservation favorables.

## Evaluación del Nuevo Proyecto Forestal Social en Indonesia: ¿reconocimiento, medios de vida y conservación?

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Indonesia está experimentando importantes cambios en sus políticas, que tratan de ampliar las designaciones forestales sociales desde menos del 1% (1,1 millones de hectáreas) a más del 10% (12,7 millones de hectáreas) del patrimonio forestal. La ampliación de las designaciones es a la vez una reforma histórica y un llamamiento a la cautela, que plantea interrogantes acerca de las intenciones políticas y preocupaciones prácticas acerca de los mecanismos jurídicos, técnicos y de aplicación. La literatura forestal social destaca tres principios clave, a saber, los

esfuerzos que confieren derechos a las comunidades locales, los que apoyan los medios de vida y los que logran resultados de conservación. Este artículo estudia la implementación de la silvicultura social a partir de una muestra representativa de sitios en Sulawesi del Sur, haciendo una reflexión sobre la investigación-acción que tuvo lugar entre 2012 y 2016. El enfoque yuxtapone críticamente las intenciones de la política forestal social con la implementación para tres sitios diferentes. Los hallazgos indican que la implementación de la silvicultura social sufre de demarcaciones estatales históricamente problemáticas y procesos de administración de tierras defectuosos, intereses políticos y económicos arraigados entre los actores locales, y falta de compromiso institucional más allá del proceso de obtención de permisos. Los atajos para abordar los conflictos arraigados sólo aumentarán las tensiones o marginarán aún más a los más vulnerables, sin garantías para los resultados de la conservación.

## INTRODUCTION

According to FAO's 40-year review of Community Based Forestry (CBF) published in 2016, Indonesia only has 0.84 million hectares of social forests (Gilmour 2016). Official government data as of November 2017 places this figure at just under 1.1 million hectares (see Table 1) accounting for a rapid increase in social forestry permits since 2014. In other words, less than 1% of formally recognized forests are under social forestry management. This comparatively low figure falls well behind FAO's analysis of the Asia-Pacific region, which averages 34% of forests under CBF arrangements. From this perspective, Indonesia has an enormous potential to expand social forestry programs, which the current administration acknowledges and is actively pursuing. President Joko Widodo and his administration's national development plans now support mechanisms to achieve goals of designating a sharp increase to 12.7 million hectares, essentially setting aside an area equivalent in size to the island of Java.

Almost two thirds of Indonesia's land area are managed under the Forestry Ministry (now the Ministry of Environment and Forestry, henceforth MOEF), a legacy of historical natural resource enclosures that began during colonial administration rule and lasted through the end of centralized governance practices of the late 1990s (Peluso and Vandergeest 2001, Vandergeest and Peluso 2006). The legacy of this history remains, in that the 'Forest Estate' amounts to an area of 126 million hectares (MOEF 2014, Siscawati *et al.* 2017).[1] Although instituting democratic decentralization reforms in 1998 that promised a new development trajectory, forest management practices in Indonesia are still shaped heavily by land-intensive primary sector extraction and cultivation (Lucas and Warren 2003, Resosudarmo 2004, Barr *et al.* 2006). As a result, rapid land use changes continue to take a heavy toll in the forms of deforestation and land degradation, resulting in rural land dispossession and violent conflict. These trends were most evident from the fires that burned 2.6 million hectares in 2015, resulting in a public health disaster, amounting to US$16 billion in losses, and high levels of carbon emissions (World Bank 2015).

Social forestry as a policy priority emerged in the context of past enclosures about who has rights to land. Government and advocacy groups have found common ground in social forestry because of the various goals it represents. Multiple stakeholders now promote social forestry as an attractive win-win-win solution, stating that the policy can recognize communal rights, improve rural livelihood opportunities, support conservation, and overall, solve Indonesia's complex land conflicts (Maryudi *et al.* 2012). Current policy objectives aim to achieve over 10% (i.e. 12.7 million of 126 million hectares) of social forestry designations within the total Forest Estate area. As these policies seek to meet designation targets however, there has been less emphasis on more critical questions about social forestry for whom (Moeliono *et al.* 2017).

Proponents support social forestry policy for three main considerations. First, advocates note that social forestry discursively acknowledges the increasing number of people without land access and the growing number of land conflicts in Indonesia. For example, McCarthy and Robinson (2016) indicate 48 million people in 41 000 villages live within or bordering Forest Estate lands. Social forestry allows for one approach to compromise, maintaining management authority while negotiating terms to already occupied land. Meanwhile, deregulatory priorities of neoliberal policies favour corporate concessionaires, indicative of 70% of Indonesia's total land area under commoditization arrangements, albeit some of them 'virtual,' or yet undeveloped (McCarthy *et al.* 2012, McCarthy and Robinson 2016). Although Siscawati *et al.* (2017) present a much lesser formal figure of 35 million hectares under corporate control, nevertheless, such enclosures indicate decreasing land available to support rural community livelihoods (Li 2014). Social forestry thus provides common ground between state interests and communities interacting with Forest Estate boundaries, whereby access to land rights are provided amidst a reluctance to devolve full management authority. The second attractive notion of social forestry in Indonesia is the idea that formalizing terms of access could incentivize community empowerment programs and provide economic development opportunities. Social forestry programs could therefore support rural livelihood initiatives and economic growth. Third, proponents believe that given certain conditions, communities can act as more effective managers of forest resources, and incentivize better conservation practices (Larson 2004, Shrestha and McManus 2007, Maryudi *et al.* 2012, Porter-Bolland *et al.* 2012).

This paper explores these three policy priorities of rights, livelihood, and conservation, by examining a cross section of

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[1] For context, the Forest Estate, or area under MOEF authority, is equivalent to four times the land area of the Philippines.

TABLE 1 *Social Forestry Mechanisms, Total Area, and Change Since Jokowi*

| No | Schemes | Before Jokowi 2007–October 2014 | Since Jokowi Administration 11/2014–11/2017 | Total (Ha) |
|---|---|---|---|---|
| 1 | Village forests (HD) | 78 072 | 416 528 | 494 600 |
| 2 | Community forestry (HKM) | 153 725 | 102 621 | 256 346 |
| 3 | Community forest plantation (HTR) | 198 594 | 38 312 | 236 906 |
| 4 | Partnership (*Kemitraan*) | 18 712 | 66 764 | 85 476 |
| 5 | Customary forests (HA) | - | 11 291 | 11 291 |
| 6 | Permits for social forestry concession (IPHPS) | - | 7 035 | 7 035 |
| Total | | 449 104 | 642 554 | 1 091 658 |

case studies from long term engagement in South Sulawesi. At these sites, we ask: Does social forestry, in its current form in Indonesia, provide for greater acknowledgement of rights to people in the Forest Estate? Or conversely, does social forestry indicate that communities acknowledge the rights of the state to designate forest areas? Similarly, does social forestry also help to reduce the incidence of land conflict? If so, in what ways? How does social forestry, as it is formulated today, help empower communities to access new economic opportunities? And finally, in what ways has social forestry supported conservation goals? Overall, in the complex history of land use policies in Indonesia, this paper asks to what extent does social forestry fulfil the goals of its proponents: does it indeed present opportunities to defend and restore the commons, landscapes, lives, and livelihoods? Or, on the other hand, does social forestry designation, in its current manifestation simply indicate a reformulation of past policies in defence of business-as-usual?

The paper is divided into sections that also underpin the methods employed. First, the approach examines the global literature on social forestry, contextualizing a broad range of studies with social forestry origins in Indonesia. Next, the paper highlights several case studies on the emergence and implementation experience of social forestry programs at each case study site in South Sulawesi. Data collection took place over four years through sustained action research initiatives at each site, which reflects direct participation in facilitating interests among various stakeholders to undertake social forestry policy implementation. The analytical approach in this paper takes action-research one step further by more critically analysing the stated goals of current social forestry policy efforts in Indonesia and contrasting them with the overall implementation experience at the case study sites.

The paper concludes that in its current form, although social forestry has discursively raised the profile and interests of community rights to land, none of the three core goals of social forestry have yet become a priority in policy implementation for reasons described herein. The paper also concludes by suggesting some key principles which could set a different course for more meaningful policy engagement among relevant stakeholders.

## SOCIAL FORESTRY – A BROAD CONCEPT

The FAO forty-year review offers a broad definition of the family of social forestry[2] schemes as "initiatives, sciences, policies, institutions, and processes that are intended to increase the role of local people in governing and managing forest resources" (from RECOFTC,[3] cited in Gilmour 2016: 2). The definition goes on to highlight the milieu of social forestry forms, ranging from indigenous, to government-led practices and policies, as well as different partnership schemes that involve public and private enterprises, and cases of sacred protection.

Social forestry emerged in the 1970s and 1980s, when state-centric schemes for scientific management were criticized for the absence of distributive economic effects and the lack of capacity to protect forest resources. The notion of rights gained policy attention through the compelling work of Elinor Ostrom (1990), critiquing the "tragedy of the commons" narrative and convincingly arguing that providing sufficient tenure arrangements to communities could set up the rules to sustainably manage common pool resources. Social forestry has also become attractive for other reasons, however. For example, neoliberal policies of deregulation and privatization that intensified in the 1980s viewed social forestry as an opportunity to reduce the role of the state, conferring land management responsibility without providing the corresponding resources to local communities (Lake 2002).

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[2] FAO (Gilmour 2016) uses the definition community-based forestry. We view the umbrella term as broadly interchangeable, whether it is community based natural resource management, community based forest management, community forestry, social forestry, adaptive collaborative management and others. We understand that the term is contested among its proponents and variants. In this paper, we select the term "social forestry" because it follows the Indonesia policy context (*perhutanan sosial*).

[3] The Center for People and Forests (RECOFTC) is an international organization working on community forest management across the Asia-Pacific region.

In the global south, land degradation and fuelwood crises provided the impetus for social forestry and suggested very different origins to community based involvement (Gilmour 2016: 7). In other policy circumstances, Indonesia included, Indigenous rights have merged with social forestry ideals by challenging the processes of dispossession initiated by the colonial state or wrought by settler colonies.

Across the rich social forestry literature, core definitions support a commitment towards devolution to local actors (McDermott and Schreckenberg 2009, Gilmour 2016). Three central tenets are rights, livelihoods, and conservation (Charnley and Poe 2007, Maryudi *et al*. 2012). Critiques however, challenge some of the premises and experiences of social forestry in practice. Agrawal and Gibson (1999) state that notions of social forestry contain too simplistic a view of 'community,' while Li (2002) describes the overall policy approach as a 'strategic simplification' that necessarily overlooks local socio-economic concerns among diverse communities. Furthermore, a critical examination of success stories has suggested the provocative notion whether social forestry is created, or whether pre-existing conditions are found. Glasmeier and Farrigan (2005: 62) describe this as the chicken versus the egg in social forestry, asking: "was community forestry the source of change itself, or did the adoption of community forestry as a practice require that those changes first be made?"

As the popularity of social forestry ideas moved into policy applications, research also helped to identify gaps between rhetoric and implementation. Research in Malawi found the effects of social forestry as doing "more harm than good," undermining existing institutional arrangements and substituting them with 'hollow' administrative processes (Kamoto *et al*. 2013). The study also highlighted the importance, or rather the negligence, of incorporating flexible mechanisms based on locally trusted institutions. Behera and Engel (2006) in another case uncovered that disingenuous attempts to transfer property rights undermined social forestry programs in India. In a systematic review, McDermott and Schreckenberg (2009) also found that although social forestry programs tended to fulfil commitments to devolve decision-making powers, many failed to meaningfully support the most vulnerable populations. Indeed, in numerous cases, the poorest were unexpectedly worse-off because of social forestry. The review also highlighted some pre-requisites to effective implementation, namely initiating capacity building from the outset for facilitators and government intermediaries.

Finally, Sikor's volume (2006) more critically examines the experience of social forestry in terms of local, political, and agrarian perspectives, which are constituted dialectically between communities, states, and markets. Findings highlight that social forestry policies are shaped by the nodes of power that implement them, which in turn interact with broader political or economic forces. For example, one case in Maluku highlights how debt bondage for clove harvests determined outcomes for agroforestry sites beyond social forestry policy (Salampessy *et al*. 2017). States and markets shape the rules about property and access to the forest, determining who has rights, what resources are valued, and form resultant social

forestry initiatives (Sikor 2006: 346). In the next section, the paper turns to the social forestry experience in Indonesia, juxtaposing with the global experience to gauge existing conditions and foreground the cases studies.

### Social Forestry in Indonesia

Although social forestry is a small percentage area of Indonesia's Forest Estate, programs have been around for a long time. The origins of social forestry ideologies and logic behind implementation are significant. The historical evolution in Indonesia took place in several key stages (Lindayati 2002). The pre-social forestry phase of the 1960s–80s highlighted an era in which the central government enacted sovereignty by appropriating as much land into the Forest Estate as possible. This took place through the systematic expansion of the "political forest" in which land surveys unscrupulously identified the most valuable species (for extraction and protection) as a rationale for enclosure under the responsibility of state forest management (Peluso and Vandergeest 2001). During this early period, social forestry schemes were awarded in locations that had high levels of conflict, forcing government actors to make concessions on community demands. A discursive shift also occurred after the 8th World Forestry Congress, which was hosted in Jakarta, Indonesia. The Congress, entitled "Forests for People," brought centre-stage the role of forests for rural livelihoods.

In the 1990s the broader rhetoric of community-based resource management became a global ideal and compelled governments worldwide to begin implementing social forestry schemes (Edmunds and Wollenberg 2003). Formal village and community forestry offices and provisions were developed by the forestry ministry with objectives of providing economic benefits to local communities. A nationwide network of NGOs also emerged during this time, albeit carefully because any challenge to tenure within the state system was not possible until the fall of President Suharto in 1998. Once the centralized state unravelled and repurposed itself under a democratically decentralized governance regime, new opportunities for social forestry emerged.

The 2000s set in motion a new era of forest management under a revised Basic Forestry Law (from 5/1967 to 41/1999). The emergence of human rights organizations, especially calling for indigenous people and customary forest recognition (coalescing in the network called AMAN) presented a coordinated voice to promote discourses for contesting land in the Forest Estate. Little changed in the Forestry law however, beyond acknowledgement of stewardship rights to indigenous forests that did not materialize in legal mechanisms. A social forestry network (FKKM) also emerged and had a growing influence on the Forestry Law. At that time however, there was still little willingness by formal authorities nor the mechanisms to hand over forestland to communities, although numerous groups across the country were forcibly staking their claims (Lucas and Warren, 2003). Legal forestry policy negotiations did however ensure that social forestry became the most acceptable means for negotiating access to the vast Forest Estate. The current legal definition of

FIGURE 1 *Social Forestry permitting process*
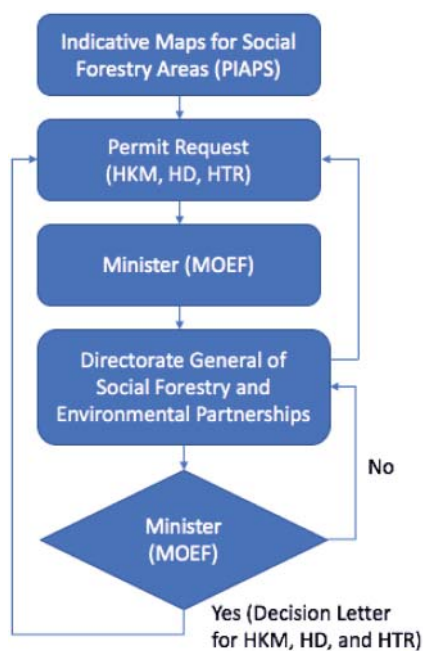


social forestry under MOEF ministerial decree 83/2016 is as follows:

> "*social forestry is a sustainable management system implemented in state forests or forest rights concessions/ customary forests, undertaken by local communities or legal customary communities as the main stakeholders, in order to increase their prosperity, ensure environmental balance and social cultural dynamics, in the form of Village Forests, Community Managed Forests, Community Plantation Forests, Community Forests, Customary Forests, and Forestry Partnerships.*"

As of 2016, the procedures for obtaining social forestry permits were complicated and expensive and follow similar procedures as large concessions. Permits for village and community managed forests typically had to pass 29 desks in at least 4 offices taking 180 days. To adjust to a more rights-oriented approach and simplify the regulatory process, MOEF passed a new decree, further streamlining the process (83/2016) – see figure 1 for permit licensing process. Although permit proposal processes are simplified by the decree, preparing permits is still onerous for local communities, requiring intervention by external actors to prepare necessary documentation.

Between 2011–2016, policy commitments amounted to 2.5 million hectares for social forestry. Since president Joko Widodo was elected in 2014, the targets have grown more ambitious, suggesting even greater commitment. In response, MOEF facilitated the creation of an indicative map for social forestry (PIAPS), allowing for local governments to propose potential sites that would amount to a total of 12.7 million hectares.[4] The PIAPS map was developed with formal institutions and coordinated with NGOs that have made headway in the participatory mapping movement. The PIAPS maps are available online, and are revised every six months.[5] One main challenge for social forestry implementation are processes of re-centralization taking place from Law 23/2014, in which the institutional structure shifted from the district to the provincial level with the creation of Forest Management Units (FMU) (Sahide *et al*. 2016, Fisher *et al*. 2017), realigning bureaucratic networks, and raising broader questions about social forestry policy trends across Southeast Asia (Fisher *et al*. 2017a). Key staff-members at MOEF have yet to be migrated to their new positions at the provincial level creating bottlenecks to the already complex permitting process.

As of November 2017, the Directorate General on Social Forestry and Environmental Partnerships at MOEF presented their progress on achieving social forestry targets (See table 1). Village forests (HD) achieved the greatest expansion and consists of the single largest category at 494 600 hectares. Other notable categories include the new scheme of customary forests (HA), which although remain limited in total area, highlight a major political victory for activists in Indonesia (Fisher *et al*. 2017b). In sum, the total area of social forestry at the close of 2017 amounts to almost 1.1 million hectares, close to 1% of total Forest Estate area. Adding an additional 11.6 million hectares to achieve targets by 2019 indicate a significant policy and implementation undertaking.

This paper picks up on program implementation between 2012–2018, examining existing examples that can highlight the challenges of the rapid expansion of targets in social forestry policy. The questions to be explored are, to what extent are social forestry efforts fulfilling the core definition of social forestry, namely a devolution of power to local communities? What are the mechanisms of social forestry implementation and what can be learned from existing social forestry programs? Does social forestry expand livelihood opportunity? What does this mean for local forest health? This paper analyses experiences at three multi-year action-research programs from Sulawesi, including: a Community Forest in Borong Rappoa, Bulukumba; a Village Forest in Patteneteang, Bantaeng; and, Customary Forest designation in Kajang, Bulukumba.

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METHODS

Researching the impacts of social forestry requires an understanding of complex socio-ecological dynamics, particularly the formal and informal institutional arrangements that govern land management practices. This research took place as part of a series of ongoing action research programs in three provinces on the island of Sulawesi.[6] Action research allowed for a deliberate process of developing partnerships with key stakeholders and responding to local good governance initiatives as they emerged (Evans *et al.* 2006, Adnan *et al.* 2008, Colfer *et al.* 2011, Fisher *et al.* 2017b). This helped the research team to critically analyse national social forestry efforts and contextualize findings from site-level perspectives.

In 2012 the project began supporting programs in South Sulawesi, Southeast Sulawesi, and Gorontalo provinces. These programs sought to improve livelihoods through agroforestry initiatives, address tenurial considerations of rural communities, and support good governance efforts by improving participation in natural resource management. Research teams therefore collected baseline materials on land cover, mapped land uses and tenure relations, and sought to support local policy initiatives that responded to multi-stakeholder concerns. As social forestry became a policy priority for these sites, and received national attention for their initiatives, the research team was well placed to contextualize social forestry implications. The case studies herein are purposively selected from action research engagement in South Sulawesi. Three sites were selected to provide comparative cases between SF designation types, and comparisons across district jurisdictions.

*Sustained data collection*
As an action research program, research teams worked at each of the project sites to build trust and improve participation in natural resource management by engaging in a landscape scale adaptive collaborative management approach (Colfer *et al.* 2011). This included stakeholder mapping, cataloguing interest groups, convening regular forums, and conducting targeted baseline information. Stakeholders were identified as farmers, community groups (both formal and informal), NGOs, government agencies, and vulnerable communities. Baselines were conducted on livelihoods (such as detailed data collection on local productive systems), on the regulatory environment (such as development programs, forestry policies, water policies, and the village law), and overall historical political economy dynamics (elements that shaped the landscape and precursors influencing local power relations). Interviews with key stakeholders were conducted regularly at sites, as well as focus group discussions, policy research, field data, and other intensive engagement as deemed necessary

by the participatory forums. The NGOs Balang Institute and OASE conducted regular site visits to all sites and reported quarterly, while the lead author spent one full year at the Kajang site over a period of 4 years. This reflexive approach responding to site-specific land and resource governance considerations sustained over several years provided a deep appreciation of local concerns.

*Action Research for Sustainable Landscape Governance*
To initiate action research, stakeholder analysis was first conducted. Key stakeholders were thereafter convened to engage in discussions about level of participation in landscape scale governance. These regularly held "learning forums" (Mulyana *et al.* 2008), and follow-up interviews with stakeholders, focused on issues concerning access to land and natural resources, and environmental services across upstream-downstream relations. Key priorities and decision-making powers were raised, followed by trainings on facilitation and environmental conflict resolution (Fisher and Sablan, 2018). Learning forums were also conducted between sites, whereby multi-stakeholder groups were convened to share issues and challenges from elsewhere.

Action research principles were instituted through the identification of key issues and discussions about priority fact-finding interests. For example, jurisdictional boundaries quickly became a major question among stakeholders at each site, which led to the consolidation of official district and Forest Estate boundary maps, and complemented by field data collection initiatives through participatory mapping (see for example, Figures 2, 3, and 4). Overall, these learning forums emerged in different ways at each of the sites depending on local priorities. Each were convened around the principles of increasing livelihoods and improving landscape scale conservation initiatives, identifying technical support opportunities and policy gaps.

As social forestry became a more concerted national policy effort, each of these sites presented ideal comparative empirical cases to understand the broader implementation considerations at three different types of social forestry schemes, across different geographies, with unique histories and land management interests. Detailed, local perspectives provided in the case studies herein thus present sustained data collection to address the broader research questions described above. In particular, this research was able to discern from local cases the extent to which social forestry policy fulfilled implementation expectations.

In each of the sections below, this paper examines background for three site-specific designation schemes. Each case study is explored by providing a brief overview of the social forestry scheme, followed by historical political economy considerations of the landscape, and the designation process. Next, the paper transitions to institutional mechanisms – both

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6   The first project took place between 2011–2016 under Contribution Arrangement No. 7056890, Department of Foreign Affairs, Trade and Development (DFATD), Government of Canada. Action research in these communities were followed up by a consecutive program to work with local partners in Sulawesi under a United States Agency for International Development (USAID) grant by the Partnership for Enhanced Engagement in Research (PEER) program.

formal and informal – that negotiate management within the designated social forestry area. Third, this paper evaluates the three tenets of social forestry devolution, which include rights recognition, livelihood and empowerment programs, and conservation efforts (as illustrated by Maryudi *et al.* 2012). It is important to note that the action research efforts reflected in this paper include sites that already obtained social forestry designation and may be ahead of the curve of current policy reforms. It is also important to critically examine the role of external actors in promoting policy schemes, in which this action research team also certainly had a role in facilitating developments. Recent but unsubstantiated social forestry research is also beginning to show that policy imperatives to achieve social forestry designation targets across Indonesia are being rushed, another area that should be considered in evaluating other cases. Therefore, future examinations of social forestry policy implementation should evaluate the extent to which distinct practices are taking place at each site. That said, the principles that emerge from the examination of this paper are likely to apply across other sites in Indonesia.

## THREE CASE STUDIES

### Case 1: Community Forestry (HKM) in Bulukumba (Borong Rappoa)

*HKM*
Community Forestry (*Hutan Kemasyarakatan*, HKM), are primarily targeted for community empowerment objectives, especially to provide new livelihoods opportunities.[7] Permit proposals are possible on production or protected forest, in special zones defined by the forest management unit (FMU), and on State Forest Management Corporation (*Perum Perhutani*) lands.[8] A ministerial decree provides the permit, but the 2016 decree now allows for provincial governments (the Governor) to accelerate designation by including sites in their development plans. A permit is first proposed by a community group, farmer group, or cooperative, which must include institutional structure. MOEF Decree 83/2016 Article 19 describes further requirements on accurate mapping and descriptive management plans. The FMU must also include the permit as part of their long-term forest planning.

*Background of the Borong Rappoa Site*
During the Colonial period, the Dutch government demarcated boundaries that local communities still describe as the BoschWezen boundaries. From early on the steeper upstream slopes of Bulukumba were set aside as conservation forest.

Forestry ministry efforts in the 1980s conducted renewed demarcation efforts (TGHK) formally designating 1,900 hectares along the slopes of Bawakaraeng mountain under conservation schemes, followed by a national land and reforestation program (GNRHL) in the 2000s. Such boundaries are still visible from the sparse pine forests that were part of the reforestation programs implemented along the slopes. In 2001, community groups sought to establish the first community forestry permits with support from Hasanuddin University (UNHAS) and a development project that helped to pass provisory permits. Community forestry efforts waned through the mid 2000s but by 2011 a decree was finally issued (MOF 363 / 2011)[9], designating 2,265 hectares of forest under the then HKM designation (AgFor final report).

According to local residents, land surveys in the early 2000s expanded the reach of the Forest Estate to include community cultivation lands. Settlement areas of Borong Rappoa village were then included in the expansion areas of the conservation forest zone. The communities firmly state that they never agreed to this more recent demarcation and when community forestry arrangements began to emerge within these expansion areas, community members were surprised. There are two hamlets in Borong Rappoa – which are Borong Rappoa (same name as the village) and Bonto Manai. There are also historically distinguished settlement areas called kampung Na'na and Asayya that border the forest estate located in the Bonto Manai Hamlet, which are often referred to in land claims. The community continues to plant cloves, passion fruit, and coffee, and some live in the expansion area of the conservation forest.

*Designating Community Forests in Borong Rappoa*
The local forestry agency supported the formation of a farmer group in the early 2000s. The group was created to undertake replanting efforts.[10] Plans to formalize HKM began in 2007. The communities claim they were never informed about HKM expectations. They were under the impression that regular meetings were like any other government seedling disbursement mechanism. They formed their community group like other agrarian subsidy projects and began planting agroforestry plots with cash crops expecting to one day harvest.

The farmer group listed 118 people over an area of 450.81 hectares under HKM management, from several sections, called: Asayya, Na'na, Kayu Birangang, Katimbang, Senggang, and Bontoa. The forestry agency facilitated the formation of the farmer group in coordination with the member listed as the head of the group. Tensions arose between the group leader and its members however, especially over the

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[7]  MOEF Decree 83 / 2016

[8]  Specific for Perum Perhutani lands, there are two new schemes: i) IUPHPS-Permits on social forestry management; and ii) forestry partnership recognition and protection. Both of these schemes are developed from pre-existing Forestry Partnership schemes with distinct ministerial decrees.

[9]  Surat Keputusan Menteri Kehutanan nomor 363/Menhut-II/2011

[10] It is also important to note that groups were formed for national reforestation and degradation programs (GNRHL) that were then later repurposed for HKM. Group members were often not informed of their involvement in such groups.

FIGURE 2 *Borong Rappoa and the various versions of jurisdictional boundaries*
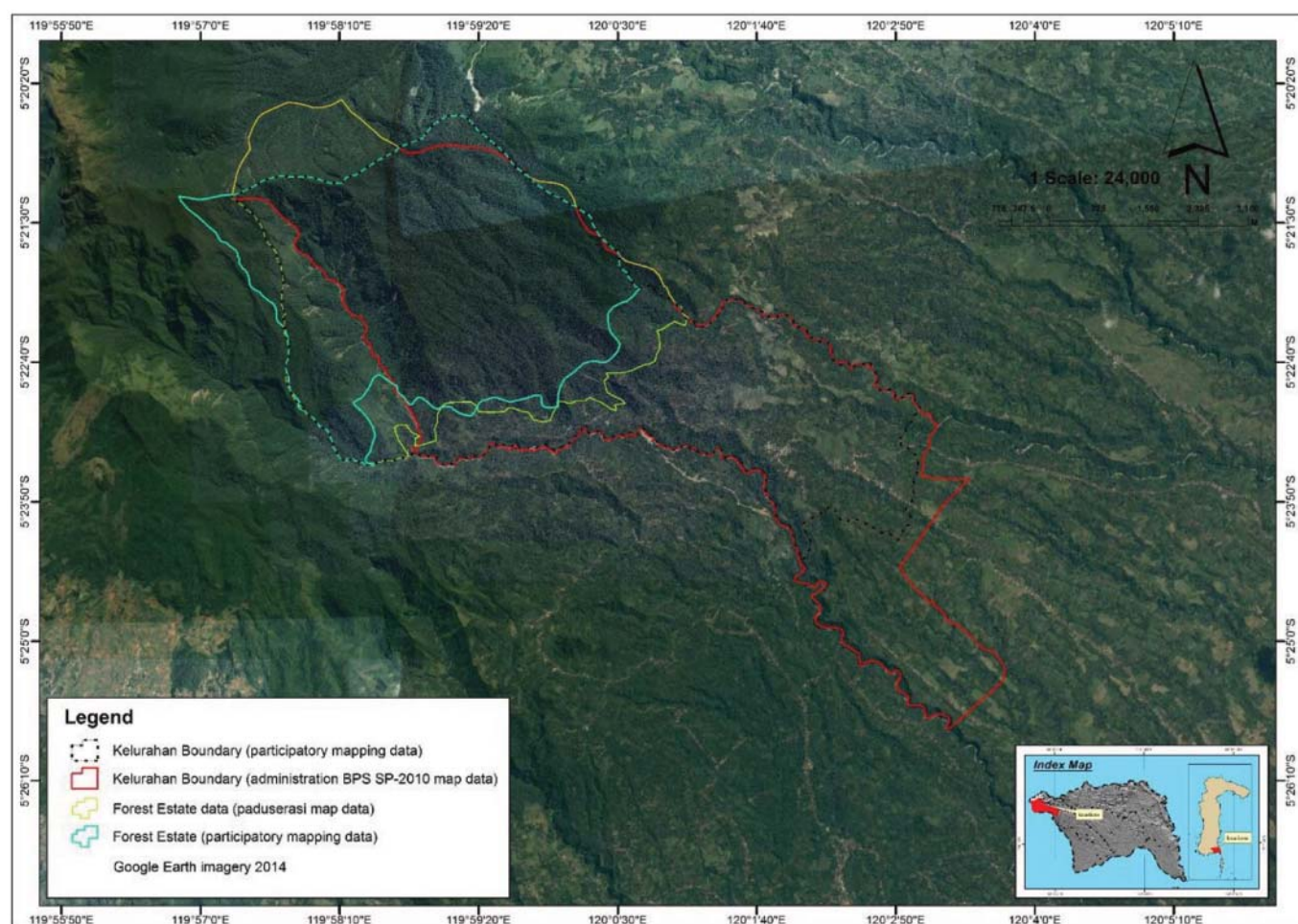


uneven distribution of program benefits. Support programs did however distribute seedlings for patchouli and timber crops, but forestry officials told farmer group members they would never be able to harvest timber products. As a result, the farmer group stopped agreeing to plant any trees. Farmer group members planted under the assumption of ancestral, private, and usufruct rights, and in many cases, were also supported by the existence of formal documents such as land tax documents (SPPT) and the highly regarded C(P1) historical evidence.[11]

Local historical perspectives also noted the mobility of settlements in the area. During the 1950s intimidation tactics by the DI/TII rebellion forced people to resettle in Balang Didi hamlet, but over time they returned to reclaim lands. A company, PT Sulawesi, also moved in and established clove plantation operations in 1975. Local community members also planted around the site, hoping to benefit from the presence of the company, but thereafter resettled further downstream because of the steep terrain.

During the TGHK re-designation of 1984, the community participated in setting boundary markers. The stakes were placed in areas that enclosed their earlier planting efforts, stakes which community members acknowledge later removing. As a result, there are two sets of claims to the land now designated as HKM. The communities contend that it is ancestral land, and that the additional 450.81 now designated as HKM, should not be within the boundaries of the Forest Estate. Meanwhile, the forestry agency maps were updated with geographic coordinates from boundary making operations that officially included these areas. Statements among officials also indicate that local leaders were complicit in implementing projects for demarcation, receiving salaries to designate these lands and thus formalizing them as Forest Estate. Furthermore, now that the site has received HKM designation, the forestry agency has continued to develop extension and outreach, implementing programs, assigning budgets, and other means of disbursing funds for community support further justifying claims of Forest Estate designation.

Conflict began when community members began to harvest their *suren* (Toona sureni) wood plots, invoking land and labour as justification to their claim. The forest police, in turn, were required to respond to such 'vandalism' and

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[11]   SPPT are proof of tax payments on a piece of property and formally sanctioned by the village head and approved by the land agency (BPN)

enforce regulations. Community members do not dispute areas beyond the BoschWezen boundary. In fact, the community supported sanctions of two people that tried to claim land in those areas by planting coffee, which the forest police cut down.

The areas within HKM designation are noted to include three sections: Senggang, Katimbang, and Bontoa. Bontoa is dominated by cloves, while Katimbang and Senggang mostly cultivate coffee. The community is preparing to harvest all remaining Suren wood located at those sites further increasing tension with forest police. Some of the land in the HKM area also have SPPT land claims that further complicate negotiations. Such complexity and lack of accountability is also illustrative in Figure 2, in which the jurisdictional maps present inaccuracies. Not only do the administrative boundaries of the Forest Estate (the BoschWezen, TGHK, and social forestry designations) highlight inconsistencies, the village and district boundaries also present alternative jurisdictional authority. Such administrative inaccuracies also lead to competing claims and increase tensions.

During the research period, discussing forest status continued to cause problems due to the conflict between the community and forest police. Discussion in the learning forums, shifted to protecting the critical watershed functions in upstream areas, complemented by riverbed restoration efforts, and potential non-invasive cultivation possibilities. Participation in these ways led to common ground around the construction of a micro-hydro power plant, which received enthusiastic support by local communities for the potential electricity generation in the area. Anytime the discussion returned to the issue of HKM status however, community members refused to be involved. Under such program justification, community members declined to plant tree crops, and in instances that replanting was conducted, community members would sabotage seedlings. Any discussion around HKM therefore, would stall efforts at collaboration, but micro-hydro allowed for sidestepping the contentious issue over rights on forest protection, empowerment and livelihood support. The local NGO facilitator at the site noted that:

> "*I don't think that HKM is a strategy that should be implemented to address natural resource challenges. They have difficulty accessing electricity there, and that was a great way to build partnership and common ground. They are absolutely willing to work together on conservation efforts if it is based on genuine mutual needs. But we see social forestry systems that exist today as too rigid to address any sort of flexible adaptive management system responsive to the community.*"

**Case 2: The Village Forest in Bantaeng (Patteneteang)**

*Background on Village Forests*
Village forests (*Hak Pengelolaan Hutan Desa*, shortened to HD) are management rights to protected or production forests (without existing permits) that are given over to authority overseen by a village organization.[12] Similar to HKM sites, HD are included in the indicative maps (PIAPS), designated in provincial level development plans, and receive final approval by ministerial decree. Village forests are proposed by a village organization, either a cooperative or a village-owned enterprise (BUMDes). In general, the location cannot exceed the area of village authority but there are certain stipulations whereby villages may partner with neighbouring jurisdictions for broader ecosystem landscape planning efforts. Permit proposals are prepared with the following documentation: i) village regulation or decision letter by the village head; ii) descriptive planning information for the HD; and iii) a map at 1:50,000 scale. Once the village fulfils these requirements, there are options for administration verification through the provincial government and MOEF in a series of steps (Article 11–15).

*Designating Village Forests in Patteneteang*
Village forest permits began in earnest in 2009, supported by the NGO RECOFTC and UNHAS. These organizations worked with the Bantaeng district forest agency and began preparing necessary documentation. Local communities were only loosely involved in the planning process at that time, mostly by setting up institutional documentation of the BUMDes and passing the necessary village decrees. The zoning areas (PAK) were finalized in 2010. Throughout the planning process, the main concern was mapping potential activities at the site. The site was divided into two different sub-sections (*blok*): Tasa'la and Daulu. The Daulu section experienced problems similar to the HKM case described in Borong Rappoa above, whereby existing land tax receipts (SPPT) indicating land claims overlapped within areas also designated as Forest Estate jurisdiction. Like the HKM case, mapping inconsistencies have caused differing perceptions of institutional role and authority, also causing conflict. Based on the PAK data from MOEF, the official area of the village forest in Patteneteang is 339 hectares, and the management organization includes 101 village members.

In 1993, boundary areas were designated throughout the district of Bantaeng, including the village of Patteneteang. At that time, the village administration was a small settlement area called Bonto Tallu. In contrast to the HKM case described above, local communities were more successful in contesting formal jurisdictional authority over their claims to land. Community members protested boundary demarcation and succeeded in influencing local parliament in Bantaeng to mediate disagreements. The community brought evidence of land rights, such as their SPPTs, and clearly outlined evidence of land claims dating back to the 1950s (i.e. C(P)1 forms).

The mediation resulted in the head of the local parliament visiting the site and evaluating conditions. Community members described the boundary of the BoschWezen, which helped with the negotiation. With this intervention, claims by community members were recognized and parties agreed to

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[12]   Also articulated in Ministerial regulation 83/2016

FIGURE 3 *Village Forest in Patteneteang based on considerations of Jurisdictional Authority, settlement areas, and access points*
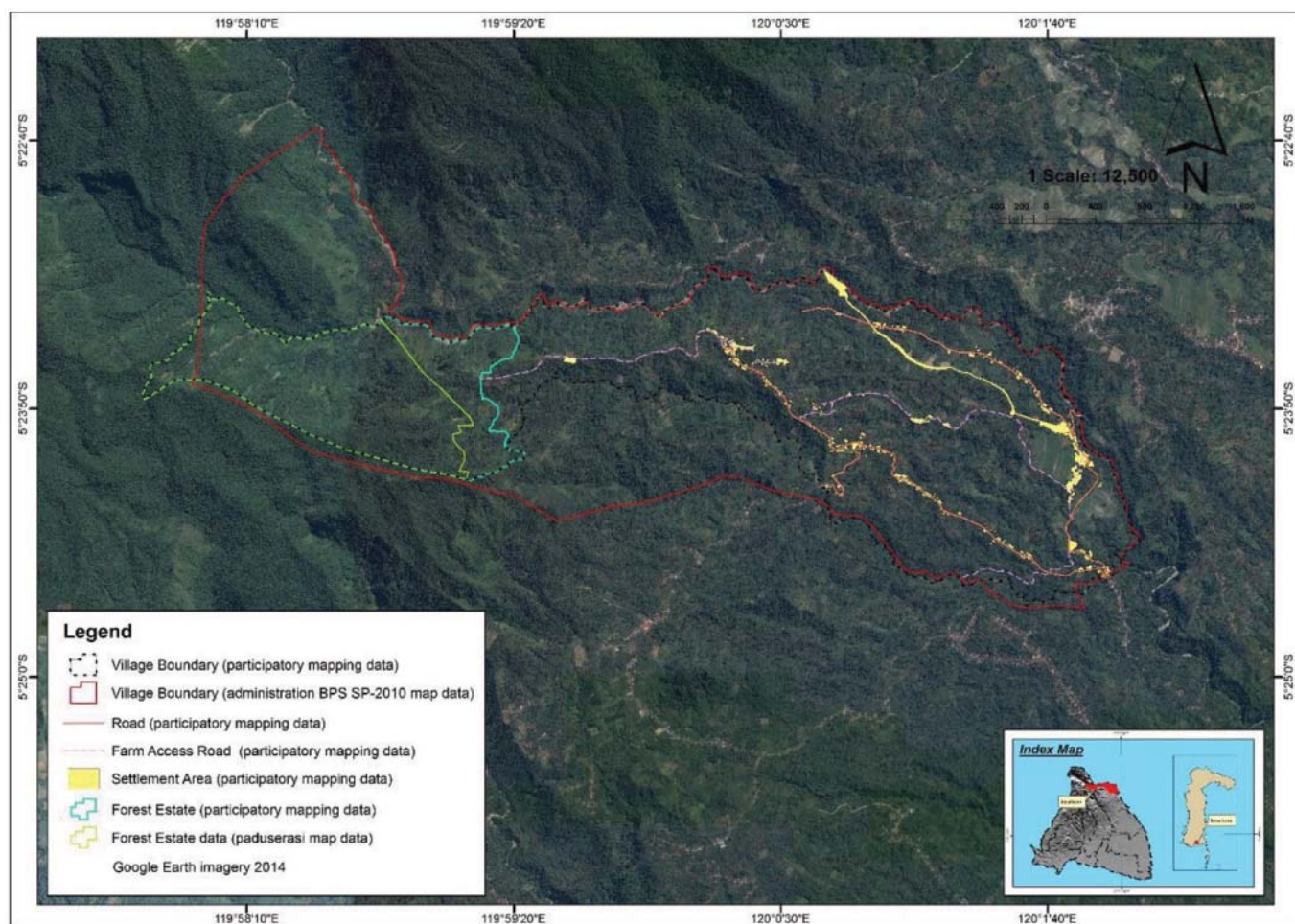


conduct a joint boundary setting process. Significant political changes were underway at the national level in 1997–8, which also influenced uncertainty about the political authority for making claims. Measurements proceeded jointly by various stakeholder representatives, overseen by: Subdistrict head (*camat*) of Tompobulu, military representatives based in Bantaeng (KODIM), district office staff (*bupati*), and the village government. The process took place over three months and measurements were jointly conducted between local community members and the land agency office (BPN) in Bantaeng. The mapping process is what provided formal provision of SPPT lands in 2000/1 that are still in use today.

When HD efforts began, one group in Patteneteang took the lead in demarcating areas within the Forest Estate administrative area. On the one hand this privileged those that had access to decision making authority. More generally however, as re-mapping efforts for HD proposal got underway, new concerns emerged about overlapping SPPT land claims designated as Forest Estate in MOEF databases. Therefore, getting the boundaries designated as HD meant that SPPT

land claims among certain residents would also be rendered moot. Several villagers implicated were not informed, creating new tensions when they learned that their claims were no longer valid. Like in Borong Rappoa, the current jurisdictional maps highlight these inconsistencies (see figure 3), namely the differences between MOEF data, participatory mapping data, and village boundary maps. The paper further details these implications in the discussion section.

Much of what emerges from Patteneteang are the institutional challenges for creating, administering, and managing HD as they are currently being set up. Patteneteang village actors followed the common approaches to prove management responsibility by creating a BUMDes. However, BUMDes as an institutional structure to administer HD presented challenges.[13] First, BUMDes are envisioned as revenue-generating enterprises that are to be productive in the near-term. Secondly, the BUMDes neither understood their position about HD management plans, nor their management responsibility in executing the objectives drawn up in the permit plans facilitated by RECOFTC and UNHAS.

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[13]   Similar findings were also true in nearby village forests (Campaga and Labbo) that are not discussed in detail herein.

FIGURE 4 *Jurisdictional and customary management authority of the Kajang adat forest*
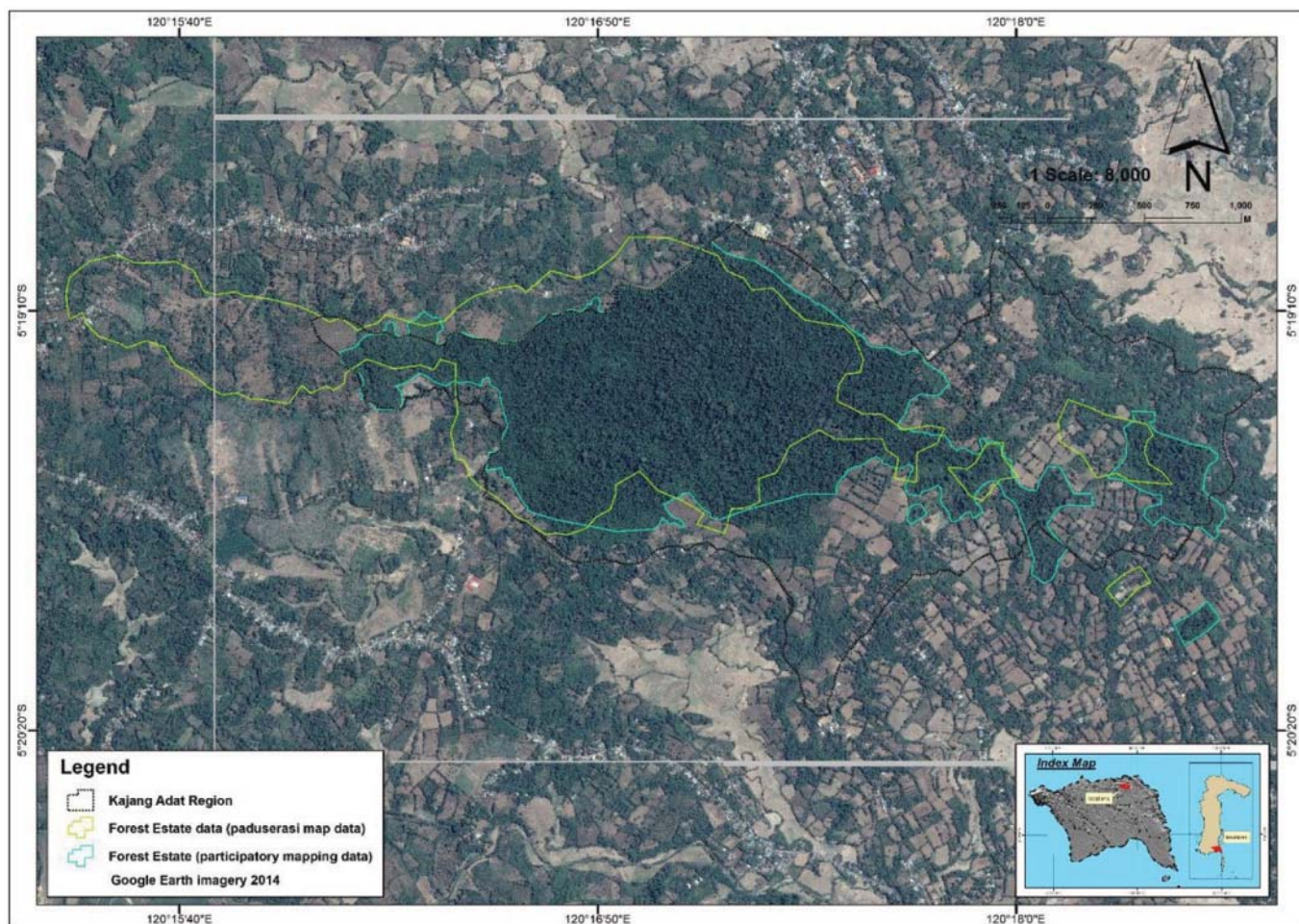


The sub-zones intended for various management functions also did not match field conditions. For example, areas indicated for range protection of the Anoa, the largest endemic mammal to Sulawesi, was already being managed as coffee development areas. The Tasa'la zone, neighbouring the Borong Rappoa HKM site, places the management area as overlapping with areas also claimed by Bulukumba district. These missteps occurred due to unclear verification standards by the ministerial and district teams that mistakenly administered these competing territorial overlaps.

**Case 3: Customary/*Adat* Forest in Bulukumba (Kajang)**

*Background on Customary Forests*
From a national perspective, Customary forests, or *Hutan Adat* (HA), has received much more controversy and contentious legal interpretation over the designation process. This is because policy interests of rights recognition, suggests that designation equates to removal from the Forest Estate. A series of legal decisions and policy efforts, particularly constitutional court decision MK35/2012, and subsequent recognition of nine indigenous communities (Kajang included), as well as concerted efforts among activists to challenge *adat* community land rights involves a more complex political contestation embodied by recent social movements in Indonesia.

It is not the intention of this research to discuss various aspects of policy interpretations, save for the approaches and implications from designation (for a more complete legal and policy discussion, see e.g. Davidson and Henley 2007, Butt 2014, Rachman and Siscawati 2016, Myers *et al*. 2017).

In this light, the Kajang case is significant for its precedent-setting status, as it was the first to successfully assign a full local regulation to designate HA out of the Forest Estate. The designation process received widespread attention in a ceremonious event convened by Indonesian President Widodo, which acknowledged central government support of recognizing indigenous authority (Gaol and Dahlia 2017). Social movement advocacy groups contend this could legitimize indigenous land claims across millions of hectares in Indonesia (McCarthy and Robinson 2016). Early guidance on the administrative mechanisms to return rights to adat communities shifts the burden of proof on local (district) governments to both demonstrate the extant of customary territorial claim and continued customary practices on those lands (UNORCID 2013, Mancayo and Firmansyah 2014). National government actors suggest that HA is one of the strategies to achieve the social forestry goal of 12.7 million hectares, and therefore including a complementary site in this analysis provides further comparative potential on the various implications of social forestry schemes.

*Designating Customary Forests in Kajang*

The Kajang are indeed a unique community, known for continuing to practice strict definitions of local customs (Rössler 1991, Tyson 2009, Maarif 2012, van der Muur and Bedner 2016, Fisher *et al*. 2017b). Kajang cosmology is also closely linked to their sacred forest, which in 1997 was designated as limited production forest (HPT).[14] Although Kajang forests in the past had multiple uses and different access zones (Mahbub 2013), the forest now represents a protected area, in which harvest, collection, or planting is prohibited without explicit permission by the Ammatoa, the Kajang cultural leader. Kajang leadership and the local forestry agency have developed a mutual support system in which both partner to enforce management responsibilities (Workman *et al*. 2015).

The district regulation recognizing the Ammatoa Kajang made it the precedent-setting HA case. The district regulation was drafted by a multi-stakeholder Taskforce[15] led by the district tourism agency and convened by the district forestry agency. Representation also included the legal bureau and other agencies, and uniquely extended representation to local NGO partners, including AMAN-South Sulawesi, Balang Institute, and OASE. To determine the extent of territorial claims to the forest estate, a participatory mapping exercise and joint questionnaires were conducted across villages throughout the Kajang area of influence. This helped to expand the scope of the district regulation beyond the boundaries of the sacred forest, including a broader definition of customary sites into the district regulation (Fisher *et al*. 2017b). After numerous public consultations and community input, district regulation 9/2015 was signed into law. One account described the policymaking effort as "the most participatory regulation" for its emphasis on multi-stakeholder collaboration in the Taskforce (Kemitraan 2015). In December 2016, President Widodo invited the Kajang and eight other customary groups for the official handing over of the decision letter[16] that effectively acknowledged their customary lands independent from the Forest Estate.

Although acknowledgement of rights for customary communities to forestland represents a tremendous political victory and symbolic achievement among national level actors and international activists, the designation process proves a more nuanced experience. First, the acknowledgement of land to the Forest Estate only confers *de jure* land rights of a system that had in fact already had a strong co-management partnership between state and Kajang customary leadership institutions (Workman *et al*. 2015). Indeed, conferring rights out of the Forest Estate suggests that the forestry agency no longer has the authority to conduct enforcement patrols to support the Kajang community, a fact that local Kajang leadership laments. This key aspect about continued forest management mechanisms was overlooked by the euphoria of achieving the goals of designation. The

more day-to-day management aspects are currently under discussion in a Taskforce re-established after the passage of the district regulation.

Secondly, the triumph over rights also raises questions about the two other legs of the social forestry stool, namely conservation and livelihoods. Since this forest is a sacred grove, in what ways does this social forestry victory for indigenous rights also support local livelihood concerns? Rights recognition is indeed an extremely meaningful outcome especially in the context of historical land dispossession in Indonesia. However, the Kajang case, as seen from the lens of social forestry implementation does not address the core interests of local community members, which revolve around livelihood opportunity. In one sense, the fact that the tourism agency spearheaded the Taskforce indicate a broader effort at developing economic opportunity. But developing tourism also comes along with the corresponding question about the benefits for whom. The policy promise of social forestry seeks to address smallholder access to land, an element that HA in Kajang does not address. If viewed from past tourism initiatives in Kajang, efforts have tended to be piecemeal, without much attention on integrating new economic opportunities for the community more broadly. New efforts from the re-established Taskforce could prove otherwise, as discussions are coordinating a tourism master plan with mechanisms for forest management authority in Kajang.

DISCUSSION

As stated, this research is not intended to undermine the overall discursive and symbolic progress made in social forestry in Indonesia, but rather to examine existing social forestry experiences in light of key questions around rights, livelihood, and conservation. Indeed, the emergence of social forestry as a way to engage with local communities would not have otherwise been possible in the past. At each site however, findings uncovered a gulf between policy imagination and implementation experience. In response to the research questions, the discussion focuses on two major barriers to achieving the three-part policy imperative. From each site, the research identified that accountability mechanisms, particularly spatial (boundaries and mapping), continues to be a major stumbling block on implementation. Delineating boundaries suffers from poor data management and integration, which leads to a violation of rights and rules in the field, and results in conflict that undermines any effort at collaboration. Second, land management considerations are not attentive to capacity building of local institutions, but rather, currently privilege bureaucratic mechanisms that focus on administrative procedure, undermining agreements on co-management roles. After exploring these two issues in more

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[14]   Forestry Minister Decision 504/KPTS/-II/1997 designating 331.17 hectares as HPT
[15]   The Taskforce was created under Bupati Decree 760/2013
[16]   SK.6746/MENLHK-PSKL/KUM.1/12/2016

detail from each site, the paper concludes by highlighting how they act as barriers to achieving broader interests in rights recognition, livelihood empowerment, and conservation outcomes.

## Rethinking Boundaries

At each of the sites described in this paper, fundamental problems emerged from inconsistent boundaries. This is a legacy of past approaches to boundary designation, lack of participation in administering boundaries, poor data accessibility and accuracy, and overall accountability uncertainty. Implications of poor spatial data management today cripple social forestry intentions, because as sites get slated for designation they invariably run up against competing claims by individuals, communities, or other agencies; a dilemma common in most land conflict across Indonesia. At all three sites described herein, inaccurate mapping information and differing perceptions of boundaries created misunderstanding, and resulted in some of the most difficult elements of policy negotiation. In Borong Rappoa local viewpoints of unjustified state enclosures and prohibiting timber harvest within social forestry designation broke down any potential of building trust. In Patteneteang improper placement of boundaries on community lands and incorrect zoning of coffee plantations areas undermined land management authority and further eroded mutual trust. In Kajang, after years of joint collaboration on joint forest boundary protections, agreement on boundaries were mostly secured, but recognition thereafter undermined the joint management arrangements between the forest agency and local customary leadership.

At a national level, PIAPS consolidation efforts acknowledge these challenges, and efforts seek to integrate national mapping database reforms under the One Map Policy. The forestry agency seeks to achieve a clean and clear policy on maps and jurisdictional authority. In this light, the way remapping efforts are undertaken could provide a first step in transparency and accessibility over administering social forestry sites. Indeed, numerous opportunities to develop joint agreements on spatial authority emerged in these cases, but were undermined by regulatory and protocol concerns. At the very least, synchronizing the dizzying lines on the maps as portrayed in this paper could reduce confusion over the jurisdictional frames of reference among key institutions.

Beyond jurisdictional agreement however, synchronizing maps will still face the challenge of addressing historical claims. Reassigning an overlay of social forestry on a map with clean boundaries does not overcome the central complaint at these sites. As yet, social forestry mechanisms have been reluctant to explicitly acknowledge competing claims, although new mechanisms (e.g. *Tanah Objek Reforma Agraria,* or TORA) are being proposed at certain sites. In both Borong Rappoa and Patteneteang, community members are vehemently opposed to any policy that takes away rights they once assumed, especially sites where labour, or labour of previous generations, go along with the expectations of future harvest. Furthermore, claims of having paid taxes on these lands proved through SPPT receipts and other documentation only embitters community perceptions of social forestry.

## The Role of Institutions

Literature from Malawi proves an ominous warning, in that social forestry efforts requiring new administrative institutions could supersede and weaken existing social relations and informal institutions (Kamoto *et al.* 2013). The current social forestry conditions in Indonesia are at risk of similar outcomes. Each of the three cases herein showed that new institutional forms compelled by social forestry policies either created new organizations to prove implementation, pitted community groups against each other (Borong Rappoa and Patteneteang), or actually undermined existing institutional arrangements (Kajang). On the one hand, a lack of capacity, flexibility, and commitment among administrators to support local (often informal) institutions are the culprit, particularly at sites which could differ dramatically from one location to the next. On the other hand, like most development and subsidy programs in rural Indonesia, projects are geared towards formal bureaucratic justification and disbursement interventions rather than influencing any meaningful changes in land management functions (cf. Li 2016 on the "project system").

The example from Borong Rappoa proves salient. Opportunities for collaboration emerged there out of plans to build micro-hydro electricity generation. The community already had a conservation ethic, articulating important environmental services that come from upstream forests. The micro-hydro initiative provided common ground to discuss conservation outcomes with community members. However, any discussion of social forestry designation in relation to local land claims and cultivation rights had become too contentious. Therefore, formal government interests to pursue social forestry policy may not match community interests, but evidence from Borong Rappoa indicates that mutual outcomes for joint land management arrangements could have succeeded nonetheless.

The three cases presented herein show that outside facilitation was essential for drafting designation plans because of the challenging permitting hurdles. The plans were indeed comprehensive but there was minimal attention to support local institutions with the knowledge or authority to implement them. In Patteneteang in particular, support by external actors (an NGO and local university) helped to make the case for HD designation. However, a learning forum in 2017 reviewing approved plans indicated that none of the management outcomes were achieved, nor was there much awareness among villagers or the BUMDes about their role in fulfilling such commitments. Intermediary NGOs played a major role in mapping, designating, and drafting plans for social forestry permits; but without honestly incorporating local management practices into the plans unfortunately undermines the intent of social forestry. The Patteneteang experience also highlights a lack of attentiveness on empowering local institutions with the support and authority to monitor and manage conservation areas. Lastly, in Patteneteang the BUMDes were designed as revenue generating institutions, expected to make annual returns on investment from its inception. The income

imperative meanwhile, puts undue pressure on this organization to generate income, most likely generated from natural resources, thus counter to the intended conservation goals of social forestry.

Overall, the stated objective of social forestry, at its most basic, is to confer a level of authority to local communities. None of the cases presented herein showcase increased capacity in this light, and rather the evidence points to the creation of new bureaucratic hurdles that privilege new institutional mechanisms and undermine existing local management systems. McDermott and Schreckenberg (2009) also warned of such means, noting that social forestry could prove detrimental and exclusionary to the poorest local communities, a consideration that needs to be taken seriously in future research as new interventions are administered.

CONCLUSION

So how does the implementation of social forestry projects fare, considering the experiences across three different designations across two districts in South Sulawesi? And furthermore, to what extent does social forestry present opportunities for recognizing rights, empowering livelihoods, and forest conservation? First, and most plainly, the experience highlights the continued legacy of problems over historical boundary setting processes. Jurisdictional maps, such as village maps, Forest Estate maps, and differing perceptions over the meaning of boundaries vary greatly across stakeholders. Across Indonesia, at their worst, such differences cause violent conflict and further entrench mistrust within communities, particularly in their relations with formal authorities. These cases showed that boundary setting and expansion of claims by authorities, combined with poor mapping databases across agencies continue to serve as a major barrier. Social forestry does not magically solve these disagreements, and furthermore, using social forestry to reinforce these claims can only result in further erosion of trust. This was the case in Borong Rappoa, in which collaboration was made possible by micro-hydro and conservation discussions, but ultimately broke down when the forestry agency tried to re-stake boundary claims and enforce new rules through social forestry programs. No matter the name of the program, such fundamental differences will prove difficult to overcome without the explicit acknowledgement and authority to come up with mutually agreeable solutions. Although formal actors may believe they are fulfilling their mandate, from local perspectives, livelihoods and decision making rights are being challenged or stripped away. Boundary disputes are extremely destructive for initiating any sort of collaborative partnership.

Second, the current efforts at social forestry implementation are heavily skewed in favour of meeting administrative fulfilments, often creating new institutions and undermining local authority that have the natural resource management memory, knowledge, and experience. Administering agencies rarely conduct meaningful visits that carefully assess local considerations, and risk reinforcing obvious contentious issues like the boundary disputes highlighted above. In chasing bureaucratic targets, authority is taken away from local

management practices. Social forestry policy implementation thus reflects another iteration of what Tania Li (2016) has called the 'project' system, built around administering procurement processes. As a result, based on the sites examined herein, the hope of social forestry to recognize local authority, support livelihood development, and assist conservation initiatives in their current form have missed opportunities at building mutual capacity for collaborative management arrangements. Implementation thus highlights a neglect in the devolution principle of social forestry, forgetting to honour the local practices that can help yield conservation outcomes. This was even true in Kajang, a case celebrated for its recognition of local authority, which resulted in the unintended consequence of formalizing rights that actually undermined the longstanding co-management authority protecting their sacred forests.

Finally, the livelihoods programs designed for social forestry are also reflective of other agrarian subsidy programs that create alliances with certain stakeholders in communities, at times creating new divisions among them. Seedling distribution programs highlight the power relationships among those in formal posts that divide livelihood empowerment programs among networks of local elites. Economic empowerment programs for local institutions are also poorly designed with unrealistic targets. The BUMDes experience in Patteneteang shows requirements for return on investment that would be difficult to meet in any scenario, highlighting another missed opportunity to create more robust economic ventures.

Are social forestry policies addressing local land management concerns, providing opportunities to local institutions and individuals based on need, and supporting co-management arrangements in support of forest conservation? This important question should rise to the forefront of any assessment of social forestry implementation and set the agenda for meeting policy targets. Unfortunately, although each of these cases showed promise in affirming this central question, ultimately implementation reinforced hollow policies that erode trust between institutional and local authority. At the moment the cases herein show that administrative objectives do not differentiate social forestry outcomes from other government initiatives, whereby the shell of administrative requirements are created to mobilize a project, not to contribute to the broader longer-term land management goals and capacity building interests for supporting devolution of authority. Following this course of events, social forestry risks becoming just another project with lofty development and societal goals, reinforcing the institutional arrangements it purports to challenge.

ACKNOWLEDGEMENTS

## REFERENCES

ADNAN, H., TADJUDIN, D., YULIANI, E.L., KOMARU-DIN, H., LOPULALAN, D., SIAGIAN, Y.L., and MUNG-GORO D.W. 2008. Belajar Dari Bungo Mengelola Sumberdaya Alam Di Era Desentralisasi. *Center for International Forestry Research,* Bogor, Indonesia

AGRAWAL, A. and GIBSON C. 1999. Enchantment and Disenchantment: The Role of Community in Natural Resources Conservation." *World Development* (**27**): 629–649.

BEHERA, B. and ENGEL, S. 2006. Institutional Analysis of Evolution of Joint Forest Management in India: A New Institutional Economics Approach. *Forest Policy and Economics* **8**(4): 350–62.

CHARNLEY, S. and POE, M.R. 2007. Community Forestry in Theory and Practice: Where Are We Now? *Annual Review of Anthropology* **36**: 301–36.

COLFER, C.J.P. 2010. Which Way Forward: People, Forests, and Policymaking in Indonesia. *Routledge*.

COLFER, C.J.P, ANDRIAMAMPANDRY, E., ASAHA, S., LYIMO, E., MARTINI, E., PFUND J.L., and WATTS, J. 2011. Participatory Action Research for Catalysing Adaptive Management: Analysis of a 'Fits and Starts' Process. *Journal of Environmental Science and Engineering* **5**(1): 28–43.

DOVE, M.R. 1995. The Theory of Social Forestry Intervention: The State of the Art in Asia. *Agroforestry Systems* **30**(3): 315–40.

EDMUNDS, D., and WOLLENBERG, E. 2003. Whose Devolution Is It Anyway? Divergent Constructs, Interests and Capacities between the Poorest Forest Users and States. In Local Forest Management: The Impacts of Devolution Policies. *Earthscan Publications*: London.

FISHER, L.A., KIM Y.S., LATIFAH, S., and MUKAROM, M. 2017 Managing Forest Conflicts: Perspectives of Indonesia's Forest Management Unit Directors. *Forest and Society* **1**(1): 8–26.

FISHER, M.R., MARYUDI, A., and SAHIDE, M.A.K. 2017. Forest and Society: Initiating a Southeast Asia Journal for Theoretical, Empirical, and Regional Scholarship. *Forest and Society* **1**(1): 1–7.

FISHER, M., and SABLAN, T. "Evaluating Environmental Conflict Resolution: Practitioners, Projects, and the Movement." *Conflict Resolution Quarterly*, 2018.

FISHER, M.R., WORKMAN, T., MULYANA, A., BALANG INSTITUTE, MOELIONO, M., YULIANI, E.L., and COLFER, C.J.P. 2017. Striving for PAR Excellence in Land Use Planning: Multi-Stakeholder Collaboration on Customary Forest Recognition in Bulukumba, South Sulawesi. *Land Use Policy*.

GAOL, A.L., and DAHLIA, L. 2017. Indonesian President Hands over Management of Forests to Indigenous People. http://blog.worldagroforestry.org/index.php/2017/02/15/indonesian-president-hands-management-forests-indigenous-people/#.WKVL0AVg670.facebook

GILMOUR, D. 2016. Forty Years of Community-Based Forestry A Review of Its Extent and Effectiveness. *Food and Agriculture Organization of the United Nations*: Rome.

GLASMEIER, A.K., and FARRIGAN, T. 2005. Understanding Community Forestry: A Qualitative Meta-study of the Concept, the Process, and Its Potential for Poverty Alleviation in the United States Case. *The Geographical Journal* **171**(1): 56–69.

KAMOTO, J., CLARKSON, G. DORWARD, P., and SHEPHERD, D. 2013. Doing More Harm than Good? Community Based Natural Resource Management and the Neglect of Local Institutions in Policy Development. *Land Use Policy* **35**: 293–301.

KEMITRAAN. 2015. Hutan Untuk Kesejahteraan: Cerita Dari Lapangan. *Kemitraan Partnership dan The Royal Norwegian Embassy*: Jakarta.

LARSON, A.M. 2004. Formal Decentralisation and the Imperative of Decentralisation 'from Below': A Case Study of Natural Resource Management in Nicaragua. *The European Journal of Development Research* **16**(1): 55–70.

LARSON, A.M. 2011. Forest Tenure Reform in the Age of Climate Change: Lessons for REDD+. *Global Environmental Change* **21**(2): 540–49.

LINDAYATI, R. 2002. Ideas and Institutions in Social Forestry Policy. Chapter 2 in Colfer, Carol J. Pierce, and Ida Ayu Resosudarmo (eds.). (2002). *Which Way Forward? People, Forests, and Policymaking in Indonesia.* Routledge.

LI, T.M. 2002. Engaging Simplifications: Community-Based Resource Management, Market Processes and State Agendas in Upland Southeast Asia. *World Development* **30**(2): 265–83.

LI, T.M. 2016. Governing Rural Indonesia: Convergence on the Project System. *Critical Policy Studies* **10**(1): 79–94.

MAHBUB, M.A.D. 2013. Dialektika Pengetahuan Lokal Dan Non Lokal (Studi Kasus Pasang Ri Kajang Dalam Pengelolaan Hutan Adat Kajang. *Dissertation, Program Pasca Sarjana Universitas Hasanuddin.*

MANCAYO, A.S., and FIRMANSYAH, N. 2014. Mengenal Pilihan-Pilihan Hukum Daerah Untuk Pengakuan Masyarakat Adat: Kiat-Kiat Praktis Bagi Pendamping Hukum Rakyat (PHR), Masyarakat Sipil (Pelaku Advokasi) Dan Pemimpin Masyarakat Adat. *Perkumpulan HuMa Indonesia, Canting Press.*

MARYUDI, A., DEVKOTA, R.R., SCHUSSER, C., YUFANYI, Y., SALLA, M., AURENHAMMER, H., ROTCHANAPHATHARAWIT, R., and KROTT, M. 2012. Back to Basics: Considerations in Evaluating the Outcomes of Community Forestry. *Forest Policy and Economics* **14**(1): 1–5.

McCARTHY, J.F., and ROBINSON, K.M. 2016. Land and Development in Indonesia: Searching for the People's Sovereignty. *ISEAS – Yusof Ishak Institute*: Singapore.

MCCARTHY, J.F., VEL, J.A.C., AND AFIFF, S. 2012. Trajectories of Land Acquisition and Enclosure: Development Schemes, Virtual Land Grabs, and Green Acquisitions in Indonesia's Outer Islands. *Journal of Peasant Studies* **39**(2): 521–49.

MCDERMOTT, M.H., and SCHRECKENBERG, K. 2009. Equity in Community Forestry: Insights from North and South. *International Forestry Review* **11**(2): 157–70.

MOEF. 2014. Statistik Kementerian Lingkungan Hidup Dan Kehutanan 2014 / Ministry of Environment and Forestry Statistics 2014. *Ministry of Environment and Forestry Data and Information Centre*.

MOELIONO, M., THUY, P.T., BONG, I.W., WONG, G.Y., and BROCKHAUS, M. 2017. Social Forestry-Why and for Whom? A Comparison of Policies in Vietnam and Indonesia. *Forest and Society* **1(2)**: 1–20.

MULYANA, A., ADNAN, A., INDRIATMOKO, Y., PRIYO-NO, A., and MOELIONO, M. 2008. *Belajar Sambil Mengajar: Menghadapi Perubahan Sosial Untuk Pengelolaan Sumberdaya Alam*. CIFOR, 2008.

MYERS, R., INTARINI, D., SIRAIT, M.T., and MARYUDI, A. 2017. Claiming the Forest: Inclusions and Exclusions under Indonesia's 'New' Forest Policies on Customary Forests. *Land Use Policy* **66**: 205–13.

OSTROM, E. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. *Cambridge University Press*.

PELUSO, N.L., and VANDERGEEST, P. 2001. Genealogies of the Political Forest and Customary Rights in Indonesia, Malaysia, and Thailand. *The Journal of Asian Studies* **60**(03): 761–812.

POFFENBERGER, M. 1990. Keepers of the Forest: Land Management Alternatives in Southeast Asia. *Kumarian Press, Inc*.

POFFENBERGER, M. 2006. People in the Forest: Community Forestry Experiences from Southeast Asia. *International Journal of Environment and Sustainable Development* **5**(1): 57–69.

PROTER-BOLLAND, L. ELLIS, E.A. GUARIGUATA, M.R., RUIZ-MALLÉN I., NEGRETE-YANKELEVICH, S., and REYES-GARCÍA, V. 2012. Community Managed Forests and Forest Protected Areas: An Assessment of Their Conservation Effectiveness across the Tropics. *Forest Ecology and Management* **268**: 6–17.

RECOFTC. 2014. Current status of social forestry in climate change mitigation and adaptation in the ASEAN region: Situational analysis 2013. *RECOFTC – The Center for People and Forests*: Bangkok, Thailand.

SAHIDE, M.A.K., FISHER, M.R., MARYUDI, A., DHI-AULHAQ, A., WULANDARI, C., KIM, Y.S., GIESSEN, L. 2018. Deadlock opportunism in contesting conservation areas in Indonesia. *Land Use Policy* **77**: 412–424.

SAHIDE, M.A.K., SUPRATMAN S., Maryudi, A., KIM Y.S., and GIESSEN, L. 2016. Decentralisation Policy as Recentralisation Strategy: Forest Management Units and Community Forestry in Indonesia. *International Forestry Review* **18**(1): 78–95.

SAITO-JENSEN, M., SIKOR, T., KURNIAWAN Y., EILEN-BERG, M. SETYAWAN, E.P., and KUSTINI, S.J. 2015. Policy Options for Effective REDD+ Implementation in Indonesia: The Significance of Forest Tenure Reform. *International Forestry Review* **17**(1): 86–97.

SALAMPESSY, M.L., FEBRYANO, I.G., and ZULFIANI, D. 2017. Bound by Debt: Nutmeg Trees and Changing Relations between Farmers and Agents in a Moluccan Agroforestry Systems. *Forest and Society* **1**(2): 60–66.

SHRESTHA, K.K., and MCMANUS, P. 2007. The Embeddedness of Collective Action in Nepalese Community Forestry. *Small-Scale Forestry* **6**(3): 273–90.

SIKOR, T. 2006. Analysing Community-Based Forestry: Local, Political and Agrarian Perspectives. *Forest Policy and Economics* **8**(4): 339–49.

SIMOR, T., STAHL, J., ENTERS, T., RIBOT, J.C., SINGH, N., SUNDERLIN, W.D., and WOLLENBERG, L. 2010. REDD-Plus, Forest People's Rights and Nested Climate Governance. *Global Environmental Change* **20**(3): 423–25.

SUPRATMAN. 2016. Kemitraan Pengelolaan Hutan Rakyat: Pembelajaran Dari Bulukumba, Sulawesi Selatan. *FORDA Press:* Bogor.

UNORCID. 2013. National Workshop on the Forestry Law: Constitutional Court Ruling No.35/PUU-X/2012," National conference.

WORLD BANK. 2015. Indonesia's Fire and Haze Crisis http://www.worldbank.org/en/news/feature/2015/12/01/indonesias-fire-and-haze-crisis.