

### PROTEKSI ISI LAPORAN AKHIR PENELITIAN

Dilarang menyalin, menyimpan, memperbanyak sebagian atau seluruh isi laporan ini dalam bentuk apapun kecuali oleh peneliti dan pengelola administrasi penelitian

## LAPORAN AKHIR PENELITIAN MULTI TAHUN

ID Proposal: d3af8707-91bb-4448-8d66-e7aaf4e93e4e  
Laporan Akhir Penelitian: tahun ke-2 dari 2 tahun

### 1. IDENTITAS PENELITIAN

#### A. JUDUL PENELITIAN

Relasi kuasa dalam mekanisme distribusi manfaat pada ragam skema perhutanan sosial

#### B. BIDANG, TEMA, TOPIK, DAN RUMPUN BIDANG ILMU

Bidang Fokus RIRN / Bidang Unggulan Perguruan Tinggi	Tema	Topik (jika ada)	Rumpun Bidang Ilmu
Konflik dan Integrasi Bangsa dan Harmonisasi Sosial	-	Kesejahteraan Sosial dan Lingkungan yang Berkeadilan	Ilmu Kesejahteraan Sosial

#### C. KATEGORI, SKEMA, SBK, TARGET TKT DAN LAMA PENELITIAN

Kategori (Kompetitif Nasional/ Desentralisasi/ Penugasan)	Skema Penelitian	Strata (Dasar/ Terapan/ Pengembangan)	SBK (Dasar, Terapan, Pengembangan)	Target Akhir TKT	Lama Penelitian (Tahun)
Penelitian Desentralisasi	Penelitian Dasar Unggulan Perguruan Tinggi	SBK Riset Dasar	SBK Riset Dasar	3	2

### 2. IDENTITAS PENGUSUL

Nama, Peran	Perguruan Tinggi/ Institusi	Program Studi/ Bagian	Bidang Tugas	ID Sinta	H-Index
MUHAMMAD ALIF KS Ketua Pengusul	Universitas Hasanuddin	Ilmu Kehutanan		255728	14
Dr SUPRATMAN S.Hut, M.P Anggota Pengusul 1	Universitas Hasanuddin	Kehutanan	Melaksanakan penelitian (pengambilan data dan analisis) serta menuliskan artikel ilmiah	6005350	5

### 3. MITRA KERJASAMA PENELITIAN (JIKA ADA)

Pelaksanaan penelitian dapat melibatkan mitra kerjasama, yaitu mitra kerjasama dalam melaksanakan penelitian, mitra sebagai calon pengguna hasil penelitian, atau mitra investor

Mitra	Nama Mitra
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#### 4. LUARAN DAN TARGET CAPAIAN

##### Luaran Wajib

Tahun Luaran	Jenis Luaran	Status target capaian ( <i>accepted, published, terdaftar atau granted, atau status lainnya</i> )	Keterangan ( <i>url dan nama jurnal, penerbit, url paten, keterangan sejenis lainnya</i> )
2	Publikasi Ilmiah Jurnal Internasional	accepted/published	Land Use Policy

##### Luaran Tambahan

Tahun Luaran	Jenis Luaran	Status target capaian ( <i>accepted, published, terdaftar atau granted, atau status lainnya</i> )	Keterangan ( <i>url dan nama jurnal, penerbit, url paten, keterangan sejenis lainnya</i> )
2	Prosiding dalam pertemuan ilmiah Nasional	sudah terbit/sudah dilaksanakan	Seminar Nasional Tahunan Komunitas Manajemen Hutan Indonesia (KOMHINDO)

#### 5. ANGGARAN

Rencana anggaran biaya penelitian mengacu pada PMK yang berlaku dengan besaran minimum dan maksimum sebagaimana diatur pada buku Panduan Penelitian dan Pengabdian kepada Masyarakat Edisi 12.

**Total RAB 2 Tahun Rp. 65,458,100**

**Tahun 1 Total Rp. 0**

**Tahun 2 Total Rp. 65,458,100**

Jenis Pembelanjaan	Item	Satuan	Vol.	Biaya Satuan	Total
Analisis Data	HR Pengolah Data	P (penelitian)	1	1,500,000	1,500,000
Analisis Data	Honorarium narasumber	OJ	4	900,000	3,600,000
Analisis Data	HR Sekretariat/Administrasi Peneliti	OB	9	300,000	2,700,000
Analisis Data	Biaya konsumsi rapat	OH	15	40,000	600,000
Bahan	ATK	Paket	1	1,514,000	1,514,000
Bahan	Bahan Penelitian (Habis Pakai)	Unit	1	1,138,100	1,138,100
Bahan	Barang Persediaan	Unit	1	3,500,000	3,500,000
Pelaporan, Luaran Wajib, dan Luaran Tambahan	Publikasi artikel di Jurnal Internasional	Paket	1	13,000,000	13,000,000
Pelaporan, Luaran Wajib, dan Luaran Tambahan	Biaya konsumsi rapat	OH	9	40,000	360,000
Pengumpulan Data	HR Sekretariat/Administrasi Peneliti	OB	12	300,000	3,600,000
Pengumpulan Data	Transport	OK (kali)	18	247,000	4,446,000
Pengumpulan Data	Biaya konsumsi	OH	45	100,000	4,500,000
Sewa Peralatan	Ruang penunjang penelitian	Unit	5	5,000,000	25,000,000

## 6. HASIL PENELITIAN

**A. RINGKASAN:** Tuliskan secara ringkas latar belakang penelitian, tujuan dan tahapan metode penelitian, luaran yang ditargetkan, serta uraian TKT penelitian.

Program perhutanan sosial di Indonesia termasuk di kawasan konservasi seakan tidak terpantau dalam rana empiris dan teoritik politik untuk teranalisa dengan baik, terutama bagi skema yang telah memasuki tahap operasi pembagian distribusi manfaat dan biaya antar aktor yang terlibat dan berpengaruh. Negosiasi antar aktor pengelolaan perhutanan sosial dalam mewujudkan distribusi baik biaya maupun manfaat yang didapatkannya seringkali dipersepsikan timpang oleh sebagian aktor terutama aktor yang memiliki kuasa yang lemah. Relasi kuasa yang timpang dari mesin kerja birokrasi politik dapat menyebabkan skema perhutanan sosial (berupa skema perhutanan sosial secara umum, reforma agraria maupun inisiatif pengembangan kawasan ekosistem esensial di kawasan hutan rakyat) tidak terimplementasi dengan baik, atau terimplementasi tapi menyebabkan ketimpangan yang baru. Konsep power (kuasa) yang terdiri dari elemen informasi, insentif dan koersi menjadi perlu dianalisis untuk mengetahui siapa aktor yang dominan, dan elemen kuasa yang digunakannya untuk mempengaruhi aktor lainnya dalam menentukan distribusi manfaat dan biaya dari skema pengelolaan perhutanan sosial yang dioperasikannya. Sehingga tujuan dari penelitian ini adalah untuk menilai relasi kuasa setiap aktor dan kepentingannya, dalam mempengaruhi aktor lainnya untuk menentukan distribusi biaya dan manfaat pengelolaan ragam skema perhutanan sosial. Penelitian ini dilaksanakan di beberapa daerah di Indonesia dengan mengambil berbagai skema perhutanan sosial, maupun reforma agraria, dan atau inisiatif kolaborasi pengelolaan kawasan ekosistem esensial di kawasan konservasi yang telah berjalan saat ini. Penelitian ini menemukan 2 kerangka teoritis terkait teori akses, eksklusi dan power dalam pengelolaan hutan sosial dan kawasan ekosistem esensial, kerangka teoritis yang dibangun ini juga berhasil di turunkan dalam 3 kasus perhutanan sosial di Indonesia dan 1 kasus pengelolaan kawasan konservasi. Pada kasus pertemuan sosial ditemukan bahwa ketimpangan antara implementasi perhutanan sosial yang berkuat pada akses ijin dan tidak kuatnya fasilitasi kelembagaan lokal membawa konsekuensi terhadap implementasi yang terhambat. Pada kasus kawasan ekosistem esensial ditemukan bahwa para pihak mesti mempertimbangkan relasi kuasa pada level politik birokrasi yang akomodatif terhadap kebutuhan dan dinamika kelembagaan lokal yang membutuhkan penguatan sebelum mengakses skema ini. Kami percaya heuristik yang dihasilkan tidak hanya berfungsi sebagai kerangka kerja strategis bagi peneliti untuk menilai berbagai tahapan dan pertimbangan implementasi perhutanan sosial, tetapi juga menyediakan alat yang berguna bagi aktor eksternal untuk mendekati implementasi perhutanan sosial dan kawasan ekosistem esensial. Untuk pengambilan data dilakukan melalui eksplorasi sejarah, observasi serta diikat dengan wawancara mendalam. Luaran yang akan dilaksanakan adalah dua jurnal internasional bereputasi, dan dua jurnal nasional terakreditasi. TKT penelitian ini adalah dari formulasi konsep menuju pembuktian konsep

**B. KATA KUNCI:** Tuliskan maksimal 5 kata kunci.

perhutanan sosial; kawasan ekosistem esensial; relasi kuasa; reforma agraria; distribusi manfaat

Pengisian poin C sampai dengan poin H mengikuti template berikut dan tidak dibatasi jumlah kata atau halaman namun disarankan sesingkat mungkin. Dilarang menghapus/memodifikasi template ataupun menghapus penjelasan di setiap poin.

**C. HASIL PELAKSANAAN PENELITIAN:** Tuliskan secara ringkas hasil pelaksanaan penelitian yang telah dicapai sesuai tahap pelaksanaan penelitian. Penyajian dapat berupa data, hasil analisis, dan capaian luaran (wajib dan atau tambahan). Seluruh hasil atau capaian yang dilaporkan harus berkaitan dengan tahapan pelaksanaan penelitian sebagaimana direncanakan pada proposal. Penyajian data dapat berupa gambar, tabel, grafik, dan sejenisnya, serta analisis didukung dengan sumber pustaka primer yang relevan dan terkini.

Pengisian poin C sampai dengan poin H mengikuti template berikut dan tidak dibatasi jumlah kata atau halaman namun disarankan ringkas mungkin. Dilarang menghapus/memodifikasi template ataupun menghapus penjelasan di setiap poin.

C. **HASIL PELAKSANAAN PENELITIAN:** Tuliskan secara ringkas hasil pelaksanaan penelitian yang telah dicapai sesuai tahun pelaksanaan penelitian. Penyajian dapat berupa data, hasil analisis, dan capaian luaran (wajib dan atau tambahan). Seluruh hasil atau capaian yang dilaporkan harus berkaitan dengan tahapan pelaksanaan penelitian sebagaimana direncanakan pada proposal. Penyajian data dapat berupa gambar, tabel, grafik, dan sejenisnya, serta analisis didukung dengan sumber pustaka primer yang relevan dan terkini.

#### **Kerangka Heuristik yang ditemukan: Mengembangkan kerangka akses dan eksklusi**

Mengembangkan kerangka eksklusi akses dimulai dengan mendeskripsikan perhutanan sosial di seluruh tahapan kebijakannya. Mengambil dari keterlibatan kehutanan sosial di Nepal, Devkota (2010) memberikan jalan dengan mengidentifikasi empat tahapan berbeda dalam hal: i) tahap awal ii) penyerahan resmi iii) implementasi, dan iv) operasi normal. Kami mengikuti preseden ini, tetapi mengingat perkembangan perhutanan sosial yang baru dan cepat di Indonesia, kami menggabungkan implementasi dan operasi normal ke dalam satu tahap. Kami lebih jauh menempatkan persyaratan birokrasi formulasi perhutanan sosial dalam setiap kategori menyeluruh (kutipan proses kebijakan normatif). Secara khusus, tahap awal dibagi lagi menjadi persyaratan konstituenya, termasuk pemilihan skema (A1), inklusivitas (A2), pencegahan / pengelolaan konflik (A3), dan perencanaan partisipatif (A4). Serah terima formal dibagi menjadi proposal administrasi dan persetujuan (B1), dan penguatan kelembagaan lokal dan keterlibatan aktor eksternal (B2). Dan tahapan implementasinya meliputi pengelolaan hutan dari segi mata pencaharian (C1) dan konservasi (C2).

Menerapkan teori akses dan kekuatan pengecualian pada masing-masing tahapan ini membantu tidak hanya menilai proses yang menguntungkan beberapa dan mengecualikan yang lain, tetapi juga menunjukkan manfaat apa yang bertambah atau diambil pada titik-titik kunci keterlibatan perhutanan sosial. Menerapkan teori kekuasaan ke kategori tertentu bagaimanapun, tidak langsung, dan memang Hansen et al. (2020) telah menunjukkan cara dangkal penelitian telah berusaha untuk menerapkan teori-teori ini. Untuk menjadi lengkap dan daftar setiap mekanisme akses untuk tujuan makalah ini terlalu berat, dan memang tidak pernah dimaksudkan oleh rumusan asli dalam teori akses. Demikian pula untuk kekuatan pengecualian Hall dkk, yang mencantumkan empat kekuatan menyeluruh (regulasi, pasar, kekerasan, dan legitimasi) yang menentukan perbedaan antara peraturan yang eksklusif dan legitimasi yang sering menyebabkan manifestasi yang tumpang tindih. Untuk alasan ini, kami mengembangkan kerangka kerja sebagai alat untuk berpikir, dan kami secara kolektif terlibat pada gagasan kekuasaan di setiap tahap perhutanan sosial, mengidentifikasi aktor kunci, kekuasaan, dan proses yang termasuk dalam apa yang kami tetapkan sebagai akses atau pengecualian. Terakhir, dengan mengingat penerapan untuk peneliti mendatang atau pertimbangan pemantauan di antara pembuat kebijakan dan praktisi, kami membuat daftar peluang pengumpulan data di seluruh tahapan ini. Saat kami menerapkan kerangka kerja pada tiga kasus dalam makalah ini, kami terlibat dalam proses reflektif induktif-deduktif di seluruh tim penulis, memeriksa silang apakah heuristik mendukung materi kasus, dan sebaliknya. Meskipun kasus mendalam yang disajikan dalam makalah ini terbatas pada tiga lokasi dari Sulawesi, tim penulis berakar pada keterlibatan empiris yang mendalam dari studi kasus di Kalimantan, Jawa, dan tempat lain di Indonesia, memastikan bahwa temuan tidak hanya terbatas di Selatan. Wilayah Sulawesi.

#### *Tahap awal dan akses-pengecualian informasi*

Kasus inisiasi perhutanan sosial di Manuju menunjukkan bagaimana akses dan eksklusi dinegosiasikan dengan mengacu pada informasi tentang sumberdaya hutan sosial. Dalam hal ini, SCF berfungsi sebagai lembaga Dinamika akses-pengecualian informasi sangat penting untuk tahap awal di hutan sosial setelah kasus Manuju. Meskipun mereka dapat berfungsi sebagai mitra penting dalam mengumpulkan informasi, masyarakat seringkali kekurangan teknologi dan kapasitas profesional untuk secara sistematis mengukur sumber daya hutan yang berharga dan tutupan hutan secara keseluruhan (Anderson et al., 2015, Alam et al., 2019). Profesionalisasi kehutanan (Lund, 2015) berfungsi untuk mengecualikan banyak aktor lokal dari memberikan kontribusi pengetahuan yang dapat ditindaklanjuti tentang sumber daya hutan, tetapi memberikan akses ke pengetahuan tersebut kepada LSM, birokrasi teknokratis dan profesional. Setelah proses pengumpulan informasi, komunitas sering kali dikecualikan dari informasi terkait pemrosesan aplikasi dan perizinan. Organisasi yang memiliki otoritas - biasanya kementerian pemerintah - memiliki akses unik ke proses di mana aplikasi ditinjau dan disetujui. Dalam kasus Indonesia, platform virtual berusaha memberikan transparansi yang lebih besar seputar pemrosesan dan waktu pemrosesan (Erbaugh, 2019), tetapi asimetri dalam akses informasi tetap ada. Akhirnya, karena masyarakat lokal tidak memegang hak atas pengelolaan dan pemanfaatan hutan selama tahap awal, mereka dikeluarkan dari penggunaan informasi baru yang mereka bantu kumpulkan secara sah. Pada tahap awal, informasi terutama bermanfaat bagi entitas berbasis negara dan profesional pihak ketiga yang memiliki akses

lebih besar untuk mengumpulkan dan menggunakannya, berbeda dengan masyarakat lokal yang sering dikecualikan dari informasi tentang pemrosesan aplikasi dan penggunaan informasi tentang sumber daya hutan.

#### *Penyerahan formal dan akses-pengecualian otoritas*

Kasus dari desa Labbo menyoroti bagaimana penyerahan formal mengecualikan pelaku tertentu yang terkait dengan tanah yang dianggap tidak layak untuk perhutanan sosial, memberikan akses untuk pembuatan peraturan kepada masyarakat dan organisasi di lokasi tertentu, dan dengan demikian itu membentuk siapa yang sah dan tidak sah. wewenang. Labbo dipilih sebagai lokasi perhutanan sosial karena sudah ada sebelumnya, kawasan hutan yang sangat penting. Penyerahan hak perhutanan sosial kepada masyarakat Desa Labbo memberi mereka kewenangan formal untuk membuat peraturan hutan di suatu wilayah yang mereka kelola jauh sebelum penyerahan hak formal hutan. Dengan demikian, anggota Labbo memperoleh legitimasi politik melalui penyerahan resmi hak hutan sosial, daripada kewenangan pembuatan peraturan.

Penting untuk dicatat bahwa Labbo sengaja dipilih untuk perhutanan sosial karena prasyarat yang mengarah pada konservasi hutan. Dalam proses terkait, desa-desa yang memiliki lahan hutan terdegradasi dikeluarkan dari inisiasi dan serah terima resmi, dan selanjutnya ditolak kewenangan formal untuk terlibat dalam pengelolaan hutan serta legitimasi dalam mengelola hutan. Kasus Labbo memberikan wawasan tentang jenis kedua dari legitimasi yang dihasilkan oleh penyerahan formal: legitimasi para pelaku dan organisasi yang mengawasi proses penyerahan. LSM, administrasi pemerintah, dan aktor terkait berupaya mendapatkan keuntungan dengan mengklaim “keberhasilan” menciptakan hutan sosial. Gubernur Sulawesi Selatan saat ini sangat terlibat dalam inisiasi dan penyerahan hutan sosial Labbo. Legitimasi yang dia peroleh melalui penyerahan hak-hak pembuatan peraturan hutan yang berhasil memberikan landasan bagi keberhasilan dan otoritas politik lebih lanjut. Demikian pula, LSM yang berhasil mengawasi penyerahan hak perhutanan sosial dapat mengklaim legitimasi melalui penyerahan hak perhutanan sosial yang berhasil.

#### *Implementasi dan pengecualian akses dalam penggunaan sumber daya*

Ledakan hutan sosial di Indonesia mengacu pada peningkatan aktivitas seputar inisiasi dan penyerahan izin hutan sosial; kegagalan, seperti yang ditunjukkan kasus ketiga kami dari Mattirotasi, terjadi dalam implementasi dan hasil. Di Mattirotasi, dua kelompok tani yang terdiri dari empat belas orang berhasil mengelola kawasan hutan sosial untuk keuntungan mata pencaharian berkelanjutan. Melalui proses negosiasi adaptif dan penyuluh yang berdedikasi, lahan hutan sosial memberikan pendapatan berkelanjutan dari penjualan kacang mete dan daging sapi di Mattirowalie dan Sipatuo II. Namun, akses terhadap manfaat mata pencaharian dari hutan sosial ini terjadi melalui pengelolaan adaptif, bukan rencana pengelolaan asli. Seperti yang ditunjukkan kasus ini, pemberian hak pengelolaan hutan tidak cukup untuk menjamin manfaat lingkungan atau mata pencaharian. Sebaliknya, ketika membuat desa dan masyarakat bertanggung jawab atas pengelolaan hutan, otoritas yang mengalihkan tanggung jawab tersebut harus memperhatikan bagaimana pengelolaan berlangsung di masa depan (Erbaugh 2019). Menanggapi kekurangan, KLHK telah membuat langkah signifikan dalam mempekerjakan lebih banyak agen penyuluhan untuk memfasilitasi penyerahan dan implementasi formal (Galudra, 2019). Namun, pelajaran dari kasus ini menunjukkan bahwa rencana hutan sosial berfungsi untuk menghasilkan dinamika akses dan eksklusivitas untuk sumber daya dan manfaat hutan lama setelah penyerahan resmi terjadi. Manfaat yang dirancang untuk hutan sosial menentukan dinamika akses-pengecualian yang menentukan penggunaan sumber daya. Serupa dengan bagaimana beberapa komunitas mendapatkan keuntungan dari sertifikasi kayu hutan sosial dan kemasyarakatan yang berfokus pada memberikan manfaat mata pencaharian dari hasil hutan dapat memberikan akses lebih lanjut ke rantai pasokan, pasar produk butik, dan publisitas yang lebih besar (Harbi et al., 2018). Meskipun masyarakat tanpa hak formal atas hutan sosial dapat terus memanen hasil hutan, mereka kemungkinan tidak akan menerima akses pasar tambahan dan sering mengalami biaya transaksi tinggi yang umum terjadi di pasar informal (Tieguhong et al., 2015). Penelitian tentang penggunaan bakau di Ekuador menantang konsep pengecualian akses biner dari penggunaan sumber daya, menyimpulkan bahwa masyarakat lebih memilih untuk memilih dan mengadopsi aturan mereka sendiri tentang siapa yang dikecualikan dari penggunaan sumber daya (Maldonado et al., 2019). Berbeda dengan manfaat berbasis produk, hutan sosial atau kemasyarakatan yang memberikan manfaat mata pencaharian dari PES memberikan akses ke manfaat moneter atau sejenis melalui kesepakatan formal, dan karenanya secara langsung mengecualikan semua individu atau kelompok yang tidak dikontrak secara eksplisit. Penelitian dari Kosta Rika menunjukkan bahwa program PES nasional secara sistematis mengecualikan petani kecil di pedesaan sambil memberikan akses kepada pemilik lahan yang lebih kaya dengan bidang hutan yang lebih luas (Lansing, 2014). Yang umum di hampir semua bentuk hutan sosial, terlepas dari akses mata pencaharian yang mereka sediakan, adalah bentuk khusus dari pengecualian mata pencaharian. Sebagai hak atas hutan sosial “teknologi negara” biasanya diperdagangkan untuk meningkatkan perlindungan atas sumber daya hutan yang spesifik, seringkali sangat berharga (Agrawal, 2005). Dengan demikian, memberikan beberapa akses ke produk hutan atau jasa ekosistem kepada masyarakat seringkali memerlukan pengecualian mereka dari produk yang ingin dipertahankan dan dilindungi oleh departemen atau kementerian pemerintah.

*Dua eksperimen pada kasus implemtasi kawasan ekosistem esensial /ecosstem essential policy (EEA) mengakomodasi relasi kuasa masayatakt lokal: Membandingkan kasus di lahan publik dan pribadi*

Menurut peraturan, mengganti model birokrasi konservasi klasik dengan mekanisme sukarela baru yang diimpikan oleh kebijakan EEA tidak semudah yang terlihat. Kami memulai dengan secara konseptual membedakan dua pendekatan kebijakan yang berbeda dan menyoroti peluang munculnya model baru konservasi dari luar zona konservasi klasik, dengan menunjuk pada potensi model baru untuk menggantikan model klasik dari luar zona konservasi. Kami sajikan analisa pebandinhgan birokrasi klasik konservasi dan birokrasi yang antisipatif dalam mengelola EEA dalam tabel dibawah ini

Perbandingan antara EEA dan kawasan konservasi konvensional formal di Indonesia

	<b>Kawasan konservasi konvensional formal - birokrasi klasik</b>	<b>Kawasan konservasi EEA - inisiatif sukarela</b>
<b>Prinsip Tata Kelola (niche)</b>	Bergantung pada perlindungan birokrasi negara, yang mendefinisikan kawasan konservasi sebagai daerah yang sangat tertutup dan terbatas untuk memberikan perlindungan maksimum bagi ekosistem. Prinsip ini sangat terpusat dengan otoritas yang dikendalikan oleh pemerintah.	Berdasarkan tata kelola polisentris yang melibatkan berbagai lembaga dan aktor yang berpotensi bergantung pada proses dan kesediaan aktor untuk menghasilkan hasil ekosistem yang dinamis. Sebaliknya prinsip dalam kategori konvensional formal yang didasarkan pada pemerintah, kawasan konservasi EEA bergantung pada tata kelola.
<b>Lokasi (karakteristik lahan)</b>	<i>Area publik:</i> Hutan negara bagian - kawasan konservasi. Ini secara historis diidentifikasi sebagai situs dengan ekosistem yang unik, lanskap, flora dan fauna, yang diputuskan secara top down oleh pemerintah pusat.	<i>Publik:</i> Hutan negara bagian, seperti hutan produksi atau perlindungan), atau situs tanpa izin atau lisensi. <i>Publik:</i> kawasan hutan non-negara milik pemerintah daerah. <i>Swasta:</i> Lahan konsesi dengan izin yang ada. <i>Swasta:</i> Tanah milik swasta oleh petani kecil atau usaha swasta skala besar tanah milik pribadi <i>Umum:</i> Tanah adat atau hutan <i>Umum:</i> Lahan koperasi masyarakat atau sarana lain untuk pengelolaan lahan bersama
<b>Pertimbangan kelembagaan dan manajemen</b>	<b>Satu lembaga</b> dikelola dan dikelola oleh pemerintah pusat, MOEF (kecuali untuk taman hutan <i>Tahura</i> , yang merupakan skema pengelolaan daerah di bawah pemerintah provinsi dan / atau kabupaten.	<b>Lembaga multistakeholder,</b> - Pelaku utama (Birokrasi konservasi, Gubernur,/Bupati/Walikota), Forum Kolaboratif, Usaha Swasta) Bupati - Aktor tambahan (aktor indigeneous, petani individu) <b>Institusi Tunggal</b> - Gubernur , Kepala daerah (Bupati/walikota), - Perusahaan swasta

Kami mengembangkan kerangka kerja untuk menguji potensi kebijakan ini di situs yang ada, dan juga berupaya menerapkan heuristiknya pada dua kasus yang bereksperimen dengan penerapan kebijakan awal. Ada beberapa temuan kunci yang muncul dari penelitian kami.

Yang pertama tidak hanya dalam kerangka tanah dan kekuasaan yang kami usulkan untuk mempelajari kepentingan global untuk menerapkan model pengelolaan kawasan konservasi baru, tetapi juga untuk cara pendekatan kami mempelajari kebijakan yang sejalan dengan perumusannya. Riset seringkali sampai pada kesimpulannya lama setelah momen kebijakan berlalu. Di sini kami menyajikan kerangka kerja build-as-you-go yang kami bayangkan dapat diterapkan oleh orang lain ke berbagai tahap persiapan kebijakan. Kami percaya bahwa model ini akan membantu peneliti mendeskripsikan tantangan realitas yang ada dalam pengelolaan

kawasan konservasi di Indonesia, baik di zona klasik, maupun yang baru diusulkan bahkan jauh setelah momen kebijakan berlalu.

Kedua, temuan spesifik lokasi dari penelitian ini dalam dua kasus yang telah kami eksplorasi - satu di lahan publik dan satu lagi di lahan pribadi - tidak mampu membangun paradigma konservasi baru di luar pendekatan klasik dalam pengelolaan kawasan konservasi. Para pemangku kepentingan di setiap lokasi tidak menerapkan model baru yang tanggap dan mempertimbangkan kepentingan lokal dan konservasi yang lebih luas. Seiring waktu, inisiatif terjebak dalam pintu tertutup dan struktur kaku model klasik, dan meskipun situs berada di luar zona konservasi klasik, mereka diturunkan ke perlakuan yang sama dari proses konservasi birokrasi klasik.

Dengan kata lain, meskipun kasus diharapkan untuk menerapkan model baru untuk konservasi di luar zona konservasi, pertimbangan birokrasi ditafsirkan dari sudut pandang birokrasi konservasi klasik .. Meskipun kami menunjukkan temuan ini di dua lokasi yang diteliti, temuan tersebut tidak dapat digeneralisasikan di semua 35 kasus EEA yang saat ini sedang diusulkan di seluruh Indonesia. Memang di provinsi dan kabupaten lain, dengan aktor dan konteks lain yang dapat mempengaruhi proses dengan cara yang berbeda, mungkin ada peluang untuk menetapkan jalur baru untuk rezim pengelolaan yang lebih responsif terhadap visi kebijakan EEA yang lebih luas.

**D. STATUS LUARAN:** Tuliskan jenis, identitas dan status ketercapaian setiap luaran wajib dan luaran tambahan (jika ada) yang dijanjikan pada tahun pelaksanaan penelitian. Jenis luaran dapat berupa publikasi, perolehan kekayaan intelektual, hasil pengujian atau luaran lainnya yang telah dijanjikan pada proposal. Uraian status luaran harus didukung dengan bukti kemajuan ketercapaian luaran sesuai dengan luaran yang dijanjikan. Lengkapi isian jenis luaran yang dijanjikan serta unggah bukti dokumen ketercapaian luaran wajib dan luaran tambahan melalui Simlitabmas mengikuti format sebagaimana terlihat pada bagian isian luaran

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Pada penelitian ini tidak ada mitra yang memberikan bantuan bain in-kind maupun in-cash

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Anggaran penelitian yang berkurang, atau tidak sesuai dengan yang disulkan membuat peneliti menerapkan beberapa strategi dalam pengambilan data, namun kendala ini bisa diatasi dengan melakukan pemilihan kasus dan lokasi penelitian yang sesuai dengan ketersediaan anggaran

**G. RENCANA TINDAK LANJUT PENELITIAN:** Tuliskan dan uraikan rencana tindak lanjut penelitian selanjutnya dengan melihat hasil penelitian yang telah diperoleh. Jika ada target yang belum diselesaikan pada akhir tahun pelaksanaan penelitian, pada bagian ini dapat dituliskan rencana penyelesaian target yang belum tercapai tersebut.

Salah satu luaran kami yakni artikel dengan judul „ Developing and applying an access-exclusion framework to assess policy outcomes power in Indonesia’s Essential Ecosystem Area policy.“ yang masih dalam tahap produksi pada saat laporan kemajuan yang lalu dan pada saat ini telah terpublish pada *Forest Policy and Economics*, maka kami tidak memiliki rencana langsung terkait penelitian ini, namun kami akan menggunakan hasil penelitian ini untuk memperkuat agenda penelitian selanjutnya

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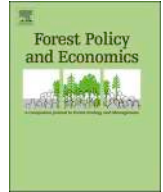
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# The boom of social forestry policy and the bust of social forests in Indonesia: Developing and applying an access-exclusion framework to assess policy outcomes

Muhammad Alif K. Sahide<sup>a,\*</sup>, Micah R. Fisher<sup>a,b</sup>, J.T. Erbaugh<sup>c</sup>, Dian Intarini<sup>d</sup>,  
Wiwik Dharmiasih<sup>e</sup>, Muliadi Makmur<sup>f</sup>, Fatwa Faturachmat<sup>a</sup>, Bart Verheijen<sup>a,g</sup>, Ahmad Maryudi<sup>h</sup>

<sup>a</sup> Forest and Society Research Group, Faculty of Forestry, Universitas Hasanuddin (UNHAS), Makassar, Indonesia

<sup>b</sup> Geography Department, University of Hawai'i at Mānoa, USA

<sup>c</sup> Dartmouth College, Hanover, Germany

<sup>d</sup> University of Twente, The Netherlands

<sup>e</sup> Department of International Relation, Universitas Udayana (UNUD), Bali, Indonesia

<sup>f</sup> Magister Student at Faculty of Forestry, Universitas Hasanuddin (UNHAS), Makassar, Indonesia

<sup>g</sup> Universiteit van Amsterdam, Amsterdam, The Netherlands

<sup>h</sup> Sebijak Institute (Research Center for Forest Policy & History Studies), Faculty of Forestry, Universitas Gadjah Mada, Indonesia

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## ABSTRACT

Governments around the world are promoting social forests as part of their stated commitments for sustainability and social justice. Since 2014, social forest policy in Indonesia has undergone rapid expansion, increasing by a factor of five, from 653,311 ha to around 3,369,583 ha in 2019. This paper examines the processes through which social forest policy is implemented to consider who benefits (access) and who loses (exclusion) within different policy stages. We identify these stages to include initial formulation, formal handover, and policy implementation, and map them onto an access-exclusion framework to analyze how power is contested and who benefits. Applying the framework to three case studies from Sulawesi demonstrates that at the initial stage, processes that generate social forestry are defined by access and exclusion related to the collection and control of information. Through processes that define the formal handover stage, key actors contest rules and establish the contours of legitimacy governing social forestry. Finally, during implementation, access and exclusion occur through the management and use of resources. By analyzing access and exclusion dynamics across temporal dimensions that structure social forestry policy, we at once demystify what social forestry entails while providing a clearer picture about the boom of its expansion in Indonesia since 2014, showing how a highly anticipated policy filled with populist ideals goes bust from below.

## 1. Introduction: making sense of Indonesia's boom in social forestry permits

Governments around the world continue to promote policies of joint forest management to support livelihoods and conservation (Gilmour, 2016; Van Chu et al., 2019). In Indonesia, such policy formulations fall under the umbrella policies of 'social forestry,' which represents a broad set of programs that express populist policy ideals for rural rights to land and forest protection (Firdaus, 2018; Anugraharsi et al., 2020). Indonesian forests have garnered significant international attention for two reasons over the past 15 years. The first is due to high carbon stocks and biodiversity (Boyd, 2010; Estoque et al., 2019), while the second is

due to the land conflicts that take place as a result of displacement in favor of industrial-scale plantation operations. Social movements for justice and conservation have therefore convened under a concerted voice by promoting social forestry on Indonesia's state forest lands (Bettinger et al., 2014; Afiff, 2016). Social forestry policy formalization therefore represents many attendant objectives, including agrarian reform, addressing land degradation and forest fires, poverty reduction, and reducing violent land conflict (Sikor et al., 2013; Firdaus, 2018; Fisher et al., 2019). As a result, operationalization is grounds for increasingly contested policy implementation.

Recent research has tried to make sense of progress on Indonesian social forestry (Bong et al., 2019; Fisher et al., 2019), providing

\* Corresponding author.

E-mail address: [muhammad.alif@unhas.ac.id](mailto:muhammad.alif@unhas.ac.id) (M.A.K. Sahide).

guidelines for evaluation under the rubric of rights recognition, livelihoods empowerment, and conservation goals (Maryudi et al., 2012). Empirical cases on social forestry implementation describe historically problematic land enclosures that shape subsequent land and administrative relations, determining outcomes at a given site (Firdaus, 2018; Firdaus, 2018). Evidence is also emerging about the way social forestry is used as a political tool, and can thus take on new shapes depending on the powerful networks and interests involved (Firdaus, 2018). This suggests that the rush in social forestry implementation is focused more on reinforcing bureaucratic outcomes and formalizing state mechanisms rather than offering a meaningful mechanism for devolution of authority (Erbaugh, 2019). As a result of this overall implementation experience, early proponents are increasingly expressing frustration that social forestry is only printing permits and failing to meet the target of community empowerment or conservation.

This paper describes our attempt to develop a clearer strategy for assessing social forestry by establishing a framework and testing it across distinct case studies. To do this, we disentangle the various stages that shape social forestry schemes and systematically examine power contestation by focusing on the processes that determine who benefits and who loses. By presenting this framework, we aim to support researchers, NGOs, and policymakers, and imagine its applications situated among the external actors closely involved in designing, drafting, approving, and evaluating social forestry permits. We envision the framework as a way to help cultivate a better understanding about the extent to which social forestry implementation efforts meet desired outcomes. In short, amidst the boom of policies supporting social forestry designation, our broader goal is to provide a method for assessing whether social forestry is successful at a given site, and help to better articulate why so many cases are considered to be going bust. Our research is limited however, to applying the heuristic at a site by site basis, and does not examine the effects of the discursive influence of policy at a broader governing scale, a focus of much of the existing research.

We begin this paper by laying out the current conditions of social forestry in Indonesia, including the types of schemes and total allocation figures, as well as the bureaucratic mechanisms for implementation (Section 2). After this more contextual section, we draw from theories of access and exclusion to develop a framework in the context of social forestry in Indonesia (Section 3), highlighting the rise of social forestry policy and the dilemmas that influence social forestry applications. Section 3 also presents the overall methodological framework, as well as the approach to site selection, data collection, and analysis. After describing our methods (Section 4), we draw on a set of cases from social forestry sites in Sulawesi that test the heuristic and connect empirical examples to the confounding trends in policy approaches (Section 5), offering our conclusions about the future of social forestry in Indonesia.

## 2. The rise of Indonesian social forestry policy and current policy approaches

Although social forestry and land rights claims are often envisioned discursively as organic initiatives where rural communities rise up to demand rights from formal actors, in Indonesia, this is rarely the case. Indeed, the articulation of social forestry is contingent upon external agents and organizations, such as NGOs and government actors (including ministerial representatives, extension officers, etc.) (Li, 2002; Maryudi, 2011; Sahide et al., 2020; Galudra, 2019; Rahayu et al., 2019). The political ideal of social forestry remains a fundamental part of the broader resistance strategy among civil society – and also drives reformist bureaucrats – against the historical enclosures of forests in Indonesia (Afiff and Rachman, 2019), a legacy which translates to 65% of the state's territory under state forest designation (Peluso and Vandergeest, 2001). Therefore, those that promote policies for rural development on behalf of communities living within and adjacent to forest boundaries, increasingly view their success in terms of areas

allocated to community land rights, discursively envisioned as protecting from state or corporate enclosures. The boom of social forestry is therefore increasingly translated into indicators of formal recognition on hectareage secured for communities. This conceptualization can be problematic however, as it can mischaracterize interests of vulnerable populations (McDermott and Schreckenberg, 2009), has been shown to provide management responsibilities without the authority or resources (Erbaugh, 2019), and furthermore, extends state control and further undermining indigenous authority (Agrawal, 2005; Fisher and Muur, 2020). Critiques of neoliberalism are also common amidst social forestry, whereby the state willingly confers rights amidst reducing responsibilities of resource allocations (Lake, 2002; Gilmour, 2016).

Nevertheless, as social forestry policy increases in scale and scope, many different agencies, organizations, and individuals are contesting and translating implementation. The Indonesian forest bureaucracy has retrofitted to implement a variety of schemes, including community forests, village forests, community plantations forests, community partnerships, and customary forests (Firdaus, 2018).<sup>1</sup> President Joko Widodo (Jokowi) and his administration, who came to power in 2014 and re-elected in 2019, have shown strong commitments to achieving targets, and anticipate significant expansion in the near future (see Table 1 for comparisons of the pre-Jokowi era contrasted with current achievements).<sup>2</sup> As of August 2019, the Ministry of Environment Forestry (MOEF, or MoFor for references before 2014) indicated that social forestry permits cover a total area of 3.37 million hectares, a five-fold expansion since the beginning of the administration's tenure, and anticipates adding another million hectares by 2024 (see Table 1).

On the one hand, researchers and rights activists critique the printing of permits as driving formal policy implementation, without enough consideration of the higher order policy goals of community empowerment, development, and conservation (Firdaus, 2018).<sup>3</sup> Literature on social forestry programming from outside of Indonesia also provides instructive critique on formalized state program initiatives, whereby policies tend to require new institutions that undermine existing traditional forms of authority, have not found consistent mechanism to support the most vulnerable, and are woefully inadequate in providing capacity building or resources for administrators and extension agents (McDermott and Schreckenberg, 2009; Kamoto et al., 2013; Galudra, 2019; Cummins and Yamaji, 2019).<sup>4</sup> On the other hand, others argue that providing permits is part of a longer term strategy, and that achieving designations today can provide legitimacy for future demands of local authority (Myers et al., 2017).

Meanwhile, empirical examples are confounding, whereby some findings point to cases that challenge local power structures, reinforce unjust power relations, or fuel new corrupt practices (Maryudi, 2014; Sahide et al., 2020). In one case in South Sulawesi, for example, a

<sup>1</sup> The various terms reflecting social forestry scheme (e.g. HD, HA, HKm, HTR, etc) is presented in Table 1. Details on the schemes are included in the P.83/2016 regulation that presents an overhaul of social forestry policy, laying out concrete operational definitions for the various schemes.

<sup>2</sup> Citing data from DG-SFEP from February Firdaus, 2018 that states the total social forestry area permits has reached only 1.42 million hectares. The MOEF thus deemed it too ambitious to reach the stated policy goals of 12.7 million hectares and during the writing of this paper, revised policy targets MOEF lowered the target of 12.7 million hectares to only 4.3 million hectares, and created new partnership schemes from IUPHPS for a qualifying partnership scheme. It is beyond the scope of this paper to examine these issue in detail. However, we included the main changes in policy approaches before the influential ministerial decision 83 of 2016 as Table 2 to highlights the ways that permits are obtained.

<sup>3</sup> In the evaluation of social forestry, led by MOEF's Directorate General of Social Forestry and Environmental Partnerships (DG-SFEP) there was concern that among longstanding permits, many of the social forestry goals had not been met.

<sup>4</sup> See also Myers et al. (2017) and Fisher and Muur (2019) for indications of similar outcomes in Indonesia

**Table 1**  
Social Forestry figures: A comparison of permits before and after the Jokowi era.

Before and After Jokowi <sup>a</sup>	Community forestry (HKm)		Village forests (HD)		Community plantation forests (HTR)		forest partnership (Kemitraan)	Total of management rights (ha)
	Areal designated (ha)	Management rights - IUP HKm (ha)	Areal designated (ha)	Management rights-HPHD (ha)	Areal designated (ha)	Management rights-IUPHHK HTR (ha)	Management rights -MoU (ha)	
Before Jokowi	432,598.86	175,250.67	471,451	216,781.21	768,859.73	203,738.29	57,542.09	653,311
After Jokowi	<sup>b</sup>	670,828.00	<sup>b</sup>	1,367,503.0	<sup>b</sup>	338,060.00	300,608.00	2,734,272.00
Total	<sup>b</sup>	309,332.47	<sup>b</sup>	760,878.21	<sup>b</sup>	250,271.74	94,378.28	3,369,583

<sup>a</sup> Using MOEF regulation 83 of 2016 as the timeline (August 2019).

<sup>b</sup> During the Jokowi era, MOEF replaced designated areas with an indicative map updated every 6 months.

**Table 2**  
Bureaucratic schemes of several social forestry in Indonesia.<sup>a</sup>

	Before MOEF 83 of 2016	After MOEF 83 of 2016
Scheme <sup>a</sup> and area characteristics.	Rights rules, and bureaucracies involved	Rights rules, and bureaucracies involved
Community Plantation Forest (HTR)	a. 60 years (extent once) b. Individual farmer, forest farmer group, cooperative c. Central government (MOEF) designated the potential area d. BP2HP (local unit of directorate general of production forest of MoFor) support proposal and implementation e. Bupati (district head) f. For production forests only	a. 35 years possible to extend b. Individual farmer, forest farmer group, cooperation c. Central gov MOEF designated the dynamic map of Social Forestry Indicative d. BPSKL (local unit of directorate general of social forestry) e. Governor f. For production forests only
Community Forest (HKm)	a. 35 years, possible to extend b. forest farmer group c. Proposed to central MoFor authority for designating the potential area d. BPDAS (local unit of directorate general of watershed) serving proposal and implementation e. Bupati (district head) f. For protection and production forests	a. 35 years possible to extend b. forest farmer group c. Central gov MOEF designate map of SF PIAPS d. BPSKL (local unit of directorate general of social forestry) e. Governor f. For protection and production forests
Village Forest (HD)	a. 35 years possible to extend b. Village institution (designated by village government) c. Proposed to central MoFor authority for designating the potential area d. BPDAS developing proposals and implementation e. Bupati (district head) f. For protection and production forests	a. 35 years possible to extend b. Village institution (designated by village government) c. Central MOEF designated the dynamic map of Social Forestry Indicative e. BPSKL (local unit of directorate general of social forestry) d. Governor f. For protection and production forests
Forestry Partnership (KK)	a. Based on the conflicts between farmers institutions and rights holder b. Individual farmer within at least 2 ha for each household, within local farmer institution c. Area proposed in the right holders area d. BP DAS mediate MoU e. Agreement between farmers institution and rights holder f. For all forest zone category	a. Based on agreement between farmers institutions and rights holders b. Individual farmer within at least 2 ha for each household, within local farmer institution c. Area proposed in the right holders area d. BPSKL mediate and or register the MoU e. Agreement between farmers institution and rights holder f. For all forest zone category

a. Period; b. Rights holder; c. Bureaucracy for area designation; d. Local central bureaucracy work for proposal and implementation; e. management rights issue by; f. Applicable in the forest function zone category.

<sup>a</sup> There are also other (two) new SF schemes offered, such as the Permit on social forestry management (IUPHPS)\* and forestry partnership recognition and protection (Kulin KK), but we do not include this in the analysis since it is still very new and not applicable for this paper.

network of NGOs claimed that social forest designations helped small-holders demand redistribution of land away from powerful local elites, yielding additional benefits that include access to credit opportunities for local institutions to expand businesses and resulting in better purchasing power for local products, and furthermore, supported community demands for small electricity extension into previously inaccessible rural areas (Personal communication with NGO Balang Institut). The most comprehensive empirical research on contemporary social forestry in Indonesia, published in *Forest and Society*, pointed to various critiques of Indonesian social forestry, such as the lack of extension officers to support livelihoods and conservation (Galudra, 2019; Wulandari and Kurniasih, 2019), the clash with the forest management unit model undermining local communities (Tajuddin et al., 2019), and regional concerns of indigeneity versus conservation in Papua (Fatem, 2019). While some continue to trumpet cases of success, others point to serious breaches of implementation undermining what social forestry is intended to deliver. This paper therefore extends the research

imperative to the ground level, and establishes a rigorous framework for assessing social forestry through the lens of examining who benefits (theories of access), and who loses (powers of exclusion).

### 3. Land and power: envisioning access and exclusion together

Foundational research on the conditions under which user-groups successfully manage natural resources generated international interest in community resource management (Ostrom and Gardner, 1993; Ostrom, 2002; Brosius et al., 1998; Larson, 2010). This led to the emphasis of rights-based development policies (Cornwall and Nyamu-Musembi, 2004) and redefined many national approaches to forest governance (Agrawal et al., 2008). The paradigm shift on the role of local actors in the management of natural resources also connects with a long lineage of studies on governance (Maryudi and Sahide, 2017; Maryudi et al., 2018), citizenship (Brown et al., 2002), social justice (Prasad Timsina, 2003), neoliberalism (McCarthy, 2005),

decentralization (Agrawal, 2001; Ribot and Larson, 2012), and recentralisation (Sahide et al., 2016a, 2016b). Theories of power and political ecologies examining property rights have gone one step further, expanding concepts of property rights to distinguishing power relations across actors, strategies, processes, and subjectivities of resource politics (Agrawal, 2005; Maryudi and Sahide, 2017; Giessen and Sahide, 2017).

A theory of access provides a heuristic that helps develop an understanding of powers conferred in resource politics (Ribot and Peluso, 2003). Ribot and Peluso define access as the “ability to benefit from the things,” highlighting various dimensions to include, among others, technology (Peluso, 1995; Fox et al., 2009), capital (Nevins and Peluso, 2008), markets (Hall et al., 2011), labor (Ribot, 1998), knowledge (Agrawal, 2005), authority (Peluso and Lund, 2011), identity, and social relations. More recently, Hall et al. (2011) engaged in the corollary of access in terms of exclusion, defined as the “inability to benefit from things.” It is expressed through powers that include regulation, the market, force, and legitimation. Exclusion “... is the normal rather than the exceptional state of affairs, and widespread aspirations for access to land implicitly include the wish for a degree of exclusionary power” (2011:6). Analyzing exclusion thus enables a range of critical entry points for examining land dynamics that are often overlooked or forgotten, which are particularly germane to understanding large scale plantation enclosures, land titling schemes, conservation projects, and “intimate” exclusions from capitalist relations between households. While Hall et al.'s work applies to these numerous projects, we apply them to social forestry. Taken together, theories of access and exclusion draw our attention to who benefits and who is removed from forests through the processes that render them “social.” Through the development of a theoretical framework and its application to understand the dynamics of access-exclusion to specific cases of Indonesian social forestry, this research moves beyond the “superficial” engagement some critics find typical of these theories (Myers and Hansen, 2020) to advance a method that critically assesses the implementation of social or community forest management.

### 3.1. Method: Developing an access-exclusion framework

Developing the access-exclusion framework began by describing social forestry across its policy stages. Drawing from social forestry engagement in Nepal, Devkota (2010) provides a pathway by identifying four different stages in terms of: i) initial stage ii) formal handover iii) implementation, and iv) normal operation. We follow this precedent, but given the new and rapid development of social forestry in Indonesia, we combined implementation and normal operation into a single stage. We further placed the bureaucratic requirements of social forestry formulation within each overarching category (normative policy process citation). Specifically, the initial stage was further divided into its constituent requirements, including scheme selection (A1), inclusivity (A2), conflict prevention/management (A3), and participatory planning (A4). Formal handover was divided into administrative proposal and approval (B1), and reinforcing local institutions and involvement of external actors (B2). And the implementation stage included forest management in terms of livelihoods (C1) and conservation (C2).

A policy stages framework for analyzing social forestry is subject to two important critiques. First, identifying stages does not provide information on how social forestry policy is created or implemented (Nakamura, 1987). We address this general critique by supplementing the framework with bureaucratic requirements related to the formulation and implementation of social forestry within each stage. This provides a “bottom-up” approach to understanding how and by whom social forestry policy is implemented within discrete stages (Sabatier, 1986). Second, in defining discrete stages of social forestry, the framework overlooks moments of overlap and iterative processes common in policy formulation and implementation (Sabatier and Jenkins-Smith,

1993). Creating and implementing social forestry is a fluid process, negotiated by groups of actors over years or decades (Fisher et al., 2019). By dividing this process into discrete stages defined by bureaucratic processes, our framework carefully organizes analysis by reducing complexity of real-world processes, similar to other research that draws upon the policy stages concept (Erbaugh, 2019; Jokinen et al., 2018). Specifically, we organized our framework to focus on who gains access to, and who is excluded from, social forestry projects across different stages of their development.

Applying the theory of access and the powers of exclusion to each of these stages helps not only assess the processes that benefit some and exclude others, it importantly shows what benefits accrue or are taken away at key junctures of social forestry engagement. Applying theories of power to a specific category however, is not straightforward, and indeed Hansen et al. (2020) has shown the superficial way that studies have sought to apply these theories. To be exhaustive and list out every mechanism of access for the purposes of this paper was too unwieldy, and indeed was never intended by the original formulation in the theory of access. Similarly for Hall et al.'s powers of exclusion, which lists out four overarching powers (regulation, markets, violence, and legitimation) determining the differences between exclusionary regulations and legitimation often led to overlapping manifestations. For these reasons, we developed the frameworks as a tool to think, and we collectively engaged on the notion of powers across each stage of social forestry, identifying the key actors, powers, and processes that fell into what we designated as an access or exclusion category in Table 3. (See Table 4.)

Finally, keeping in mind applicability for future researchers or monitoring considerations among policymakers and practitioners, we listed out the data collection opportunities across these stages. As we applied the framework to the three cases in this paper, we engaged in a reflexive inductive-deductive process across the writing team, cross-checking whether the heuristic supported the case material, and vice-versa. Although the in-depth cases presented in this paper are limited to three sites from Sulawesi, the writing team are rooted in deep empirical engagement from case studies in Kalimantan, Java, and elsewhere in Indonesia, ensuring that findings are not only limited to the South Sulawesi region.

### 3.2. Method: Case selection, data collection, and analysis

The access-exclusion framework emerged through engagement across the authors extensive experience across Indonesia, and was applied to three comparative contexts in South Sulawesi. Developing the framework was a reflexive process, going back and forth inductively and deductively to cross-check the framework with real case applications. The cases are selected at sites within a single province to provide enough comparative context between them. Each case also derives from what Fisher et al. (2019) have identified as three distinct but overlapping generations of social forestry. The first case is from the third generation of social forestry, namely the latest iteration of the regulatory framework from P.83/2016, which is indicative of schematics and project implementation. The second case is from the second generation of social forestry, while the third case is from the first generation of social forestry. Indeed, examining implementation requires a long timescale to meaningfully engage on findings.

In applying case studies to the framework, given space considerations, we had two options. The first option was to go into depth at one case study site, while the second option involved comparative engagement by providing depth at different stages across research sites. For the purposes of this paper and to engage with an additional number of cases studies we elected for the latter (See Fig. 1).

**Case 1.** As the initial stage only began since the P.83 regulation, it is difficult to identify a case that fully represents the entirety of the most contemporary policy formulations guiding social forestry

**Table 3**  
The access-exclusion heuristic power assessment of facilitating social forestry implementation in Indonesia.

Policy process	Land and power		Monitoring and investigation
Normative stages of Social Forestry Policy (component parts)	Access dimensions	Exclusion dimensions	Data collection options
A. Initial stage of determining the formal SF schematic			
A1: Selecting SF Schemes: SF sites are framed with the intended purpose of supporting local needs and aspirations, as well as ensuring that schemes support local ecological conditions. As of P.83/2016 a site will be included into the indicative maps (PIAPS) for consideration as an SF site based on evaluation criteria assessed by proponents.	<p>In practice, selection in the indicative maps has taken place in an extremely ambiguous process. Although the perception is that communities are the ones that decide their scheme for the PIAPS, in most cases the SF scheme is proposed by intermediaries (what we have described as external actors). This includes NGOs, local government agencies, and extension officers that introduce the idea or define the impetus for a particular SF scheme.</p> <p>On a broader scale, those invited to take part in the PIAPS designation process consist of external actors that gain access to information. They benefit from these internal discussions and are able to take part and shape the type and allocation of sites under particular schemes. These external actors are also able to access potential resources as part of the PIAPS selection process, and negotiate increasing interest among potential funders to implement SF.</p> <p>Furthermore, at the target sites, external actor engagement converges with networks of key informants that structure the way forest farmer groups are established, and also shapes who benefits and in what ways they get to benefit as part of their participation.</p>	<p>Programmatic mandates determine the type of scheme selection and often fail to consider alternative options. This is due to formal bureaucratic driven processes, which influence subjective assessments that are often driven by meeting target total area designation. Therefore, the external actors shaping the schemes serve to gain access to influencing the terms of engagement while many others are often left out. The network alliances are usually shaped by local political situations, either those that are in local leadership posts or placed as head of farmer groups, often at the exclusion of others, particularly competing political alliances. In other words, though social forestry may suggest redistributing land to the land-short or the landless, indeed those without channels to formal decision making authority often have little recourse to advocate for themselves, and numerous research has confirmed this is true of social forestry as well (cf. McDermott and Schreckenberg, 2009).</p> <p>These networks that determine site selection tend to overlook the most vulnerable as they have the least amount of access to influencing formal channels, which have resources attached to implementation. This initial scheme selection and the farmer groups established to implement schemes could serve to exclude from opportunities to gain land access far into the future, rendering some forest cultivators illegal.</p>	<p>Examining access is a much more direct process. Access can be determined through the PIAPS processes, project documents, and engaging the institutions, stakeholders and individuals that are involved in the process. It also serves to highlight ways that people do benefit from social forestry. On the other hand, exclusion is more challenging because these groups are necessarily if not purposefully left out. When assessments of farmers interacting with the forests are conducted rigorously, information can be obtained on ways to identify those excluded. However, exclusion is highly political and without close engagement with the local sites, it will be difficult to determine the oft-overlooked dimensions of exclusion.</p>
A2: Inclusivity: the inclusivity dimensions of the policy set out approaches to ensure that those included in the process are selected according to the targets of the SF scheme. The formal policies articulate that the selection criteria are based on targeting individuals or communities historically or geographically with claims to a certain area, which can thus be considered eligible under the corresponding SF scheme.	<p>Similar to above the access dimensions are negotiated by external actors and their networks with local individuals or groups with the requisite decision making powers in the village and the bureaucratic support/facilitation of the process. For example, those involved in this process are set by the forestry extension officers, forest rangers, district government, and local FMU. For additional guidance on this dimension see also the overall regulated requirements for participation in Indonesian policies (e.g. Suhardjito and Wulandari, 2019)</p>	<p>Though the normative language of inclusivity seems holistic in its formal articulation, the implementation of convening stakeholders is often more tokenistic and pro forma. Our extensive research at social forestry sites yields evidence that forest farmers and target individuals can be unaware of the social forestry policy scheme, its implications, or their stated responsibilities in the management plan. As a result, the partial or lack of meaningful facilitation can result in dominant information only among elite groups or between specific alliances.</p>	<p>Participant observation is an especially strong approach to collecting data, particularly on access. The exclusion dimensions are much more difficult however, and would be enriched by field level data among communities that are potential claimants. Particular attention should also be devoted to vulnerable groups. For example, ongoing research with an NGO has indicated that of all the forest farmer groups in the millions of hectares of forests across Indonesia, only two of them are women's groups.</p>
A3: Conflict prevention, management, and resolution mechanisms: As SF is framed as an intervention that helps to address conflict, there are specific normative requirements for anticipating and addressing conflict. In the formalization of a SF scheme, central and regional handling bureaucracies are expected to identify tenorial conflict and various mechanisms for dispute resolution. In practice however, this requirement is combined with the general proposal plan as described in A4 below.	<p>Close attention should be directed to the ways that tenure is documented. As land tenure is complex, the explanations in the formal documentation of tenure rarely capture the complexity of local historical land relations. Therefore, the ones that are included can serve as important identifiers of which local interests are able to gain access.</p> <p>On the other hand, the formal institutional mechanisms for conflict resolution also provide important signifiers of access. Are these determined through local informal authority, and</p>	<p>The way that tenure is described in such documentation and the local authority that negotiates tenure can vary greatly. Here are where the powers of exclusion take shape, particularly if formal documentation is applied to resolving conflict.</p> <p>In practice, tenure, conflict, and conflict resolution are rarely articulated in the formal planning documents. They are generally developed as a response mechanism after a conflict occurs. As a result, not only do these ex-post processes privilege stronger parties and serve to exclude weaker ones, the very</p>	<p>Careful observation on the way local key actors decide who is invited, who is considered, and who can claim benefits and resources provides important insights into how social forestry are likely to unfold across the other stages. Conducting deep analysis of tenure arrangements, authority, and historical analysis provides the strongest insights into this dimension.</p> <p>Formal planning documents also provide notations about conflict and conflict resolution.</p>

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Table 3 (continued)

Policy process	Land and power		Monitoring and investigation
Normative stages of Social Forestry Policy (component parts)	Access dimensions	Exclusion dimensions	Data collection options
	which formal authority has final say?	processes of lodging a complaint is very likely unknown by vulnerable populations	
	A key dimension of access could be the upward accountability that is introduced by the facilitation of the conflict resolution process.		
A4: Initial Participatory Planning: The formal SF regulation requires a community-based and participatory planning process. The formal requirement is minimal however, and provides open interpretation for those leading the process.	The open interpretation of this initial participatory stage provides the opportunity to convene in-depth engagement, however it also means that in other cases, the process is often overlooked in the initial stage. Because of the open interpretation of this process, the terms of access are negotiated through the level of intensity and inclusivity that this process is undertaken. In more inclusive approaches, participatory mapping usually indicates greater levels of participation and can be the basis for commons arrangements to emerge and the new establishment of access mechanisms.	Because of the open interpretation arrangements, generally the formal institutions are focused on the bureaucratic dimensions, particularly in the push to expand social forestry permits in recent years. Therefore, indicators of exclusionary effects are likely to be reflected in the details of the formal documentation and the intensity with which local facilitation takes place. This can mean that village leaders—rather than all participants—negotiate the terms of management among themselves, rather than including all or most of the participants in social forestry.	The General Plan for SF management. Indicators are likely to emerge in the ways the maps were generated (e.g. village borders, MOEF maps, community mapping), the individuals and farmer groups convened to generate the document. Observations and/or participation in the discussions and meetings during which the General Plans are completed.
At the end of the initial stage, there are key documents produced to indicate that all stages have been completed. There will be i) Proposal Letter ( <i>surat pengusulan</i> ); ii) General plan ( <i>rencana umum</i> ); iii) Map ( <i>peta</i> ), and some additional depend on the scheme e.g. KTP or KK. Once this documentation and requirements have been approved, the process transitions to the Formal Handover stage.			
B. Formal Handover			
B1. Administrative proposal and SF scheme approval: The overall approval process for different types of SF permits vary slightly and Firdaus (2018) provides schematics on how the approval process takes place. In general the management rights are provided by the Governor ( <i>hak pengelolaan</i> , and depending on the scheme can be issued by Perhutani, National Park, BKSDA, and FMU). Meanwhile, the formal handover of permits are approved by MOEF, overseen by DG-SFEP and signed directly by the Minister.	Formal approval of social forestry includes a constellation of province and ministerial actors. Different approval routes are possible, depending on the location of the SF site. Some of these routes may occur through the MOEF (Social Forestry Directorate) as well as through the provincial government (before requiring ministerial approval). Formal access to SF designation is provided by the right to use forests (provided by province governments) and the license for social forestry use by MOEF. In practice however, although the formal permits are important it is contingent on various acts being able to articulate the utility of such documents, shaping relationships with formal institutions. For access considerations, this step is especially key for being able to negotiate the way that formal processes are implemented.	In the past SF administration was extremely bureaucratic, especially in state forests. Therefore permitting proposals were largely handled by external actors. In the current policy boom, state interests are expediting formal handover to meet targets. As a result, at the time of approval local actors may not have proper understanding of policy and plans. This can create new conflicts between internal and external actors. Assumptions among external actors expediting SF scheme approval can result in local communities misunderstanding of mutual responsibilities.  The asymmetries of the information are heavily skewed towards bureaucracies and external actors. This results in power concentrated among those that have strong influence and likely to the exclusionary effects of informal forest users.	Application tracing is possible through online platforms, but the communication of when and why application packages are approved is unclear. There is often a limited opportunity to identify how long processing is supposed to take, but there are few opportunities for transparency and oversight of this bureaucratic process.  Local perspectives are particularly important to consider in the data collection on exclusionary practices, by juxtaposing their involvement with formal documentation.
B2: Reinforcing local institutions and continued involvement of external actors: This refers to the process that the site undergoes to formalize the SF management plan. In the plan, there must be clear zones established between protection and utilization areas. For this reason, complete documentation is developed on livelihood plans, boundaries of cultivation parcels, forest protection plans, and that there is evidence that local institutions have a clear understanding of the rights and responsibilities of SF management. There is general language guiding the involvement of external actors but widely open to interpretation, in which external actors can provide continued support in the process, and can provide shared responsibility mechanisms between local	The facilitation process and the actors convened during this process get to map out and negotiate, which sections of the forest are assigned different types of access and responsibilities. The information compiled during this process also resolidifies the possibilities of who gains access, whether this is in the collection of more detailed information about resources, more formalized acknowledgement about the management of a particular parcel, as well as the knowledge about what types of resources are available for certain activities.  Various external actors also get to negotiate new terms of access. For example, the extension officers, local NGOs, and potentially the private sector, get to identify the potential resources to be developed at a site and connect	This is perhaps the most important step where exclusion occurs. Pending the level of intensity that takes place in the initial stages, and the legitimacy the formal processes are given among various key actors, the opportunity to solidify claims is greatest during this step. Forest management plans allow for some forest farmers to gain a plot for cultivation relative to those that are excluded.  This has several implications. On the one hand the formalized plans can take on greater meaning, or it can also undermine the formal processes whereby local traditional mechanisms exclude the formal ones. Usually the traditional tenure systems of how forest management takes place at these sites are most at risk from being erased from the formal planning processes, as new formal land management institutions are established and resources directed towards them.	Observations from the preparation of the forest management plans are extremely important for identifying actors that are likely to gain access.  Formal documents include the detailed maps and forest management plans.  It would also be useful to identify who among the community knows about the these documents, the extent to which they were involved, and comparing the plans with existing conditions at the site

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**Table 3** (continued)

Policy process	Land and power		Monitoring and investigation
Normative stages of Social Forestry Policy (component parts)	Access dimensions	Exclusion dimensions	Data collection options
stakeholders and management institutions. Formal handover occurs through the approval and receipt of several key documents. First, the person or group who holds the social forestry rights ( <i>Surat keputusan pemegang izin</i> ) receives legal permits that define the social forestry rights. Second, upon receiving the legal permits, the group who has received social forestry rights develop a forest management plan, which contains annual as well as comprehensive (often 35 years) objectives and strategies. It is important to note that there are neither formal requirements for who keeps the social forestry management plan nor for providing or presenting it. It is often the case that social forestry management plans are difficult to locate, as they might be kept by village heads, extension officers, or archived at district or province government offices.	resources or markets for a particular venture.		
<b>C. Implementation</b> C1: Forest Management (livelihood benefit) Local institutions (forest farmer groups) allocate resources, implement their plans, modify plans (when necessary), and thus provide sustainable livelihood opportunities to maximize the utilization of forest products (e.g. timber, non timber, ecosystem services)	Local groups gain access, according to the rights afforded them through the sanctioned SF permit. This extends to the provision of training, new technologies, various support programs for small industries, connections to new markets, credit, and access to grant programs.	Those not afforded social forestry rights through the sanctioned SF permit are excluded from SF programming and land. This further reduces the availability of local land or livelihood opportunities available to excluded groups. As a result, such groups may have to find other locations for cultivation or risk illegally cultivating sanctioned SF land. Access to markets also becomes more challenging, given that certain individuals or groups are excluded from those that gain formal resources. This could mean finding new industries that put pressure on the forest system, or perhaps forced to migrate given the loss of livelihood opportunity. On the other hand, with fairer resources, previously exploitative activities like loan sharks can find themselves excluded given that new mechanisms to provide capital are being introduced.	Livelihood data based on local surveys are most valuable.  Changes in before and after provide interesting methods for deepening understanding about the influence of SF programming. The following questions across the supply and production chain provide some key indicators to explore: Are there new markets or industries that are emerging and who benefits from these new dynamics? Are there new middle-men emerging replacing the previous market dynamics?
C2: Forest Management (conservation and forest protection). There is a clear requirement for any SF institution to protect the forest. This can be done through the mapping of specific zones, and this can take the form of species identification, protection and monitoring, the conservation of water sources, and other means.	When it comes to conservation dimensions, communities now have a unique opportunity to apply their longstanding practices, and also to engage with new information about species protection. This could also provide access to new conservation experts to work with, or on behalf of communities to conduct conservation initiatives. Some have also facilitated resources from well-funded organizations to conduct joint monitoring schemes, to use this as a basis for potential ecotourism, and new livelihoods for locals around conservation and tourism.	Conceptually, SF conservation dimensions allow for communities to reassert and exclude external conservation experts and to place on par their knowledge about local biodiversity and conservation management. Nevertheless, local exclusionary practices may also take place. For example as <a href="#">Agrawal (2005)</a> has written, the establishment of local environmental subjects to protect areas on the basis for conservation could also serve to exclude livelihoods for others.	Indeed the question of livelihoods and SF remains an under-explored question and new innovations for data collection and analysis are still required relative to the current approach to SF. Formally, data can be obtained through the conservation management plans of SF schemes. However, formalized plans are often unknown to local farmers (or they are unfamiliar with them) so direct surveys on species conservation forest management, satellite imagery on land use changes, the emergence of re-emergence of institutions on the way they monitor, sanction, incentivize actions in the field are sure to provide insights into conservation dimensions of SF. Research is also increasingly integrating species perspectives on access and exclusion, which could also provide unique insights into the terms for which some species are privileged, while others are excluded.

Implementation requirements include the submission of annual plans. However, it is very rare for communities to draft and submit their annual plans. As these documents are likely unavailable, is there a system for setting reminders or delivering sanctions that these requirements are not being met. One possible way to check for implementation progress is also through the Ministry requirements to conduct evaluations of implementation progress, which are also a useful way to identify information.

**Table 4**

Location and SF selection and methodology deployed.

Case for each stage	Scheme and location	Method
Case 1 for initial stage	Kemitraan Kehutanan - Gowa, Forestry Partnership Representation: represent the third generation of social forestry in Indonesia	Participant observation: ● The sixth author is act as facilitator and consultancy with relevant state bureaucracy and involve o SP preparation, involve on the policy dialogue, and mediating interests among actors
Case 2 for formal handover	HD in Bantaeng District ● Representation: represent the second generation of social forestry in Indonesia	Participant observation. ● The first author is actively involve as the member of Universitas Hasanuddin team that HD in Banteng ● The second author conducted his field research in this area as part of his dissertation research
Case 3 for implementation	HKm in Sidrap Representation: represent the first generation of social forestry in Indonesia	Non Participant Observation, interview, and document analysis

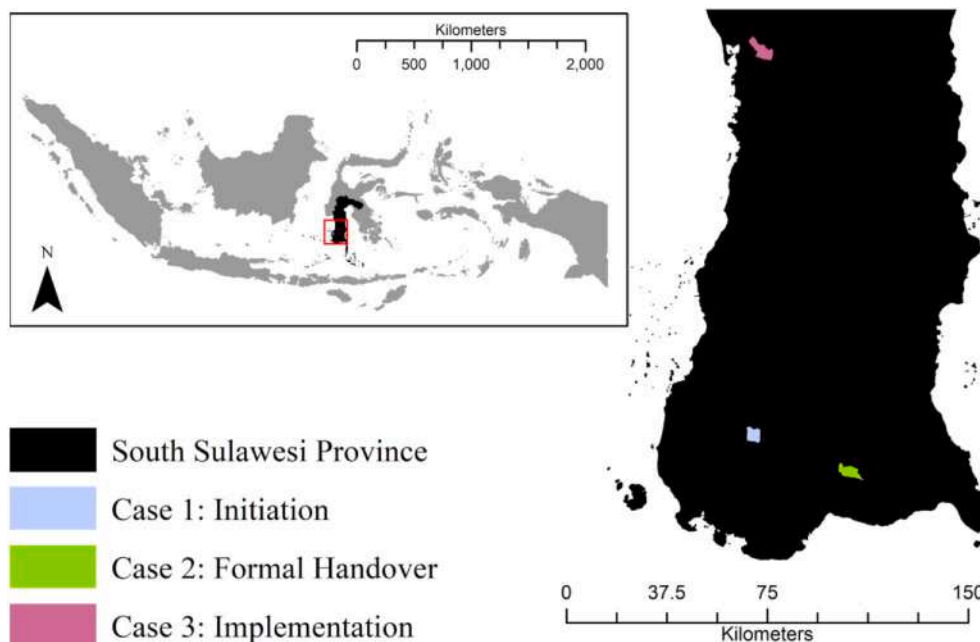


Fig. 1. Location of three social forestry cases analysed in the paper (Central Statistics Agency, 2019).

implementation. For the initial phase, we select a case from Desa Manuju because the kemitraan (partnership) scheme was selected for implementation. The partnership scheme, which emerged in the post P.83 regulation, is the newest of the social forestry schemes, which provides greater flexibility between parties to decide on implementation arrangements and the timescale of the partnership.

**Case 2.** For the formal handover stage, we selected a site for its potential to examine the administrative proposal process, particularly the extent to which institutions evolved amidst formal handover and the role of external actors. We selected a case representative of the landscape of social forestry sites in a particular region. The case selected is the village forest from Labbo, Bantaeng.

**Case 3.** We chose the HKm case, because HKm was the most who had entered the implementation phase in Indonesia. HKm is the first PS scheme project in Indonesia, even representing the first generation of PS as indicated through projects supported by international donors.

## 4. Results

### 4.1. The initial stage: Reshaping access to, and exclusion from, information in Manuju Village

#### 4.1.1. Context for Manuju and its forestry partnership scheme with INHUTANI

The village of Manuju is foregrounded by land conflicts between state-supported plantations and local claims to land. In 1966, the district of Gowa began to establish a local paper industry facility. *Pabrik Kertas Gowa* (PKG, literally the Gowa Paper Factory) was established alongside a process of mapping out lands that would feed raw materials to the factory. In this case, land allocations initially for bamboo plantations included a total of 30,000 ha, part of which was located in and around the village of Manuju (see Map on Fig. 2). Reflections among local community members indicate that forest farmers participated in planting bamboo on their lands without compensation for their labor or for the land. Over time, the bamboo on these lands resulted in PKG asserting their claims to the land, formalizing them into state maps, and securing the support of local elites to function as intermediaries in legitimizing these claims. In 1993 however, facing financial hardship,

PKG was forced to close. As the company halted their operations, local communities reclaimed parts of the land, legitimizing their claims based on ancestral and inheritance rights. They planted subsistence crops like corn and peanuts. Meanwhile, state planning processes set out to repossess and allocate the land for other plantation production.

PT INHUTANI,<sup>5</sup> a state forest company, took over the concession lands previously managed by PKG, and began planting acacia and albizia throughout the concession area. By 2012, the total area under PT INHUTANI claims amounted to 18,350 ha and included areas of Manuju village under its concession. The company worked with local people, contracting them to plant trees, and hiring some as staff at the company. Nevertheless, according to locals, they never considered areas they willingly planted for PT INHUTANI as concession lands. Rather, they claim to have planted on their legitimately inherited lands, and could therefore choose to harvest, plant a different commodity, or use the land for something else based. To formalize rights, in 2011 local villagers began to organize to formalize land claims. They hired a local land surveying company KPP Pratama Bantaeng to map out land parcels and gained formally issued tax receipts (called SPPT, a common surrogate for legitimizing land claims) approved by the village government.<sup>6</sup> Though inherently contradictory, the village governments willingly issued SPPT on PT INHUTANI forest concession lands.

In 2013 tensions began to escalate over these dual claims, as PT INHUTANI refused to recognize individual land claims and viewed the harvesting of the trees as destruction of state property. Two incidents took place at the height of this conflict. The first began when PT INHUTANI reported theft and destruction of property to the police. The second, involved conflict that escalated after a prominent figure in the community (with the local status of Karaeng) was let go as a staff member at PT INHUTANI. While the former incident discouraged and frightened local claimants, the latter emboldened them. Several conflict

<sup>5</sup> PT INHUTANI was established under the same model as the more prominent PT PERHUTANI, which oversees industrial plantations in Java. There are key differences over their management mandates however.

<sup>6</sup> SPPT are a common approach to proving ownership to land in rural Indonesia. See van der Eng (2016) for a historical explanation of land ownership and tax systems in Java and the outer islands, and the problematic ways that a system with a prerequisite of sedentary agriculture gets applied to regions with shifting cultivation practices.

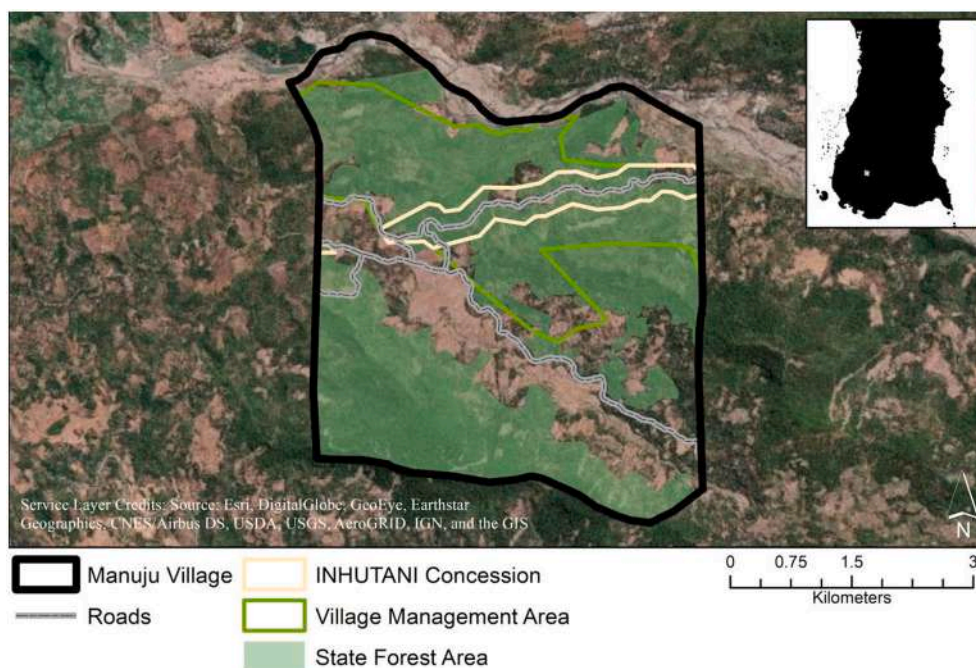


Fig. 2. The map of Manuju Partnership Area (Source MOEF, 2019).

resolution attempts ensued to de-escalate tensions, one in which PT INHUTANI agreed to hire several community members onto their workforce. Social forestry emerged as a potential mechanism for compromise, and the Sulawesi Community Foundation (SCF), supported by international donor funds and administered by the Asia Foundation, began outreach to stakeholders, explaining the various mechanisms and terms of social forestry.

#### 4.1.2. Initial stage scheme selection in Manuju (A1)

SCF began to facilitate discussions between PT INHUTANI and the local community about the social forestry partnership scheme. The partnership scheme does not specify a timeframe, nor does it prescribe specific arrangements between parties. Unlike the other social forestry instruments, the partnership scheme allows parties to come up with their own rules. In July 2017, SCF worked with the local village government and forestry extension officers assigned to the site. From the outset, the village government functioned as a key gatekeeper for any externally supported initiative, requiring close consultations with them. Four forest farmer groups (KTH) were initially included in the process, but only two of them followed through to the subsequent stages. The two KTH that refused to proceed cited irreconcilable differences, stating that the lands were their ancestral rights and given that settlements were already established within their areas, meant they were unwilling to negotiate partial rights to their land. These two groups elected to continue to fight for legal individual claims against PT INHUTANI. The two groups that were willing to proceed with the partnership scheme, included KTH Pattompongan, and proposed a total land area of 15.29 ha involving 24 households; and KTH Asamaturu with a total of 51.9 ha, including 75 households.

**4.1.2.1. Access and exclusion in A1.** From an access lens, there are several key actors that benefited from social forestry scheme selection. Given that SCF served as the facilitator, an organization equipped with the regulatory interpretations of social forestry, thus placed them in a unique position of authority over information. It also marked their legitimacy - both locally and in the region - by establishing networks locally, collecting databases about local conditions, such as farmers and their fields, and concession lands. Meanwhile, SCF also benefited beyond the site, developing their empirical expertise in social

forestry, gaining invitations to attend state initiatives on social forestry while advocating for inclusion in the nationally mandated PIAPS. It also established their role as a mediator of forest conflicts, a claim that is increasingly attractive to both the state and outside donor sponsors seeking to implement social forestry. Meanwhile, SCF quickly learned of the important role of the village head in Manuju, who also asserted his position in the process. He used his office to facilitate the arrival of external actors like SCF, and also acted as a hub for future project initiatives, and positioned his office to gain from other state-supported initiatives. Finally, the two farmer groups that agreed to partake in the process also gained access through their ability to articulate interests on their potential involvement in the scheme. Nevertheless, at this stage this is a precarious form of access, and could potentially be a damaging calculus. For the two farmer groups that elected to not partake in social forestry could either serve to lose completely, or if successfully, could one day enjoy fuller rights to land. PT INHUTANI is also experiencing the corollary of this access-exclusion gamble. On the one hand, their participation indicates a willingness to participate in a process that negotiates themselves out of full control over their claims to exclusive concession land rights.

#### 4.1.3. Initial stage: Participatory mapping for inclusivity, conflict prevention, and planning in Manuju (A2-A4)

The farmer groups that came together for the social forestry initiative in Manuju were not a collective institution prior to facilitation by SCF. The Manuju landscape is shaped mostly by long-established plantation crops, either managed by the company or as individual household plots. Therefore, much of the initial stage preparation activities centered around identifying farmers, their associated plots, and cross-checking overlaps with PT INHUTANI. In addition, the actors (PT INHUTANI, the village government, and the villagers) had low comprehension on the terms of social forestry, as well as its implications. For example, when initial discussions began to address the cost-benefit sharing arrangements between farmer groups and PT INHUTANI, some farmers suggested all proceeds should go to the cultivator.

The many uncertainties about the terms of the partnership scheme created the impetus for a participatory mapping process facilitated by SCF as means to fulfilling the A2-A4 phases. SCF set out to map farmers that cultivated lands within the area as well as those that were in need

of land. On December 15th, 2017 the multi-stakeholder group began jointly mapping out land uses. The participatory mapping included five individuals to highlight the path of the transects, and then each of the groups were requested to wait along the path to identify the extent of their land claims. SCF facilitated the technical aspects of mapping using GPS units, two individuals from PT INHUTANI joined in the field, two representatives attended from the village government, and all involved farmers participated. The participatory mapping facilitated discussions about types of land uses and potential joint management arrangements under the social forestry designated areas, while also proposing potential farmer roles. Mapping took place over the period of one week. Follow up consultations were thereafter conducted on December 27th between PT INHUTANI and the farmer groups, and again on January 4th Firdaus, 2018 with the forestry extension officers. At the end of these meetings the two farmer groups were formalized through decision letters by the village head. The participatory mapping process therefore served several functions at once. SCF identified different claims among each individual cultivator and the company, listed out tenure perceptions, explored local desires for land management, listed acceptable terms by the company, identified tensions between parties, and initiated the early planning processes that could potentially govern the partnership scheme in Manuju.

**4.1.3.1. Access and exclusion in A2-A4.** Access in this case is most prominent in terms of the information collected by SCF, as well as the networks established among key actors. Farmer groups expressed relief at finally understanding the extent of the forest concession, and at times were surprised by sites included within and beyond the state forest boundaries. The Map on Fig. 2, shows half the village within the concession area. On the one hand, farmers claimed to have benefited from an improved legal understanding of the issues, while on the other, the maps reinforced company ideas about legal boundaries. One particularly revealing aspect of the assessment was a greater awareness among parties about the value of the trees on the land, and the key negotiation dimensions at this point revolve around the determination over access to harvest over the existing timber at the sites. At the time of writing, the company has not yet agreed to the terms of the partnership, and could be weighing the implications of entering into binding social forestry agreements. There are also indications that lobbying could go above PT INHUTANI. As the Ministry continues to push for more social forestry schemes, the company could receive pressure from above (i.e. through MOEF responsible for guiding concession land use and planning) through lobbying by SCF to press for social forestry approval. For now, access and exclusion are contingent upon this collected information and how the parties may decide to use them going forward. The farmers feel that advocacy by SCF could potentially prove beneficial, but for the time being, they are unaware and unclear about the outcomes.

## 4.2. Formal handover: Access to, and exclusion from rulemaking and legitimacy in Labbo Village

### 4.2.1. Context for Labbo and its village Forest

The village forest in Labbo, alongside other social forestry sites in Bantaeng, has a unique political background. In 2007, an assessment of Bantaeng state forests published findings that identified over half (54%) of the district's state forests in critical condition (Supratman and Sahide, 2013). This finding is not unusual for state forests in Indonesia, reflecting a common story of land use change, whereby political decentralization took place alongside severe economic pressures across rural Indonesia. Many upland villages in Bantaeng and neighboring Jene-ponto, began widespread conversion of state forests by planting vegetables. Although an open secret about the condition of state forests in Bantaeng, the study about its forest condition gained attention and political traction (See Fig. 3).

The forest assessment thus led the district governments to take a

strategic and populist approach by identifying forests that were still standing as sites to protect while committing to empowering livelihoods of those living on the boundaries of these forests. The remaining intact forest stands in Bantaeng were due to their geographic location, at higher elevations with difficult road access. As the Bantaeng district government committed to community empowerment and forest protection by 2008, partnerships with an NGO (RECOFTC) and Hasanuddin University (UNHAS) began to assess the possibility of implementing social forestry pilot schemes for village forests in Bantaeng. Armed with the regulatory expertise on social forestry at UNHAS, supported by well-funded community facilitation by RECOFTC, and having the strong support of Nurdin Abdullah (the Bantaeng district head, or *Bupati*), led to the unique conditions for showcasing a precedent-setting social forestry example.

Indeed, Bantaeng came to be a showcase for social forestry in Indonesia, and numerous NGO programs began to visit and learn from its village forests. The Village of Labbo was among these village forests, and was the site of a ceremonious visit by the Minister of Forestry in 2009 to highlight the success of social forestry. The head of Labbo village was thereafter regularly selected as a community representative invited to attend and speak at national forums on social forestry. The attention led to additional international donor and NGO support, such as a large Canadian-funded program on agroforestry and livelihoods, supported by ICRAF and CIFOR, Birdlife International, and others. In terms of regional politics, the Bantaeng *Bupati* (Abdullah) also began to receive attention for his populism on rural empowerment and efforts to protect forests, later fueling his campaign to an unlikely victory as governor of South Sulawesi in Firdaus, 2018. For these reasons, Bantaeng social forestry sites, and the village of Labbo in particular, provides a unique opportunity to highlight the formal handover dimensions of social forestry designation, and an ideal site for applying the access-exclusion framework.

The Labbo village forest is small, covering a total area of 285 ha (just over a square mile). There are two main land uses in this forest, which predominantly consists of natural forest cover [*hutan alam*], while the area includes a group of agroforestry plots cultivated by 12 farmers with coffee groves covering approximately nine hectares. The forest includes important water sources and is in the habitat range for the endangered Anoa, also known as the midget buffalo. Labbo is also known regionally for its honey, where as opposed to harvesting among nests in trees, cultivators harvest from bees that nest in a formation of rocks in the forest. The farmers identified to be encroaching on forest lands, do so because they lack access to land, influenced by a social structure that revolves around three types of farmers classes (land owners, subsistence farmers, and laborers).<sup>7</sup>

The timing for the selection of the village forestry scheme in Labbo is significant. In 2008, national interests were eager to showcase, influence interpretation, and implement village forestry for various reasons.<sup>8</sup> Abdullah, as the topmost elected official in Bantaeng seized on this opportunity to define the scope of village forests amidst populist sentiment for protecting forests and empowering rural communities. One of the unique ways the Abdullah gained attention was due to his willingness to support social forestry through multiple government agencies. As lines of authority and jurisdiction are often limited to a

<sup>7</sup> For more on the class structure in this region of South Sulawesi see Gibson (2005)

<sup>8</sup> In 2008 the Forestry Ministry P.49 Regulation was issued to provide guidance on village forests in Indonesia because there were so many different interpretations and applications for implementing social forestry. This was a new scheme that previously the scheme consisted only with HKm and HTR. Three interpretations, is that it was the compromise for *hutan adat*, another interpretation for strengthening the old practices like *tanah bengko'* where the village government could use the land for common needs of the village, and in Bantaeng there was a different technical interpretation by the BUMDES that it would be helpful to strengthen the farmer groups)

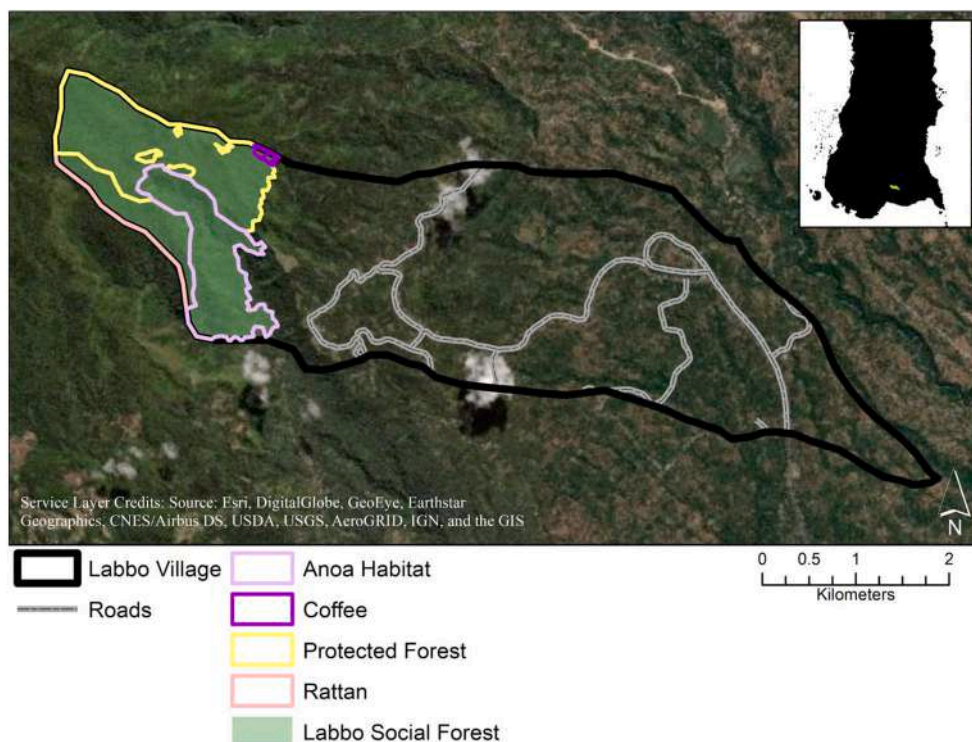


Fig. 3. Map of Labbo and the Village Forest (Source MOEF, 2019; Supratman and Sahide, 2013).

single sector where forestry only works with forestry, Abdullah instructed additional support from agricultural and other local agencies to provide additional support. By mobilizing resources across development and conservation-oriented agencies, Abdullah gained attention for his progressive policy approach in village forestry, lending him credibility among a growing reform-minded civil society movement in Indonesia. Meanwhile UNHAS and RECOFTC mobilized support from international donor funds and supported the capacity building process through several trainings, workshops, and public consultations that were conducted throughout 2009.

#### 4.2.2. Administrative proposal and SF scheme approval (B1)

As village forests were a new mechanism during that time period (2008–2009), gaining approval helped to establish a precedent for NGOs working elsewhere. Guided by ministerial regulation P.49/2008, the Labbo village forest helped to articulate policy formulation on regulatory and administrative mechanisms for proposing village forests. Success in Labbo was made possible through the close facilitation and legitimacy of UNHAS and RECOFTC, which oversaw all the letter-writing and administrative forms, commonly applied as a template for implementation elsewhere. Labbo was well-financed to convene local actors and fund requirements. Over several months in 2009, a series of meetings convened at the village office and the local mosque to establish the mechanisms for the village government in working with the farmer groups and land managers. The outcome from these discussions determined the management institution would be established as a special unit of the village enterprise (BUMDES). A presiding individual overseeing the BUMDES would then work with the forest farmer unit to coordinate revenue generating opportunities, which ranged from managing water resources for distribution and sale, overseeing forest honey and coffee collection and marketing. The meetings also discussed the relationship between the BUMDES, forest cultivators, and external actors. A draft Bupati regulation was drafted with UNHAS support to formally propose the village forest permit, and provided a basis for various government agencies to support forestry-related ventures.

Upon the completion of administrative proposals on village forest

management and establishing partnerships with external organizations and agencies, guidelines for village forestry establishment require the completion of four key documents.<sup>9</sup> An official letter was sent on January 12th, 2009 by the Bupati to the Minister to make the formal request to approve the village forest, appending all completed requirements, which included proposed recommendations on village forest managers, their institutional structure, a map, and a general management plan. Just over a year after the submitted request, on January 21st, 2010, the proposed village forest in Labbo was approved without any revisions. After receiving the approval permit on the working area by the Minister of Forestry, several follow up meetings were convened to finalize documentation for submission to the governor on proposing management rights (*hak pengelolaan*) of the village forest. These meetings focused on the 35 year planning document RKHD [*Rencana Kelola Hutan Desa*], which provides the basis for obtaining the full permit (discussed in more detail in B2, below). A year later the village forest permit was officially obtained.

**4.2.2.1. Access and exclusion in B1.** The story of village forests in Labbo transcends well beyond the site. As Brosius et al. (1998) have said about social forestry, models of success are exemplary sites for examining the idealized conceptualization of a policy involving people and forests. The Labbo case clearly shows that access dimensions were driven by multiple external interests eager to establish precedence of administrative rulemaking. Providing a model for implementation presented access to expert interpreters of social forestry to guide village forestry policy while also supporting the overall populist messaging of Abdullah's government. This not only provided material resources from the multiple agencies tasked with supporting successful site preparation, but also provided a powerful narrative from district leadership on commitments to empowering people and protecting forests, which extended to various external actors claiming legitimacy as institutional interpreters of village forestry policy.

<sup>9</sup> See Firdaus Firdaus (2018) for a more recent legal interpretation of social forestry permitting mechanisms

#### 4.2.3. Reinforcing SF scheme approval and continued involvement of external actors (B2)

The B2-stage is not necessarily sequential, because even during permitting preparations, institutional arrangements take place in parallel, the intensity of which is usually contingent upon funding availability. This stage re-examines the new institutional expectations relative to the permit and therefore solidifies the formalized working arrangements going forward. In the Labbo village forest, most institutional planning processes took place within the B1 stage because of intensive support by external actors UNHAS and RECOFTC, and with additional formal mandates from local government agencies tasked by Abdullah's administration, there was no difficulty convening meetings, drafting plans, and conducting bureaucratic functions.

Discussions on institutional management plans for the village forest resulted in farmers agreeing to establish the business management unit under the purview of the BUMDES. As an established formal entity, the BUMDES already has a local manager [*pengurus*], receiving regular professional training from local agencies tasked with building local village cooperatives. However, reinforcing the institutional relationship between the BUMDES and the farmer groups created a source of friction between them. Farmer groups work in the forest to harvest coffee and collect raw materials like honey, while local elected elites oversee village economic development opportunities that connect with markets and formal institutions. In this light, the BUMDES manager, accustomed to managing formal bureaucracy functions, resulted in very different expectations about management and administration of the village forest. He viewed his role as increasing the revenue for the village. Meanwhile, the business management unit established under the BUMDES specifically for managing the village forest viewed its role as representing the farmers and managing a joint resource. In other words, while the BUMDES was accustomed to the processes of formally managing an institution to seek revenue for the village, the village forest business unit that consisted of the farmer groups were driven by different interests and had less capacity for the reporting aspects of the bureaucracy. This is unsurprising as the local politics of revenue generation at the BUMDES are closely safeguarded among alliances of the locally elected leadership, and a new unit under the institution geared towards fair distribution across farmer groups presented a very different view of the form and function of the village forest.

This source of tension requires a closer examination of access and exclusion relative to local land relations. The context for land ownership in Labbo is that the Karaengs (cultural elites) own much of the productive land outside of the forest estate. Those facilitating discussions for village forest preparations (the NGOs) recognized the potential land grabbing by local elites on the emerging terms for village forest lands. Working with the farmer groups, parameters for village forest land access were limited to individuals without existing lands or for those already cultivating land in the state forests without any other access to land. A specific stipulation in the village decree stated that only those without access to land could be included in the state forest area. By the end of stage B-4, the 12 previously labeled encroachers on nine hectares expanded formal access to a total of 131 villagers originating from the two Labbo hamlets with overlapping boundaries with the state forest (*Dusun Bawah* and *Dusun Panjang*), as well as Kampala and Bontotampalang villages, amounting to a total of 80 ha divided into different farmer group blocks. These individuals were considered for inclusion to cultivate coffee agroforestry plots under three criteria: those already cultivating plots within the forest boundary, people in need of land / low-income households, and areas amounting to no more than one-half hectare. In addition to coffee cultivation, other cultivators were also considered, including individuals harvesting honey and rattan.

Upon confirming the forest farmer group, subsequent negotiations revolved around institutional aspects, namely placing the special unit of the village forest within the BUMDES structure. The key negotiation involved the benefit-sharing ratio, which resulted in an initial

agreement to split proceeds at the ratio of 75/25 between the coffee farmers and the BUMDES. However, the arrangement remains a general agreement as it did not specify key details, such as the types of benefits to be shared, and the stage on the supply chain in which benefits were to be evaluated. For example, it was unclear whether benefit sharing was to be evaluated at the raw harvested seed, or the already "processed" product. Due to this lack of clarity, arrangements in the end fell apart. The farmers stated that the mechanisms in the BUMDES were yet to be established, while the BUMDES cited that the yield from harvests did not provide anticipated outcomes.

A key part of the B2 stage also involves the exit strategy of external actors and establishes continued relationships going forward. This exit strategy involved commitments for continued facilitation by the local NGO called Balang Institut to support the village forest institutions and farmers to continue to achieve their targets listed in the management plan. In parallel, the *Forum Rembuk* [convening forum] for the village forest was also established to ensure regular meetings between local government agency representatives and the farmers. The overall intent of this continuing engagement with external actors sought to deliver on the commitments of empowering forest farmers and meeting conservation targets. The Forum however, was only established as a formality, and after permitting, follow up commitments waned.

**4.2.3.1. Access and exclusion in B2.** In the context of social forestry development of the years 2008–2010, it is easy to see why Labbo, a small village forest involving a limited number of forest farmers, came to be seen as such a success story. On the one hand, the site conveniently supported the narrative of a progressive elected leader in Nurdin Abdullah, whereby close facilitation by external actors helped to legitimate interpreters of the legal dimensions of village forestry. Legitimacy was founded on the support of a well-known NGO, with additional capacity building conducted by a local NGO that would continue working at the site for the long term. Labbo could continue to show continued success in that already secure forests would continue to be protected, while also showing concrete measures for providing land to farmers that actually needed it. But if we extended the timeline of analysis to the implementation stages, the overwhelming focus on the formal handover to the village institutions established the mechanisms for negotiating access and exclusion. As formal handover focused so much on establishing the institutional support mechanisms through the BUMDES as a village enterprise, it would therefore continue to structure outcomes long after receiving the permit. Agencies and their support programs targeting the village forest would henceforth continue to structure their programs through the village office and its BUMDES. The effects, of course, is that the access the BUMDES received also overshadowed interests among the forest farmers.

#### 4.3. Implementation: Access to, and exclusion from, resource use and benefits in Mattirotasi Village

##### 4.3.1. Context: A complex of 14 community forests in Mattirotasi, Sidrap

To adequately address a case for the implementation stage of the access-exclusion framework (C1 and C2), we reached further back in time to provide more longitudinal engagement. However, this also means that the case was established in a very different regulatory framework from the existing policy mechanisms governing social forestry.

Mattirotasi village was established long before the area was included in state maps and designated as forests. The landscape was commonly used among locals as cattle grazing land because of the flat terrain, and when regularly burned, creates shoots of young grasses that cattle especially enjoy grazing. Because of the geographic and topographical conditions, a Suharto family-affiliated corporation overseen by then first lady Tien Suharto, took note of the site and also began early investments to expand cattle production operations. The project was short-lived due to the assessment that it was ultimately considered not profitable enough.

In 2000, following the drastic changes that brought on democratic decentralization and reshaped political and administrative systems in Indonesia, new development paradigms became possible, and a project entitled the Community Forestry Development Project (that would serve as the precursor to the *hutan kemasyarakatan*, or HKm scheme) was formed to organize farmers and rehabilitate state forests. Amounting to approximately 1000 ha, the project received funding from the OECF<sup>10</sup> and involved a local NGO to serve as facilitator.

The basic contours of the community forestry scheme involved the 70/30 concept, which refers to the ratio of tree crops relative to multi purpose tree system (MPTS). In Mattirotasi, MPTS translated mostly to the introduction of cashews. At the beginning of the project, the land was identified as an arid and degraded landscape, and OECF promoted the site as an early pilot site for HKm and land rehabilitation. The initiative at that time was not designed or intended to provide land access to state forests for local villagers but rather to involve them in a land rehabilitation scheme to reforest the site. The project was therefore a showcase for the Sulawesi region, in that as opposed to previous reforestation schemes planting tree crops, the intent in this case was to diversify tree crops with livelihood options in ways that could also provide benefits to locals. Indeed, the local villagers did not have high expectations for the project beyond the labor reward for planting, transplanting, and replanting seeds in the first and second year of the project.

Given that Mattirotasi a showcase site, receiving close oversight from the OECF project and the then-MoFor (today's MOEF) ensured the ease of completing the formal handover process. Both supportive local and national government actors provided the requisite regulations to complete administrative permitting aspects, which was finalized within one year. Although the initial project site involved 1000 ha, the permitting process reduced adjacent lands to a total contiguous HKm area of 755,23 ha. Throughout this area, 14 farmer groups each received a HKm permit (see Table 5 and Fig. 4 for land area and list of farmer permits). At the end of formal handover, however, the local villagers involved in the scheme were unclear about their rights, and did not believe they had obtained rights. Their perception of forestry departments at that time were such that the agency merely enforced violations or provided funds for reforestation, not that they could provide rights to land. Understanding among farmer groups were such that they would no longer be intimidated by forest rangers for entering the forest estate, not that they would be conferred partial ownership and land management responsibility. Upon reflection, villagers stated that if they were provided permits, the most important right would be to harvest the more valuable timber stands, especially the main tree they were involved in planting (*Gmelina arborea*, commonly called *Jati Putih* in Indonesia). Finally, the main management question related to the issue of cattle. The most valuable aspect of local livelihoods, farmer group highest priority revolved around questions whether the permits would allow grazing.

The imaginary of a social forestry scheme tends to invoke local groups engaging with a resource involving rules long established among local people interacting with a resource. The farmer groups in Mattirotasi established for the HKm scheme, however, were by no means a tight knit group, and were unaccustomed to developing rules to govern resources that on paper were now legally transferred to them. The farmer groups, rather, consisted of individuals from the surrounding village hamlets, brought together as part of their personal

<sup>10</sup> The Overseas Economic Cooperation Fund (OECF) is the implementing agency for loan aid furnished by the Japanese government, now known as the Japanese International Cooperation Agency (JICA). Founded in 1961, it is the Japanese government's development financing arm that extends low-interest, long-term funds to support community efforts in developing countries. Since its establishment, the number of countries receiving yen loans has grown to reach 90 worldwide as of the end of March 1998.

**Table 5**  
List of 14 HKm in the village of Mattirotasi.

List of 14 HKm in the village of Mattirotasi	Permit license number (all issued in 2012)	Amount of forest farmer member	Coverage (Ha)
Mamminasae	343/XI/2012	42	74.05
Samaenre	340/XI/2012	86	89.08
Massabirin	334/XI/2012	48	69
Massumpuloloe	342/XI/2012	17	32.7
Sipakamase	335/XI/2012	20	36.7
Bunga Desa	332/XI/2012	23	29
Sipatuo II <sup>a</sup>	337/XI/2012	35	49.25
Padaidi	339/XI/2012	37	72
Sipakainge I	338/XI/2012	24	42.5
Mattirowalie <sup>a</sup>	331/XI/2012	28	39.5
Massenreng Pulu	341/XI/2012	12	30
Sipatuo I	336/XI/2012	18	34
Makkaresoe	330/XI/2012	64	39.5
Mappasitjue	333/XI/2012	27	49

<sup>a</sup> These two groups were successful in building common arrangements between cattle herding and cashews, which were integrated into the HKm Program.

interest to benefit from the labor opportunity afforded by the project funds as daily wages for planting and maintaining the land rehabilitation and reforestation components.

#### 4.3.2. Forest management (livelihood benefit) (C1)

Among the 14 farmer groups receiving permits, implementation was overseen by the Forestry Department arm of BPDAS, which also included periodic support from a local NGO. The farmer groups had very different ideas about land management from the approved 70/30 scheme and initially asked permission to plant corn, or even that the ratio could be overturned to 70% MPTS to 30% timber. Farmer groups were also eager to incorporate cattle into the scheme, but at that time, livestock was outside of the purview of forestry agency support. Given the different perceptions and rules about land management, one local extension officer [*penyuluh*] named Rusdiansyah, also listed himself as a farmer in the Mattirowalie group. Although his involvement as officer and member is formally prohibited, his rationale to list himself as a farmer was so that he could lead by example, showcasing a model for success and replication across the HKm sites. Strategically positioned in a state agency, he could also visit the various government offices to drum up additional support for the site. He began farmer trials with a limited number of members, implementing different combinations of commodities and crops. At the outset gaining support for agricultural development was difficult and cross sectoral coordination between forestry and agricultural rare, given that the agriculture agency was not allowed to support activities in the forest estate. However, because of Rusdiansyah's persistence in continuing to ask, the agricultural agencies began to provide seedling support for agriculture so long as it was not explicitly stated for distribution in the forest estate. Cattle, however, was a more difficult challenge to obtain government support, and so he and other villages began to pursue livestock development on their own.

At the outset of social forestry implementation, the agency was suspicious of Rusdiansyah's initiatives and motives. Furthermore, his farmer trials also yielded experiments that were not common among other farmer practices, and which did not endear him to their support at the outset. Only two heads of farmer groups initially agreed to participate, and a handful of other farmers joined him in the field trials. Meanwhile, other members outright ignored the HKm management plans, equating permits as access to land that they could do with what they pleased. They openly burned fields to clear lands or let the *Gmelina arborea* stands die, replacing them with other commodities of their own choosing. Rusdiansyah's experiments continued, however, with the overall objective to create a combined land management approach prioritizing corn, cashews, cattle, while still maintaining the *gmelina*

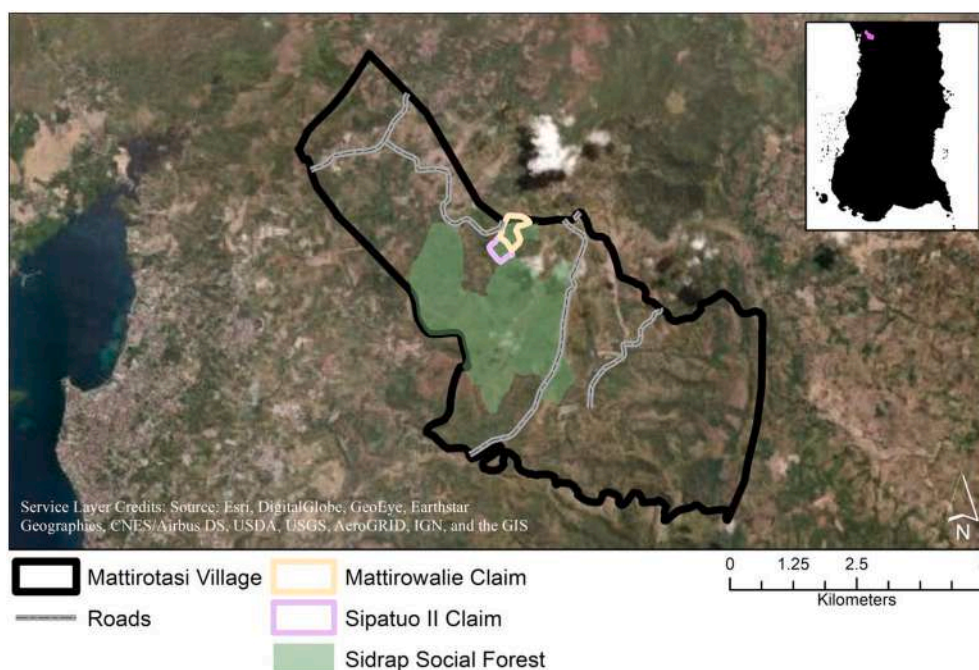


Fig. 4. Map of Mattirotasi HKM (Source MOEF, 2019).

stands. Accommodating all four of these commodities failed for various reasons. The first reason was that the prohibition against harvesting the gmelina caused the farmers to present a barrier for conducting other meaningful livelihood activities, particularly for the main interest of supporting their cattle. Second, corn and cattle were also incompatible. Third, several of the areas were too steep to allow for successful combinations. Amidst these overall failures however, Rusdiansyah's trials also made an important discovery that made the cattle and cashews compatible with one another. The cattle could graze in the rainy season when the grasses were abundant, and in the dry season when the grasses were sparse, could enjoy feeding on the shedding of failed fruits [*buah gagal*] from the cashews. Not only was this beneficial for the cattle, but Rusdiansyah noticed the benefits from cattle naturally fertilizing the base of the cashew trees, over time yielding better harvests. As other farmers began to notice the approach succeeding, members from across two adjacent farmer groups (Mattirowalie and Sipatuo II) began to follow Rusdiansyah's persistence and leadership, incorporating his model as a common land management practice.

They also began to create new locally driven institutions to manage the area. For example, they began to institute an annual membership fee and also accepted voluntary donations. Each year, the fee included a payment of 30,000 rupiah (approximately US\$2.5) per mature branded cow, and voluntary donations were accepted during the sale of cashew harvest as a way to re-invest in their farmer group. These mechanisms were never formalized in the HKM permits or plans, premised on trust established between members. The collective fees and funds were used as a way to build boundary fencing for the outer boundaries, as well as limited internal fencing that helped to manage their permit sites. Any additional finances were used to maintain and improve fencing, which consisted of a combination of barbed wire, bamboo, or natural hedges from fast growing shrubs and trees.

In national forums, these two farmer groups have become a success story of social forestry. The narrative among national and provincial groups always highlight the successes of the site for their establishment of cashews. DG-PSKL, the arm of MOEF assigned to administer social forestry and environmental partnerships, continue to support and expand cashew production and marketing for the site, through grants to develop refrigeration, packaging, and more. Engagement also expanded beyond the farmers themselves to support small grants for women's

groups to develop the packaging and marketing initiatives. Nevertheless, although cashews are seen as the hallmark of success at this site, local farmers see things differently. They describe success not based on cashews, which they continue to view as secondary, but rather view their main motivations as driven by local farmer interests to protect and grow their cattle.

**4.3.2.1. Access and exclusion in C1.** At the outset, those that were involved in the initial planting stages of the OECF project all received wages for planting and maintaining the reforestation efforts in the first two years. Labeled as a showcase site from the outset, and therefore not allowed to fail, the institutional support continued in the form of administrative functions providing continued project-level benefits. In the implementation stages, there were those that gained access by outright ignoring the permit, and rather, began to use the permit as a reason to make use of short term gains. This was done mostly in the form of clearing land to plant corn. Meanwhile, Rusdiansyah's leadership in two of the 14 farmer groups, over time began to yield continued support from government agencies for initiatives supporting their longer term vision of land management. Meanwhile, they were able to build institutions that prioritized their cattle grazing operations, and at the same showcased their successful cashew cultivation that was marketed as an attractive national example for improving livelihoods in forests. The third group excluded themselves. They received their daily wages by reforesting the landscape, which over time became too dense to plant anything else in the understory.

#### 4.3.3. Forest management (conservation and forest protection) (C2)

There are several main land cover types at the Mattirotasi site. The first is the persistence of abandoned and degraded lands, which initially drew attention to the site and established the rationale for rehabilitation. These degraded lands are located on the rockier conditions and steeper slopes that have undergone repeated plantings of corn, and without applying soil conservation mechanisms, eroded nutrients from the soil. In other parts of the landscape, farmers keep areas clear to plant corn, which they ensured by allowing the gmelina and cashew stands to wilt. In yet other areas, the lack of attention with thriving gmelina stands have also resulted in overgrowth too thick to allow for cultivation in the understory.

The two HKm permits at Mattirotasi and Pattiro II were initially open to introducing conservation programming if they were allowed to also access the timber stands at various points. However, given that the gmelina was off-limits for harvest, these two groups began to slowly prioritize cattle and cashews, thus reducing the gmelina stands. Given that cattle were the priority, and that cattle like to eat the gmelina bark, the gmelina slowly thinned out.

*4.3.3.1. Access and exclusion in C2.* In degraded landscapes the initiation of the HKm project allowed for opportunities to introduce new conservation practices. However, the lack of trust between the local farmers, and the limitations placed upon them to decide what type of land management approaches to pursue resulted in 12 of the 14 farmer groups not following the broader terms of the permit scheme. Among the two remaining farmer groups led by Rusdianyah's vision of mixed management of cashew and cattle, resulted in a deeper land management ethic, even though it did not follow the general vision of the plan approved in the formal permit. Across almost all of the other remaining areas of the landscape however, farmers saw opportunities to cultivate social forestry for short term gains, often depleting the soil and not taking into consideration other conservation practices like terracing or water conservation. Where the gmelina stands did grow large however, were a function of disinterest among farmer groups beyond their receipt of the initial wages for replanting. Though this element could be seen as a conservation success, for the regrowth of larger tree stands, the lack of engaged land management and stewardship could leave the stands vulnerable for future logging.

## 5. Discussion

The access-exclusion framework channels information from in-depth case studies to understand how actors create social forests, who benefits from those processes, and who does not. Using this framework to analyze social forests does not seek to replace in-depth historical, social, or anthropological study of the political-ecological dynamics that define community forest management. Rather, it highlights specific information from such studies to disentangle normative processes that simultaneously grant access to, and embed exclusion from, forest resources. In doing so, it demonstrates how social forestry is not a single policy, but a set of bureaucratic processes that unfold in different locations with unique historical backgrounds and power relations. We thus divide social forestry into distinct stages defined by specific bureaucratic practices, and consider how access and exclusion occur across each of these stages. Because these stages are common across all social forestry initiatives in and beyond Indonesia, and because the framework focuses on elements of access and exclusion within each stage, applying it enables a systematic comparison of different cases that illustrates the promise and perils of social forests. Applying the framework to the cases we selected reveals that specific stages of social forestry are defined by access to, and exclusion from, information, political legitimacy, and resource use.

### 5.1. Initial stage and access-exclusion of information

The case of social forestry initiation in Manuju demonstrates how access and exclusion are negotiated in reference to information about social forest resources. In this case, SCF served as a boundary institution that united PT. INHUTANI, a state-owned company, and community members from Manuju village. Working together, actors within these organizations mapped forest resources, finding valuable standing timber within the concession identified for a partnership scheme. Initially, it seemed that all actors received access to information; however, local actors were excluded from using this information, legally. At present, PT. INHUTANI retains rights to the concession, and it remains reluctant to share these rights until valuable resources are harvested. Meanwhile, community actors have no ability to harvest or

legally benefit from the forest area for which they contributed information. It is unclear how social forestry licensing will proceed in Manuju, though it is likely that PT. INHUTANI will be able to harvest valuable timber before the forestry partnership plan is submitted, much less approved. By generating information through participatory mapping, SCF convened villagers and PT. INHUTANI, and generated useful information. Thus, members of Manuju Village remain excluded from the collection and use of information, though social forests are often enacted to primarily benefit local communities.

The access-exclusion dynamics of information are critical to initial stages in social forests beyond the Manuju case. Though they may serve as critical partners in gathering information, communities often lack the technology and professional capacity for systematically measuring valuable forest resources and overall forest cover (Anderson et al., 2015; Alam et al., 2019). The professionalization of forestry (Lund, 2015) serves to exclude many local actors from contributing actionable knowledge of forest resources, but grants access to such knowledge to NGOs, technocratic bureaucracies and professionals. After the process of gathering information, communities are often excluded from information regarding the processing of applications and permissions. Organizations that are in positions of authority—usually government ministries—have unique access to the process by which applications are reviewed and approved. In the Indonesian case, virtual platforms seek to provide greater transparency surrounding processing and processing times (Erbaugh, 2019), but asymmetries in informational access remain. Finally, because local communities do not hold rights to forest management and use during the initial stage, they are excluded from lawfully using any new information they helped collect. In the initial stage, information primarily benefits state-based entities and third-party professionals who have greater access to collecting and using it, in contrast to local communities who are often excluded from information on application processing and the use of information about forest resources.

### 5.2. Formal handover and access-exclusion of authority

The case from Labbo village highlights how formal handover excludes specific actors associated with land that is not deemed reasonable for social forestry, it grants access to rulemaking to communities and organizations in select locations, and in doing so it shapes who is and is not a legitimate authority. Labbo was selected as a location for social forestry due to its pre-existing, critically important forest area. The handover of social forestry rights to the people of Labbo Village provides them the formal authority to make rules for forest in an area that they managed long before the handover of formal forest rights. Thus, members of Labbo gained political legitimacy through the formal handover of social forest rights, rather than rulemaking authority.

It is important to note that Labbo was purposefully selected for social forestry because of the preconditions that led to forest conservation. In a related process, villages that contained degraded forestland were excluded from initiation and formal handover, and further denied the formal authority to engage in managing forest as well as the legitimacy in managing forests. The case of Labbo provides insight into a second type of legitimacy that formal handover produces: the legitimacy of actors and organizations that oversee handover processes. The NGOs, government administrations, and related actors seek to gain by claiming the “success” of creating a social forest. The current governor of South Sulawesi was intimately involved in the initiation and handover of Labbo's social forest. The legitimacy he gained through the successful handover of forest rulemaking rights provided a foundation for further political success and authority. Similarly, NGOs that successfully oversee the handover of social forestry rights can claim legitimacy through the successful handover of social forest rights. It is important to consider, however, the communities that are selected for formal handover and how they differ from those that are not included.

Through the legal provision of forest management rights, certain

groups and actors gain access to the legal as well as political authority, while others are excluded. In Labbo, where pre-existing forest management institutions protected critical habitat, political actors and organizations focused on the handover of social forest rights, not on developing management capacity. This represents a worrying pattern, where social forests are found, not made (Glasmeyer and Farrigan, 2005). The pattern of focusing authority granting processes rather than capacity development is common among social forest projects (Fisher et al., 2018), and it serves to exclude communities that lack pre-existing institutional arrangements or critical forest habitat. By recognizing and successfully promoting social forests where pre-existing institutions occur, political actors and organizations are able to increase the likelihood that the handover of rights occurs, and are subsequently viewed as effective and legitimate community partners. The recent boom in social forest allocation across Indonesia should not be confused with equitable access to social forest rights. Many communities are excluded from social forests, either because their applications to implement a social forest were denied or because they were unable to begin the application due to a lack of human or natural capital. Future research on social forests—in Indonesia and elsewhere—would do well to focus on such exclusion.

### 5.3. Implementation and access-exclusion in resource use

The boom of social forests in Indonesia refers to heightened activity surrounding the initiation and handover of social forest licenses; the bust, as our third case from Mattirotasi demonstrates, occurs in the implementation and outcomes. In Mattirotasi, two farmer groups (kelompok pertanian hutan) of fourteen managed to successfully manage social forest areas for sustainable livelihood benefits. Through a process of adaptive negotiations and a dedicated extension agent, the social forest land provided sustainable income from the sale of cashews and beef in Mattirowalie and Sipatuo II. However, the access to livelihood benefits from this social forest occurred through adaptive management, not the original management plan. As this case demonstrates, the provision of forest management rights is not sufficient to guarantee environmental or livelihood benefits. Rather, when making villages and communities responsible for forest management, the authorities that transfer such responsibilities must attend to how management unfolds in the future (Erbaugh, 2019). In response to shortages, MOEF has made significant strides in hiring more extension agents to facilitate formal handover and implementation (Galudra, 2019). However, the lessons from this case demonstrate that social forest plans serve to generate access and exclusion dynamics for forest resources and benefits long after formal handover occurs.

The benefits a social forest is designed to deliver determines the access-exclusion dynamics that define resource use. Similar to how some communities benefit from timber certification (Molnar, 2004), social and community forests that focus on providing livelihood benefits from forest products may grant further access to supply chains, boutique product markets, and greater publicity (Harbi et al., 2018). Though communities without formal rights to a social forest may continue to harvest forest products, they are unlikely to receive additional market access and are often subject to high transaction costs common in informal markets (Tieguhong et al., 2015). Research on mangrove use in Ecuador challenges the concept of binary access-exclusion of resource use, concluding that communities prefer to choose and adopt their own rules about who is excluded from resource use (Maldonado et al., 2019). In contrast to product-based benefits, social or community forests that deliver livelihood benefits from PES grant access to monetary or in-kind benefits via formal agreement, and so they directly exclude all individuals or groups not explicitly contracted. Research from Costa Rica demonstrates that the national PES program systematically excludes rural smallholders while granting access to wealthier land owners with larger tracts of forest (Lansing, 2014). Common to nearly all forms of social forests, regardless of the livelihood access they

provide, is a specific form of livelihood exclusion. As a “technology of the state” social forest rights are typically traded for the enhanced protection of a specific, often highly valuable, forest resource (Agrawal, 2005). For example, in India Joint Forest Management between the Forest Department and Forest Protection Committees provides communities the right to collect and manage non-timber forest products and a portion of timber sale profit, but in return they are excluded from managing timber and are charged with protecting the forest from fires, grazing, and other activities that might affect timber resources (Agrawal and Ostrom, 2001; Behera and Engel, 2006). Thus, granting some access to forest products or ecosystem services to communities often entails their exclusion from products governmental departments or ministries seek to retain and protect.

## 6. Conclusion

This research advances a framework to analyze the processes that create Indonesian social forestry, attending to the way in which they grant some actors access to, and exclude others from, forest management. We then apply this framework to three cases that represent different stages of social forestry implementation in South Sulawesi province. Using the access-exclusion framework to examine the initial stages of social forestry in Manuju, the formal handover of social forestry rights in Labbo, and the implementation of social forestry in Mattirotasi, we demonstrate that social forestry processes determine who is and is not able to generate and use information, gain political legitimacy, and use forest resources for economic and environmental benefit.

The application of the access-exclusion framework to additional cases of social forestry promises to improve understanding of who benefits from community-based forest management and who does not. Though Indonesian social forestry claims to be forest management in the name of local communities, there remains a disproportionate focus on planning and handover, and less attention paid to implementation. We refer to this as the boom of social forestry policy, and the bust of social forests. This, in turn, raises important questions about the usefulness of social forestry. Is it a method of resource management most concerned with conserving forests? Does it promote an agenda of social and environmental justice? Should it be measured by the livelihood benefits it provides local communities? Is it a policy fad to enhance the legitimacy of political elites? Examining the access-exclusion trends of Indonesian social forests shows that, at present, they can represent each of these considerations. Understanding the outcomes of social forestry demands future research that considers how access is granted, as well as how exclusion is reified, through processes that grant local groups rights to manage forests.

This paper promotes the evaluation of social forests on a case by case basis. The access-exclusion framework seeks to identify and analyze dynamics that unfold amid processes that generate social forests. Thus, this analysis does not engage with the broader questions about the politics of social forestry, which are much discussed elsewhere. For example, a social forestry license may be considered a success—despite extensive local exclusions—if the alternative is eviction of local communities and land degradation. The access-exclusion framework, as presented and applied in this research, does not consider these broader questions of land use and focuses only on the dynamics of social forests. Nevertheless, our analysis demonstrates how social forests produce conditions of access and exclusion for the local communities they are meant to benefit. The contemporary boom of policy and licensing demands that future research on social forests carefully consider who benefits, and who is excluded, across the different stages of their implementation.

### Credit author statement

Muhammad Alif K. Sahide: Conceptualization, Methodology,

Empirical, Writing. Micah R. Fisher: Conceptualization, Methodology, Empirical research (Case 2, Labbo), Writing, Editing. J.T. Erbaugh: Theoretical Framing, Visualization/Mapping, Writing, Reviewing, and Editing. Dian Intarini: Theoretical engagement, empirical triangulation, writing, and reviewing. Wiwik Dharmiasih: Methodological engagement and framework development. Mulyadi Makmur: Empirical field research and writing for case study 1 (Manuju). Fatwa Faturachmat: Empirical field research and writing for case study 3 (Mattitrotasi). Bart Verheijen: Theoretical engagement and reviewing. Ahmad Maryudi: Theoretical engagement and reviewing.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Dokumen pendukung luaran Tambahan #1

Luaran dijanjikan: Prosiding dalam pertemuan ilmiah Nasional

Target: sudah terbit/sudah dilaksanakan

Dicapai: Published

Dokumen wajib diunggah:

1. Artikel yang terbit

Dokumen sudah diunggah:

1. Artikel yang terbit

Dokumen belum diunggah:

-

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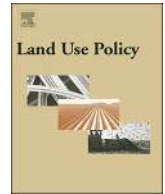
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## Anticipating a new conservation bureaucracy? Land and power in Indonesia's Essential Ecosystem Area policy

Muhammad Alif K. Sahide<sup>a,\*</sup>, Micah Fisher<sup>a,b</sup>, Nasri Nasri<sup>a</sup>, Wiwik Dharmiasih<sup>c</sup>, Bart Verheijen<sup>e</sup>, Ahmad Maryudi<sup>d</sup>

<sup>a</sup> Forest and Society Research Group, Faculty of Forestry, Universitas Hasanuddin, Makassar, Indonesia

<sup>b</sup> University of Hawai'i at Mānoa, USA

<sup>c</sup> Universitas Udayana, Bali, Indonesia

<sup>d</sup> Sebijak Institute (Research Center for Forest Policy & History Studies), Faculty of Forestry, Universitas Gadjah Mada, Indonesia

<sup>e</sup> University of Amsterdam, the Netherlands

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### ABSTRACT

As an emerging policy in Indonesia, “Essential Ecosystem Areas” (EEA) is being established as an instrument to expand protections for conservation areas at sites beyond the classical domain of the conservation bureaucracy. The policy impetus is from recent global research identifying high conservation values located outside of formally designated conservation areas. EEA policy provides a foundation for justifying conservation practices at sites based on high biodiversity indicators, but which might not have previously held formal protections. This policy instrument is particularly unique in Indonesia because it is envisioned to support initiatives that emerge voluntarily, even in areas that might not have been historically thought of as conservation areas. This is unusual because it applies to all land categories, including private and public lands. In this article, we introduce the EEA policy and identify the potential applications it might have, considering the possibilities for future conservation area management in Indonesia. In particular, we identify some key principles for researchers and practitioners to follow when assessing EEA implementation. Our organizing framework consists of several elements based on existing land and power characteristics, which we connect to the institutions that might emerge amidst these new policy arrangements. We apply the land and power framework to two emerging EEA sites in Sulawesi to anticipate the extent to which the policy suggests a future trajectory for conservation management, or whether conservation policy will remain tied to existing rigid bureaucratic structures. Findings from the two cases point to the continued primacy of the centralized conservation bureaucracy, indicating that EEA sites are being negotiated through the classical approach for administering conservation areas.

### 1. Introduction

The classical conservation model is premised upon the notion that people are somehow separate from nature. Indeed, the early formulations of conservation policy led to the justification for evicting people from sites designated for conservation (Tsing, 2011). Although a global movement since the 1980s began to acknowledge a more explicit role for communities in natural resource management and conservation (Brosius et al., 1998), as well as polycentric models formally engaging multistakeholder arrangements (Armitage et al., 2009; Fisher et al., 2018), the legacy of strictly bounded and controlled conservation areas to deny access remains a central feature of conservation policy worldwide (Peluso, 1993; Sahide et al., 2018; Fisher et al., 2019).

Bureaucratic systems that manage conservation areas are incredibly rigid, with strong regulatory backing difficult to unravel or challenge, and institutional frameworks that continue to function under directives of keeping people out. Even when exceptions are made for other zoning categories within conservation areas, they are typically done for particular niche uses that remain highly restrictive, such as landscape views for tourism purposes or limited non-timber harvests, and thus rarely formalize the role of local communities in managing lands that they might have a claim to for generations (Sahide et al., 2018).

Meanwhile, rates of land-use change and deforestation in tropical forests pose immense concern among global interest groups to protect conservation areas and expand them. International regimes continue to press for more stringent and expanded policies for ensuring

\* Corresponding author.

E-mail address: [muhammad.alif@unhas.ac.id](mailto:muhammad.alif@unhas.ac.id) (M.A.K. Sahide).

conservation outcomes (Giessen and Sahide, 2017a). Indeed, recent studies have shown that achieving formalized conservation targets will require a strategy beyond those within existing spatial boundaries of conservation areas, and in the Indonesian case, a specific directorate on essential ecosystem services has been established (Direktorat Bina Pengelolaan Ekosistem Esensial of MEFOR, 2018). The basis for establishing the unit emerged from the Conservation Action Plan for the Indonesian Orangutan (or Strategi dan Rencana Aksi Konservasi Orangutan Indonesia, SRAK) (2007–2015), due to the discovery that 75% of orangutans are located outside conservation areas (Ministry of Forestry, 2007). In Kalimantan, 60% of protected species are located outside conservation areas, located in areas such as production forests or among oil palm plantations (Meijaard et al., 2011). Another study showed that 80% of protected area species habitats are located outside of conservation areas (Geldmann et al., 2013). In recent years, conservation policy and conservation area management have sought to find new ways of engaging policy instruments to incorporate considerations beyond its borders.

This paper is about one such experimental initiative entitled the Essential Ecosystem Area policy,<sup>1</sup> which seeks to establish conservation area management mechanisms beyond the classical areas of the conservation bureaucracy in Indonesia.<sup>2</sup> The policy also expands the scope of conservation area management approaches to be more inclusive of multiple stakeholders, while also explicitly extending the territorial scope to areas beyond classical conservation zones. The EEA policy is thus unique because it can apply to diverse settings and involves numerous stakeholders, engaging across land classifications of public and private lands. EEA policy is also viewed as a strategic mechanism among various actors. One of the crucial elements is that the policy does not challenge the rigid bureaucracy that administers management arrangements in existing formal conservation areas. This is because the proposed EEA areas are located outside of the jurisdiction of conservation areas. On the other hand, however, the EEA does present an indirect challenge to the conservation paradigm in Indonesia because it creates a new approach for administering conservation area management, which some envision could unravel the rigid structures defining the existing conservation bureaucracy, allowing for more collaborative approaches and new actors to participate.

This paper examines this tension of conservation policy, namely to what extent does the EEA change conservation politics in Indonesia. To do this, we begin by examining the context for the emergence of the EEA policy and compare it with the hallmarks of the classical conservation policy paradigm (section 3). Next, we propose a set of principles that form a framework for assessing EEA implementation, which considers land characteristics, actors and institutions, and the power struggles that determine outcomes (Section 4/MethodsX). Thereafter (Section 5), we apply the framework by assessing the challenges for implementation at sites preparing to apply the scheme. To do this, we examine the benefits and the burdens of the actors interested in taking part in the EEA scheme, as well as the likely contestations determining implementation outcomes. The policy analysis, framework, and empirical evidence leads to our conclusions on the extent to which EEAs represent a potential breakthrough, or whether implementation will reinforce the status quo.

<sup>1</sup> We realise that there is no strong formal definition of this policy. In Bahasa Indonesia the Essential Ecosystem Area policy is entitled *Kawasan Ekosistem Esensial*, which relies on Government Regulation No. 108 year 2015, which includes a paragraph regulating the protection of nature preservation areas and nature reserve areas, including the protection activities of EEA. MEFOR has since drafted the formulation of MEFOR Regulation on the Protection Guidelines of EEAs, which at the time of writing, is currently under discussion for finalisation and stipulation

<sup>2</sup> By conservation bureaucracy in Indonesia we mean the formal government agency within the current Ministry of Environment and Forestry that holds the mandate for conservation listed in Law 5/1990.

## 2. Methods: Reflexive theoretical framework supported by case studies

As of January 2020, at the conclusion of this research, the EEA policy is still in draft form. Our research can thus only be assessed in terms of the preparations that have been made to prepare for policy implementation. We did not view the lack of case implementation as a barrier for waiting to conduct this research. Rather, we applied an innovative approach for assessing research in ‘real-time,’ centering our research on the political dimensions unfolding during policy preparation stages. Therefore, although we cannot yet trace direct empirical outcomes from the policy measures taking place, we believed it essential to produce timely, yet robust research on emerging policy situations. Indeed, criticism of peer-reviewed journal articles is that they tend to lag behind policy implementation, coming to the surface long after the policy moments have passed. We, therefore, believed it essential to develop the frameworks and study the experiences related to EEA policy preparations as they are currently being contested and reshaped.

Three methods were employed. The first included a comparative theoretical and policy approach, examining the origins of classical models, new conservation policies, and the similarities and differences between them. We drew from our collective understanding of the evolution of conservation laws in Indonesia. We contrasted the long term sustained policy engagement with a close document review of the EEA policy. This method directly maps to the results produced in Section 3.

The second methodological element drew from a series of studies on bureaucratic politics (Allison, 1971; Peters, 2001; Halperin, 1974; Giessen and Sahide, 2017b), which we applied to conservation policy in Indonesia. We also compiled methodological approaches in the form of frameworks for conducting studies on these topics (see Fisher et al., 2019; Sahide et al., 2018; Fatem et al., 2018; Tajuddin et al., 2019; Sahide et al., 2019; Rahayu et al., 2020; Sahide et al., 2020b). We thus tailored a framework for examining power dynamics on conservation policy in Indonesia, which includes the critical elements of actors and institutions, and incorporates the realm of policy struggles common among institutional dynamics in studies relating to natural resources. However, as we will show, the EEA consists of a distinct policy without direct precedence in the Indonesian conservation policy context, and therefore, we slightly tweaked our framework by including a key dimension that considers land characteristics. Our framework thus takes shape intending to provide clarity on whether the EEA will return to the classical top-down paradigm of the conservation bureaucracy, or whether the new contestations of the EEA policy can serve as a tool for anticipating and pre-empting the way a new conservation bureaucracy might take shape. The results of this approach of building a framework are presented in Section 4.

To extend beyond the conceptual dimensions of analysis, our third methodological approach is to apply the framework for assessing a set of cases undergoing EEA policy preparations, which is presented as results in Section 5. The lead author had the opportunity to facilitate a dialogue on initiating a multistakeholder forum on EEA at the karst ecosystem in Maros and Pangkep Districts of Sulawesi Selatan Province on October 25, 2019. This engagement required reviewing the policy basis, the official reports, interacting with the actors and institutions, and directly participating in facilitating discussions (Rahayu et al., 2019; Maryudi and Fisher, 2020). Meanwhile, the third author also served as part of the HCV assessments at a second site in private lands managed by PT Vale Indonesia Tbk in Malili, in September 2019 and January 2020.

### 3. Emergent conservation areas category: the new politics of conservation?

#### 3.1. Establishing and contesting conservation in Indonesia

Conservation areas date back to the colonial era as natural forest parks (Goss, 2011). These were at once tied to research, recreation, and interests in identifying new commodities for the colonial state (Brockway, 1979; Peluso, 1992; Scott, 1998). Conservation areas also became a global movement through the discourse and material establishments of national parks in the United States, which also sparked the creation of similar land management categories throughout the 20th century (Tsing, 2005). During the New Order era in Indonesia (1966–1998), a series of policies in the late 1960s established the zoning categories for conservation, followed by land surveys in the ensuing decades that expanded the area formally categorized as conservation areas (Peluso, 1995). Although surveys mostly prioritized natural resources for state economic development purposes, significant studies were undertaken to identify endangered and charismatic species, high conservation value regions, unique landscapes, and steep slopes as indicators for establishing protection and conservation forests. As part of international pressure for conservation and biodiversity, the national government passed a stringent conservation law in 1990, limiting zoning for any other uses beyond forest conservation.<sup>3</sup> This law followed the values model of the United States National Parks and public lands system established in the early 20th century, whereby people are seen as separate from nature, and subsequently justified the removal of people from areas designated for conservation (Myers et al., 2017). As widespread land enclosures by the state forestry bureaucracy increased evictions and enforcement to keep people out of conservation zones, opposition to these practices also began to influence international policies on governing people in forests (Gilmour, 2016). Particularly in regions where people held deep historical relations with landscapes and the environment, in which natural resources formed a central role in their livelihoods, and in which people played a crucial role in sustaining ecosystems, policies began to emerge to accommodate the role of communities as partners in forest management (Ostrom, 1990). Commonly described as community-based natural resource management (CBNRM), nature parks were critiqued for their dispossession effects and destabilizing effects on conservation, which led to the formulation of initiatives to explicitly involve communities in the management of natural resources on the premises of justice and livelihoods, and on the basis that local involvement in resource management was good for conservation (Zerner, 2000; Agrawal, 2005; Agrawal et al., 2006; Maryudi et al., 2012; Fisher et al., 2019, 2020). This broader policy objective of CBNRM has since sparked widespread international support, mainly through funding streams tied to bilateral and multilateral programs.

The reformulation of land management rights through the discourses of CBNRM continues to challenge the conservation law through various initiatives, particularly through the growing policy interest in Social Forestry (Fisher et al., 2018). Though joint management rights and collaborative landscape initiatives have succeeded in other forest zones, their policies remain a rigid legal construct for conservation areas that are still in effect. Indeed, several initiatives were unsuccessful in their efforts to conduct multistakeholder management arrangements in the name of collaboration in conservation zones. For example, the MEFOR<sup>4</sup> revoked a potential collaboration scheme (Santosa and

Setyowati, 2016), and has consistently denied community forestry schemes in conservation areas (Sahide et al., 2018).

Though the language of collaboration remains in many policies, the conservation bureaucracy leaves no room for interpretation that might trump their responsibility for upholding the stringent clauses embedded in the 1990 conservation law. Meanwhile, the EEA policy is an example of a conservation-orientated policy being applied beyond conservation areas. The opportunities for establishing new management guidelines on doing conservation outside of conservation zones present an opportunity for challenging the broader paradigm of how conservation is defined and what legitimizes activities. In this way, there is a sense that a new paradigm for approaching conservation elsewhere could be grounds for challenging the legitimacy of conservation zones.

#### 3.2. Origins of the EEA experiment

The origins of the EEA in Indonesia emerged through voluntary initiatives among the private sector. As part of growing global concern on illegal logging and rapid deforestation dating back to the mid-1990s, the Forest Stewardship Council (FSC) introduced the concept of High Conservation Value (HCV)<sup>5</sup> as a way for companies to gain certification of sustainable practices (Brown et al., 2013). Such certification schemes have since become famous, such as palm oil through the Roundtable for Sustainable Palm Oil (RSPO) (Ruysschaert and Salles, 2014). On a voluntary basis, large scale companies began to examine their value chains, identifying lands relative to their impacts on the environment. These voluntary certification schemes included stipulations on the environment and terms of engagement on interactions with local communities. Principles include aspects such as consultation and consent with communities, and in some cases, began to involve local communities as part of institutional arrangements that supported broader management practices for land management. Though still unusual, and often part of the “boutique market” of high-value goods (Edwards et al., 2012), there were several cases of success (Purwanto, 2019). However, institutional arrangements were unprepared for this global standard and did not have the policy mechanisms to implement them. In Sumatra, a palm oil company applied for RSPO through HCV standards for conservation on lands under their jurisdiction. However, due to regulations at the Agrarian Affairs Ministry/the Land Agency on the permit uses on those lands, the company was actually censured for not utilizing the concession land based on its permit (Sahide et al., 2015). In this way, even though the company tried in good faith to introduce conservation practices, they had difficulty implementing them due to the lack of institutional mechanisms for carrying out their interests in conservation.

Meanwhile, international conservation regimes, such as those shaped by the Convention on Biological Diversity, began to identify research that highlighted how many priority regions for conservation area located on lands beyond sites zoned for conservation (Smith and Maltby, 2001; Morand et al., 2017).. Indonesia also signed on to commitments to expand an additional 11% of the land area managed under some form of ecosystem conservation as ratified under Aichi targets (Antara, 2019). The official response resulted in the establishment of a specific directorate (Directorate General of Conservation of Natural Resource and its Ecosystem of MEFOR) tasked with overseeing the implementation of this process (MEFOR, 2019a, b). The HCV concept was also being translated into policy at that time, with its own institutional mechanisms termed *Areal Bernilai Konservasi Tinggi* (ABKT) (Purwanto, 2019; Widayati et al., 2018), which is also under the subcategory of

<sup>3</sup> Conservation Act 5/1990 on conservation of biodiversity and ecosystems

<sup>4</sup> Forestry Ministerial regulation P.85/2014 revoked Forestry Ministerial regulation 19/2004 concerning Collaborative Management of conservation areas where the role of the Conservation Unit manager is strengthened as the first party in conducting management cooperation, while in P.19/2004 other parties can act as initiator of collaborative management of KSA/KPA

<sup>5</sup> Indonesian regulations have translated High Conservation Value as Area Bernilai Konservasi Tinggi, which includes a list of core values as part of their assessments (see regulation the Directorate General of Conservation and Natural Resources and Ecosystem (KSDAE) through regulation No. P5/KSDAE/2017).

EEA policy and management. Four areas fall under the EEA category, such as wildlife corridors, wetland ecosystems, high conservation value areas, and biodiversity parks. That HCV has entered the Indonesian policy lexicon and includes policy instruments to implement it presents a unique development that could influence various bureaucratic mandates.<sup>6</sup> In Section 3.3 we explicitly highlight the differences between the classical bureaucracy and the emergence of the EEA policy instrument, thus teasing out the potential implications of new policy trajectories.

### 3.3. Classical bureaucracy vsv Voluntary conservation

Table 1 differentiates between formal conventional conservation areas and the new EEA conservation scheme by examining their overall governance principle, the areas/zones they can be applied, and the institutions that administer and manage them. The conventional conservation schemes are highly centralized, whereas the EEA areas are premised on voluntary arrangements. Classical conservation applies to areas that have long been established and zoned as a conservation area, with strict singular zones. EEAs are not intended to apply to other conservation areas, and the sites under preparation are located among various zoning categories, ranging from different types of public and commons lands and a variety of arrangements for private land. More detailed clarifications on these divisions are provided in Table 1.

## 4. A land and power framework for assessing EEA

This paper was co-submitted alongside a MethodsX paper, which provides a detailed explanation of our land and power framework. We have also presented the MethodsX paper as an appendix to this paper. We felt our approach to analyzing ongoing policy implementation was innovative in the way it tried to design a method that could support policy research in real-time. We, therefore, felt we needed a great deal more space to articulate the nuances within the mechanics of the framework. However, to ensure that the analysis in this paper can stand alone as an analytical piece, we also felt the need to provide an adequate summary of how we derived the framework and applied it to our results on the two case studies in Section 5.

The land and power framework is based on an interest-based power framework. What this means is that we examine the key bureaucratic actors and their power backgrounds by exploring dimensions of dominant information, coercion, and [dis]incentives (Krott et al., 2014; Sahide et al., 2020a). The EEA framework also considers these dimensions in terms of accountability across scales. One shortcoming among existing research on natural resources, however, is that this EEA proves challenging because it can apply across different land categories. Meanwhile, bureaucracies often have very rigid land management regulations and practices that determine applications and monitoring in a specific land category. Therefore our framework specifically established our analytical instrument by focusing on power across the land dimensions. In particular, we divided the analysis between private, public, and commons land arrangements. We also subdivided these land administration categories into state public lands (state forest or APL lands), whereby the leading proponents are either national state land managers, regional government land managers, or a multistakeholder entity of civil society sanctioned by the state (usually with international links). On private lands, we further subdivided the land categories as concessionaires among the large landholdings as distinct from the

<sup>6</sup> Indonesian HCV technical guidance on area identification outside natural reserve area, conservation area, and hunting park was released by the Directorate General of Conservation and Natural Resources and Ecosystem (KSDAE) through regulation No. P5/KSDAE/2017. This HCV approach gained legal support as part of the implementation process of the EEA policy and bureaucracy

privately-owned lands among smallholders. On commons lands, we describe emergent categories being formulated for recognizing communal and/or indigenous (customary) lands (Fisher et al., 2017).

The overall intent of the framework was to identify whether voluntary conservation initiatives such as the EEA would result in a new management approach. The heuristic is thus geared towards determining whether the bureaucracy will be “tied” to previous mechanisms, or whether we could identify the conditions whereby a new “anticipated” bureaucracy might take shape. By splitting the land category types, the framework helps to analyze the likely outcomes based on the framing of centralized conservation bureaucracy (CCB) versus a multistakeholder arrangement (MSA).

In Section 5, we turn to two case examples, evaluated through the heuristic of the land and power framework.

For the detailed framework, please see the MethodsX article on the method of “Land and power framework for assessing voluntary conservation development.”

## 5. Two EEA experiments: comparing cases on public and private land

To apply our methodology, we select two cases in the preparation process for EEA implementation. We recognize the limited availability of case studies but have already made the case that this should not create obstacles for examining emergent policies and their potential implications. Indeed we see the examination of preparation stages as an inherent strength of inquiry. The two sites include a case from the karst limestone of Maros-Pangkep, which is located on public lands. This case has already entered into a multistakeholder management forum. The second case is from an ecosystem corridor planned for the Malili ancient lakes region. This site is distinct from the first as it is located on private land, which involves a large corporation (PT Vale) initiating the early phases of preparation. The comparative between a private and public land case also fits nicely into testing the overall land-power framework.

### 5.1. The Karst limestone ecosystems of Maros-Pangkep: an EEA on public land

#### 5.1.1. Land and power in the Maros-Pangkep EEA

The Karst ecosystems of Maros-Pangkep, located north of the regional metropolitan area of Makassar, provide a majestic view of a unique landscape. Not only is it a striking landscape, but it is also unique for its biodiversity and local variation within the region (Brumm et al., 2019; Marwoto, 2008), with unique cultural differences (Duli and Mulyadi, 2019). At the same time, studies have shown particular sensitivity among local ecologies against external stressors (Clements et al., 2006; Ahmad and Hamzah, 2019). Furthermore, the karst region has also been identified for its strategic role as an important water resource for the region (Arsyad et al., 2016), not only in providing drinking water supply to the large populations in the lower valleys but also for irrigating the region’s vast paddy fields. Meanwhile, the karst is also site to a coveted mineral resource (Arsyad et al., 2016; Ahmad and Hamzah, 2019), and is also the site of lucrative economic activities for the many visitors that seek out the region’s views for tourism (Yusran et al., 2017). In 2017, the region was also identified for its strategic role in the development of a broader geopark region, and in 2019, the region was identified as an ASEAN World Heritage Site (ASEAN Biodiversity Centre, 2019).

Taken together, there are various institutional actors and jurisdictional considerations in managing the broader karst region. The Karst is the largest limestone area in Southeast Asia, which covers an area of around 46,200 ha. About 22,800 ha of the limestone karst has been protected as a National Park (Ahmad and Hamzah, 2019). Another 1,100 ha are allocated to PT Semen Bosowa (henceforth, Bosowa) for cement mining (Rusdianto, 2019), as well as another 715 ha to PT Semen Tonasa (Semen Tonasa, 2019). An additional 30,000 ha are

**Table 1**  
Comparison between EEA and formal conventional conservation areas in Indonesia.

	Formal conventional conservation areas – classical bureaucracy	EEA conservation areas – voluntary initiatives
Governance Principle (niche)	Relies on the protections of the state bureaucracy, which define conservation areas as highly enclosed and restricted areas to provide the maximum protection for ecosystems. The principle is highly centralized with authority controlled by the government	Based on polycentric governance involving potentially multiple institutions and actors that are dependent on the process and willingness of actors to yield vibrant ecosystem outcomes. In contrast, the principle in the conventional formal category premised on government, the EEA conservation areas are contingent upon governance
Location (land characteristics)	<i>Public areas:</i> State forest – conservation areas. These were historically identified as sites with unique ecosystems, landscapes, flora, and fauna, which were decided in a top-down fashion by the central government.	<i>Public:</i> State forests, such as production or protection forests), or sites with no permits or licenses <i>Public:</i> non-state forest area owned by the local government <i>Private:</i> Concession land with an existing license <i>Private:</i> Privately owned lands by smallholder or larger scale private business privately owned land <i>Common:</i> Indigenous lands or forests <i>Common:</i> Community cooperative lands or other means for co-management of land
Institutional and management considerations	Single institution administered and managed by the central government, MOEF (except for the <i>Tahura</i> forest parks, which is a regional management scheme under provincial and/or district government.	Multistakeholder institutions, Main actors (Conservation bureaucracies, Governor, Head of the district (Bupati/Walikota), Collaborative forum, Private business) Additional actors (indigenous actors, individual farmer) Single Institution, Governor, Head of the district (Bupati/walikota), Private company

located outside the conservation and mining areas (under the jurisdiction of the regional government). These lands are under the APL jurisdiction (area for other development purposes, located outside of the forest estate) and are viewed by formal institutional actors as largely unmanaged lands. In reality, any cultivable lands are generally claimed by local communities, or have been under the management of customary institutions for generations. These APL lands were identified for inclusion in the EEA, amounting to a total of 24,413 ha. We now turn to the ways that the institutional mechanisms emerged to implement the EEA, and describe how the multistakeholder elements were approached and applied, before assessing the extent to which the Karst example fits our framework as a tied or an anticipated model.

### 5.1.2. Establishing the Karst limestone EEA

As early as 2006, MEFOR provided an indicative map for potential EEAs in Indonesia. The initial idea for developing an EEA in the Karst region was thereafter formalized as part of the 2014–2019 national medium-term development plan. The Directorate for EEA management at MEFOR provided the indicative map. By 2017 however, there was no progress about the EEA, and without any proof of implementation, this would reflect negatively upon MEFOR achieving its targets. Budgets were allocated to begin fulfilling the various mandates. One of the key steps as part of decentralized governance systems in Indonesia, required a regional regulation to be prepared as a prerequisite for implementation. The Directorate supported consultancies in preparing the draft regulations to fulfill the overall programmatic mandates. Meanwhile, in coordination with the regional MEFOR implementing unit, The South Sulawesi Natural Resource Conservation Agency (Balai Konservasi Sumber Daya Alam Sulawesi Selatan, or henceforth BKSDA), invited and convened local partners to identify the specific location of the EEA. Two main actors were invited by BKSDA, including conservation researchers from the local university (Universitas Hasanuddin) and Burung Indonesia (as an NGO/civil society representative). BKSDA also involved the management organization of the Geo Park Karst Maros-Pangkep and reached out to related regional local government agencies, such as provincial bodies, as well as the Maros and Pangkep districts. The mining corporations PT Semen Bosowa and PT Semen Tonasa were also encouraged by BKSDA to be involved in the EEA scheme but declined the inclusion of their concessions as part of the EEA. However, the mining corporations remained eager to be part of the overall EEA multistakeholder forum.

### 5.1.3. An EEA tied to the conventional bureaucratic model

The conceptual guiding process for preparing EEAs is designed in very deliberate steps, including the identification of sites, establishment, and dialogue among collaboration forums, which then lead to the results of the broader mapping of the site agreed upon by the forum. Once these steps are completed, only then are the sites formalized and designated as EEAs, which is then followed by EEA management formalization. These steps are taken from those listed out in the draft ministerial regulation on the protection of essential ecosystem area). However, the EEA process implemented at the Karst site points to a process that was geared towards fulfilling the technocratic requirements.

There are a couple of key areas that point to the continued application of bureaucratic processes tied to previous norms. First, the composition of the forum shows that there was minimal dialogue or representation. Only larger formal organizations were invited. Local NGOs that had long been working within the site area were not invited to participate in the process. Second, the extent of the land area was also seemingly arbitrarily selected, and the basis for the delineation of the map remains unclear. Key indicators that point to a new bureaucratic model for conservation area management revolve around representation and the establishment of joint monitoring targets that fulfill mutual interests on conservation and site management. Indeed, the approach to establishing the EEA has not followed any significant interest in establishing responsive management among the key stakeholders that might have vested interests or hold key roles in biodiversity conservation. Indeed establishment of the EEA has focused its attention on fulfilling technocratic requirements as defined by central actors at MEFOR rather than establishing targets premised on responsive multistakeholder processes (Fig. 1).

## 5.2. An EEA on the ecosystem corridors of the Malili ancient lakes: A private land example

### 5.2.1. Land and power at the Malili ancient lakes EEA

The Malili ancient lakes consist of an extremely vulnerable and unique ecosystem (von Rintelen et al., 2007). The lake complex, which includes the Matano, Mahalona, and Towuti lakes have unique ecosystems, exceptional faunal endemism, and floral diversity (Costa et al., 2015). The lakes are known as ancient lakes for their ecological characteristics and are extremely sensitive to invasive species, water pollution, and the way that water levels are regulated (Sirimorok and

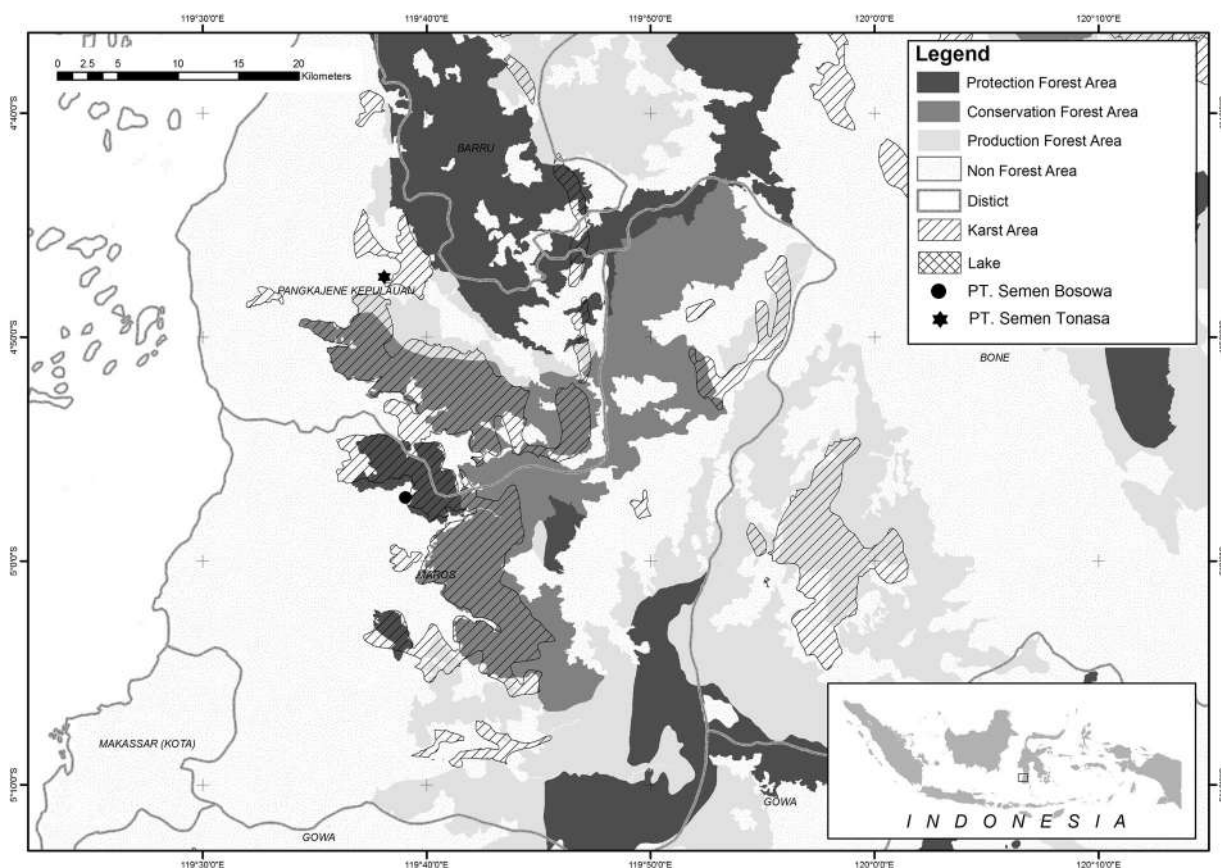


Fig. 1. The karst limestone area ecosystem in Maros and Pangkep.

Rusdianto, 2020). One of the key stressors affecting the lakes are not limited to what occurs within the lakes, but also the ecological processes that take place in the terrestrial ecosystems around the lake. Not only do the surrounding areas provide a pivotal buffer to the lakes, but these ecosystems are also unique for their biodiversity, including habitats for several endemic and threatened species, the Maleo (*Macrocephalon maleo*), and Anoa (*Bubalus quarlessi*) (Whitten and Henderson, 2012). Although the lake complex itself is already designated as a conservation area, MEFOR has acknowledged the importance of connecting the terrestrial and lake areas under a more integrated corridor conservation framework.

Nevertheless, the surrounding terrestrial areas are controlled by several land use and zoning authority, including a large international mining corporation (PT Vale), protection forests<sup>7</sup>, and production forests (see Fig. 2, Robinson, 1986). MEFOR recognizes the inconsistencies of assigning a conservation area limited to the lakes, which is further fragmented by different land ownership authority and uses and has sought to bring together the various actors for a more comprehensive approach. Meanwhile, PT Vale, as the largest nickel mining company in the world, has faced external pressures from activists on both social and environmental issues (Robinson, 2019). The company is also engaged in various corporate social responsibility (CSR) initiatives, in part to improve their standing among multiple stakeholders. Their CSR profile includes various community engagement activities, and more recently, PT Vale has sought to incorporate conservation programming into their CSR portfolio. As a result, PT Vale mobilized consultants and engaged with authorities to conduct assessments to fulfill their HCV

<sup>7</sup>In Indonesia, protection forests are distinct from conservation forests. Protection forests are designated to protect water resources and address erosion concerns, while conservation forests are specifically designated for species protection.

commitments.

#### 5.2.2. CCB – MSA of the Malili ancient lakes

In expanding the areas of the EEA, MEFOR identified PT Vale as a strong partner. PT Vale conducted their HCV assessments through a well-funded and professional team, providing a strong basis for scaling up the assessments to form an EEA. The company's approach to the HCV assessments also applied the formal guiding principles listed in MEFOR's<sup>8</sup> conservation bureaucracy. PT Vale quickly mobilized the consultant team using their own funds, hired consultants to follow the seven principles of HCV contained in the policy, and identified potential spots to be included in the possible EEA site. Similar to the Maros-Pangkep case, the multistakeholder arrangements proceeded quickly, but because the land, in this case, was private land, there was even less of a mandate to reach out to other stakeholders. In this way, PT Vale worked through their consultant team of experts and expanded on their existing relationships with an NGO, Burung Indonesia (the national branch of Birdlife International), to conduct their assessments.

#### 5.2.3. Indications of an EEA tied to the conventional bureaucracy

Conducting HCV requirements 1–7 requires a considerable amount of time. However, the consultant contracts were limited in scope to fulfill the fact-finding dimensions, and the push to create an EEA was streamlined to follow material documentation against existing regulations. The fact that the EEA process is unfolding on private lands with a high degree of autonomy of a powerful land manager, in this case, has reduced the incentive to engage in more collaborative stakeholder

<sup>8</sup>In the form of Directorate Generale regulation 2017 on ABKT. The Indonesian version of ABKT, although mirroring the HCV requirements, slightly differ. For the purposes of this paper, we still apply the terminology of HCV for broader international readership and familiarity.

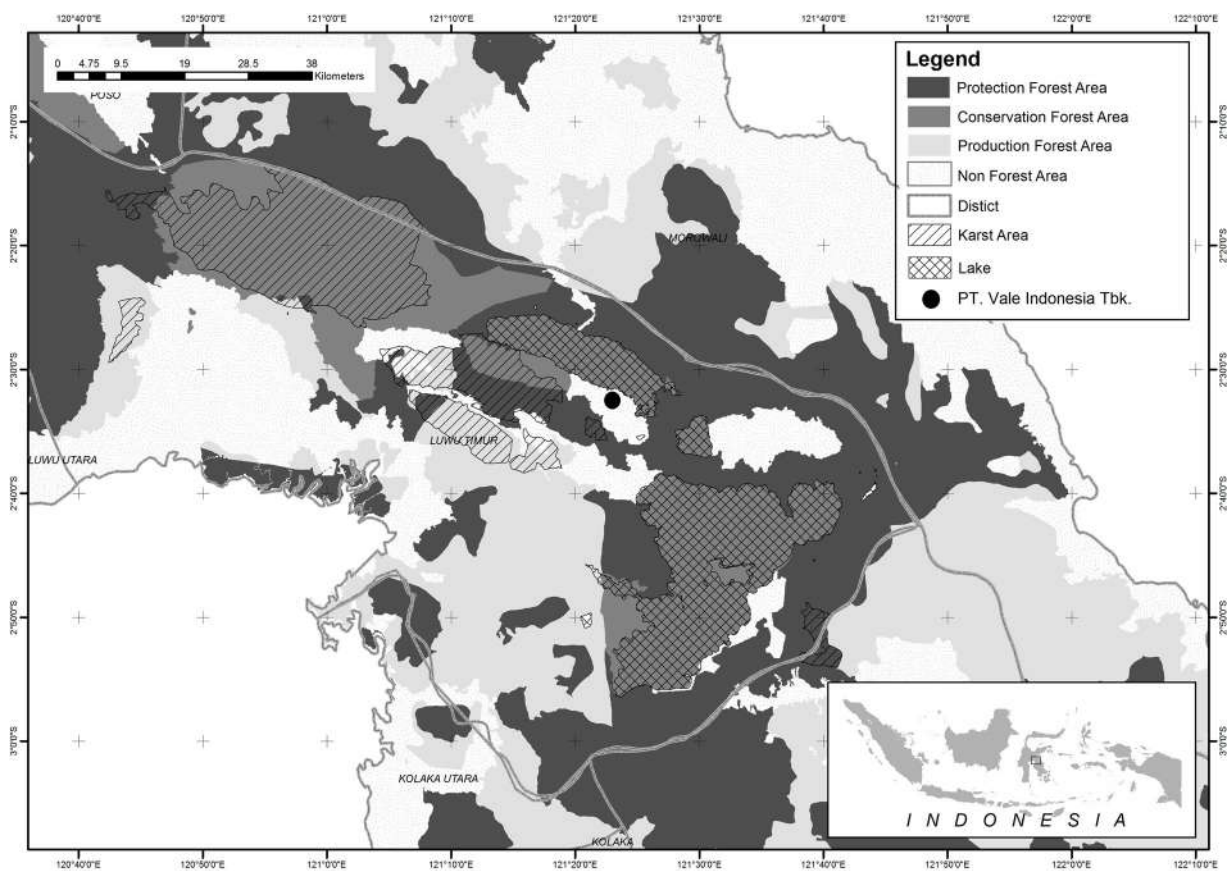


Fig. 2. The ecosystem corridors of the Malili ancient lakes.

forums that involve different actors. Indeed, PT Vale is comfortable following the instrumental policy dimensions, taking their cues from the existing conservation guidelines at MEFor without feeling the need to develop any meaningful targets that respond to other relevant partners. The historical issues associated with dispossession and the sensitivity of the extractive land development model has also led PT Vale as the main proponent to proceed cautiously with the sharing of information and led them to focus their interests on remaining compliant with national regulations. As a result, our assessment of this case points to seeking safety in the rearticulation of existing conservation policy, leaning on the dominant information of the classical conservation bureaucracy while maintaining overwhelming decision making autonomy and authority. Though still in the early stages of preparation, it is likely that this case does not point to a new paradigm of multi-stakeholder collaboration or the establishment of a new conservation model. Rather, PT Vale seems to prioritize the material interests of being legal, and although expressing a willingness to mobilize experts and finance the necessary assessments, they are less interested in establishing new mechanisms for more responsive and deliberative approaches to conservation.

## 6. Conclusion

According to the regulations, replacing the classical conservation bureaucracy model with the new voluntary mechanisms envisioned by EEA policy is not as easy to achieve as it might seem. We began by conceptually differentiating the two different policy approaches and highlighted the opportunities for a new model of conservation to emerge from outside of the classical conservation zones, pointing to the potential of new models to supersede the classical models from outside the conservation zone. We developed a framework for testing this policy potential at existing sites, and also sought to apply its heuristic at

two cases experimenting with early policy implementation. The framework we developed takes its strengths from the ability to categorize the overall background of land and power at the EEA sites. Several key findings emerge from our research.

The first is not only in the land and power framework that we propose for studying global interests to apply a new conservation area management model but also for the way that we approach studying policy in parallel with its formulation. Research often comes to its conclusions long after the policy moment has passed. Here we present a build-as-you-go framework that we envision others can apply to various stages of policy preparation. We believe that this model will serve to help researchers describe the challenging realities that exist in conservation area management in Indonesia, both in the classical and the newly proposed zones, even long after the policy moment passes.

Secondly, the site-specific findings of this research in the two cases we have explored – one on public and another on private lands – were unable to establish a new conservation paradigm beyond the classical approaches to conservation area management. The stakeholders at each site did not apply a new model that is responsive and deliberative of local and broader conservation interests. Over time, initiatives were trapped within the closed doors and rigid structures of the classical model, and although sites were outside of the classical conservation zones, they were relegated to the same treatment of classical bureaucratic conservation processes. In other words, though the cases were envisioned to apply a new model for conservation outside of the conservation zones, the bureaucratic considerations were interpreted from the viewpoint of the classical conservation bureaucracy. Although we showed these findings at the two sites examined, the findings cannot be generalized across all 35 EEA cases currently being proposed across Indonesia. Indeed in other provinces and districts, with other actors and contexts that can influence the process in different ways, there may be opportunities to establish new pathways for management regimes that

are more responsive to the broader vision of EEA policy.

The two sites also suggest a third early finding that requires further inquiry. These sites point to the ease that existing institutions go about co-opting the lofty goals of international initiatives through the quotidian processes of bureaucratic power such as, in this case, on EEA (and HCV) applications, and how quickly the bureaucratic instruments, in turn, mobilize to undermine them. Nevertheless, the findings from these two cases also highlight several principles for consideration in the policymaking process. The most obvious is in the process of creating and establishing the map. Even though the maps in these cases are still indicative, they were also quickly promoted to push for meeting formal area targets. More participation during these mapmaking decisions that allow meaningful stakeholder engagement could serve to introduce greater upward accountability. The same also applies to the comprehensive needs assessment, whereby planning processes and overall approaches for determining priorities and indicators are rooted in transparency and accountability that is more representative of key stakeholder interests, rather than pursued meeting formal bureaucratic targets.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.landusepol.2020.104789>.

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