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--
Dr. forest. Muhammad Alif K. Sahide
Editor-in-Chief, Forest and Society

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I also think that the section referring to the MethodsX article (and where it says insert the MethodsX article) needs some work. I have suggested that you work in some of the key messages from the MethodsX article, appropriately referenced. I think that this would make the manuscript flow better. (Particularly as the MethodsX article is a standalone article). I apologise for any confusion around this section.

-Reviewer 2

-
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I agree that the paper has value as early analysis on a policy process that is unfolding in real time, and the authors are perhaps rightfully cautious in drawing generalized conclusions in this regard. However, this has also taken away some of the impact of this paper could have to inform the policy process. The authors indicate in their response that "this work is important for international policies claiming lofty ideals about how new conservation policies can succeed in establishing more collaborative and deliberative approaches for people and forests". As such, the authors could briefly discuss the elements that are missing from their review of the 2 cases that could enable these collaborative and deliberative approaches and contemplate what might be needed in a revised future EEA policy that would support such transformative practices in the conclusion section.

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BAGIAN 2:

- **Original Manuscript**
- **Manuscript revision & the explanation of revision**
- **Accepted manuscript**

SUBMITTED MANUSCRIPT:

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

Abstract

Essential Ecosystem Areas, as an emerging policy in Indonesia, is being established as an instrument to expand protections for conservation areas at sites beyond the classical domain of the conservation bureaucracy. Indeed recent research has identified that high conservation values are often located outside of areas designated as formal conservation areas. The Essential Ecosystem Area policy provides a foundation for justifying conservation practices at sites on the basis of 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 on a voluntary basis, even in areas that might not have been historically thought of as conservation areas, and which is unusual because it applies for all land categories including private and public lands, as well as areas under commons arrangements. In this article we introduce the Essential Ecosystem Area 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 Essential Ecosystem Area implementation. Our organizing framework consists of several elements based on existing land and power characteristics, which we connect to the resultant institutions that could emerge amidst these new policy arrangements. We apply the framework to two emerging cases in Sulawesi Selatan to examine whether Essential Ecosystem Area policy anticipates a new future of conservation management or remains tied to existing rigid bureaucratic structures. Findings from the two cases, point to the latter.

Keywords: essential conservation areas; voluntary conservation; conservation bureaucracy, multi-stakeholder collaborative forum; Indonesia

1. Introduction

The classical conservation model is premised upon the separation of man from nature, and indeed has led to the eviction of many from sites designated for conservation (Sahide, Fiser et al., 2018). Although a global movement since the 1980s has started the acknowledgement of, and role for communities in natural resource management and conservation (Brosius et al., 1998), the legacy of strictly bounded and controlled conservation areas denying access remain a central feature of policy (Peluso, 1993). Indeed, the bureaucratic systems that manage conservation areas are extremely 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 zoned uses within conservation areas, they are typically made for particular niche uses that remain highly restrictive such as viewing and tourism purposes or limited non-timber forest product harvests, and thus rarely present the opportunity to formalize the role of local communities in managing lands that they might have claim to for generations (Sahide, Fisher et al., 2018).

Meanwhile, rates of land use change and deforestation in tropical forests pose immense concern among global interests groups to protect conservation areas and expand them.

International regimes continue to press for more stringent and expanded policies for ensuring conservation outcomes (Giessen and Sahide, 2017). Indeed, recent studies have shown that achieving formalized conservation targets will require a strategy beyond those in spatial boundaries of conservation areas (Direktorat Bina Pengelolaan Ekosistem Esensial of MEFor, 2018). For one, the SRAK Indonesia study (2007-2015) found that 75% of orangutan are located outside of conservation areas. In Kalimantan, 60% of protected species are located outside conservation areas, in areas such as production forests or among oil palm plantations (Meijaard et al., 2011). In other studies, 80% of protected area species habitats are located outside of conservation areas (Geldmann et al., 2013). In other words, conservation policy and area management has in recent years been about finding new ways to engage on policy instruments beyond conservation areas.

This paper is about the Essential Ecosystem Areas policy,[1] which is one instrument that seeks to establish conservation area management mechanisms beyond the classical areas of the conservation bureaucracy in Indonesia. 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 involved numerous stakeholders, engaging across land classifications of public and private lands, as well as the commons. The policy is also viewed as a strategic mechanism among various actors. On the one hand the policy does not challenge conservation areas on the rights of other institutions and communities to take part in the management plans because the proposed areas are located outside conservation areas. On the other hand however, the EEA creates a new paradigm of possibility that some envision could one day break down the rigid structures of the conservation bureaucracy towards more collaborative approaches.

This paper examines to what extent the EEA policy are changing conservation politics in Indonesia. To do this we first examine the context for the emergence of the EEA policy and compare it with the hallmarks of the classical conservation policy paradigm. Second we propose a set of principles that form a framework for assessing EEA implementation, which consider land characteristics, actors and institutions, and the power struggles that determine outcomes. In the third section of this paper we apply the framework by assessing the challenges for implementation as sites preparing to apply the scheme. To do this we examine the benefits among those that are interested to take part in the EEA scheme, the burdens that potential sites take on, and the likely contestations that structure implementation. By providing this holistic setting of an emergent and innovative policy that at the moment seems beyond the confines of the bureaucracy, we conclude by considering whether EEA represent a potential breakthrough, or whether implementation will reinforce the status quo.

[1] It is realised that there is no strong formal definition of this policy. In Indonesian the Essential Ecosystem Area policy is entitled *Kawasan Ekosistem Esensial*, which is relied on the Government Regulation No.108 year 2015, with a paragraph that regulates the protection of nature preservation area and nature reserve area, including the protection activities of essential ecosystem area (EEA). MEFor has now drafted the formulation of MEFor Regulation about Protection Guideline of Essential Ecosystem Area, which is currently under discussion for finalisation and stipulation.

2. Methods: Reflexive theoretical framework supported by case studies

As of December 2019, at the conclusion of this research, the EEA policy is still a draft policy. 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 as real time considerations, meaningful for the actions and reactions taking place during preparation stages. Therefore, although we cannot yet trace direct empirical outcomes from the policy measures taking place, we believed it important 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 important 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, by examining key elements from classical models that would normally consider the similarities and differences with the EEA. We drew from our collective understanding of the evolution of conservation laws in Indonesia, and contrasted the long term sustained policy engagement with a close document review of the EEA policy. The second methodological element involved drawing from a series of studies on the bureaucratic politics (Allison, 1971; Peters, 2001; Halperin, 1974; Giessen and Sahide, 2017) of conservation in Indonesia, which introduced methodological approaches in the form of frameworks for conducting studies on these topics (See Fisher, et al., 2019; Sahide, Fisher, et al., 2018; Yusran, Sahide, et al., 2017). Applying a common umbrella for examining conservation bureaucratic politics (i.e. under the classical framing of power dynamics), we tailored a framework that includes actors and institutions that incorporates the realm of policy struggles among institutional policy dynamics in the natural resource sector. However, as the EEA consists of a distinct policy without direct precedence in the Indonesian conservation policy context, we slightly tweaked our framework by including a key dimension of land characteristics. This framework in particular, takes shape in its ability 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.

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. The lead author had the opportunity to facilitate a multistakeholder dialogue on initiating 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. Another author also served as part of the preparation teams for the HCV assessments at a second site in private lands managed by PT Vale Indonesia Tbk.

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 in Java and the Malukus. These were at once tied to the interests of research as well as identifying new commodities for the colonial state (Brockway, 1979; Peluso, 1992; Scott, 1998). Conservation

areas also became a strategic global movement, through establishments like national parks in the United States, that also sparked the creation of management systems throughout the 20th century (Tsing et al., 2005). Throughout the New Order era in Indonesia (1966-1998) a series of policies in the late 1960s established the zoning categories for conservation, in which a series of land surveys in the 1970s and 1980s expanded the area formally categorized as conservation areas. Although those policies and surveys privileged the identification of lucrative natural resources for international trade, a major part of the surveys identified endangered and charismatic species, high conservation value, unique landscapes, and steep slopes as the indicators to establish conservation areas. As part of international pressure for conservation and biodiversity, the national government passed a stringent conservation law in 1990.[2] 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).

Meanwhile, In the 1980s, opposition increased on the strict and often violent divisions of people from conservation zones, particularly in regions where people held deep historical relations with landscapes and the environment, in which natural resources form a central role in their livelihoods, and in many cases people play a crucial role in sustaining particular ecosystems. In this overall discursive and policy movement for community based natural resource management (CBNRM), nature parks were critiqued for their dispossessory effects and led to initiatives explicitly involving communities in the management of natural resources on the premises of identity and livelihoods, and on the basis that local involvement close to the resource were good for conservation (Zerner, 2000; Agrawal, 2005; Agrawal et al., 2006; Maryudi, et al., 2012; Fisher, et al., 2019). The role of community in conservation has also sparked large scale international support, particularly through funding streams tied to bilateral and multilateral programs.

Although over the years several initiatives have sought to challenge the conservation law, its policies remains a longstanding legal construct that is still in effect. Meanwhile, Indonesia tried to open up new management opportunities on conservation zones beyond the conservation bureaucracy by introducing a policy on collaboration management under international conservation support (Sahide, Fisher et al., 2018). However, after a decade of largely unsuccessful efforts to conduct multi-stakeholder management arrangements, the Forestry Ministry[3] revoked the collaboration scheme (Santosa and Setyowati, 2016). Though the language of collaboration remains in many policies, the conservation bureaucracy leave little room for interpretation beyond their responsibility for upholding the stringent clauses embedded in the 1990 conservation law.

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 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) as a way for companies to gain certification of sustainable practices. Such certification schemes have become popular since, such as the close attention of palm oil through

[2] Conservation Act 5/1990 on conservation of biodiversity and ecosystems

[3] 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

the Roundtable for Sustainable Palm Oil (RSPO). On a voluntary basis, large scale companies began to examine their value chains, identifying lands that had impacts on the environment. These voluntary certification schemes included certain recognized forms, that not only served to assure protections to the environment, but also included stipulations related to interactions with local communities. Such principles would 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 at a HCV standard for conservation practices on lands under their jurisdiction (Sahide et al., 2015). However, due to regulations at the Agrarian Affairs Ministry / the Land Agency on the permit uses on those lands, the company actually were censured for not utilizing the concession land based on its permit. In this way, even though the company tried to introduce conservation practices, the institutional mechanism were unclear on how to implement them.

Meanwhile, international conservation regimes, on the Convention on Biological Diversity, began to identify that a lot of key conservation areas are located in lands beyond sites zoned as conservation. Indonesia also signed on to commitments to expand conservation interests beyond conservation zones to an additional 11% land area managed as ecosystem conservation (under Aichi targets) (Antara, 2019). Indonesia created a specific directorate (Directorate General of Conservation of Natural Resource and its Ecosystem of MEFor) to oversee the implementation of this process (MEF, 2015). The notion of HCV were also being translated into policy and institutional mechanisms as *Areal Bernilai Konservasi Tinggi (ABKT)* (Purwanto, 2019; Widayawati et al., 2018), which is also under the sub category of EEA policy and management. Insight EEA policy, therefore there are four areas categories such as wildlife corridor, wetland ecosystem, high conservation value areas, and biodiversity park. That HCV in the Indonesian context has entered the Indonesian policy lexicon and includes policy instruments to implement it presents a unique development.[4] In section 3.3 we highlight the differences between the classical bureaucracy and the emergence of the EEA policy instrument.

3.3. Classical bureaucracy vs voluntary

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 areas apply 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 areas, and the sites under preparation are located on various zoning categories, that range 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, below.

[4] 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

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 process and willingness of actors to yield vibrant ecosystem outcomes. In contrast the principle in the formal conventional category premised on government, the EEA conservation areas are contingent upon governance.
Location (land characteristics)	*Public areas:* 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.	*Public:* State forests, such as production or protection forests), or sites with no permits or licenses. *Public*: non-state forest area owned by the local government. *Private*: Concession land with existing license. *Private:* Privately-owned lands by smallholder or larger scale private business privately owned land *Common:* Indigenous lands or forests *Common*: 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 *Tahura* forest parks, which is regional management scheme under provincial and/or district government.	**Multi Stakeholder institutions,** - Main actors (Conservation bureaucracies, Governor , Head of the district (Bupati/walikota), Collaborative forum, Private business) - Additional actors (indigeneous actors, individual farmer) **Single Institution** - Governor , Head of the district (Bupati/walikota), - Private company

4. A land and power framework for assessing EEA

----Insert Methodsx in the attachment. ***This section can be seen in the attachment as MethodsX as part of this manuscript submission*** **------**

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

To apply our methodology we select two cases in the process of preparing implementation mechanisms and plans for EEA. We recognize the limited availability of case studies, but have already made the case that this should not create obstacles to examining emergent policies and their potential implications. These are a case from karst limestone Maros-Pangkep on public lands that already entering for multi stakeholder management forum, and a case from ecosystem corridors of the Malili ancient lakes on private land in PT Vale that on the initial phase development

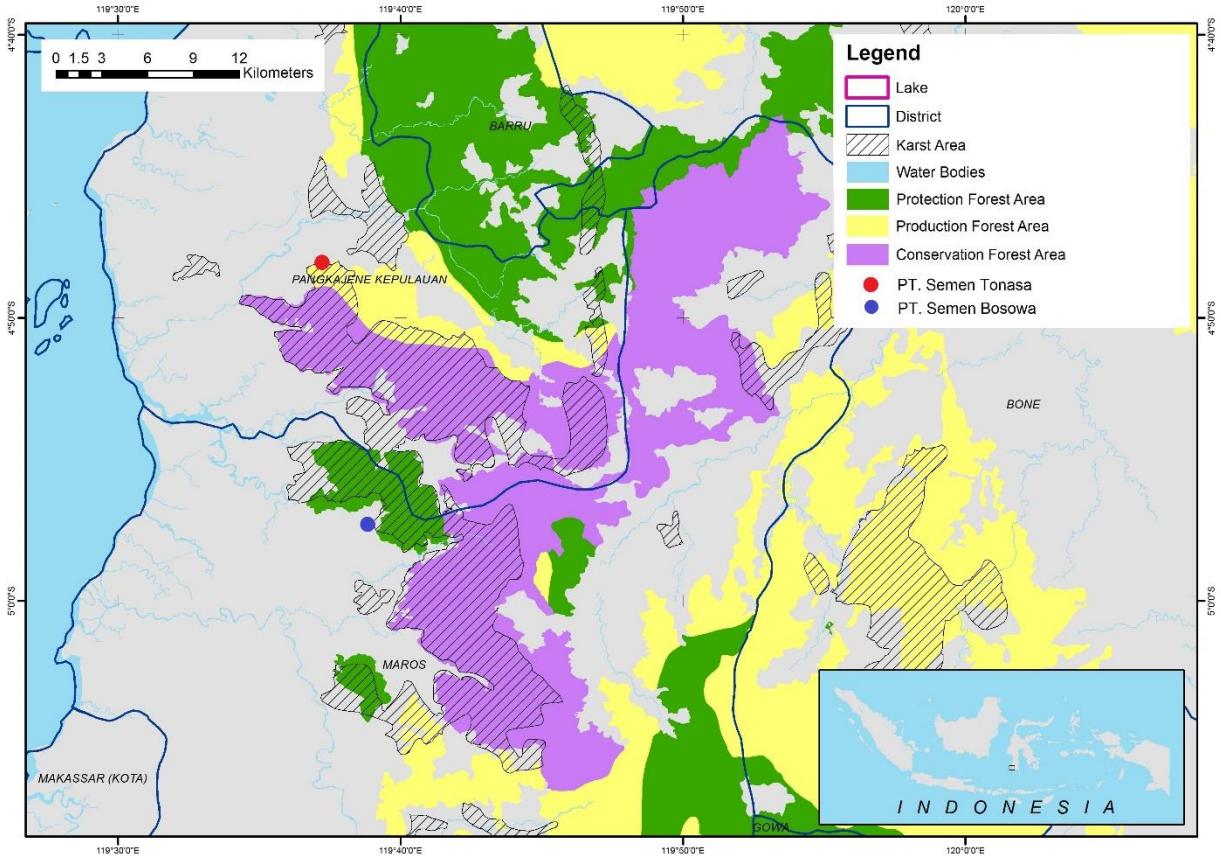
5.1. An EEA in the Karst Limestone ecosystems of Maros-Pangkep: A public lands example

5.1.1. Land and power in the Maros-Pangkep EEA

The Karst ecosystems of Maros, located north of the regional metropolitan area of Makassar, provides a majestic view of a unique landscape. Not only is it a striking landscape, the site is also unique for its biodiversity, which is also diverse and differentiated within the region from one location to the next (Brumm, 2019; Marwoto, 2008) as well as unique social interaction (Duli and Mulyadi, 2019). At the same time, studies (Clements et al., 2006; Ahmad and Hamzah, 2016) have shown a particularly sensitivity of local ecologies, in which external stressors have a more profound impact in these systems compared to others. 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 a large population, but also for irrigating vast valleys of paddylands. Meanwhile, the karst also provides a unique resource and is also the site of lucrative economic activities as a visitors experience for tourism (Yusran, Sahide et al, 2017), but also regions for extractive mining purposes (Arsyad et al., 2016; Ahmad and Hamzah, 2016). In 2019, the region was identified as an ASEAN world heritage site (ASEAN Heritage Park, 2019). In 2017, the region was also identified for its strategic role in the development of a broader geopark region .

Taken together, there are various institutional actors and jurisdictional considerations in managing the broader karst region. The Karst limestone region is claimed as the largest limestone area in Southeast Asia, which includes around 46,200 hectares. About 22,800 hectares of the limestone karst has been protected as National Park (Ahmad and Hamzah, 2016). Another 1,100 hectares is allocated for to PT Semen Bosowa (henceforth, Bosowa) for cement mining (Rusdianto, 2019), as well as another 715 hectares to PT Semen Tonasa (PT. Semen Tonasa, n.d). Another 30,000 hectares are located outside the conservation and mining areas (under the jurisdiction of the regional government as APL lands). These APL (area for other purposes category) lands are viewed by formal institutional actors as largely unmanaged lands, but in reality, cultivable lands are generally claimed by local populations, or are under the management of customary institutions. These APL lands were identified for inclusion as the EEA, amounting to a total of 24,413 hectares. PT Semen Bosowa and PT Semen Tonasa were also encouraged to be involved in the EEA scheme but declined inclusion of their concessions as part of the EEA. However, they remained eager to be part of the overall EEA multistakeholder forum. We now turn to the ways that the institutional mechanisms emerged to implement the EEA, and describe how the multi-stakeholder elements were approached and applied, before assessing the extent to which the Karst example fits a tied or an anticipated model.

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



5.1.2. CCB - MSA of the Karst Limestone EEA

MEFor provided an indicative map for potential EEAs in Indonesia in 2006. The initial idea for developing an EEA in the Karst region was formalized as part of the 2014-2019 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 preparing and 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 support consultancies in preparing the draft regulations to fulfill the overall program mandates. Meanwhile, in coordination with the regional MEFor implementing unit, The South Sulawesi Natural Resource Conservation Agency, invited and convened local partners to identify the specific location of the EEAs. Two main actors were invited by BKSDA, including conservation researchers from the local university (Universitas Hasanuddin) and Burung Indonesia (as an NGO / civil society representation). BKSDA also involved the management of Geo Park Karst Maros-Pangkep, and related regional local government agencies, such as provincial bodies, as well as the Maros and Pangkep districts.

5.1.3 An EEA *tied* to the conventional bureaucratic model

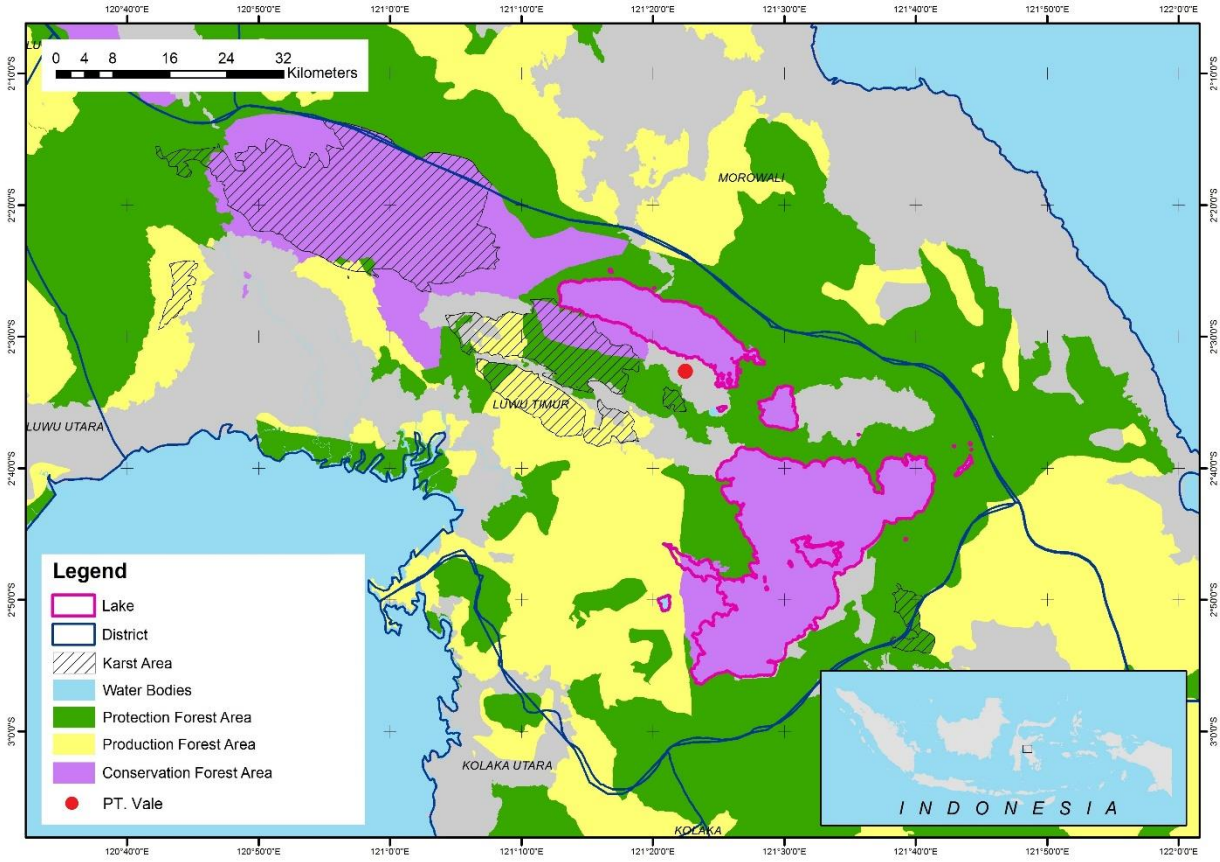
The conceptual guidance processes for preparing the EEAs are designed to be conducted in very deliberate steps, including the identification of sites, establishment and dialogue among collaboration forums, which then lead to the results of the broader mapping agreed upon by the forum. Only then are the sites formalized and designated as EEAs, which is followed by EEA management formalization (these steps are taken from those listed out in the draft ministerial regulation on the protection of ecosystem essential area). However, the experience described above about 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 process tied to previous norms. First, the composition of the forum shows that there was very limited dialogue or representation. Only larger formal organizations were invited, and local NGOs that had long been engaged on activities 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 bases for the delineation of the map remains unclear. Aside from these two key indicators of representation and site selection, the management plans and target achievements, particularly the monitoring of such aspects do not highlight meaningful approaches for responsive management to local aspects of key biodiversity. Indeed the interests remain trained on achieving fulfilling technocratic requirements than responsive multi stakeholder processes geared towards fulfilling targets.

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

5.2.1. Land and power of the Malili ancient lakes EEA

The Malili ancient lakes consists of an extremely vulnerable and unique ecosystem (von Rintelen, 2007). The lake complex, which consists of the Matano, Mahalona, and Towuti lakes have unique ecosystems, exceptional faunal endemism and floral diversity (Costa et al., 2015). For these unusual features, the lakes are known as ancient lakes, of which are extremely sensitive to invasive species, water pollution, and the way that water levels are regulated (Sirimorok and Rusdiyanto, unpublished). 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 key buffer to the lakes, these ecosystems are also unique for their biodiversity, including habitats for several endemic and threatened species the Maleo and Anoa (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.

Figure 2. The ecosystem corridors of the Malili ancient lakes



Nevertheless, the surrounding terrestrial areas are controlled by a large international mining company (PT Vale), protection forests[5], and production forests (see Figure 2, Robinson, 1986). MEFor recognizes the inconsistencies of assigning a conservation area limited to the lakes, which is further fragmented by different land ownership and uses, and has sought to bring together the different actors for a more comprehensive approach. Meanwhile, PT Vale, as the largest nickel mining company in the world, which has faced external pressures from activists for both social and environmental engagement (Robinson, 2019), aims to improve their standing by promoting corporate social responsibility (CSR). Their CSR profile includes a long list of community engagement, and more recently, PT Vale has sought to incorporate conservation programming into their portfolios. As a result, PT Vale mobilized consultants and engaged with authorities to conduct assessments to fulfill their HCV commitments.[6]

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 Value had already begun their HCV assessments, providing a strong basis for scaling up the assessments

[5] In Indonesia, protection forests are distinct from conservation forests. Protection forests are designated to protect water resources and address erosion, while conservation forests are specifically designated for species protection.

[6] 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).

to form the basis for the EEA. The company's approach to the HCV assessments also applied the formal guiding notes of MEFor[7] from the conservation bureaucracy. PT Vale quickly mobilized the consultant team using their own funds, hired consultants to follow the seven principles of HCV listed in the policy, and identified potential spots to be included in the emergent EEA. Similar to the Maros-Pangkep case, the multi-stakeholder 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 are limited and the push to create an EEA has also streamlined the process to follow existing regulations. The fact that the EEA process is unfolding on private lands with a high degree of autonomy to the land manager in this case has reduced the incentive to engage in more collaborative stakeholder forums that involve different actors. The historical issues associated with dispossession and the sensitivity to extractive land development model has also led the main proponent PT Vale to proceed cautiously with the sharing of information while still remaining compliant with national regulations. As a result, our assessment of this case points to a rearticulation of existing policies, leaning on the dominant information of the classical conservation bureaucracy while maintaining overwhelming decision making autonomy by the main proponent. 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 and responsiveness to the local targets. Rather, it seems to prioritize the interests of staying legal and fulfilling the basic requirements that point to the benevolent interests of the main actors that also support the national bureaucracies to meet their targets.

6. Conclusion

According to the regulations, replacing the classical conservation bureaucracy model with the new voluntary mechanisms envisioned by EEA policy are 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, further pointing to the potential for a new models to reshape old ones. We developed a framework for testing this policy potential at existing sites, and also sought to apply the framework at cases that are experimenting with early policy implementation. Nevertheless, the framework we develop takes its strengths from categorizing the overall background of land and power at sites for EEA application. There are several key findings that emerge from our research.

The first key contribution of our study is not only in the land and power framework that we propose for studying the global interests in applying a new model for expanding conservation area management, but also for the way that we approach studying a policy in parallel with its

[7] 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.

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 the stages of policy preparation. We believe that this model will serve to help researchers to 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 may pass.

Secondly, the core finding of this research is that 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 were unable to establish a new responsive and deliberative model based on achieving local targets. Overtime initiatives were trapped within the closed doors and rigid structures of the classical model, rendering them to the same outcomes commonly experienced in conservation area management. Therefore, though the cases are being prepared and implemented outside the classical conservation zones, their approaches still rely upon the comfort and safety of the existing bureaucratic norms. Though this is the case at the two sites examined, the findings cannot be generalized across all 35 EEA cases currently proposed across Indonesia. Indeed in other provinces and districts, with other actors and contexts that can influence the process in different ways, they can serve to establish new pathways for achieving the broader policy interests that many envision EEA can provide.

In addition, a third and corollary finding about overall policy imaginary versus implementation also emerged from the findings of our reflexive theoretical-empirical approach. Our research shows the ease that existing institutions go about bureaucratizing and undermining the lofty goals of international initiatives such as, in this case, EEA (and HCV) applications.

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Response to the reviewers' comments revision 1

Thank you very much for this review that allowed us to significantly improve our paper. We have addressed the different points in the table below.

Response to Reviewer 1

1	Thank you for an interesting and well written manuscript. I have a number of suggestions for 'moderate' revisions.	Thank you very much for your insights, which allowed us to significantly improve our paper. We have substantially revised the manuscript accordingly and feel that the message is much clearer.
2	In the introduction, the first sentences are very general, and I'm not sure if it is referring to Indonesia in general or globally. If it is global, I'm not sure that the assertions hold. I would suggest adding in a little bit of context here.	We recognize this may have been a bit confusing. In this paper we are interested in engaging with a wider audience and so have initiated the discussion in more general, global terms. We hope that our edits throughout the introduction now provide a better context for situating the global issues prior to transitioning to the more specific case that we examine in Indonesia. We have also added context to make sure the assertions hold together better.
3	Again in the introduction, the final sentence of paragraph two "In other words..." doesn't really accurately reflect or sum up what is written in the rest of the paragraph. Consider revising or eliminating this sentence.	We have edited this sentence to be more complementary with the rest of the paragraph rather than as a summary of the paragraph.
4	In the methods section, you note that three methods were used. You describe methods two and three and provide appropriate references. Method one, which includes the statement "...by examining key elements from classical models..." has very little description and no references for the author to refer to. My main questions are: 1. Which classical models have you considered/used and why? and 2. What key elements of these classical models have you examined and why? Appropriate references should also be provided.	We see where this confusion may have arisen. That is why we have now referenced which sections the methods correspond too. To be clear, we do this in two parts of the paper. The first is at the end of the introduction, and the second is explicitly delineating the methods we applied for each section. On the specific issue you raise, we do not list the references here because they are too numerous. Rather, we reference section three which is a detailed examination of this body of research.

5	Again in the methods section, in the final paragraph, there is the phrase "...facilitate a multistakeholder dialogue on initiating multistakeholder forum..." which seems to be missing something for it to make sense.	We have edited this accordingly. Thanks for pointing this out.
6	At the end of the first paragraph in section 3.2 you have written "...the institutional mechanism were unclear on how to implement them." This may be simply a language issue, but my understanding of the paragraph is that the institutional mechanisms prevented the implementation. Please clarify.	Apologies for this confusion. We have edited the language. We were pointing out a case where a company wanted to do conservation but met with challenges because of the regulatory conditions. We hope the current language now reflects this point about the regulatory environment. We do not feel the need to explore the case in detail as it is just making a point about the regulatory situation and we have cited research that addresses the issue in detail.
7	I may not be clear on the way that MethodsX are linked to/incorporated into an article. My impression from what I could find online is that the MethodsX is a separate article that is linked to this article, and is not incorporated into this one. If that is the case (I have asked the editor for clarification), I feel that section five needs to have your discussion reference back to the MethodsX article; as it is written, section 5 is a good summary, but there should be direct links to your new framework.	This recommendation was especially helpful for us to move forward. We will still pursue the co-submission option of the framework and the empirical article. We have addressed the issue of section 4 by introducing a summary of the framework. We describe how power dynamics shapes the framework and further articulate the way that land dimensions are critical for our findings in section 5.
8	A few minor points - Check the spelling throughout - two examples - the first reference in the introduction should be Sahide, Fisher et al., and in 5.2.2 it should be PT Vale, not PT Value. Overall the language is good, however there are some instances where there is a mismatch between plural/singular or other small language nuances.	Thank you for careful observations. We have fixed the PT Vale name. We have also conducted a major effort at editing the content of the paper throughout.
9	Finally, I found that the figures, when printed in black and white were quite difficult to interpret as the lines and shadings used are all very similar.	We have fixed Figure 1 and Figure 2, following the reviewer's suggestion.

Response to Reviewer 2

1	The authors present a novel analytical frame to evaluate the early/ongoing implementation of a new Indonesian policy, the Essential Ecosystem Area (EEA), which aims to expand conservation status to areas outside of typical conservation areas. This paper provides valuable insights into how a state institution that has been structured for traditional protected area management can adapt its structural practices to meet the demand of polycentric governance of lands owned and used by different actor groups, and to be able to balance the different demands and power relations amongst these groups.	Thank you very much for this very helpful review that allowed us to significantly improve our paper. We have addressed the comments as best we could and have included an explanation for our edits below. We also see some fundamental understanding from the way we initially wrote the paper. In your comment you note how the state "can adapt its structural practices." We have been much more careful to highlight the dimensions of power, whereas the impetus for voluntary conservation mechanisms have been bought into by the state. We thus highlight how the bureaucratic power elements contest this potentially transformative policy instrument. We also show how in these early cases the major push by the rigid conservation bureaucracy to contest and reinterpret its outcomes.
2	Aside from focus on the state's conservation bureaucracy, ultimately it is unclear what the implications of this policy in terms of reinforcing state-corporate power structures in these potentially diverse landscapes and what might be the effect of EEA on possibly large swaths of land area in Indonesia, particularly on non-state and non-corporate land owners. The EEA is adapted from private voluntary HCV processes to pursue conservation goals – but given that much of this will take place outside of both state and private lands, and in local farming and customary lands – it would be remiss that the authors do not consider more fully the implications of whose voices and participation are excluded from this process	This is an important consideration. At the moment this paper only addresses the formal bureaucratic contestations of power. Indeed EEAs are only taking place on a very land area, but the implications for bureaucratic change could potentially significant. We also agree that the importance of local stakeholders that only get limited voice with state bureaucracies are a critical justice frame that must be followed up in future research. Right now this is a bureaucratic contestation that is seeking to incorporate new mechanisms that could transform management systems. We also highlight how the EEA is tied to efforts that can incorporate mechanisms for upward/downward accountability that could incorporate local constituents and smallholders. If you also look in the heuristic framework we make a clear case for considerations with respect to smallholders and commons lands.

3	Given that this is research of a new policy in its implementation process, critical reflections of what these policies are missing in terms of its goals and targets would be useful. And indeed, of where/how the authors see as key opportunities for policy reflexity.	We took a great deal of care in considering this comment based on our research. Unfortunately, the two cases point to maintaining the status quo and do not really present any material that suggests new terms are being set. Indeed the big finding in this early cases - which suggest a promising new approach to conservation policy - are really just a return to the old way of doing things.
Specific comments:		
4	Abstract: "We apply the framework to two emerging cases in Sulawesi Selatan to examine whether Essential Ecosystem Area policy *anticipates a new future of conservation management or remains tied to existing rigid bureaucratic structures*. Findings from the two cases, point to the latter". Can policy anticipate – or perhaps better to rephrase as what the authors anticipate of the policy outcomes.	Thank you for identifying this editorial fix. We have changed the language to clarify what we are anticipating.
5	Introduction: "Although a global movement since the 1980s has started the acknowledgement of, and role for communities in natural resource management and conservation (Brosius et al., 1998), *the legacy of strictly bounded and controlled conservation areas denying access remain a central feature of policy* (Peluso, 1993)". This statement is rather strong. There are many classifications of protected areas globally with varying governance structures: ranging from strict protection to protected land/seascapes where human-nature interactions are integral, to protected areas with sustainable use which emphasizes cultural knowledge and traditional governance (see the IUCN categories of protected areas). If you are only referring to the case of Indonesia, then you need to specify this explicitly and provide additional references that this is indeed the only system at play in the country.·	At the beginning of the article, we would like to engage the EEA in the context of global discourses on conservation and the role of people in conservation areas. We have included more citations, and clarified this sentence, to incorporate the breadth of conservation models that the reviewer suggests.
6	Introduction: "On the one hand the policy does not challenge conservation areas on the rights of other institutions and communities to take part in the management plans because the proposed areas are located outside conservation areas." This sentence is confusing and could be rephrased for clarity.	Fixed.

7	The term "conservation bureaucracy" is used liberally throughout the paper without a proper definition – does this refer to a specific institution or department within the Ministry, or to administrative systems and structures, or to a set of discursive practices. Similarly, the authors could also better define of what is meant by terms like "classical areas of conservation bureaucracy", "classical models", "classical framing of power", etc.	We do not intend to use the term liberally. The conservation bureaucracy in this paper refers to a specific agency and its mandate. We have clarified this in a footnote.
8	Introduction: "…although we cannot yet trace direct empirical outcomes from the policy measures taking place, we believed it important to produce timely, yet robust research on emerging policy situation". The authors should better elaborate on this claim of importance; why, and to whom, is this work important? How can it support better policy design or policy reflexivity?	We have been very explicit in several sections of this paper on the anticipatory dimensions of the research. We have asked the question about how we study things that are unfolding in real time and how our research can be published as these important considerations are unfolding. We also believe that the who benefits question is apparent throughout our work and we have tried to make this more explicit throughout. This work is important for international policies claiming lofty ideals about how new conservation policies can succeed in establishing more collaborative and deliberative approaches for people and forests. We also show empirical evidence about how this cooptation of power in the status quo is maintained.
9	Introduction: "The lead author had the opportunity to facilitate a *multistakeholder* dialogue on initiating *multistakeholder* forum on EEA at the karst ecosystem in Maros and Pangkep Districts of Sulawesi Selatan Province on October 25, 2019". Avoid use of multistakeholder twice in one sentence. Description of the second case study in following sentence needs to provide equivalent details of sites, dates, etc.	Ok thank you for pointing this out. We have address the multi multi stakeholder issue throughout
10	Section 3.1: "Although over the years *several initiatives have sought to challenge the conservation law*, its policies remains a longstanding legal construct that is still in effect." Unclear what are these initiatives, who leads these initiatives and what aspects of the conservation law were being opposed.	We have added citations and context here. There are many initiatives mostly known under the heading of social forestry. Those are the ones that particularly challenges state forest land for access for local smallholders and community land. However there are also large cases that we have referenced in the citations such as challenges to

		conservation zones from geothermal power plants (Sahide et al., 2018)
11	Sections 3.1 - 3.3: In the discussions of, and comparison between "classical bureaucracy" and "EEA – voluntary initiatives", the limitations and problems of the classical bureaucracy is prevalent but what is missing is an evaluation of the limits of the voluntary initiatives. Whose interests do the voluntary initiatives serve? Likely corporate interests first and global conservation benefits secondary. What are its limitations – who monitors and who is held accountable when the voluntary initiatives fail? Given that corporations in Indonesia were often issued large-scale concessions that were perhaps equally as contested as protected areas, it would be remiss not to highlight these within the context of what can rationally expected of EEA.	This is a valid point and forms the broader context of our research, which we have explained in a previous comment and also sought to further clarify in the text of the paper. Indeed what we see in the second case PT Vale is that the private interest used the rigid conservation regulations to be able to keep a hold on information and forego the anticipated interests of multi-stakeholder interests to take part. Overall, we are inline with this comment and indeed wanted to point out that with this research we wanted to identify whether new mechanisms for new interest groups to take part (and in what forms) was what we set out to identify.
12	Section 4: It would be useful to add a paragraph introducing the framework in addition to having the entire MethodsX paper as an appendix	This was an excellent suggestion that addressed one area that we felt was disjointed about the co-submission approach. Thank you! We have introduced several paragraphs that now make an explicit connection between our approach and our findings. We have also added the full text of the MethodsX paper as an appendix.
13	Sections 5.1.1 and 5.1.2: It appears that the discussion is these sections do not talk so much on power relations, but rather on administrative jurisdictions	Yes, this paper is focused on bureaucratic power - namely how the interests of key actors interpret their mandate and how that is then applied in the mechanics of the regulations. We believe that these power contestations are a precursor for understanding future research on downscaling the power relations that take a closer look at the implications that affect communities (and species).

14	Section 5.1.3: "Indeed the interests remain trained on achieving fulfilling *technocratic requirements* than responsive multi stakeholder processes geared towards fulfilling targets." It appears to be more administrative than technocratic – if it was technocratic, I would expect the focus on details such as indicators and monitoring, technical mapping, etc., which are all rather weak. But what indeed were the targets? Were there any goals for achieving social targets? What were the expectations of, and state precedence for a truly polycentric governance mechanism?	Indeed we sought out to answer these questions. The maps are of yet unavailable and the process is proceeding as one that lacks meaningful participation. We were fortunate that two of the authors among us participated in the deliberations for the regulatory process. Indeed we show that we did not see evidence of "truly polycentric governance mechanisms."
15	The authors need to careful with use of many acronyms without proper spelling out of what this means, eg. SRAK, BKSDA, CCB, MSA …	We have made a proper spelling for SRAK (page), BKSDA (page 8), CCB
16	Section 5.2.1: "...including habitats for several endemic and threatened species *the Maleo and Anoa* …" What are these? Useful to either provide common or scientific names for the fauna/flora.	Yes, we have added the latin names. *Macrocephalon maleo* for Maleo and Anoa for *Bubalus quarlessi*
17	Footnote 6 should be inserted much earlier in the paper with first mention of HCV and Areal Konservasi Bernilai Tinggi	Yes, we have inserted this Footnote earlier in Section 3.2
18	Section 5.2.3: "…The fact that the *EEA process is unfolding on private lands with a high degree of autonomy to the land manager* in this case has reduced the incentive to engage in more collaborative stakeholder forums that involve different actors." But isn't this also the model with voluntary HCV initiatives? Where those results are often vetted by FSC or RSPO for certification – what is the incentive for the land manager to engage? And who vets the results here?	We believe that the point being made here reinforces the broader conclusions that we are getting in this paper. Though we cannot speak for other sites, this is clearly the conclusion based on the two sites. We have added an additional finding in the conclusion (at the very end) further suggesting at the broader trends that are being made in this comment. However, we do not want to make generalizations with other sites as those contestations are still yet inchoate.

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

Muhammad Alif K. Sahide, Micah Fisher, Nasri Nasri, Wiwik Dharmiasih, Bart Verheijen, Ahmad Maryudi

Highlights:

- The Essential Ecosystem Area policy in Indonesia is pushing the boundaries of the conservation bureaucracy beyond the classical centralized system by extending opportunities to all land area types based on biodiversity considerations and encouraging more diverse involvement of actors.
- A land and power framework is presented for assessing whether the Essential Ecosystem Area policy constitutes an innovation or maintains the status quo of the conservation bureaucracy.
- Two cases are examined from Sulawesi, which point to early indications that Essential Ecosystem Area policy does not present a meaningful challenge to the classical conservation bureaucracy, and rather, extends authority from conservation zones to the newly proposed sites.

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 on the basis of 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 on a voluntary basis, even in areas that might not have been historically thought of as conservation areas. This is unusual because it applies for 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.

Keywords: essential conservation areas; voluntary conservation; conservation bureaucracy, multistakeholder collaborative forum; Indonesia

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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 multi stakeholder arrangements (Armitage et al., 2008; Fisher and Sablan, 2018), the legacy of strictly bounded and controlled conservation areas to deny access remains a central feature of conservation policy worldwide (Peluso, 1993; Sahide, Fisher et al., 2018; Fisher et al., 2019). Bureaucratic systems that manage conservation areas are extremely 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 claim to for generations (Sahide, Fisher 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 conservation outcomes (Giessen and Sahide, 2017). 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 (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,[1] which seeks to establish conservation area management mechanisms beyond the classical areas of the conservation bureaucracy in Indonesia.[2] 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

[1] 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.

[2] 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.

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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 to take 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.

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 important 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 important 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, emergent conservation policies, and the similarities and differences between them. We drew from our collective understanding of the evolution of conservation laws in Indonesia, and 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, 2017), 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, Fisher, et al., 2018; Yusran, Sahide, et al., 2017). We thus tailored a framework for examining power dynamics on conservation policy in Indonesia, which includes the key 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

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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 with the goal of providing 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. 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 Mamuju, in December 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, that 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 largely prioritized natural resource for state economic development purposes, significant surveys 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.[3] 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

[3] Conservation Act 5/1990 on conservation of biodiversity and ecosystems

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(Ostrom, 1990). Commonly described as community based natural resource management (CBNRM), nature parks were critiqued for their dispossessory 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). This broader policy objective of CBNRM has since sparked widespread international support, particularly 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 is still in effect. Indeed, several initiatives were unsuccessful in their efforts to conduct multi-stakeholder management arrangements in the name of collaboration in conservation zones. For example, the MEFor[4] 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 presents 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)[6] as a way for companies to gain certification of sustainable practices. Such certification schemes have since become popular, 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

[4] 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

[6] 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).

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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 are located on lands beyond sites zoned for conservation (TKTK Citation?). Indonesia also signed on to commitments to expand an additional 11% of 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 (MEF, 2015). 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; Widayawati et al., 2018), which is also under the sub category of EEA policy and management. There are four areas that 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.[7] 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 vs 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, below.

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

[7] 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

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	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 process and willingness of actors to yield vibrant ecosystem outcomes. In contrast the principle in the formal conventional category premised on government, the EEA conservation areas are contingent upon governance.
Location (land characteristics)	*Public areas:* 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.	*Public:* State forests, such as production or protection forests), or sites with no permits or licenses. *Public*: non-state forest area owned by the local government. *Private*: Concession land with existing license. *Private:* Privately-owned lands by smallholder or larger scale private business privately owned land *Common:* Indigenous lands or forests *Common*: 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 *Tahura* forest parks, which is 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 (indigeneous actors, individual farmer) **Single Institution** - Governor , Head of the district (Bupati/walikota), - Private company

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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 enough summary about 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., TKTK). 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 lands arrangements. We also subdivided these land administration categories into state public lands (state forest or APL lands), whereby the main proponents are either national state land managers, regional government land managers, or a multi-stakeholder 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 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 multi stakeholder arrangement (MSA).

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

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 a potential 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 multi stakeholder 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, provides a majestic view of a unique landscape. Not only is it a striking landscape, it is also unique for its biodiversity, and local variation within the region (Brumm, 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, 2016). 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

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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, 2016), and is also the site of lucrative economic activities for the many visitors that seek out the region's views for tourism (Yusran, Sahide 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 Heritage Park, 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 around 46,200 hectares. About 22,800 hectares of the limestone karst has been protected as a National Park (Ahmad and Hamzah, 2016). Another 1,100 hectares is allocated to PT Semen Bosowa (henceforth, Bosowa) for cement mining (Rusdianto, 2019), as well as another 715 hectares to PT Semen Tonasa (PT. Semen Tonasa, n.d). An additional 30,000 hectares are 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 hectares. 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.

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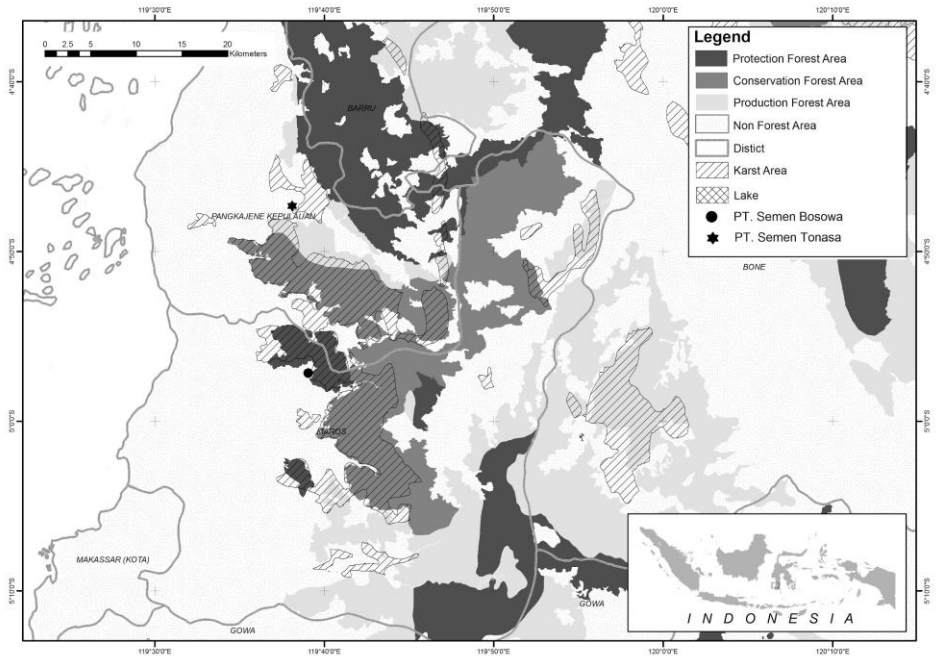

Figure 1. The karst limestone area ecosystem in Maros and Pangkep

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 Sumberd 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

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encouraged by BKSDA to be involved in the EEA scheme but declined 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 are 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 ecosystem essential 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 very limited 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 fulfil mutual interests on conservation and site management. Indeed, the approach to establishing the EEA has not followed any meaningful 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.

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, 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 Rusdiyanto, 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 key buffer to the lakes, 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.

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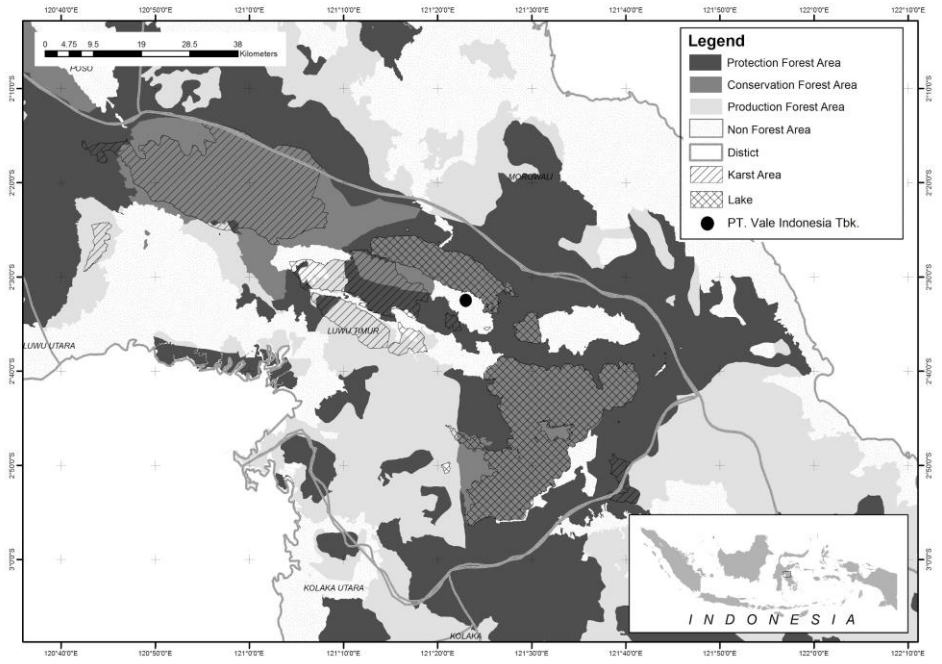

Figure 2. The ecosystem corridors of the Malili ancient lakes

Nevertheless, the surrounding terrestrial areas are controlled by several land use and zoning authority, including a large international mining corporation (PT Vale), protection forests[8], and production forests (see Figure 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 different 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 various 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 commitments.

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[8] 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.

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[10] conservation bureaucracy. PT Vale quickly mobilized the consultant team using their own funds, hired consultants to follow the seven principles of HCV listed in the policy, and identified potential spots to be included in the potential 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 fct-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 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 a 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 multistakeholder 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 mehanisms for mmore responsive and delilberative approaches to conservation.

6. Conclusion

According to the regulations, replacing the classical conservation bureaucracy model with the new voluntary mechanisms envisioned by EEA policy are 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

[10] 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.

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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. There are several key findings that 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 a 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.

We reflect that from these two cases, and taken from our heuristic framework, there are two elements that are missing from the process it is the more comprehensive needs assessments, and participatory public engagement. The cases show that the process is still tied by the formal bureaucracy target, relevant actors should work beyond the formal target. Therefore these two elements should it including open public consultation for identifying potential EEA in public areas.

The cases show that the process is still tied by the formal bureaucracy target, relevant actors should work beyond the formal target. Therefore these two elements should it including open public consultation for identifying potential EEA in public areas. This is an important consideration. At the moment this paper only addresses the formal bureaucratic contestations of power. Indeed EEAs are only taking place on a very land area, but the implications for bureaucratic change could potentially significant. We also agree that the importance of local stakeholders that only get limited

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voice with state bureaucracies are a critical justice frame that must be followed up in future research. Right now this is a bureaucratic contestation that is seeking to incorporate new mechanisms that could transform management systems. We also highlight how the EEA is tied to efforts that can incorporate mechanisms for upward/downward accountability that could incorporate local constituents and smallholders. If you also look in the heuristic framework we make a clear case for considerations with respect to smallholders and commons lands

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Acknowledgments

Thanks to Universitas Hasanuddin and the Ministry of Research, Technology and Higher Education of the Republic of Indonesia for the research grant

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Response to the reviewers' comments revision 2

Thank you very much for this review that allowed us to significantly improve our paper. We have addressed the different points in the table below.

Response to Reviewer 1

1	- Thank you for your comprehensive revisions. I have only two minor comments.	Thank you very much for your insights, which allowed us to improve our paper.
2	There is one reference that needs some attention.	Thank you for careful observation and apologies for our oversight on the incomplete citations. TKTK is our short form for "to come" that is easily searchable. It is a notation for us to follow up on. We have now ensured that no more of these TKTK reminders remain in the text. We have made the following corrections, adding references such as: - Smith, R. D., & Maltby, E. (2001). Using the Ecosystem Approach to implement the CBD. In *A global synthesis report drawing lessons from three regional pathfinder workshops, Royal Holloway Institute for Environmental Research, Royal Holloway, University of London, Egham, UK*. Retrieved from https://www.cbd.int/doc/meetings/esa/ecosys-01/information/ecosys-01-inf-02-en.pdf - Morand, S., Lajaunie, C., & Satrawaha, R. (Eds.). (2017). *Biodiversity conservation in Southeast Asia: challenges in a changing environment*. Routledge.
3	I also think that the section referring to the MethodsX article (and where it says insert the MethodsX article) needs some work. I have suggested that you work in some of the key messages from the MethodsX article, appropriately referenced. I think that this would make the manuscript flow better. (Particularly as the MethodsX article is a standalone article). I apologise for any confusion around this section.	We have addressed this point. We have written up a summary of the MethodsX paper, and also included the reference that this is a more detailed separate article. We have now added a sentence *For the detail framework, please see the MethodsX article on the method of "Land and power framework for assessing voluntary conservation development"* If there are additional suggestions for improving this section that we are not aware of, or have overlooked, please let us know. We have reviewed all the attachments as part of the reviewer comments and did not find anything else.

Response to Reviewer 2

1	The authors have well considered the previous comments and have made substantive revisions to address them. This is appreciated and the paper is stronger. There are a few incomplete citations and minor grammatical issues that can be easily addressed in proof-reading.	Thank you for your support. We are encouraged to hear that you also believe this is a timely paper and that our framing of the issue helps to bring greater understanding about an important topic not just for Indonesia, but also hope that the theoretical framings can also be applicable elsewhere. As also indicated by reviewer 1 above, we have completed the citations and fix the grammatical errors
2	I agree that the paper has value as early analysis on a policy process that is unfolding in real time, and the authors are perhaps rightfully cautious in drawing generalized conclusions in this regard. However, this has also taken away some of the impact of this paper could have to inform the policy process. The authors indicate in their response that "this work is important for international policies claiming lofty ideals about how new conservation policies can succeed in establishing more collaborative and deliberative approaches for people and forests". As such, the authors could briefly discuss the elements that are missing from their review of the 2 cases that could enable these collaborative and deliberative approaches and contemplate what might be needed in a revised future EEA policy that would support such transformative practices in the conclusion section.	Thank you for highlighting these practical elements. we have added some additional text about the mapping process and the comprehensive needs assessment which need to be more representative of the key stakeholder interests.

Reviewer comment in the text

1	Not sure what TKTK is; There appears to be a date in the reference list	We have explained this above. It is a short form to follow up on an issue. Apologies for the oversight.
2	I think that there was some confusion around my original comment. Not being certain of how the MethodsX work. As it is a stand-alone article, I would suggest that some of the highlights from the MethodsX article, appropriately referenced may be the way to go, rather than trying to "insert" the MethodsX article into the main article.	Yes, we have done this and written up a summary of the MethodsX article as a stand alone section. We hope this version is now sufficient, and we have also maintained that readers can access the more detailed article in MethodsX if they would like.

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

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 on the basis of 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 on a voluntary basis, even in areas that might not have been historically thought of as conservation areas. This is unusual because it applies for 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.

Keywords: essential conservation areas; voluntary conservation; conservation bureaucracy, multistakeholder collaborative forum; Indonesia

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 multi stakeholder arrangements (Armitage et al., 2008; Fisher and Sablan, 2018), the legacy of strictly bounded and controlled conservation areas to deny access remains a central feature of conservation policy worldwide (Peluso, 1993; Sahide, Fisher et al., 2018; Fisher et al., 2019). Bureaucratic systems that manage conservation areas are extremely 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 claim to for generations (Sahide, Fisher et al., 2018).

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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 conservation outcomes (Giessen and Sahide, 2017). 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 (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,[1] which seeks to establish conservation area management mechanisms beyond the classical areas of the conservation bureaucracy in Indonesia.[2] 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 to take part in the EEA scheme, as well as the likely contestations determining implementation outcomes. The

[1] 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.

[2] 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.

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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.

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 important 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 important 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, emergent conservation policies, and the similarities and differences between them. We drew from our collective understanding of the evolution of conservation laws in Indonesia, and 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, 2017), 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, Fisher, et al., 2018; Yusran, Sahide, et al., 2017). We thus tailored a framework for examining power dynamics on conservation policy in Indonesia, which includes the key 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 with the goal of providing 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. 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 Mamuju, in December 2019 and January 2020.

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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, that 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 largely prioritized natural resource for state economic development purposes, significant surveys 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.[3] 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 dispossessory 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). This broader policy objective of CBNRM has since sparked widespread international support, particularly 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 is still in effect. Indeed, several initiatives were unsuccessful in their efforts to conduct multi-stakeholder management arrangements in the name of collaboration in conservation zones. For example, the MEFor[4] revoked a potential collaboration

[3] Conservation Act 5/1990 on conservation of biodiversity and ecosystems

[4] 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

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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 presents 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)[6] as a way for companies to gain certification of sustainable practices. Such certification schemes have since become popular, 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 are located on lands beyond sites zoned for conservation (TKTK Citation?). Indonesia also signed on to commitments to expand an additional 11% of 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 (MEF, 2015). The HCV concept was also being translated into

[6] 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).

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policy at that time, with its own institutional mechanisms termed *Areal Bernilai Konservasi Tinggi (ABKT)* (Purwanto, 2019; Widayawati et al., 2018), which is also under the sub category of EEA policy and management. There are four areas that 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.[7] 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.

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3.3. Classical bureaucracy vs 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, below.

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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 process and willingness of actors to yield vibrant ecosystem outcomes. In contrast the principle in the formal conventional category premised on government, the EEA conservation areas are contingent upon governance.
Location (land characteristics)	*Public areas:* 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.	*Public:* State forests, such as production or protection forests), or sites with no permits or licenses. *Public*: non-state forest area owned by the local government. *Private*: Concession land with existing license. *Private:* Privately-owned lands by smallholder or larger scale private business privately owned land *Common:* Indigenous lands or forests *Common*: Community cooperative lands or other means for co-management of land

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[7] 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

Institutional and management considerations	**Single institution** administered and managed by the central government, MOEF (except for the *Tahura* forest parks, which is regional management scheme under provincial and/or district government.	**Multi-stakeholder institutions,** - Main actors (Conservation bureaucracies, Governor , Head of the district (Bupati/walikota), Collaborative forum, Private business) - Additional actors (indigeneous actors, individual farmer) **Single Institution** - Governor , Head of the district (Bupati/walikota), - Private company

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 enough summary about 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., TKTK). 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 lands arrangements. We also subdivided these land administration categories into state public lands (state forest or APL lands), whereby the main proponents are either national state land managers, regional government land managers, or a multi-stakeholder 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 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 multi stakeholder arrangement (MSA).

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

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

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examination of preparation stages as a potential 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 multi stakeholder 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, provides a majestic view of a unique landscape. Not only is it a striking landscape, it is also unique for its biodiversity, and local variation within the region (Brumm, 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, 2016). 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, 2016), and is also the site of lucrative economic activities for the many visitors that seek out the region's views for tourism (Yusran, Sahide 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 Heritage Park, 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 around 46,200 hectares. About 22,800 hectares of the limestone karst has been protected as a National Park (Ahmad and Hamzah, 2016). Another 1,100 hectares is allocated to PT Semen Bosowa (henceforth, Bosowa) for cement mining (Rusdianto, 2019), as well as another 715 hectares to PT Semen Tonasa (PT. Semen Tonasa, n.d). An additional 30,000 hectares are 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 hectares. 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.

----------***Insert Figure 1 here.***----------

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

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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 Sumberd 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 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 are 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 ecosystem essential 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 very limited 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 fulfil mutual interests on conservation and site management. Indeed, the approach to establishing the EEA has not followed any meaningful 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.

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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, 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 Rusdiyanto, 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 key buffer to the lakes, 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.

----------Insert Figure 2 here.----------

Figure 2. The ecosystem corridors of the Malili ancient lakes

Nevertheless, the surrounding terrestrial areas are controlled by several land use and zoning authority, including a large international mining corporation (PT Vale), protection forests[8], and production forests (see Figure 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 different 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 various 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 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[10] conservation bureaucracy. PT Vale quickly mobilized the consultant team using their own funds, hired

[8] 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.

[10] 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.

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consultants to follow the seven principles of HCV listed in the policy, and identified potential spots to be included in the potential 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 fct-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 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 a 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 multistakeholder 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 delilberative approaches to conservation.

6. Conclusion

According to the regulations, replacing the classical conservation bureaucracy model with the new voluntary mechanisms envisioned by EEA policy are 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. There are several key findings that 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 a 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

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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.

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Acknowledgments

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

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.

Keywords: essential conservation areas; voluntary conservation; conservation bureaucracy, multistakeholder collaborative forum; Indonesia

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., 2008; Fisher and Sablan, 2018), the legacy of strictly bounded and controlled conservation areas to deny access remains a central feature of conservation policy worldwide (Peluso, 1993; Sahide, Fisher, 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, Fisher, 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 conservation outcomes (Giessen and Sahide, 2017). 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 (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,[1] which seeks to establish conservation area management mechanisms beyond the classical areas of the conservation bureaucracy in Indonesia.[2] 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

[1] 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.

[2] 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.

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.

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, 2017), 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, Fisher, 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 Mamuju, in December 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.[3] 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 dispossessory 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; Fisher et al., 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[4] revoked a potential collaboration

[3] Conservation Act 5/1990 on conservation of biodiversity and ecosystems

[4] 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

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)[5] as a way for companies to gain certification of sustainable practices. 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 & 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 (MEF, 2015). The HCV concept was also being

[5] 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).

translated into policy at that time, with its own institutional mechanisms termed *Areal Bernilai Konservasi Tinggi (ABKT)* (Purwanto, 2019; Widayawati et al., 2018), which is also under the subcategory of 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.[6] 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 vs. 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, below.

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)	*Public areas:* 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.	*Public:* State forests, such as production or protection forests), or sites with no permits or licenses. *Public*: non-state forest area owned by the local government. *Private*: Concession land with an existing license. *Private:* Privately-owned lands by smallholder or larger scale private business privately owned land *Common:* Indigenous lands or forests *Common*: Community cooperative lands or other means for co-management of land

[6] 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

Institutional and management considerations	**Single institution** administered and managed by the central government, MOEF (except for the *Tahura* 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

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 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

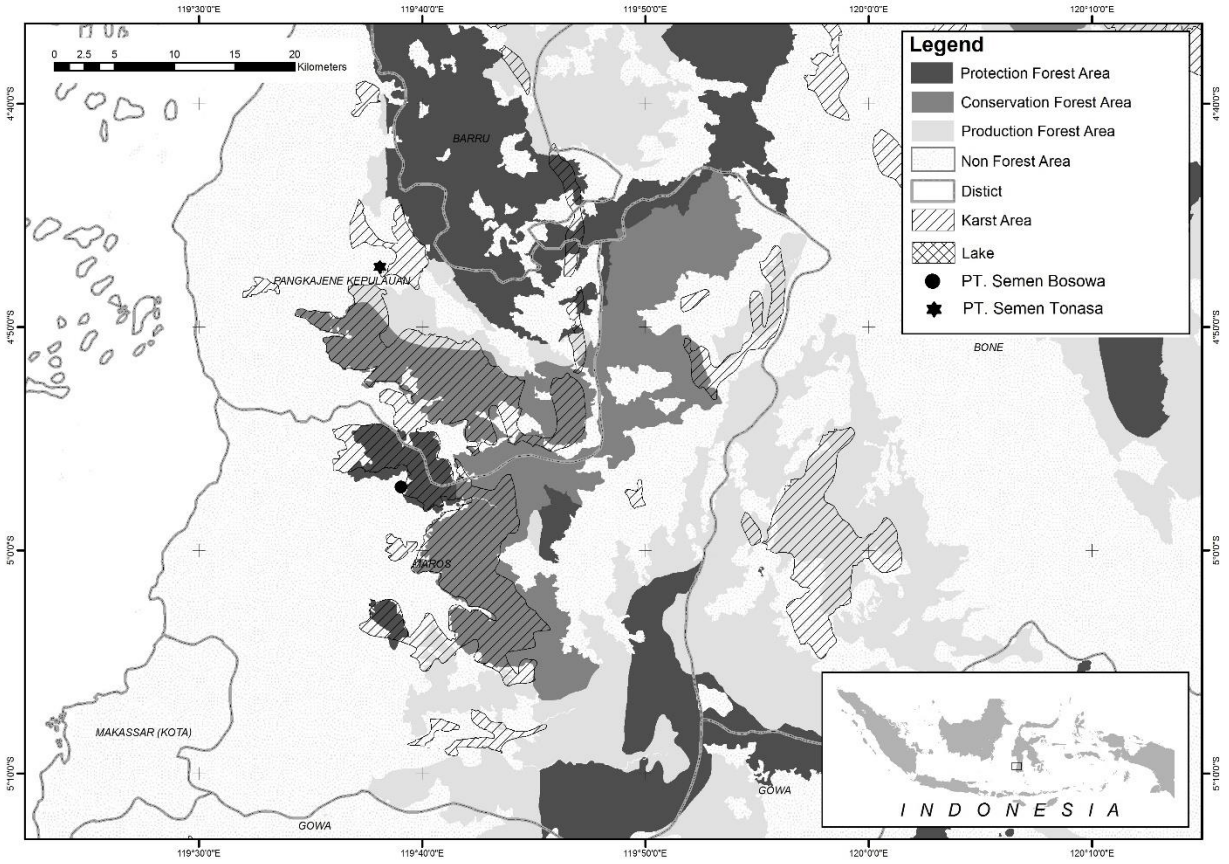
5.1.1. Land and power in the Maros-Pangkep EEA

The Karst ecosystems of Maros-Pangkep, located north of the regional metropolitan area of Makassar, provides 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, 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, 2016). 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, 2016), and is also the site of lucrative economic activities for the many visitors that seek out the region's views for tourism (Yusran, Sahide, 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 Heritage Park, 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 hectares. About 22,800 hectares of the limestone karst has been protected as a National Park (Ahmad and Hamzah, 2016). Another 1,100 hectares are allocated to PT Semen Bosowa (henceforth, Bosowa) for cement mining (Rusdianto, 2019), as well as another 715 hectares to PT Semen Tonasa (PT. Semen Tonasa, n.d). An additional 30,000 hectares are 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 hectares. 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.

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



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.

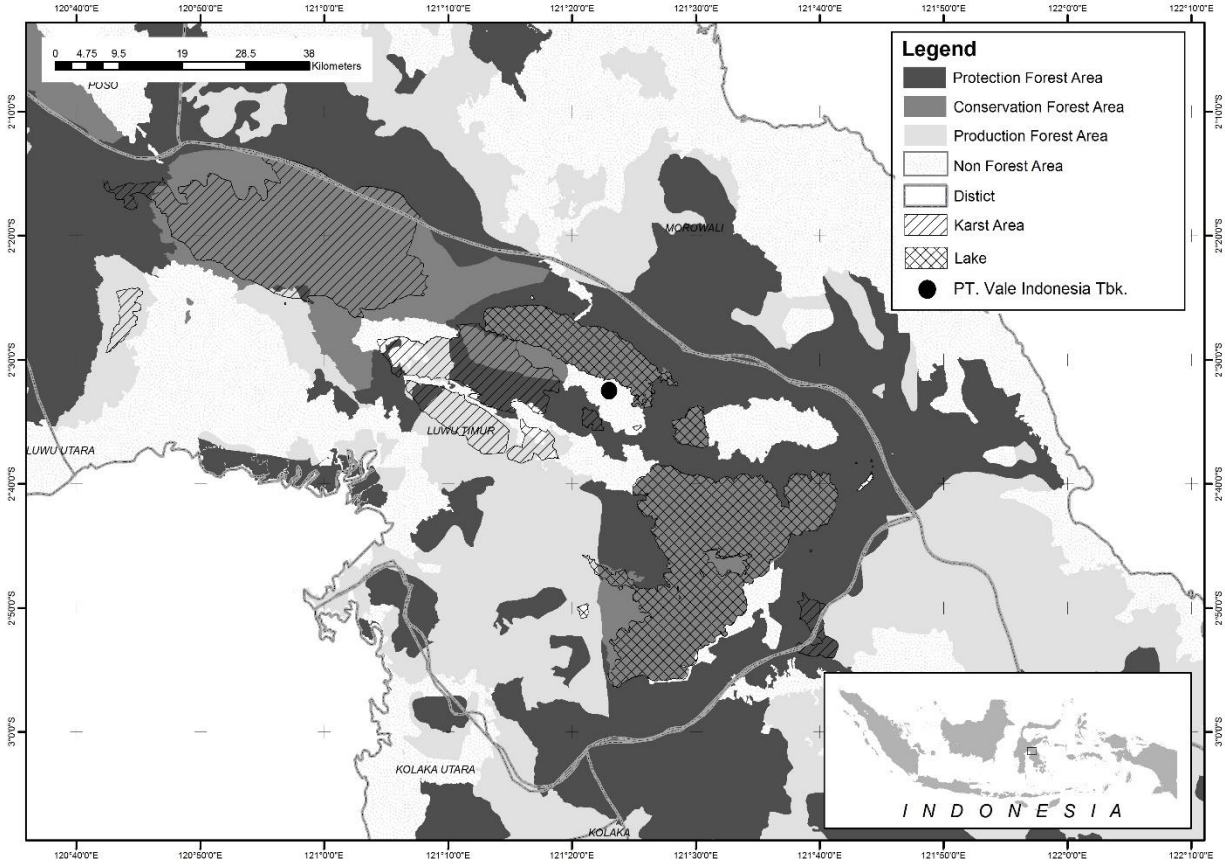
5.2. An EEA on the ecosystem corridors of the Malili ancient lakes: A private land example

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, 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 Rusdiyanto, 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.

Figure 2. The ecosystem corridors of the Malili ancient lakes



Nevertheless, the surrounding terrestrial areas are controlled by several land use and zoning authority, including a large international mining corporation (PT Vale), protection forests[7], and production forests (see Figure 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 commitments.

[7] 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.

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[8] 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 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 multistakeholder 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

[8] 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.

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.

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