



Landscape
Indonesia

Investing in Jurisdictional Approach

The Case of Berau,
East Kalimantan

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Jurisdictional Approach to Address the Climate Crisis in Indonesia

The current and projected climate crisis will increase the average temperature significantly. The Paris Agreement has been adopted to keep the temperature at well below 2 degrees Celcius (°C) possibly not to exceed 1.5 °C, but the window of opportunity is closing rapidly¹.

About 6.6 billion tons of heat-inducing carbon dioxide-equivalent of greenhouse gases (GtCO₂e) were emitted worldwide by land-based sector, out of the total 58.1 GtCO₂e in 2019². Addressing the climate crisis, therefore, requires significant reductions and avoiding of emissions of greenhouse gases and increasing sequestration and storage capacity of these gases, including and especially that of nature in the land-based sector. The New York Declaration on Forests (NYDF) was signed by countries and corporations in 2014 to halve deforestation by 2020 and reverse it by 2030. But instead, deforestation increased³. The world lost about 26 million ha between 2014-2018⁴.

Most recently, jurisdictional approach is gaining momentum as a way to consolidate efforts toward land-based sustainability, including and especially reduction of deforestation and degradation of forests. Jurisdictional approach has grown out of landscape approach in which production and protection will be harmonized in synergy, spatially and participatorily.



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There are perceptions among investors that the increase in scale, additional stakeholders that need to be directly involved in the invested initiatives, and the direct involvement of governments in the initiatives will increase investment risks significantly⁵⁻¹⁰. But lately, jurisdictional approach is also gaining momentum among financiers, while global standards have also emerged¹¹⁻¹³. Additionally the Roundtable for Sustainable Palm Oil (RSPO) is piloting a jurisdictional standard for sustainable palm oil¹⁴.

As a party to the Paris Agreement, Indonesia is already committed to reducing its total emissions by 29 percent unconditionally with own resources and 41 percent conditional with international cooperation in 2030¹⁵. Indonesia is also committed to achieving net zero emissions by 2060 or earlier¹⁶. In the forestry sector, Indonesia is even committed to a more ambitious target of reducing emissions from 714 million tons of carbon dioxide equivalent (714) of projected emissions in 2030 without any emission reduction policy to 217 MtCO₂e (about 70 percent) with own resources and to 68 MtCO₂e (90 percent) with international cooperation, contributing 66 and 89 percent of total emission reduction commitments by 2030, respectively¹⁵. Indonesia is also set to turn its forestry sector into a net sink – negative emissions – by as early as 2030¹⁷. At COP26, Indonesia has joined the world leaders to halt net deforestation in 2030¹⁸.

These commitments are commendable. Indonesia has shown remarkable progress in the past decade in reducing deforestation. From being the worst deforester in the world with more than 1 million ha per year prior to 2015, Indonesia managed to reduce its deforestation rate to about 115,459 ha per year in 2020, which is a staggering 90 percent reduction¹⁹.

Jurisdictional approach has been embraced in Indonesia since REDD+ began to be recognized²⁰. Through the Forest Carbon Partnership Facility (FCPF) and the BioCarbon Fund (BCF) of the World Bank has been working in Jambi and East Kalimantan, the World Bank is advancing jurisdictional approach at the provincial level²¹⁻²². East Kalimantan is especially strategic as a candidate for jurisdictional initiative as it contains carbon-rich peat forests while there is a substantial amount of oil palm plantations. As such, East Kalimantan – alongside Riau, West Kalimantan, and possibly Central Kalimantan – is considered as one of the provinces in Indonesia that are at high risk for deforestation and peat conversion by the expansion of oil palm plantations but at the same time considered more amenable to partnership in jurisdictional approach²³.

Deforestation in Berau, East Kalimantan

Berau is located in the Northern-most area of East Kalimantan, covering about 34,127.47 square km (km²), or about 3,412,747 ha, comprises about 2,195,171 ha of land and 1,196,242 ha of ocean. It consists of 52 islands big and small, 13 sub-districts, 10 wards (kelurahan), and 100 villages. The number of the population was about 248,035

people in 2020, growing at a rate of 3.2 percent per year²⁵. Berau borders with the District of Bulungan in the Province of North Kalimantan in the North, the Strait of Makassar in the East, the District of Kutai Kartanegara in the West, and the District of Kutai Timur (East Kutai) in the South. Its capital is the town of Tanjung Redeb²⁶.

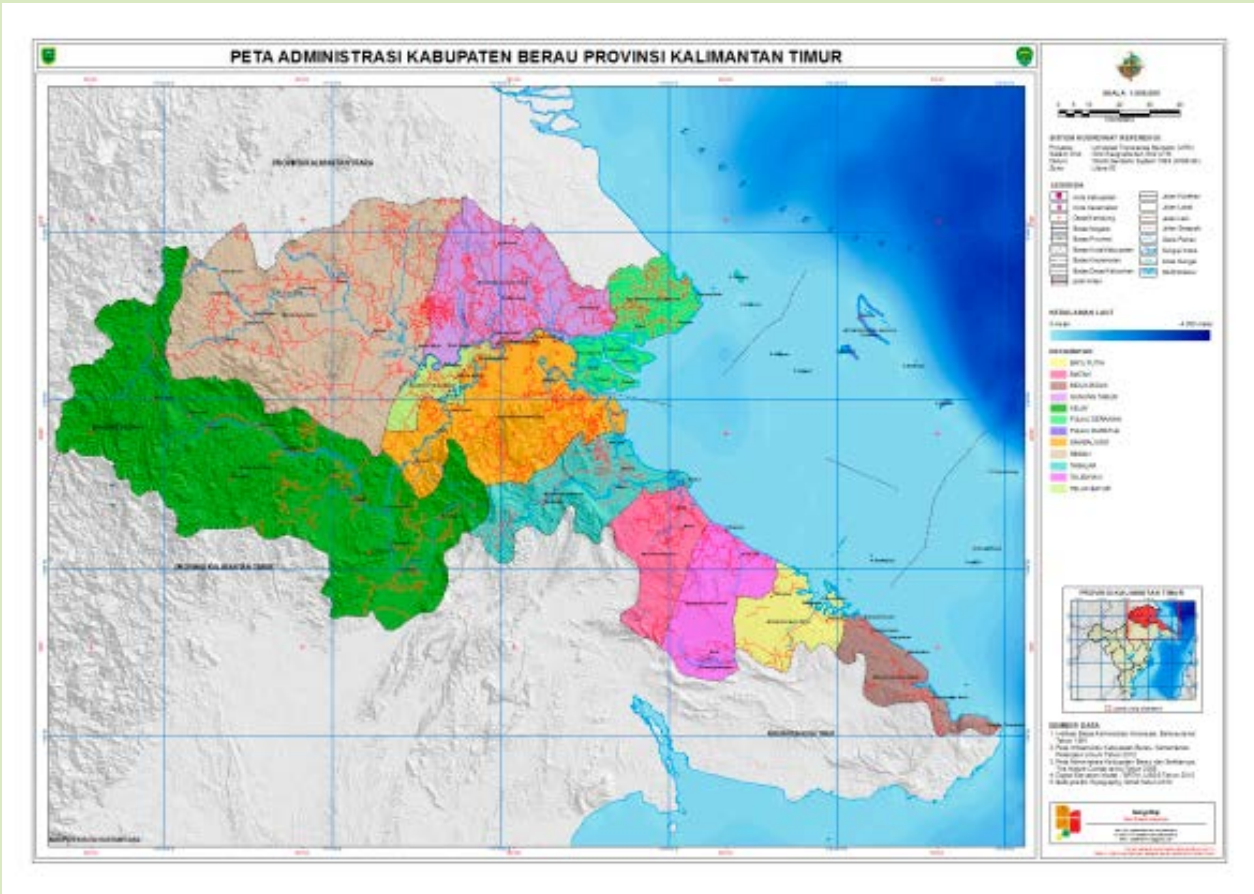


Figure 1. The Map of the District of Berau in East Kalimantan, Indonesia.

Source: World Geodetic System 1984 (WGS 84).

The total Gross Domestic Regional Product (GDRP) of the District of Berau was about Rp 35.5 trillion in 2020 after having been contracted by 3.35 percent since 2019 due to the pandemic. Mining and quarrying sector dominated the contribution to the district's PDRB, at 56.4 percent, while farming, forestry, and fisheries follow at 11.6 percent. Due to the pandemic, open unemployment increased slightly by 0.13 percent to 5.08 percent while poverty rate increased by 0.15 percent to 5.19 percent²⁵.

In the period of 2000-2020, more than 1 million ha of forests have been deforested or degraded, accounted for more than half of the total of almost 2 million ha of forests in 2000²⁷. Table 1 below shows the changes in vegetative cover in Berau in the period.

Table 1. Dominant changes in vegetative cover in Berau, 2000-2020, ten largest changes

Source: Vegetative cover maps from KLHK, 2000 and 2020, processed.

Vegetive land cover changes, 2000-2020	ha	percent
Primary dryland forest to secondary dryland forest	659,037	58.93
Secondary dryland forest to shrub	59,529	5.32
Secondary dryland forest to plantation	45,112	4.03
Secondary dryland forest to dryland farming	44,413	3.97
Primary dryland forest to dryland farming	38,401	3.43
Primary dryland forest to plantation	34,611	3.09
Secondary dryland forest to plantation Forest (HTI)	26,173	2.34
Primary dryland forest to shrub	26,173	2.34
Shrub to plantation	19,183	1.72
Open area to plantation	16,237	1.45
Total	968,869	86.62
Total Berau	1,118,343	100.00

Note: This table and relevant table as well as spatial data below are generated using spatial data provided by KLHK at 1:250,000 resolution.

As shown in Table 1 above, the dominant changes in vegetative cover in Berau in the period of 2000-2020 are the shifts from primary to secondary dryland forests at about 650,000 ha (about 60 percent of the changes). Meanwhile, secondary dryland forests to shrub comes second at almost 60,000 ha (about 5.3 percent), while secondary dryland forests

to plantations at about 45,000 ha (about 4 percent). This shows that logging – illegal as well as legal – is the largest source of land use change. Moreover, about 120,000 ha of new plantations were established in Berau in the period, generating additional major emissions.

Implications for Greenhouse Gas Emissions

In total, about 1,118,343 ha of land cover changes in the period of 2000-2020 in Berau, 1,034,744 ha of which were reduced vegetative cover while 83,599 ha were increased cover, causing net emissions of 161,555,360 MtCO₂e or about 8 million per year, 7.22 tons per ha per year on average in such period. Figure 2 below shows spatially where the emissions are due to the vegetative cover change²⁸.

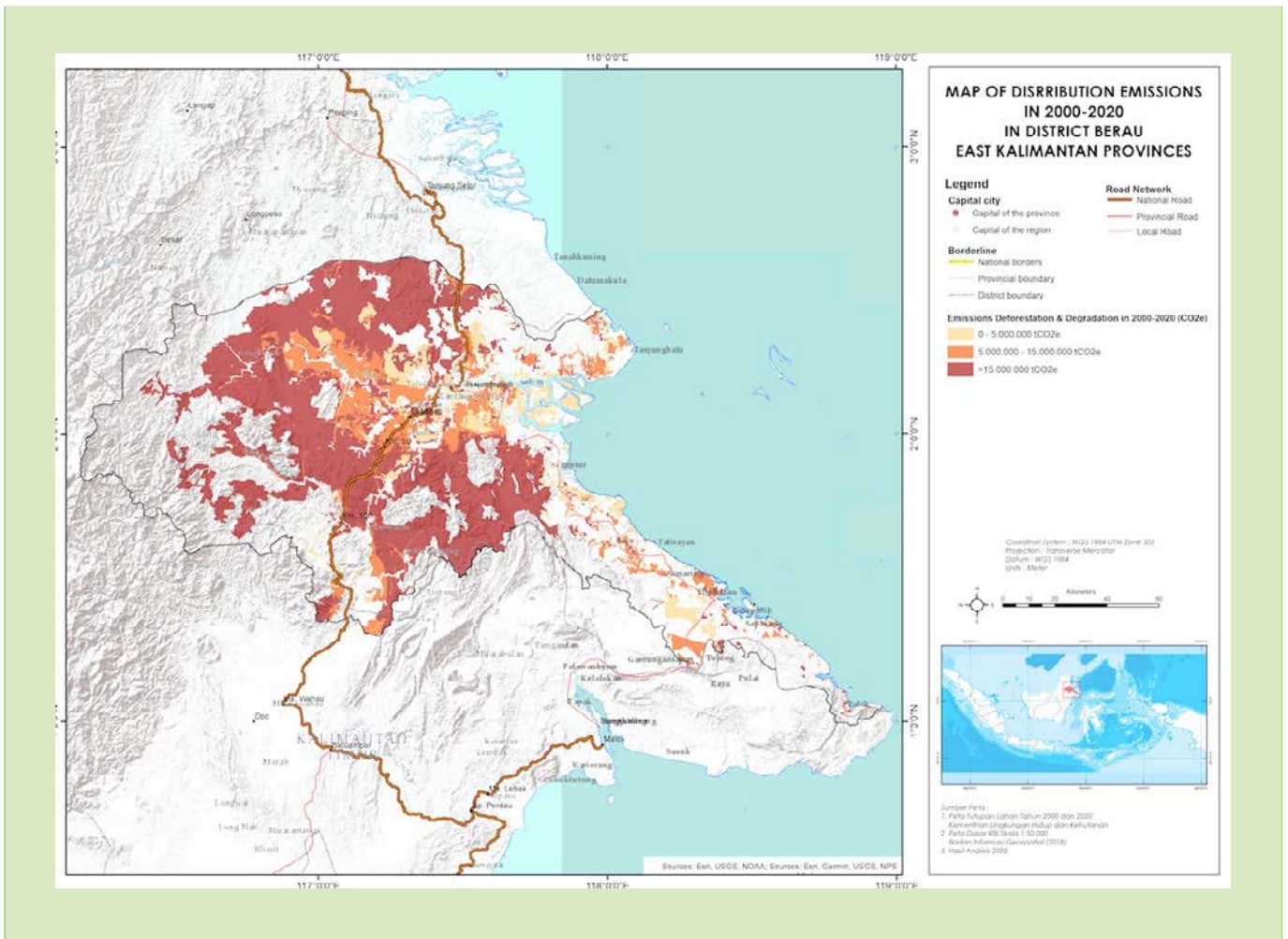


Figure 2. Map of deforestation and its resulting emissions in Berau, 2000-2020, based on the amount of emissions.

Source: Vegetative cover maps from KLHK, 2000 and 2020, processed by Landscape Indonesia.



Table 2. Summary of the calculation of emissions from land use changes in Berau, 2000-2020. Vegetative cover maps from KLHK, 2000 and 2020, processed. Emission factors are from DIPSD, 2015.

Total landcover change areas (ha)	1,118,343
Landcover change that reduced carbon stock (ha)	1,034,744
Carbon stock in 2000 (tCO ₂ e)	878,615,052
Carbon stock in 2020 (tCO ₂ e)	717,059,692
Emissions from landcover change (tCO ₂ e)	177,694,642
Landcover change that increased carbon stock (ha)	83,599
Total sequestrations (tCO ₂ e)	16,139,282
Net emissions (tCO ₂ e)	161,555,360
Yearly emissions (tCO ₂ e per year)	8,077,768
Yearly emissions per ha (tCO ₂ e per ha.y)	7.22

Total vegetative changes in Berau in the period of 2000-2020 was 1,118,343. About 1,034,744 (percent) reduced the carbon stock (released emissions) while 83,599 ha (percent) increased it (sequestered more carbon) resulting in a total

net emissions of 161,555,360 tCO₂e. This means that Berau produced about 8 million tons of carbon dioxide emissions in the period of 2000-2020.

Investment Opportunities

Investable Jurisdictional Initiatives

Most of the investable cases in Berau in this document were drawn naturally from the works by the Kelompok Kerja Ekonomi Hijau Berau (KKEHB) and The Berau Forest Carbon Program (BFCP).

The KKEHB already laid out mitigation plans based on the regional development plan (Rencana Pembangunan Jangka Menengah Daerah, RPJMD) and inputs from other stakeholders²⁸. When these plans were successfully implemented, KKEHB estimated that Berau could reduce emissions in total by 58 MtCO₂e or about 14 percent in the period of 2010-

2030. Instead of burdening the district's budget, all of these mitigation actions can be carried out at an accumulated net profit of \$17 million²⁸. Additional mitigation initiatives may reduce emissions even further.

KKEHB indicated that the most significant emission reductions could be delivered from three mitigation plans, namely improvements in the management of production forests in at least 650,000 ha, improvements in the management of protected forests in at least 100,000 ha, specifically for reducing emissions and increasing carbon stock, and improvements in the land-use planning and management of oil palm plantations in at least 20,000 ha²⁹.

Improved Management of Production Forests

There are a number of actions that could possibly be carried out to improve production forest management. First, logging companies can increase their sustainability practices usually demonstrated by receiving globally-recognized sustainability certification such as from the Forestry Stewardship Council (FSC). In addition to reduction of emissions, there is actually a significant premium price that could be gained from sustainably-certified timber products³⁰. Second, reduced-impact logging for carbon (RIL-C), an improved logging technique that reduces negative impacts such as unintended tree felling. RIL-C has a potential to reduce significant amount of emissions³⁰.

Additionally, harvesting non-timber forest products from forests could also generate income while maintaining vegetative cover of the forests. An approach developed in Berau called Sigap (Aksi Inspiratif Warga untuk Perubahan, or Communities Inspiring Action for Change) could also be used to organize community-based initiatives that take advantage of Village or Community Forests³⁰. All these will maintain forest cover in high conservation value (HCV) forests that will conserve biodiversity and other ecosystem services of the forests in addition to reducing carbon emissions³⁰.

Improved Management of Protected Areas

Securing and protecting protected forests will avoid deforestation. Also, development of concession-based Reduction of Emissions from Deforestation and Degradation of Forests (REDD+) project that eventually will be nested up to the Berau jurisdictional approach. There is a series of additional initiatives that can be developed such as monitoring and controlling forest fires, outreaching the participation of local communities around the forests, utilization of non-timber forest products, and development of eco-tourism and wildlife tourism. These initiatives will eventually maintain forest cover, especially primary forests and high-density secondary forests³⁰.

Sustainable Palm Oil

As in many parts of Indonesia, expansion of oil palm plantations have brought significant threat to the forests, although it provides livelihoods to the local people and contributes to the national economy. Doing it right may be able to obtain economic benefits sustainably. There are a number of initiatives that can contribute to making oil palm plantations more sustainable and at the same time reduce emissions. Protecting HCV forests within plantation areas will keep substantial carbon stock intact while avoiding a large amount of emissions, especially when they are located in peat and mangrove forests. Developing plantations in critical land areas will increase carbon sequestration and as such contribute to emission reductions. Integrating animal husbandry, especially cows, in the oil palm plantations will increase potential livelihoods generated by the plantations on a per ha basis³⁰. Calculating expansion of oil palm plantations, even in critical land areas, programmatically to increase sequestration is controversial, however.

Additionally, land use planning and management for oil palm plantations that takes into account emissions and overall ecological services of the landscapes will also contribute to lower emissions from the oil palm plantation activities. Increasing productivity of oil palm plantations, especially in smallholders, will increase income from the plantations without increasing emissions from the clearing of forests. All these initiatives will lead to reduction of land clearing and increase carbon stocks in forested areas, utilization of otherwise idle degraded lands³⁰.

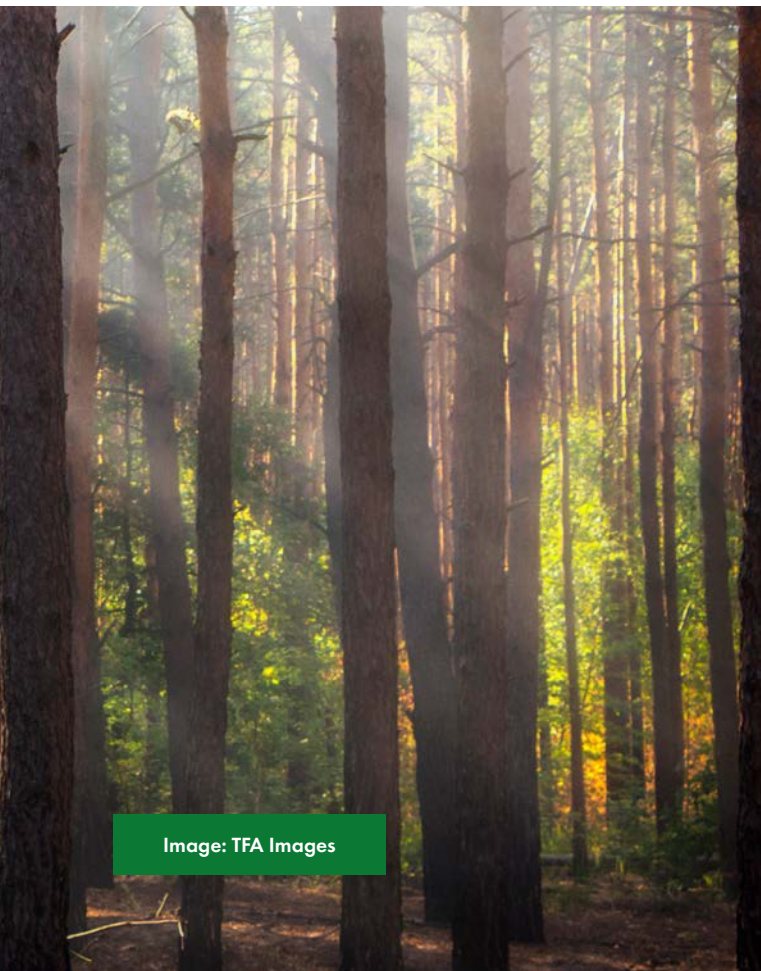


Image: TFA Images

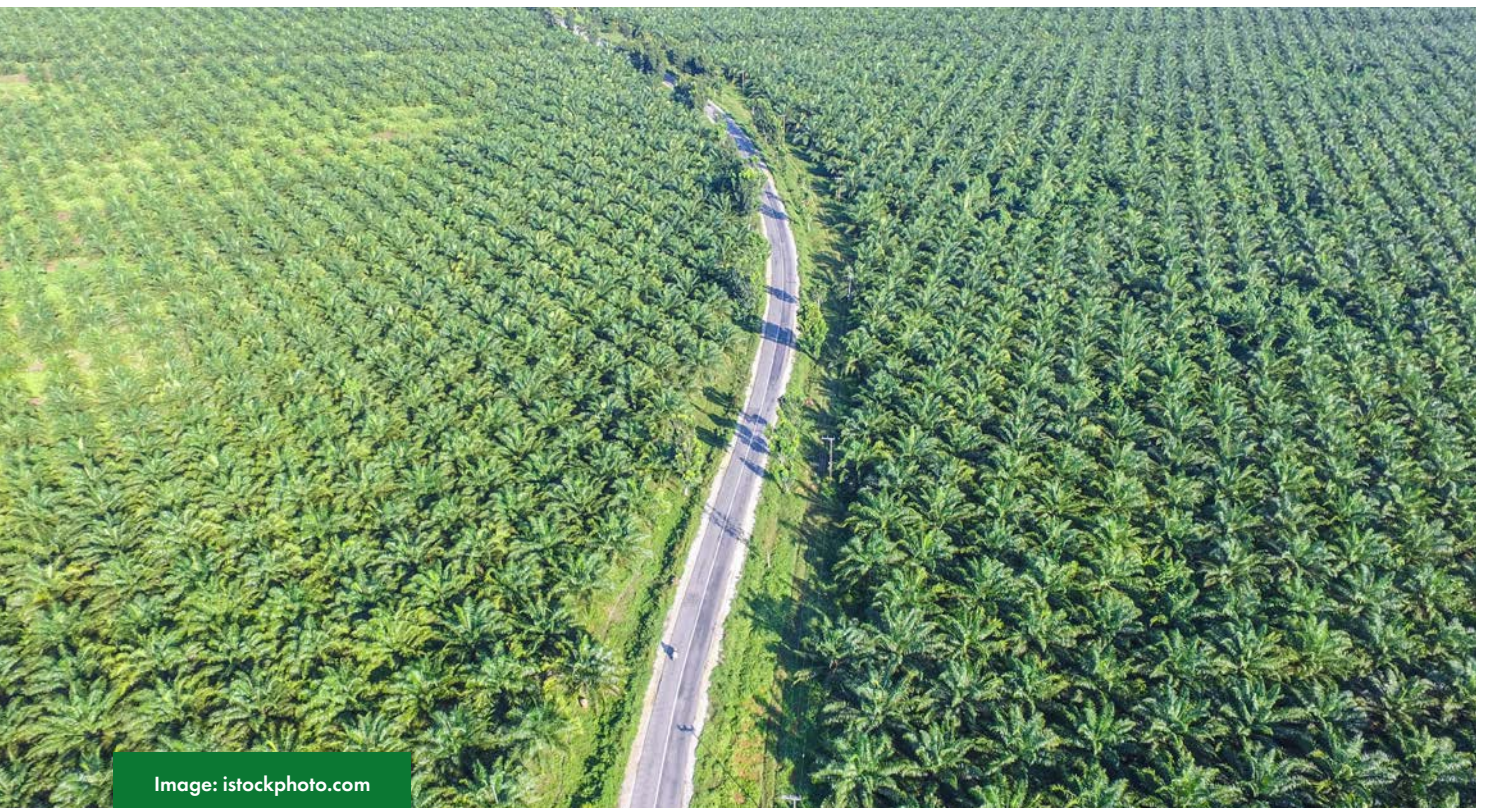
Large companies with strong concerns over their brand reputation will welcome participation in a jurisdictional approach as it is a public way to show their sustainability commitment, especially with regards to maintaining deforestation free products. Additionally, participation in jurisdictional approach will increase access to premium markets, reduce cost of compliance with sustainability certification procedures, and reduce cost of compliance with government regulation. Smaller companies may have initial doubt as jurisdictional approach, especially as it is most likely government-led, may be perceived to increase tighter regulation and legal enforcement. As such, the (local) government as the leader of the jurisdiction needs to reassure these companies that it is not the case¹⁶.

Already, application of sustainability certification such as the Roundtable on Sustainable Palm Oil (RSPO) on oil palm plantations have shown to effectively reduce deforestation²⁴. Also, RSPO is currently developing a standard for jurisdictional approach³¹. The approach is currently being piloted in the Seruyan district, Central Kalimantan alongside the trial of the Terpercaya Indicators¹⁴. The Ministry of National Development Planning has also included jurisdictional approach for food and agriculture in Indonesia's Midterm National Development Plan (Rencana Pembangunan Jangka Menengah Nasional, RPJMN) 2020-2024³².

Other Agricultural and Plantation Areas

Similarly with oil palm plantations, other commodity plantations could also gain from the support to be more sustainable. For example, rubber or other commodities including mixed fruits and general farming commodities such as rice can be planted in degraded lands. Community owned and controlled degraded lands can especially benefit. Local organizations can be involved in such initiative. As such, these degraded lands can be utilized to provide economic and ecological benefits³⁰.

In general farming, especially rice farming, sustainable farming technologies that can be applied. There are also climate-friendly rice varieties that may lead to reduced emissions (especially methane emissions) while maintaining the quality of the rice. Research and development of farming technologies and farmers accompaniment may bring further benefits. Extensification of farms into open and degraded lands and intensification of existing farms will bring economic as well as climate benefits³⁰.



Enabling Conditions

What forms a jurisdictional approach is the presence of two components, namely (1) of it being spatially relevant ecologically, socially, and economically, showing managerial arrangements spatially covering the relationships of the land uses in the jurisdiction; and (2) of it being planned, implemented, and monitored and evaluated participatorily by the relevant stakeholders, including to resolve overlapping

land use, to combine rational as well as participatory reasoning. In Berau as in other jurisdictions, the main reference for the participatory planning process is the District Spatial Land-Use Plan (Rencana Tata Ruang Wilayah Kabupaten, RTRWK) as well as maps of forestry, mining, and plantation concessions³⁰.

Box 1 Existing and Notable Initiatives in Berau

Three initiatives are notable as they have developed initial preparedness for jurisdictional approach in Berau, and are expected to continue to create enabling conditions.

The Heart of Borneo

This initiative came out of an official declaration by the heads of state at the Association of Southeast Asian Nations (ASEAN) Summit in Manila, the Philippines, in December 2006. As a follow up, the “Declaration on the Heart of Borneo Initiative: Three Countries, One Conservation Vision” was signed in Bali, Indonesia, in February 2007. The initiative covers about 220,000 ha in the Kalimantan Provinces of Indonesia, in the States of Sarawak and Sabah of Malaysia, and a small part of Brunei. It strives to protect the single-largest stretch of rainforest left standing in Southeast Asia, the third largest in the world housing possibly the richest biodiversity on Earth where half a million indigenous people still rely on its ecological services³³.

The Berau Forest Carbon Program (BCPF)

Among the most notable program in Berau is the Berau Forest Carbon Program (BFCP). The development and planning of the program was facilitated by The Nature Conservancy (TNC) and was launched in 2010 as among the first jurisdictional approach initiatives for REDD+ in Indonesia. The program includes a combination of activities, including site-based strategies to strengthen community-based natural resource management, improve the management of natural forest logging concessions, enhance protection management of

intact forests, and reduce forest conversion for oil palm development. The program also strives to improve enabling conditions including strengthening the district spatial planning, mid-term development planning, and the establishment of forest management institutions. Strategies were designed to enable the district to achieve measurable emission reductions and develop the necessary systems to enable the district to access results-based carbon finance²⁹.

While the BFCP covers the entire land area in the district including the 1.7 million ha forest area and 0.5 million ha of non-forest area, it is focused on two of the 13 subdistricts in Berau, namely Kelay and Segah. Moreover the East Kalimantan Green Growth Compact was launched in 2015 that could house the multi-stakeholder collaboration to accelerate provincial-scale jurisdictional program.

The Kalimantan Tropical Forest Conservation Act (TFCA)

The Kalimantan TFCA is a debt-for-conservation swap (also called debt-transfer cooperation) between the Governments of Indonesia and the United States. It transfers Indonesia’s debt from having to be paid back to the US, be paid to another party appointed by the US Government to be used to fund conservation activities. The Kalimantan TFCA was implemented with the World Wide Fund for Nature (WWF) and The Nature Conservancy (TNC) as the “swap partners” and is administered by the Biodiversity Foundation (Yayasan Keanekaragaman Hayati, Kehati)²⁹. The Kalimantan TFCA supports the Heart of Borneo initiative that includes Berau, among others through the BFCP³⁴.

The BFCP has developed the capacity of the district to implement jurisdictional approach significantly. Being a part of the Heart of Borneo program does help. The BFCP has established a Steering Committee, chaired by the Vice Bupati, that can be a good start to establish the participatory process. It already has representatives from the provincial and central governments as well as from the academic community²⁹.

Jurisdictional approach for food and agriculture sustainability has been adopted in the National Midterm Development Plan (Rencana Pembangunan Jangka Menengah Nasional 2020-2024)³². But the enactment of Law No 23/2014 on Local Government brought a significant amount of authorities regarding forest management from district to provincial governments. While this might disrupt the jurisdictional approach in Berau, it opened a larger opportunity to bring the approach to the provincial level with Berau being a significantly instructive model district.

Meanwhile, East Kalimantan already established the Regional Climate Change Council (Dewan Daerah Perubahan Iklim, DDPI) through a close coordination between the Governor of East Kalimantan and the Ministry of Environment and Forestry. The DDPI then established a so-called Design Team to develop a road map for the so-called Green Growth Compact (GGC). The GGC was eventually established in 2015. It continues to provide strategic direction as a multi-stakeholder leadership group while the official leadership of the governor in the GGC provides political legitimacy³². Moreover, East Kalimantan – along with Aceh, Central Kalimantan, North Kalimantan, West Kalimantan, Papua, and West Papua in Indonesia, among a total of 35 provincial-level jurisdictions globally – is a member of the Governors' Climate and Forest Task Force (GCFTF). It provides a platform to increase awareness and capacity of the members in carrying out jurisdictional approach to reduce deforestation and its related emissions³⁵. In 2017, the Governor of East Kalimantan hosted the global meeting of the GCFTF that produced the Balikpapan Challenge³⁶.



Building the Ecosystem to Promote Sustainable Investment

Institutional arrangement and financial structure is key in ensuring the success of jurisdictional approach. Diagram in Figure 3 below depicts the institutional and financial ecosystem of a jurisdictional approach in Berau. The Berau District Program is managed by the district government, which is coordinated under the Ministry of Home Affairs through the provincial government of East Kalimantan.

The planning process of the jurisdictional program through a multi-stakeholder steering group needs to be harmonized with the development planning process at the district, provincial, and national levels. At the district level, it is under the guidance of the Regional Development Planning Agency (Badan Perencanaan Pembangunan Daerah, Bappeda). At the national level, it is under the guidance of the Ministry of National Development Planning (Badan Perencanaan Pembangunan Nasional, Bappenas)³².

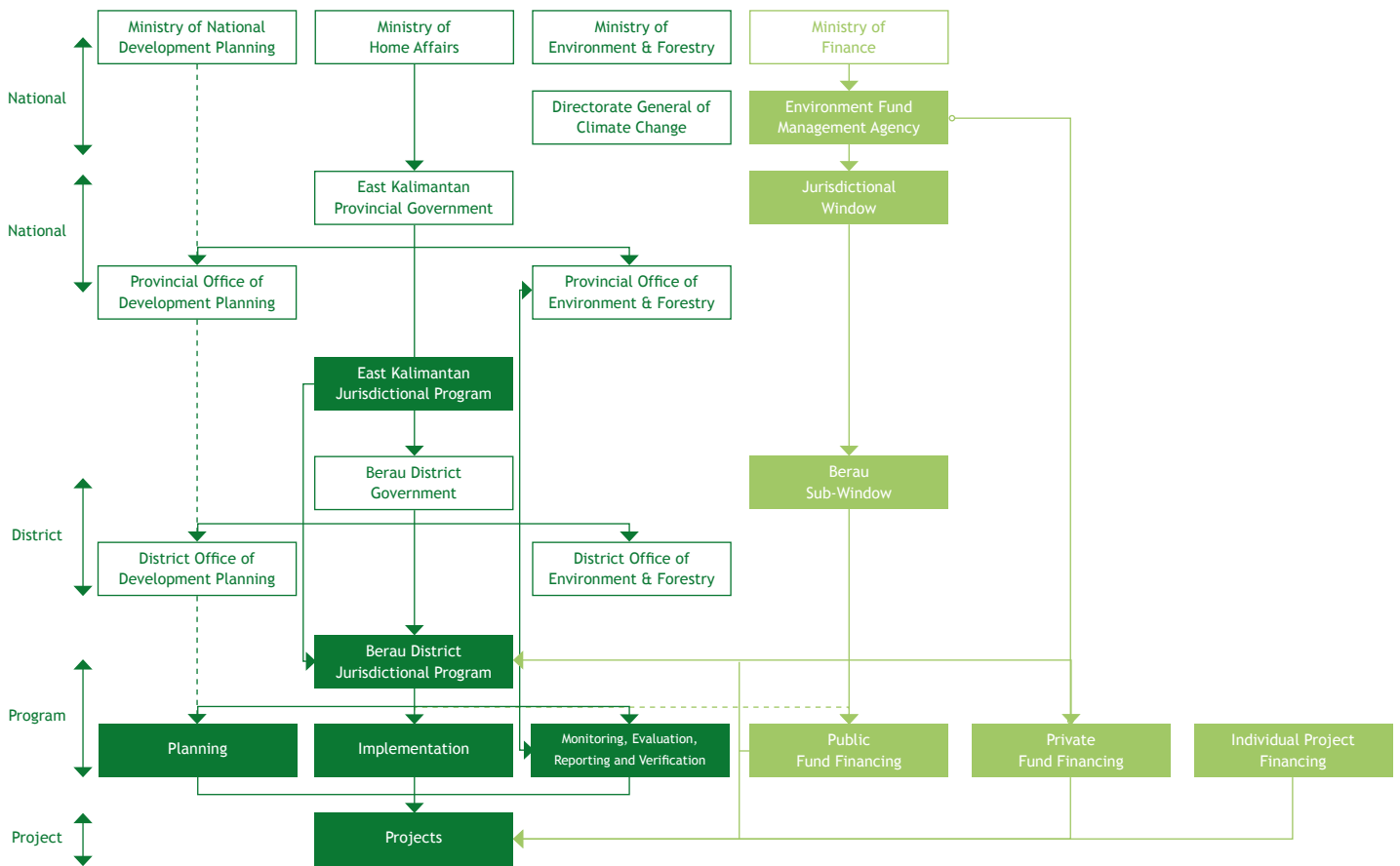


Figure 3. Institutional Arrangement of a possible Berau Jurisdictional Program and its financing arrangement.

Sharing of benefits from the jurisdictional approach needs to be defined at the planning process. Benefit sharing mechanism is a recognition that reduction of deforestation and degradation of forests as well as the resulting reduction of emissions are a result of collective action. For the financial benefits that Berau will gain from monetizing the emission reduction, the benefits need to be properly and fairly shared among the stakeholders. Well-defined benefit sharing mechanism often times is the most important determining factor of the success of the jurisdictional approach.

MRV is managed by the Office of the Environment and Forestry (Dinas Lingkungan Hidup dan Kehutanan). The BFCP has created sufficient capacity to carry out the MRV process. As part of the provincial jurisdictional approach, the Berau Jurisdictional Program can be nested onto the East Kalimantan jurisdictional program. As a result, the MRV system at the Berau district level needs to be structured as a part of provincial system, and eventually reported to the Directorate of Climate Change of the Ministry of Environment and Forestry.



Financing Structure

There are a number of possible ways financial deliveries can be made into a jurisdictional approach. The simplest option is to continue with direct and straightforward business-to-business financing. The sources of financing may be from individual or institutional financiers. These individual “projects” or initiatives need to be coordinated so that it is curated jurisdictionally. The “Production-Conservation-Inclusion” Pitchbook for Mato-Grosso may be a good model for building a curated list of investable project to be scaled³⁷.

The second option is to establish jurisdictional-level public, private, or combined financing instrument that obtains funds from individual and institutional sources and distribute them to the investable jurisdictional initiatives. Obviously it needs to be well-governed and transparent to increase comfort of the investors to invest in and through the instrument. However, when public funding is involved, the complexity of the structure should not be underestimated. It may take a long time before this jurisdictional financial instrument can be fully operational.

The third option is a slight departure to the second one. A jurisdictional focus can be established within an already well-established and operational financing instrument.

For example, a jurisdictional window can be established under the already operational Indonesian Environmental Fund Management Agency (Badan Pengelola Dana Lingkungan Hidup, BPD LH) under the Ministry of Finance. The window can have its own separate governing body that fits with the needs in the jurisdictions. Establishing a window is expected to be much simpler than establishing an entire jurisdictional entity.

The second and third options are expectedly more complex than the first one, but at the same time can be much larger in scale and more systematic in addressing the underlying causes of deforestation. In addition, as capacity has been significantly built in East Kalimantan, Berau’s district-level jurisdictional approach can actually be nested up onto the provincial-level jurisdictional approach of East Kalimantan. Figure 3 above shows the options for financing the jurisdictional initiatives. These options are not mutually exclusive. They can be combined and applied as appropriate. Projects and initiatives in Berau can still be financed directly in addition to the fund financing structure. The option of using the BPD LH that already has sufficient fiduciary governance as a fund manager alongside individual project financing can be explored further.

Box 2 Internal Jurisdictional Financing Possibilities



At more than half, coal mining is a significant contributor to Berau's GDRP¹⁹. Berau Coal, for example, contains more than 200 million tons of proven reserves out of the total 500 million reserves³⁸. Coal mining is the most carbon-intensive source of energy and as such there is a major call at COP26 to phase down its utilization³⁹. Berau Coal claims to carry out its mining sustainably, however, following its "Berau Coal Green Mining System", and has received a number of awards from the government⁴⁰⁻⁴¹.

Among key activities that could be done by a mining company such as Berau Coal is to ensure that it not only complies with environmental regulations in Indonesia, including for ex-mining site restoration, but taking actions beyond compliance. Reclamation and revegetation will be able to return the vegetative covers of ex-mining sites while at the same time returns to the extent possible the sequestration capacity of the sites. Additionally, the coal industry may be able to offer supply chain offset for at least a portion of its potential emissions. The financial resources provided by the offset could finance some of the investable jurisdictional initiatives in its landscapes in Berau. Assuming that on average one ton of coal potentially

could release about 2 tons of carbon dioxide, and the cost of offsetting is, for example, \$2 per ton of carbon (the minimum of carbon tax amount regulated by Law No. 7/2021), the potential financial resources provided from 200 million tons of coal is \$800 million. Berau Coal produces about 15 million tons per year that potentially emits at least about 30 million tons of carbon dioxide. Carbon tax imposed on these emissions would generate about \$600 million per year that could be utilized locally to reduce emissions in Berau.

Similarly, there are industrial oil palm plantations in Berau. A number of them seek to implement more integrated and comprehensive sustainable landscape management with other land users around their plantations. Some chose to work through providing grants to local organizations, while others through so-called corporate social responsibility (CSR). Internal investment involvement in Berau allows more comprehensive action plans, for example through establishing additional protected areas through concession-based REDD+ as a part of the landscape management of the industry. These project-based financing can be a part of a bigger jurisdictional-level financing.

The combination of direct project-based and programmatic financing structure will lead to total reduction of emissions in Berau. It underlines the collective nature of the emission

reductions at the jurisdictional level. As such, every individual stakeholders should be able to expect gains, including financially, from the value of the reductions.

Conclusion

As an investable jurisdiction, Berau is fertile and possibly the most matured. The decade-long development as the first jurisdictional approach has brought significant institutional capacity to the district especially through the Heart of Borneo and the Berau Forest Carbon Program (BFCP) initiatives.

The initiatives have also survived the tests of two major changes, namely the change of the district head and the governor, and the changes in the forest management policy caused by the enactment of Law No. 23/2014 on Local Government that brought significant forest management authorities from the district to the provincial levels. The policy changes could actually open the opportunity to bring the entire province of East Kalimantan as an investable jurisdiction and bring Berau as an instructive model for other districts in the province and in the country. In sum, Berau possibly is among the most prepared and fertile districts for the implementation of jurisdictional approach not only in East Kalimantan, but possibly in Indonesia.

A significant amount of emission reductions could potentially be achieved in Berau. KKEHB identified an opportunity to reduce about 58 MtCO₂e at a net profit of \$17 million³⁰. The floor price of carbon has increased considerably for reductions made through jurisdictional approach, and as such could potentially generate even larger amount of income.

The past calculation by the KKEHB works have identified an opportunity of reducing about 58 MtCO₂e (14 percent) at a net profit of \$17 million. More recent information shows that the price of carbon dioxide emissions gets higher over time⁴². Opportunities other than those identified here could still be explored and exhausted.

To increase investors appetite, however, there has to be investor-friendly structure to facilitate investment financing to the jurisdictional approach in Berau. A combination of direct investments to a series of individual initiatives and fund-based financing, for example including through the BPD LH, should work. Nesting jurisdictional approach in Berau onto the East Kalimantan provincial jurisdictional approach will bring more benefit. Indeed, the structure needs to be designed and developed properly to ensure investors' comfort, but the enabling conditions for such is already in place in Berau.



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TROPICAL FOREST ALLIANCE



Landscape
Indonesia

The Tropical Forest Alliance

TFA is a global multistakeholder partnership platform initiated to support the implementation of private-sector commitments as well as to amplify demand-side engagement in major economies towards the transition to reduced deforestation commodity supply chains. Hosted by the World Economic Forum, TFA partners with 170+ organizations - companies, government entities, civil society, indigenous peoples, local communities and international agencies. TFA operates regional platforms in Latin America, West and Central Africa, China, and Southeast Asia.

Landscape Indonesia

It was incorporated as PT Bentang Alam Indonesia. Bridging sustainable landscape management with financial resources. The mission is to ensure that landscape management in Indonesia is carried out sustainably while sufficiently and sustainably financed. Landscape Indonesia supports a landscape approach that spatially and participatoryly strives to balance seemingly competing goals of protection and production.

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