



LANDSCAPE ACTION & FINANCE PLAN

April 2022

Overview

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3. Stakeholders
4. Finance plan

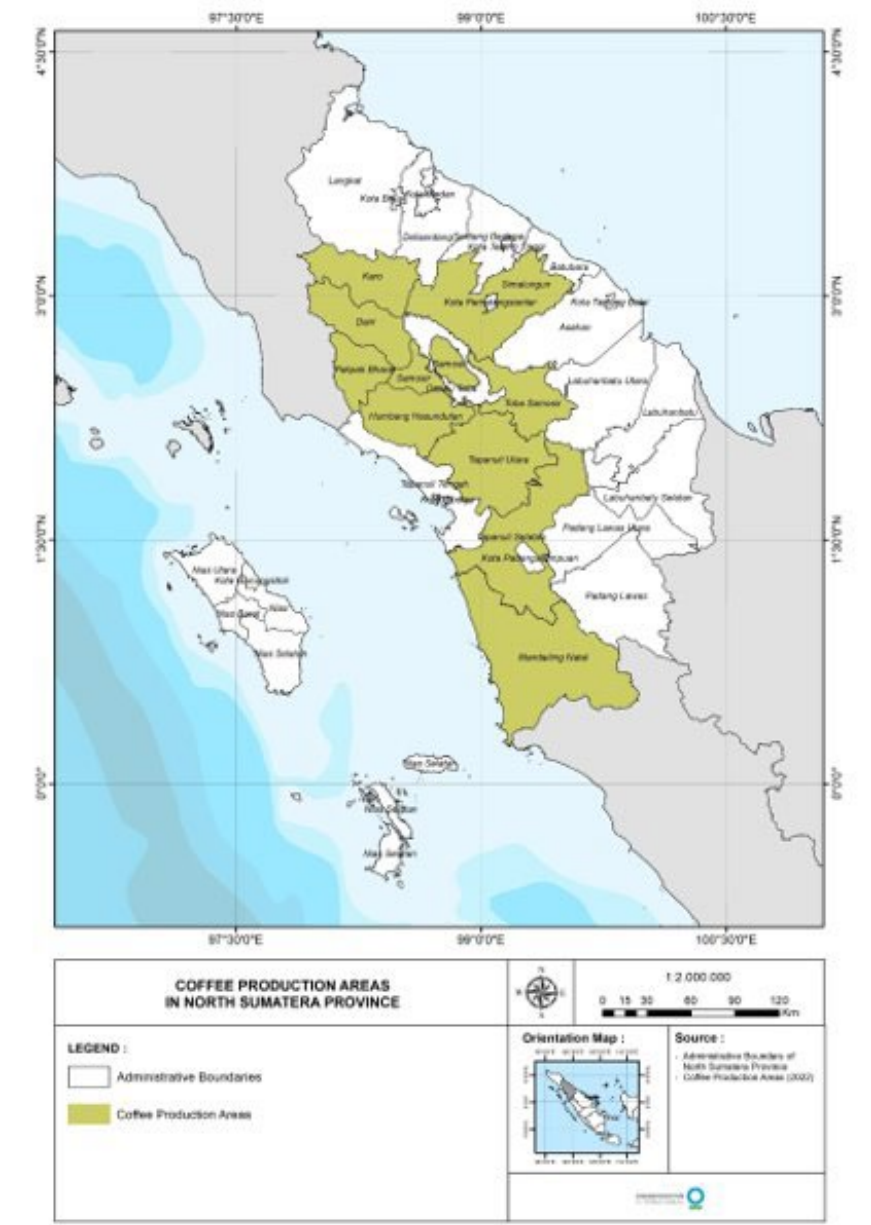


LANDSCAPE VISION



NORTH SUMATRA LANDSCAPE

Indonesia's North Sumatra Province covers 7.3 million hectares (ha) and is home to more than 14 million people, 41% of whom are employed by the agriculture and forestry sectors. The province has 33 districts and municipalities and 10 of them are coffee production areas.



Rationale for Landscape Investment

- North Sumatra has over 3 million ha of land designated as forest area, with 1.4 million ha designated as production forest, 1.2 million ha as protection forest, and 427,000 ha as conservation forest. In total, 1.6 million ha is managed for protection and conservation purposes, representing about 25% of North Sumatra's total area.
- North Sumatra has experienced a reduction in annual deforestation rates, from 2% per year in 2010 to less than 1% per annum in 2017. This mirrors a national trend, in which deforestation rates dropped significantly in 2017. Indonesia was able to maintain these low rates for the three-year period 2017-2019. This success has largely been attributed to a moratorium on new plantation licenses in primary forest and peatlands
- Despite this progress in reducing deforestation, encroachment of forest lands by smallholders remains a major concern even within protected areas, with the dominant driver being conversion to oil palm cultivation.
- Agroforestry, a mixed farming system combining tree and agricultural crops, is a common practice in this area. Coffee, cocoa, rubber, sugar palm, banana, cinnamon are some of crops widely used in this system.



Vision for Sustainable Coffee in North Sumatra Landscape

Sustainable coffee production landscape is a landscape where best practices are adopted in coffee production, degraded forest restored according to the policy and remaining forest is well protected.



Priority Actions & Targets

Priority actions:

1. Establish a farmer database to support the decision making and program planning
2. Improve coordination among governments and partners related to coffee productions
3. Create sustainably managed coffee productions through improved conservation and GAP practices at least in 20% of farmers in North Sumatra by 2026
4. Ensure financial sustainability of coffee business at farmer level by strengthening the capacity of farmer association (institutional and technical capacities)
5. Address the impacts of climate change by resolving forest tenurial issues, protecting HCV areas and restoring degraded forests around coffee production areas



Indicators & Measurement

Target 1 - indicator:

- A coffee farmer database is established and used by stakeholders for developing coffee program

Target 2 - indicator:

- Integrated and sustainable coffee programs developed and supported by government institutions and partners

Target 3 - indicators:

- Conservation and GAP practices improved at least in 20% of farmers in North Sumatra by 2026
- 10% of government extension officers certified as sustainable coffee production trainers

Target 4 - indicator:

- Farmer coffee associations are built and has the capacity to secure fair coffee price for farmers

Target 5 - indicators:

- 10% of tenurial issues are resolved through social forestry program
- 10% of degraded forest areas are restored using coffee agroforestry system



BASELINE DATA



1. Average Farm Data

Average farm size:

Coffee: 0.25 - 0.5 ha

Palm oil: 1-2 ha

Average yield

Coffee: 500 – 750 kg/year

Palm oil: 8 – 10 ton/year

Average price:

Coffee (parchment): IDR 34,000 – 37,000/kg (USD 2.5 - 3/kg)

Current price of palm oil (FFB): IDR 600 – 1,200/kg (USD 0.04 - 0.08/kg)



2. Production Data

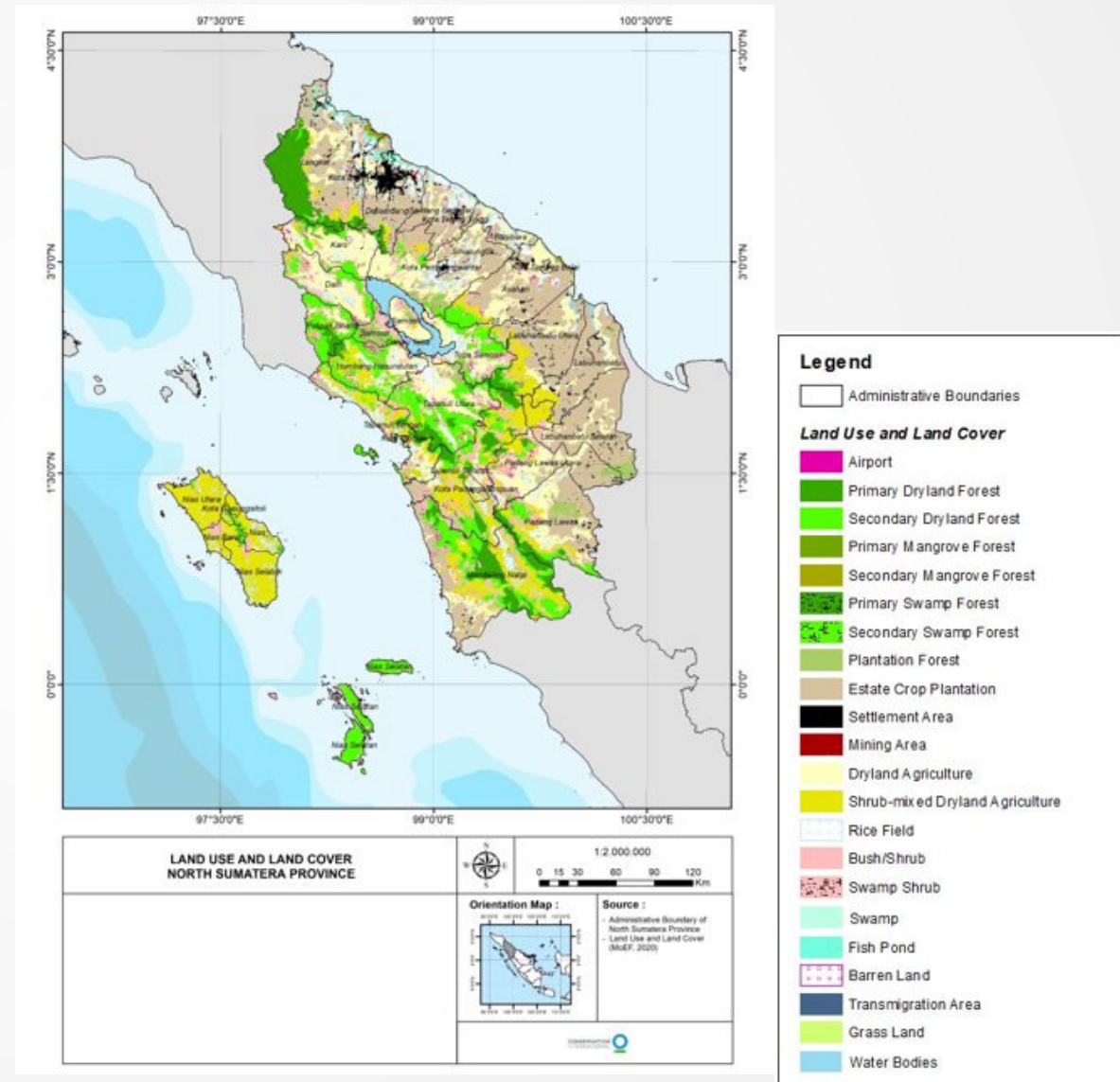
No	District	Size (ha)	Production (ton)
1	Dairi	12,099	9,613
2	Humbang Hasundutan	12,057	9,683
3	Karo	9,205	7,403
4	Pakpak Bharat	964	1,084
5	Samosir	5,064	4,163
6	Simalungun	8,233	10,523
7	Mandailing Natal	3,564	2,533
8	South Tapanuli	4,606	2,103
9	North Tapanuli	16,468	15,220
10	Toba Samosir	4,788	4,403
	Total (North Sumatra)	77,834	67,469

Source: Indonesia Statistic data, 2020



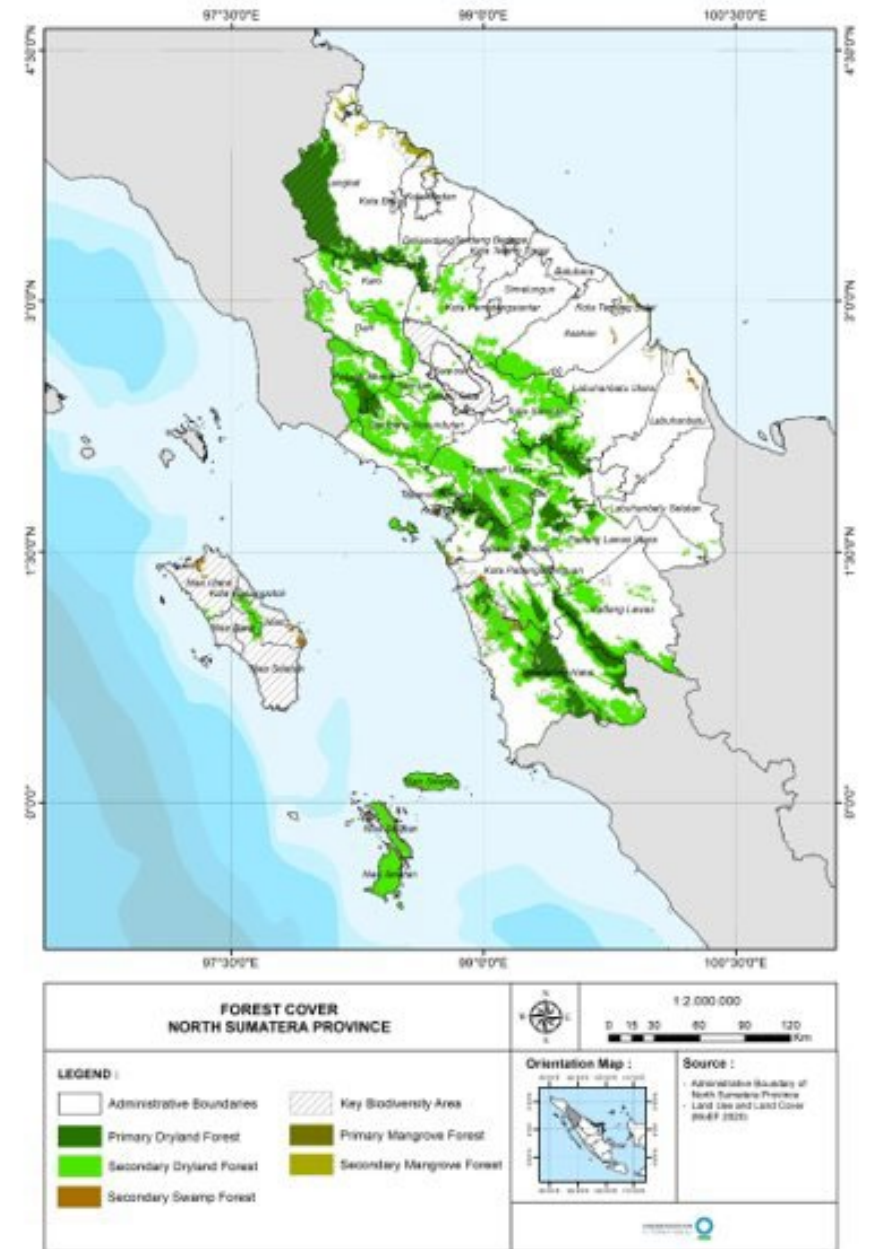
3. Land Use and Land Use Cover

Forests cover including primary and secondary forests dominates (1,703,208 ha) NS landscape in the highland while estate crop plantation which is mainly palm oil occupied large areas in the lowland.



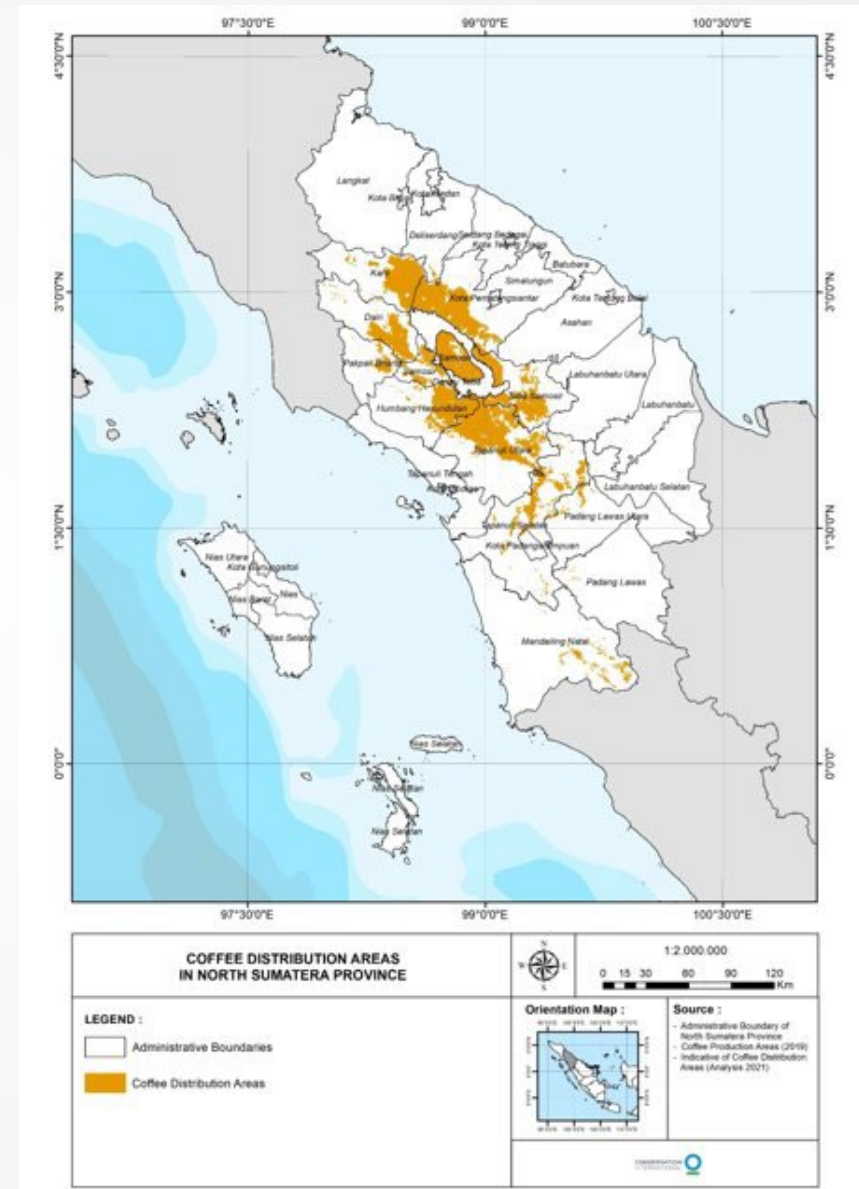
4. Forest Cover

While government designated 41% of North Sumatra land areas for forest zone, however currently only about 23% of NS covered by forest.



5. Coffee Production

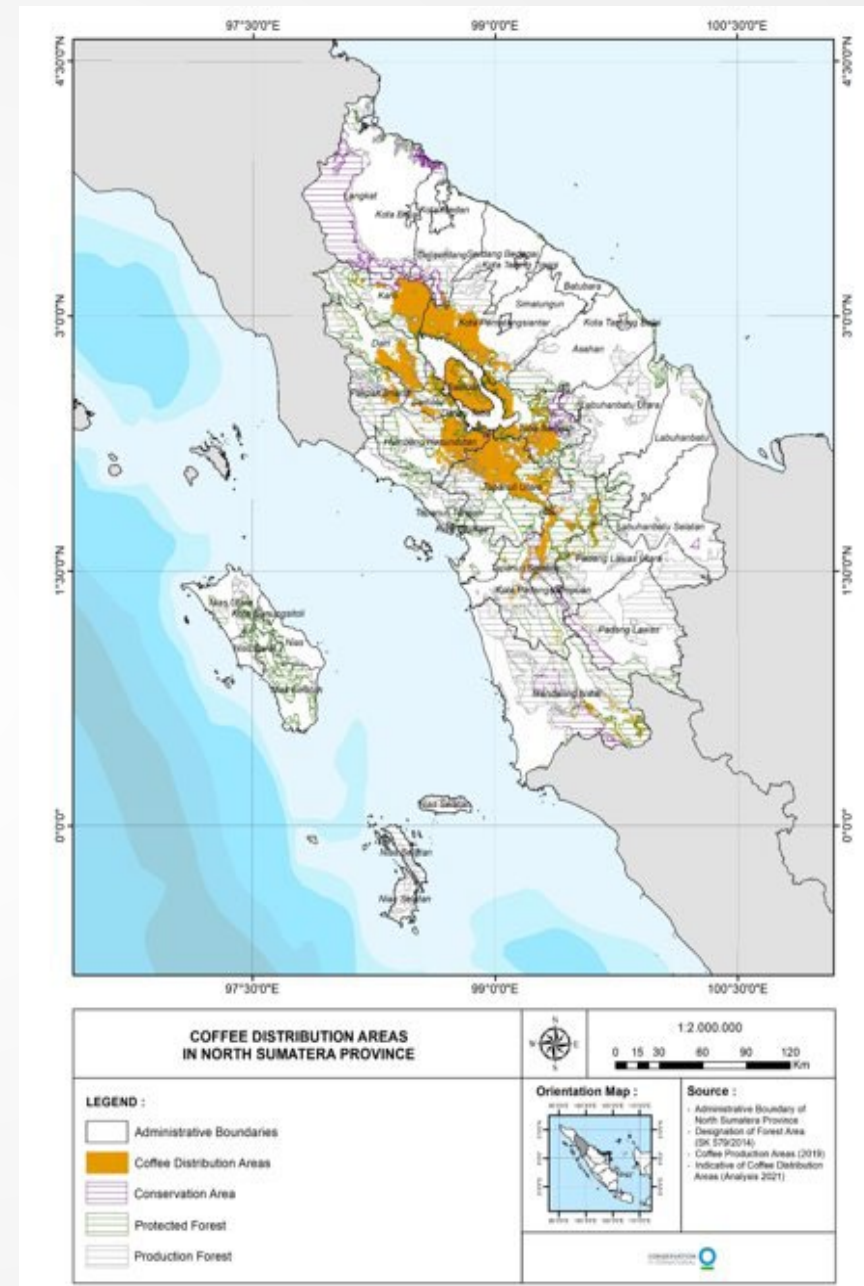
Data analysis by CIAT states that approximately 389,084 ha of coffee farms in North Sumatra. These farms distributed to 10 key production districts across the province.



5. Forest Threats

Our analysis shows that over 68k ha of coffee farms planted in forest areas. Details of coffee farm distributions in forest areas can be seen below:

- Coffee in Conservation Forest: 1.122 Ha
- Coffee in Protected Forest: 31.615 Ha
- Coffee in Production Forest: 36.228 Ha

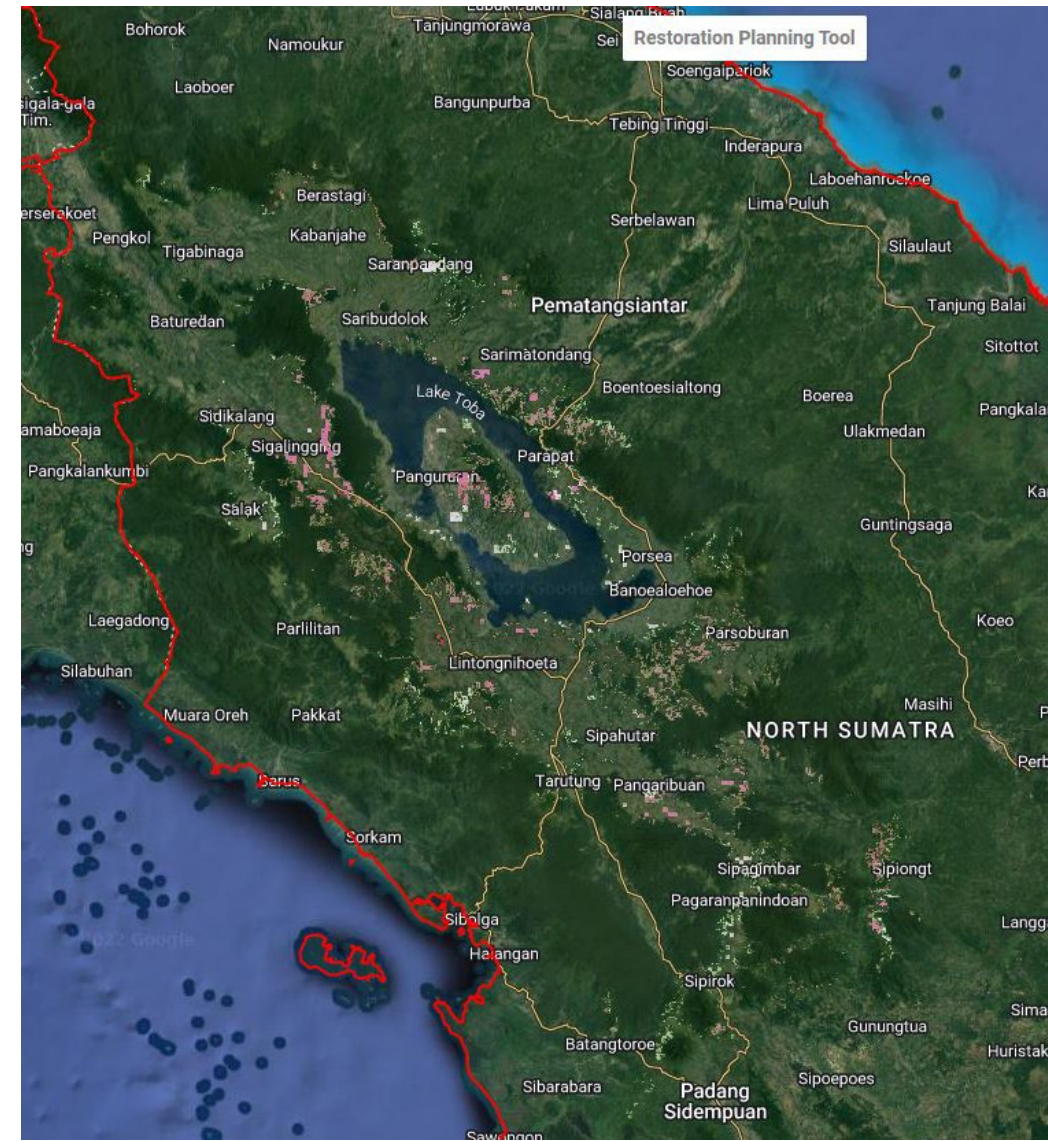
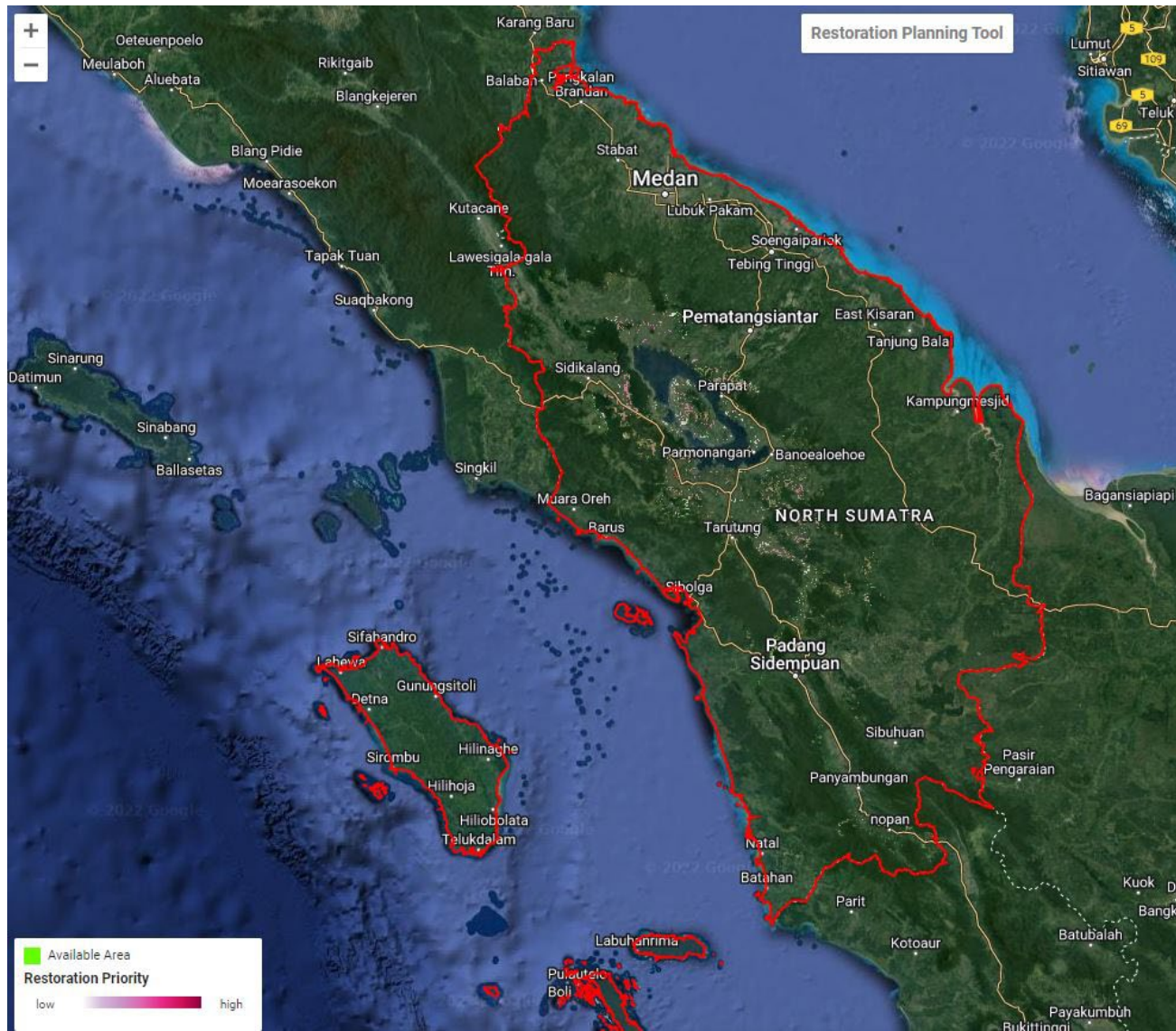


INDONESIA: STAKEHOLDER WEIGHTING

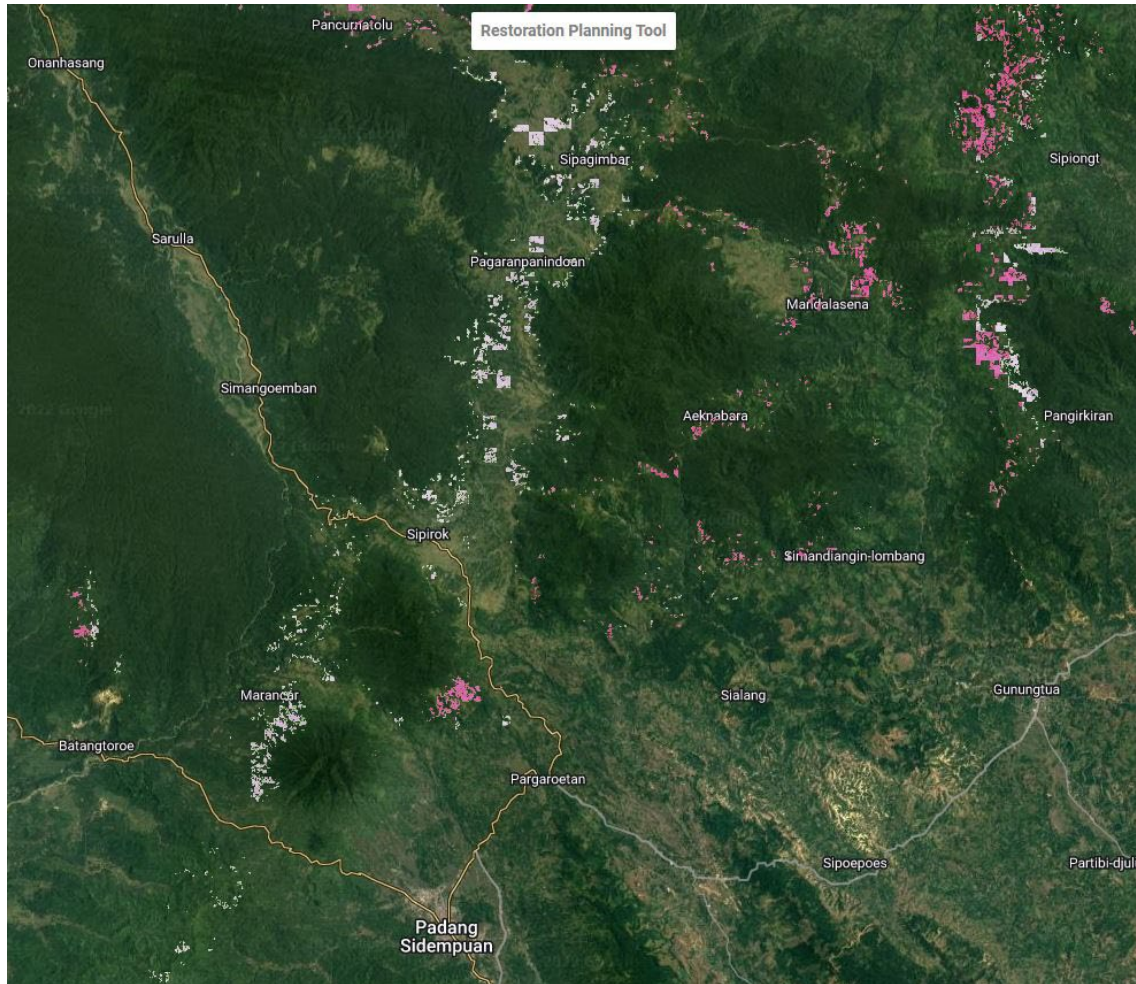
Criteria (1=low, 5=high)	North Sumatera
Proximity to existing forest	5
Carbon sequestration potential	5
Species Range Rarity	5
Proximity to impervious surfaces	4
Riparian areas	5
Fire frequency	4
Slope	5
Peatlands	4
Watershed	5



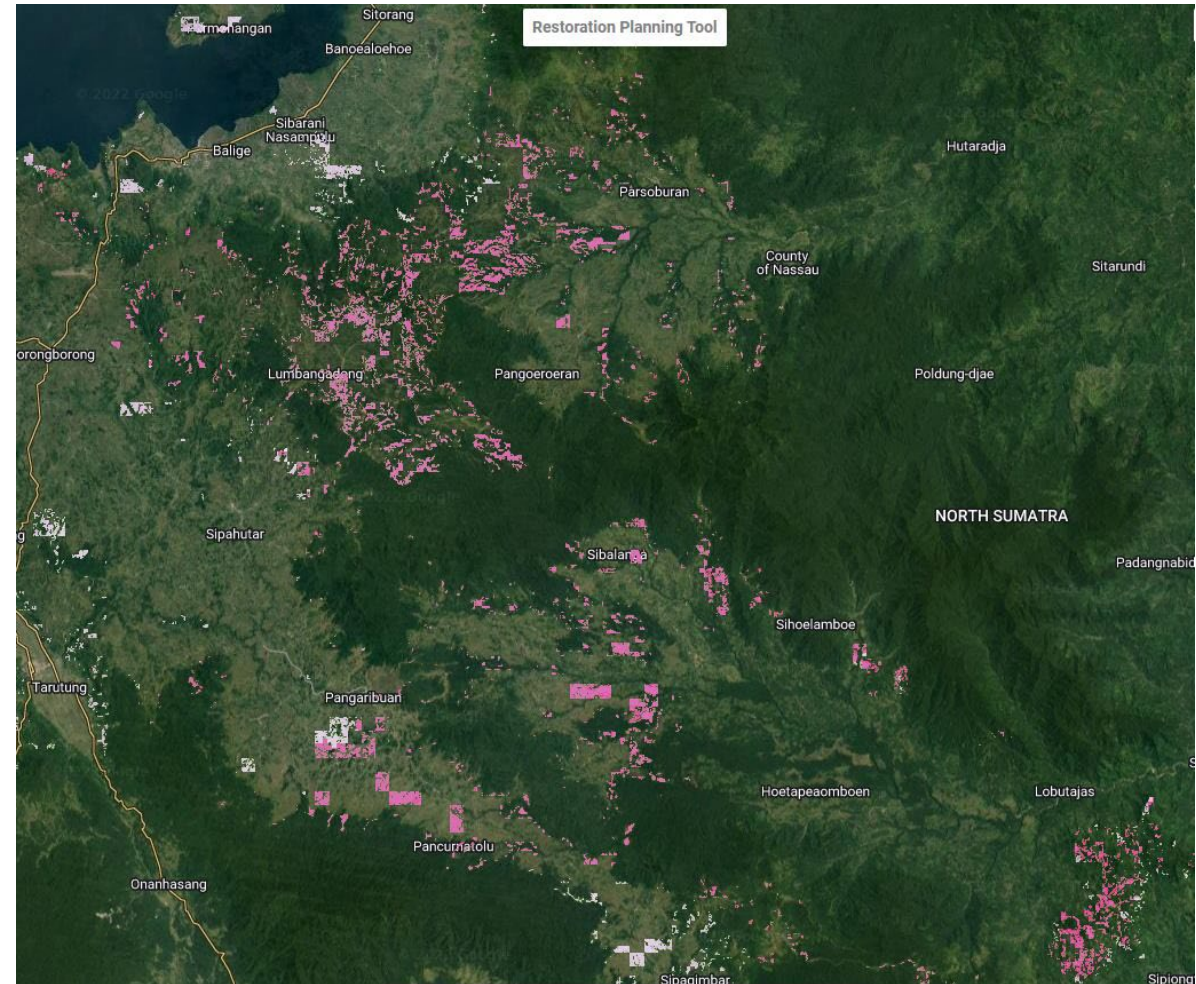
6. Restoration Opportunities - Coffee



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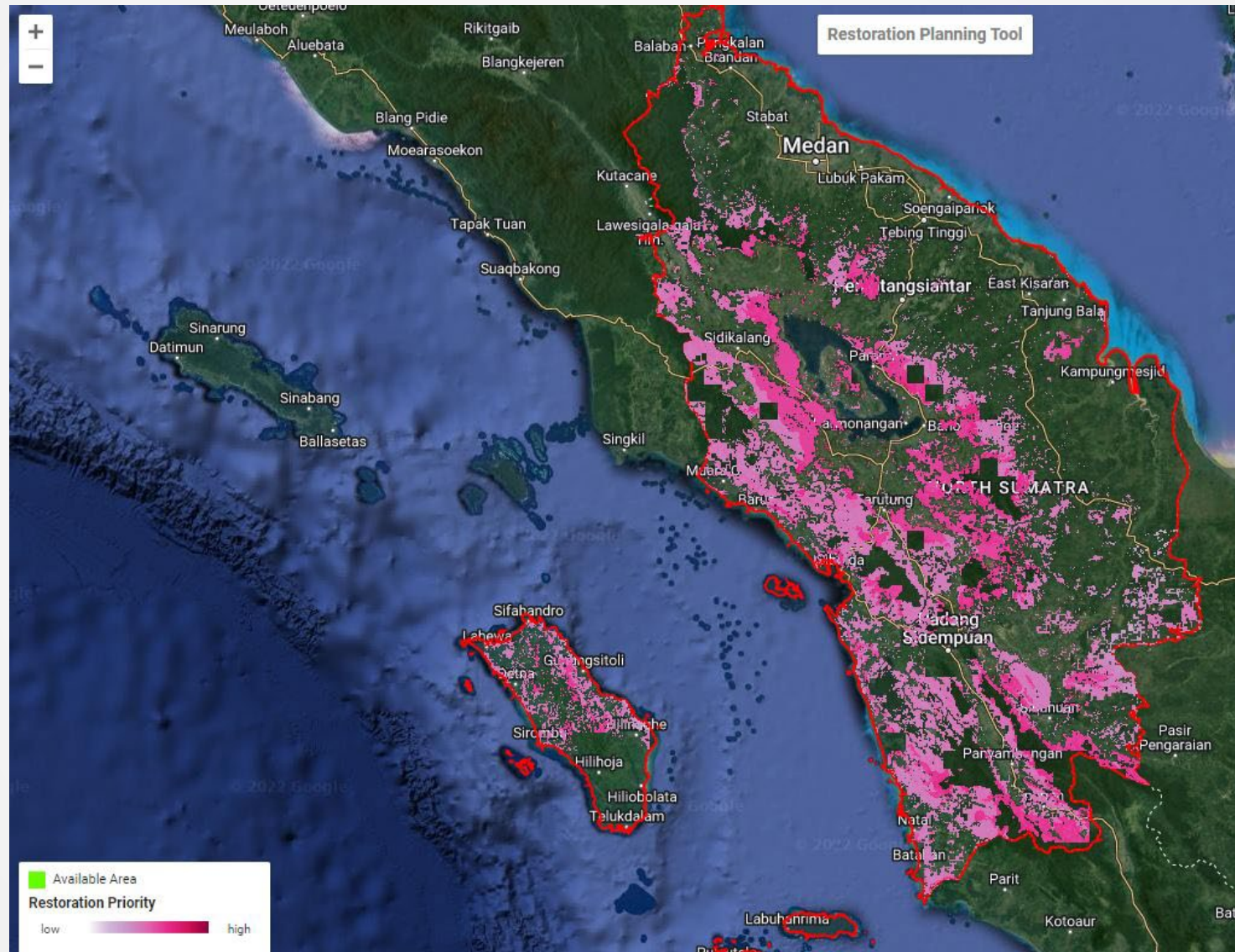
South Tapanuli district



North Tapanuli district



6. Restoration Opportunities – coffee + other crops



STAKEHOLDER MAPPING



1. Status of institutions, financial flows

1. Current financial flows and institutions
2. Investible entities identified
 - Local coffee processing unit; this is a small-scale coffee processing business unit located at district level. This business buys parchment from local farmers and produces green bean.
 - Nursery center; a center which produces quality of seedlings including coffee seedling. Number of nursery center is very limited though the demand is high
 - Coffee farmer association; at least one association is available in each district. This association can play significant roles to strengthen coffee farmers such as serving as credit union, organizing collective marketing while improving the quality, etc.
3. Potential sources of finance (new, reallocated, efficiency...)
 - Bank of Indonesia; coffee program
 - Central government; food estate program
 - Provincial government
 - Private companies
 - Donors



2. Supportive Policies & Programs

Government programs in the landscape that could contribute to efforts

- Food estate: this program is aimed to boost economic development post pandemic situation. Government facilitates access to forest areas for agricultural production including coffee.
- SITANTRI: this program targets improved land productivity and efficiency by maximizing the use of internal farm inputs. Government has already pilot projects and coffee is one of the focus.
- Village Fund: this is government funding to each village to support the economic development.

Government policies that could enable additional opportunities for farmers:

- Forestry policy: this policy allows community to plant trees or shrub in forest areas (in production forest)
- Spatial plan policy: this policy provides guidance which areas can be used for crops production. This policy emphasizes the forestry policy that coffee can be produced in production forest.
- Social forestry: this policy provides access to community for sustainable management of forest areas for 35 years and can be extended.
- Farmer association and fertilizer subsidies: government provides subsidy for fertilizer only when farmers parts of groups or association



3. Landscape Key Actors

KEY ACTORS IN NORTH SUMATRA LANDSCAPE

National Government	Sub-national Government	Development Partners
<p>Ministry of Environment and Forestry (MoEF) through local office units:</p> <ul style="list-style-type: none"> - Social Forestry (PSKL) - Protected forest and Watershed agency; responsible for restoration and seedling supply - Conservation agency including national parks; provides supports to farmers in the buffer zone 	<p>Provincial government:</p> <ul style="list-style-type: none"> - Forestry department; though Forest Management Unit facilitates community-based forest management - Development agency; facilitates development plan and collaboration among partners - Spatial plan agency; facilitate provincial level spatial plan - Estate crop and agriculture departments; coffee is the priority which include improve capacity of agriculture extension, intensification and diversification, pest and diseases management, seedlings provisioning and processing. 	<p>Company – exporters:</p> <ul style="list-style-type: none"> - PT. SSC - PT. Indocafco
<p>Ministry of Agriculture; fertilizer subsidy and processing needs such as compost machine, hand tractor, etc.</p>	<p>District Government – facilitates programs from provincial government</p>	<p>Farmer association for geographic indication protection (MPIG); protection of coffee sourcing in the market. 7 districts of 10 coffee production areas have registered their geographic indications.</p>
<p>Ministry of cooperative and small medium enterprises; provides capital to farmer cooperative also technical and non-technical supports to businesses</p>		<p>NGOs working on supporting coffee farmers: KPHSU, Petrasa, Konservasi Indonesia, Sipirok Lestari, Petai</p> <p>Starbuck farmer support center and other farmer center funded by privates</p>



4. Socialization Process to Date

Literature review and interview planning



Stakeholders interview

- 25 stakeholders interviewed represents stakeholders from national government, sub-national government, exporter companies, farmer associations, NGOs.
- Interview conducted in second week of June



Sustainable coffee action plan draft consulted

81 participants from national government, sub-national government, exporter companies, farmer associations, NGOs attended online workshop on July 4th.



Restoration priority area mapping tool consulted

51 stakeholders joined workshop on July 13rd.



STAKEHOLDER MAPPING - INTERVIEW

Name of stakeholder (institution)	Type of institution (national government, sub-national govt, companies, University, NGOs)	Relevant to coffee action plan (planning, production, processing, market)	Level of interest	Level of influence
Bobby N (Batang Gadis National Park)	National Govt (MoEF)	Planning	2	3
Apri (Social Forestry and Partnership)	National Govt (MoEF)	Planning	3	3
Melvi Sinaga Forest Management Unit	Provincial Govt	Planning	2	3
Wangseng Saragih (Forest Management Unit)	Provincial Govt	Planning	2	3
Dameria Saragih (Plantation Services)	Provincial Govt	Planning	3	3
D.Girsang (Dept Agriculture) Karo	Provincial Govt	Planning	3	3
T.Sarwah (Forest Management Unit)	Provincial Govt	Planning	2	3
Dr.Surip Mawardi (Coffee Researcher)	Personal (Coffee expert)	Production	3	2
Leo Purba (Lisa dan Leo Caffee (coffee entrepreneur)	Company	Production and Market	3	1
Joko Prabowo (Sumatra Specialty Coffee)	Company	Processing and Market	3	2
Anto (Indo Cafco)	Company	Processing and Market	3	1
Alam Saidul (Indonesia Coffee Exporter Association)	NGOS/association	Market	3	3
Tovan M (Starbuck Farmer Support center)	Company	Market	3	1
Manat Samosir (Farmer association for geographic indication protection (MPIG) Lintong;	Association	Production	3	2
Bambang (MPIG Sipirok)	Association	Production	3	2
Sabilal Maha (MPIG Robusta Coffee Sidikalang)	Association	Production	3	2



Name of stakeholder (institution)	Type of institution (national government, sub-national govt, companies, University, NGOs)	Relevant to coffee action plan (planning, production, processing, market)	Level of interest	Level of influence
Bim Harahap (Tropical Forest Conservation Action for Sumatra)	NGO	Planning	3	1
Suhery (Yayasan Ekosistem Lestari)	NGO	Production	3	1
Masrizal (Yayasan PETAI)	NGO	Planning	3	2
Vivi Andriai (FNS-Friedrich Naumann Stiftung)	NGO	Production	3	1
Irsan Simanjuntak (LSI Lembaga Sipirok Lestari)	NGO	Planning and Production	3	1
Dr. Onrizal (Universitas Sumatra Utara)	University	Planning	3	3
Navan Satriaji (Coffee key Farmer)	Coffee farmer	Production	3	1
Budiman (Coffee Key Farmer)	Coffee farmer	Production	3	1
Halomoan (Coffee Processeor)	Coffee farmer	Production	3	1



STAKEHOLDER MAPPING - WORKSHOP

Name of stakeholder (institution)	Type of institution (national government, sub-national govt, companies, University, NGOs)	Relevant to coffee action plan (planning, production, processing, market)	Level of interest	Level of influence
Lisma (Department of Agricultural and Plantation)	Provincial Govt	Planning	3	3
Bobby, Gunawan, Fitria, Evo (Batang Gadis National Park)	National Govt	Planning	3	3
Apri, Noel, Monica, Fenny, Shafira, Nurul, Winda, Ade, Fani, Rita (Social Forestry and Partnership)	National Govt	Planning	3	3
Melvi Sinaga (Forest Management Unit)	Provincial Govt	Planning	3	3
Natal Yana (Agricultural Extension Centre)	District Gov	Production	1	2
Ajlan, Muhammad (North Sumatera University)	University	Planning	1	1
Armaini , Andriadi, Rahmad, Mediana, Sry, Ganda, Intan, Ibnu (Planning and development Agency)	Provincial Govt	Planning	1	3
Yenni , Masrizal, Sry, Popo, Rico, Rio (Yayasan Ekosistem Lestari)	NGO	Production	3	1
Hendra, Bambang, Ludiantoni, Budiman (Coffee Association)	Coffee association	Market	3	2
Manotar, Prihatno (Forest Management Unit)	Provincial Govt	Planning	1	1
Lindung, Sakban, Sari, Hadijah, Asrul (Planning, Research, and Development Agency)	District Govt	Planning	1	2
Hendriawan, Elvinora, Gongmatua, Zulkarnaen, Ali, Azhar, Adi, Frisda (Agricultural Unit)	District Govt	Planning	2	2
Surip, Joko, Nafan, Samuel, Leo (Private Company)	Companies	Processing + Market	3	2



Action #1

Action 1: Establishing a farmer database to support the decision making and program planning

Indicator	A coffee farmer database is established and used by stakeholders for developing coffee program	
Activities and measurements	Activity	Measurements
	<ul style="list-style-type: none">• Development of guideline for sustainable coffee production• Farmer data collection and mapping to understand the distribution of coffee	<ul style="list-style-type: none">• Sustainable coffee production guideline is available for stakeholders at district level• A coffee farmer database and map developed
Supporter institutions and funding	Provincial estate crop department, Forestry department, district government (government extension), MPIG, NGO, farmer group, university, exporter companies.	
Timeline	2022– 2024	



Action #2

Action 2: Improving coordination among governments and partners related to coffee productions

Indicator	Integrated and sustainable coffee programs developed and supported by government institutions and partners	
Activities and measurements	Activity <ul style="list-style-type: none">• Mapping and integration of government programs• Synchronizing available data and information from different stakeholders• Activating and supporting existing multistakeholder platforms to enhance collaboration among stakeholders	Measurements <ul style="list-style-type: none">• Regular coordination among stakeholders and a collaborative coffee program launched• Regular meeting conducted to share updates and learn from other experiences• Updated data and information is available for government and partners
Supporter institutions and funding	Provincial estate crop department, Forestry department, Industrial department, district government (government extension), MPIG, NGO, farmer group, university, exporter companies.	
Timeline	2022– 2024	



Action #3

Action 3: Creating sustainably managed coffee productions through improved conservation and GAP practices at least in 20% of farmers in North Sumatra by 2026

Indicator	Conservation and GAP practices improved at least in 20% of farmers in North Sumatra by 2026 10% of government extension officers certified as sustainable coffee production trainers	
Activities and measurements	Activity <ul style="list-style-type: none">• Series of technical and management training to stakeholders in coffee production system• Establish coffee demonstration plot where the GAPs are applied and demonstrated.• Farmer exchange program to share knowledge among farmers• Enhance the capacity of agriculture extension officers with skills needed in promoting sustainable coffee production• Promote the use of shading trees	Measurements <ul style="list-style-type: none">• Improved knowledge of stakeholders on coffee processing, product quality that meet market demand• 20% coffee farmers practices GAP• At least 10% of agriculture extension officers have the competency to deliver training on sustainable coffee production• Regular training is conducted to improve farmer knowledge and skills
Supporter institutions and funding	Provincial estate crop department, Forestry department, district government (government extension), MPIG, NGO, farmer group, university, exporter companies.	
Timeline	2022– 2026	



Action #4

Action 4: Ensuring financial sustainability of coffee business at farmer level by strengthening the capacity of farmer association (institutional and technical capacities)

Indicator	Farmer coffee associations are built and has the capacity to secure fair coffee price for farmers	
Activities and measurements	Activity <ul style="list-style-type: none">• Building and empowering the capacity of farmer associations• Training on coffee processing for improved quality• Enhance the roles of farmer association through series of training and building partnership with exporters and other companies• Organize exhibition and events to promote specialty coffee to domestic market	Measurements <ul style="list-style-type: none">• Coffee association at local level has the capacity to ensure high quality of coffee products• Government and other partners invested in building the capacity of farmer associations• Collaboration agreements between farmer associations and companies/exporters associations
Supporter institutions and funding	Provincial estate crop department, Industrial department, district government (government extension), MPIG, NGO, farmer group, exporter companies.	
Timeline	2022– 2026	



Action #5

Action 5: Addressing impact of climate change by resolving forest tenurial issue and restoring degraded forests around coffee production areas

Indicator

10% of tenurial issues are resolved through social forestry program
10% of degraded forest areas are restored using coffee agroforestry system

Activities and measurements

Activity

- Mapping and verification of coffee plantations in forest areas
- Socialization of social forestry program and facilitate farmer groups to join the program
- Verification of priority areas for restoration using coffee agroforestry system and restoration strategy is developed with stakeholders
- Establish nursery for agroforestry crops which will supply to farmers

Measurements

- Coffee plantation in forest areas mapped and verified
- Coffee farmers apply for social forestry program
- Restoration priority areas verified and strategy developed
- At least one agroforestry nursery established at each district to support restoration program

Supporter institutions and funding

Provincial estate crop department, forestry department, district government (government extension), MPIG, NGO, farmer group, exporter companies.

Timeline

2022– 2026

