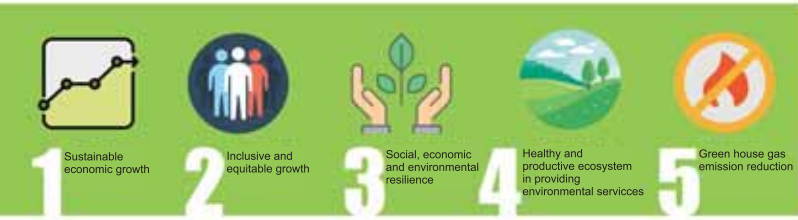


TOWARD SUSTAINABLE DEVELOPMENT IN SOUTH SUMATRA

Brief of Green Growth Masterplan for Renewable Resources 2017-2030

South Sumatra Provincial Government is committed to be the frontrunner in attaining Green Growth included in agriculture, forestry, and the other sub-sectors. In 2015, land-based sector of South Sumatra contributed 17.28% to the Regional Gross Domestic Product (Regional GDP). This sector supported more than 1.33 million households. Green economy is driven by production increase in sustainable agriculture and forestry in order to meet market demand whilst protecting and recovering the natural resources as well. The principle can only be realized by strengthening partnership between the government, private sector, conservation and civil society actors. The Masterplan of Green Growth Plan is a locally initiative base to manage and utilize the renewable resources in a sustainable ways. The initiative is run by South Sumatra Provincial Government with the support of IDH the Sustainable Trade Initiative and ICRAF. The masterplan developed by participatory process involving all stakeholder, was launched on May 9, 2017 by the Governor of South Sumatra at The Bonn Challenge High Level Ministerial Meeting in Palembang. Three weeks later, Governor Regulation No.21/2017 on Green Growth Masterplan in South Sumatra was also issued. This summary contains several of key aspects covered by Masterplan of Green Growth Plan based on sustainable natural resources.



THE GREEN GROWTH VISION OF SOUTH SUMATRA

Encompasses five achievement adopted from national Green Growth target

The scopes of land-based sector

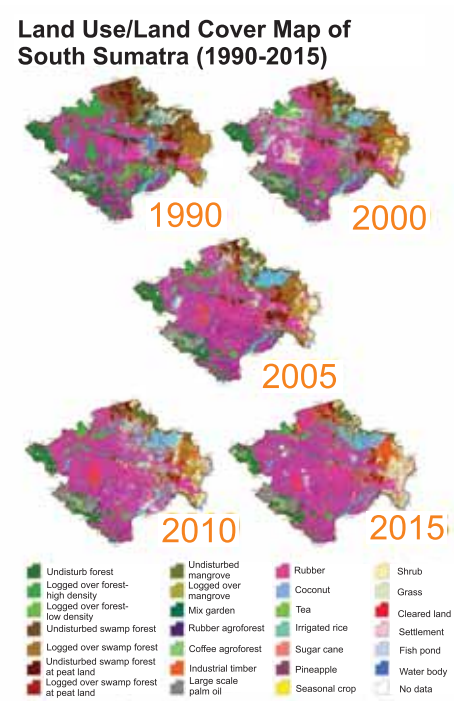
The South Sumatra Green Growth Plan focused on renewable resources by increasing agricultural and forestry production. Main interventions are carried out by preserving and restoring forest and peat land through strengthening the partnership between all of stakeholders.

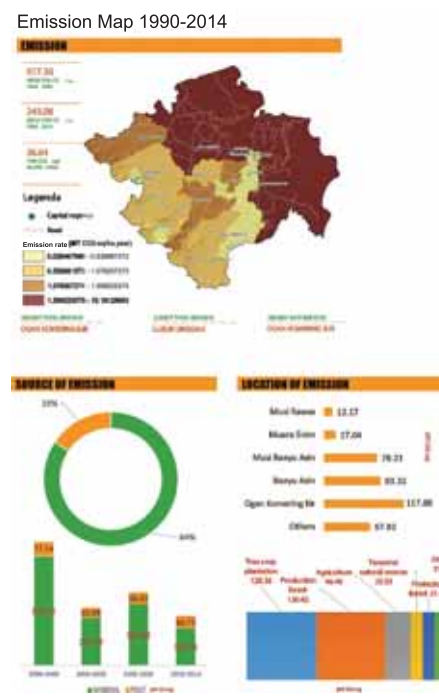
- Land is needed for various utility, as a producer of environmental products or services, both locally, regionally and globally by various parties
- Some limiting factors determine the 'suitability' of land for specific uses, biophysically, socially, economically, culturally, also as defense and security
- Land management determines the fulfillment of needs: food, household income, local revenue, business continuity, and environmental services
- Policy interventions, programs and investments are need to address the linkages to achieving GG targets

Sustainability aspect in landscape management

Decission making on land management in the globalization era should be considering:

- Trade-offs between economic growth, environmental degradation and social inclusiveness need to be understood, anticipated and addressed in the integrated way
- A landscape approach that also considering sub-landscape connectivity, managing by stakeholders with various concern, in a value chain of product and services process
- Importance of the process base on data, information and participation from stakeholders are very importance to provide some aspirations in developing green development scenarios as win-win scenarios (all beneficiaries).





PLANNING PROCCESS

The basic principles

- Inclusive: Related stakeholders in the planning process both at vertical (national scale) and horizontal (provincial scale) must be actively involved so that existing aspiration, concerns and constraints can be identified as early as possible;
- Integrative: The existence of coherence between programs and activities across sectors and institutions to create synergies between it;
- Informative: Information and models to simulate a scenarios that resulted ex-ante scenario impact to select the most suitable plan scenario based on trade-off analysis baseline

Green Growth planning steps

Develop agreed vision and perception among the stakeholders;

- Collect and compile the best data set: land administration, planning documents, land cover maps, biophysical factors, demographic, socio-economic, and policy factors;
- Technical analysis that includes:
  - Quantification of historical GHG emission, watershed functions, regional economy, land use profitability, labor absorption;
  - Trade-offs analyst between conservation and development;
  - Drafting scenarios development and ex-ante impact analysis;
  - Negotiation to select the most suitable scenario planning
- Develop monitoring and evaluation system to be applied on the current policy framework
- Facilitation, public consultation and policy dialogue about policies and programs, including funding opportunities.

DEVELOPMENT SCENARIO

The BAU (Business as Usual) Scenario

- Historical Projection: projection from the historical land use trends, with assumption that the driver factor in the past will be the same in the future;
- Existing development plan: projection by translating all existing plans at the provincial level (development plan, master plan from each sector, spatial planning) location of land use expansion for the five major commodities, combined with projection of historical trends.

Green Growth Scenario

- Base on BAU analysis, drivers factor, ex-ante impact as a basis data to improved the land use plan, ie. to revised land requirement and increased of land availability, to avoid the negative impact in environment and economic benefits can be improved;
- Implementation of land use plan toward green growth plan, 6 strategies need to breakdown into programs considering local context;
- GG scenario are developed from the strategies generated by analysis and spatial model, driving factor analysis, interview and FGD with province government institution (SKPD), private sector, academics, NGOs and farmer groups, with highly inclusive and participatory process according to their aspiration.

South Sumatra Green Growth Strategies

1. **Sustainable allocation and land-use planning addresing the gap between land demand and supplydemand and supply**
   This strategy tries to balancing the demand of land and quality of the environment maintaining. Expansion are allocated on the provided area and has a little negative impact to the environment. Give an attention to the protected areas to avoiding environmental damage and increase GHG emissions.

2. **Improve access of communities to livelihood capital**
   With the access to natural resources, physical, financial, social and human resources development through infrastructure and facilities improvement, community and farmer can feel the equality of economic growth and have a resilience against the seasonal fluctuation.

3. **Increase productivity and diversification**
   Suitability and sustainability of technology and practices will increase the productivity of cultivated area (per-unit area) that increase income.

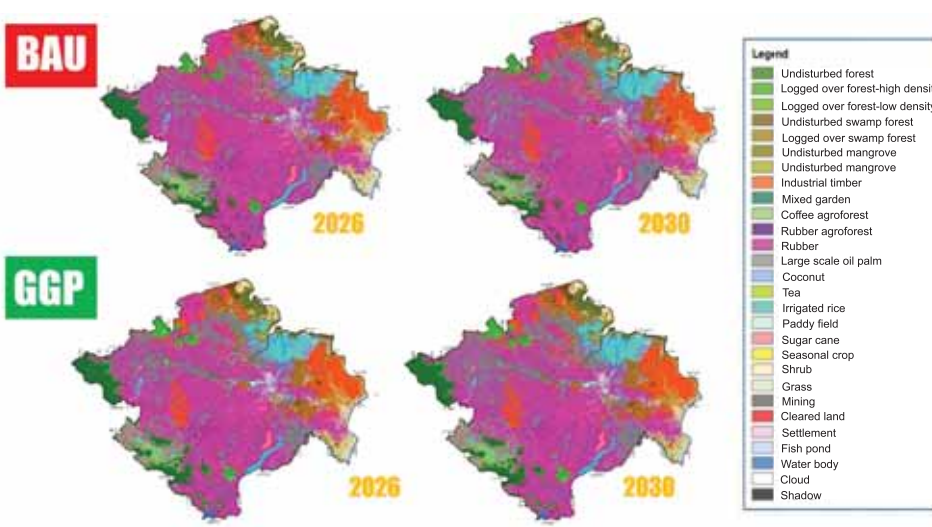
4. **Improve value chain by ensuring fair distribution of benefits**
   Value chain improvement from the agricultural/plantation/forestry sectors of South Sumatra has a close relationship with the global consumer (tele-connectivity).

5. **Improve connectivity and economic of scale**
   Increase the connectivity will create economic scale that encourage economic growth and economic resilience by increasing PDRB (Regional GDP) and equality. And also can control the fluctuation price of raw materials from downstream industry.

6. **Restore degraded land and forests**
   This strategy try to restored the land and forest function according to their allocation. This strategy is not limited to forest ecological restoration only but also to revitalized the livelihood.

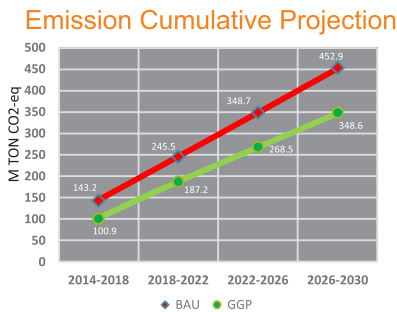
7. **Provide incentive for ecosystem services and innovative funding for sustainable commodities**
   Incentive and disincentive mechanisms, and also the innovative funding for environmental services are potential to support the Green Growth goals.

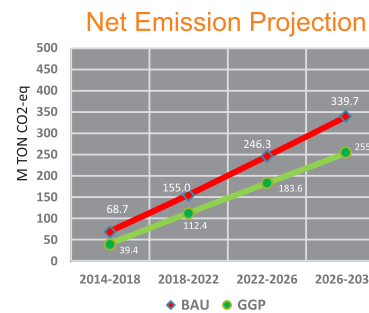
Land Cover Projection

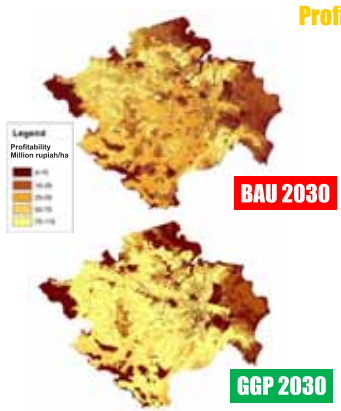


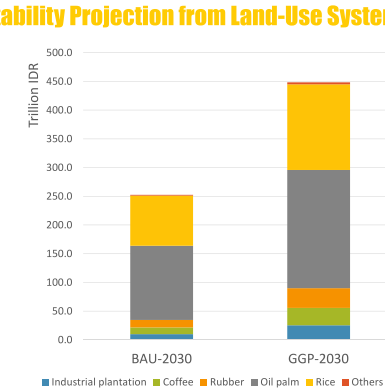
BAU and Green Growth scenarios comparison

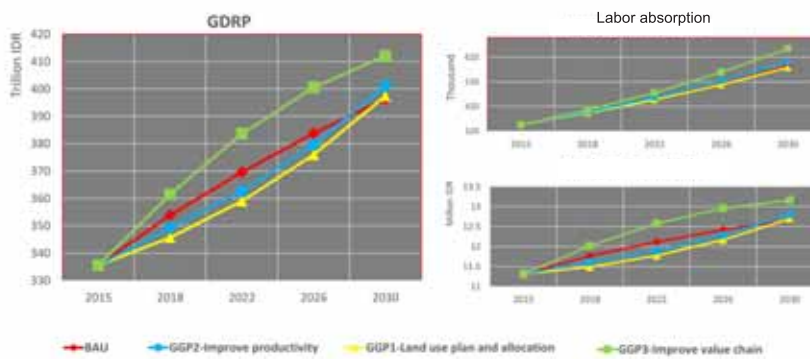
- Green growth scenarios can **reduce 22%** of emissions (base on carbon stocks loss only, and also without the forest fires emissions) until 2030;
- In 2030, base on GGP scenario **net emissions in forest plantation are negative or the sequestration are bigger than emissions**, while base on the BAU scenario, forest plantation emission are the largest source of emissions;
- Green growth scenarios **can contributing to maintain the biodiversity at landscape level by increasing the integration degree of forest and mangroves with the areas around**;
- In 2030 total **NPV (Net Present Value) of the land use system from GPP will be increase twice** comparing to the BAU scenario;
- In 2030 **Regional Gross Domestic Product (PDRB or Regional GDP) of GGP will be increase by 16.4%** comparing to BAU; labor absorption will be increase 35.3% and income per capita 26.3%, comparing to BAU

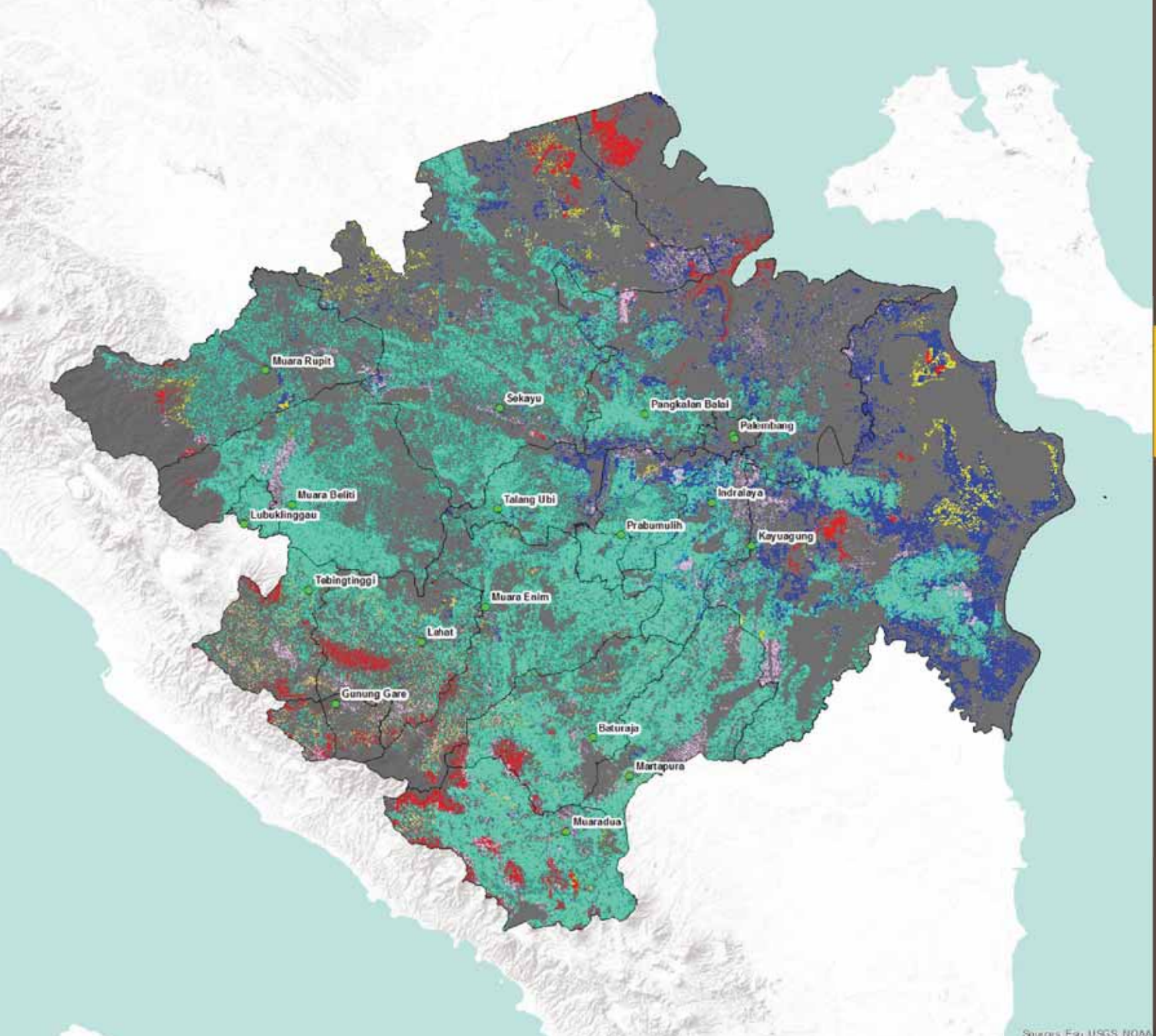












Intervention Map

Green Growth Masterplan

for Renewable Resources

Sustainable allocation and land-use planning that addresses the gap between land demand and supply

- **INTERVENTION 1** Land allocation and planning that address land demand and supply, taking into account protection areas and land suitability
- **INTERVENTIION 2** Allocation of access forest use as sources of livelihood
- **INTERVENTION 3** Ensuring land use access for the community in managing forest area
- **INTERVENTION 4** Prioritizing restoration areas
- **INTERVENTION 5** Allocation rehabilitaton and reclamation of ex-mining sites
- **INTERVENTION 6** Limited expansion of coffee plantation
- **INTERVENTION 7** Rubber revitalization
- **INTERVENTION 8** Moratorium of oil palm expansion on peat lands
- **INTERVENTION 9** Regulating Micro Zonation in acacia plantation concession (HTI)




Does Green Growth Plan Strategy have biggest economic impact? Expansion, Intensification, Downstream Industries

- Comparing to BAU scenario, allocation strategy for expansion of commodity areas considering the availability and sustainability of land, including High Conservation Value (HCV) and High Carbon Stock (HCS), permits, regulations, land suitability and others, will produce lower PDRB during the simulation period but in 2030 PDRB will be equivalent to BAU;
- If the expansion strategy is compared to productivity improvement strategy and benefits per unit area (intensification, good agricultural practices, agroforestry) PDRB will be increase by 3% from BAU at the end of the simulation period;
- When value chain improves through market access, economies scale improvement and processing facilities development (downstream industries), PDRB will grow at 16.4% of BAU, due to multiplier effects. This GGP simulation, inserts the downstream oil and rubber industry interventions.

SCENARIO SIMULATION USING LUMENS (LAND USE PLANNING FOR MULTIPLE ENVIRONMENTAL SERVICES) TOOL

- In the planning process, creating a scenario from a several strategies and clear locus programs can bridge the integration of RPJMD and RTRWP so the ex-ante impact can be projected;
- Execute trade-offs analysis by comparing different development scenarios can be a negotiation materials for the stakeholders to choosing appropriate scenarios:
- For using LUMENS, it requires data and information with sufficient qualification that resulting the reliable output

World Agroforestry Centre (ICRAF) is an international research institution with its headquarter located in Nairobi, Kenya. ICRAF established in 1973 named the International Centre for Research in Agroforestry (ICRAF). ICRAF is one of 15 international research institution under the Consultative Group on International Agricultural Research (CGIAR). ICRAF focused on develop agroforestry based on local knowledges and practices by farmers. By this research programs and innovative partnership with competent partner, we dedicated this knowledge for the farmers and also for the decision makers.

More information about LUMENS:
Andree Ekadinata
a.ekadinata@cgiar.org

World Agroforestry Centre

idh the sustainable trade initiative