

In the face of climate change, South Sulawesi needs green economic growth

In an effort to maintain economic growth amid climate change challenges and limited environmental carrying capacity, the South Sulawesi Provincial Government has prepared a Master Plan and Roadmap for Green Economic Growth, also known as the Green Growth Plan (GGP) South Sulawesi. This document contains policy recommendations for managing land-based natural resources—agriculture, plantations, forestry, and coastal and marine areas—in a sustainable manner.

The South Sulawesi GGP was formulated by South Sulawesi Provincial Government's Regional Planning, Research, and Development Agency (Bappelitbangda) in collaboration with ICRAF Indonesia as part of the Land4Lives project supported by Canada.

The draft of GGP South Sulawesi was presented for public consultation at the Forum on Planning for Climate-Resilient, Food, and Gender-Responsive Green Economic Growth in Makassar on February 27, 2025. The forum is opened by the Regional Secretary of South Sulawesi Dr. H. Jufri Rahman, M.Si and attended by the Canadian Ambassador to Republic of Indonesia and Republic of Timor Leste H. E. Jess Dutton.

Why South Sulawesi needs green economic growth

The impact of climate change has been felt by South Sulawesi. Extreme weather, exacerbated by climate change, has resulted in numerous disasters such as floods, landslides, and water crisis. The agricultural sector has also been affected, with a decrease in productivity for several of South Sulawesi's leading commodities, including cocoa and rice.

Cocoa production in South Sulawesi has been declining since 2010, according to the Cocoa Entrepreneurs Association, due to extreme weather conditions and aging plants [1]. Another factor contributing to the decline in productivity is soil that has become depleted [2]. So far, the increase in agricultural commodity production has generally been achieved through extensification rather than intensification, thus encouraging land conversion.

Rice production is also affected by climate change. According to research, every increase in air temperature by 1 degree Celsius per year will reduce rice production by around 4,500 tons in every province in Indonesia [3]. This presents a challenge for South Sulawesi as the fourth largest rice producer in Indonesia.

Losses due to climate change can be exacerbated by landscape management and development practices that do not consider environmental carrying capacity. According to the South Sulawesi Forestry Service, there are more than 500,000 hectares of critical land throughout the province [4]. The main causes of critical land include deforestation and land degradation resulting from human activities such as illegal deforestation, land clearing without conservation, and land conversion.

Vulnerable communities, especially those who depend on natural resources for their livelihoods, face special risks from climate change. Often farmers need to make a choice between meeting their living needs and protecting the environment from erosion and flooding. Likewise, women are severely affected by drought and changing rainfall patterns due to various factors, including cultural norms.

All of this presents serious challenges for South Sulawesi's economy, which still relies on the land sector. However, the environment's capacity to support a wide range of human activities has its limits. If these limits are ignored, the risk of disasters will be even greater, with impacts felt by future generations.

In the face of increasingly real climate change challenges, it is increasingly clear that South Sulawesi cannot continue business as usual. Effective handling of climate change requires a development plan that ensures both economic growth and environmental sustainability. South Sulawesi also needs to strengthen community resilience to the impacts of climate change, particularly among vulnerable groups, especially women and girls.

One way to achieve these goals is to align development objectives with environmental health and community welfare so that the benefits of development can be enjoyed by future generations. This is the background for the preparation of the Master Plan and Roadmap for South Sulawesi's Green Economic Growth.

Support for South Sulawesi's green economic growth plan

In his speech at the public consultation for the South Sulawesi Green Economy Growth Master Plan, Ambassador of Canada to the Republic of Indonesia and the Democratic Republic of Timor-Leste expressed support for green economic growth in South Sulawesi. H.E. Jess Dutton said:

"Climate change is having a growing impact on all of us. This is why we're proud to be partnering with the South Sulawesi government and ICRAF through the Land4Lives project, which is helping farmers and communities adopt climate-smart agricultural practices, grow more food, and increase their incomes. The Land4Lives project is building the foundations of a more climate-resilient and prosperous South Sulawesi."

Implemented by ICRAF Indonesia with funding support from Canada, Land4Lives aims to improve livelihoods of farmers and resiliency to climate change, strengthen food security and protect the environment in three provinces in Indonesia—South Sulawesi, South Sumatra, and East Nusa Tenggara. In South Sulawesi, Land4Lives collaborates with the Provincial Government through Bappelitbangda and the Bone Regency Government through Bappeda.

The process of preparing the Master Plan and Green Economy Growth Roadmap

The preparation of the master plan is driven by the South Sulawesi Green Economic Growth Working Group, a multi-stakeholder forum involving local governments, the private sector, academics, and civil society organizations. Setiawan Aswad, Head of the Bappelitbangda and Vice Chairman of the Working Group's Steering Committee, stated that the plan is designed to balance economic growth with environmental health and community welfare.

"We want to prove that development does not have to sacrifice social aspects and environmental health," he said.

Setiawan outlined four goals for South Sulawesi's green economic growth. This document also contains several recommendations to address natural disasters that frequently occur in South Sulawesi due to extreme weather exacerbated by climate change, such as floods, landslides, and clean water crises.

The recommendations include protecting forests by preventing deforestation and degradation in conservation and protected areas, enforcing land use rules in accordance with the Regional Spatial Plan (RTRW), and revitalizing South Sulawesi's leading agricultural commodities such as cocoa, coffee, cashews, cloves, candlenuts, and coconuts.

To guide the implementation of the green economic growth plan, the document also includes a roadmap that outlines the stages of activity implementation, role division, and identification of financing sources. The Working Group hopes that the recommendations in this master plan will support the South Sulawesi mid-term and long-term Regional Development Plan (RPJMD and RPJPD).

Inclusive, integrative, and informed processes

Director of ICRAF Indonesia Andree Ekadinata explained that Bappelitbangda has been collaborating with ICRAF Indonesia under Land4Lives since 2021, and the Master Plan and Green Economic Growth Roadmap are among the results of this collaboration.

ICRAF, an agroforestry research organization active in Indonesia since 1996, contributed its scientific expertise and assisted throughout the preparation process of this plan.

Overall, Andree stated that the planning process adheres to three principles: inclusive, integrative, and informative. Inclusive means involving all stakeholders—accommodating the aspirations of all districts/cities in South Sulawesi, women's organizations, and civil society through forums, including public consultations. Integrative means that the plan incorporates various regional planning documents, while informative indicates that it is based on up-to-date scientific evidence and data.

He added that this plan supports South Sulawesi's development vision 2025–2045, which emphasizes independence, progress, and sustainability.

"By adopting a green economic growth approach, South Sulawesi can build resilience to climate change, restore cocoa and rice productivity through agricultural intensification, and ensure inclusive and sustainable development for future generations," Andree concluded.

[1]"Cocoa Production in South Sulawesi Has Declined Since 2010, This Is the Obstacle" Feb. 24, 2025, dpmptsp.sulselprov.go.id/publik-read?id=Produksi-Kakao-di-Sulsel-Menurun-Sejak-2010,-Ini-Kendalanya. Retrieved 24 Feb. 2025.

[2]"The story behind the low cocoa production in South Sulawesi" *ANTARA News*, 25 Jan. 2019, www.antaranews.com/berita/791442/cerita-di-balik-rendahnya-produksi-kakao-sulsel. Retrieved 24 Feb. 2025.

[3]"Climate Factors Suppress Rice Production" *Kompas.id*, 12 Oct. 2023, www.kompas.id/baca/riset/2023/10/12/faktor-iklim-tekan-produksi-padi. Retrieved 24 Feb. 2025.

[4]"South Sulawesi Forestry Service Focuses on Handling Critical Land" 22 Oct. 2024, sulselprov.go.id/post/dinas-kehutanan-sulsel-fokus-tangani-lahan-kritis. Accessed 24 Feb. 2025.