

# RESTORE+: Addressing Landscape Restoration on Degraded Land in Indonesia and Brazil

Part of the International Climate Initiative (IKI)

Supported by:



Federal Ministry  
for the Environment, Nature Conservation,  
Building and Nuclear Safety

based on a decision of the German Bundestag

# Project outline

- **Countries of Implementation**  
Indonesia and Brazil (with limited activities in the Congo Basin area)
- **Project duration**  
5 years (2017-2022)
- **Type of activities:**  
Capacity Building (enhancement of methods, datasets and institutional capacity)
- **Project coordinator:**  
International Institute for Applied Systems Analysis (IIASA)
- **Project team:**  
Indonesia: World Agroforestry Centre (ICRAF), World Resources Institute (WRI) Indonesia, WWF-Indonesia  
Brazil: SELPER Brazil - Associação de Especialistas Latinoamericanos em Sensoriamento Remoto  
Others: UNEP World Conservation Monitoring Centre (UNEP-WCMC), Mercator Institute on Global Commons and Climate Change (MCC), Environmental Defense Fund (EDF), Grantham Research Institute on Climate Change and the Environment-LSE, Landmapp
- **Partner institutions in countries of implementation:**  
Indonesia: Ministry of National Development Planning/BAPPENAS, Ministry of Environment and Forestry  
Brazil: Brazilian Cooperation Agency (Foreign Office), Ministry for the Environment

# Project goals

- Support decision making for restoration or sustainable food/energy crops production options over degraded and marginal lands
- Improve information/datasets on degraded/marginal lands and degraded forests in tropical areas, including through the demonstration of the role of transparent, accountable and publicly accessible citizen-sourced land use monitoring information
- Provide strong evidence base on possible land use-change impacts on biodiversity and carbon stocks for cross-sectoral policies on forestry (new Forest Code of Brazil) and bioenergy (national bioenergy targets of Indonesia)
- Demonstrate green growth pathways supported by incentive mechanisms that acknowledge traceable impacts of using degraded/marginal land for food and energy crop production
- Enhanced institutional, technical and scientific assets & capacity in the tropical region

# Project outputs

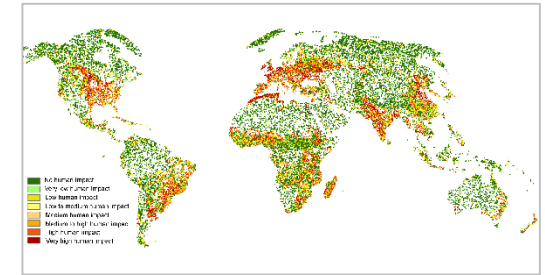
- Technical assessment on the implications of different definitions of degraded and marginal land on agriculture production, biodiversity, restoration benefits and wider land use
- Communicative analytical and visualization tools of results to support decision makers
- Updated land use datasets obtained through remote sensing, administration data, citizen-sourced information and/or crowd validation
- Integrated assessments of (land-based) sectoral policy (i.e. forestry and bioenergy) covering land availability/suitability assessment, long term impacts and trade-offs and spatially explicit techno-economic feasibility
- Assessment of potential economic incentives gained from including traceable impacts of using degraded/marginal land for food and energy crop production in existing mechanisms (e.g. sustainability standards, carbon financing etc.)
- South-south learning through knowledge exchange between Indonesia, Brazil and relevant countries in the Congo Basin in land use and land degradation monitoring, modelling and policy-making

# Project approach (1)

Visualization  
of land cover data sets, suitability maps,  
land use information, biomass, etc.



Crowdsourcing of  
land cover analysis

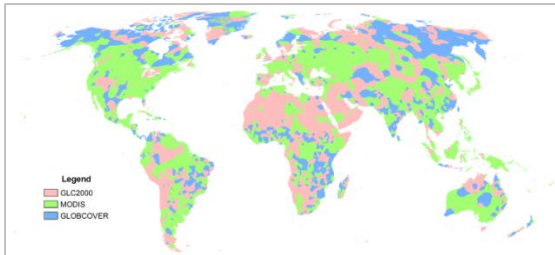


**Citizen-empowered Scientific Assessment**

Validation of Land  
Cover Maps



Creation of Hybrid  
Land Cover Maps



In-situ Data  
validation using  
mobile apps



Serious Games  
(Cropland  
Capture)



# Project approach (2)

Integrated land-use modeling for globally consistent national and regional land use and restoration policies that safeguard and enhance other ecosystem values, in particular those distinguished by the CBD

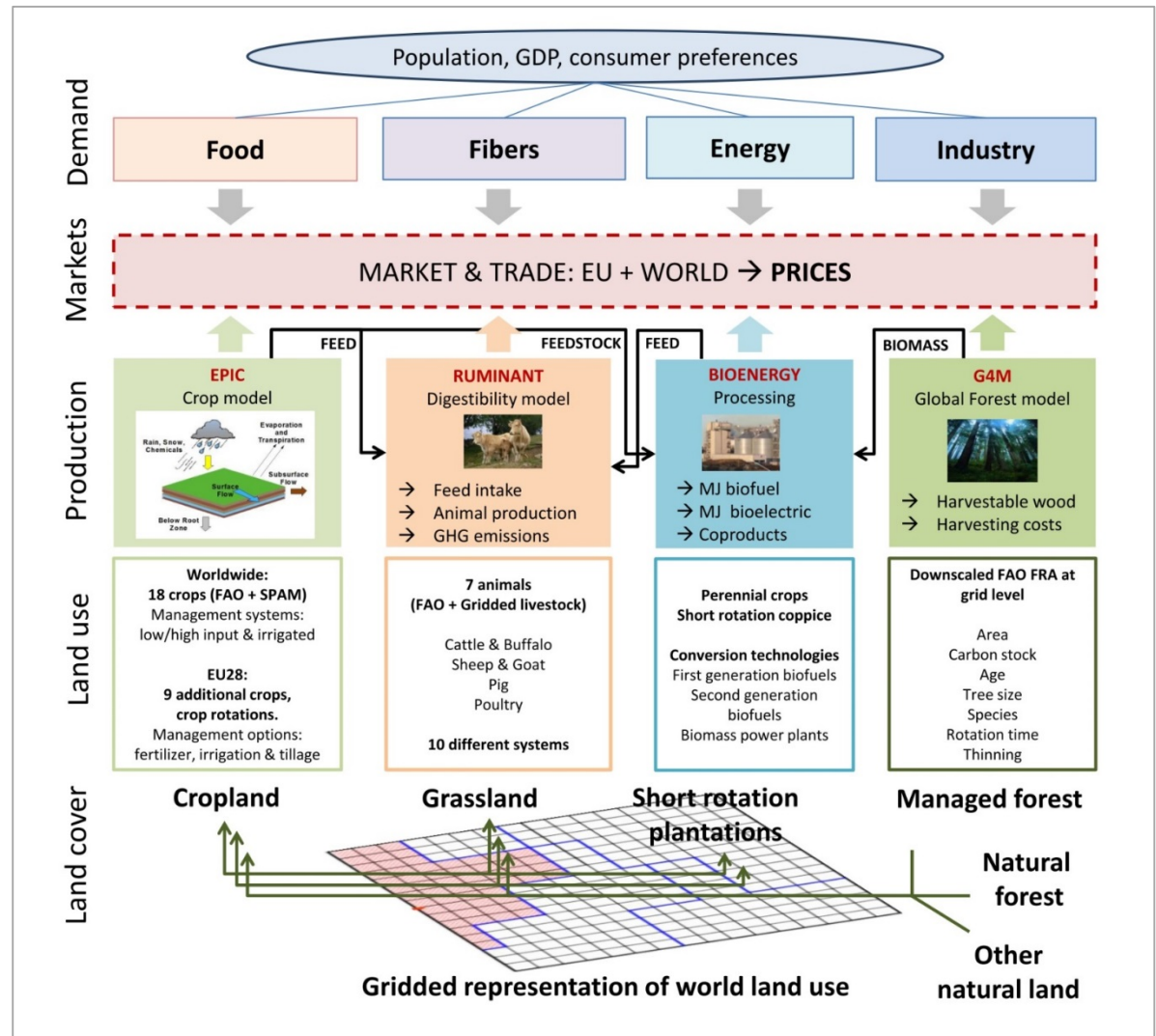


Illustration of Global Biosphere Management Model (GLOBIOM) – one of various modelling tools that will be deployed in the project