

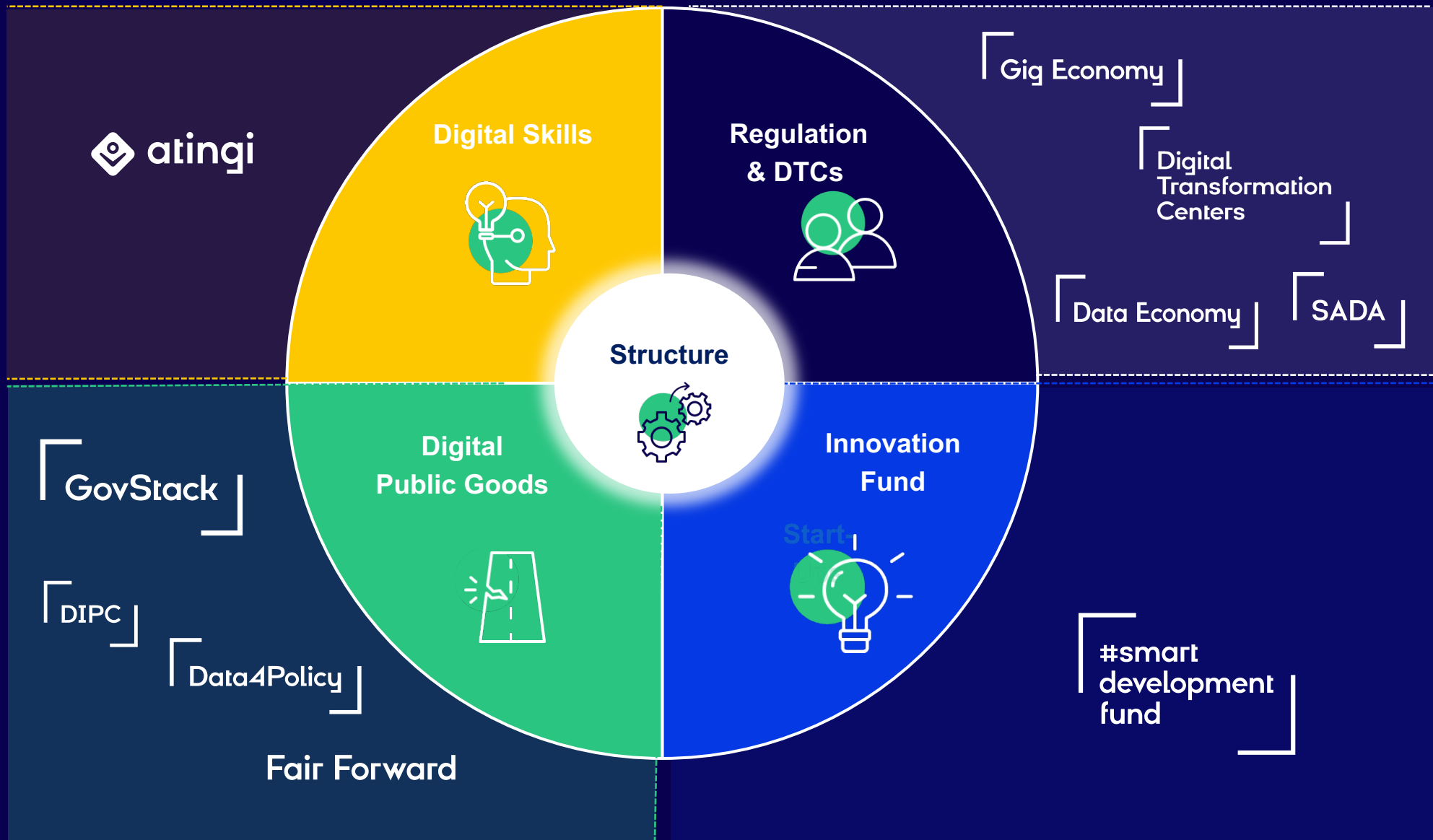
Knowledge Sharing session. Digitalization Digitalization for Climate Action.

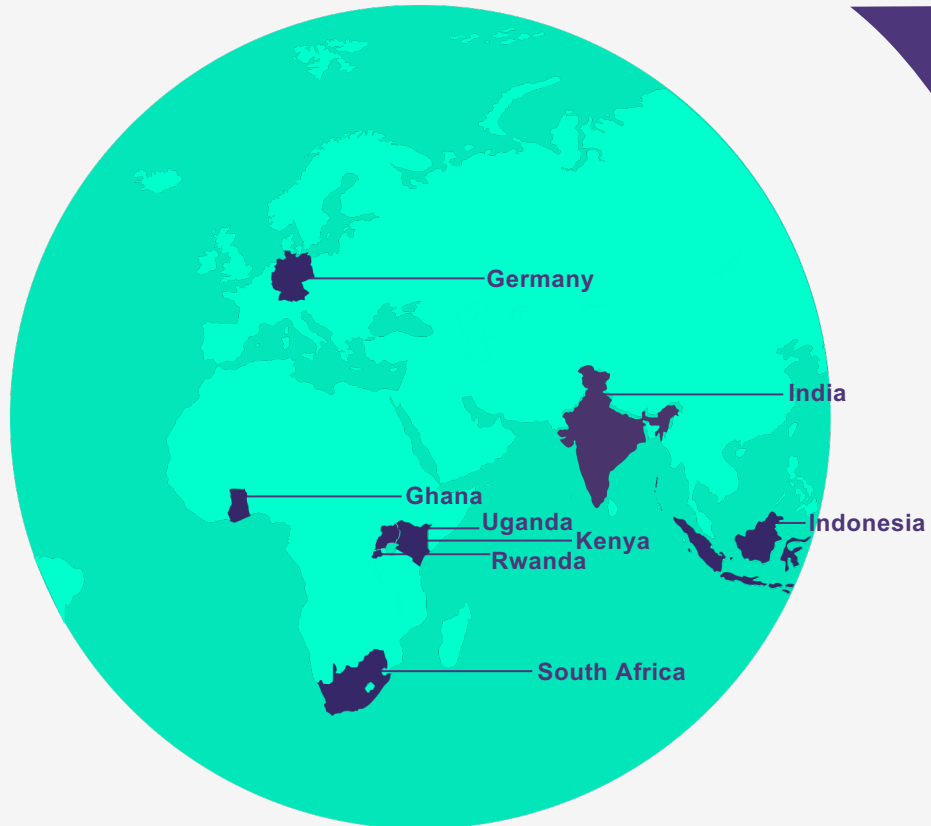
23rd CTCN Advisory Board meeting

Julia Fink, Advisor Twin Transition, Digi Cluster, GIZ GmbH

Overview: Global Digital Programme and its initiatives

digital.
global





Main goal: Democratize AI worldwide - Fostering local innovation by Open Sourcing AI



1) Improve access to training data and open AI technologies for local innovation



2) Strengthen local technical know-how on AI in Africa and Asia



3) Develop policy frameworks for ethical AI & foster dialogue on AI and Data Protection

On behalf of: German Federal Ministry for Economic Cooperation and Development (BMZ)

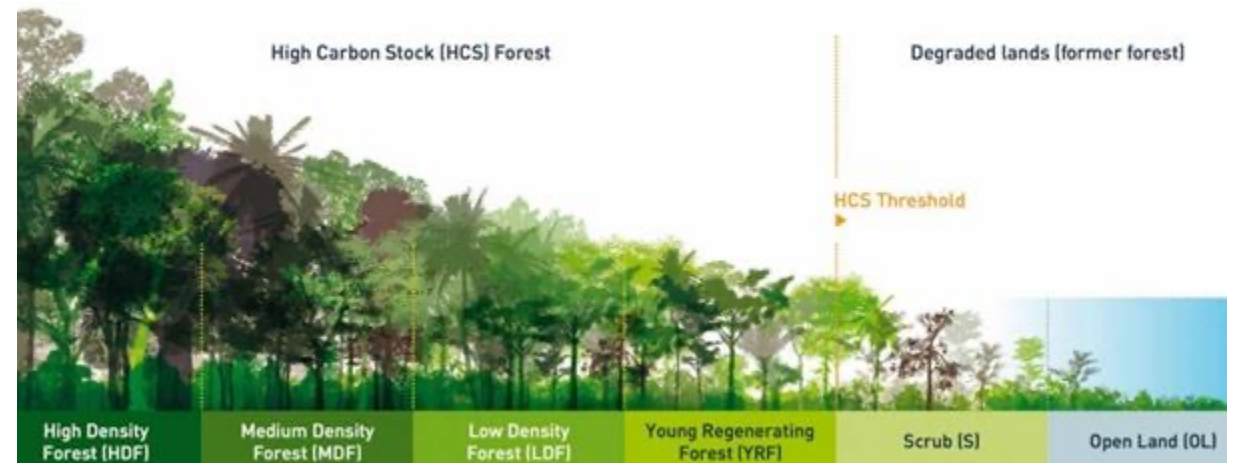
Implemented by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Duration: 2019 – 2025

Main partners: Smart Africa, Mozilla, IDRC, Lacuna Fund

High Carbon Stock Approach Indonesia

- **Aim:** Use AI to better identify forests with high carbon stock and protect them
- **Main partners:** High Carbon Stock Approach (HCSA) and ETH Zürich
- **For whom:** Small-holder farmers, commodity sectors, NGOs and local/regional governments for sustainable agricultural planning, forest protection and sustainable supply-chain management
- **For what:** All these groups can better identify forests with high carbon stock and therefor better protect them
- **How:** Data and AI models for maps will be and made openly accessible to create broad access to this highly advanced tech and enable local stakeholders to build on it
- **Why Artificial Intelligence?** AI makes the HCS approach more efficient, less expensive, and adds the ability to scale across geographies and regions
- **Potential for Scaling:** Senegal, Kenya and Rwanda



ETH zürich

HCSA

Use case Ruanda: Piloting landslide monitoring system



Optical, camera-based system supported through computer vision + weather stations



Pilot in Rambura, Northwestern Rwanda



Capacity building and skills transfer to operate the system

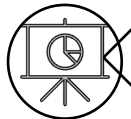


Image and weather information data will be made openly available for the ecosystem



Pioneering AI system to monitor landslides



Creating analysis of Early Warning System and developing recommendations on how to integrate the solution



FAIR Forward – Artificial Intelligence for All



Use cases

to improve access to training data and open AI technologies for local innovation

- **High Carbon Stock Approach** for forest protection in Indonesia
- **Early warning systems** for smallholder farmers in Kenya
- **Piloting landslide monitoring system** in Ruanda
- **AI-powered rural electrification** in Uganda

Guidance on how to **reduce carbon intensity** of computing



Capacity building

to strengthen local technical know-how on AI in Africa and Asia

- AI bootcamp for women in South Africa, Ghana and Kenya (in collaboration with Data Economy, to be scaled)
- Bootcamp for precision agriculture in South Africa (potential for scaling)



Policy frameworks

for ethical and sustainable AI

- Strategic agenda for climate action in India
- National AI strategies in Rwanda, Ghana, Kenya and South Africa