

















#### AFRICA BIODIVERSITY COLLABORATIVE GROUP

Phase II October 1, 2015 – September 30, 2018

# Member Organizations















### Mission

Tackle complex and changing conservation challenges by:

- catalyzing and strengthening collaboration
- bringing the best resources from across a continuum of conservation organizations

#### Vision

African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods

# Implementation

- 1. Prioritize: Mainstream biodiversity conservation in human well-being and development agendas
- **2. Promote** good conservation **practices** among practitioners
- 3. Partner: Strengthen the role of social and development institutions in biodiversity conservation

## Thematic Focus Areas

- 1. Land and Resource Tenure Rights
- 2. Land Use Management
- 3. Managing Global Change Impacts on Biodiversity
- 4. Global Health Linkages to Biodiversity Conservation
- 5. Emerging Issues

#### Connect

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Laying the Foundation for Smart Planning for Sustainable Agriculture in Southern Agricultural Growth Corridor of Tanzania (SAGCOT):

Overview of TNC's SAGCOT work



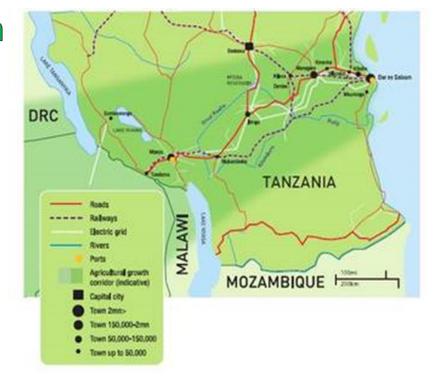
#### **Presentation Outline**

- Importance of SAGCOT Region
- SAGCOT objectives and guiding strategies
- Focus of TNC SAGCOT Work
- What is SNAPP?
- Partners in TNC work
- Work streams
- Outputs- decision support tools- Corridor level
- Outputs- Ihemi priority SAGCOT Cluster



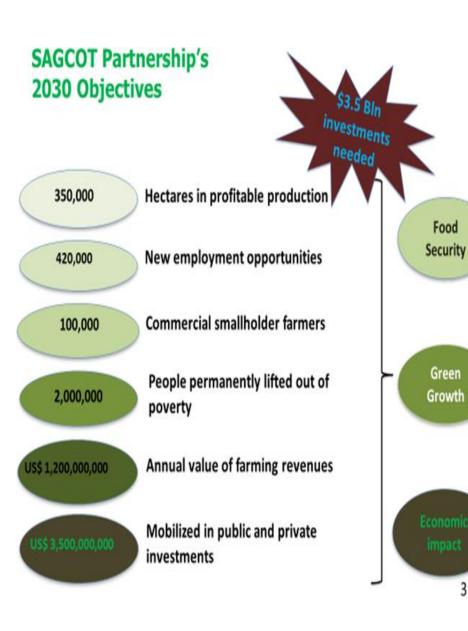
#### **Importance of SAGCOT Region**

- 307,000 Sq Km (Approx. 30 % of TZ mainland)
- Food basket of TZ
- Key conservation areas in SAGCOT
- Population- 12m
- SAGCOT Partnership (PPP) launched in 2010 is key a flagship of National Agriculture First- Kilimo kwanza Strategy.
- SAGCOT Partnership's object is to transform Ag thro catalyzing inclusive and environmentally sustainable Ag investments.
- Major commercial agricultural investments – 6 agribusiness clusters zoned out.
- High risk of negative environmental impacts with "business as usual" agricultural development





# **SAGCOT Objectives & guiding strategies**



#### **Guiding Strategies**

**SAGCOT Blueprint**- spells out the SAGCOT Vision.

 A strategy for scaling up productive, profitable commercial agriculture in the SAGCOT region.

#### 3 key features:

- Public-private partnership –
   Coordinated by SAGCOT Centre Ltd
- Cluster development approach
- Attention to benefits for smallholders

**SAGCOT 'Greenprint'** – Strategy for Agriculture Green Growth (AGG)

- outlines strategies for accelerating Ag development thro investments which incorporate env. sustainability and social inclusivity
- SAGCOT Green Reference Group (GRG)

# Focus of TNC SAGCOT Work: Sustainable agricultural intensification and smart planning

- ❖ Objective: To support the SAGCOT Agricultural Green Growth (AGG) Strategy and contribute towards achievement of SAGCOT 2030 objectives.
- ❖ TNC is a member of SAGCOT Green Reference Group (GRG)
- 2 inter-related projects:
- "Sustainable agricultural intensification and smart planning in SAGCOT corridor" (corridor-level) supported by science for nature and people partnership (SNAPP) initiative <a href="www.SNAPPartnership.net">www.SNAPPartnership.net</a>
- "Laying the foundation for effective landscape-level planning for sustainable development in <u>Ihemi</u> agricultural development cluster (LiFELand)"- supported by CGIAR-WLE- offshoot of SNAPP Project

Outputs: decision- support tools to guide policy and investment decisions towards environmentally sustainable and socially inclusive ag development.

The Nature Conservancy

#### What is SNAPP?

❖ SNAPP: Science for Nature and People Partnership

(A scientific collaboration betw TNC, WCS & NCEAS (US-National Centre for Ecological Analysis & Synthesis).

- SNAPP Vision: A Quick, Clear Pathway to Impact
- SNAPP uses multi-disciplinary Working Groups teams of scientists, practitioners and stakeholders that answer specific critical questions at the intersection of nature conservation, economic development and human well being
- SNAPP is structured to deliver rapid results that will make a difference

#### **Partners in TNC work**

- Conservation organizations:
- International Union for Nature Conservation (IUCN)
- World Wildlife Fund (WWF)
- Eco-Agriculture
- Wildlife Conservation Society (WCS)
  - Research Organizations
- Sokoine univ. of Agric (TZ)
- International Centre for Tropical Agriculture (CIAT
- Indaba Agricultural Policy Research Institute (IAPRI)

- Farmer organizations
- Agriculture non-state actors forum (ANSAF)-TZ
- Agribusiness investors
- Silverlands (TZ) Ltd
- Cargill Ltd
- SAGCOT Centre Ltd



#### **Work Streams**

#### 1. Sustainable land use-led by CIAT

- Crop suitability modeling
- Land use/land cover analysis
- Soil constraints analysis
- Mapping of key biodiversity areas
- Socio-economic analysis

# 2. Sustainable water flows- led by WCS.

- Catchments hydrological flows modeling
- Erosion and sedimentation modeling

# 3. Best Practices guidelines for investors- led by WWF

Environmental & social inclusivity investor guidelines.





### **Outputs (decision support tools)- Corridor level**

# **Sustainable Land Use Work Stream**

 Crop Suitability Maps-23 key crops modeled using ECOCROP Model (based on rainfall and soil properties viewable at:

http://arcg.is/2cbGHRC







#### Outputs (2)

 Web-based interactive maps created from analysis of soil and land cover constraints to agricultural intensification using multi-criteria evaluation-6 variables: The maps can be viewed at: <a href="http://arcq.is/2aNbbHN">http://arcq.is/2aNbbHN</a>

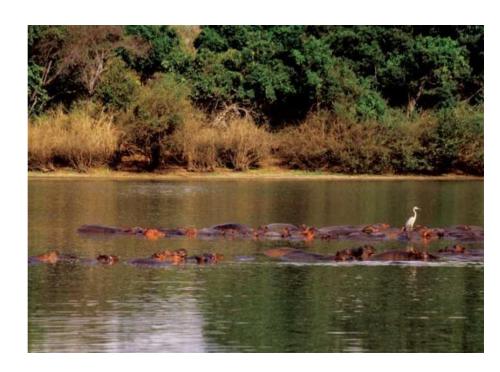
Variable	Unit	Suitability Threshold (GO)	NO-GO	Data resolution (m)
Aluminum concentration	mg/kg	<800	>=800	250
Soil organic carbon	g/kg	>=2	<2	250
Soil pH		>5.5	<=5.5	250
Wildlife & protected areas		absence	presence	n/a
Erosion risk*	tons/ha	<20,000	>20,000	90
Tree cover	%	<=70	>70,000	90

<sup>\*</sup>Erosion risk variable was scored assuming full intensification and no soil conservation, using the InVEST erosion model with a resolution of 90m.

### Outputs (3)

# Sustainable Water flows Work Stream

- Hydrological flows analysis for Great Ruaha River completed
- STREAM model calibration undertaken for prediction of river flows – support to water allocation decisions.
- Land use and cover change (15 years) analysis for the SAGCOT region and the degree how this impacts water quality and quantity completed





# Outputs (4)

Best practices guidelines for investors work stream

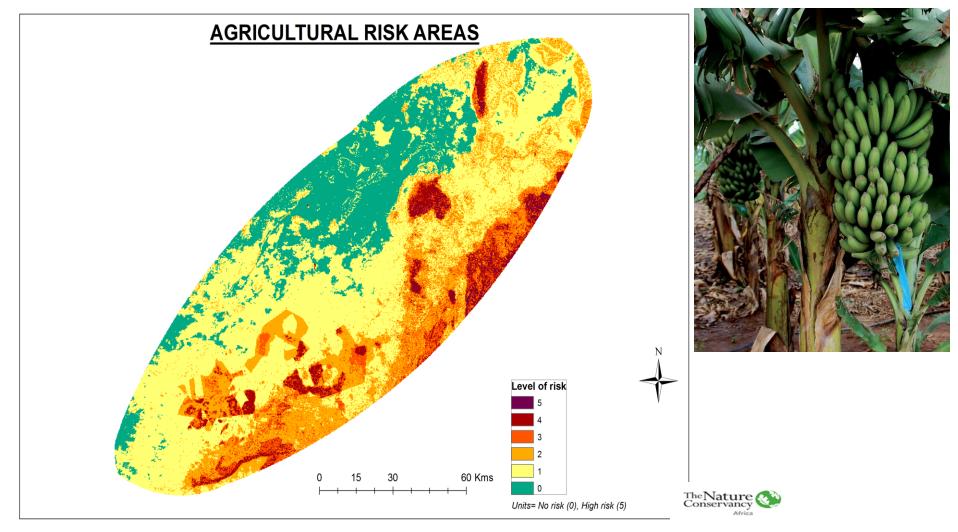
 Environmental and social performance investment screen tool was developed for use by SAGCOT Centre to screen Ag investors:

https://tnc.box.com/s/qxfiisxen c4q3can7e8nu5jnj0fzzgur



## **Outputs (decision support tools)- Ihemi Cluster**

#### Mapping of Ag risk areas



# **Outputs- Ihemi Cluster (2)**

- Cluster baseline report
- Cluster hydrology analysis report
- Wetlands management guidelines
- ❖ 3 Policy Briefs on land use, ecosystem health, and gender equity/inclusivity
- 3 publication papers:
  - ➤ Land fragmentation and its implications for Ag investments in SAGCOT
  - ➤ Assessing the hydrology of Little Ruaha watershed using soil and water assessment tools.
  - ➤ Gender relations in management of land and water resources in SAGCOT region
- Gender inclusion and monitoring guidelines
  The Nature (Nature (Natur





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# Thank you



