ROAM: a collaborative framework to help landscape planning and decision-making for FLR

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Outline of presentation

- FLR and ROAM process
- Activities, Outputs and Impacts
- Bonn Challenge Barometer

FLR and ROAM process

Protected primary forest

Degraded primary forest

WIDE-SCALE RESTORATION OPPORTUNITIES

Secondary forest

Secondary forest
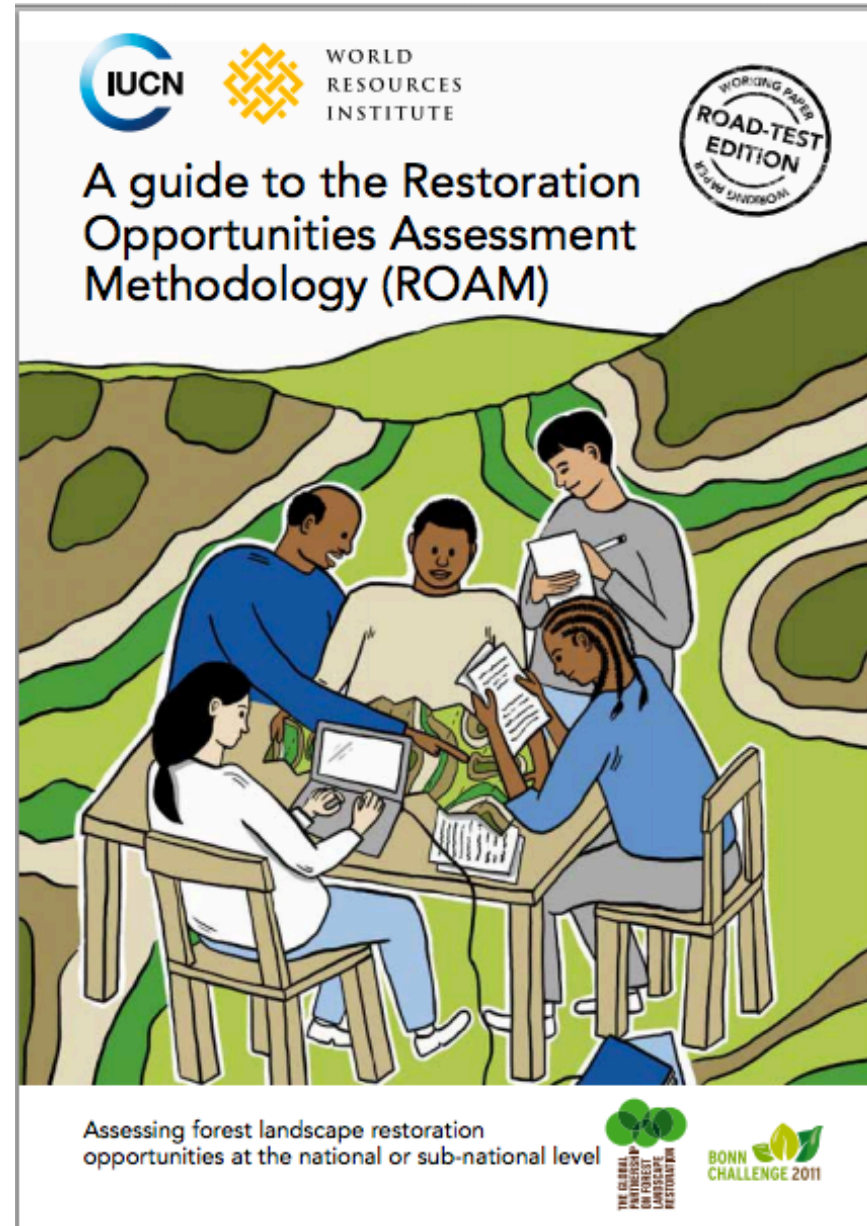
Degraded lands

Permanent pasture

MOSAIC RESTORATION OPPORTUNITIES

Permanent pasture

Intensive agriculture land

Restoration Opportunities Assessment Methodology (ROAM)

ROAM is a methodological framework to <u>identify and prioritize FLR opportunities</u> at the national and subnational level – and much more....
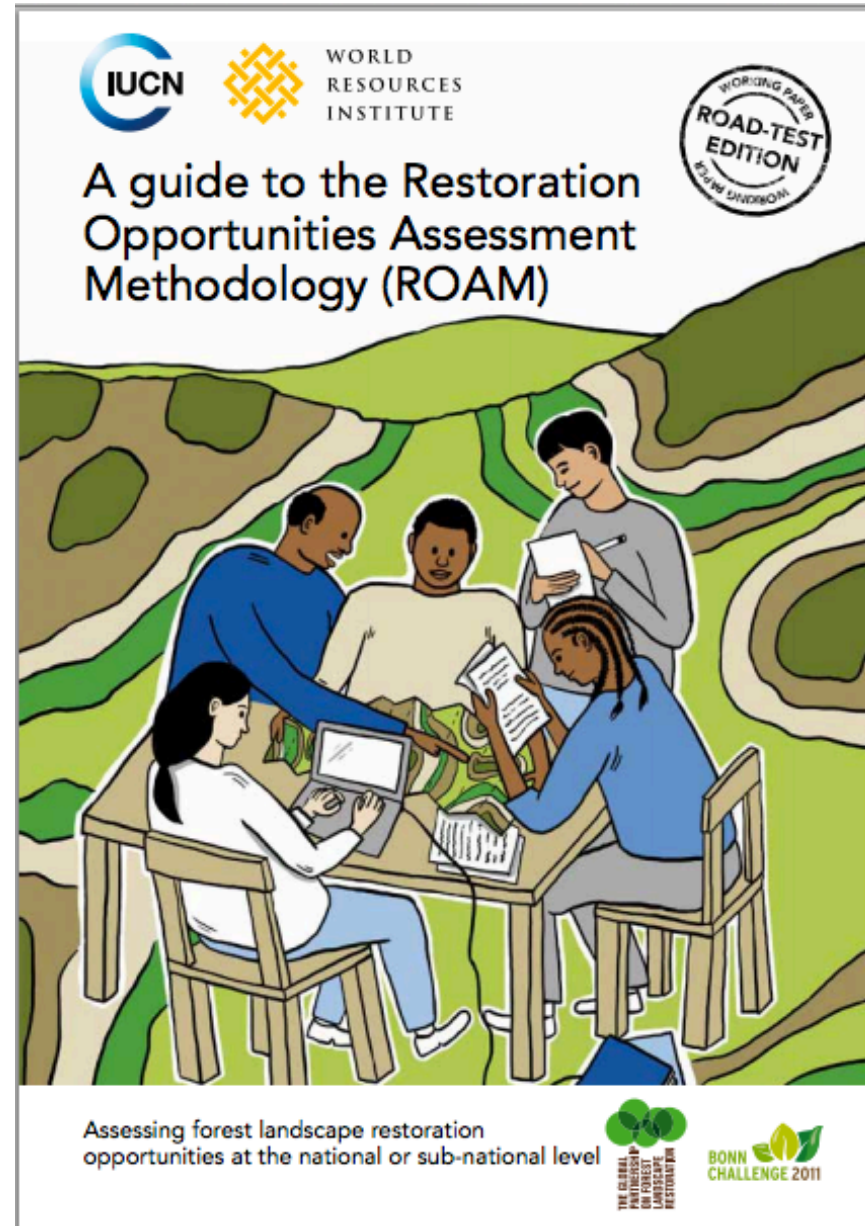
Key aspects of ROAM

Stepwise, iterative, flexible and adaptable to national and subnational contexts.

Brings people together to identify, negotiate, and implement FLR activities for restoration.

Generates data, robust analysis, decision support, tools

Demand driven – ownership – capacity development

IUCN's Restoration Assessment Methodology (ROAM) - an overview

https://youtu.be/nvl_0TLdULg

SCALE-INDEPENDENT, DEMAND-RESPONSIVE

- ROAM can be applied at different scales:
  - National
  - State
  - Regional
  - District
  - Community
  - Watershed

- It can meet different objectives:
  - Food & water security
  - Livelihoods
  - Sustainable production
  - Carbon (FIP)
  - Nature reserves
  - Biodiversity
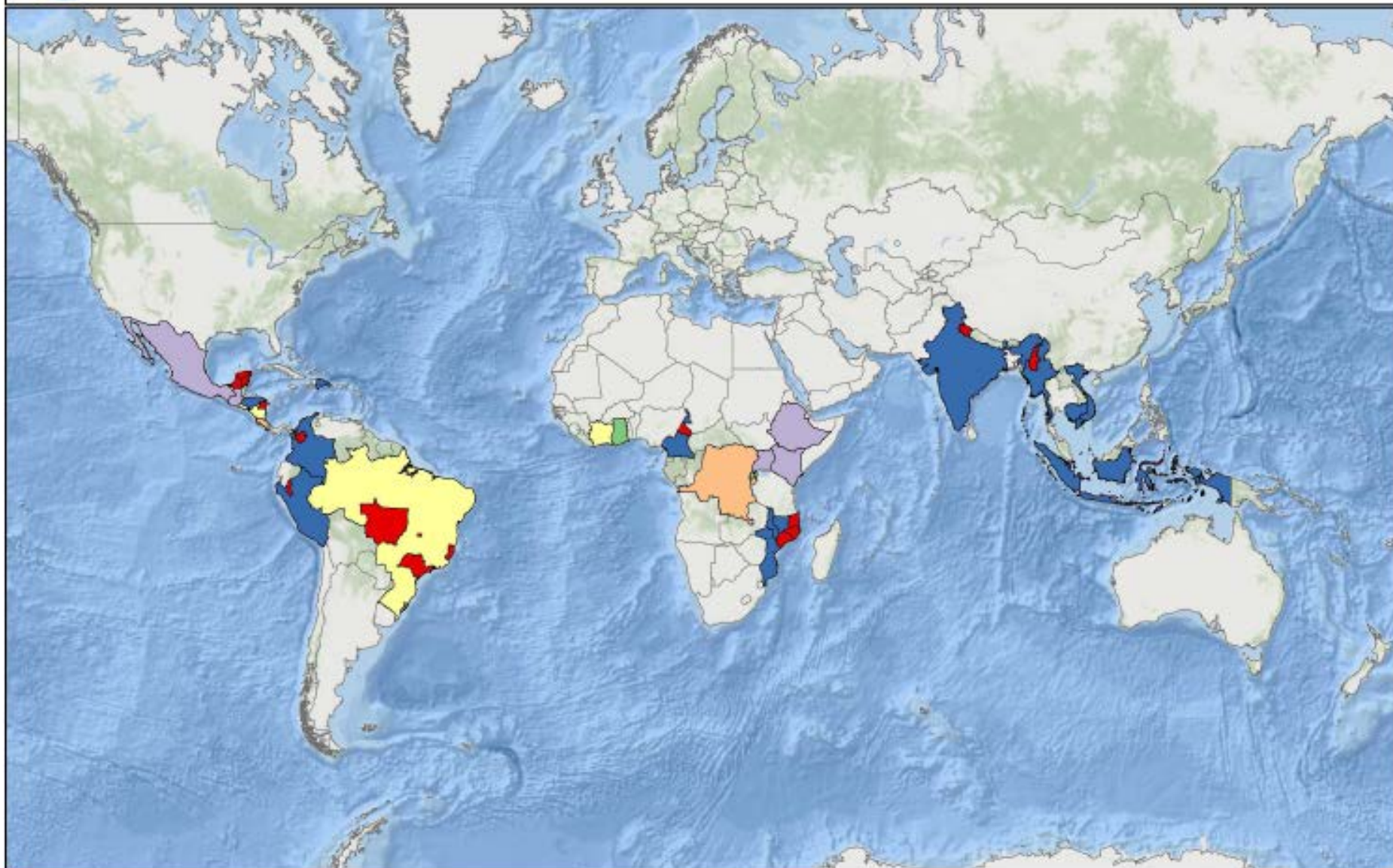 - Resilience

ROAM helps us to answers questions such as:

1. **Where** is restoration socially, economically and ecologically feasible?
2. **What** is the total extent of restoration opportunities in the country/region?
3. **Which types** of restoration are feasible in different parts of the country/region?
4. What are the **costs and benefits**, including carbon storage and ecosystem services, associated with different restoration strategies?
5. What **policy, financial and social incentives** exist or are needed to support restoration?
6. Who are the **stakeholders** with whom we need to engage?
7. What options exist to unlock **finance** for restoration?
8. How can we **scale up** restoration?

Key components of ROAM

- Scoping FLR (drivers of degradation, objectives)
- Stocktaking (what worked, what did not)
- Stakeholder mapping
- Social/Cultural aspects of FLR (Gender, Youth, Culture)
- Data collection and spatial analysis (best science, best knowledge)
- Economics, ecosystem services, and finance analysis
- FLR opportunities, priorities and transitions identified
- Validate results with stakeholders
- Develop FLR action plan and finance strategy

ROAM Assessment Countries: 26 Countries, 39 Processes

ROAM Initiated 2012 2013 2014 2015 2016 Subnational assessments

ACTIVITIES, OUTCOMES & IMPACTS

Stakeholder participation, demand driven, ownership, capacity development

Defining the problem and restoration objectives: creating a theory of change

Understanding degradation and the drivers of degradation. Agreeing on the objectives for FLR, for example:

- Erosion control, sedimentation of rivers
- Increased resilience
- Food & water security
- Increase soil productivity
- Etc.

Forest landscape restoration in Rwanda

Natural Forest

Protective Forest

Woodlots

Agroforestry

Forest	Energy	Water	Food
Increase forest cover to 30%	70% access to electricity	100% access to clean water	Agri production to 2600 kcal/day

Economy
Poverty level to 20%; Per capita GDP to US$ 1,240

Increased collaboration between different ministries and actors on the landscapes

- **Malawi National Task Force – Composition**
  - *Stocktaking and Mapping Working Group*
  - *Economics and Finance Working Group*
  - *Policy and Institutions Working Group*
  - *Gender Working Group*

Partners:

THE MINISTRY OF NATURAL RESOURCES, ENERGY AND MINING → Department of Forest → National Task Force → IUCN / WRI / USAID PERFORM

The NFLRA process was launched in February 2016 by the Minister of Natural Resources, Energy and Mining in close collaboration with government departments in the Ministries of Agriculture, Water and Irrigation; Lands; Local Government; Finance; Gender and Social Services; and other local stakeholders

Led by IUCN Brasil and WRI Brasil and integrated by strategic placed IUCN members.

IUCN

Political Committee
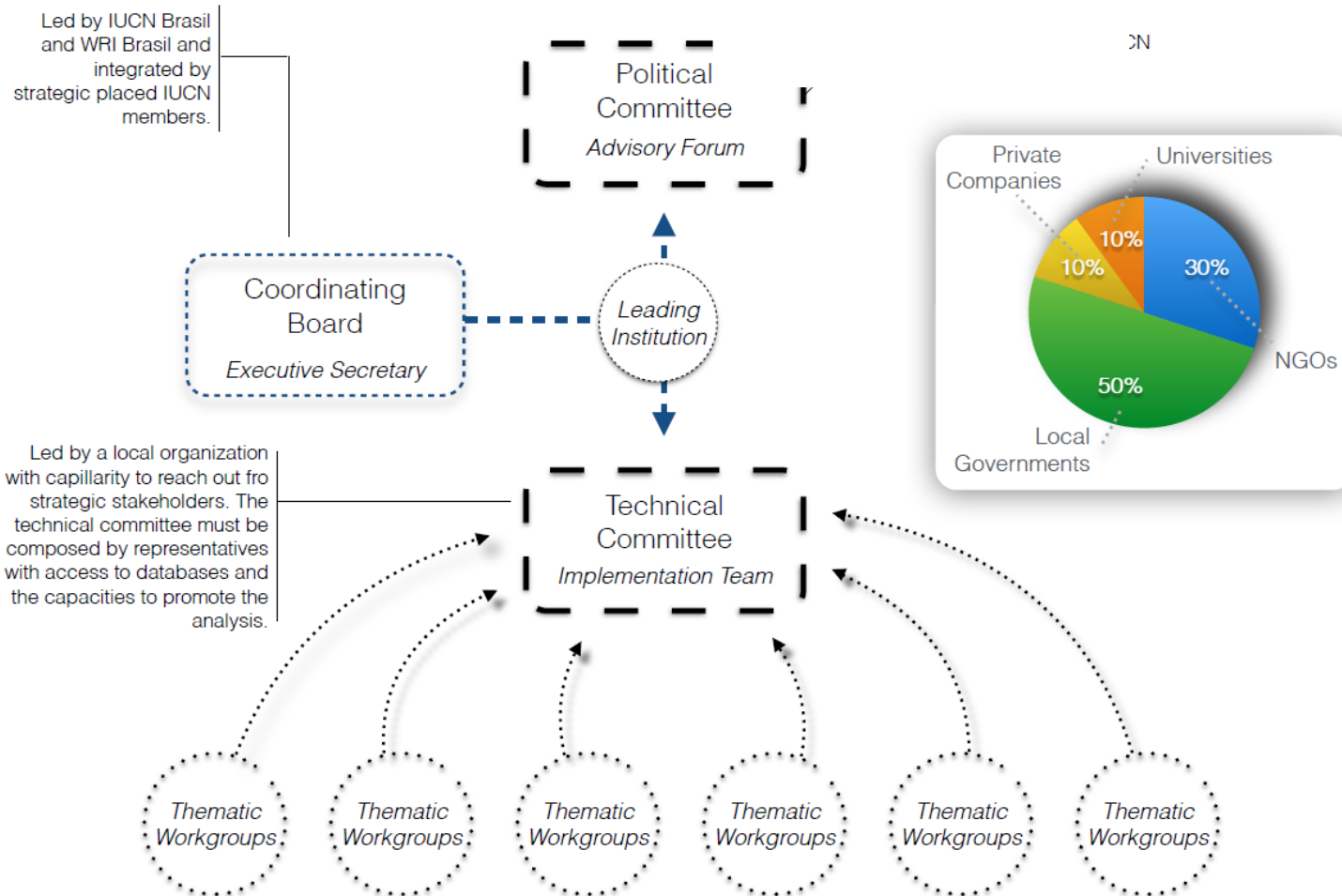*Advisory Forum*

Coordinating Board
Executive Secretary

Leading Institution

Led by a local organization with capillarity to reach out fro strategic stakeholders. The technical committee must be composed by representatives with access to databases and the capacities to promote the analysis.

Technical Committee
Implementation Team

Private Companies — Universities
10%
10%
30%
50%
NGOs
Local Governments

Thematic Workgroups   *Thematic Workgroups*   *Thematic Workgroups*   *Thematic Workgroups*   *Thematic Workgroups*   *Thematic Workgroups*

MALAWI: Multi-Criteria Analysis of Landscape Restoration Potential for Food Security

Coincident Degradation Criteria

Coincident Food Security Criteria

High Potential

Lower Potential
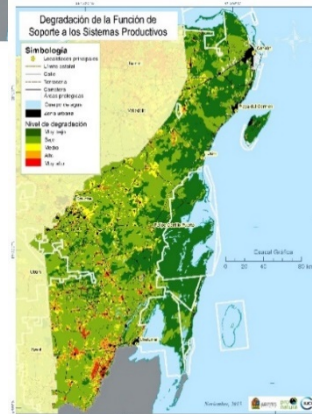
1:4,750,000

FLR Priority map

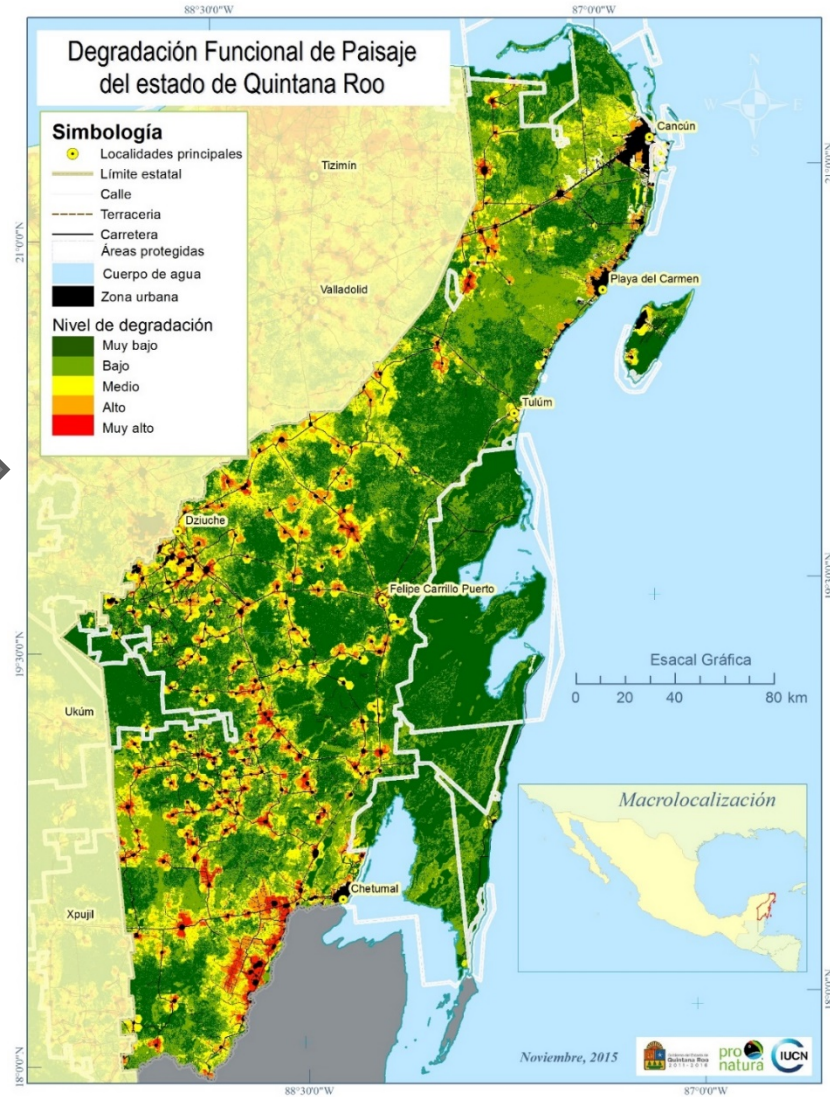MULTI-CRITERIA DEGRADATION MAPPING

Habitat fragmentation

Reduced carbon potential

Productivity loss

Landscape Restoration Potential in the Yucatan peninsula

- Ecological restoration
- Improved shifting "milpa"
- Commercial forest plantations
- Silvopastoral
- Agropastoral
- Agroforestry (rainfed)
- Agroforestry (irrigated)
- Successional forest enrichment

Existing protected areas

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		Degraded areas (ha)	Restoration potential (ha)	Bonn Challenge pledges (ha)
México	Yucatán	1,973,594	1,678,772	550,000
	Campeche	1,526,681	1,168,151	750,000
	Quintana Roo	753,871	503,977	700,000
	Yucatan peninsula (13,733,910 ha)	**4,254,146 (31%)**	**3,350,900**	**2.000.000**

	INITIAL INVESTMENT (USD/ha)	TOTAL COSTS at present value (USD/ha)	BENEFIT-COST RATIO	NET PRESENT VALUE (USD/ha/yr)	IRR (%)	AVG. CARBON MITIGATION tCO2e/ha/yr
Conservation agriculture (corn-soy-cedar)	$ 2,468	$ 13,674	1.2	$ 126	65.2	35.71
Improved milpa system (corn-beans-pumpkin-cedar)	$ 501	$ 10,319	5.8	$1,083	103.0	104.8
Commercial forest plantations (teak-corn-sheeps)	$ 1,460	$ 15,354	3.0	$1,571	18.7	87.56
Silvopastoral system (cattle-leucaena)	$ 12,993	$ 17,721	1.3	$190	43.0	33.95
Agropastoral system (sheeps-orange-apiculture)	$ 4,534	$ 19,915	1.7	$594	16.9	11.81
Agroforestry rainfed (mango-banana-pumpkin-mahogany)	$ 753	$ 17,572	1.9	$615	393.0	38.49
Agroforestry irrigated (cocoa-lemon-papaya-corn-beans-watermelon-teak-melina)	$ 3,658	$ 22,575	1.6	$674	34.8	28.14
Secondary forest enrichment (apiculture-pepper-achiote)	$ 3,532	$ 34,573	1.3	$456	26.8	91.35

	Restoration priority (ha) according to economic criteria for achieving Bonn Challenge 2M ha goal		CBD — Contribution to Aichi targets	UNFCCC — Contribution to INDCs (Mt CO2e)	REDD+ — Restoration priority (ha) within REDD+ FCPF Pilot Invest. Areas	Green Development — Annual net economic value of restoration
YUCATAN	551,164 (100% BC pledge)	Improved "milpa" (418,341)	5, 7, 8, 11, 14, 15	41.6 (12% of national INDCs)	46,168	799 million USD (5.8% GDP Yucatan)
		Forest plantations (63,397)	5, 7, 15			
		Agroforestry rainfed (6,718)	5, 7, 8, 15			
		Agroforestry irrigated (4,489)	5, 7, 8, 15			
		Forest enrichment (58,219)	5, 7, 11, 14, 15			
CAMPECHE	751,003 (100% BC pledge)	Improved "milpa" (166,626)	5, 7, 8, 11, 14, 15	39.9 (11.4% of national INDCs)	170,907	837 million USD (2.2% GDP Campeche)
		Forest plantations (128,439)	5, 7, 15			
		Silvopastoral (137,267)	5, 7, 15			
		Agropastoral (270)	5, 7, 8, 15			
		Agroforestry rainfed (54,229)	5, 7, 8, 15			
		Agroforestry irrigated (837)	5, 7, 8, 15			
		Forest enrichment (263,335)	5, 7, 11, 14, 15			
QUINTANA ROO	503,977 (72% BC pledge)	Ecological restoration (15,861)	5, 11, 14, 15	25.6 (7.3% of national INDCs)	386,858	498 million USD (3.4% GDP Q.Roo)
		Improved "milpa" (132,825)	5, 7, 8, 11, 14, 15			
		Forest plantations (21,945)	5, 7, 15			
		Silvopastoral (61,687)	5, 7, 15			
		Agropastoral (7,088)	5, 7, 8, 15			
		Agroforestry rainfed (47,751)	5, 7, 8, 15			
		Agroforestry irrigated (1,701)	5, 7, 8, 15			
		Forest enrichment (215,119)	5, 7, 11, 14, 15			

Job creation

Net Income & Job Creation Curve

NATIONAL IMPACT: GUATEMALA LEADS ON FLR

KEY IMPACTS OF ROAM

- ROAM helps operationalize Bonn Challenge pledge in several countries

- Developing business models and proposals to raise funds for implementation of FLR

- National environment fund tapped into for FLR, GCF proposal developed

- Promoting regional collaboration: Kigali Declaration adopted by 13 countries

Access to ROAM materials

Download the road-test handbook on ROAM: www.iucn.org/ROAM

Use the clickable version of ROAM to navigate the phases online: http://www.forestlandscaperestoration.org/

See the animations of each phase as quick visual introductions: www.iucn.org/ROAM

Available in English, French, Spanish, Portuguese, Russian, Bahasa Indonesia.

Contact us at: **flr@iucn.org** to share your experiences with us
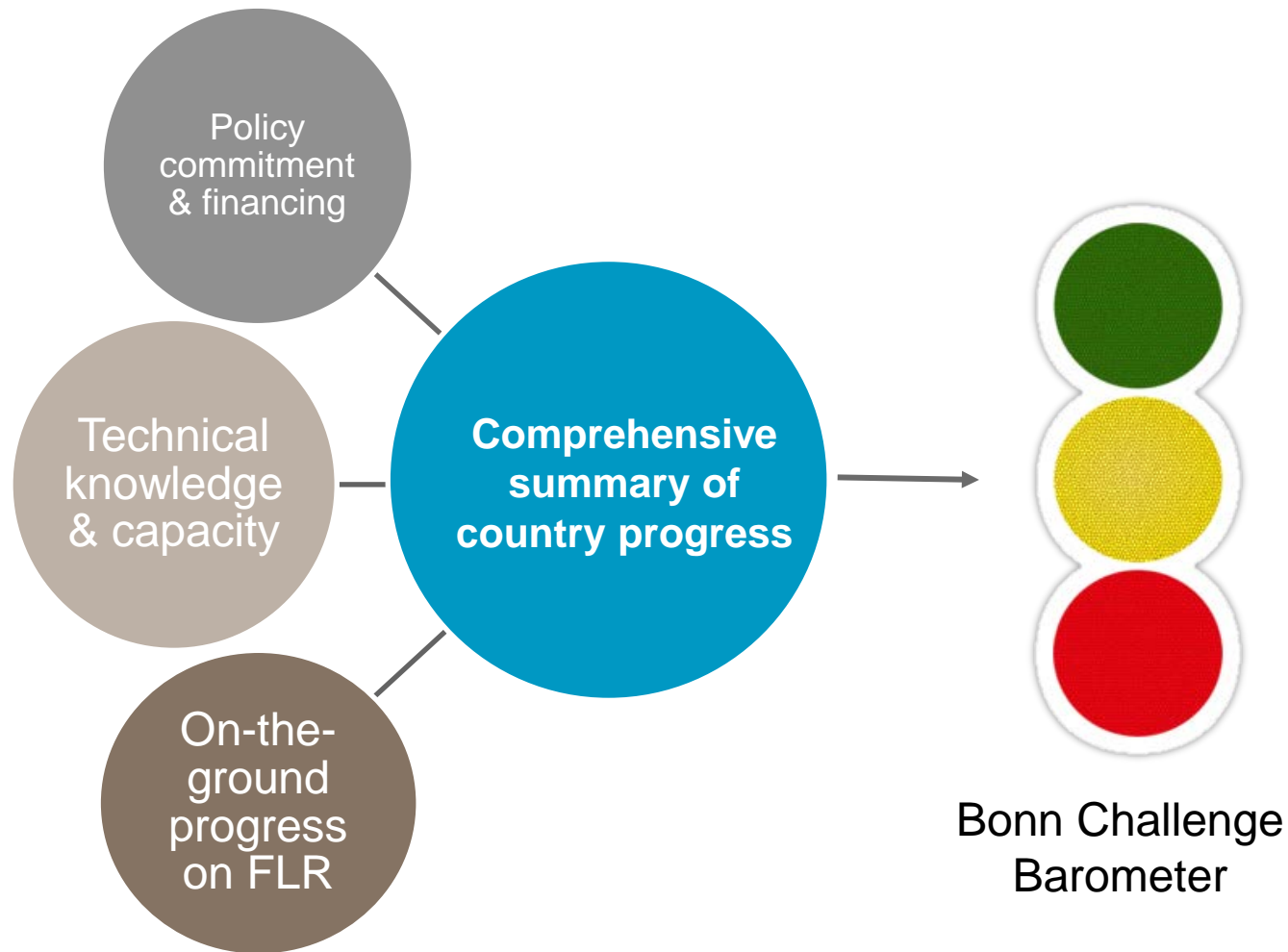
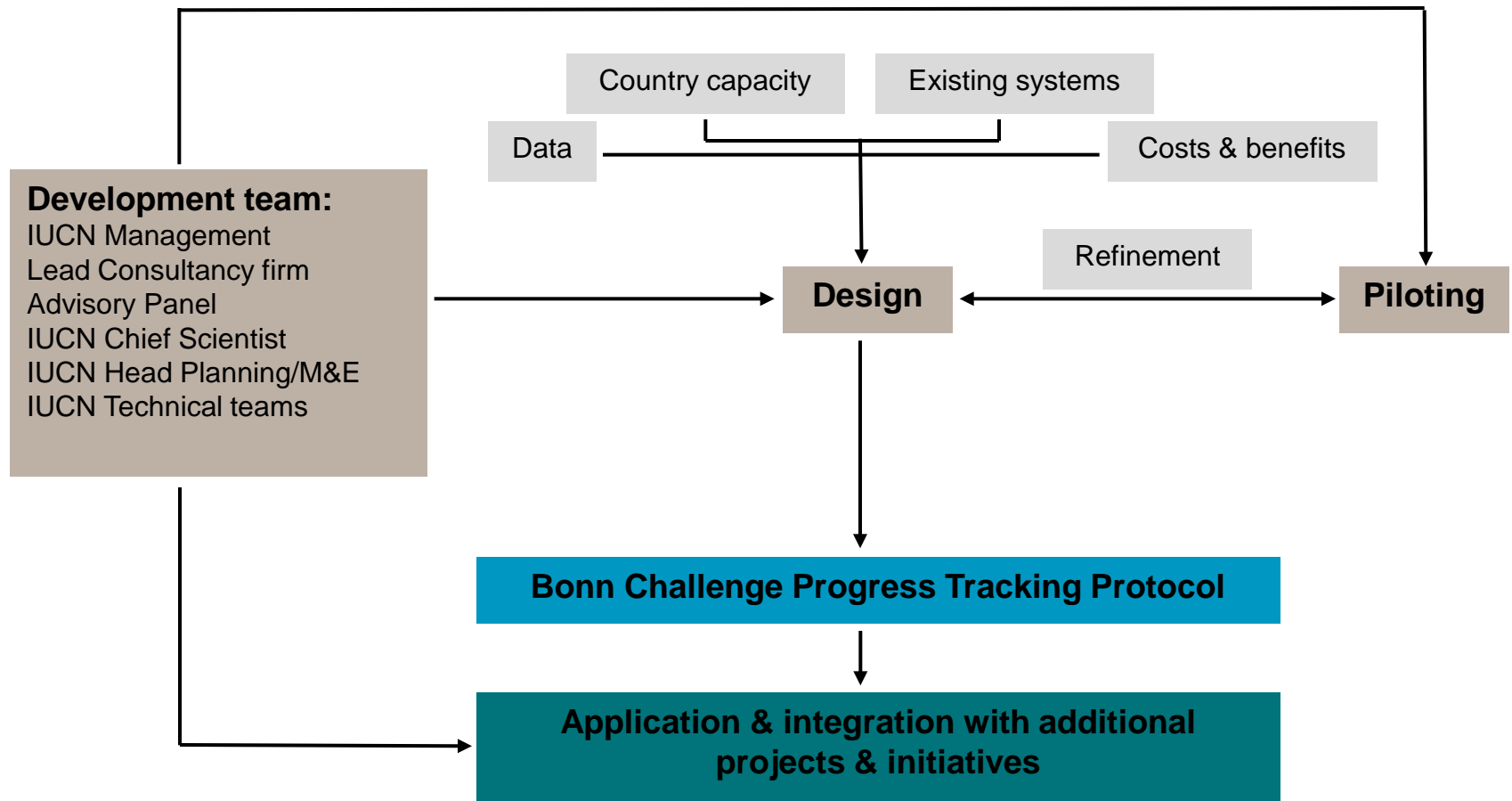# THE BONN CHALLENGE BAROMETER OF PROGRESS

OVERVIEW

- IUCN project to profile & track country / jurisdictional progress on Bonn Challenge pledges

- Grant from the German International Climate Initiative (IKI)

- Protocol to be developed with input from six pilot countries:
  - Brazil, Indonesia, Rwanda, Mexico, El Salvador,&United States

PROGRESS-TRACKING PROTOCOL

Policy commitment & financing

Technical knowledge & capacity

On-the-ground progress on FLR

Comprehensive summary of country progress

Bonn Challenge Barometer

DEVELOPING THE PROTOCOL

Country capacity

Existing systems

Data

Costs & benefits

Development team:
IUCN Management
Lead Consultancy firm
Advisory Panel
IUCN Chief Scientist
IUCN Head Planning/M&E
IUCN Technical teams

Design

Refinement

Piloting

Bonn Challenge Progress Tracking Protocol

Application & integration with additional projects & initiatives

FLAGSHIP PRODUCTS

- Three reports including comprehensive 2020 Bonn Challenge Progress Report
- Six Implementation Toolkits and in-country workshops
- Films profiling restoration champions and success

ANTICIPATED IMPACTS

- Accelerated and transparent national/sub-national implementation of Bonn Challenge restoration commitments, as well as of contributing regional initiatives

- Enhanced awareness of FLR benefits and contributions to achieving developmental and environmental goals

- Increased awareness of FLR needs and opportunities at national levels

- Increased private-sector engagement in FLR

Thank you!