

CLIMATE-SMART  
**Agriculture**  
20**15**



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# Climate-Smart Landscapes: Multifunctionality in Practice

Peter A Minang, Meine van Noordwijk, Lalisa A Duguma

World Agroforestry Centre- ICRAF and ASB Partnership for the Tropical Forest  
Margins



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# Why Landscape Approaches to CSA?

- Multiple connections between deforestation and agriculture, deforestation and climate change, climate change and poverty etc...
  - E.g. European agriculture in some places was recently challenged due to the absence of pollinators- which can be linked to degraded landscapes
- Growing world population on fixed land area = competition between land uses
  - CSA that cannot compete with driving forces in landscape is unlikely to survive
  - “Tragedy of the commons” (Hardin, 1968)
  - Economic value dominates essential decisions but common environmental functions not often valued in monetary terms
  - Single function planning is no longer sustainable



# Climate-Smart Landscapes: Multifunctionality in Practice

Edited by

Peter A. Minang  
Meine van Noordwijk  
Olivia E. Kassam  
Cheikh Mbem  
Jan de Leeuw  
Dalia Catsoulas



"*Climate-Smart Landscapes: Multifunctionality in Practice* provides leadership on the landscape approach scientific discourse. It is a practical guide with case studies and suggested methods of application. I find the insights on how to create synergy between the different UNFCCC mechanisms - NAMA, REDD+, LULUCF - at the landscape level to be particularly beneficial for the UNFCCC negotiation process as we build consensus towards a new agreement in Paris, 2015."

*Prof. Dr. Kuntoro Mangkunubroto, Professor, School of Management, Institute of Technology, Bandung, formerly Head of National REDD+ Task Force, Republic of Indonesia and Head of President's Delivery Unit, Republic of Indonesia*

"If we could choose to change one thing it would unlikely be our climate, but sadly we are faced with this inevitability. With respect to agriculture, forestry and the environment the global negotiations have earnestly highlighted the 'why', the 'what' and the 'where' but have given us little guidance on the 'how'. This book speaks in an enabling way to policymakers, civil society, scientists and land managers to address 'how' to integrate perspectives and outcomes in managing nested biophysical and human landscapes. The framing propositions also speak to some of the bigger practical aspects for implementation such as the inadequacy of current metrics. If you change your understanding and actions after reading one book this year, you will not find a better volume than this one to do so."

*Prof. Tony Simons, Director General, World Agroforestry Centre (ICRAF) and Honorary Professor of Tropical Forestry, Faculty of Science, University of Copenhagen*

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Partnership for the  
Tropical Forest  
Margins



Norad



RESEARCH  
PROGRAM ON  
Forests, Trees and  
Agroforestry



## **Book first of its kind:**

- Landscape approaches in the context of climate change
- Written for policy makers, researchers and practitioners alike
- Offering a wealth of knowledge on several topics and concrete experience
- 27 peer-reviewed chapters written by 86 authors from 44 institutions



## Six Parts:

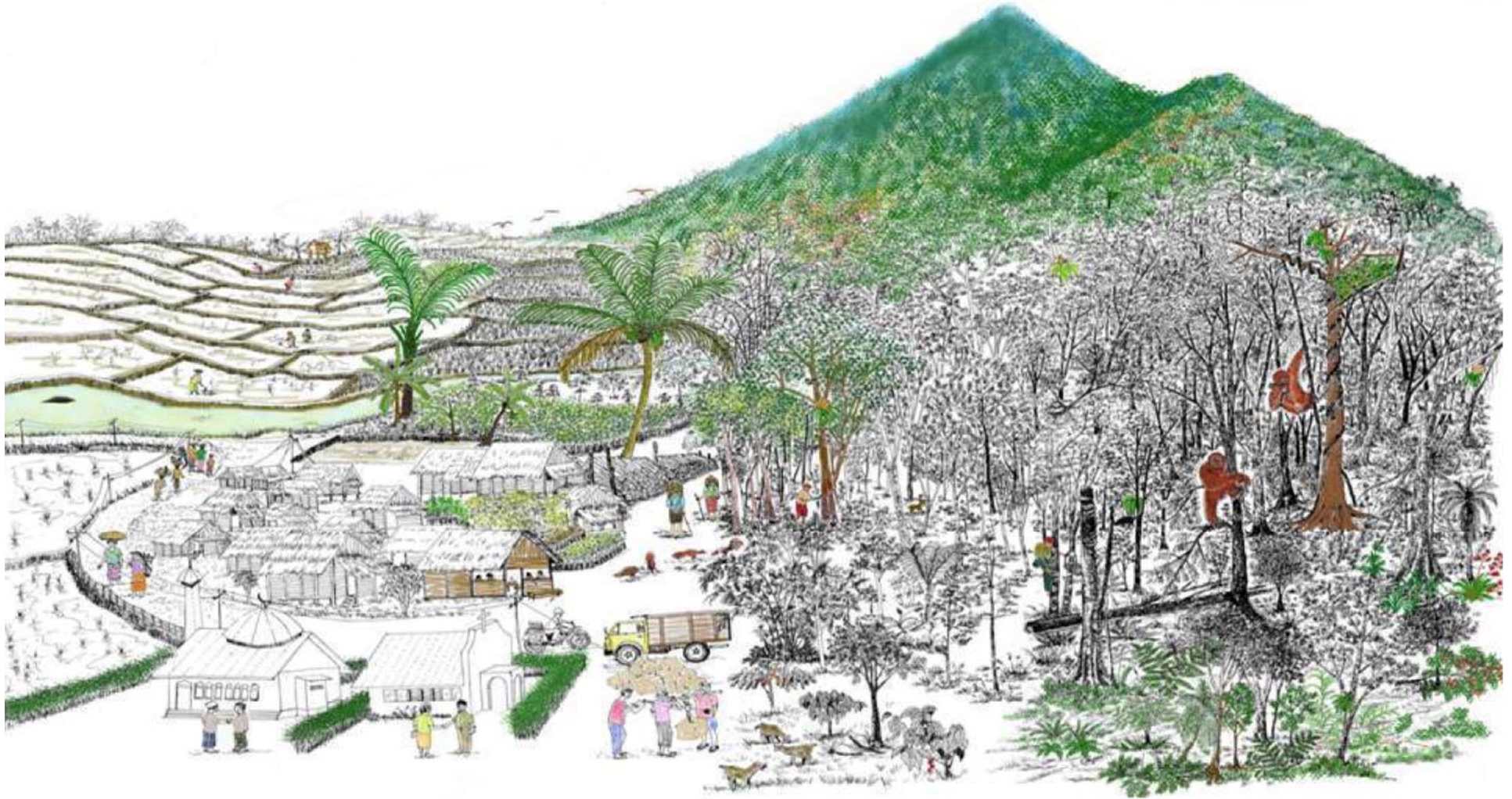
- 1. Introduction**
- 2. Understanding Landscapes**
  - a. *Climate Smart Territories (6)*
  - b. *Gestion de Terroirs (4)*
  - c. *Integrated Conservation and Development (7)*
  - d. *Landscapes and SDGs (8)*
  - e. *Leveraging landscape systems (10)*
- 3. From Concepts to Inducing Change**
  - a. *Scale (9)*
  - b. *Landcare (11)*
  - c. *Landscape Restoration (5)*
- 4. Involving the Private Sector**
- 5. Contextualized Experience**
- 6. Synthesis and Conclusions**
  - a. *Evidence-based approaches (26)*
  - b. *Towards Landscape Democracy (27)*



## Tools and Methods for Landscape Analysis and Facilitation

- Social-ecological framework (5),
- Scale Considerations (9),
- A systems approach drivers of change (10),
- Gender specific spatial perspectives (15),
- Opportunity costs and trade-off analysis (16),
- Low emission planning negotiation support tools (17)
- Sustainable intensification (12; 24),
- Water-focused management (13),
- Charcoal production (14),
- Value chain approach (20)
- Certification in Landscapes (19)

# A Boundary-spanning Object...



# Four Propositions

- ◆ Currently we are far from achieving multiple functions (sustainability) in landscapes;
- ◆ However structured interactions, co-investments and negotiations among concerned actors can nudge landscapes towards multifunctionality;
- ◆ Climate is one of many drivers of change in landscapes;
- ◆ Landscape approaches need to be grounded in local realities and linked to the ambitions or expected change of the people

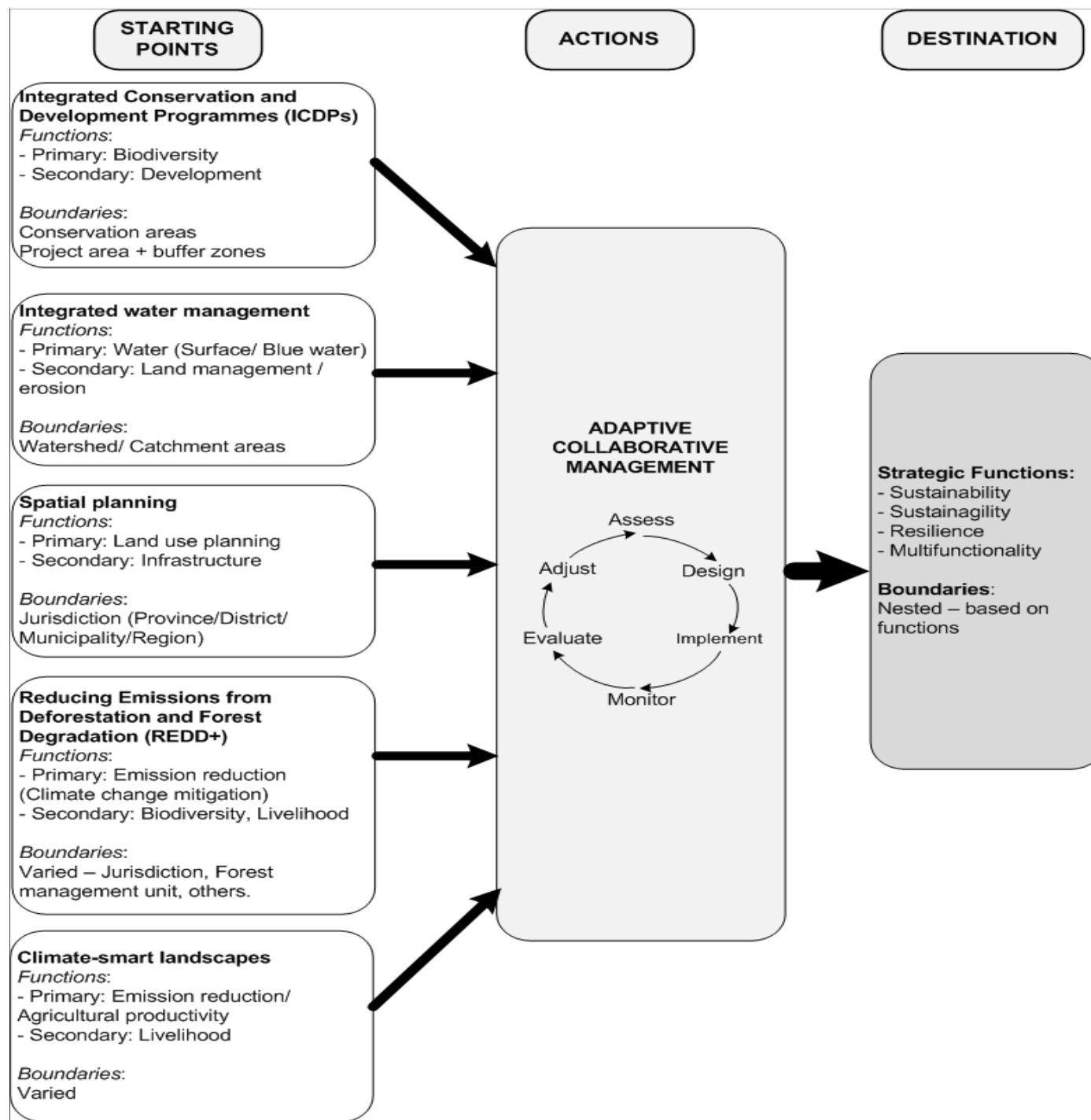




## Proposition 1: Currently we are far from achieving sustainability in landscapes

- Learning from 191 integrated landscape initiatives from Africa and Latin America
- In depth case studies in Cameroon, Kenya and the DRC
- Multiple case studies throughout in Africa, Asia and Latin America

Cases at different points on the path to multifunctionality (i.e. social, economic and environmental)



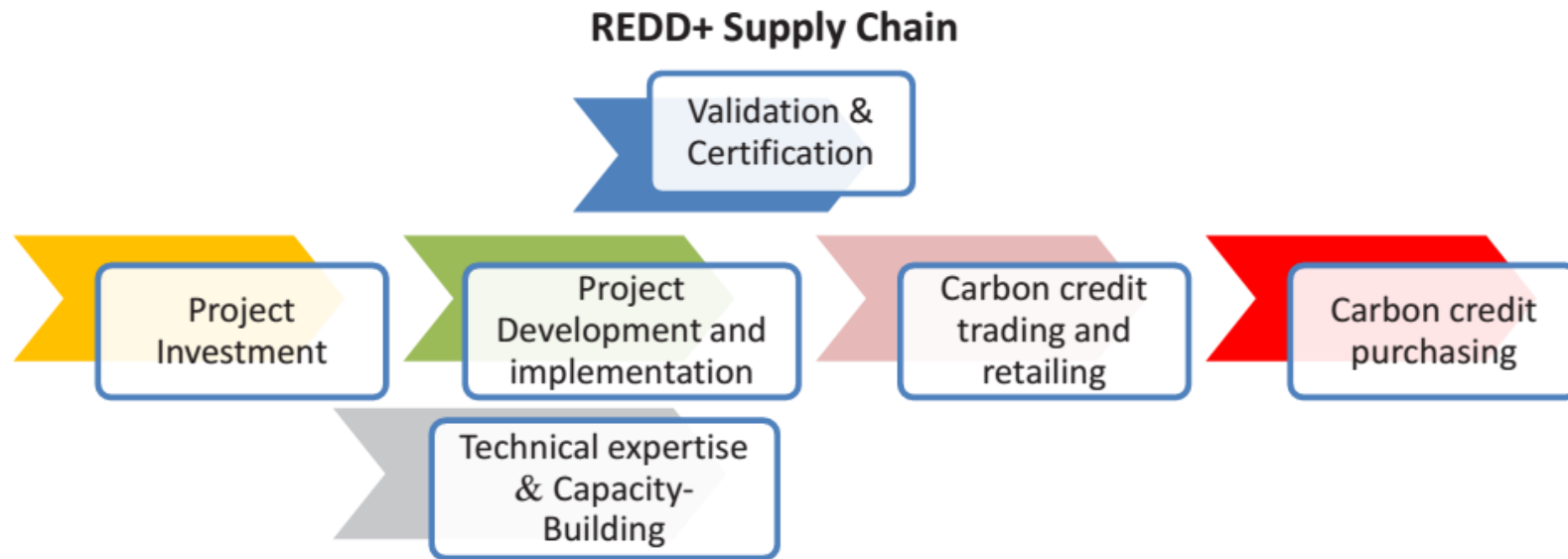
**Different  
starting  
points but  
same  
destination!**

## Proposition 2: Structured interactions, co-investments and negotiations among concerned actors can nudge landscapes towards multifunctionality

- Landscapes are shaped by people with different preferences, interests, knowledge and power, gender
- **Landscape democracy** and **soft systems improvement processes** can potentially improve collaborative adaptive management processes in landscapes;
- We need to increasingly make a business case for landscapes if we want **to leverage private sector** investments, know-how and efficiency



# Private sector



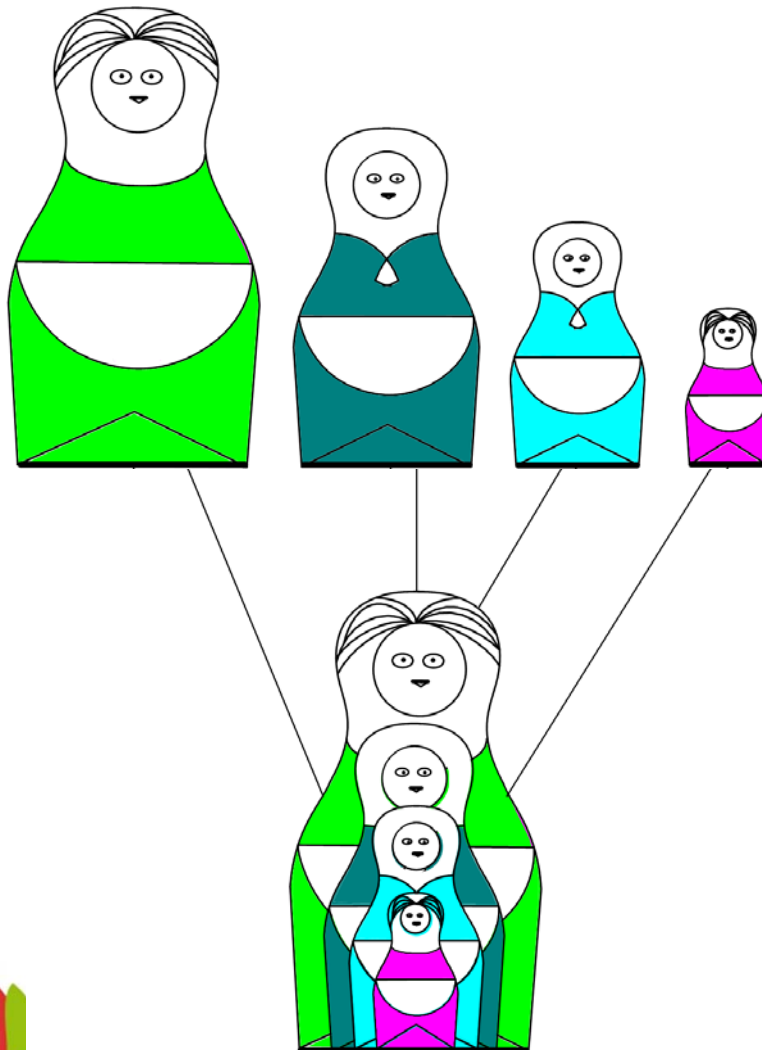
- Co-investments (Public-Private-Partnerships)
- Certification as a primary driver currently
- Part 4 of the book (Chapters 19, 20 & 21)

### Proposition 3: Climate change is one out of many drivers of change in landscapes

- Climate is important BUT it is only one driver. Therefore its interactions with other drivers of change needs careful consideration.
- **Nesting landscapes** necessary for success:
  - To national green growth, NAMA, REDD+, SDG and other policy frameworks
  - To jurisdictional levels of decision-making
- Landscapes can benefit from global policy support (e.g. CBD, European Landscape convention, UNFCCC)



# Scale Considerations



## **Hierarchy in Scale**

(The extent to which phenomena manifest differently at different scales)

## **Scale effect**

(Changes in patterns and processes with change in scale)

## **Scaling**

(Theories, methods, tools for translating / extrapolating across scales)

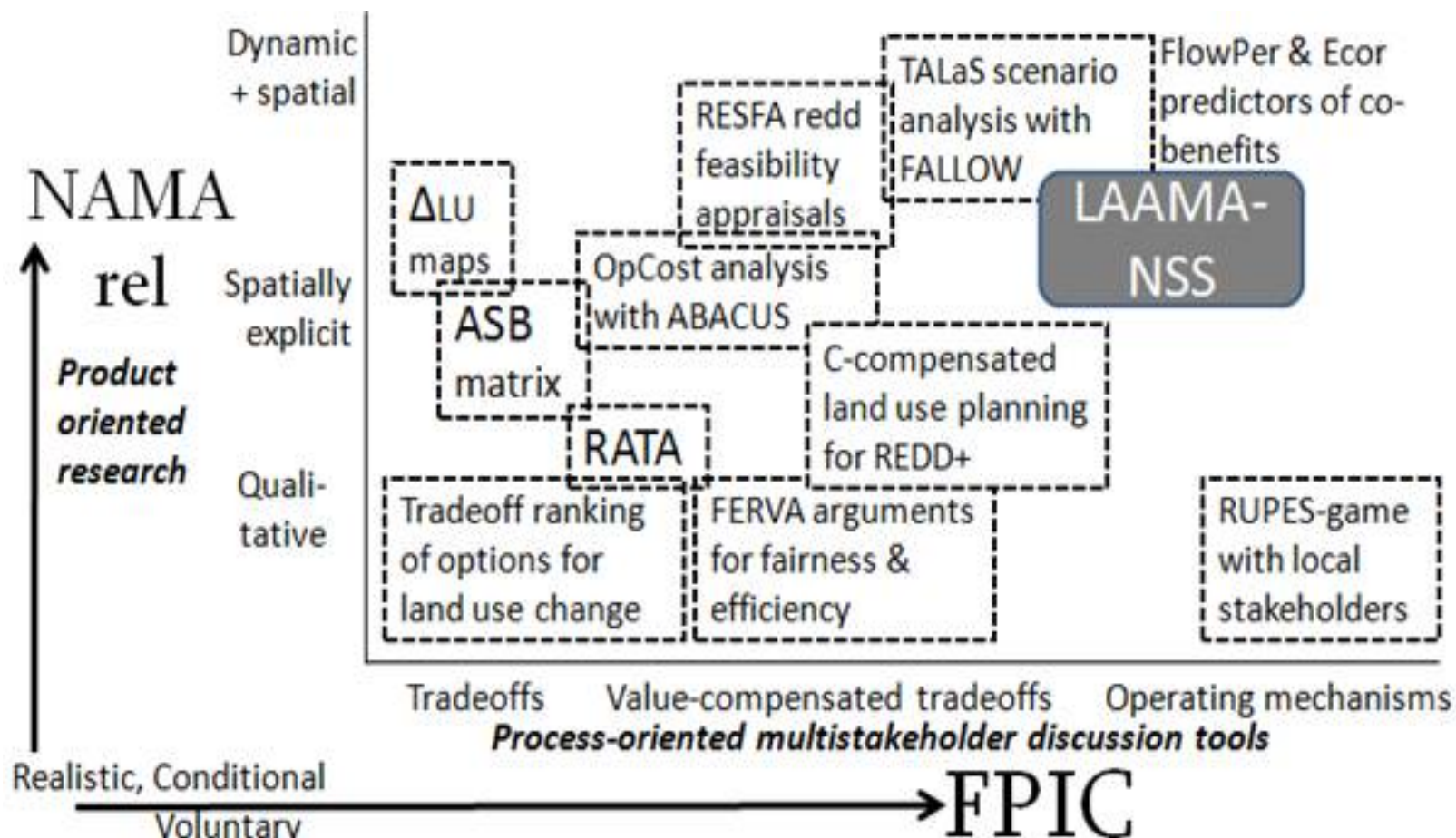
## **Nesting**



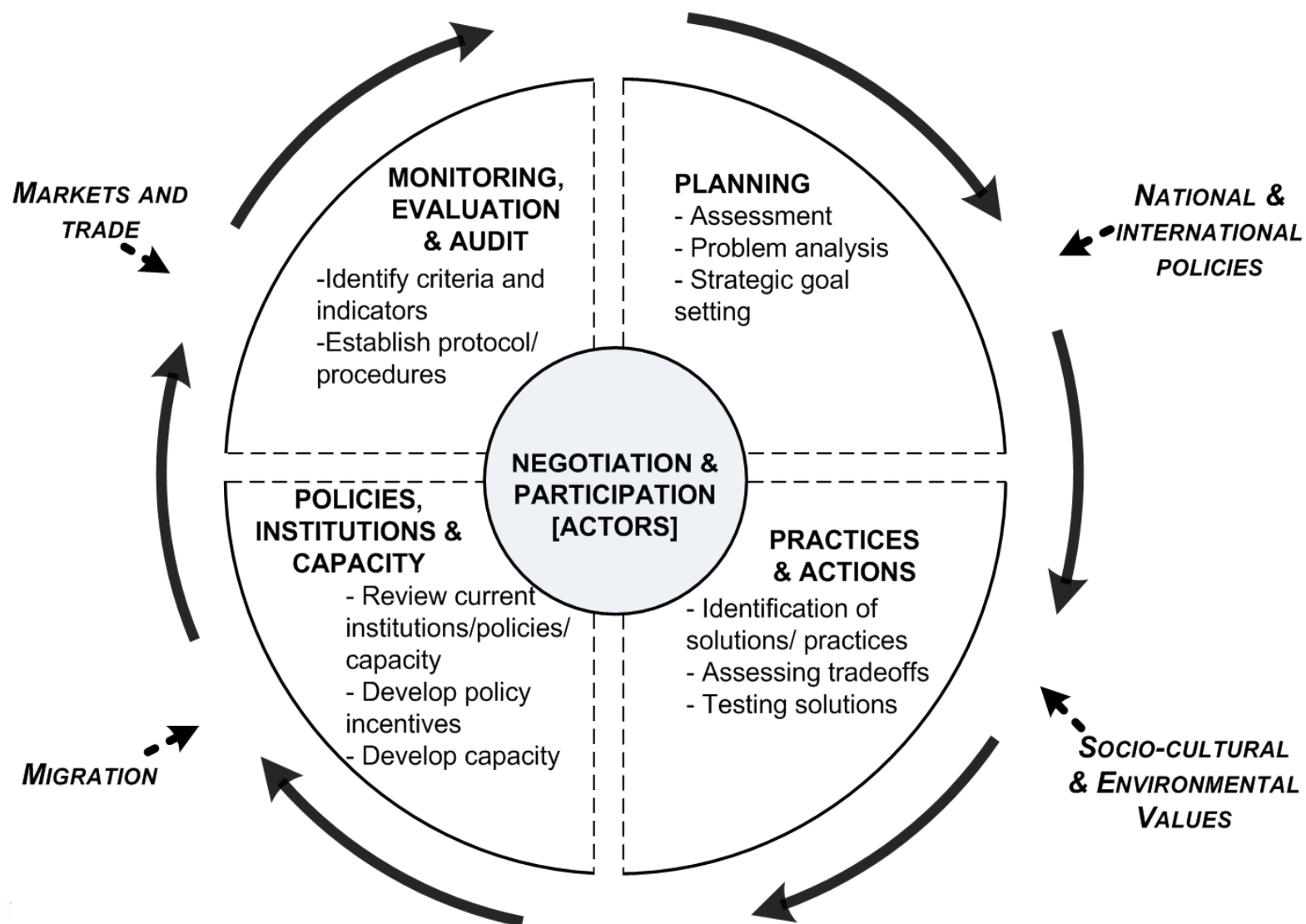
**Proposition 4: Local realities and the ambitions or expected change pathways are important**

- Evidence from landscape analysis critical for negotiations (trade-offs) and forging synergies
- Methods and tools need to be sophisticated (to accommodate complexity, embrace uncertainty and enable trade-offs) YET remain practical enough for implementation

# Accuracy vs Precision



# The Landscape Wheel



# Looking ahead

**“As a farmer, we do not say today I do *Mitigation*, tomorrow I do *Adaptation*. It is all in one package.”** Mr. Chibonga, *Malawi’s Smallholder Farmers’ Association at COP 19*  
Warsaw

**THE CHALLENGE FOR  
MULTIFUNCTIONAL**

**LANDSCAPES CONTINUES**





# Merci!

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