



GLOBAL AGENDA FOR SUSTAINABLE LIVESTOCK

Focus Area 1

CLOSING THE EFFICIENCY GAP

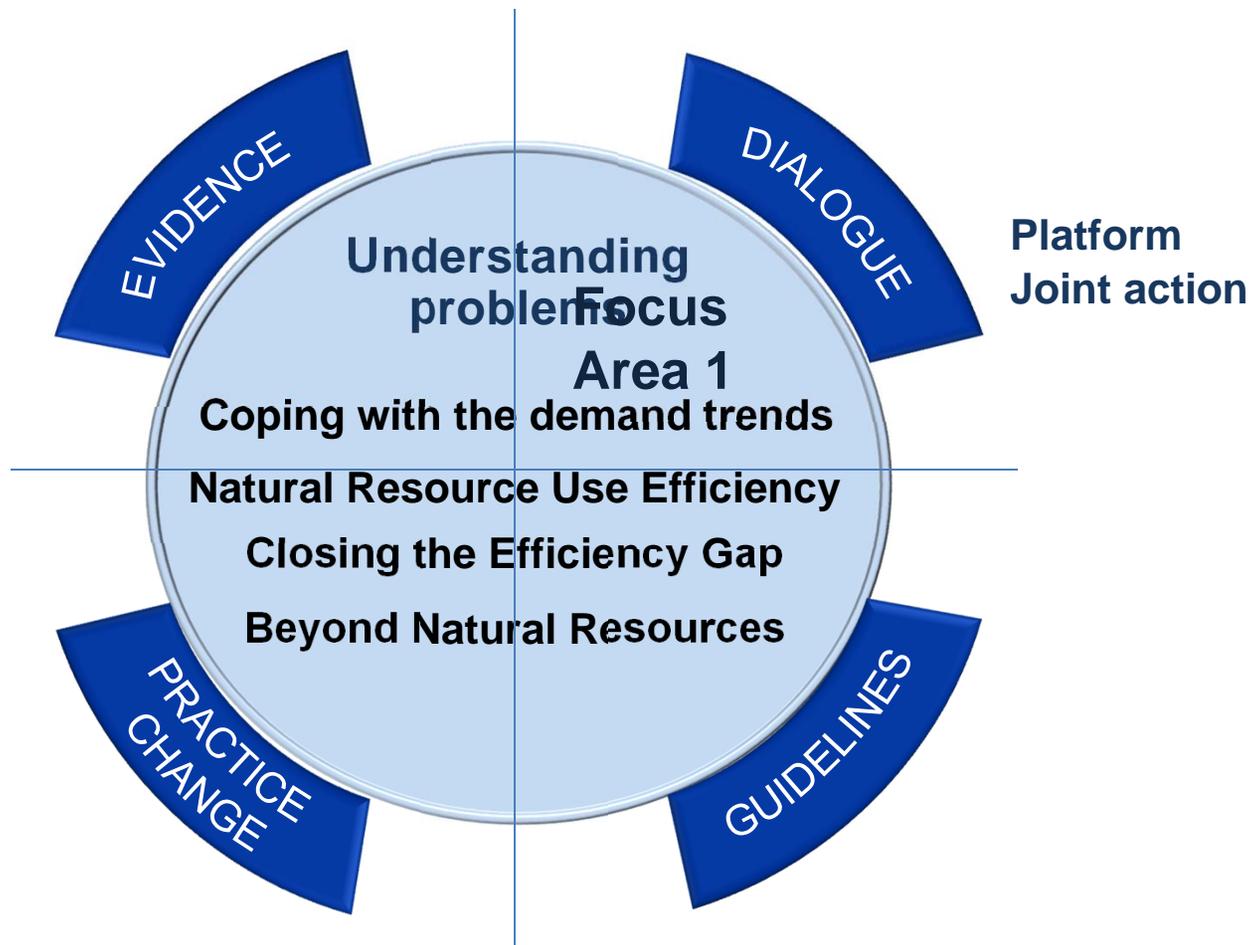
Beyond Natural Resources....



Ernesto Reyes, Chair FA1

Panamá, 21st of June 2016

THE FRAMEWORK: GLOBAL AGENDA AND THE FA1



GLOBAL AGENDA

FA1 - Who we are

Main FA1 institutional partners



- Working initially on Natural Resource Use Efficiency (NRUE)

- Providing guidelines for NRUE metrics (EFFICIENCY MATRIX)

- Identifying those initiatives which are currently working on NRUE. (PILOT PROJECTS)

- Now enlarging the scope: BEYOND NATURAL RESOURCES (SUSTAINABLE OPTIONS)



Organización de las Naciones Unidas para la Alimentación y la Agricultura



LEAGUE OF ARAB PRODUCERS OF ENDOGENOUS LIVESTOCK DEVELOPMENT



German Environmental Assessment Agency

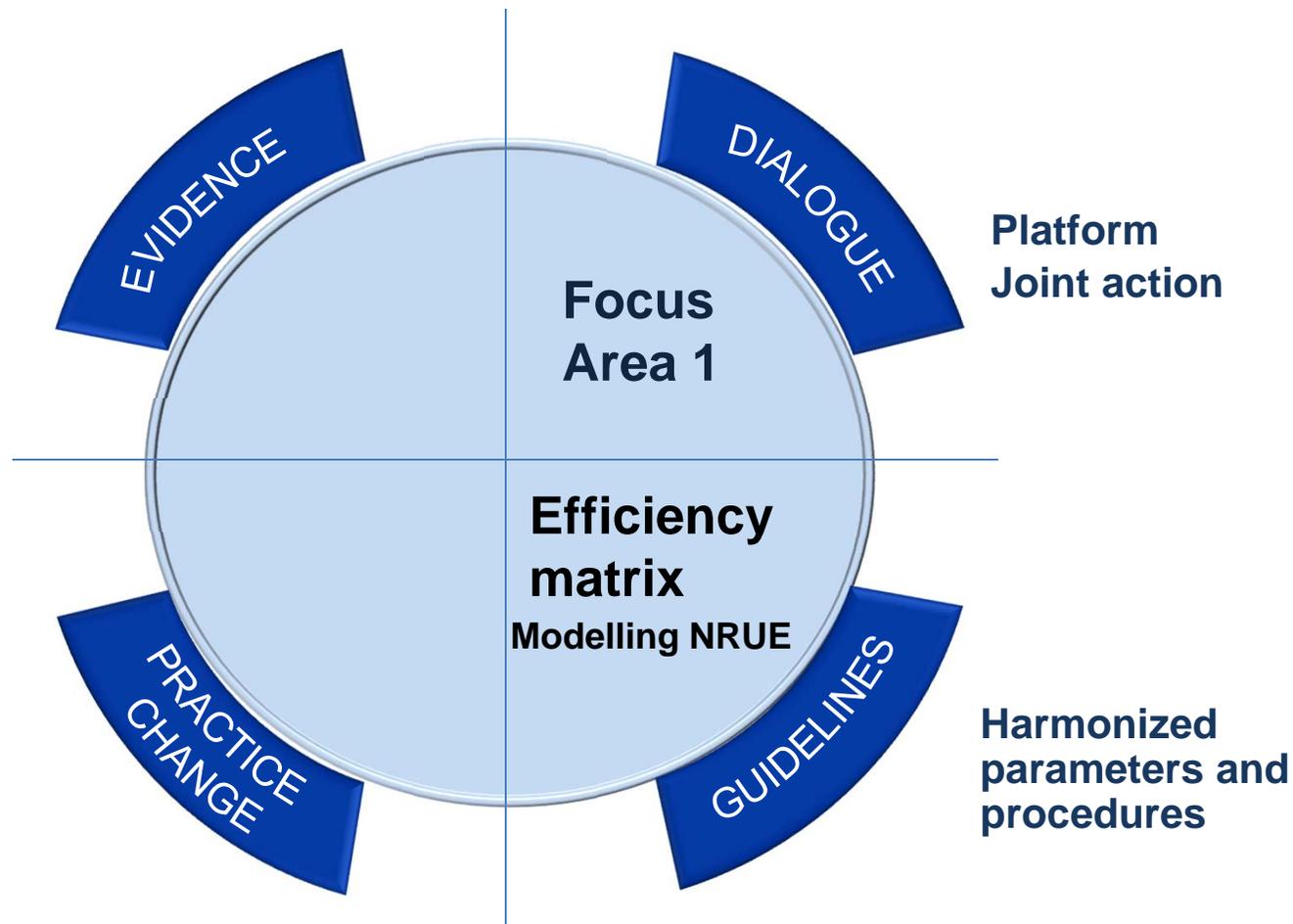


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THE FRAMEWORK: GLOBAL AGENDA AND THE FA1

g with the demand trends

Natural Resource Use Efficiency

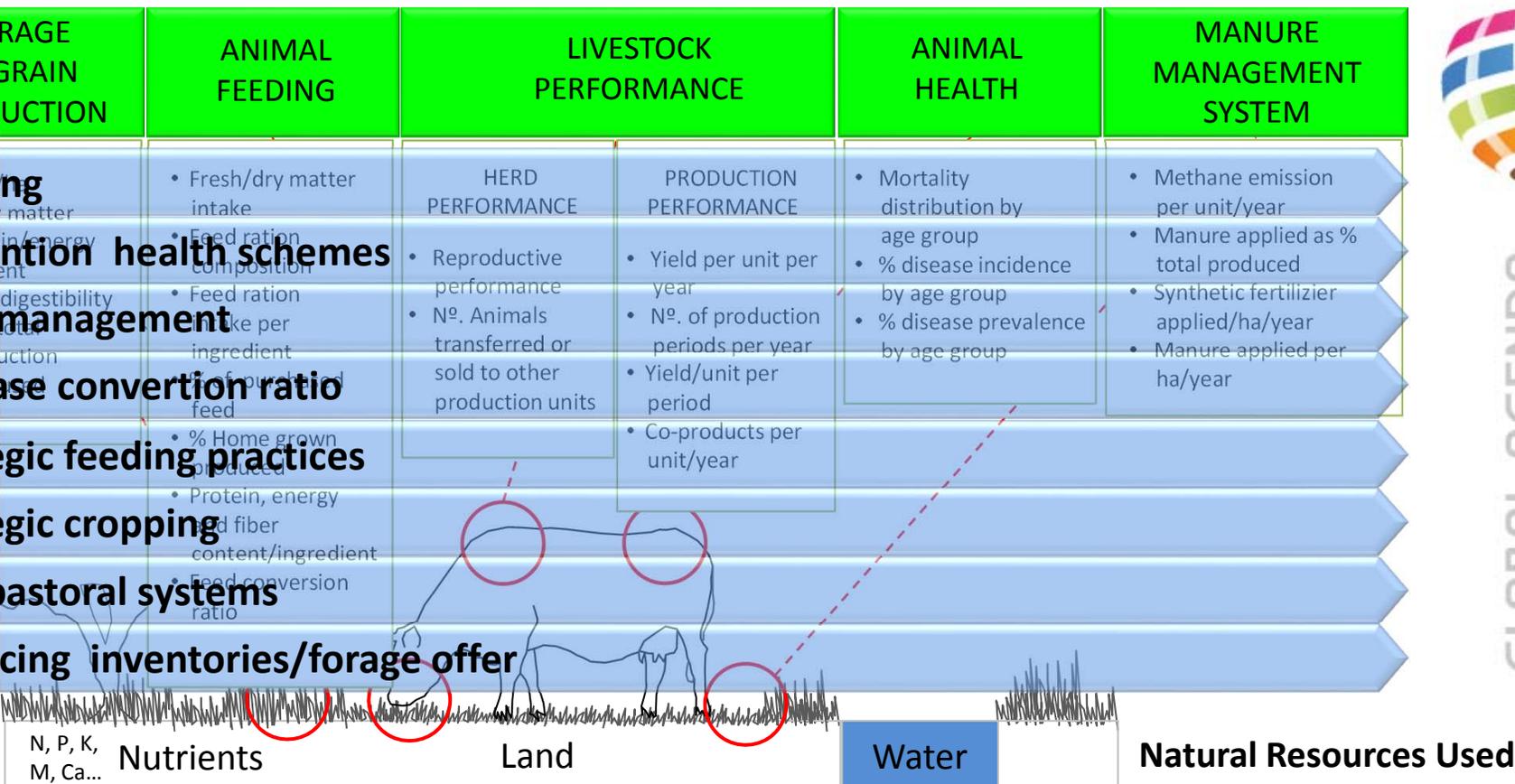


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g the Efficiency Gap

Beyond Natural Resources

NRUE - Efficiency Matrix (Rationale)



Reference Scenario - baseline

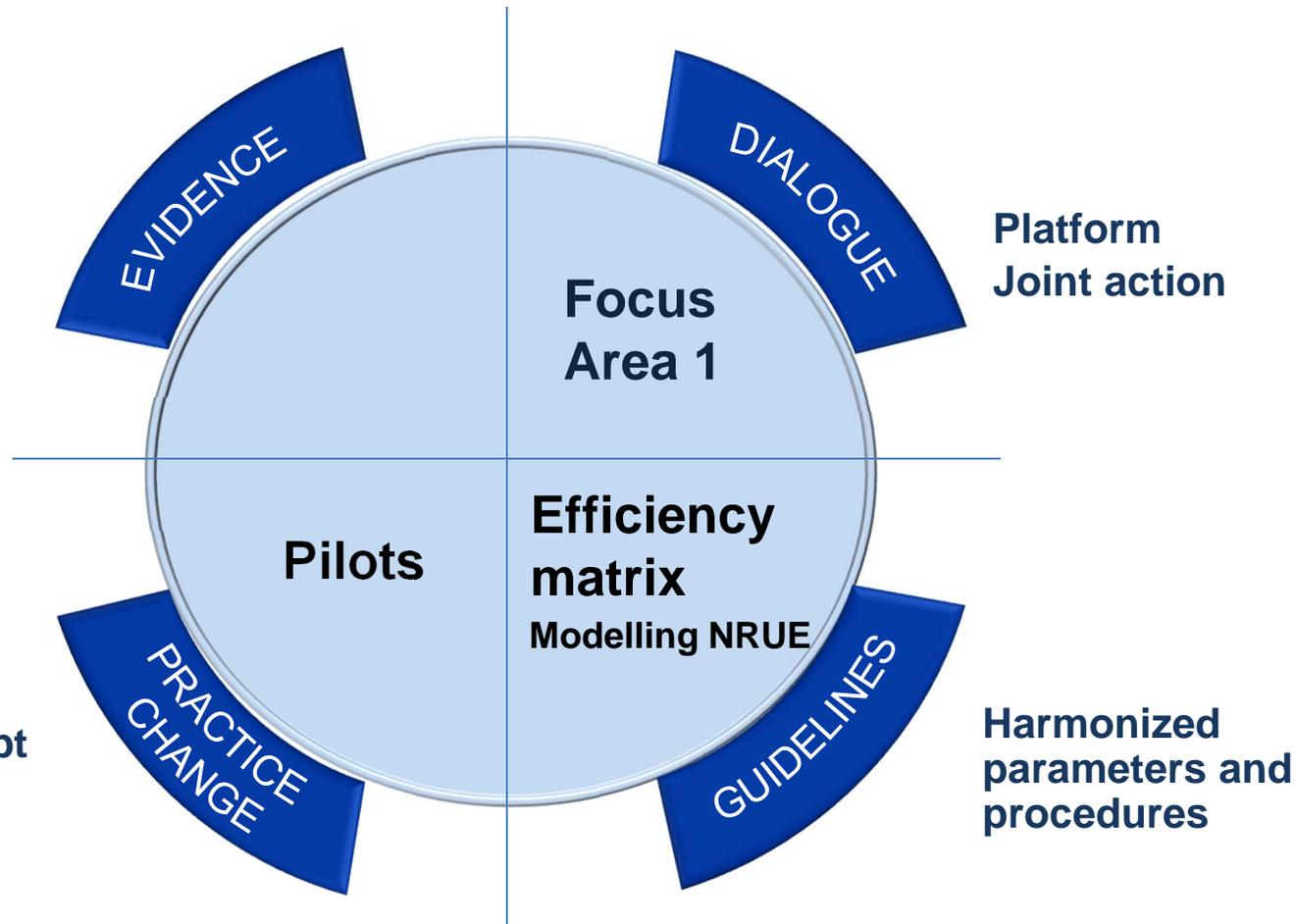
Vs.

New Scenario after intervention

THE FRAMEWORK: GLOBAL AGENDA AND THE FA1

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Natural Resource Use Efficiency



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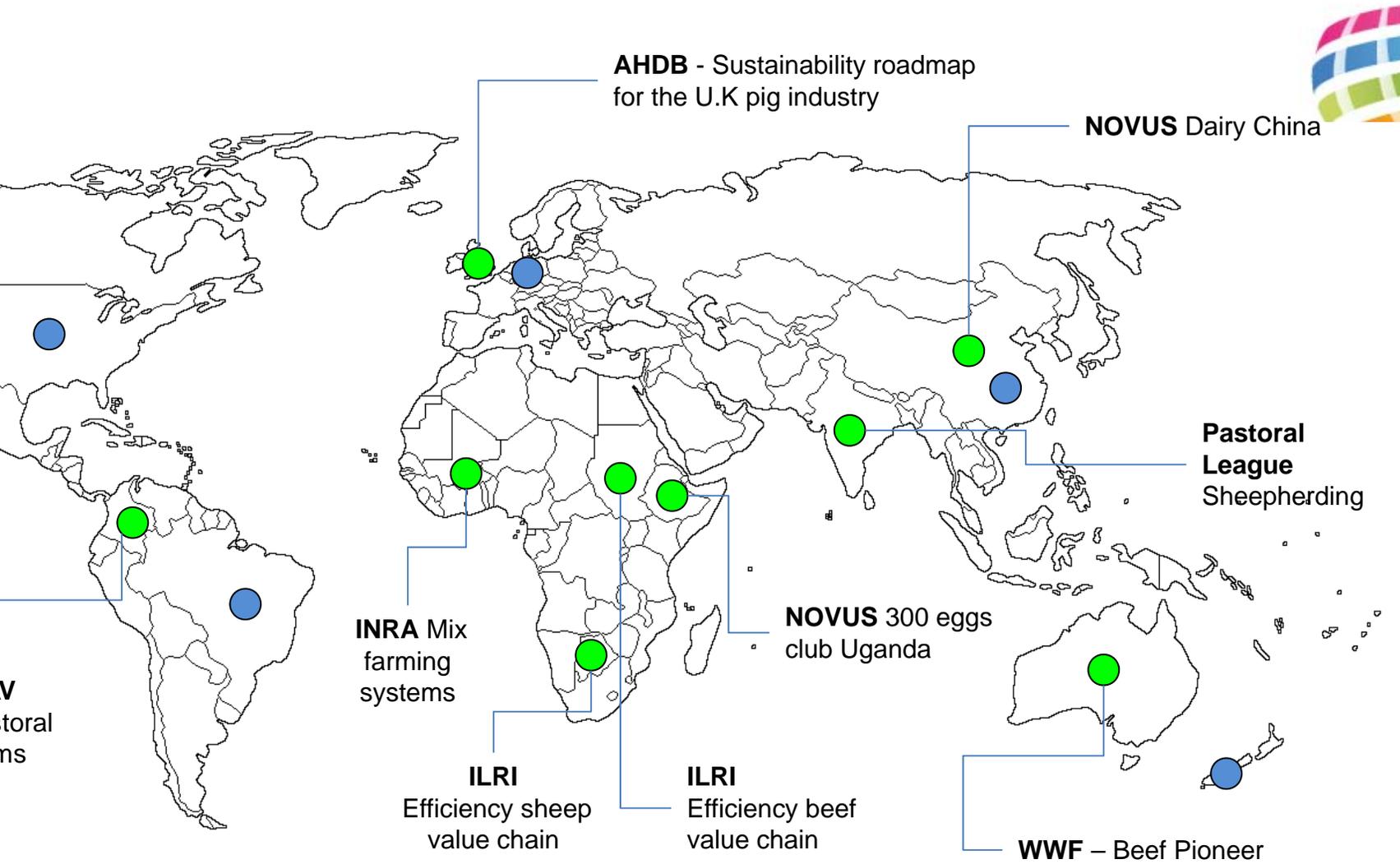
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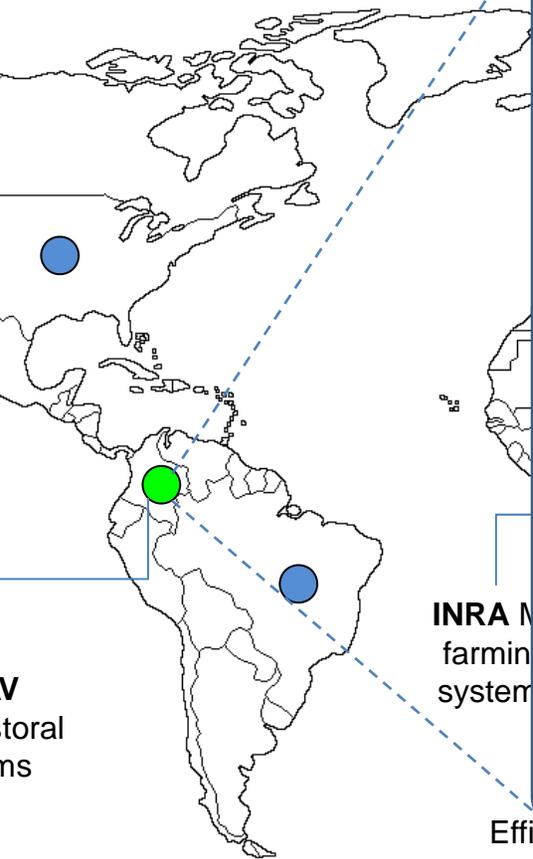
Beyond Natural Resources

Pilot Projets

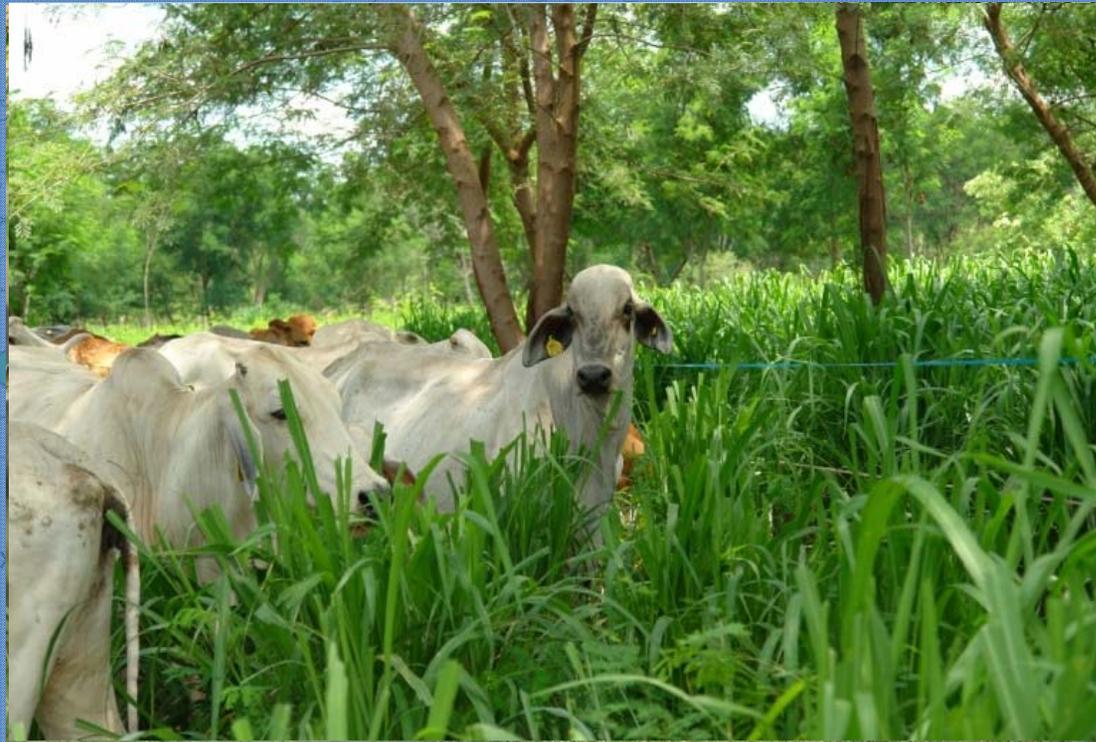
agrohyd - water resource management at the farm level



Pilot Projets



INRA Mixed farming systems



AHDB - Sustainability roadmap for the U.K pig industry

Colombia
Silvopastoral Systems

NOVUS Dairy China

Efficiency sheep value chain

Efficiency beef value chain

WWF – Beef Pioneer

Pilot Projects



India

Pastoral League - Sheepherding



AHDB - Sustainability roadmap for the U.K. pig industry

NOVUS Dairy China

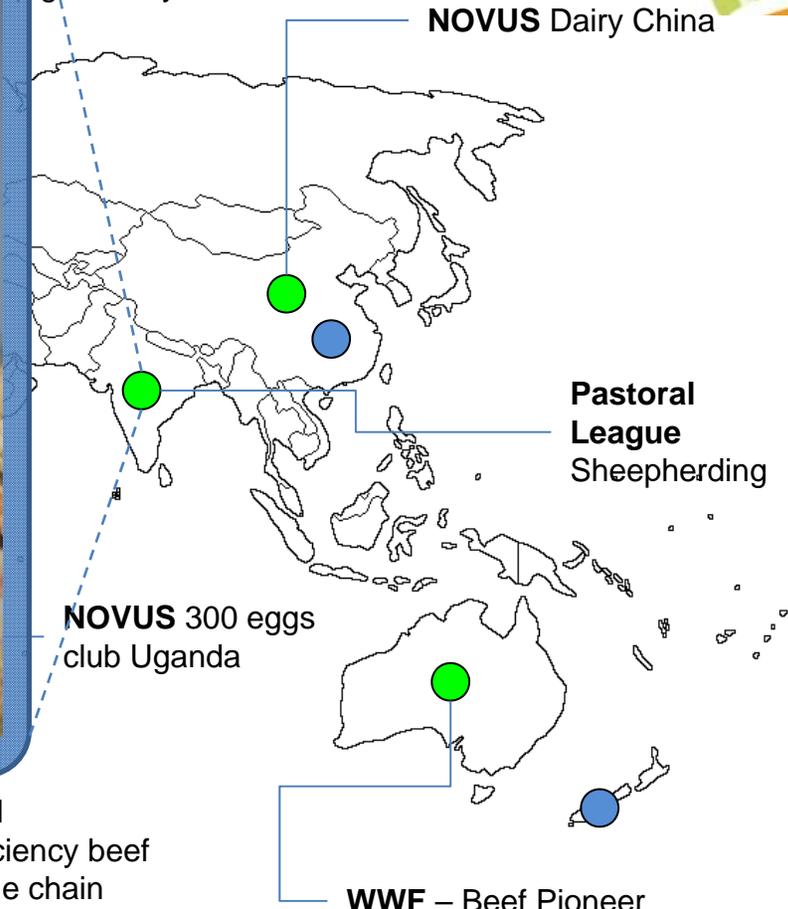
Pastoral League Sheepherding

NOVUS 300 eggs club Uganda

ILRI Efficiency sheep value chain

ILRI Efficiency beef value chain

WWF - Beef Pioneer



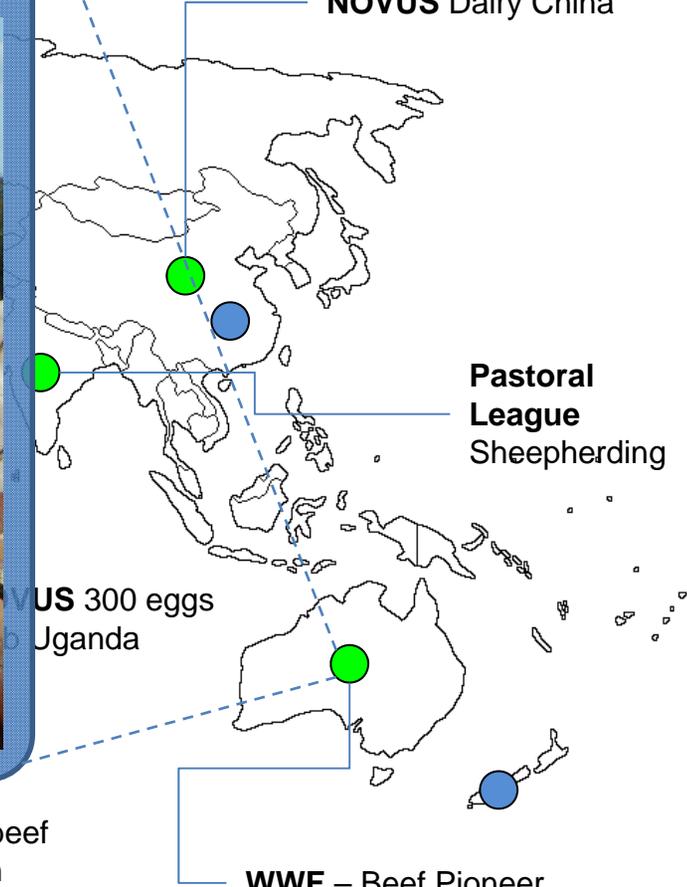
Pilot Projets

Australia
WWF - Beef Pioneer

AHDB - Sustainability roadmap
for the U.K pig industry



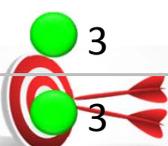
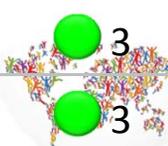
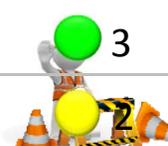
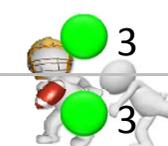
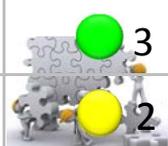
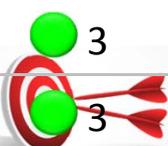
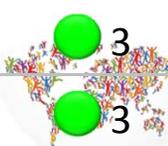
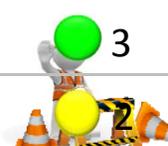
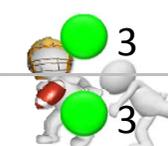
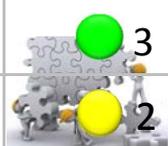
NOVUS Dairy China



ILRI
Efficiency sheep
value chain

ILRI
Efficiency beef
value chain

FA1 - Pilots

	Criteria							
CS	Focalization NRUE	Possibility of Intervention	Regional and Livestock Diversity	Capacity Building	Impact	Interaction with FA1	Implement. Capacity	Synergies
Australia	 3	 3	 3	 3	 3	 3	 3	 3
India	 3	 3	 3	 3	 3	 3	 3	 3
Footprint	 3	 3	 3	 3	 3	 3	 3	 2
JK	 3	 3	 2	 3	 3	 3	 3	 1
	 3	 3	 3	 3	 3	 3	 3	 1
s	 3	 3	 3	 3	 3	 3	 3	 2
a Faso	 3	 3	 3	 3	 3	 3	 2	 3
	 3	 3	 3	 3	 3	 3	 3	 3
	 3	 3	 3	 3	 3	 3	 3	 3
	 3	 3	 3	 3	 3	 3	 3	 3
	 3	 3	 3	 3	 3	 3	 2	 3

THE FRAMEWORK: GLOBAL AGENDA AND THE FA1

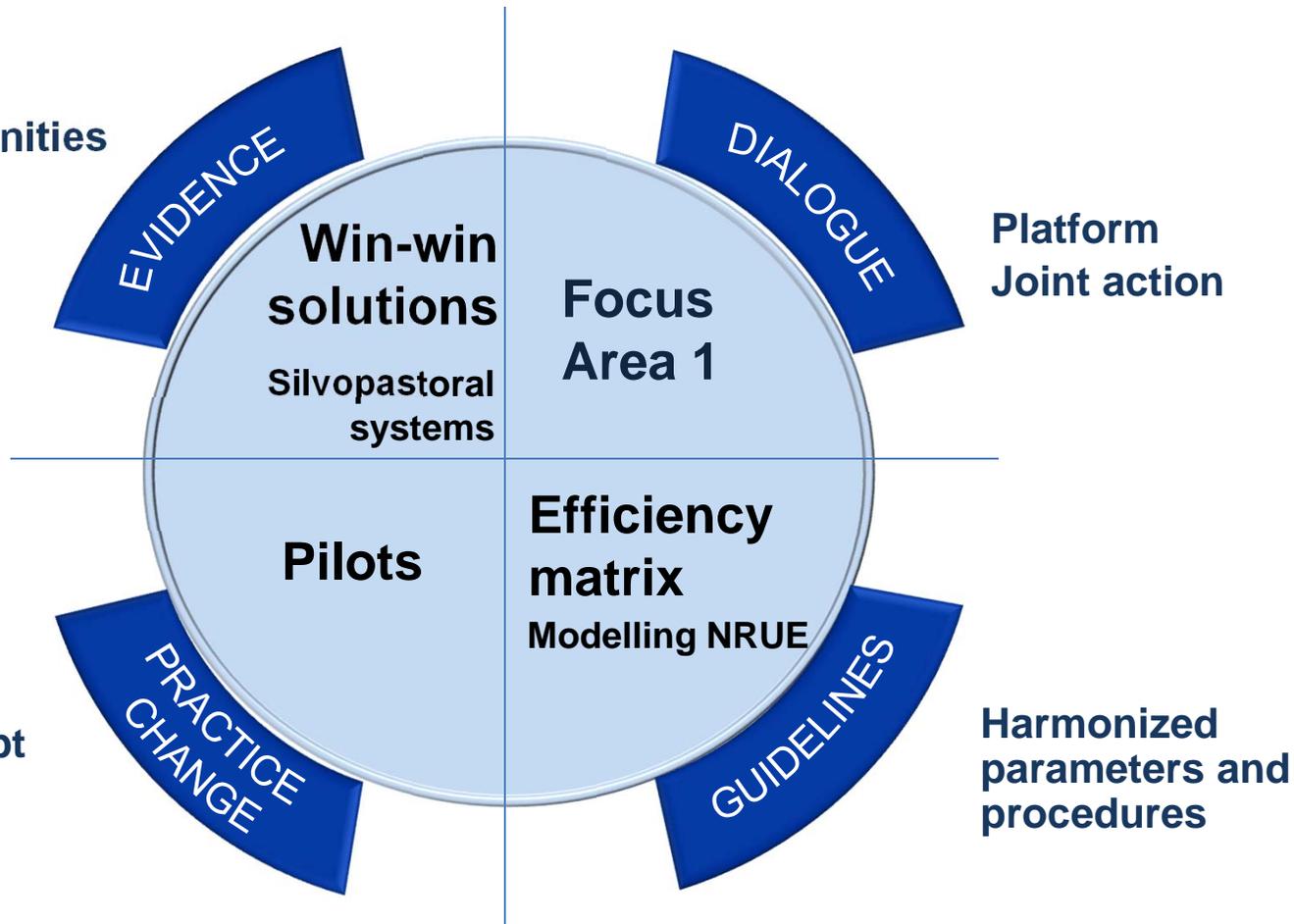
g with the demand trends

Natural Resource Use Efficiency

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g the Efficiency Gap



GLOBAL AGENDA

Beyond Natural Resources

Silvopastoral Systems

Principles

- Increasing plant biomass**
- Reducing soil degradation**
- Protecting water sources**
- Increase animal productivity**
- Conserve regional biodiversity**
- Ensure animal welfare**
- Ensure economic stability**



THE FRAMEWORK: GLOBAL AGENDA AND THE FA1

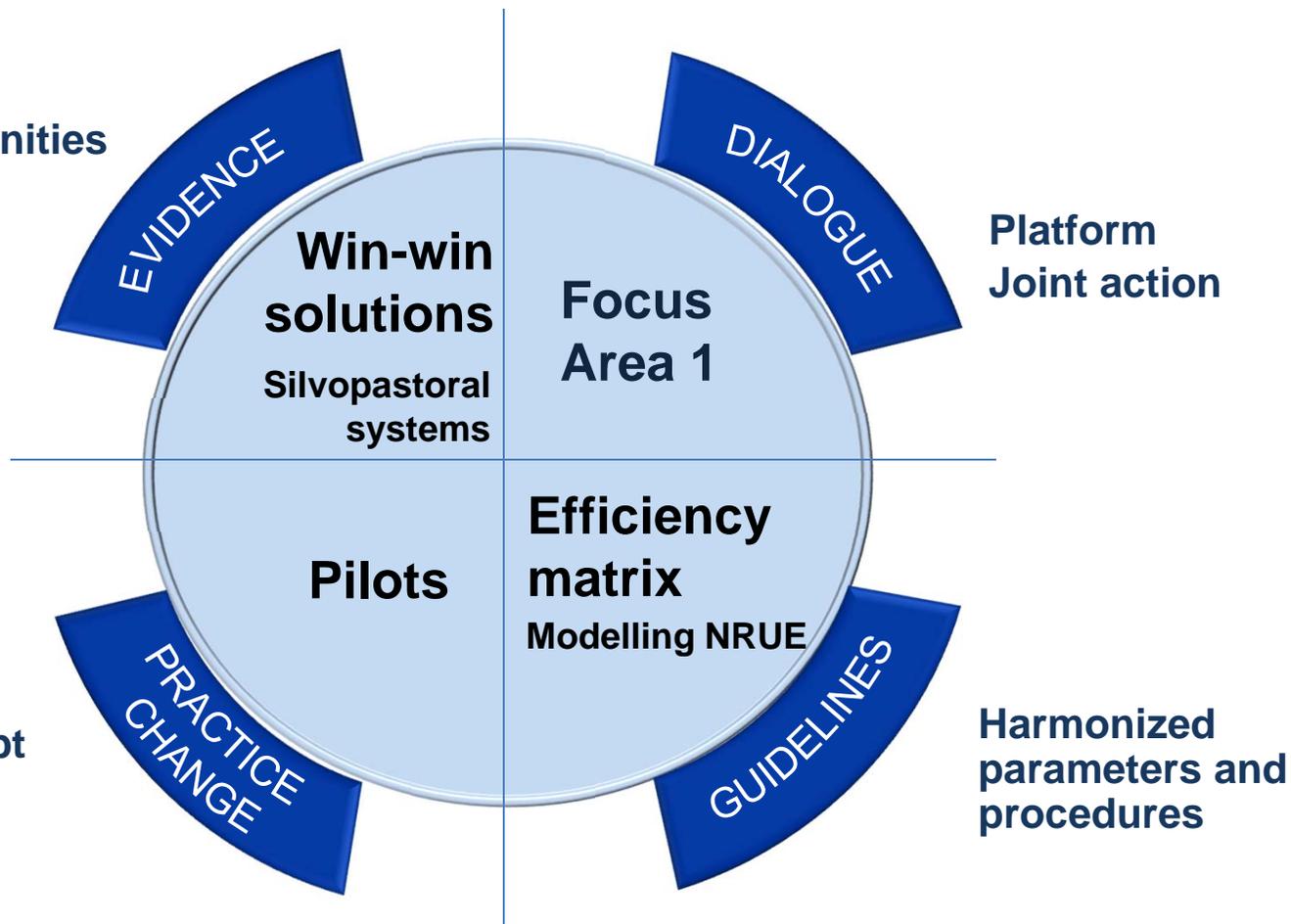
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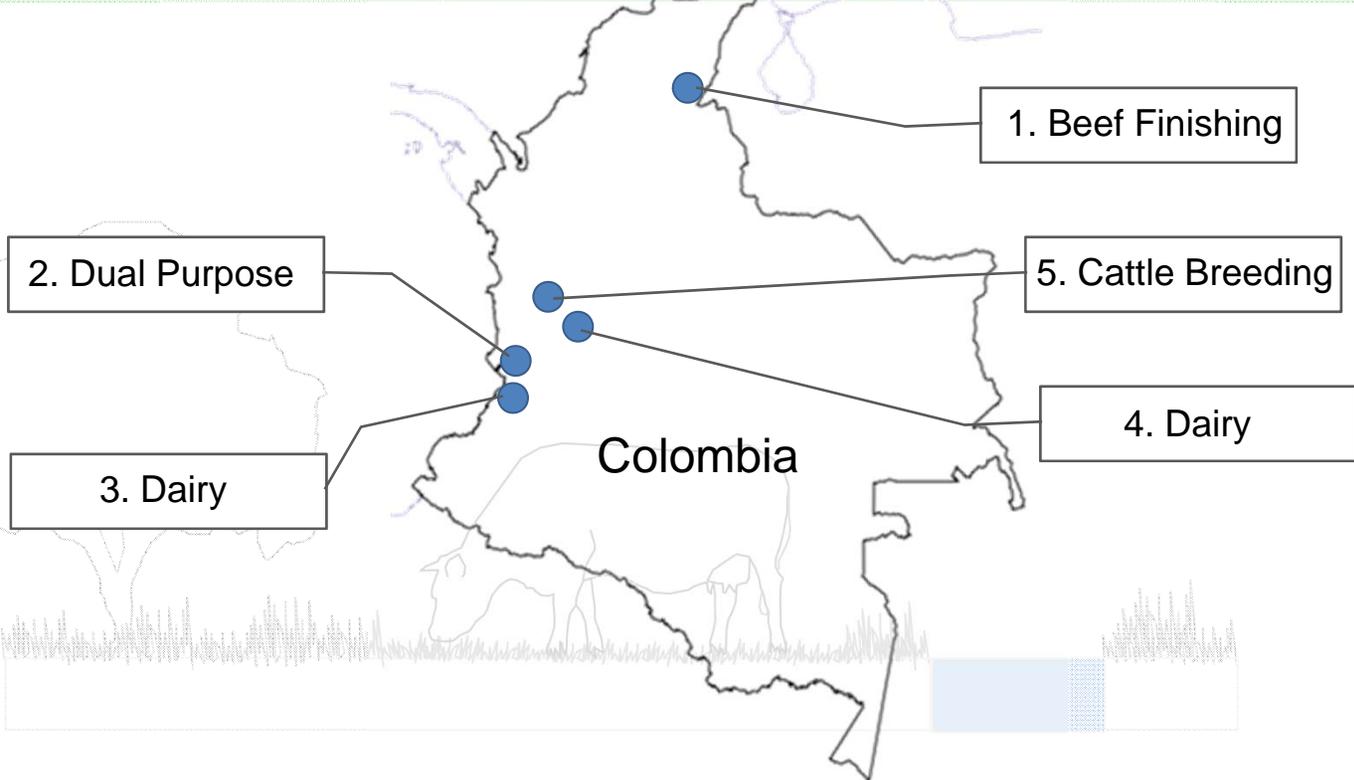
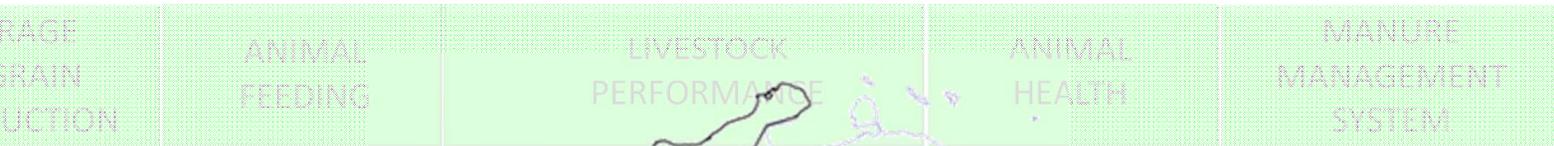


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Beyond Natural Resources



The Evidence: Case Studies



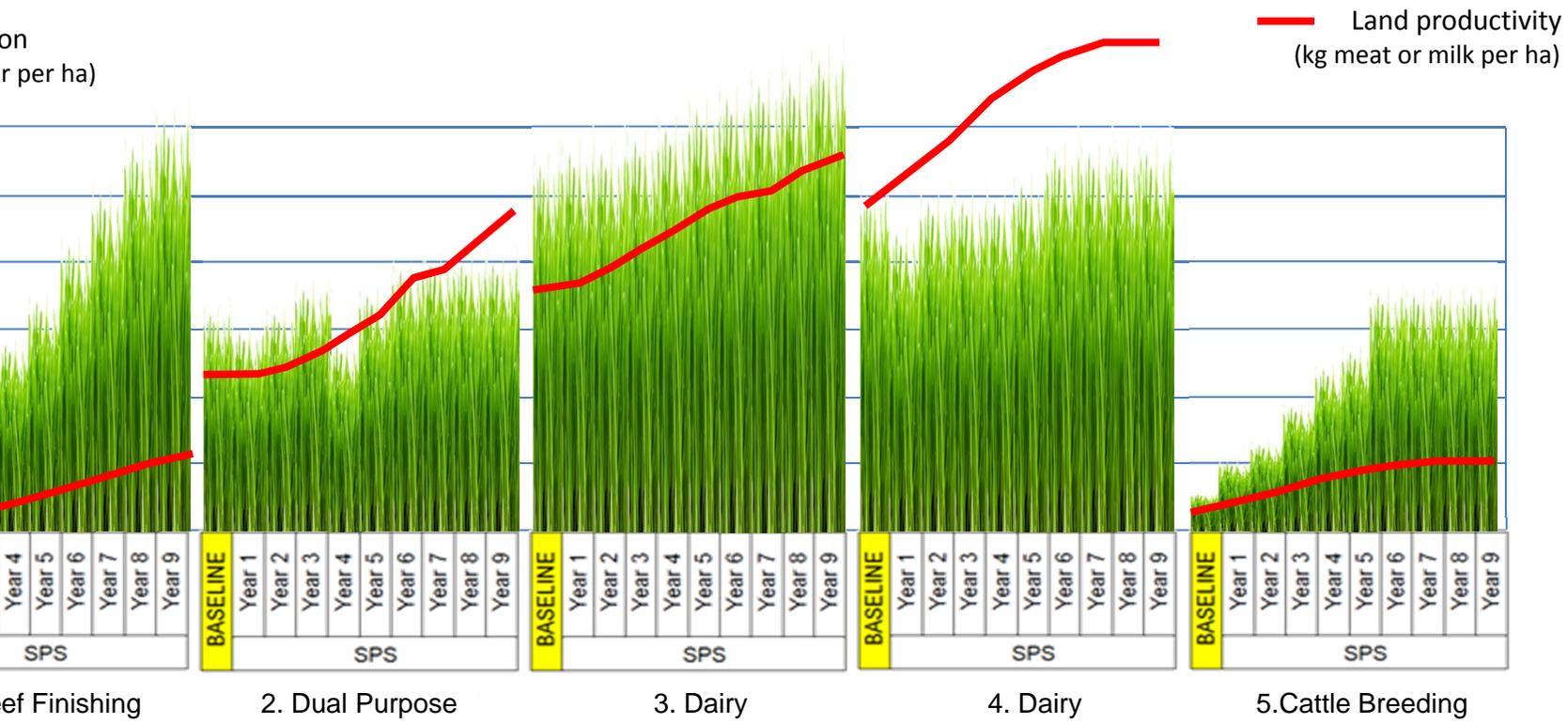
Reference Scenario - baseline

Vs.

New Scenario after intervention



The Evidence: Case Studies



Reference Scenario - baseline

Vs.

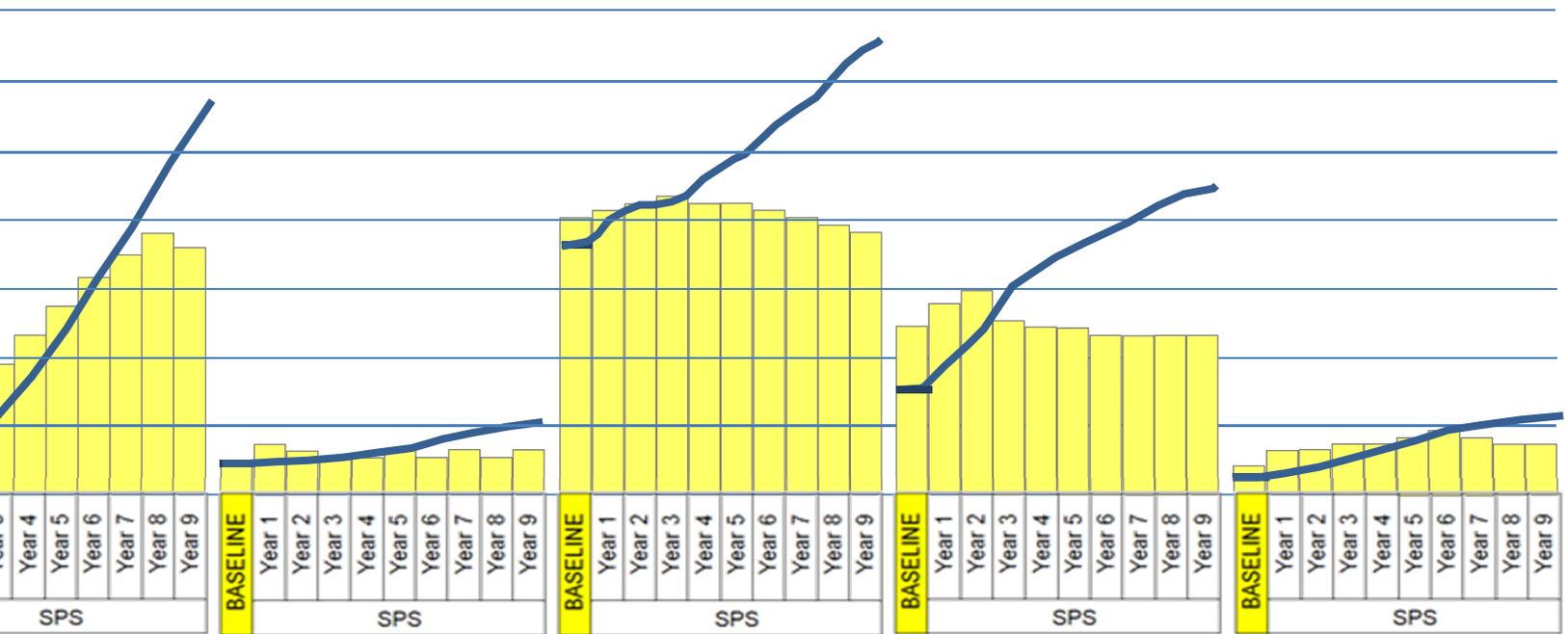
New Scenario after intervention



The Evidence: Case Studies



Whole farm costs ('000 US\$)
 Whole farm returns ('000 US\$)



1. Beef Finishing 2. Dual Purpose 3. Dairy 4. Dairy 5. Cattle Breeding

Reference Scenario - baseline

Vs.

New Scenario after intervention



The Evidence: Case Studies

Feed
CRAIN
FUNCTION
Manure Nox

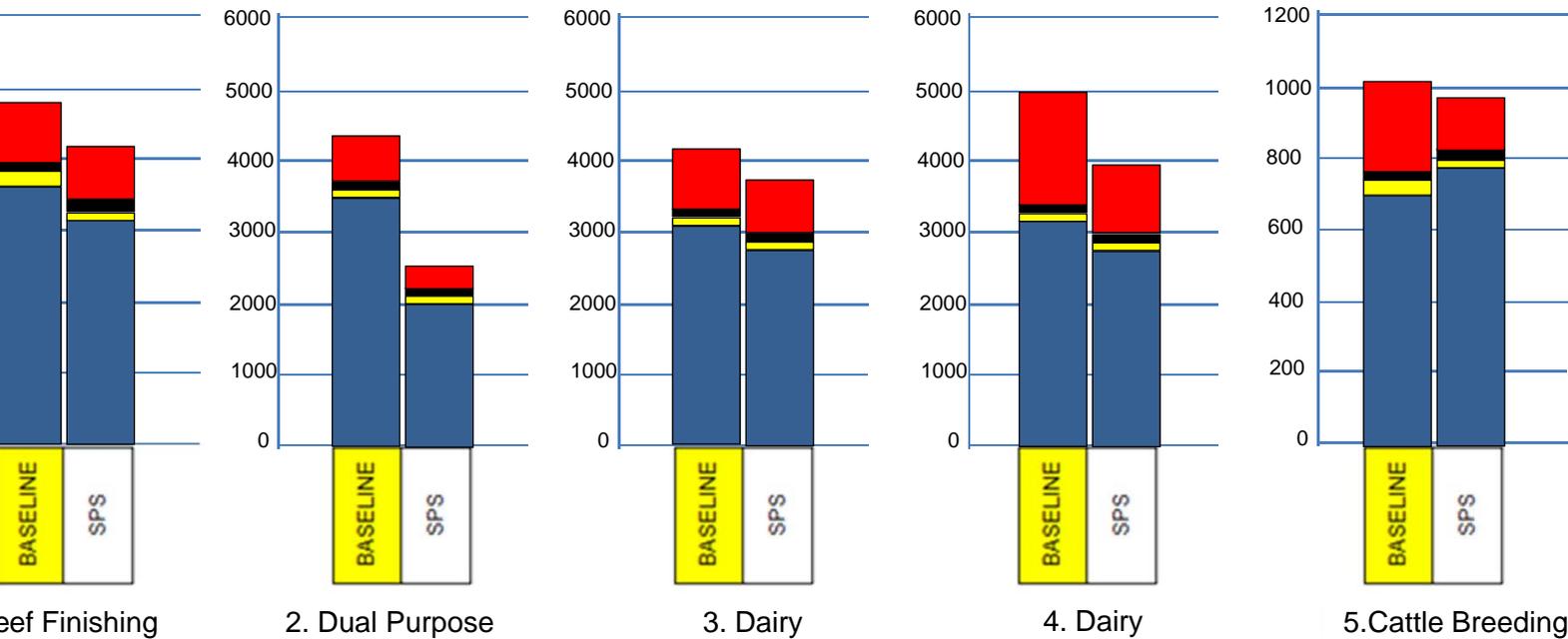
Manure methane
Enteric fermentation

LIVESTOCK
PERFORMANCE

ANIMAL
HEALTH

MANURE
MANAGEMENT SYSTEM

kg CO₂ / 100 kg LW added / ECMilk



Reference Scenario - baseline

Vs.

New Scenario after intervention



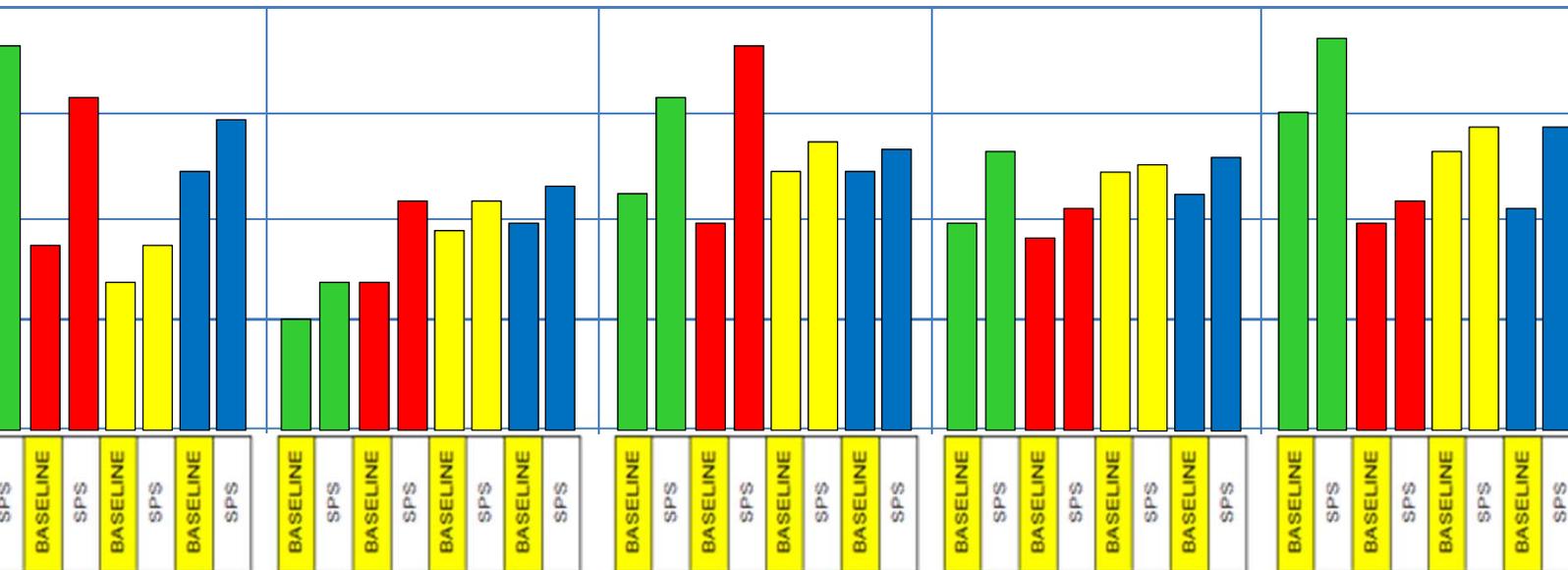
The Evidence: Case Studies

Good Feeding ■ Good Health
 Good Housing ■ Appropriate Behavior

LIVESTOCK PERFORMANCE

ANIMAL HEALTH

MANURE MANAGEMENT SYSTEM



1. Beef Finishing

2. Dual Purpose

3. Dairy

4. Dairy

5. Cattle Breeding

Reference Scenario - baseline

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New Scenario after intervention

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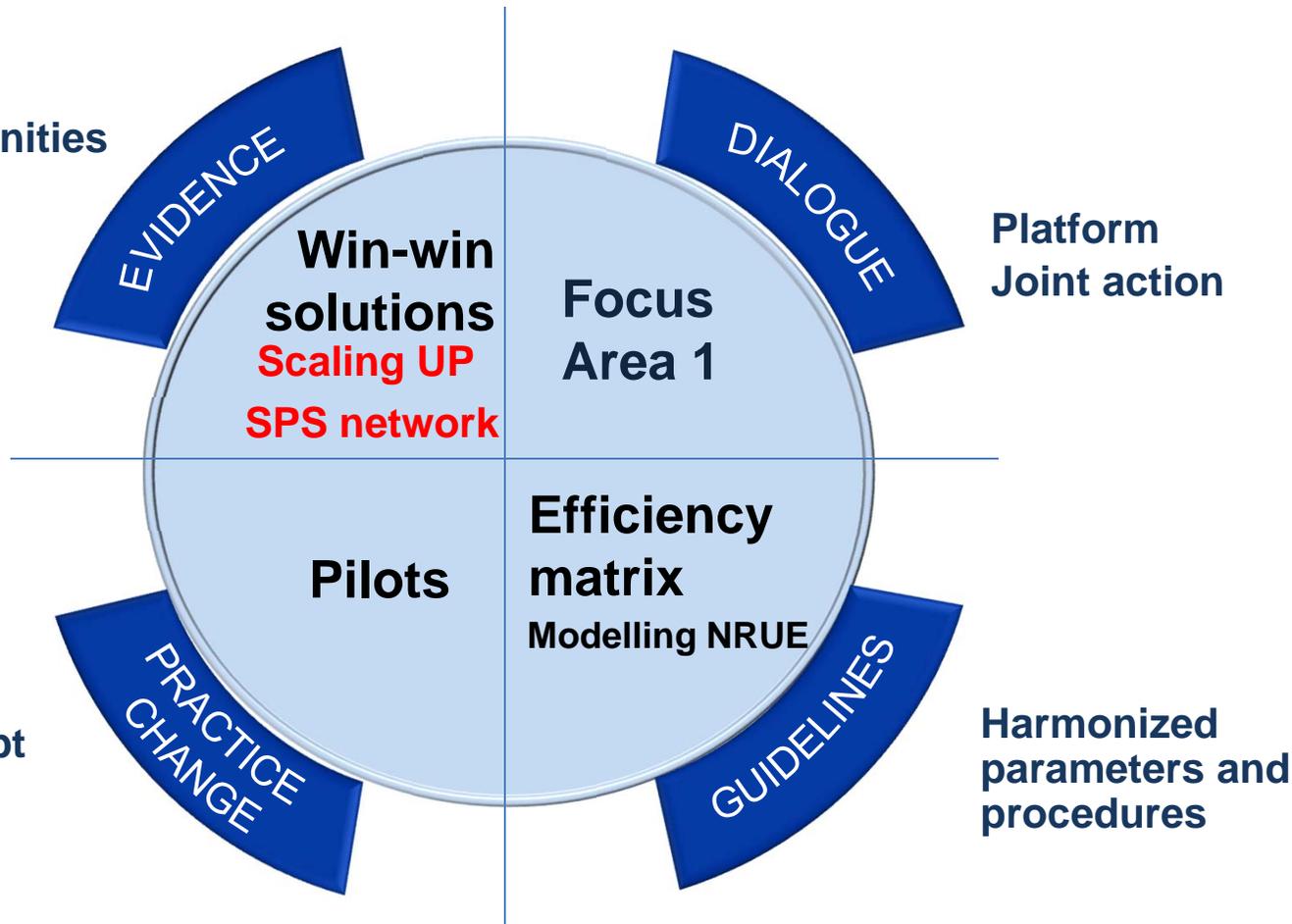
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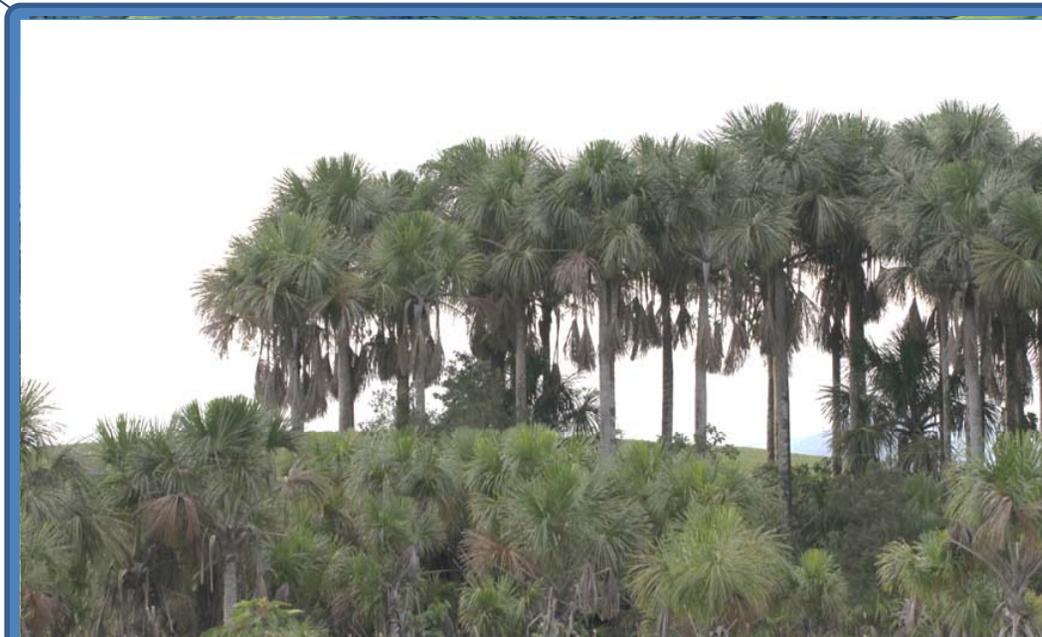
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Scaling Up

**SPS as a sustainable alternative
for reducing deforestation in the
The Amazonian region (Colombia)**



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Scaling Up

**Improving natural resource use efficiency
and profitability on a wider scale**
México (12.000 has on SPS)



Scaling Up

**Improving land use, combining
complementary enterprises under SPS
schemes**

Argentina (forestry + beef cattle)



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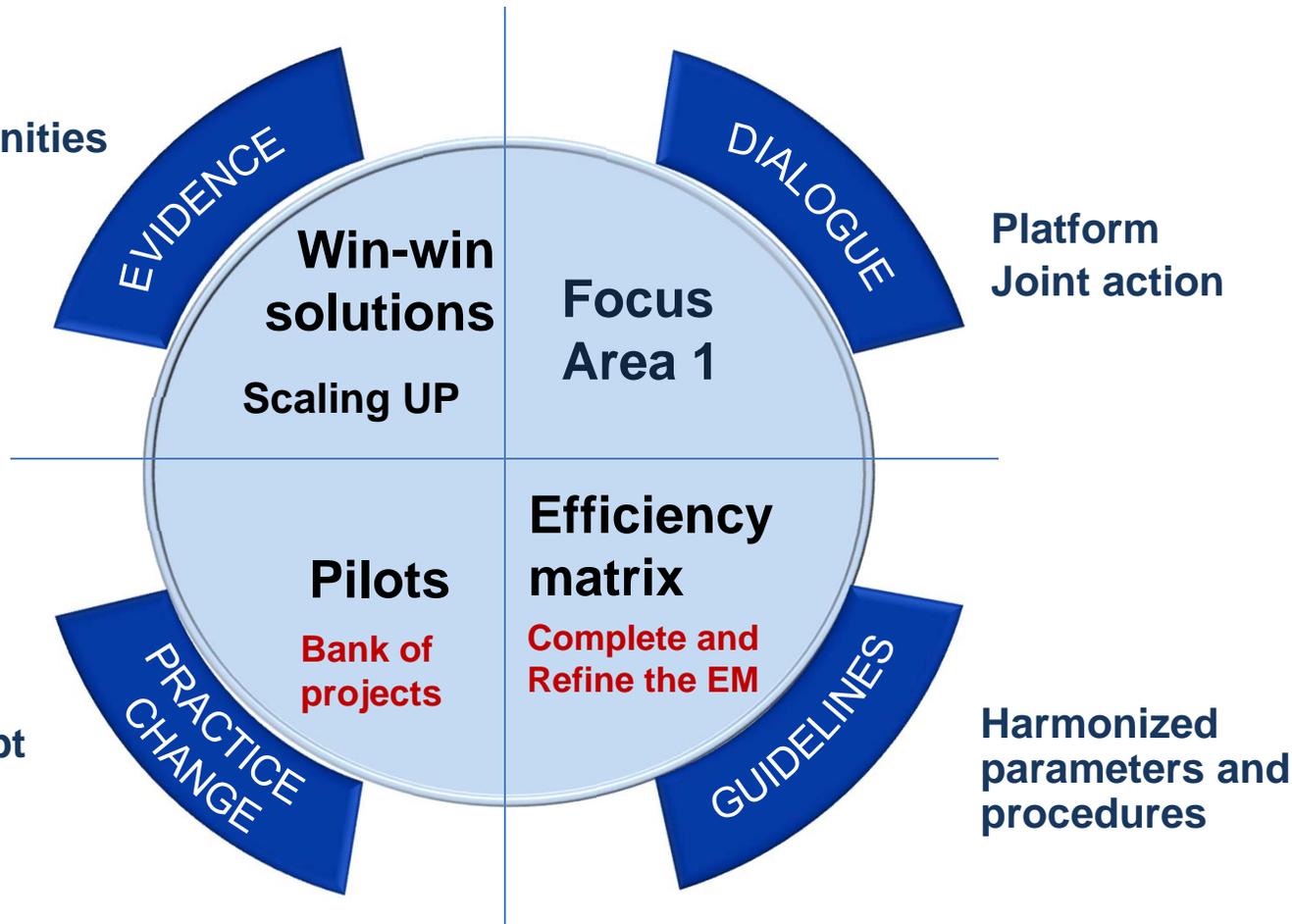
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Beyond Natural Resources

IN A GLOBAL CONTEXT: PLAN OF ACTION FOR PEOPLE, PLANET AND PROSPERITY



FA1 - CLOSING THE EFFICIENCY GAP

Thanks.....



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Thanks.....

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