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# “The Potential of Agroecology to Hedge against Climate Change

and build Resilient and Sustainable Livelihoods and Food Systems”

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For the 1st International Conference on Agroecology Transforming Agriculture & Food Systems  
in Africa – 18-21 June 2019 - Nairobi, Kenya

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# Rationale

- Call from FAO's governing bodies :  
strengthen normative and evidence-based work
- Recent developments: the 'Scaling up agroecology';  
the 10 elements characterizing agroecology; the FAO Global  
Knowledge Product (GKP)
- Agroecology is not yet fully considered in climate change  
discussions (COP, KJWA), use momentum



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# Multistakeholder partnership

- Partnership between FAO, NGOs and Research Organizations:
  - ❑ At the global level: Biovision, FAO and FiBL
  - ❑ At national level: Senegal: Enda Pronat and ISRA  
Kenya: ICE and Bioversity
- Opening-up to external experts (Advisory group)



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# Objectives

- **Provide evidence** on how agroecology builds resilient livelihoods and food systems (& mitigation co-benefits)
- **Link agroecology to the Paris Agreement and the Koronivia Joint Work on Agriculture** (and other relevant processes CFS, UNCCD, CBC)



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# Expected outputs

- At global level
  - ✓ Meta-study results into KJWA (submission 2b&2c “adaptation & resilience”)



# Koronivia submission



KJWA Technical input, May 2019



## Biovision and FiBL Submission for Koronivia joint work on agriculture: Elements to be included in topics 2(b) and 2(c)

***Agroecological systems show increased resilience (stronger adaptive capacity and decreased vulnerability) towards adverse impacts of climate change, based on the following findings:***

- Strong evidence that agroecology contributes to improved soil organic carbon contents, soil fertility and soil quality. This then results in higher water absorption and retention capacities and better soil structure, making these soils more resilient to droughts and heavy rain events. The increased soil organic carbon levels also have the co-benefit of climate change mitigation by sequestering CO<sub>2</sub> from the atmosphere.
- Strong evidence that agroecology contributes to increased diversity (crop, livestock or biodiversity and ecosystem services in general). This results in a diversity of locally adapted varieties, which are able to better cope with the local threats from climate change. Increased crop and biodiversity leads to higher nutrient use efficiency, productivity and stability of the production systems. A more

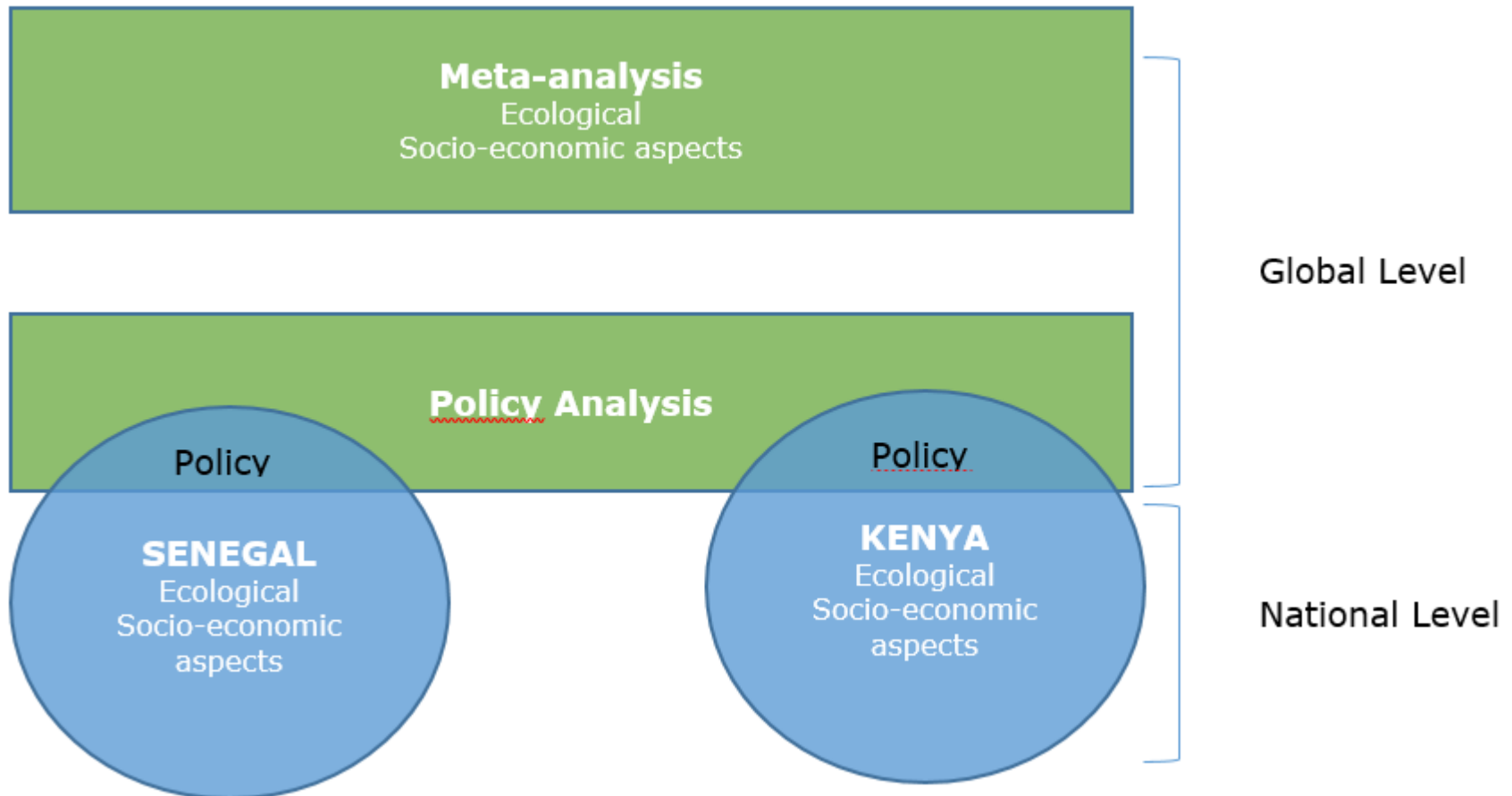


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# Expected outputs

- At global level
  - ✓ Meta-study results into KJWA (submission 2b&2c “adaptation & resilience”)
  - ✓ scientific publication
  - ✓ Launch full study at COP 25
- At national level:
  - ✓ Support the national dynamic (through the existing national platforms)
  - ✓ Feed the national momentum, scale-up agroecology-climate change discussions and activities
  - ✓ Pilot test the GKP

# Study components







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# CASE STUDIES

## KENYA + SENEGAL



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# Technical potential analysis

Objective: Assess agro-ecological agroecosystems' resilience (ecological and socio-economic) and compare with those that are not agro-ecological

Method:

- Use Agroecology multidimensional framework (GKP) & ACT tool to characterize farms
- Apply SHARP to assess the resilience level of characterized farms
- Assess farmers' perceptions of climate change and reasoning for implementing agroecological practices



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# Political potential analysis

Objective: understanding the current policy environment and enabling conditions and barriers to AE adoption (to tackle CC)

Method:

- Survey (national/subnational), desk study
- Content and focus context driven
  - NDC, overall climate related frameworks & roll out
  - Identify awareness & potential entry points for scale-up of AE



# Focus on Senegal

## Technical potential analysis

- Sites location: Niayes and Tambacounda
- Sample of 80 farms (40 in each site)
- Kick-off 16-22 May: Training + Field testing the methodology
- Developing the Technical potential analysis (June-September 2019)

## Policy potential Analysis

- 28-29 May : Kick-Off Workshop with key agroecological actors
  - discussions on the obstacles and levers for adopting the approaches and principles of agroecology in Senegal and highlighted the question of its institutionalization
- Developing the policy potential analysis (June-September 2019)

**Next steps** : Presentation & discussion of the results during a  
“Great debate on Agroecology” in **October 2019**

## May 2019: Field testing the methodology



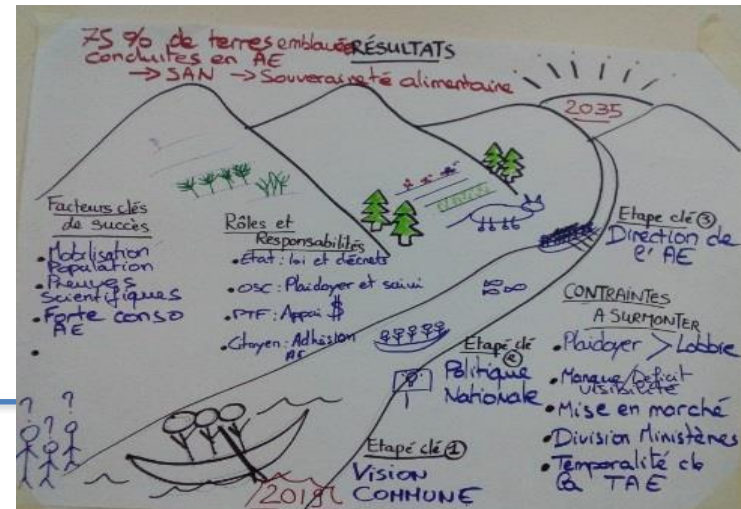
Tharaka Nithi, Kenya



## 28-29 May : Kick-Off Workshop



## Results of a group work on the ideal for AE transition by 2035





# Focus on Kenya

## Technical potential analysis

- Sites location:
- Tharaka Nithi (ICE) & Busia County (Biooverstiy)
- Sample: N=100
- Kickoff: next week

## Policy potential Analysis

- First assessment:
- Opportunities; Devolution, 6 counties very open to AE (CIDP); national level ASGTS & KCSAS with KCSAIF, as well as NCCAP
- Barrier: Funding
- Second in-depth assessment, starting now.





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**Thank you for your  
attention!**