



Can Sustainability Certification Deliver Climate Resilience for Smallholder Farmers? The Case of Ghanaian Cocoa

ETH4D Seminar, 27th November, 2020

Why is a transition to a more sustainable food system is necessary?

Problems faced and generated by the food system

- Poverty
- Food and nutrition insecurity
- Biodiversity loss
- Deforestation
- Climate change

Evolving context

- Climate
- Trade connectivity
- Population
- Urbanisation
- Dietary preferences

Threats to food system functioning inhibit transitions to sustainability

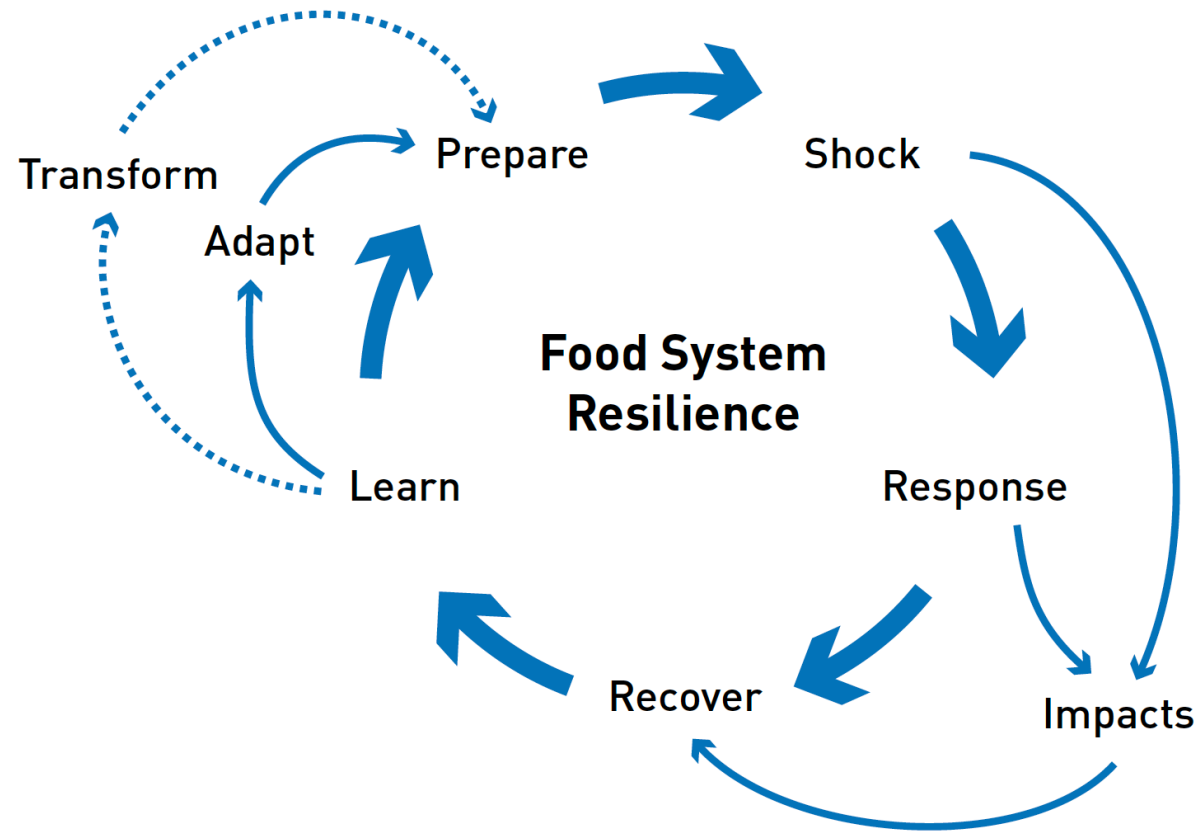
Gradual stresses

- Rising temperatures
- Increasing volatility of rainfall patterns
- Falling pollinator populations
- Growing inequality
- Growing polarisation of power in value chains

Shocks

- Floods
- Droughts
- Political crises
- Pandemics
- Financial crises

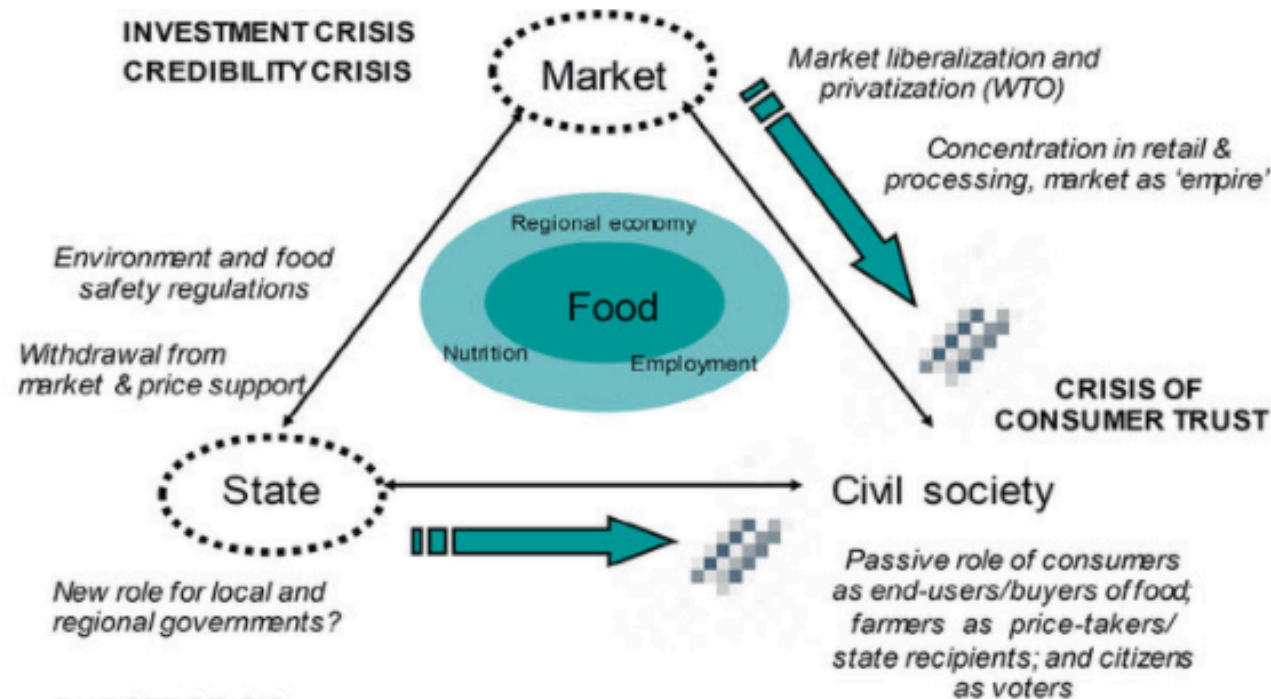
Resilience: theoretical concept – system property – governance goal – management tool



Thompson et al., 2021

Improved governance as a way to make change in the food system

“Governance can be defined as a system of rules, authority and institutions that coordinate, manage or steer society. It includes government, but also markets, traditions and networks, and non-state actors such as businesses and civil society.” Stockholm Environment Institute, 2016



Non-State Market Driven Governance



“Eco-labels”

“Sustainability certification”

“Private Sustainability Standards”



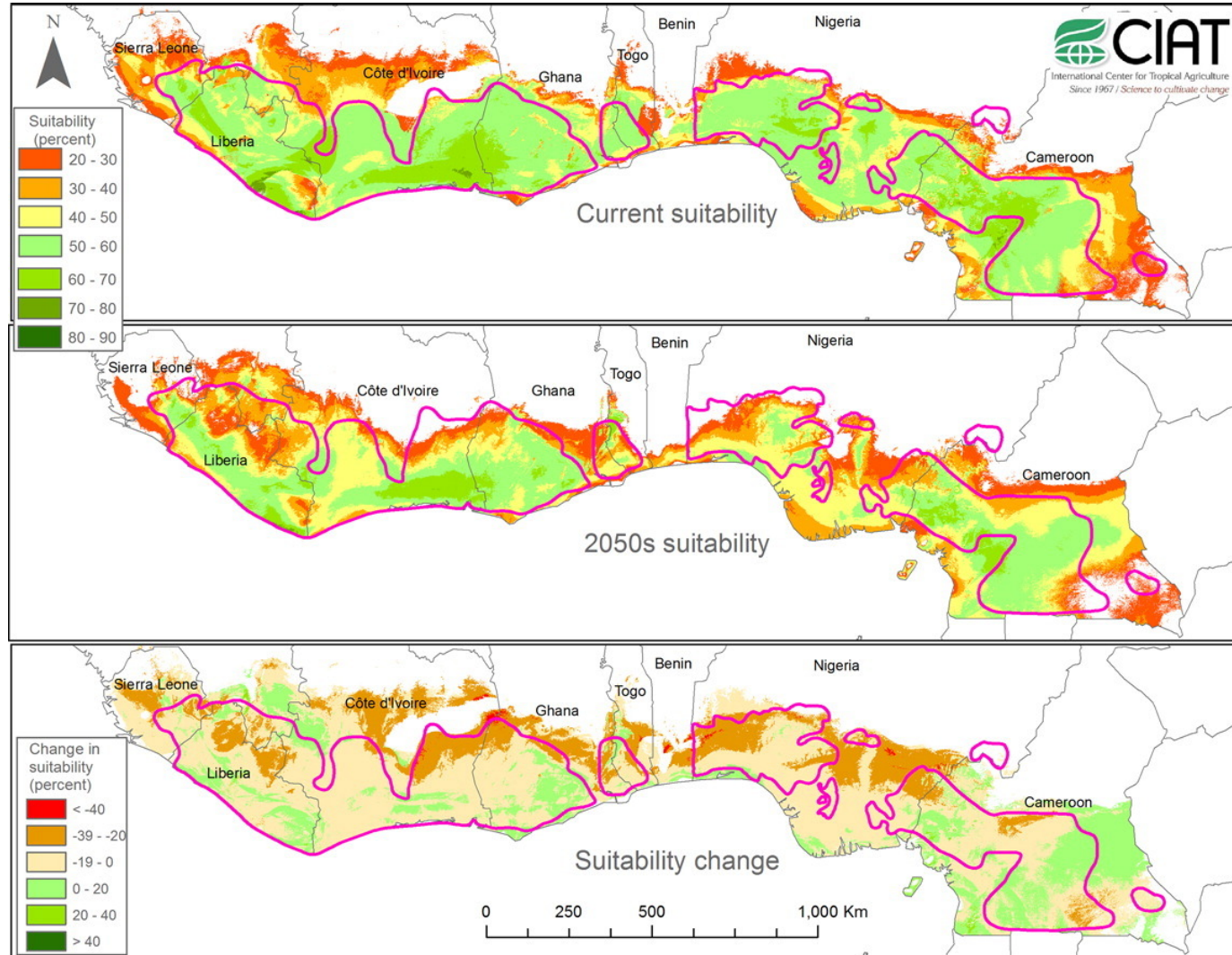
“Voluntary sustainability standards”



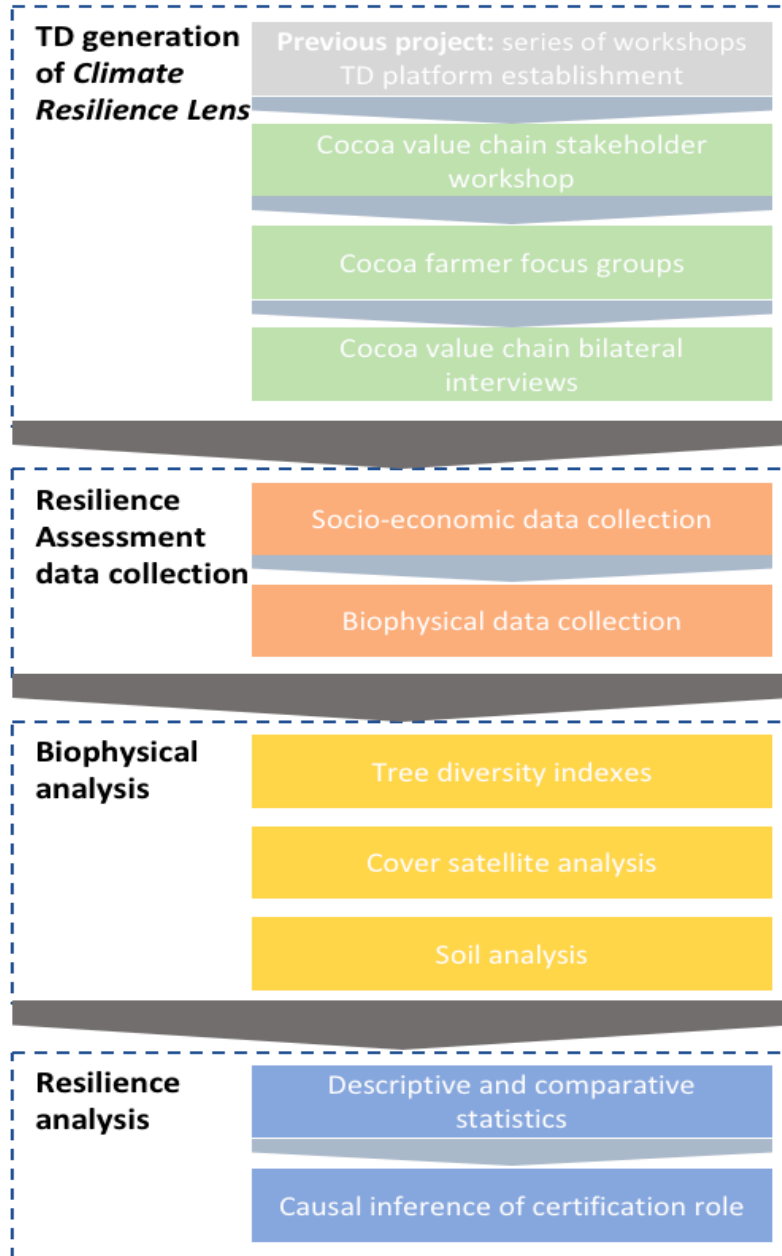
Research question

Can sustainability certification deliver climate resilience for smallholder farmers?

Ghana, cocoa and the climate threat








Methodology



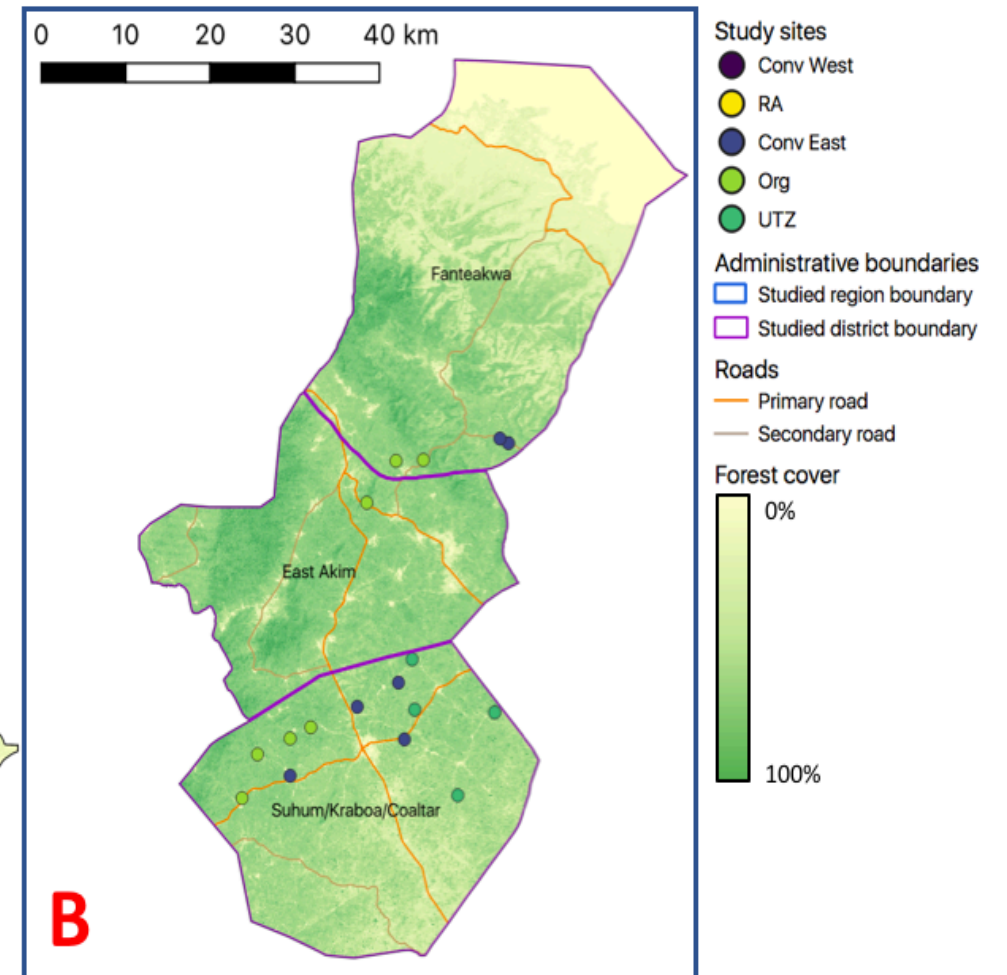
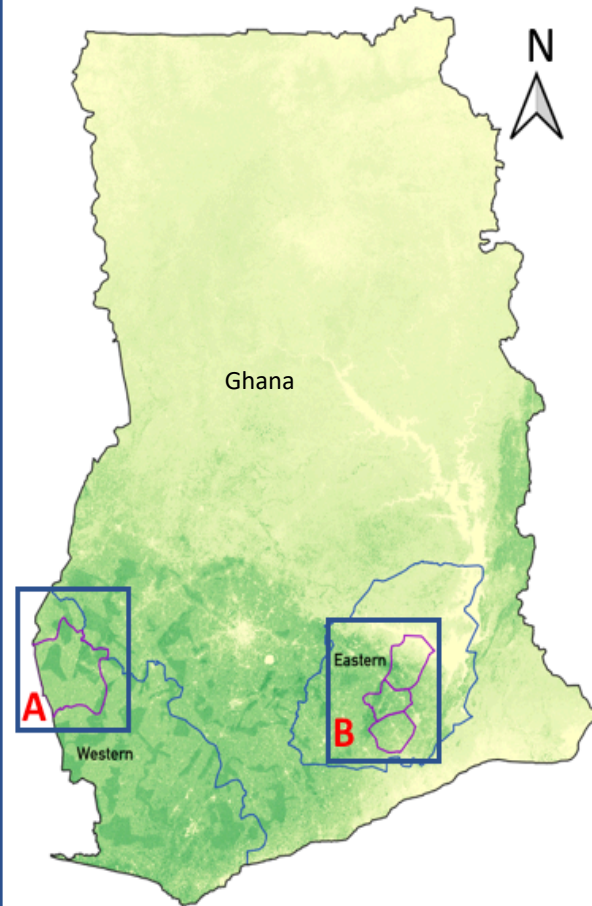
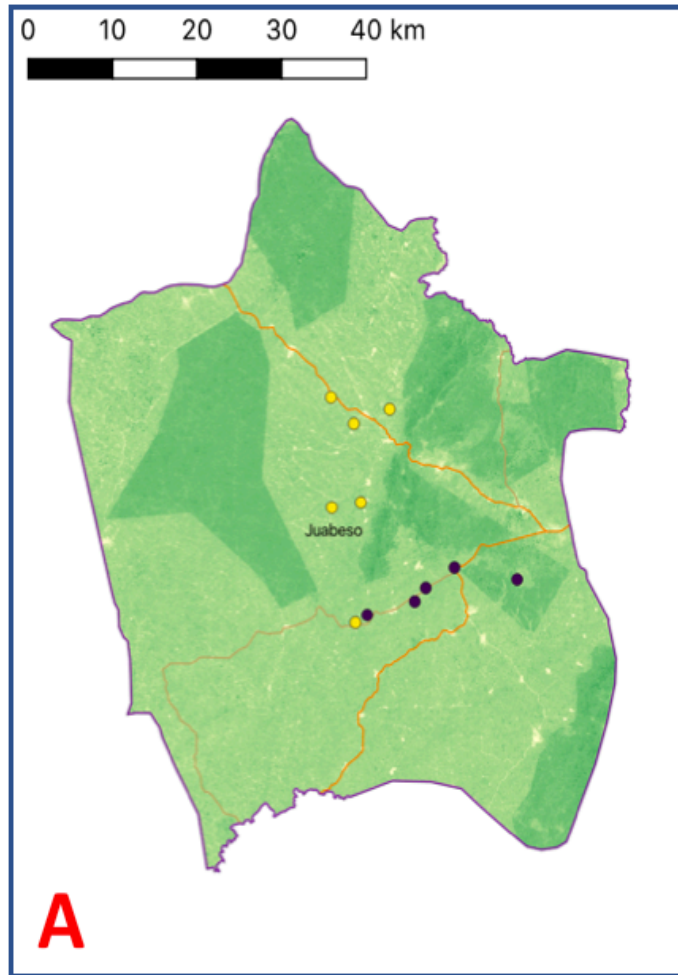
TD approach: Workshops, focus groups and stakeholder interviews

Resilience component	Robustness			Recovery	Adaptability	
	Preparation	Response	Impacts		Characteristic	Type
Measure, Characteristic or Outcome	Good Agricultural Practice	Farm inspections	Tree death	Sale of physical assets	Bank account Raise capital	Financial capital
	Water harvesting	Irrigation	Fire driven tree death	Mitigate ag work	Ag network Cocoa group	Social capital
	Fire belt	Change in pruning	Change in pest and disease	Mitigate non ag work	Soil Carbon Primary forest Secondary vegetation	Natural capital
	Crop diversity	Change in fertilisation	Change in cocoa yield	Sell livestock	Training intensity GAP knowledge	Human capital
	Alternative ag income	Change in weeding	Change in income	Income dependency	Livestock	Physical capital
	Shade tree incorporation	IPM		Alternative non-ag income	Other ag groups Drought training Market integration	Mobilizing factor

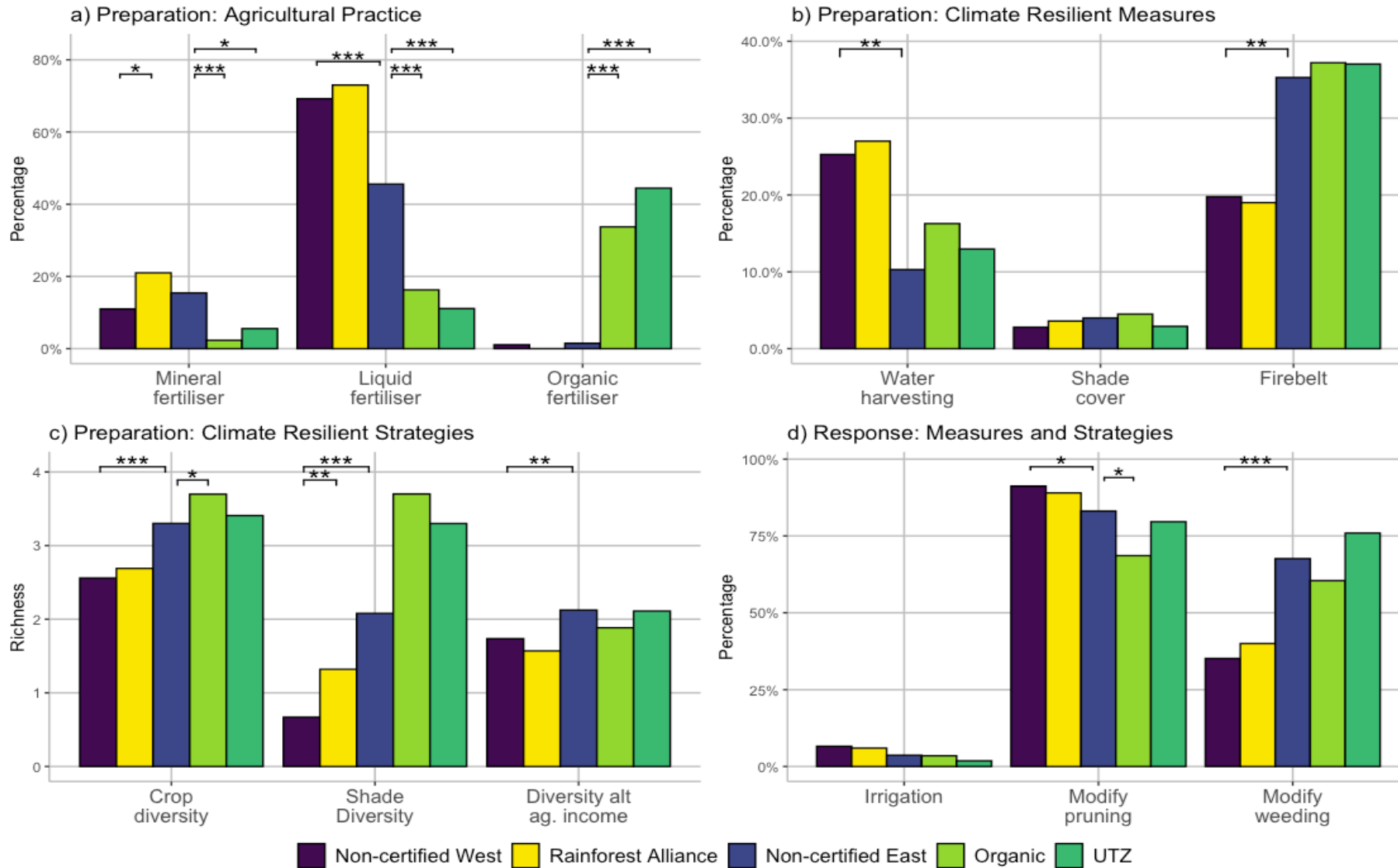
Resilience Component	Aspect	Organic	UTZ	RA	COCOBOD
	Explicit climate resilience goal	✓	✓	✓	✓
	Climate specific module	✗	✓	✓	✗
Robustness					
	Drought resistant seedlings	→	👥	→	✗
	Crop diversification	→	🕒	✗	→
	Income diversification	✗	🕒	✗	→
	Shade tree cover	✓	✓	✓	→
	Shade enhancement plan	→	→	✓	✗
	Soil structure management	→	→	→	✗
	Cover crops	→	✗	✓	→
	Smart fertilization	✓	🕒	🕒	✗
	Water harvesting	→	🕒	→	→
	Climate record keeping	✗	✗	→	✗
Recovery					
	Group savings mechanisms	✗	✗	✗	✗
	Insurance	✗	✗	✗	✗
Adaptability					
	Group governance	👥	👥	👥	✗
	Farm management planning	→	→	✓	→
	Training on climate aspects	👥	👥	👥	✗
	Climate risk assessment	✗	→	→	✗
	Training on general aspects	→	👥	👥	→
	Community engagement	→	→	👥	✗

 Present/Mandatory
  Mandatory after a year X
  Recommended
  Group mandatory
  Not present in standard

Field sites

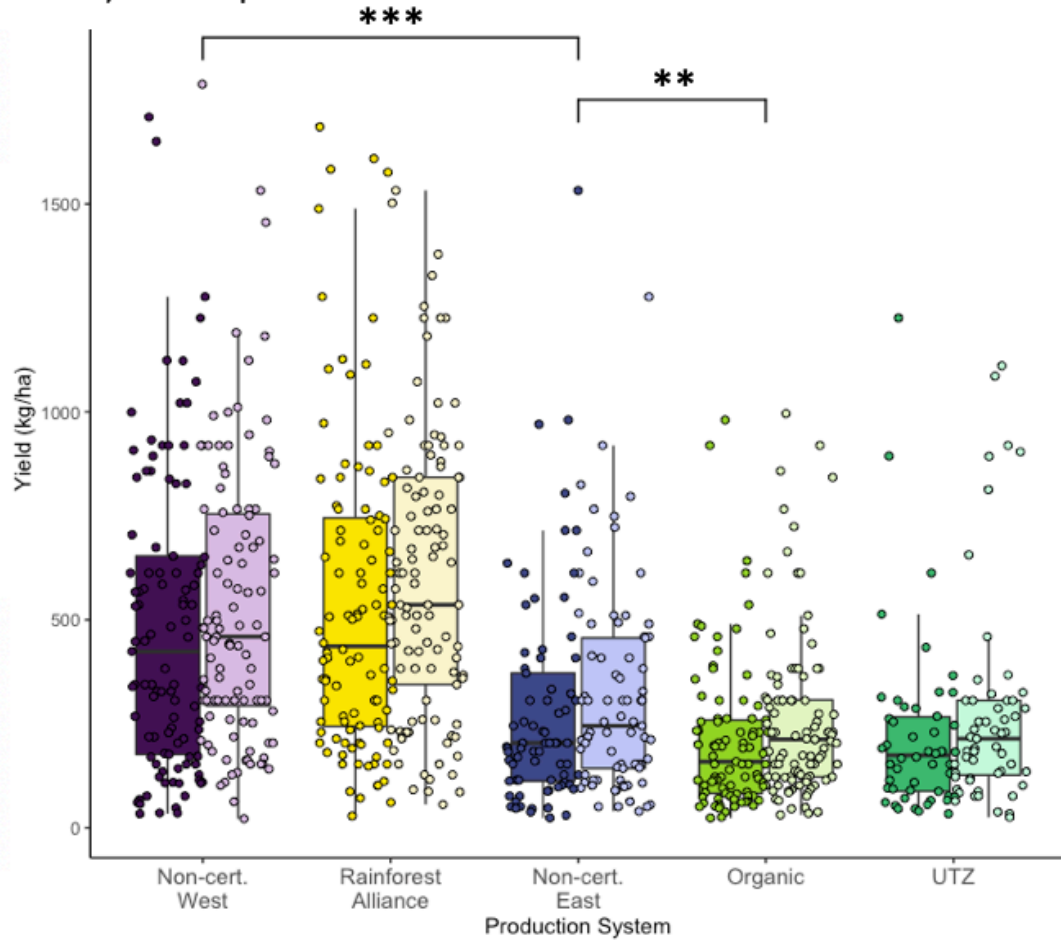


Robustness

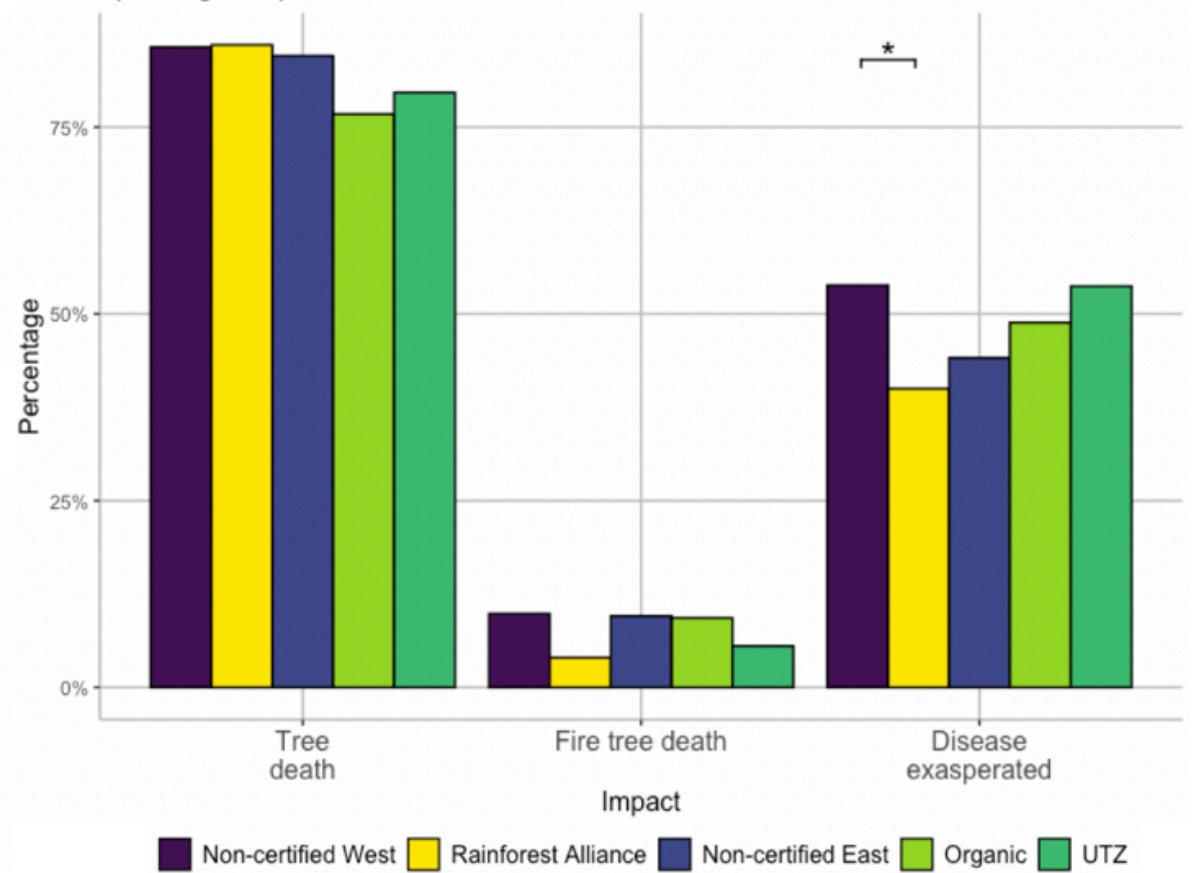


Impacts

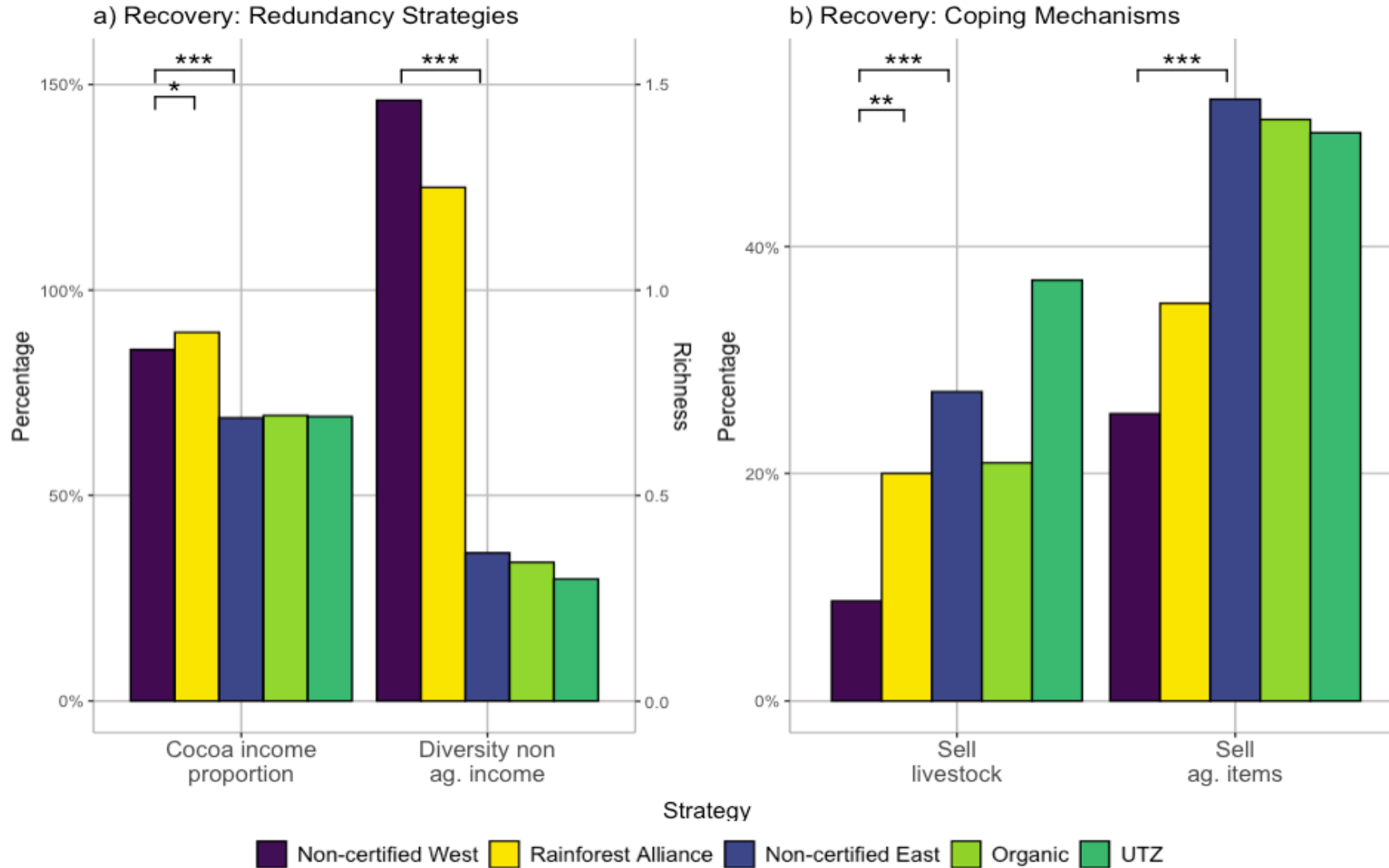
a) Yield impacts



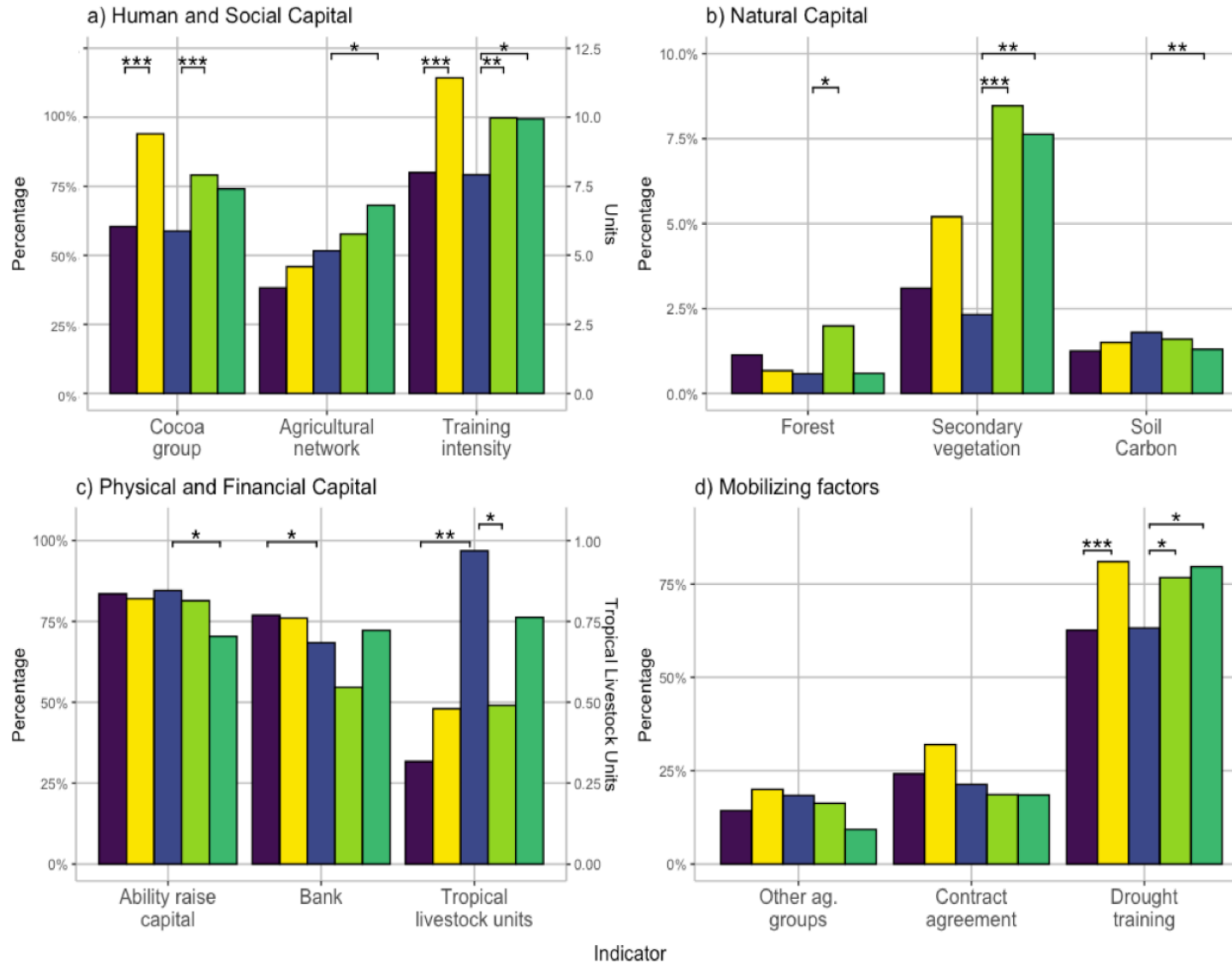
b) Drought Impacts



Recovery



Adaptability



Key findings

1. Certification has a high impact on basic management practices, such as fertilization and a low impact on more complex resilience strategies, such as diversifying agricultural production and income
2. Certification did not influence yield response to drought during the 2015/16 drought
3. Certification showed effects on the recovery mechanisms employed by farmers
4. Certified farmers are conferred better adaptability, in the form of group memberships, access to extension and higher levels of natural capital but the effect on mobilizing factors is limited
5. Regional differences predominated in terms of resilience metrics for farmers, across robustness, recovery and adaptability

Conclusion

Can sustainability certification deliver climate resilience for smallholder farmers?

- Sustainability certification in its current form is not sufficient to climate proof smallholders
- There are gaps between knowing and doing, in terms of standards, training, practices and outcomes.
- We do find some support for choosing sustainability certification as a tool to deliver climate resilience, for example in farmer group formation and strengthening good agronomic practice. ‘
- For translating training into adaptation, we suggest that mobilizing factors that can bridge this gap should be prioritized .
- We also identify risks; significantly, their commodity focus versus multifunctionality of producer systems.
- We suggest sustainability certification should be considered as part of a policy mix, and collaborations by certifiers with both public and private sector should be sought, to bridge the gaps in adaptation pathways identified

Thanks to all the collaborators

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