Exploring the impacts of CAP relative to climate with respect to adaptation

Ana Iglesias

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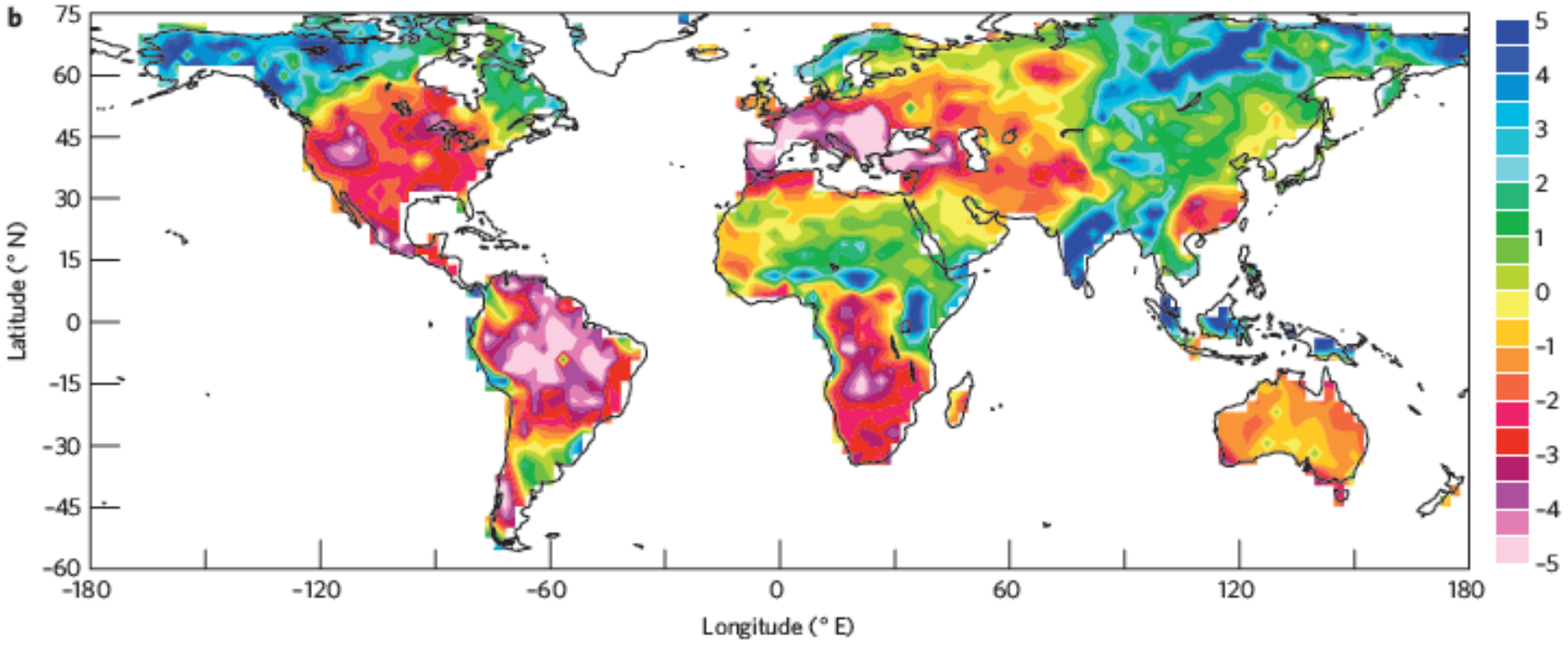
- I wish to support the following argument:

- Adaptation policy is not enough to compensate climate risks or to take advantage of opportunities

Too hot, too dry for crops, more floods



Source: Dai 2012, Science. Future changes in soil moisture (PDSI, percentage changes from 1980–1999 to 2080–2099)

Agricultural Water Management 155 (2015) 113–124

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Agricultural Water Management

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Review

Adaptation strategies for agricultural water management under climate change in Europe

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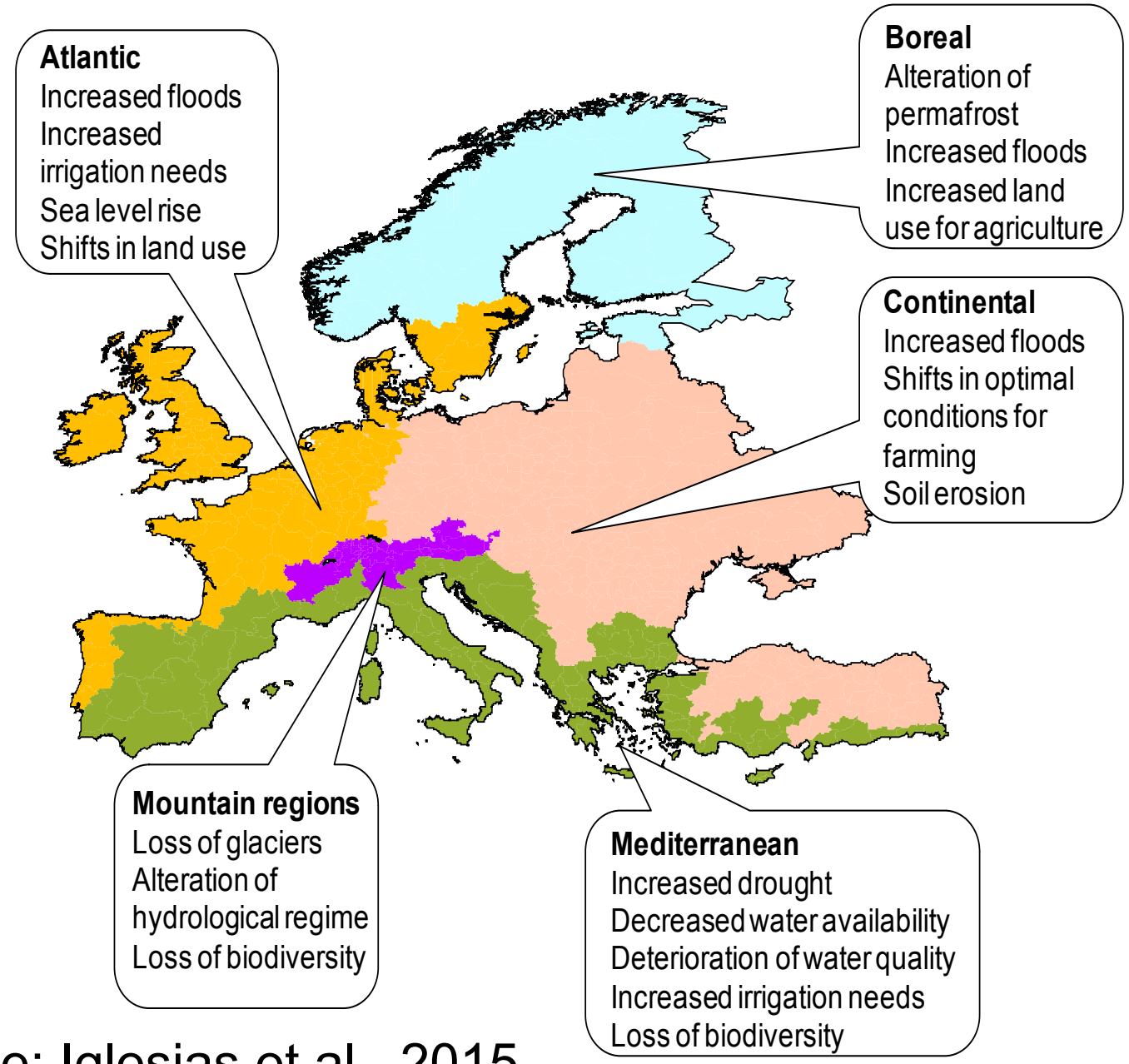
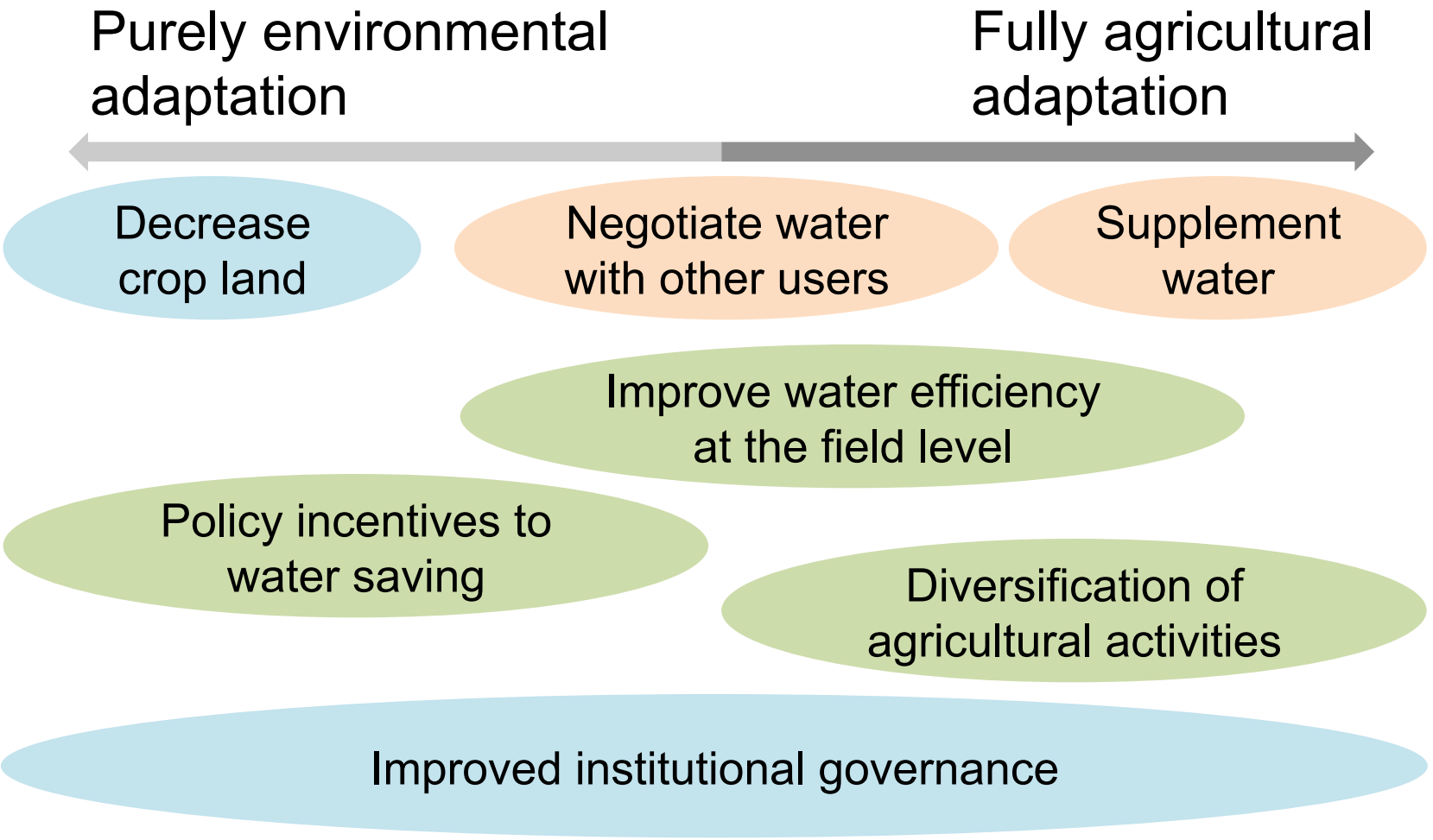
ABSTRACT

Climate change is expected to intensify the existing risks, particularly in regions where water scarcity is already a concern, as well as create new opportunities in some areas. Efforts to develop adaptation strategies for agricultural water management can benefit from understanding the risks and adaptation strategies proposed to date. This understanding may assist in developing priorities for the adaptation of



Source: Iglesias et al., 2015

Screening options for adaptation and mitigation: agricultural water management



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journal homepage: www.elsevier.com/locate/agee

Socio-ecological adaptation to climate change: A comparative case study from the Mediterranean wine industry in France and Australia

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ABSTRACT

The article aims to present a systemic and comparative framework to study adaptation to climate change in agricultural systems. Mediterranean viticulture, projected to experience significant and rapid changes in climate, is used as a case study. We apply an international socio-ecological approach focusing on viticulture in Roussillon (France) and McLaren Vale (Australia). Mixed-methods, including analysis of meteorological data, semi-structured interviews and field observations, guide an analysis of the exposure,

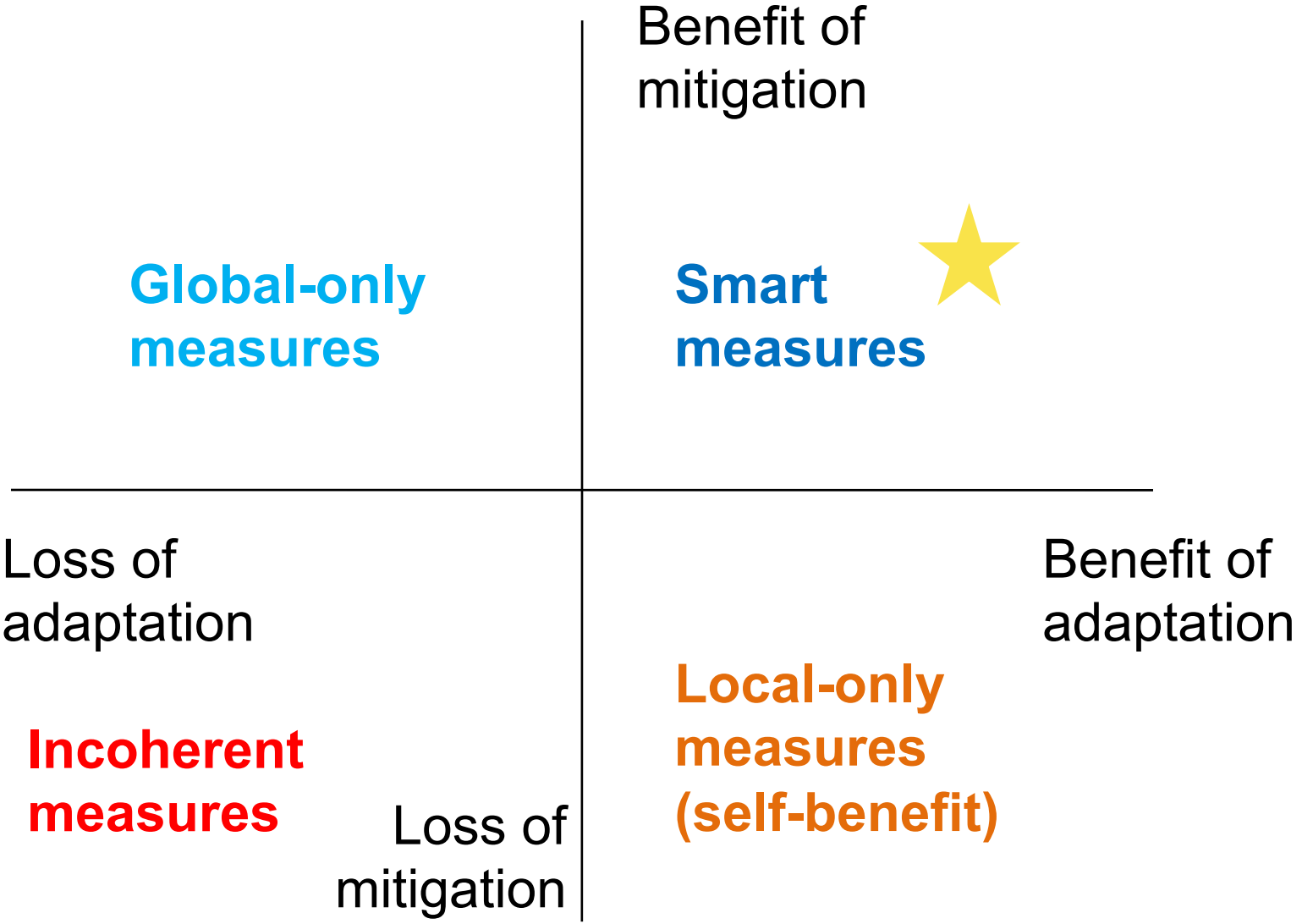
Full benefit of measures =

benefit of adaptation

adjustment to risks and opportunities (local): effort or benefit of implementation (local), market effects (regional, global)

+ benefits of mitigation

adjustment to policy targets (global): effort or benefit of implementation (local), market effects (regional, global), reduction of GHG (global)


Benefit of mitigation
Global-only measures
Smart measures
Loss of adaptation
Benefit of adaptation
Incoherent measures
Local-only measures (self-benefit)
Loss of mitigation

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A user perspective on the gap between science and decision-making. Local administrators' views on expert knowledge in urban planning

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Reducing vulnerability: policy action

(Iglesias et al., 2010)

HadCM3/HIRHAM B2 scenario, 2071-2100, (% yield change)

Region	Adap.Policy Urban / Env (1)	Adap.Farm (2)	Adapt.Policy Econ /Rural Dev (3)
Boreal	25 to 30	34	35 to 40
Atlantic South	-10 to -10	-7	-5 to 0
Cont. North	0 to 5	4	5 to 10
Alpine	10 to 20	23	25 to 40
Med. South	-50 to -25	1	0 to 20

(1) Emphasis on water resources protection and urban development

(2) Farm adaptation without policy support (private)

(3) Emphasis on agricultural production and rural development

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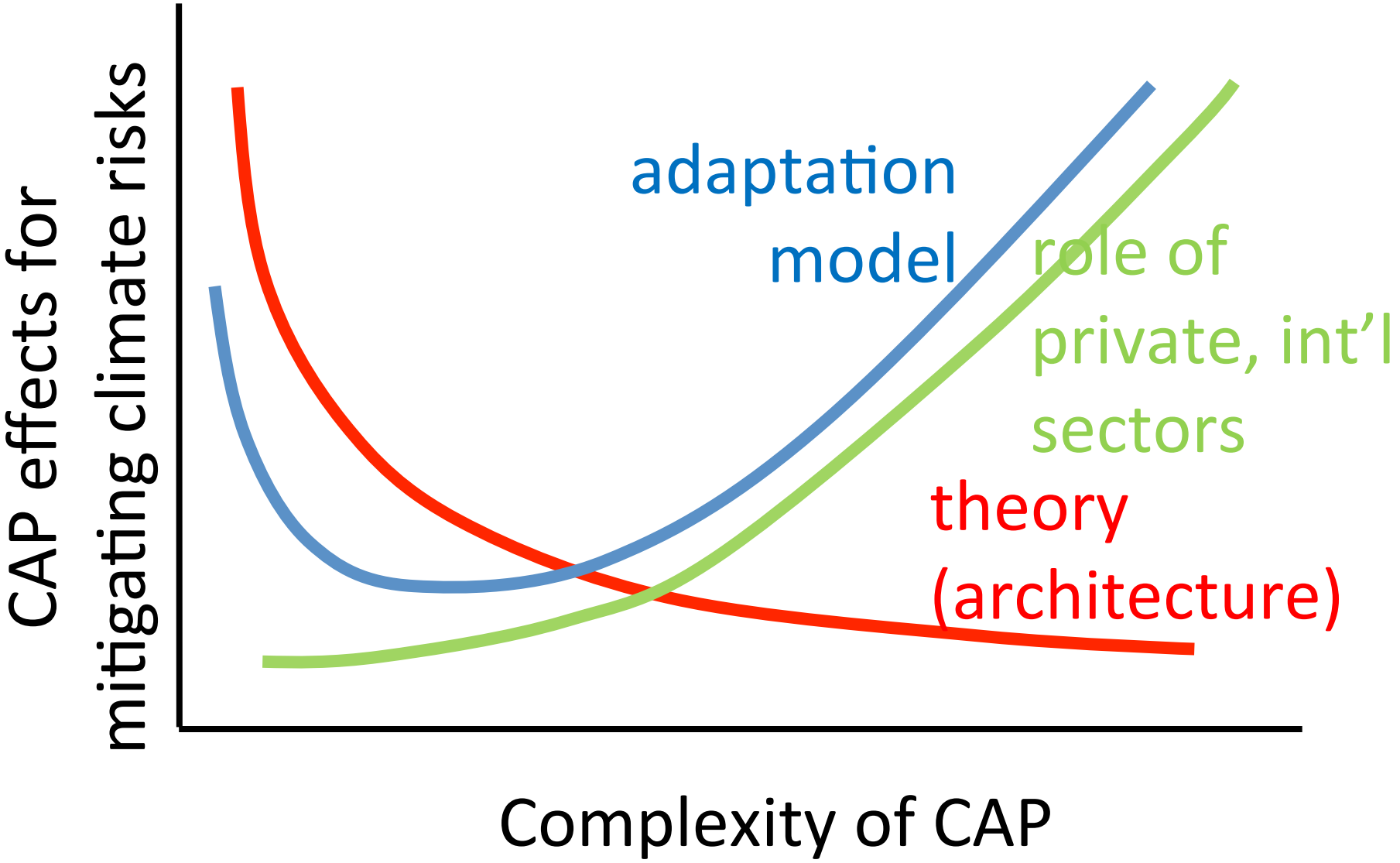
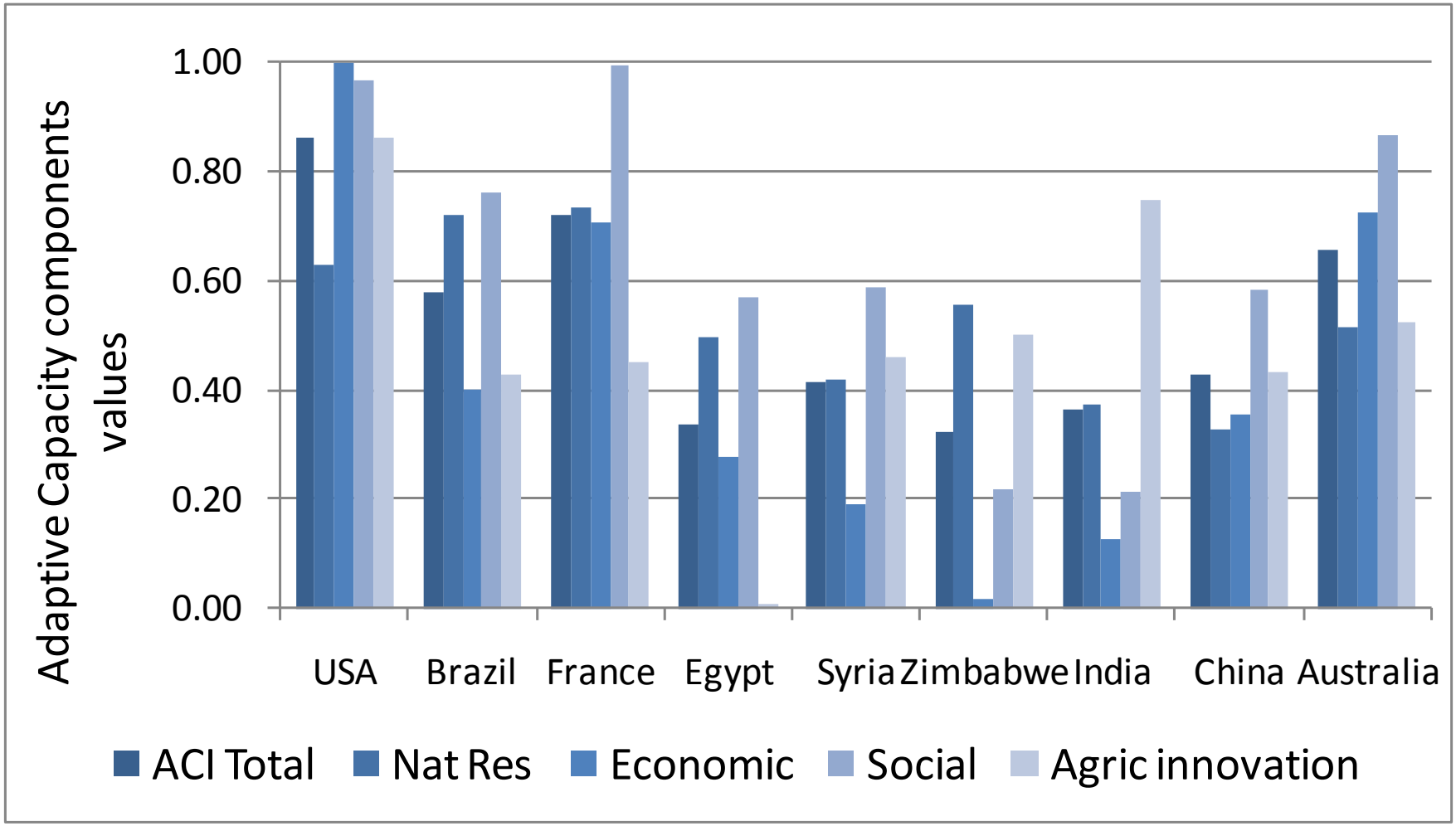
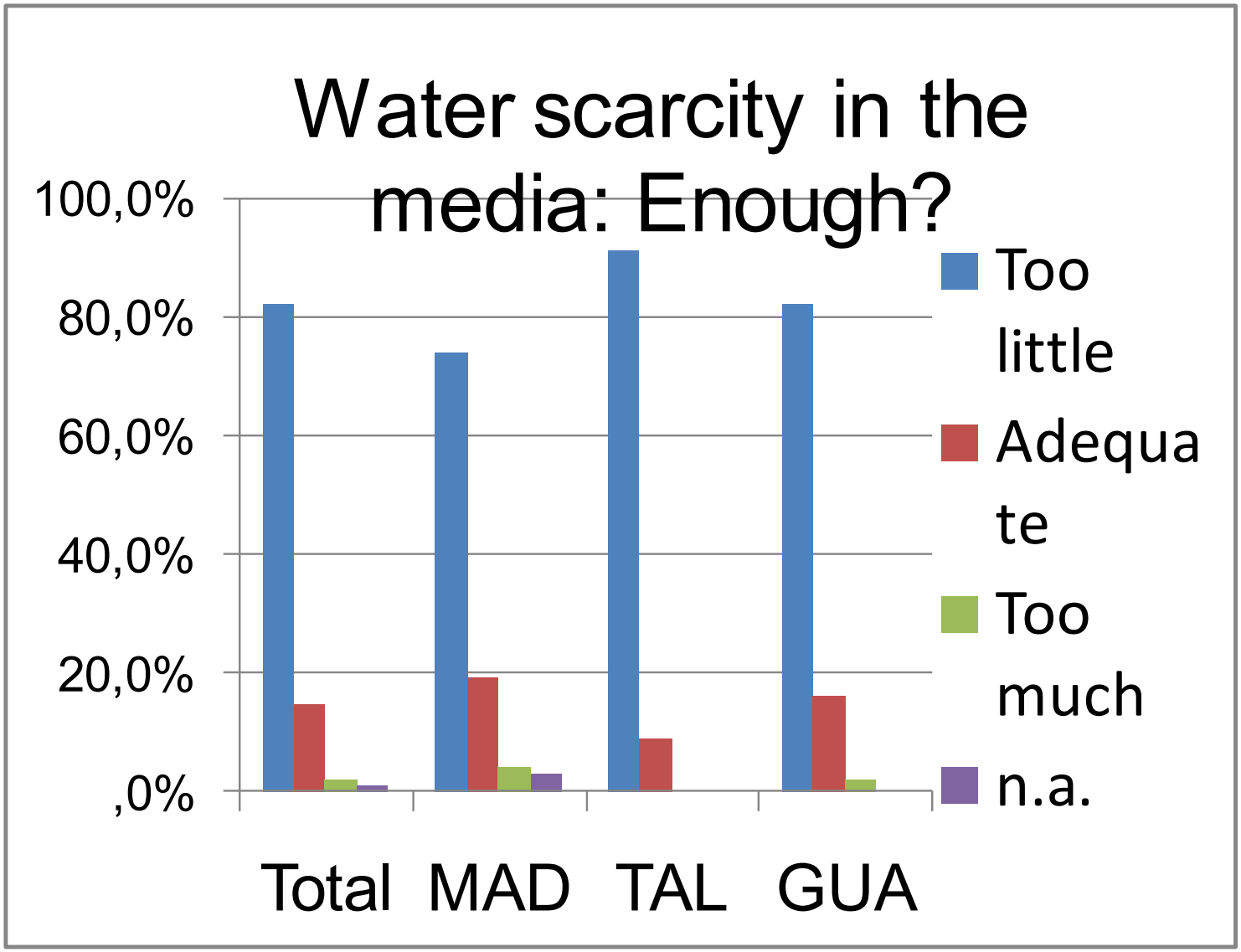
Climate change risk to 'one in six species'


CAP effects for mitigating climate risks
adaptation model
role of private, int'l sectors
theory (architecture)
Complexity of CAP

Adaptive capacity: components

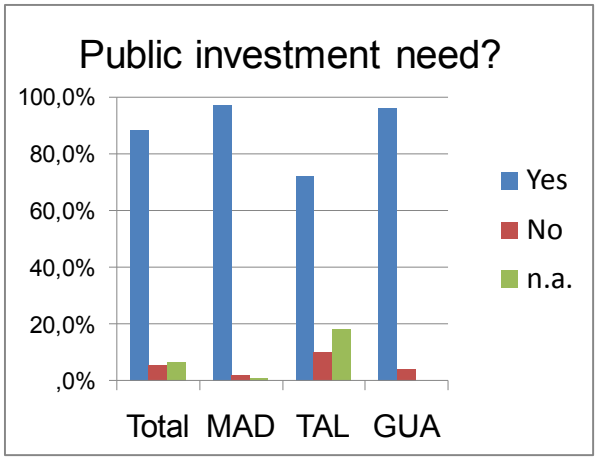


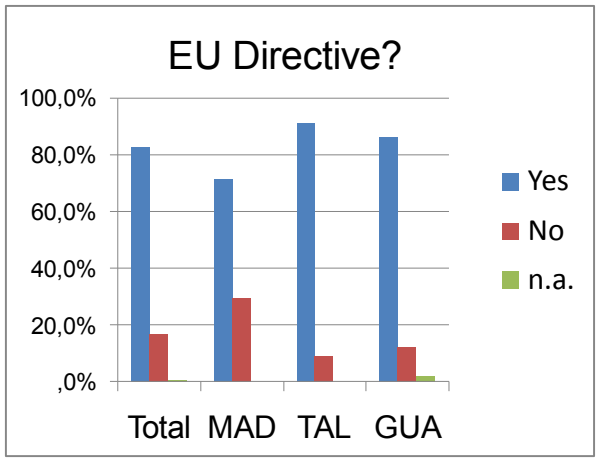
Source: Iglesias et al., 2011

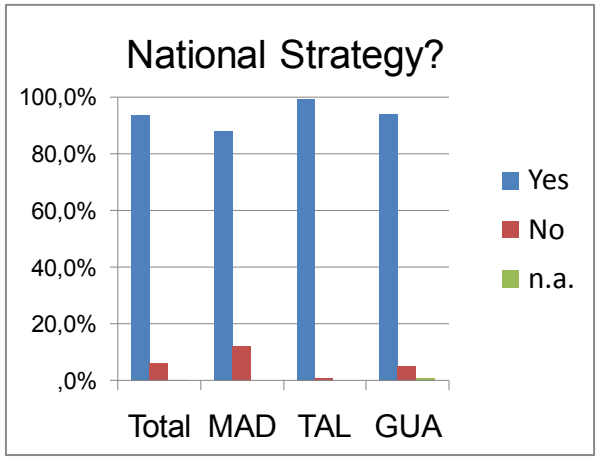


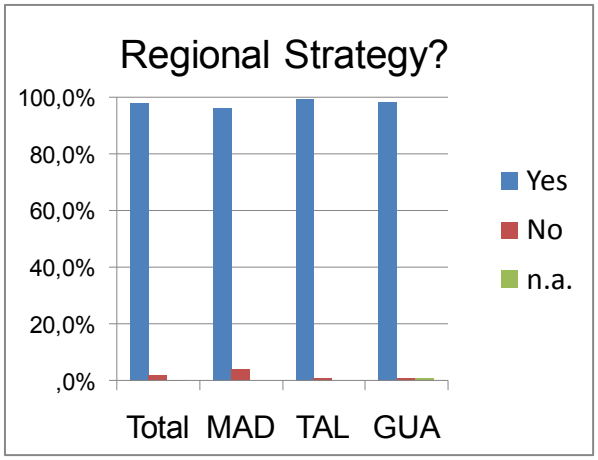
Source: Iglesias et al., 2015

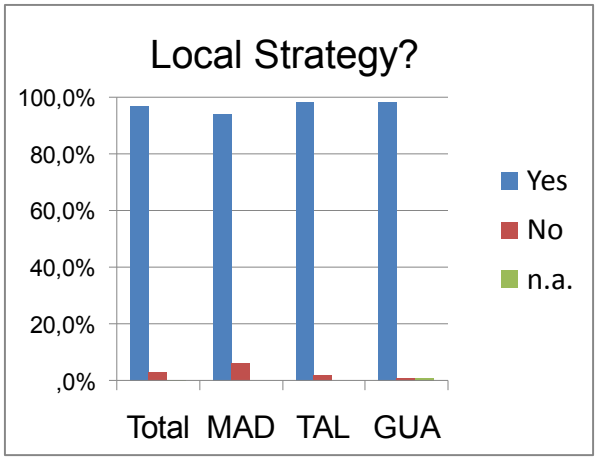
Adaptation: Institutional responsibilities

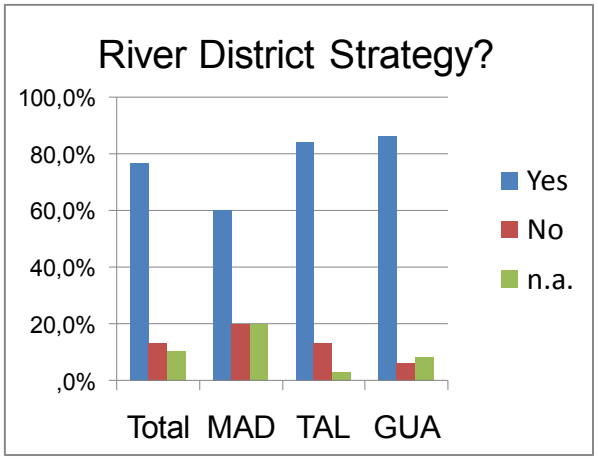






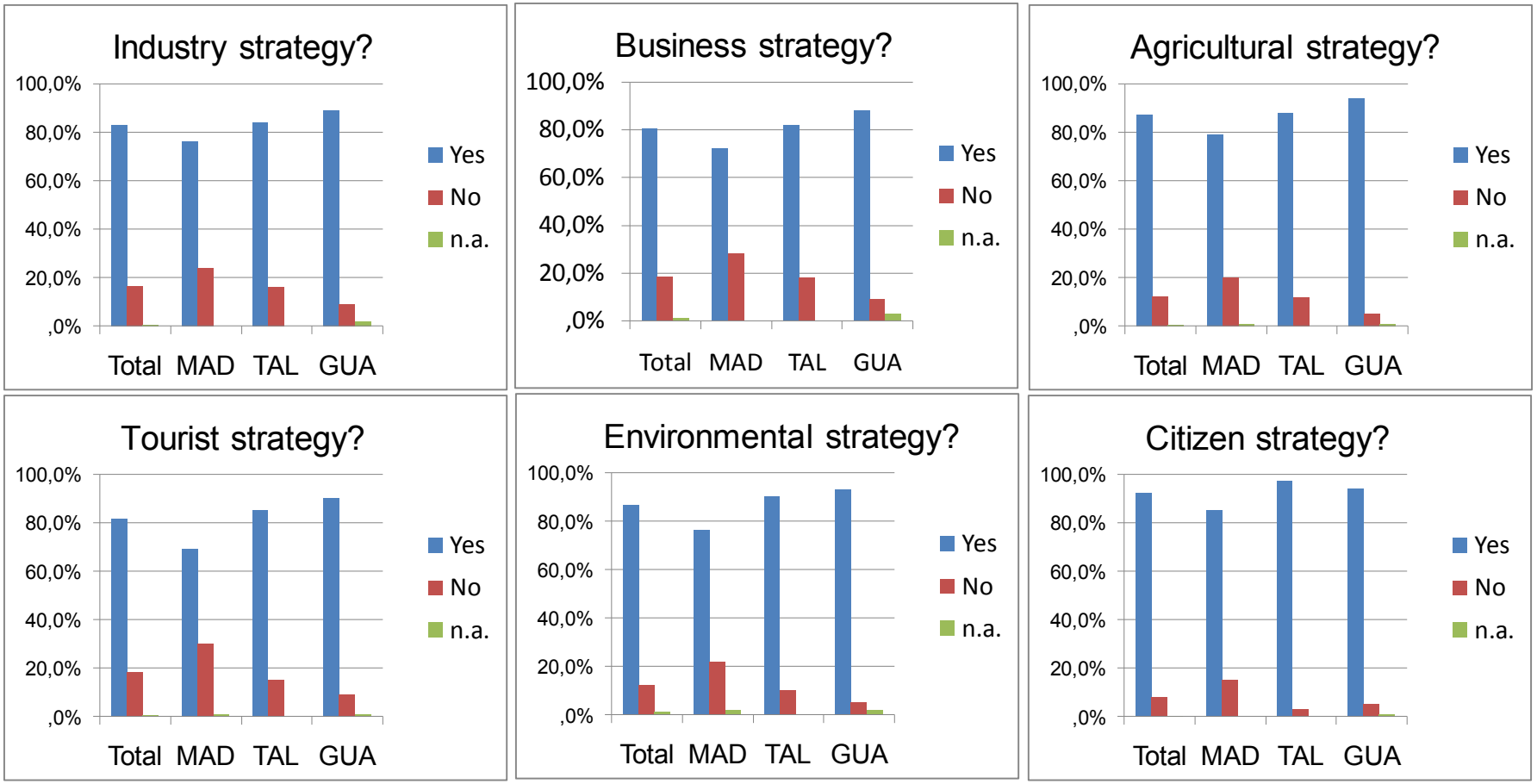






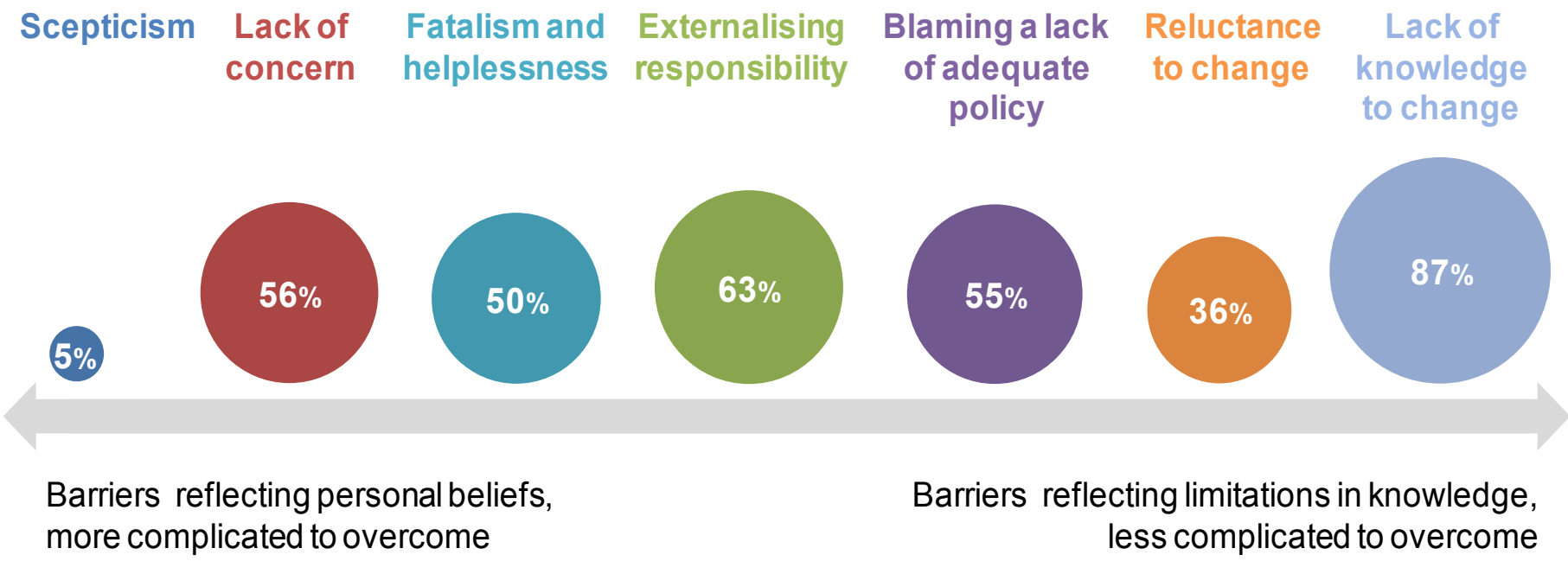
Source: Iglesias et al., 2015

Adaptation: Sectoral responsibilities



Source: Iglesias et al., 2015

García de Jalón et al (2014)
Behavioural barriers



Thank you!


SEVENTH FRAMEWORK
PROGRAMME


SmartSOIL
Sustainable farm Management Aimed at Reducing Threats to SOILs under climate change


ANIMAL
CHANGE


BASE
BOTTOM-UP CLIMATE
ADAPTATION STRATEGIES
TOWARDS A SUSTAINABLE EUROPE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