



# Institutional and organisational mapping

a powerful approach to identify opportunities and constraints for climate adaptation in fast warming regions

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# ***Global Understanding and Learning for Local Solutions (GULLS)***

Focus: fast warming regions, 'hotspots', in the southern hemisphere

Project aim: connect researchers from 'hotspot' locations to rapidly learn how best to characterise and reduce coastal vulnerability

Case studies:

South Africa

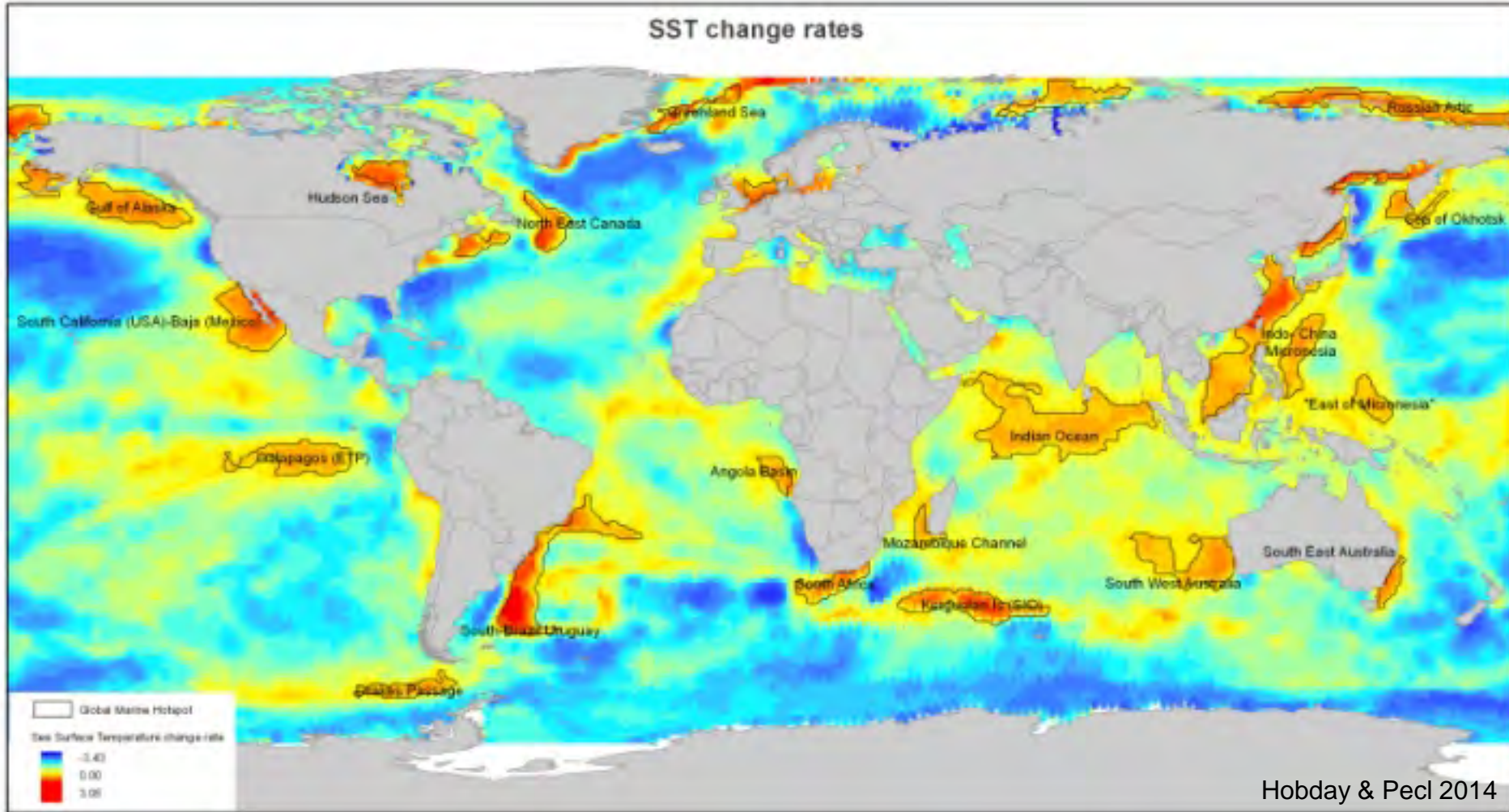
South-east Australia

Mozambique Channel

Southern India (two locations)

South-east Brazil

# Global Understanding and Learning for Local Solutions (GULLS)



# GULLS Governance team

Australia: Leo X.C. Dutra, Marcus Haward, Sarah Jennings, Ingrid van Putten

India: Shyam S. Salym

Brazil: Maria Gasala, Ivan Martins, Caroline Ykuta, Sonia Giancesella

South Africa: KeVERN Cochrane, Shankar Aswani, Warick Sauer

Madagascar: Hajanirina Razafindrainibe

United Kingdom: Gary Watmough

# Governance Hotspot Activity

Present a general framework for governance mapping that can be applied in GULLS countries based on local needs

Present preliminary results of the application of the framework in Australia and India

# Governance

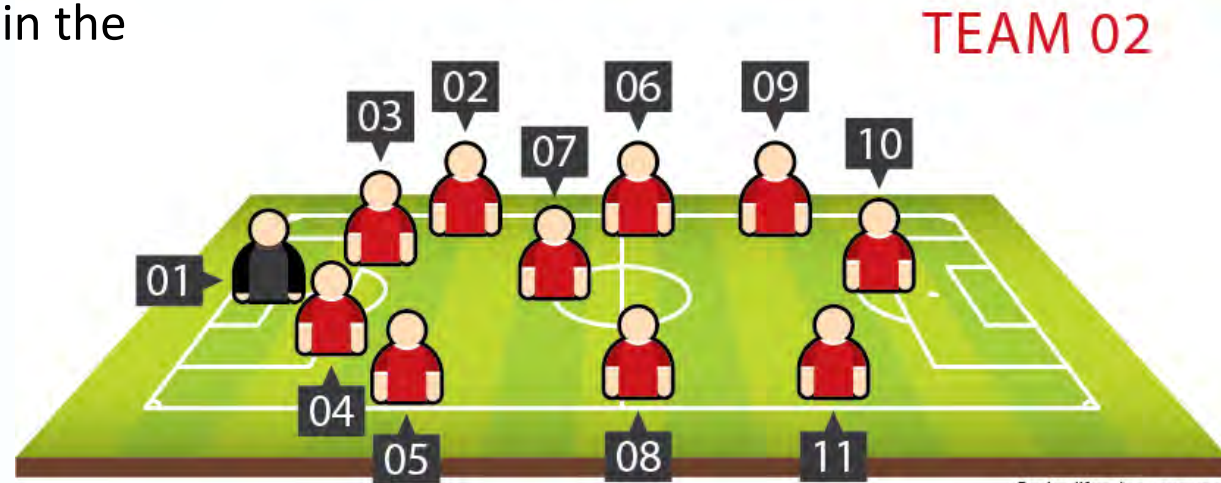
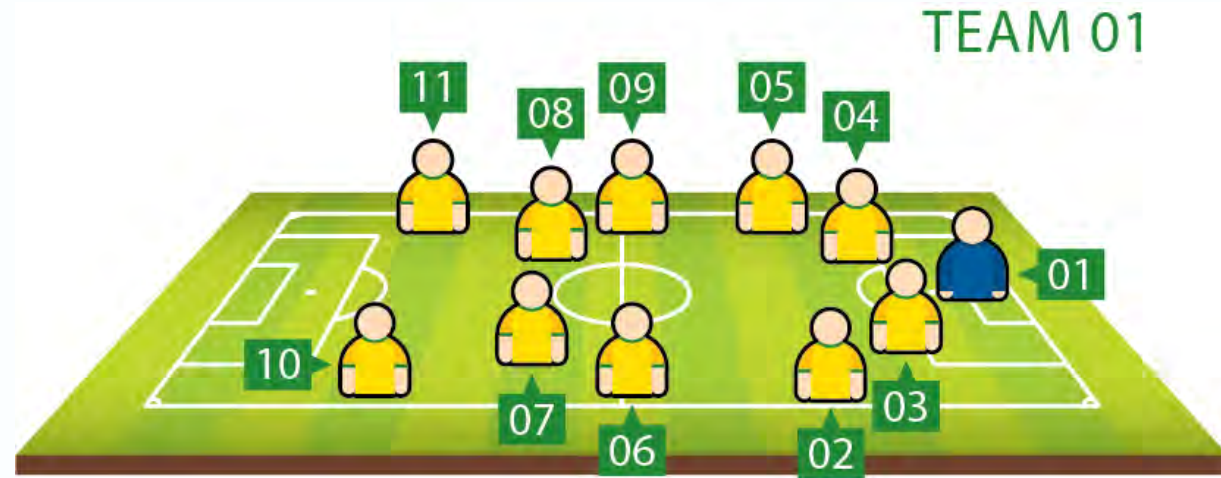
Describes 'who' makes decisions, has powers and responsibilities, and 'how' they exercise this. It consists of two interacting systems:

- 1) Institutions (Rules)
- 2) Organisations (People)

# Governance

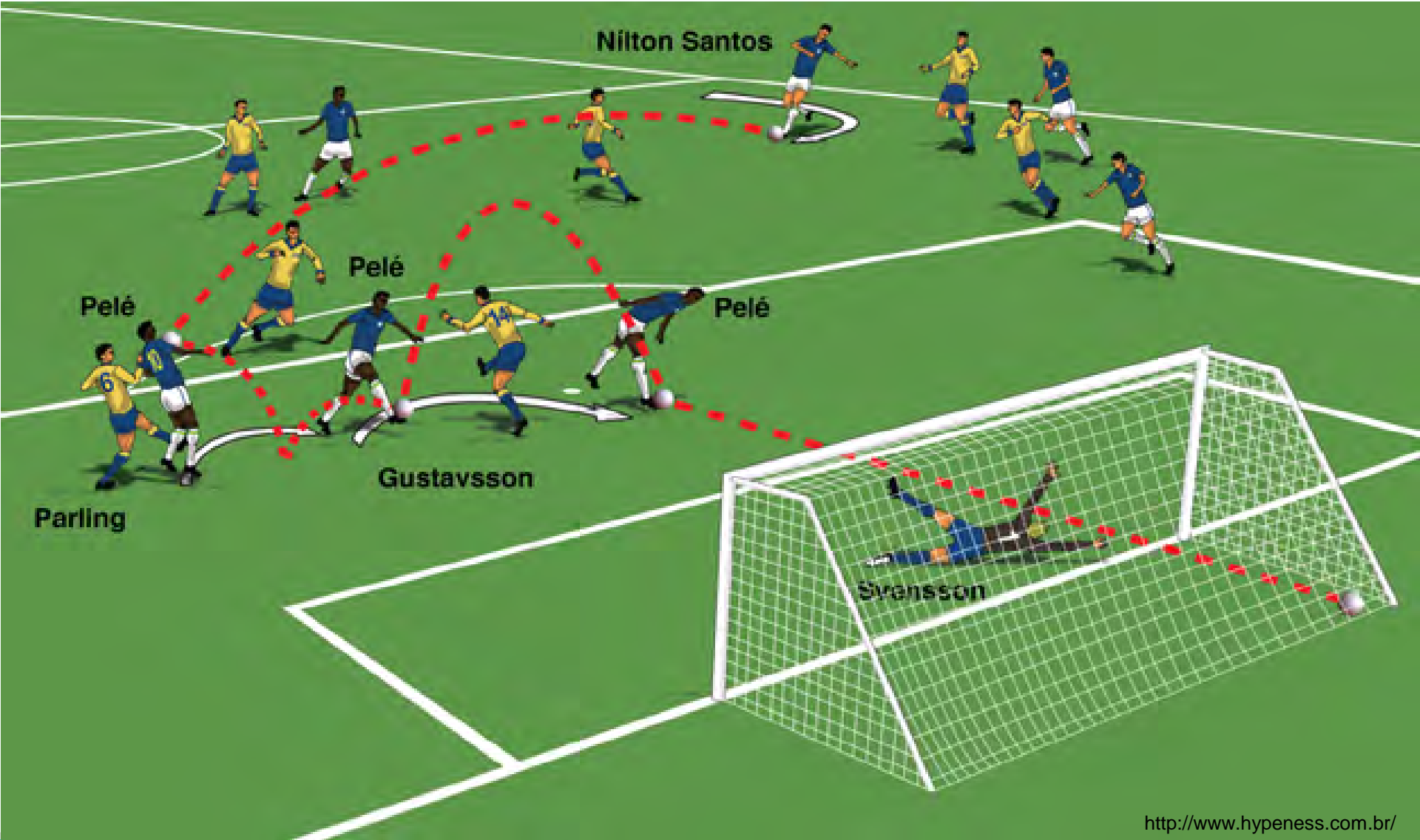
## Basic Rules:

1. Two teams
2. A soccer field
3. Players
4. Goal
5. As long as the ball stays in the field the game is in play
6. NO HANDS!!!



By zhaolifang/vecteezy.com

# 'People' create, follow and modify rules



<http://www.hypeness.com.br/>



# People create, follow and modify rules



# Governance – Coastal resources

## Governance system

### Enabling institutional framework

**Constitutive rules**  
rules prescribing permissible organizational structures and purposes

**Incentive systems**  
e.g. financial rewards, penalties

**Reporting and information exchange systems**

**Regulatory goals and objectives**

**Resource distribution**  
e.g. budgeting, taxation systems

**Authority rules**  
rules prescribing permissible scope of actions



### Organizational system

**Leadership**

**Distribution of roles and responsibilities**  
organizational structure

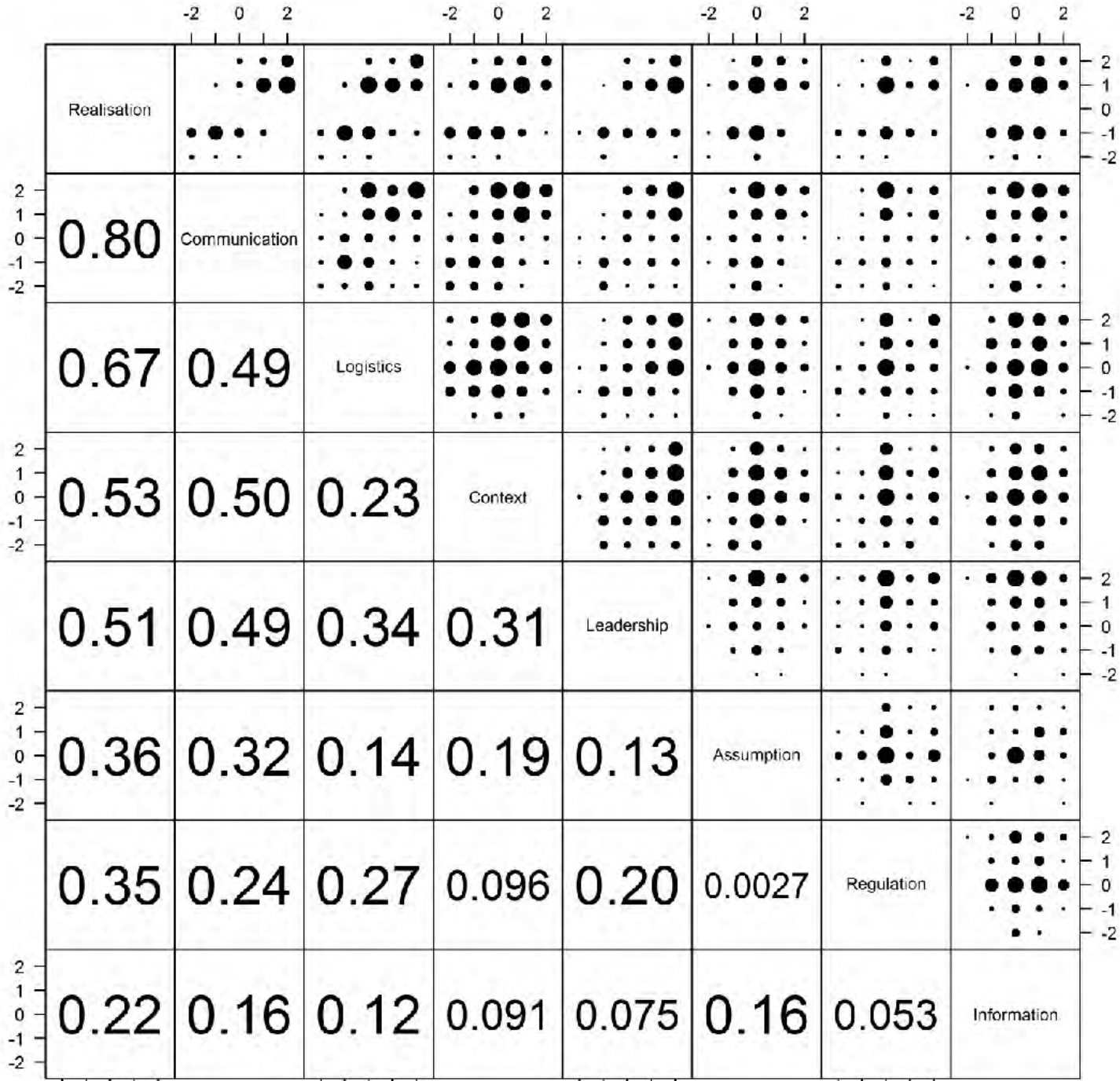
**Information processing and learning**  
capabilities to obtain, process and update information

**Organizational culture and perceptions**

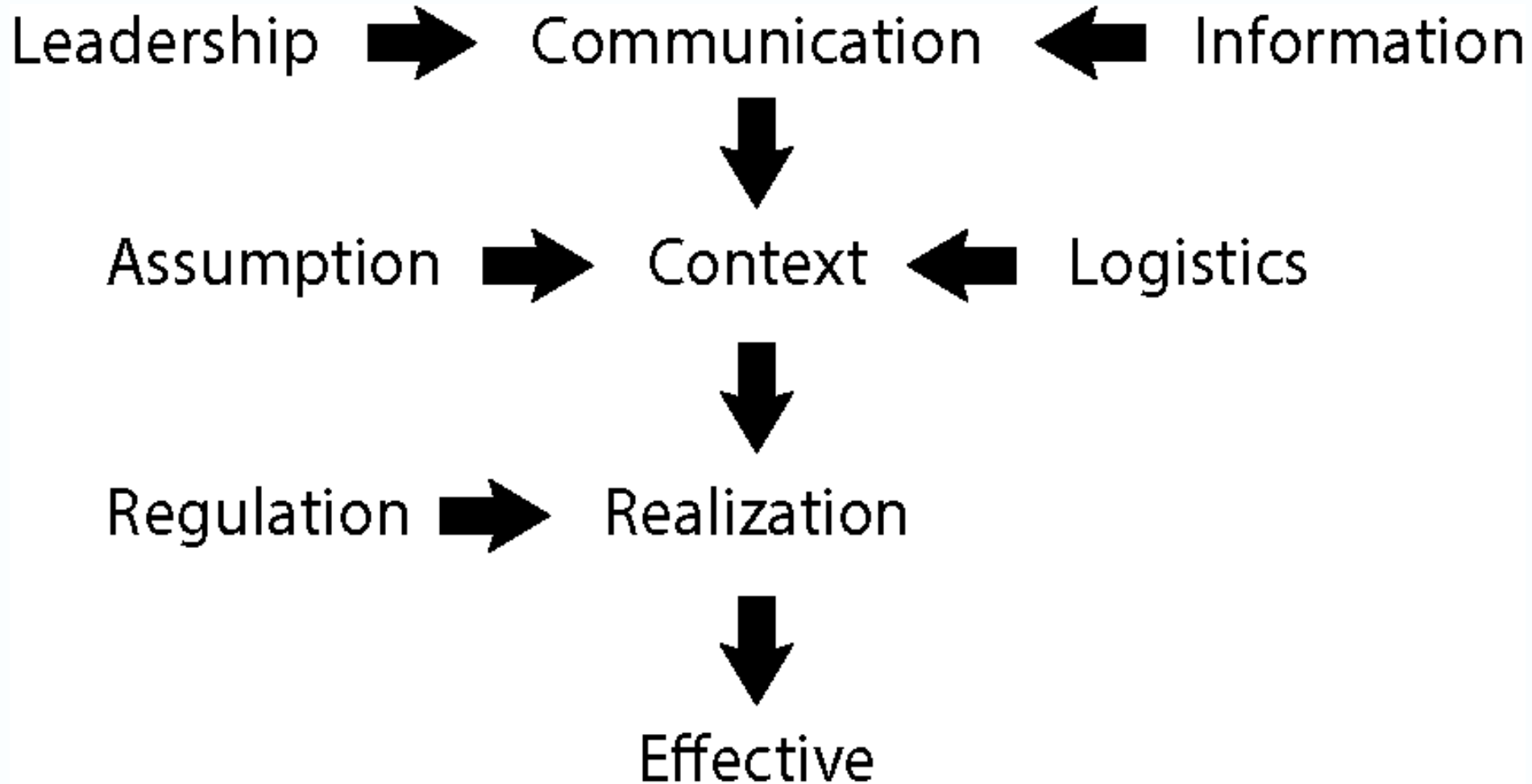
**Organizational goals and objectives**

**Human resources and assets**

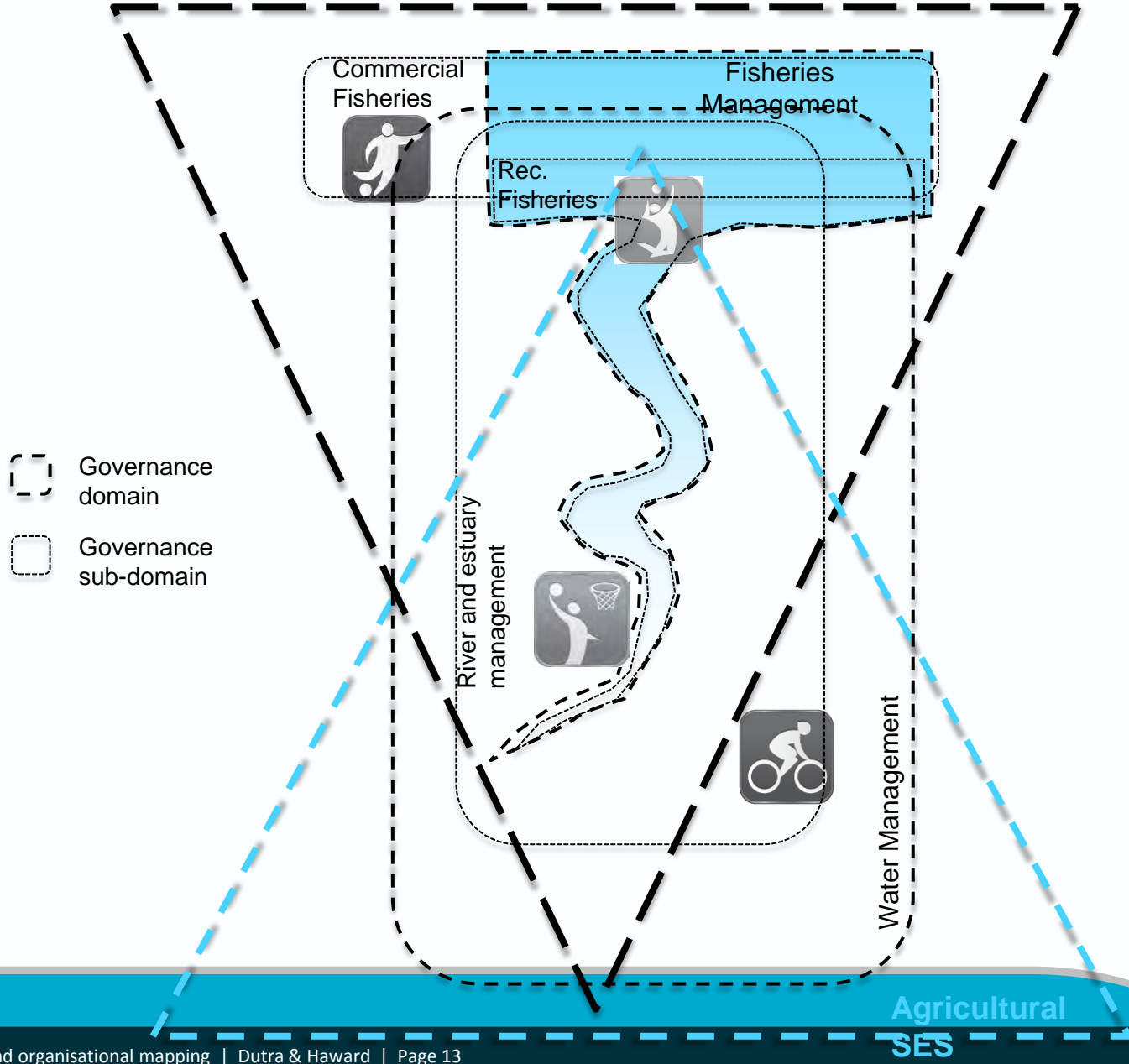
From Dutra et al., 2015



# Governance – Coastal resources



# Fisheries SES



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# What we would like to do:

Undertake governance mapping activity to characterise and understand the influences of governance systems on adaptation in each hotspot region

# Proposed governance mapping framework

**Stage 1:** Identify instruments (laws, regulations policies etc), constitutional rules (formal rules at a societal scale), decision rules (those made by and affecting an identified group) and informal rules

# Stage 1A: identification of scale of instruments – Balancing of results approach

Countries	International	National	Sub-national	Local	Community/NGO
Australia	UN Law of the Sea Convention Fish Stocks Agreement Compliance Agreement	Australian Fisheries Management Act •FMP •Regulations	State Fisheries Acts	Planning Health and Safety	Sanctions Access rights Traditional Knowledge
India	UN Law of the Sea Convention Fish Stocks Agreement	Control over Economic Exclusive Zone	Control over territorial Waters	Conflict management	Traditional management system like kadakodi (sea court) system of Northern Kerala, Pedhaloo in Southern Orissa



# Stage 1B: Identification of rules State

	Constitutional Rules (All Society)	Decision Rules (Group)	Informal
<b>Australia</b>	International obligations National laws Regulation		Black economy Corruption/bribery
<b>India</b>	Protection Act 1986, The wildlife protection Act 1972	State regulation of Cochin Estuarine fisheries in Kerala	fishing community in Southern India may apply specific (informal) rules regarding fishing days and amounts of fish that can be caught in each season in order to preserve the fish stock in the longer run

# Stage 1B: Identification of rules

## Cooperative/Collective

	Constitutional Rules (All Society)	Decision Rules (Group)	Informal
<b>Australia</b>	Co-management arrangements Equitable resource allocation (e.g. rec vs commercial fisheries)	Membership arrangements Decision-making processes Clear responsibilities and jurisdictions Inclusiveness Organisational culture Legal and customary rights	Sanctions
<b>India</b>	Legal/institutional frameworks – Traditional institutions – <b>Uur</b> panchayats Modern Institutions-GP, Fishers Co op,Shgs) Stakeholder group based institutions –boat owners' associations, <b>uur</b> panchatyats, panchayat	Boat owners association in trawl sector powerful in collective decision making (Scholtens (2006) Such associations have the power to negotiate the scope of regulations with DOF. (Sathyapalan et.al, 2008)	

# Stage 1B: Identification of rules

## Individual

	Constitutional Rules (All Society)	Decision Rules (Group)	Informal
<b>Australia</b>	Compliance		Behaviour(s) Norms Values Capacities/skills Psychological processes Cognitive processes
<b>India</b>	Collection of chanks by hand in Ramanathapuram Tamilnadu		Creation of level playing field for co-management for coastal communities and institutional stakeholders

# Stage 2: linking instruments and rules to organisations

## Organisational Attributes that support adaptation

Australia	India
Leadership	Co-operation
Cross-sectoral co-operation	Co-management
Integration of knowledge and insights	Leadership
Learning approach to natural resource management and governance	Caste Panchayats
Human capacity and coordinated participation in decision-making	Caste
Legal Framework and Policy Instruments	

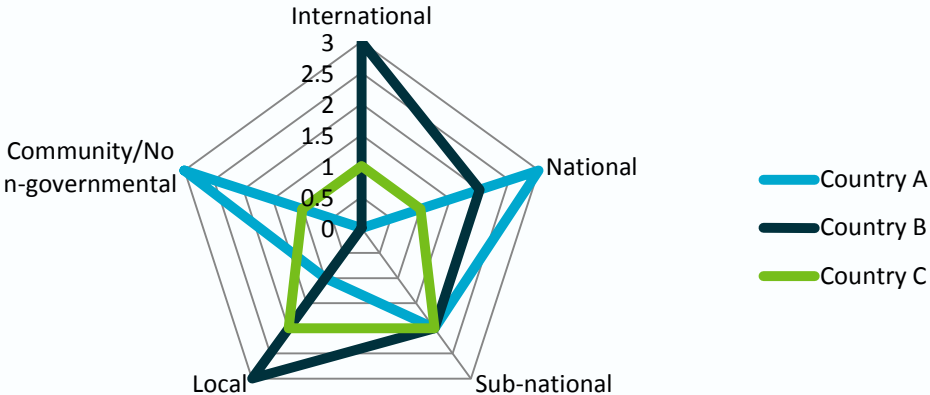


# Stage 3: evaluating institutions and organisations in the context of adaptation

*Example: Evaluating scale of policy instruments*

Policy area: e.g. fisheries, water resources

Scale of policy instruments	Country A	Country B	Country C
International	0	3	1
National	3	2	1
Sub-national	2	2	2
Local	1	3	2
Community/Non-governmental	3	0	1



- 3 Objectives met at a high level
- 2 Objectives generally met
- 1 Objectives present but not achieved in practice
- 0 Objectives not present/absent

# Thank you

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