



The Australian Natural Disaster Resilience Index: A profile of Australia's disaster resilience

Economics, Policy and Planning RAF
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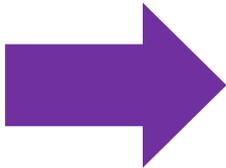
Disaster resilience (ANDRI)

Coping capacity

- Social character: 15 indicators
- Economic capital: 15 indicators
- Emergency services: 13 indicators
- Planning and the built environment: 10 indicators
- Community capital: 11 indicators
- Information access: 3 indicators

Adaptive capacity

- Social and community engagement: 6 indicators
- Governance and leadership: 4 indicators



Assessment of disaster resilience in Australia

Capacity for disaster resilience in Australian communities

Australian Natural Disaster Resilience Index

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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX VOLUME I – STATE OF DISASTER RESILIENCE REPORT

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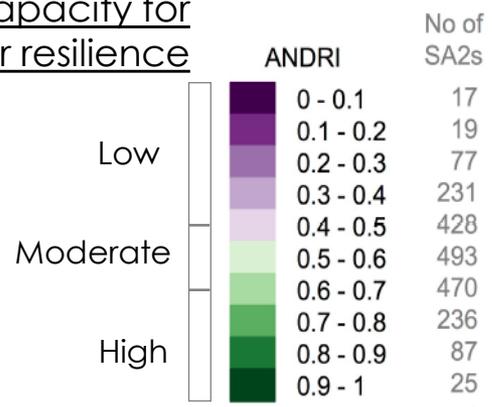


Today's talk:

1. The State of Disaster Resilience Report findings
2. Utilization activities and opportunities



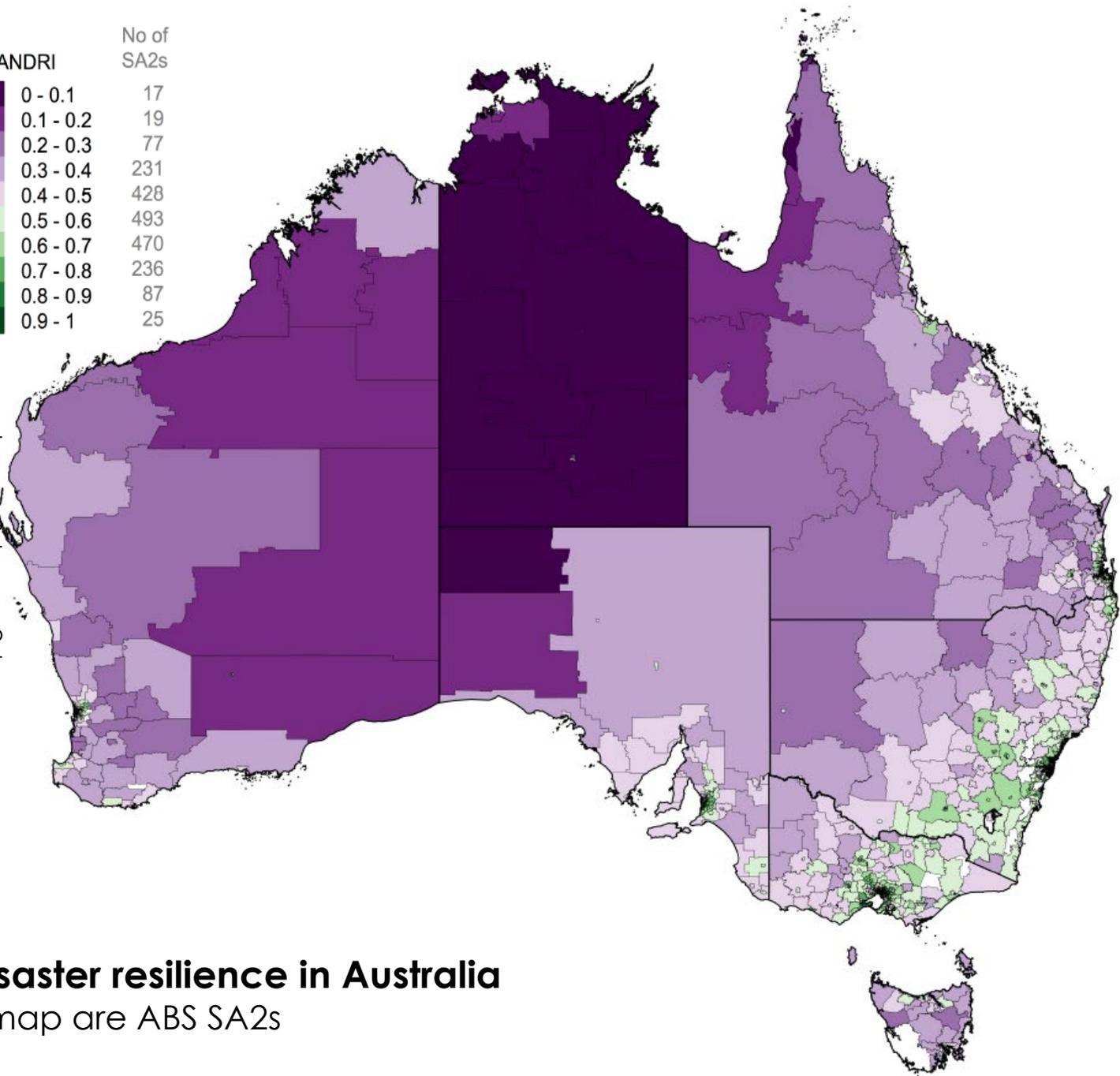
Capacity for disaster resilience



Low = limited capacity to use available resources to cope with adverse events or to adapt and change

Moderate = some capacity to use available resources to cope with adverse events or to adapt and change

High = enhanced capacity to use available resources to cope with adverse events or to adapt and change

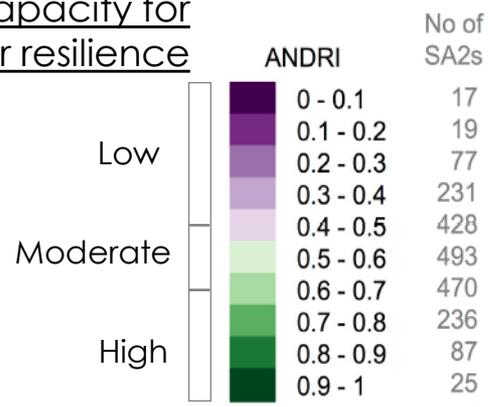


The state of disaster resilience in Australia
Divisions in the map are ABS SA2s





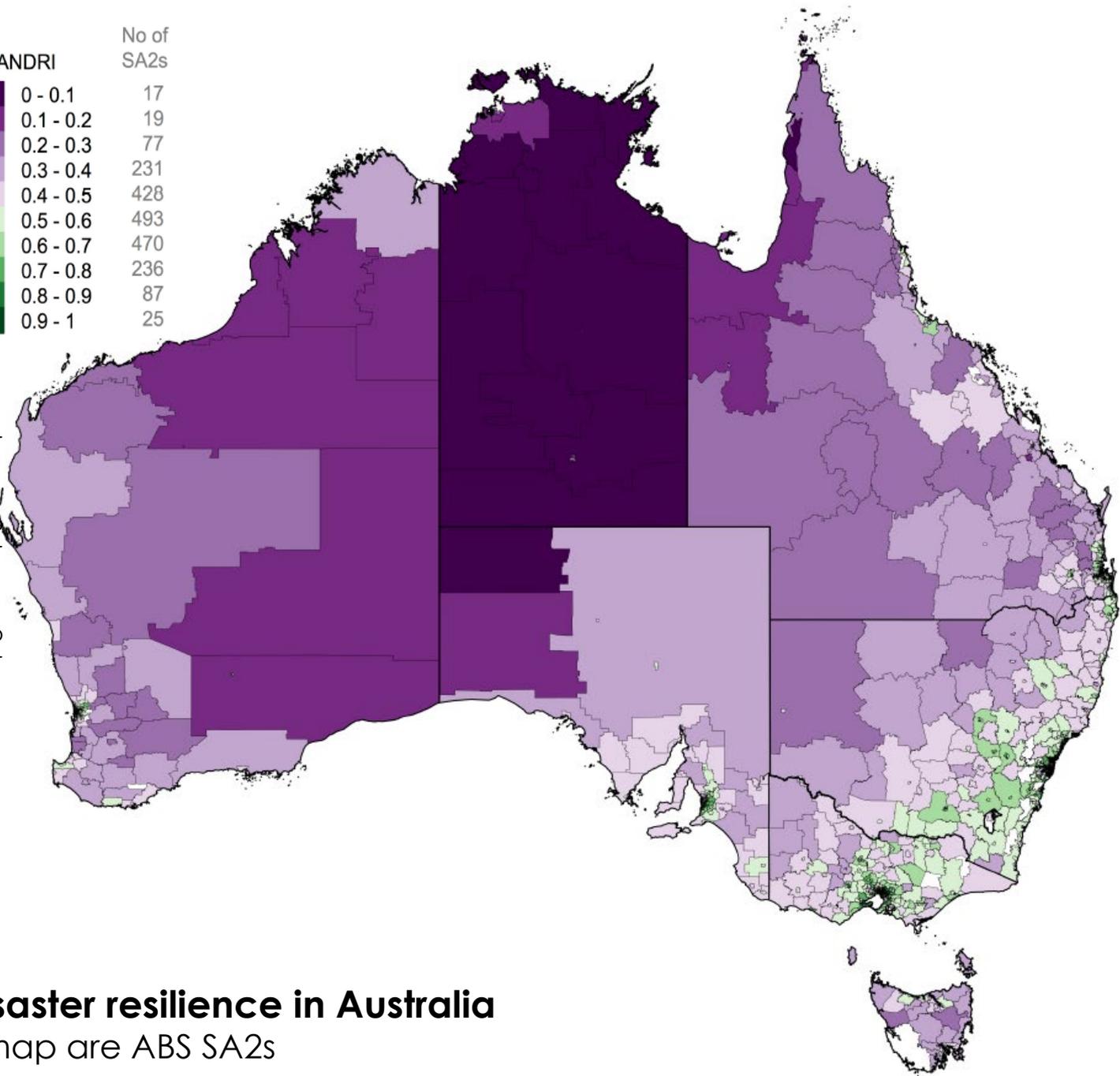
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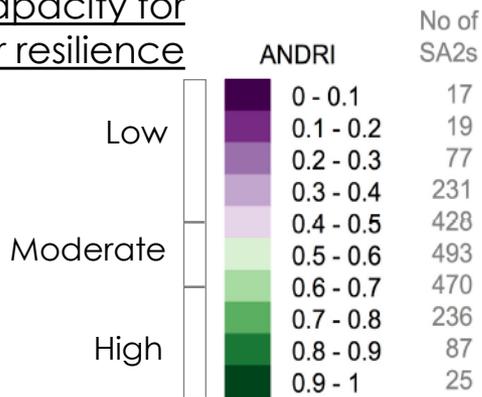
High = enhanced capacity to use available resources to cope with adverse events or to adapt and change



The state of disaster resilience in Australia
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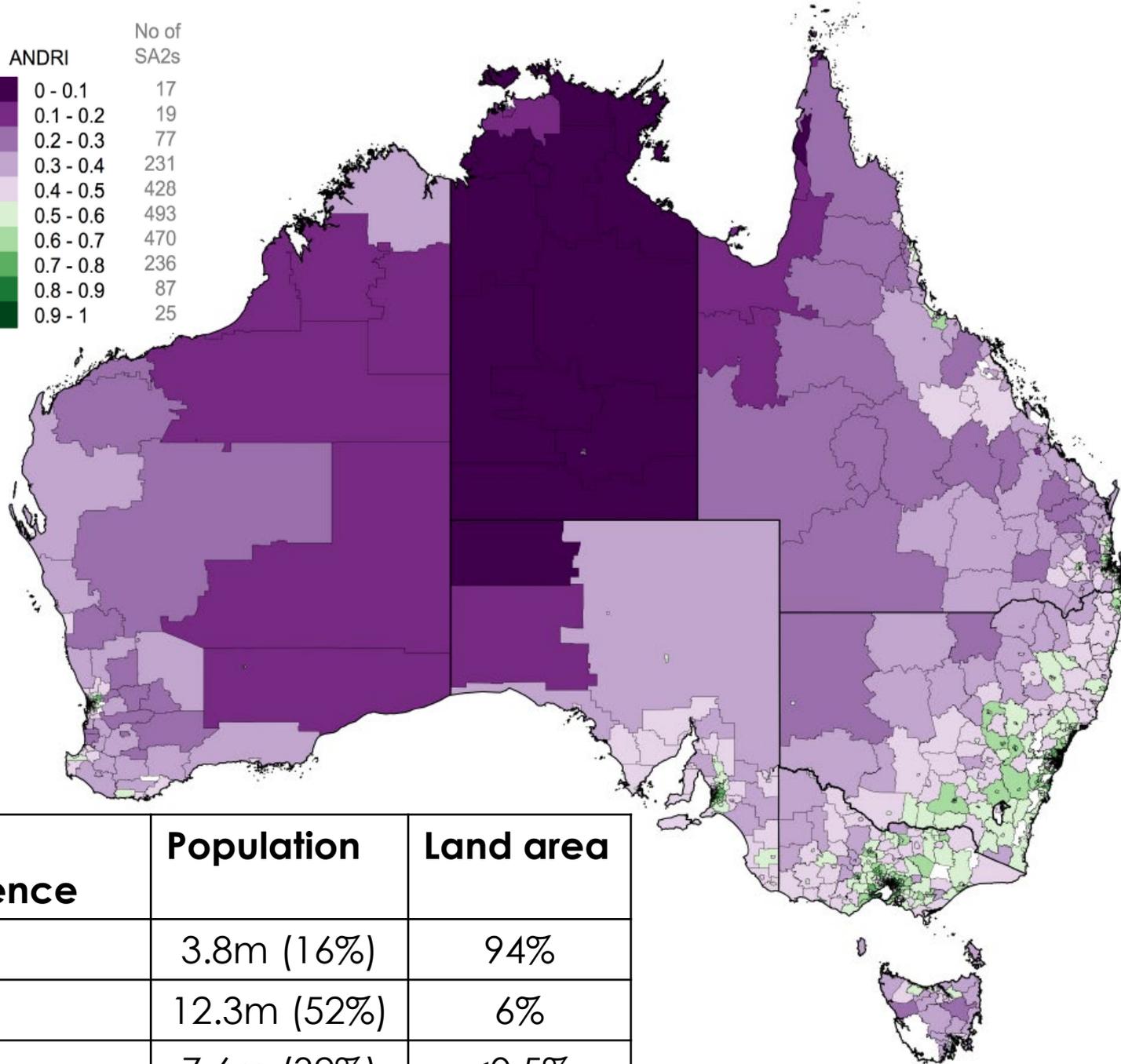
Capacity for disaster resilience



Low = limited capacity to use available resources to cope with adverse events or to adapt and change

Moderate = variable capacity to use available resources to cope with adverse events or to adapt and change

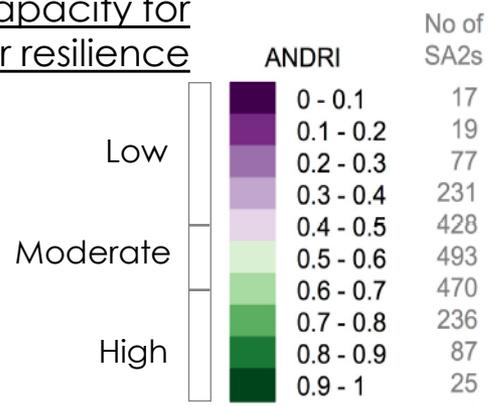
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Capacity for disaster resilience	Population	Land area
Low	3.8m (16%)	94%
Moderate	12.3m (52%)	6%
High	7.6m (32%)	<0.5%



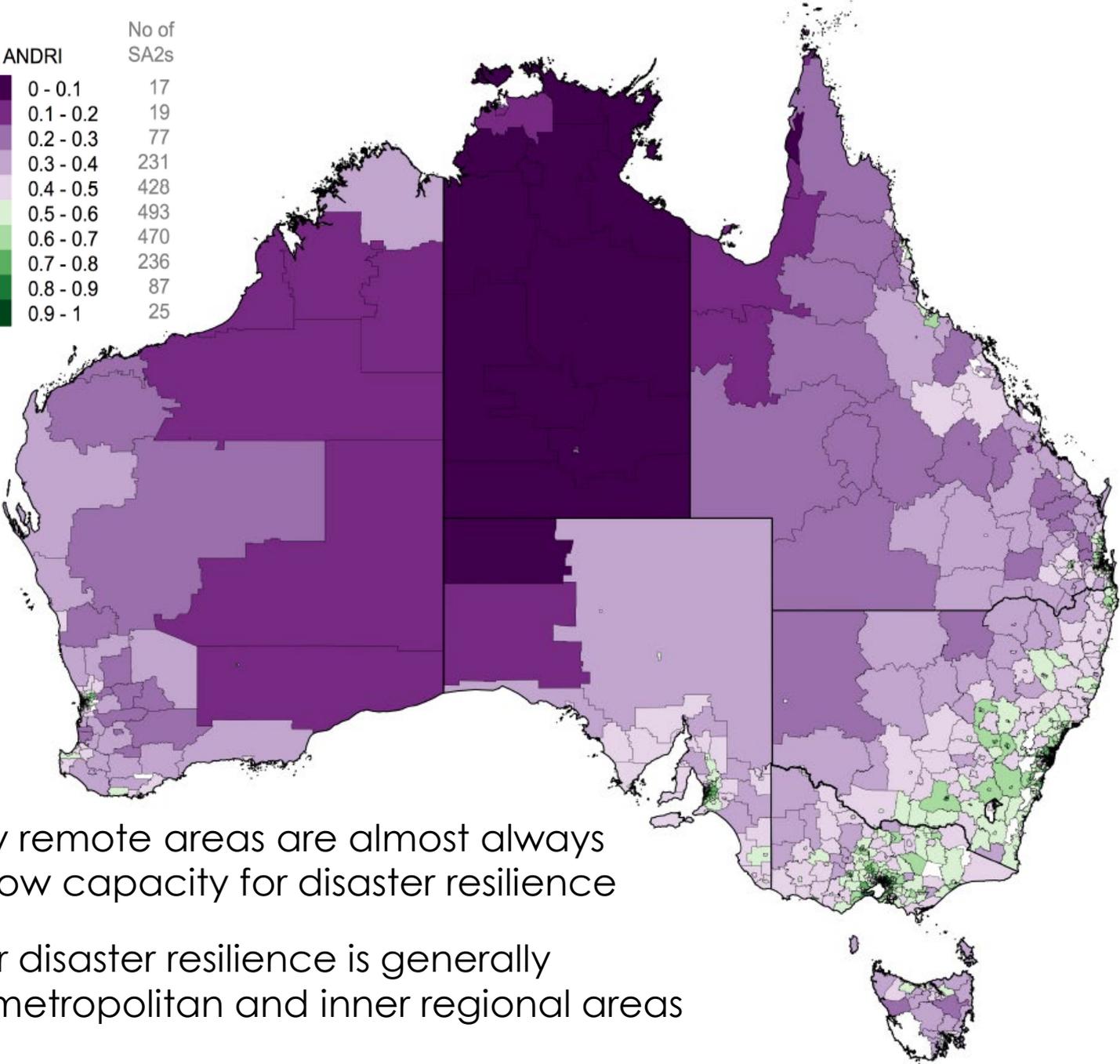
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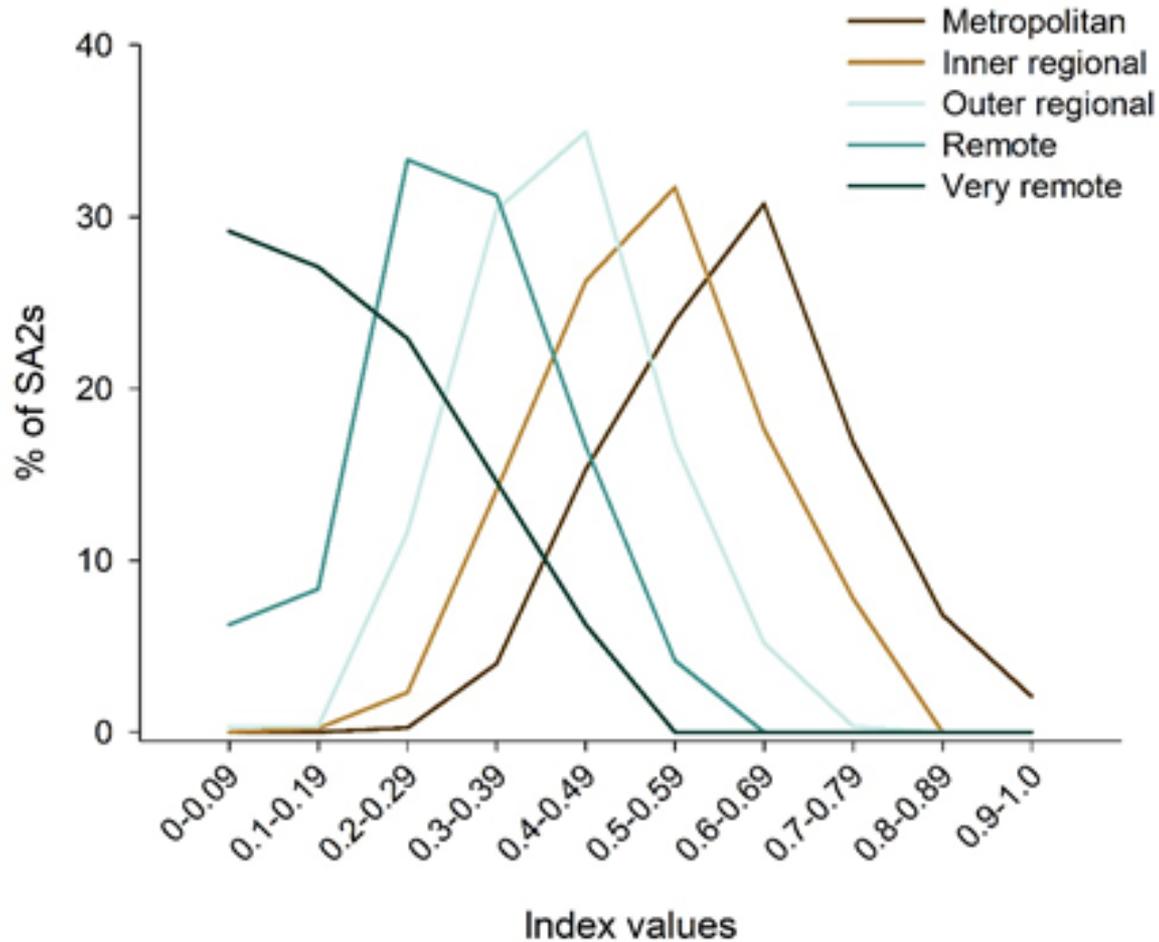
Remote and very remote areas are almost always associated with low capacity for disaster resilience

High capacity for disaster resilience is generally associated with metropolitan and inner regional areas





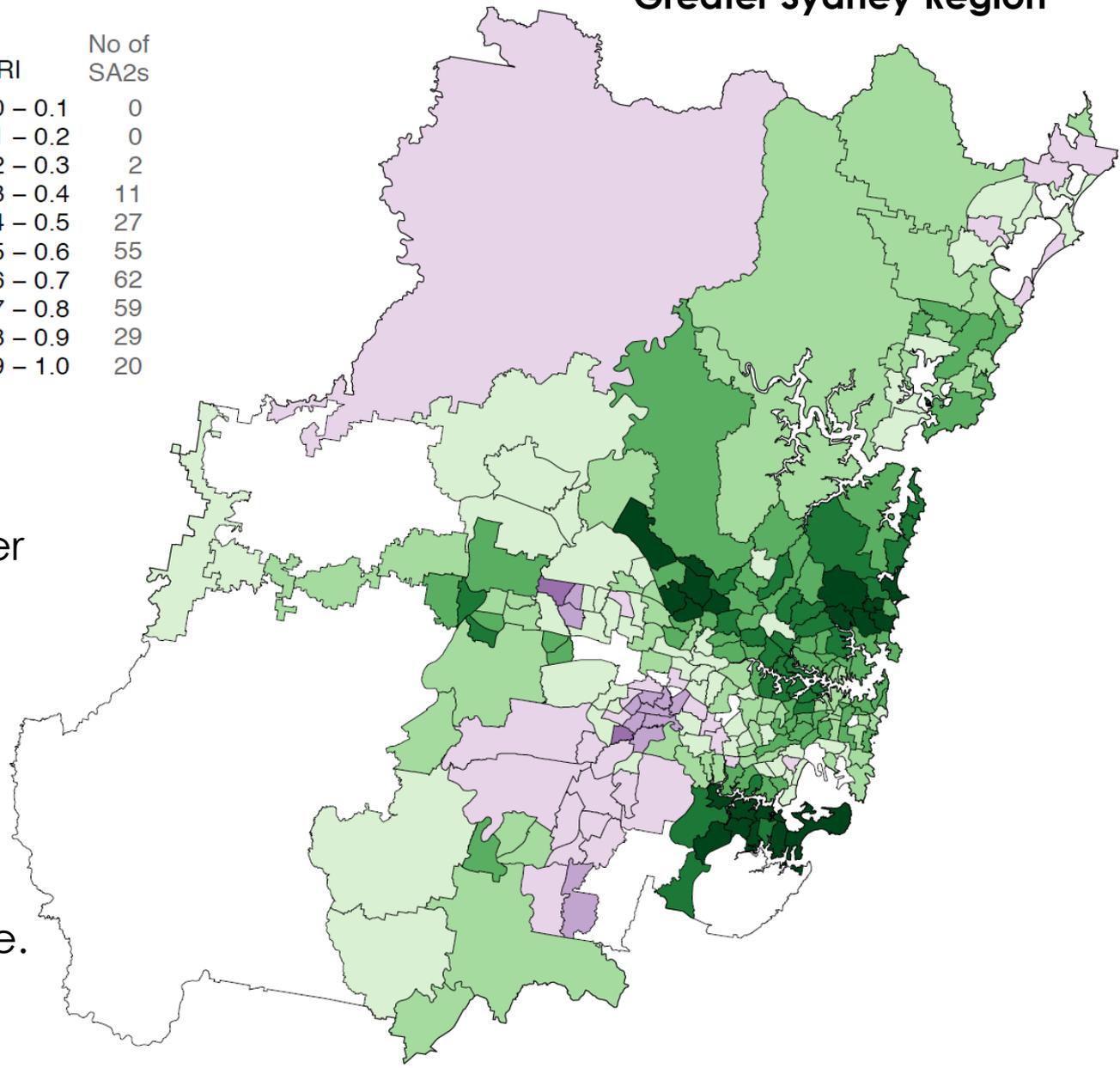
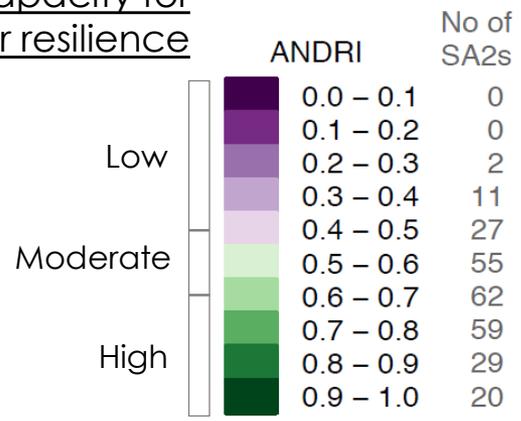
Relationship between index values and remoteness





Greater Sydney Region

Capacity for disaster resilience



Areas of low capacity for disaster resilience do occur in metropolitan areas.

Areas of high and low capacity for disaster resilience often sit side by side.



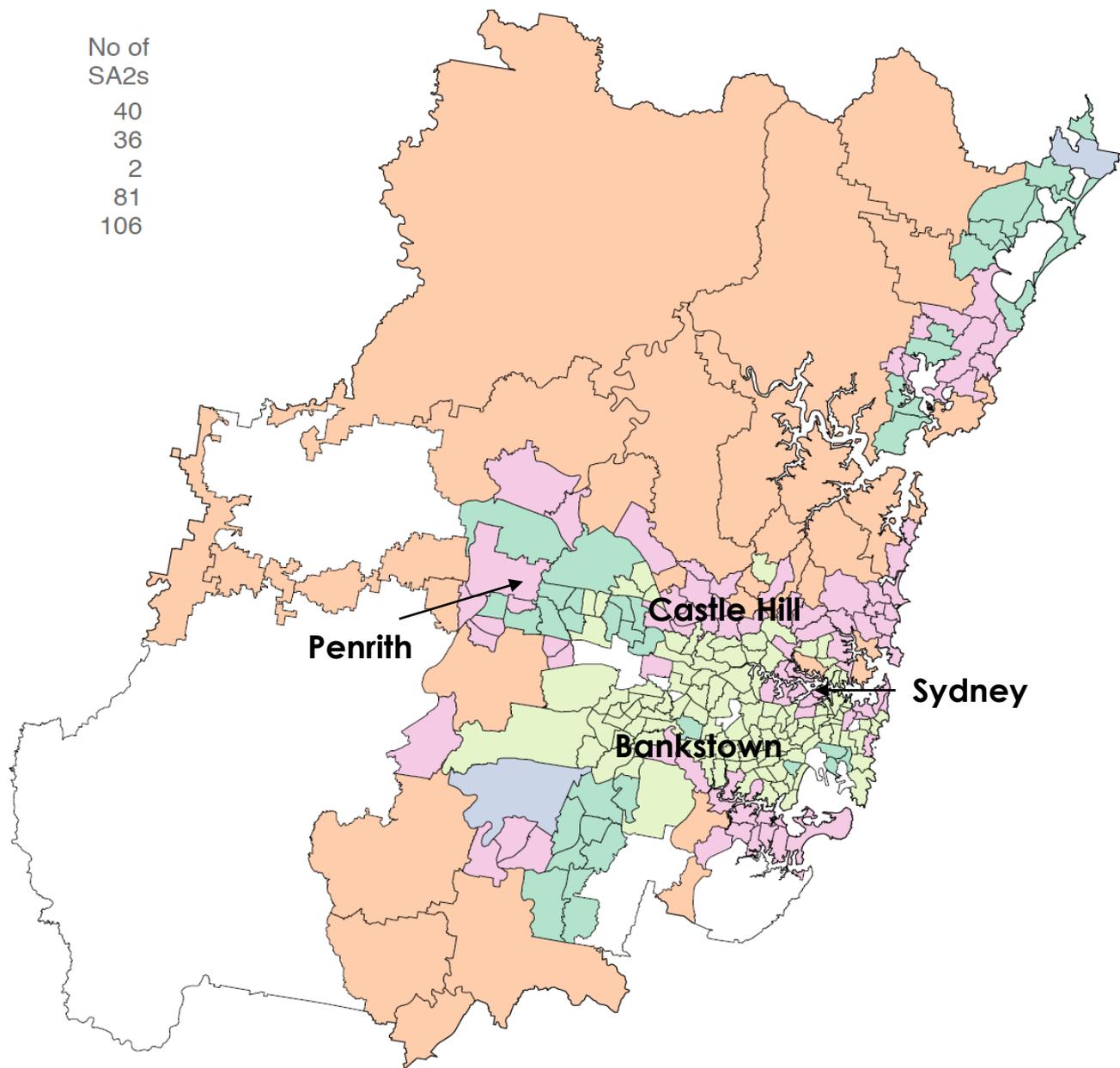


Cluster



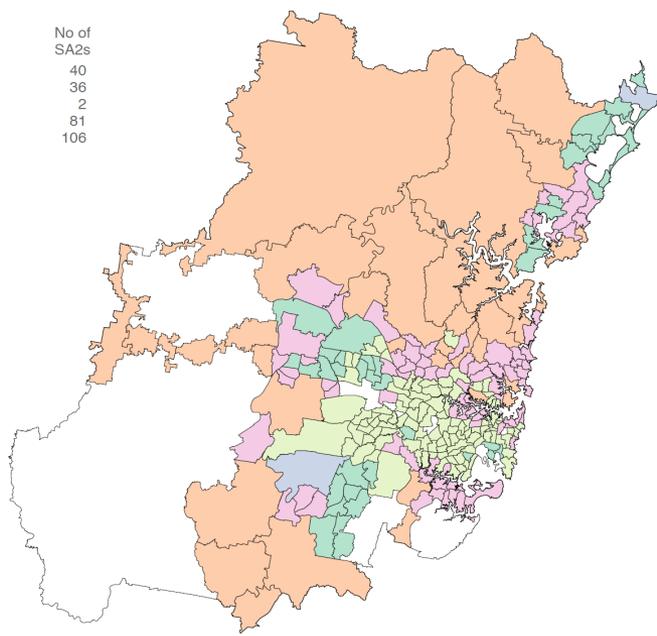
No of SA2s

40
36
2
81
106



Greater Sydney Region





-  Social character
-  Economic capital
-  Emergency services
-  Planning and the built environment
-  Community capital
-  Information access
-  Social and community engagement
-  Governance and leadership

Disaster resilience strengths

Disaster resilience barriers

<p>High</p>   <p>Moderate</p>    	<p>Low</p>  
<p>High</p>    <p>Moderate</p>    	<p>Low</p> 
<p>High</p>    <p>Moderate</p>     	<p>Low</p>





- Policy development
- Strategic planning
- Decision support

- All hazards

- Longer term outcomes
- Joined up government



- Community engagement
- Behaviour change
- Safety
- Risk awareness
- At-risk groups

- Individual hazard types

- Shorter term outcomes
- Individual agencies



ANDRI Dashboard

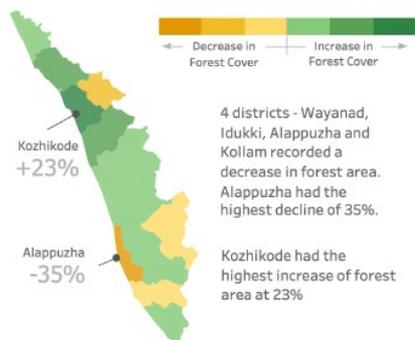
Kerala's Forest Cover Increased by 2.7% in 2017

According to a report by the Forest Survey of India (FSI), there was an increase of 1043 sq km (2.7%) in Kerala's Forest cover compared to 2015. Kerala had the third highest increase in forest cover after Andhra Pradesh and Karnataka. Together, the three states accounted for an increase of 6,778 sq km.

Kerala's forest area
20,321 (sq km)

Percentage of area as forest
52%

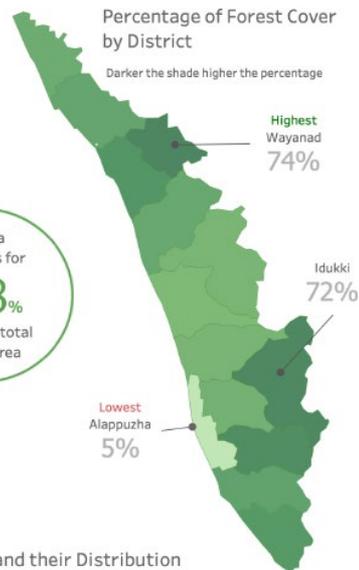
Percentage Change by District Compared to 2015



Reasons for Increase in Forest Area

- Commercial plantations outside forest areas
- Improvement in interpretation due to better radiometric resolution of recent satellite data

Source : ISFR Forest Cover 2017 Report
Design : Kizley Benedict (@kizley)



Kerala accounts for **2.8%** of India's total forest area

Types of Forests and their Distribution



Provide end-users with access to the index through a web-based platform.

Phase I – June to August

Consultation with end users to design the dashboard elements and outputs

Phase II – August to October

Software development



ANDRI – Risk map overlays

Geoscience Australia

Overlaying different aspects of the index data with risk maps

- Severe wind assessment for Western Australia
- Earthquake Impact and Risk Assessment for Perth and Supporting Infrastructure (EIRAPSI)

Aim – matrix of social resilience and physical exposure



ANDRI – Dimensions of disaster resilience



WA DFES

Incorporated these dimensions into the program logic for the Community Preparedness Directorate Monitoring and Evaluation Framework

EMV

Incorporated these dimensions into the design of the Victorian Resilience Indicators dashboard

Index data will also become part of the Victorian Resilience Indicators dashboard