



Australia's Biosecurity Future

Unlocking the next decade of resilience

CSIRO Futures project overview

19 October 2020

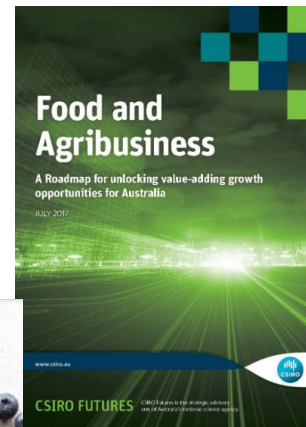




Background



Emerging medical devices landscape and associated regulatory environment



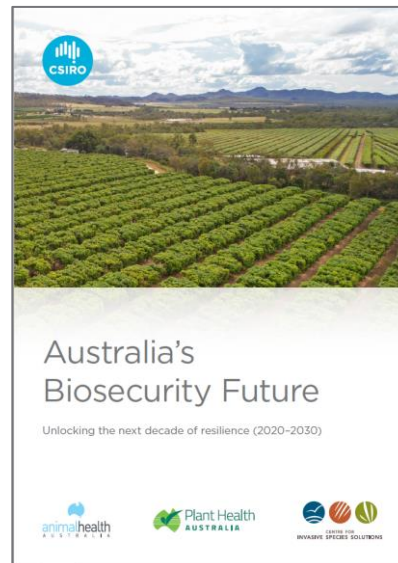


Background



2014

Megatrends
Megashocks



2020

Future states (2030)
System recommendations



Objectives

1

Promote the importance of a strong biosecurity system (especially through a One Health lens)

2

Create a sense of urgency across the biosecurity system in relation to necessary improvements/actions

3

Inform policy, investment decisions and future Government biosecurity reviews



Process

56

individuals

26

organisations

40

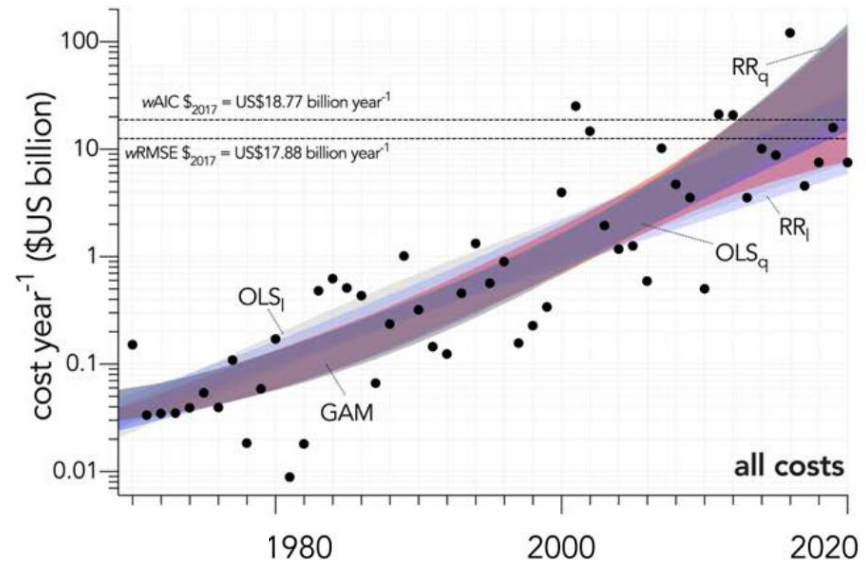
reviews





Economic impacts

- COVID-19 caused a 3.8% decline in Australian economy contracted Jan-Sep but recovered 3.3% in the Sept quarter unemployment peaking at 15% in April
- Environmental biosecurity system protects Australia's environmental assets valued at over \$6.5 trillion
- Alien pests weeds and diseases cost Australia over \$390 B over last 50 years*
 - up to 6-fold increases per decade
 - current annual costs between \$8.9 B (direct) and \$76 B (direct & indirect)



*Bradshaw et al. (*in press*) Detailed assessment of the reported economic costs of invasive species in Australia. *Neobiota*



Two trajectories

Business as usual trajectory

- Declining and stretched
- Response and recovery
- Low and slow
- Under-engaged, one-way
- Vulnerable to non-tariff trade barriers
- Unaligned and fragmented
- Slow and incremental

Expertise and infrastructure capability



System focus

Data sharing



Community and stakeholder engagement

International market access



Technology development

Rate of change



Transformational trajectory

- Up-to-date and adaptive
- Prevention and detection
- High and fast
- Collaborative, highly informed and engaged
- Increasing export market access
- Strategic
- Fast and transformational

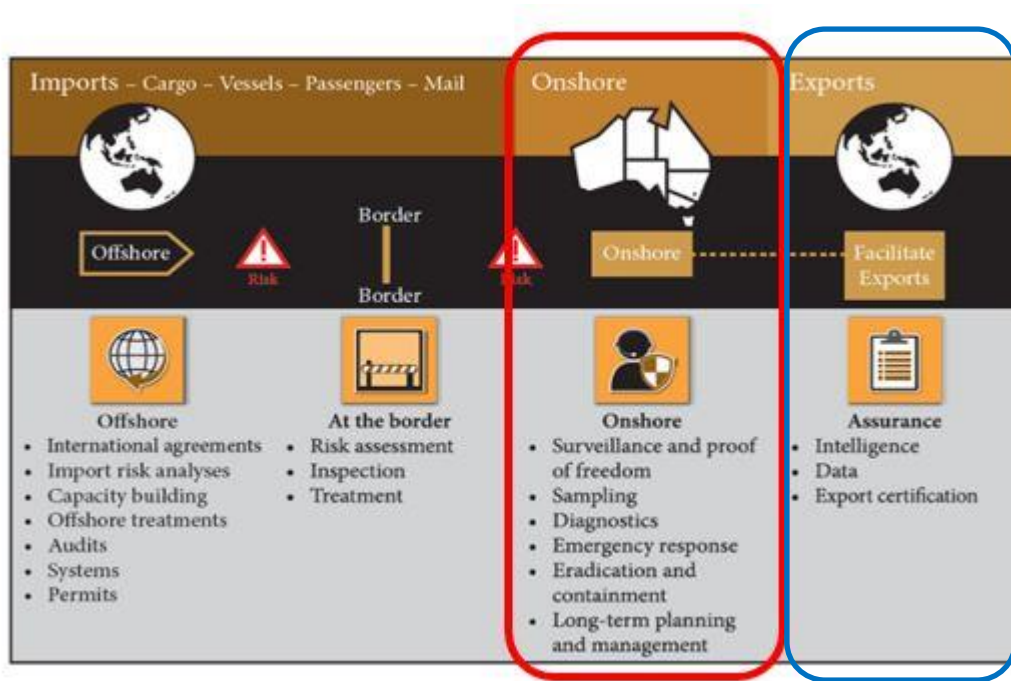


Recommendation themes

20 recommended actions
across 3 themes.

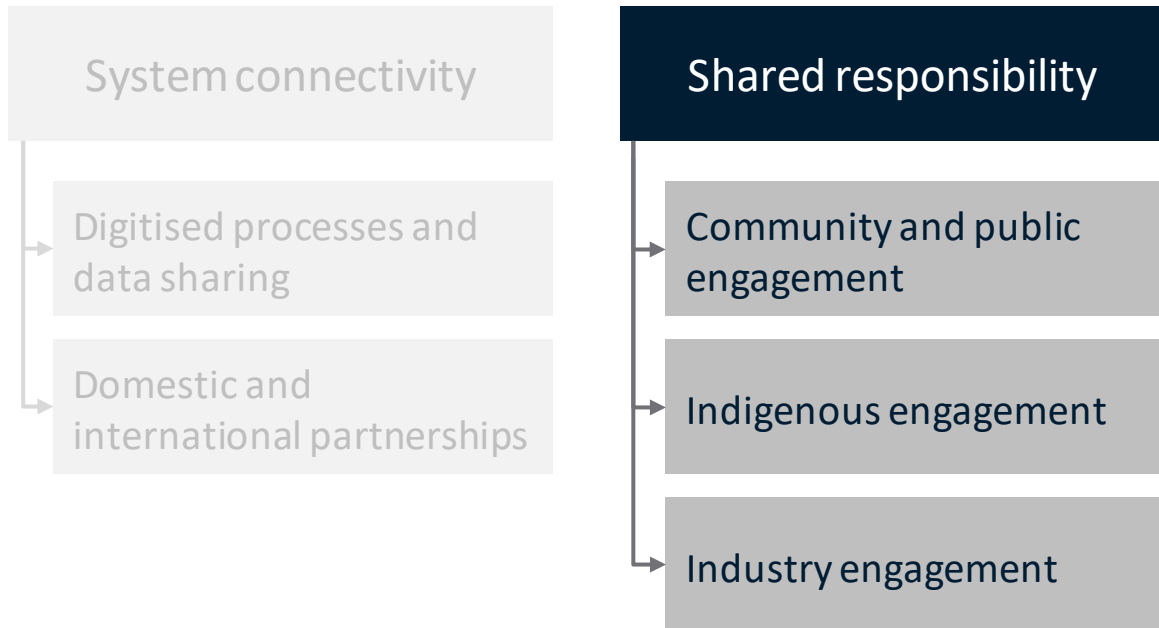


Recommendation themes





Recommendation themes





Recommendation themes





Recommendation themes

System connectivity

- Digitised processes and data sharing
- Domestic and international partnerships

Shared responsibility

- Community and public engagement
- Indigenous engagement
- Industry engagement

Innovation in S&T

- Supporting innovation
- Science and technology capability



Australian Biosecurity System

- Protects our unique environment & internationally competitive \$60B agricultural export industries
- Provides the platform for shared-responsibility and government-industry and community partnerships
- Needs to be transformed to meet growing risks and impacts – scaling up not good enough
- Needs to innovate by defining and investing in technologies for priority areas
- Needs a human-agriculture-environment One-Health approach



Australia wants to be the most biosecure trading nation respected globally.
Transformative change is needed to get there



Thank you

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