

Australia's Biosecurity Future

Unlocking the next decade of resilience











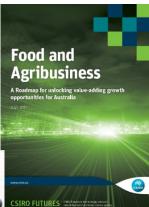


Emerging medical devices landscape and associated regulatory

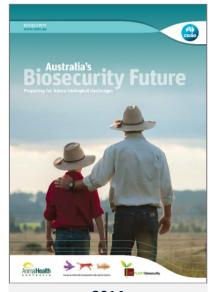












2014Megatrends
Megashocks



Future states (2030)
System recommendations

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

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

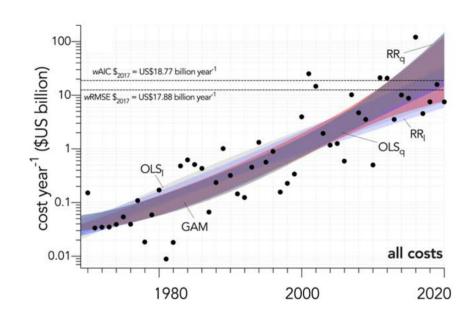
Inform policy, investment decisions and future Government biosecurity reviews





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

Transformational 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



Up-to-date and adaptive

Prevention and detection

High and fast

Collaborative, highly informed and engaged

Increasing export market access

Strategic

Fast and transformational



20 actions across 3 themes.

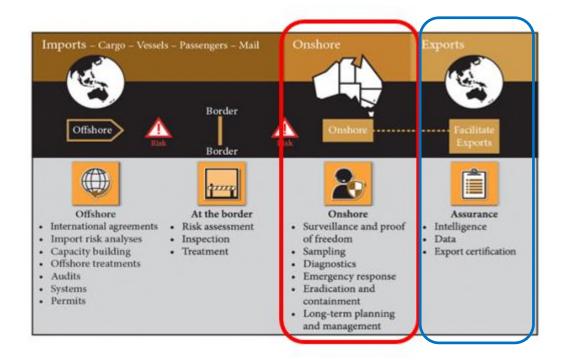


Recommendation themes

System connectivity

Digitised processes and data sharing

Domestic and international partnerships





Recommendation themes

System connectivity

Digitised processes and data sharing

Domestic and international partnerships

Shared responsibility

Community and public engagement

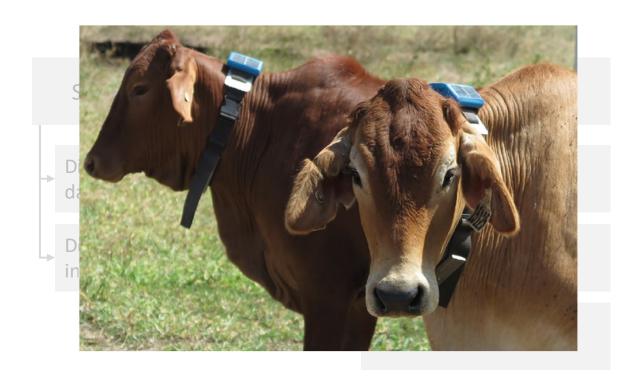
Indigenous engagement

Industry engagement





Recommendation themes



Innovation in S&T

Supporting innovation

Science and technology capability



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 governmentindustry 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

Andy.Sheppard@csiro.au CSIRO