Managing Your Water Asset 'Setting the scene'

Monday 3 July 2017

Loxton Research Centre





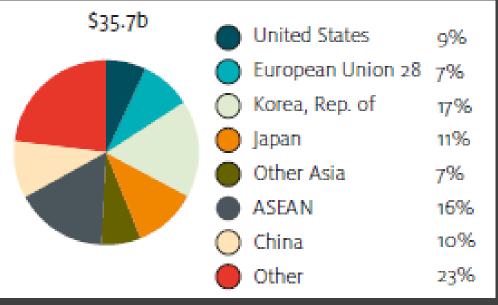
Global Food - Demand

- Need 70% increase in food production by 2050
- Rising incomes and health conscious consumers
 - = ↑ demand for fruits, nuts, vegetables
- The Asian shift ...
 - Rising Asian middle class (~70% world pop'n)
 - 60% of the global economic growth over 2017-18
 - India population > China by 2022 ... to 1.3 billion
 - Indonesia food consumption ↑ x 4
 - Exports assisted by FTAs
- Middle East direct flight access

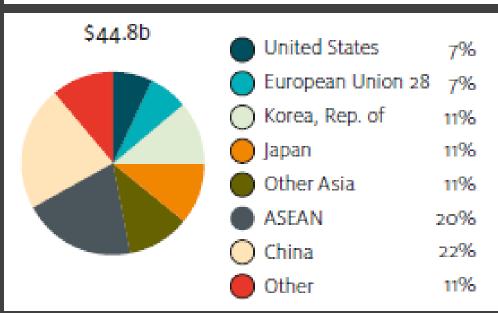


Changing Market for Australian Agricultural Exports

2005-06 Australian Agricultural Export Markets

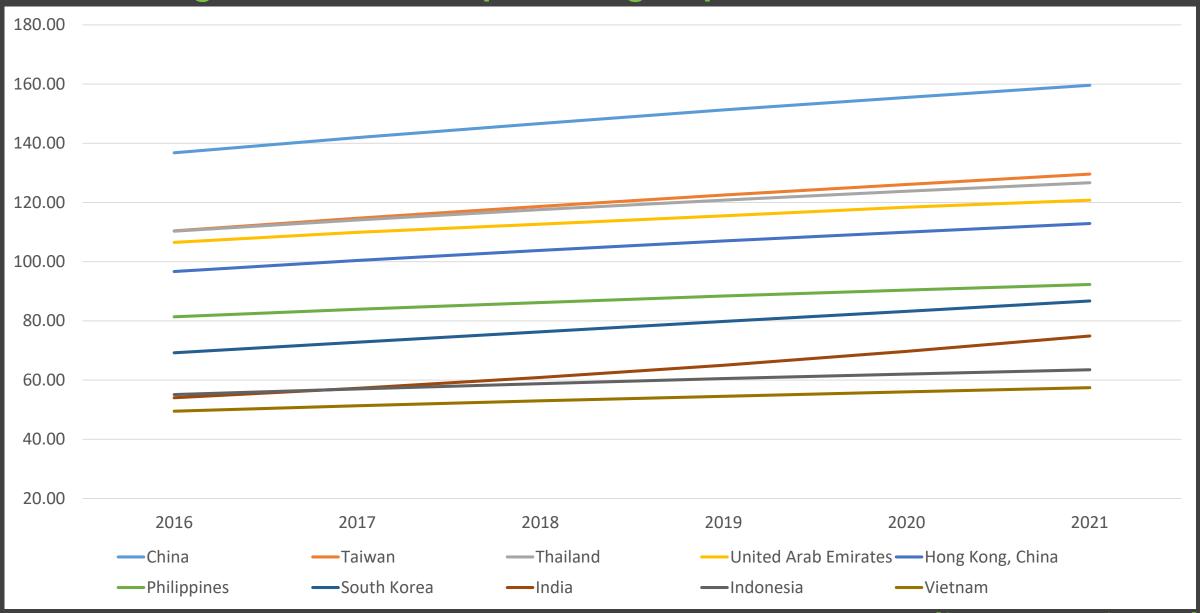


2015-16 Australian Agricultural Export Markets

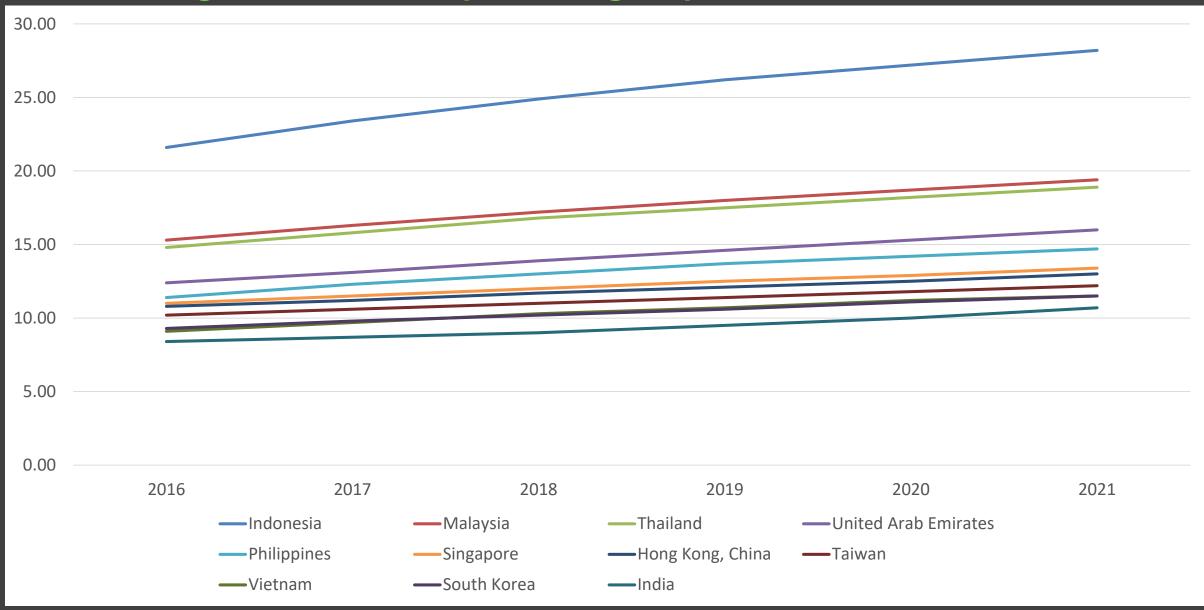


[Source: ABARES 2017]

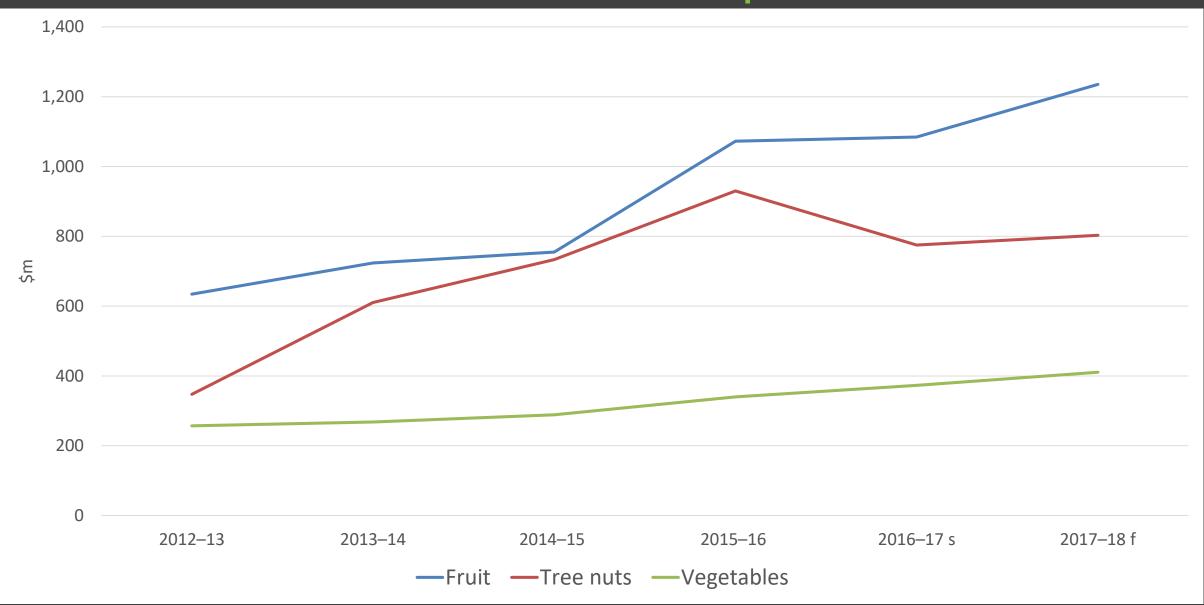
Rising Fruit Consumption (kg/capita)



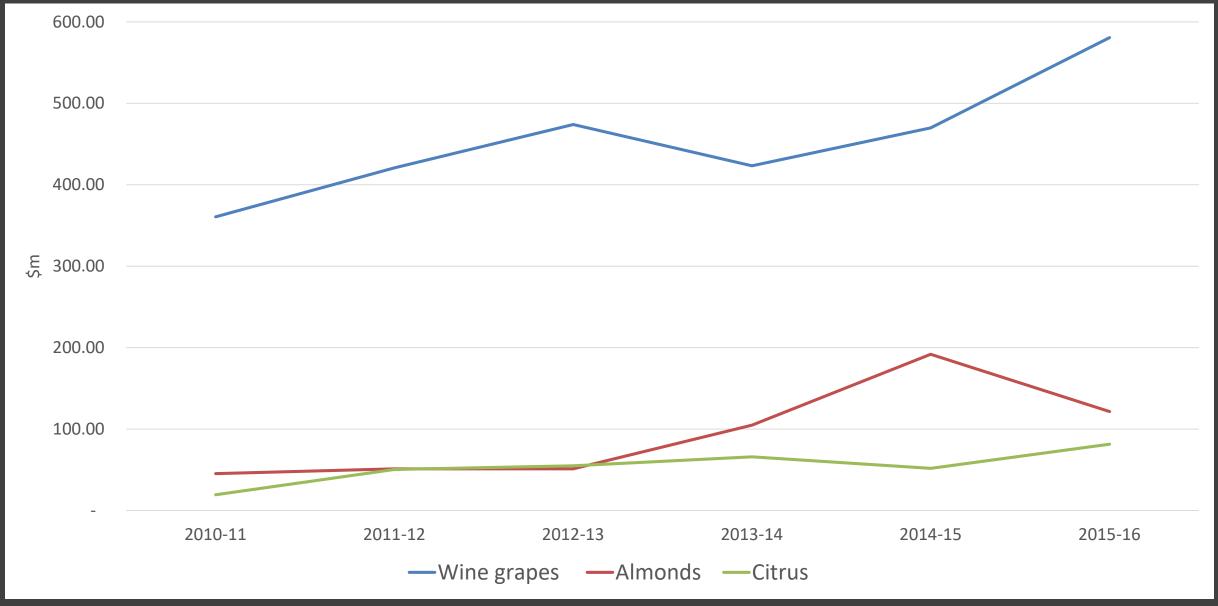
Rising Nut Consumption (kg/capita)



Value of Australian Horticulture Exports



SA Farm Gate Value of Production



Global Food – Supply

- Global food production constrained by water
- Water has shifted towards crops with highest returns (\$/ML)
- Need ongoing innovation / productivity improvements
- Minimise food losses cyclical economy
- Decrease input costs precision agriculture & business mgt
 - Netting, canopies and side walls ↑ yields, ↓ water use
 - Drip irrigation, precision nutrients, advanced fertigation
 - Tech drones, thermal imaging, automation, robotics
 - Controlled atmosphere
 - Energy

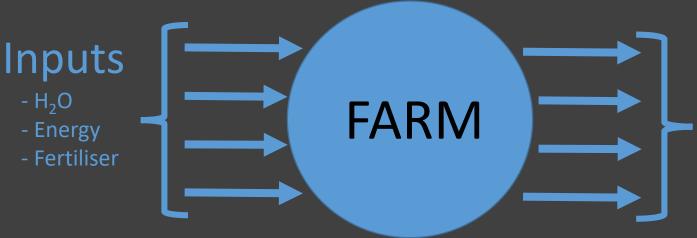




Local Agribusiness in a Global Context

Evolution from the farm to agribusiness

Working for production



Outputs

- Tonnes
- Quality
- Loss

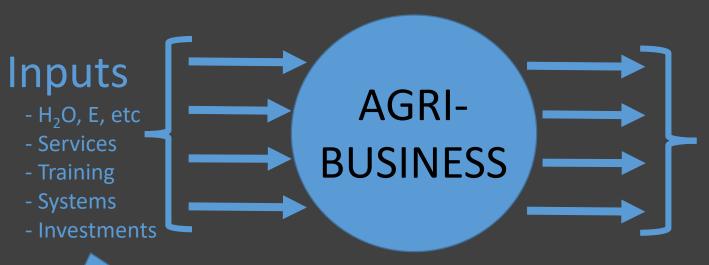




Local Agribusiness in a Global Context

Evolution from the farm to agribusiness

Working for profit



Outputs

- t, quality, etc
- Reuse
- Value-add
- Value chain
- Marketing





Water – A Farm Input or Business Asset

- There are many approaches to water management
 - Water per area (ML/Ha) water efficiency
 - Water for production (ML/t) water productivity
 - Water for profit (\$/ML) water optimisation
 - Water for security (equity / nest egg)
 - Water for trading (markets)
- No one model is perfect all require active management
- Questions to consider
 - Entitlement is your asset working for you?
 - Allocation can you afford the fluctuations?
 - Market are you considering all markets?



