

Australia-Indonesia Centre **AGRICULTURE AND FOOD** Megatrends

Australia and Indonesia

In spite of their close proximity and the sharing of an international maritime border, Indonesia and Australia are very different nations. Geographically, politically, culturally and economically they bear some similarities, but also some stark differences. Nonetheless, both nations are located in the Asian economic region which is transforming rapidly, presenting opportunities and necessities for greater collaboration on shared issues. The Australia-Indonesia Centre (AIC) and CSIRO have been investigating these shared issues for four research Clusters: **Agriculture and Food, Health, Infrastructure and Energy.**



AIC Foresighting Project

CSIRO has been invited by the AIC to apply its 'foresighting' approach to assist research planning for the Agriculture and Food Cluster. By identifying 'megatrends' and 'megashocks' towards 2030 and beyond, foresighting enables the Cluster to be evidence-based and anticipatory, and to identify a clear pathway to market, adoption and application. The overarching goal of the AIC Foresighting Project is to 'support the development of priority research areas of shared interest between Australia and Indonesia, and to promote integration, synergy and learning amongst the Cluster teams'.

In November 2014 – January 2015 the project engaged with Cluster teams during their planning workshops to identify shared issues, underlying drivers and potential megashocks. In February – May 2015 megatrend narratives were developed around the shared issues, and then tested and refined through discussion and validation with Cluster researchers and the AIC. Based on the shared issues and drivers, overlapping megatrends were identified for each Cluster. These are summarised here for the Agriculture and Food Cluster. The full megatrend report is available from the AIC website, www.australiaindonesiacentre.org.

Megatrend summaries

- Climate change and biosecurity risks will accelerate.
- The ASEAN Economic Community will provide opportunities for agricultural trade.
- Changes in diets and food demand will transform agriculture.
- Innovations in value chains and multi-functional land use will rapidly emerge.



Environmental Hazards

This megatrend describes increasing hazards from climate change and extreme events, movements of people and goods in the Asian region, and biosecurity risks. Infrastructure development will have to account for climatic extremes and sea level rise, and coastal agricultural areas may be impacted by salinisation of soils and groundwater. This has similar implications for food production in Indonesia and Australia, requiring greater cooperation and capacity building to prepare for these potential impacts.

The Asian Century of Trade

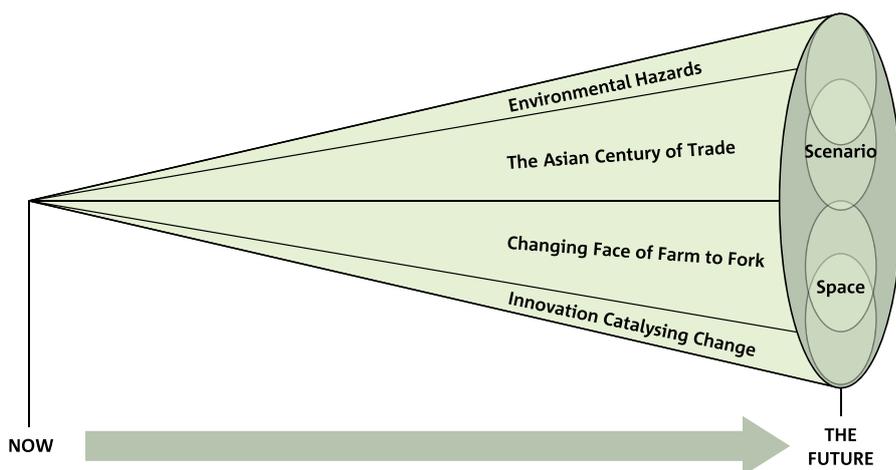
This megatrend focuses on the projected rapid economic growth of the Asian region, centred on China and India. The process will be accelerated by the formation of the ASEAN Economic Community in 2015. This will provide enormous opportunities for agricultural trade for Indonesia and Australia. However, partnerships which can value-add to produce, and appropriate transport infrastructure will be necessary to take advantage of the trend.

Changing Face of Farm to Fork

This megatrend projects dramatic changes in the production of food and fibre driven by policy changes relating to food and land sovereignty in Indonesia and Australia. Urban drift and the decline of the traditional farming systems in both countries will also drive a transition towards fewer and larger businesses. Changes in diet and demand for ethically-produced food will also influence a transformation in the form and intensity of agricultural production, with a focus on more diverse niche crops targeted at middle-class consumers.

Innovation Catalysing Change

This megatrend explores likely innovations in the agriculture and food sectors of Indonesia and Australia. These will include novel partnerships (e.g. enhancing value chains through public-private partnerships), technological advances to promote more sustainable and diverse production and processing (e.g. certified and traceable food, including Halal products), and multi-functional land use (e.g. farming for tourism, carbon and biodiversity).



THE FOUR MEGATRENDS IDENTIFIED FOR THE AGRICULTURE AND FOOD CLUSTER

CONTACT US

t 1300 363 400
+61 3 9545 2176
e csiroenquiries@csiro.au
w www.csiro.au

AT CSIRO WE SHAPE THE FUTURE

We do this by using science and technology to solve real issues. Our research makes a difference to industry, people and the planet.

FOR FURTHER INFORMATION

CSIRO Land and Water
Dr. James Butler
t +61 7 3833 5734
e james.butler@csiro.au
w www.csiro.au