

Rural Research and Development

Innovation is a vital part of maintaining the ongoing growth, profitability and sustainability of Australia's rural industries, especially in the face of increases in competition in domestic and international markets. Investors and providers of rural R&D vary across a wide range of Commonwealth and state/territory agencies, including the 16 rural research and development corporations and companies (RDCs), the CRCs, universities funded through the ARC, and CSIRO.¹

Improved overall understanding of the rural innovation system is needed to better align respective efforts and collaboration. The Review consultation process raised a strong consensus need for greater national strategic leadership, a broader framework around prioritisation, and coordination across jurisdictions and institutions.

The Panel sees as a priority that the Australian Government should develop a national rural innovation strategy to:

- Ensure optimal outcomes are gained from public investment in rural R&D including improved delivery of research and development directed at issues of national public concern
- Determine where public investment is needed to achieve greater effectiveness and efficiency in agriculture and food supply chains, taking into account the work being done by the Primary Industries Ministerial Council
- Reduce the duplication of research activity through institutional consolidation to promote administrative efficiency and critical mass
- Review existing rural research and development levy arrangements and contribution levels, including contributions made by both industry and government, to ensure the effective delivery of research and development to meet the demands of both public and private interests.

Tropical Innovation

As one of the few developed nations with a substantial tropical footprint and a strong R&D base in tropical science, Australia is well placed to take a leadership role in developing and marketing products and services in the areas of tropical health, food, environment and urban design.

The tropics comprise approximately 50% of world's population on 33% of world's landmass and with 50-80% of the world's biodiversity. Projections based on current growth rates suggest that the gross Tropical World Product will reach \$US40 trillion by 2025, with knowledge-intensive industries accounting for 20 per cent, or \$US8 trillion, of this economy.²

The extent to which Australia is able to capture a significant portion of this economy will be determined in some part by the extent of its pre-eminence in tropical R&D. It is already a leader in some areas such as coral reef ecology. However, exploiting other opportunities in fields such as health and agriculture will require a conscious decision

¹ The Department of Agriculture, Fisheries and Forestry – Submission No. 661

² Calculations based on data available from: The World Factbook, Central Intelligence Agency (<http://www.cia.gov/cia/publications/factbook/>), accessed July 2007

to build world research and development leadership and to develop Australia's capacity to commercialise and market the resulting products and services.

A coordinated and strategic approach will be necessary to properly overcome the challenges faced by tropical populations both within Australia and throughout the world and to take advantage of Australia's tropical expertise. The cross-jurisdictional nature of opportunities and challenges for the tropics and the large number of existing policy and institutional research initiatives suggest the need for a high level overarching coordination mechanism.

Building pre-eminence in tropical innovation will require not only substantial critical mass on the ground in Australia but also strong linkages to key areas of tropical research domestically and internationally. This could best be achieved by establishing an iconic tropical research and innovation precinct that provided a shared research environment for Australian and international researchers, and where industry and other end-users could interact and partner. A Tropical Innovation precinct would build capacity, expertise, critical mass and connectivity in tropical research and raise its profile both nationally and internationally.

The Panel sees merit in the Australian Government establishing a Tropical Innovation Council with responsibility for setting overall research and innovation priorities and strategies and allocating funding sourced from both State and Federal governments. A Tropical Innovation Precinct could also be created to build capacity, expertise, critical mass and connectivity in tropical research and raise its profile both nationally and internationally