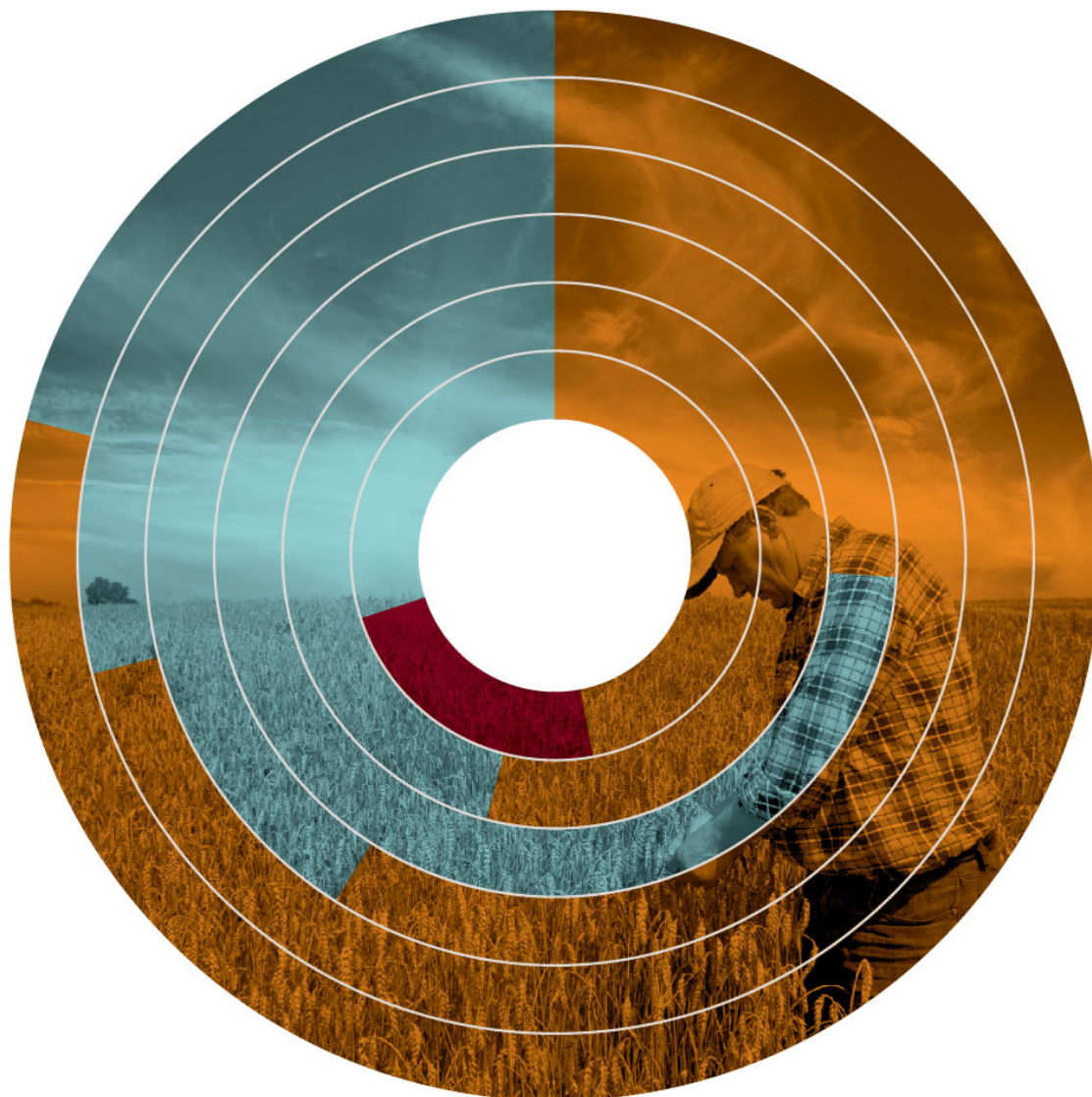




Australian Government  
Department of Agriculture  
and Water Resources

# Australian Bureau of Agricultural and Resource Economics and Sciences: 2016–17 Work Programme



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### **Cataloguing data**

ABARES 2016, 2016–17 Work Programme, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

### **Internet**

ABARES 2016–17 Work Programme, is available at: [agriculture.gov.au/abares/workplan](http://agriculture.gov.au/abares/workplan)

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# 1 Overview

ABARES is the science and economics research bureau within the Australian Government Department of Agriculture and Water Resources.

Government and industry decision makers face questions and problems that demand quality and timely advice on a range of themes, including responses to drought, fisheries management, biosecurity, forestry, trade and agricultural productivity. ABARES provides specialised capacity to meet this demand through the provision of integrated scientific and economic advice on water and the agriculture, fisheries and forestry sectors. Our mission is to provide professionally independent and world-class multi-disciplinary research, analysis and advice to inform decision makers in this department, other government agencies and the private sector on significant issues affecting Australia's agriculture, fisheries and forestry industries.

ABARES performs its role to support the strategic objectives of the department:

- Building successful primary industries
- Supporting agricultural communities
- Expanding agricultural, fisheries and forestry exports
- Sustaining natural resources for longer term productive primary industries
- Improving water use efficiency and the health of rivers, communities, environmental assets, and production systems
- Managing biosecurity and imported food risk
- Being a best practice regulator
- Building an efficient capable department

In 2016-17 ABARES will contribute to supporting key priorities of the Government's agenda. An Information Management and Public Data Taskforce was established in ABARES in February 2016 to implement the Government's public data agenda, which will involve changes to the way information and data are managed across the department. On behalf of the Agriculture and Water Resources portfolio, ABARES also manages the government's regulatory reform agenda, including the identification and monitoring of opportunities for regulatory reform, reporting on achievements to the Department of the Prime Minister and Cabinet, and implementing the regulator performance framework. ABARES also contributes to the department's performance framework as part of the Public Management Reform Agenda. This involves the development of, and improvement to, non-financial performance reporting across the department.

ABARES capacity contributes directly to the development of public policy, enabling the Australian Government to make decisions based on the best available information and analysis.

In contributing to policy development, ABARES examines the range of options potentially available to policy makers and, at times, may enter into public discussion on its research findings and on the impact of different policy options. ABARES also takes a collaborative approach to research and policy analysis, working with external experts and partners, including both domestic institutions, including the CSIRO and the Centre of Excellence for Biosecurity Risk Analysis, and international organisations such as the OECD and the Economic Research Service of the United States Department of Agriculture.

ABARES research products take a variety of forms, including publications, data, data tools, workshops, briefings and presentations. Research findings are commonly communicated through our website, seminars and conferences—including our National and Regional Outlook conferences—and through a range of media tools.

In addition to making much of our research publicly available, in 2016–17 ABARES will continue to undertake an extensive programme of work that is internally focused and supports the development of policy, delivery of government priorities and a range of operational activities across the portfolio. This work is embedded in policy briefings and information from other areas of the department rather than as standalone and individually visible products. We expect to provide analytical advice and briefing, positioning the Department of Agriculture and Water Resources as a whole-of-government leader in evidence-based policy and programme provision.

Our work programme in 2016–17 sets out ABARES priorities and activities for the year. It reflects the collaborative nature of our work in supporting the department to meet policy, programme and business outcomes as outlined in the Portfolio Budget Statement 2016–17. It encompasses activities we undertake for other Australian Government departments and agencies and private-sector stakeholders to aid their decision making.

Apart from publishing our regular flagship products—such as the *Australian crop report*, *Agricultural commodities*, *Australian Farm Survey reports*, *Australian Forest and Wood Products Statistics* and *Fishery status reports*—we deliver specialised publications, including land use maps for clients across a diverse range of subjects, and integrated research on fisheries, biosecurity and forestry issues. Our publications and reports often attract media attention, which helps to further disseminate the information we produce. Some ABARES publications and data are also critical inputs to meeting Australia’s international obligations. For example, *Australia’s State of the Forests Report*, provides Australia’s key input to the FAO Global Forests Assessments. ABARES also provides the national reports to regional fisheries management organisations, part of Australia’s obligations to maintaining access and participation.

ABARES funding comprises approximately 80 per cent direct appropriation and administered funding from the Department of Agriculture and Water Resources, with the balance received in earned revenue from divisions of the department, its portfolio agencies, other government departments and the private sector.

## 2 Core capabilities and activities

ABARES research and analysis is focused on supporting the key priorities of the Government in relation to more sustainable, productive, internationally competitive and profitable agriculture, fisheries and forestry industries; safeguarding Australia's animal and plant health status; and improving the health of rivers and freshwater ecosystems, and ensuring enhanced efficiency in the management and use of water resources. Our core capabilities and activities, reported against the department's strategic objectives as published in the 2016–17 Portfolio Budget Statement and 2016–20 Corporate Plan, are described below.

Some research products deliver on multiple departmental strategic objectives, but are reported against only one in this chapter for brevity. For example, much of the fisheries and forestry research and analysis contributes to both 'sustaining natural resources for longer-term productive primary industries' and 'building successful primary industries'. Similarly, irrigation surveys and analysis contribute to both 'improving water use efficiency and health of rivers, communities, environmental assets and production systems' and 'building successful primary industries'.

### Building successful primary industries and supporting agricultural communities

#### Commodity forecasts and analysis

ABARES commodity forecasting and analysis provides up-to-date data and information on Australian and world markets for agricultural commodities. It produces regular publications, briefings and forecasts to support core activities in the department. Through this activity ABARES collects domestic and international agricultural, fisheries and forestry statistics, including seasonal conditions, production, consumption, exports, imports and prices. The publications and data are available to the department and external stakeholders, including industry and international organisations such as OECD and FAO. The commodity forecasts are presented at ABARES regional and national Outlook conferences over the course of 2016–17.

Key publications in 2016–17 will include:

- *Australian climate, water and agricultural update (weekly)*
- *Australian Crop Report* (published quarterly: September 2016, December 2016, February 2017, June 2017)
- *Agricultural Commodities* (published quarterly: September 2016, December 2016, March 2017, June 2017)
- *Agricultural Commodity Statistics* (published annually: December 2016).

#### Farm and producer surveys collection

ABARES conducts a range of business surveys each year to obtain detailed financial, physical and socioeconomic information on various industries. Most are farm surveys, but we also conduct annual surveys of selected Commonwealth fisheries and forestry industries relating to production, plantations and downstream processing.

The data collected and analysed within ABARES are used to monitor the economic performance and productivity of the agriculture, fisheries and forestry sectors and to support evidence-based policy development and program implementation within the department.

ABARES has conducted the Australian Agricultural and Grazing Industries Survey and the Australian Dairy Industry Survey annually for nearly 40 years. These surveys cover detailed financial, physical and socioeconomic information for the broadacre and dairy sectors, which account for more than two-thirds of Australian farm businesses with significant agricultural production. This year ABARES will also conduct surveys of vegetable farmers and irrigators. These surveys are jointly funded by the research and development corporations. ABARES is also likely to conduct an irrigation survey for the Murray-Darling Basin Authority in 2016–17.

Information gathered from these surveys is analysed and published in a range of publications, including the *Australian farm surveys report*, *Australian fisheries economic indicators report*, *Australia's plantation statistics*, and in performance reports for the Australian grains, beef, lamb, dairy and vegetable growing industries.

### **Farm performance and productivity analysis**

The farm surveys are designed to provide a broad range of information on the current and historical economic performance, productivity and management practices of farm business units in the rural sector. These data are fundamental to tracking and reporting on industry performance. As the only dataset that contains sufficient detail to allow analysis of complex issues such as farm debt, these data are frequently used to support policy and programme development, including the in-drought support measures announced in the Agricultural Competitiveness White Paper. The data are also used to monitor trends in agricultural productivity in Australia.

In 2016–17 ABARES will continue to monitor physical and financial farm performance based on information and data collected through the surveys of the broadacre, dairy, vegetable and irrigated agriculture sectors. Results from the farm survey program are published in a series of industry reports and are used extensively in presentations and briefings. Detailed data (by region and industry) are also available through the AgSurf database on the ABARES website (<http://www.agriculture.gov.au/abares/>)

ABARES will continue to analyse Australian agricultural productivity by monitoring productivity trends across farms, regions and industries and investigate underlying drivers. ABARES will also benchmark Australia's agricultural productivity performance against trends in other OECD countries. By informing government and industry about the determinants and sources of productivity growth, ABARES aims to improve farm profitability and industry competitiveness and support strategic decision-making.

ABARES will continue to combine its surveys data with the latest available information from the Australian Bureau of Statistics to generate 48 regional profiles and 8 state and territory profiles of the agriculture, fisheries and forestry industries across Australia each year.

ABARES is undertaking a project *Investment in Australian Farms*. This report describes recent trends in investment on Australian farms with a particular focus on the role of corporate investors. The likelihood of an increase in corporate investment is considered, as are the implications of any increase that may occur. Data are presented that describe the potential returns and the risks associated with farm investments, and some of the reasons for the ongoing dominance of family-owned farms in Australia's agricultural sector are discussed.

In 2016–17 ABARES will estimate the level of funding supporting rural research and development. Innovations developed through research and development have been a key source of productivity improvement in Australian agriculture. Rural R&D funding is obtained from a variety of sources, but it is difficult to be certain how much is being spent and how it has been trending. In 2016–17 ABARES will estimate the total amount of funding that supports Australia's rural R&D system. This will involve designing a model of funding flows, developing a measurement methodology and collecting data from

key stakeholders, including the Australian Government, State and Territory Governments, the rural R&D corporations, cooperative research centres, CSIRO and Australia's 40 universities. The results will enable stakeholders to better understand trends in investment in rural R&D in Australia.

There has been considerable discussion in the media about labour shortages in Australian agriculture. However, there is no comprehensive information on the extent of the shortage and its impact on farm performance across industries. To gain a clearer understanding, ABARES will survey vegetable, irrigated horticulture, cotton and dairy farmers to analyse current and future labour requirements. More specifically, the survey will seek to establish employment profiles of farms, labour intensity, as well as recruitment experiences and expectations. This will provide a benchmark against which stakeholders can consider changes in supply and demand of workers in the future.

Key publications in 2016–17 will include:

- *Australian farm survey results 2014–15 to 2016–17*
- *Farm performance: broadacre and dairy farms 2014–15 to 2016–17*
- Industry reports on beef, slaughter lamb, grains, dairy and vegetables
- Updated regional profiles and AgSurf data base (available through <http://www.agriculture.gov.au/abares/>)
- *Investment in Australian farms*
- Productivity trends across farms and agricultural industries by region
- *Productivity of Australia's vegetable industry*
- *Resource reallocation and its contribution to productivity growth in Australia's dairy industry*
- *Labour on Australian farms*
- *Measuring the funding of Australia's rural R&D and extension system*
- Relevant publications listed under Forestry and Fisheries sections below.

## **Water**

ABARES assists the water division of the department by providing data, analysis and advice on water market and water policy issues, particularly as they relate to the irrigated agriculture sector. ABARES also provides ongoing advice and analysis on water availability and water market conditions.

ABARES has responsibility for the annual Australian Water Markets Report. The report presents a comprehensive set of national statistics on water markets, including data on water access entitlement and water allocation trade, market performance and environmental water. This annual series began in 2007–08 under the former National Water Commission. ABARES took over responsibility for the report from the 2013–14 edition. ABARES water work is also underpinned by ABARES survey of irrigation farms within the Murray-Darling Basin. These data provide information on the financial and economic performance of irrigators in the MDB.

Key research activity in 2016–17 will include preparation of the Australian Water Markets Report for 2015–16 (the third edition of the report prepared by ABARES) and analysis of factors affecting water markets in the southern Murray-Darling basin.

Key publications in 2016–17 will include:

- *Australian Water Markets Report 2014–15*
- *Factors affecting water markets in the southern Murray-Darling Basin*
- *Australian Water Markets Report 2015–16.*



## Climate

ABARES climate related research is focused on understanding the effect of climate variability and related government policies on the agricultural sector. In 2016–17 ABARES will continue to support the department's ongoing drought response activities through the provision of timely advice and analysis. ABARES will also provide portfolio relevant analysis and advice on Australia's projected future climate to gain a better understanding of the possible longer term effects of climate change on agriculture and to provide an evidence base with which to consider future policy responses.

A key focus in 2016–17 is to investigate the sensitivity of broadacre farm productivity and income to climate variability and how this has varied across industries, regions and time. The results may inform climate change adaptation and drought policy. In addition, various ABARES and Australian Bureau of Statistics (ABS) farm data sets will be combined with climate data to better understand the complex relationships between farm outcomes (including productivity and profitability) and climate variability. This work is likely to involve close collaboration with the ABS and others.

Key publications in 2016–17 will include:

- *Climate variability and broadacre farm incomes*
- *A model of broadacre farm crop yield.*

## Expanding agricultural, fisheries and forestry exports

### Trade and market access

ABARES provides analytical research and modelling to support the Department of Agriculture and Water Resources on key global policy issues of importance to Australian agriculture and Australia's position in bilateral and multilateral trade agreement negotiations. Timely analyses are produced in the publication *Agricultural commodities*. Previous examples include analysis of the key agricultural outcomes of the Trans-Pacific Partnership Agreement and of Argentina's agricultural export policies. In 2016–17, ABARES will continue to support the department's preparations for free trade negotiations with the European Union.

ABARES will continue to examine potential developments in the export capacity of South American countries, an emerging competitor with Australia. It will also examine the potential impacts of changes to domestic agricultural policies in China, Australia's principal export market. This research will contribute to understanding the opportunities and implications for Australian agriculture, especially over the longer term.

Key publications in 2016–17 will include:

- *European agricultural policies—beef, sugar, almonds*
- *South American agriculture—dairy, wine*
- *Indonesia beef*
- *China domestic grains policy.*

## Sustaining natural resources for longer-term productive primary industries

### Fisheries

ABARES assists the department in its role to support the fishing industries and sustain the natural resources that underpin fisheries by providing fisheries related data, advice and analyses. Since 1993,

ABARES has undertaken regular, independent assessments of the performance of Commonwealth fisheries management, against economic and sustainability objectives (*Fishery Status Reports*). This work is underpinned by ABARES fisheries data and information expertise. It is also supported by regular economic surveys of key Commonwealth fisheries, to enable financial and economic performance monitoring, productivity analyses and evaluation of the impact of policy and management changes. ABARES generates and maintains long-term data series on fisheries commodities from all jurisdictions, which provide the basis for gross value of production (GVP) determination and forecasts.

In 2016–17 ABARES will release reports on recent economic surveys of the Northern Prawn Fishery, the Commonwealth Eastern Tuna and Billfish Fishery and the Commonwealth Gillnet, Hook and Trap Sector and the Commonwealth Trawl Sector of the Commonwealth Southern and Eastern Scalefish and Shark Fishery.

The department leads Australia's engagement in international and regional fisheries fora, including the Commission for the Conservation of Southern Bluefin Tuna. ABARES supports this role by leading the scientific engagement to these forums and contributing to Australia's reporting obligations. This ensures a robust, scientific basis for management decisions, the sustainability of fish stocks and maintaining access for Australian industry. In 2016–17, there will be a focus on work to support the development and implementation of harvest strategies in regional fisheries fora; the scientific processes in the Southern Indian Ocean Fisheries Agreement and South Pacific Regional Fisheries Management Organisation; and bilateral engagement with China on fisheries issues.

Key publications in 2016–17 will include:

- *Fishery Status Reports 2016*
- *Australian Fisheries and Aquaculture Statistics 2015*
- *Australian Fishery Economic Indicators Report 2015—Financial and economic performance of Northern Prawn Fishery*
- *Australian Fisheries Economic Indicators Report 2015—Financial and economic performance of the Eastern Tuna and Billfish Fishery*
- *Australian Fisheries Economic Indicators Report 2015—Financial and economic performance of the Commonwealth Trawl Sector and Gillnet Hook and Trap Sector of the Southern and Eastern Scalefish and Shark Fishery.*

## Forestry

ABARES provides data, analyses and advice on the forestry industry and associated wood products processing and manufacturing industry, to support the department's role in forestry policy, as well as current priorities such as the review of regional forest agreements. ABARES maintains national data on Australia's forests in the National Forest Inventory and National Plantation Inventory, which enable the characterisation of Australian forests and reporting on their sustainable management and use. ABARES publishes Australia's *State of the Forests Report* every five years in partnership with state and territory agencies through the Montreal Process Implementation Group and the National Forest Inventory Steering Committee. This work meets national reporting requirements on forest management and contributes to meeting international reporting requirements, in particular the FAO Global Forest Resource Assessment. In partnership with Forest and Wood Products Australia, ABARES also provides national economic data, statistics and analysis on production, consumption and trade of wood-based products (*Australian Forest and Wood Products Statistics*) and maintains long-term industry surveys (gross value of production, plantation and pulp and paper industry).

Key areas of forestry work in 2016–17 include surveys of forestry production, annual pulp and paper production, tea tree oil production and Australian plantations; analysis and advice on regional forestry agreements; estimating the gross value of production of the wood products sector and the tea tree oil industry; surveying softwood, hardwood and sandalwood plantation areas; undertaking further analysis to support implementation of the *Illegal Logging Prohibition Act 2012*; updating key National Forest Inventory datasets; data collation and analysis for Australia's *State of the Forests Report 2018*; and providing advice to the department as requested on regional forest agreements and other priority areas.

Key publications in 2016–17 will include:

- *Climatic suitability of Australia's production forests for myrtle rust*
- *Reporting Australian forest biodiversity*
- *Australia's forests at a glance 2016*
- *Australian Forest and Wood Products Statistics*
- *Australia's plantation statistics 2017 update*

### **Land use and management information**

ABARES maintains spatial analytical capability and data to provide national land use information and advice to the department and stakeholders. This information contributes to securing the sustainable and productive use of soil, water and vegetation resources, by monitoring land use and the adoption and impact of land management practices. Spatial land use and management information also contributes to the government's Stronger Biosecurity and Quarantine Initiative and the objectives of the National Landcare Programme. Other government processes such as Australian State of the Environment reporting also use ABARES spatial land information. The work is primarily undertaken by contributing to the Australian Collaborative Land Use and Management Program (ACLUMP), a consortium of Australian and state/territory government partners with the objective of developing nationally consistent land use and land management practices information. ABARES also delivers up to date information on land management practice trends through the online Monitor tool.

In 2016–17 key areas of work include land use and management information and analyses to support emerging issues, such as biosecurity risk management and emergency disease preparedness through coordination of detailed land use mapping of horticulture and intensive animal production; maintaining national collaboration on land use and management information through our role as the ACLUMP secretariat; publishing summaries of change in land use and the location of Australia's agricultural industries; releasing a new version of the Multi-Criteria Analysis Shell for Spatial Decision Support tool; updating the Catchment Scale Land Use of Australia map; and collaborating with the Australian Bureau of Statistics on future delivery of national scale land use information.

Key publications in 2016–17 will include:

- *Australia's Agricultural Industry 2016 map*
- *Change in Australia's Land Use*
- *Multi-Criteria Analysis Shell for Spatial Decision Support Version 3.2*
- *Catchment Scale Land Use of Australia map.*

## **Managing biosecurity and imported food risk**

### **Biosecurity research and analysis**

ABARES undertakes economic and scientific research and analysis to support the department's biosecurity and export programmes and the implementation of the biosecurity reform agenda across all

levels of activity, from operational activities to high level policy development. ABARES biosecurity research and analysis supports the department's evidence and risk based approach to resource allocation across the biosecurity continuum, using a range of methods, including risk assessments, economic modelling, social science analysis, spatial modelling, ecological/epidemiological modelling, mathematics and statistics. Integrated economic, scientific and social science research and analysis is employed when required. ABARES provides research and analysis support to Sectoral Committees (Invasive Plant and Animal Committee and Marine Pest Sectoral Committee), emergency response consultative committees and pest and weed technical advisory groups.

In 2016–17 ABARES will continue to provide research, analysis and advice about the risks and impacts of on-shore and off-shore biosecurity threats to Australia's agricultural industries, environment and economy and the approaches to manage these risks. ABARES will support the department to build a stronger biosecurity system as part of the commitments made in the Agricultural Competitiveness White Paper. This will include developing methods for designing more efficient surveillance systems; estimating economic impacts of biosecurity policies and proposed reforms; analysing farm-level impacts of government programs; improving techniques for modelling pest and disease spread; modelling border inspection processes; continued development of processes to assist with the prioritisation of exotic invasive species of concern. ABARES will collaborate with the Centre of Excellence for Biosecurity Risk Analysis to better understand Australia's biosecurity system and identify where improvements can be made. This will involve assessing the health of the biosecurity system and estimating its value, from which the future performance of the system can be compared.

ABARES invasive species research and analysis continues to contribute to Australia's preparedness for the incursion of exotic species and their potential impacts on our economy, society and environment. In 2016–17, the bureau will establish an invasive species inventory to enable a clear understanding of the overall invasive species situation and the resulting threats to Australia's agriculture production systems and environment.

Research to strengthen Australia's marine pest biosecurity arrangements will investigate behaviours of vessel owners/operators of domestic and international vessels. This will include investigating movement patterns, the current standard of biofouling management activities and the level of awareness of biofouling marine pests. A project will also assess the non-market impacts of marine pests.

Key publications in 2016–17 will include:

- *Health and value of Australia's Biosecurity System*
- *Estimated impact of maximum spread of potential biosecurity incursions in Australia: economic and scientific assessment*
- *Potential economic impacts of exotic wheat stem rust in Australia*
- *Economics of meeting phytosanitary requirements in exporting horticulture produce: pest area freedom vs product disinfestation*
- *Assessing the threat of invasive species exotic to Australia*
- *Invasive species inventory*
- *Evaluating the drivers of biological control in Australia*
- *A national survey of agricultural landholders on common established pest animals and weeds*
- *Potential economic impact of Xylella fastidiosa in Australia*
- *A framework for allocating limited resources to plant pest surveillance*
- *Improving the risk-return outcomes from border inspections*
- *Assessing the non-market impacts of marine pests*
- *Sampling strategies to estimate biofouling risk*

- *Implications of increasing free-range poultry production for avian influenza outbreaks.*

## Best practice regulator

### Regulatory reform and performance measurement

The government's regulatory reform agenda focuses on changes that increase innovation and productivity and that increase efforts to engage the states and territories in reducing the burden of duplicative and unnecessary regulation across multiple jurisdictions. This approach continues to drive the 'cutting red tape' approach that underpinned the original deregulation agenda introduced in October 2013 but frames it within a broader economic narrative. The department's regulatory reform unit is located in ABARES and has responsibility for ensuring that the Department of Agriculture and Water Resources implements the government's regulatory reform agenda. Priorities in 2016–17 include assisting the department in providing input into two Productivity Commission inquiries: Regulation of Agriculture; and Marine Fisheries and Aquaculture. There will also be a focus on further development of regulatory policy capability across the department, including assisting staff with regulatory impact assessment and the calculation of regulatory burden in accordance with the government's agreed framework and methodology.

ABARES is responsible for implementing the regulator performance framework across the department, with the aim of improving the administration of regulation within the department. In 2016–17, ABARES will undertake the department's first annual assessment of regulator performance against six key performance indicators and will continue to work closely with other divisions in the department to improve performance metrics.

Key publications for 2016–17 will include:

- *Regulator Performance Framework 2016–17: performance measures and frameworks*
- *Regulator Performance Framework 2015–16: self-assessment.*

## Efficient and capable organisation

### Information Management and Public Data taskforce

On 7 December 2015 the Australian Government released its policy on public data—centred on the notion that public sector data are a valuable, but underutilised national resource. Championed by the Prime Minister, the public data agenda sets an ambitious and valuable agenda for Australian Government agencies on public data.

The department has recognised that implementing the public data agenda will require changes to the way information and data are managed across the department. To support this reform, the Information Management and Public Data Taskforce was established within ABARES in February 2016.

During 2016–17 the taskforce will progress work to position the department to support information management and public data access through the development of a comprehensive framework. This framework will provide the detail necessary to collect, use, share and publish information and data; support more open access to and use of data and information within the department; and provide guidance on issues such as data and information quality and governance, legislative responsibilities and requirements, information and communication technology barriers and performance metrics.

The taskforce in ABARES will develop a catalogue of the department's data assets, with a view to making more of the department's non-sensitive data available publically. An assessment of the department's

public data ICT capability and the development of a roadmap to progress the implementation of reform will support and guide the progress of the public data agenda within the department over the coming years. Engagement with stakeholders and communication with staff will be undertaken on an ongoing basis to inform the development of the framework and to communicate the importance of the public data agenda.

The taskforce will also work closely with the sponsors of departmental projects that have a strong data and information management focus, which are complementary to the taskforce's activities. Projects include the ABARES Agricultural Intelligence Transformation Project, the Biosecurity Integrated Information System, developing advanced analytics capability, and the enterprise surveillance system project. These projects and the work of the taskforce give the department an opportunity to demonstrate how it is taking the public data agenda into account during the design phases.

### **Data management and Intelligence transformation**

ABARES maintains several datasets that are Essential Statistical Assets for Australia, in the areas of land statistics, water supply and use, and agriculture, fisheries and forestry statistics. ABARES is collaborating with the department's Information Services Division to take advantage of the department's investment in enterprise capabilities, such as the enterprise data warehouse, to make information management, access and dissemination more effective. In the long term, this will facilitate more effective sharing of information within the department and with external stakeholders through open data and intelligence services. The agricultural intelligence transformation project will gradually roll out across all of ABARES business activities over the next few years.

The National Agricultural Statistics Review (2014) undertaken by ABARES and the Australian Bureau of Statistics, identified a set of actions and initiatives for improving the agricultural statistical system. These include better coordinating government statistical collection activities; encouraging the exploration of alternative data sources; making better use of electronic forms; improving the integration of existing statistical collections; improving the value for respondents of participation in survey programs through partnerships with industry and returning results to participants in a usable and useful format. The bureau will continue to collaborate with the ABS to implement the actions and initiative from the review.

In 2016–17 ABARES will focus on finalising transformation of the ABARES Farm Survey System in line with the recommendations of the National Agricultural Statistics Review. The data collected from farm surveys provide a unique and comprehensive picture of the performance of much of the agriculture sector. The consistent collection of data since 1977 provides a rich evidence base that underpins policy development across the department. Transformation of the farm survey system will improve the collection, storage and analysis of farm survey data, simplify ongoing maintenance of the system and data, improve our ability to collaborate with the ABS, and facilitate improved access for departmental staff and external stakeholders over time to aggregated data and analyses.

### **Non-financial performance reporting**

As part of the department's compliance with the *Public Governance, Performance and Accountability Act 2013*, ABARES plays a significant role in overseeing the development of systems and processes to improve non-financial performance reporting across the department. This includes measuring and reporting against key performance indicators published in the Portfolio Budget Statements and the Corporate Plan. ABARES will continue to refine and improve the department's performance framework for future years.

## Engagement

### Communication Strategy implementation

ABARES is revitalising its approach to communication through the 2016 Communication Strategy.

The overarching aim of the strategy is for ABARES to deliver integrated, contemporary and effective communication through engaging its staff and revitalising its services and products. The strategy provides a framework for achieving these objectives and a practical implementation plan that outlines the way forward.

The implementation plan will refresh ABARES external communication to provide information in more user-friendly, engaging and contemporary formats, including website pages, publications, data releases and use of social media to improve awareness of ABARES data and services by stakeholders.

### Outlook conferences

ABARES will host its national Outlook conference in Canberra on 7–8 March 2017. The conference provides an annual forum for discussion of key domestic and global issues affecting Australia's agriculture, fisheries and forestry industries.

Outlook 2017 will focus on innovation in the agriculture sector. The conference aims to influence debate on significant issues by providing a sound, objective, evidence base through dissemination of ABARES commodity forecasts and relevant research and analysis. It is supported by sponsorship from the public and private sectors and features leading national and international speakers from government and the private sector who address an audience of more than 700 delegates.

To reach a broader audience speakers' presentations are published after the conference on the ABARES website [[www.agriculture.gov.au/abares/outlook](http://www.agriculture.gov.au/abares/outlook)]. In addition all Outlook conference sessions are filmed and made available one month later on the [ABARES YouTube channel](#).

ABARES follows the national Outlook conference with a series of Regional Outlook conferences in each state and the Northern Territory to present its commodity forecasts and latest research, with information tailored to the region.

The Regional Outlook conferences engage regional Australians in discussions of issues, opportunities and trends affecting Australia's agriculture, fisheries and forestry industries, including natural resources, climate and trade. In developing the conference programs, ABARES collaborates with state and territory departments of agriculture, regional development agencies, major banks and organisations such as ABC Rural, Nuffield Australia and the Bureau of Meteorology.

The Outlook conference series attracts strong coverage from regional and metropolitan media throughout the year.

### Science and Innovation Awards

ABARES coordinates the annual Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry, which provide grants for young Australians 18–35 years to undertake innovative projects that will contribute to the success and sustainability of Australia's agriculture, fisheries and forestry industries, including food and sustainable natural resource management.

The Awards aim to recognise young Australians' research and innovation relevant to rural industries and provide opportunities for Award recipients to enhance their career, gain valuable research skills and experience and create professional networks across the industry.

Applications for the 2017 awards close in late 2016 and the winners will be announced at ABARES national Outlook 2017 conference.



## 3 Our organisation

### Structure and people

ABARES is structured into five branches:

- Agricultural Commodities and Trade
- Agricultural Productivity and Farm Analysis
- Fisheries, Forestry and Quantitative Sciences
- Portfolio Strategies and Biosecurity
- Information Management (Public Data)

Under the leadership of the Executive Director, the ABARES team is managed by five assistant secretaries. The assistant secretaries work with professional staff who have skills, qualifications and expertise across a range of economic, science, social science and policy disciplines. These include skills in scientific and economic analysis, economic modelling, data collection and statistical analysis, risk assessment and management, geographical mapping (particularly in areas related to natural resource management), commodity and market analysis, integrated economic and scientific analysis and policy development.

### Training and development

ABARES provides a work environment that attracts, retains and develops professionally qualified staff.

We support quality service delivery through a commitment to training and development embodied in the ABARES professional plan that includes:

- providing staff with opportunities for lifelong learning through time and financial support for advanced university and related study
- supporting attendance and participation at government, industry, professional discipline-related conferences, seminars and forums
- committing to an annual graduate recruitment and development programme that develops the skills and capability of our more junior staff.

### Research engagement and support

ABARES is committed to being a source of easily accessible quality public information, with its research shaping the public debate around issues affecting the agriculture, fisheries and forestry industries. In addition to making much of its research and data publicly accessible through its website, the national Outlook conference and annual series of Regional Outlook conferences provide an opportunity for ABARES and department staff to engage with key stakeholders.

ABARES will also continue to support the department in 2016–17 through the provision of library services.

A small team within ABARES provides project management support to research leaders, overseeing the development of contracts with external clients, procurement of external consultants when required, and ensuring compliance with financial management policies and procedures. In 2016–17 this team will focus on continued improvement of project monitoring and reporting, a review of library services and coordination of the bureau's entry level professional programme.

## **Stakeholders, collaborators and clients**

ABARES stakeholders include government, industry and the general public. We work with all parts of the Department of Agriculture and Water Resources and its portfolio agencies, including the Australian Fisheries Management Authority, the Australian Pesticides and Veterinary Medicines Authority, the Australian Grape and Wine Authority, the Murray-Darling Basin Authority and research and development corporations such as the Fisheries Research and Development Corporation, the Grains Research and Development Corporation and the Rural Industries Research and Development Corporation.

Many elements of ABARES work are undertaken in collaboration with other researchers. We work with other Commonwealth departments and agencies, including the Department of the Environment, the Australian Bureau of Statistics and CSIRO. We collaborate with university researchers, including through the Centre of Excellence for Biosecurity Risk Analysis.

ABARES coordinates and partners with state and territory government agencies on issues affecting the agriculture, fisheries and forestry industries. For example, ABARES coordinates development of consistent land-use, land-cover, groundcover and land management practice data and information products through the Australian Collaborative Land Use and Management Programme. ABARES is also a partner in the Australian Collaborative Land Evaluation Programme that provides a national focus for collection, collation, management, dissemination and analysis of nationally consistent, integrated data and information on soil and land resources.

In 2016–17 ABARES will continue to work collaboratively with international experts to compare productivity growth across countries, improve productivity metrics and identify policies that promote agricultural productivity growth. ABARES will remain an active contributor to the OECD work program on agricultural productivity and will continue to work with the United States Department of Agriculture on international productivity comparisons.

ABARES will continue to monitor its performance through a client satisfaction survey in 2016–17 that will inform areas of continuous improvement in the provision of research, analysis and advice.

## **Information and data tools**

ABARES extensive data holdings on agriculture, fisheries and forestry industries are a vital resource for the department, the Government, portfolio industries and the Australian public. These data holdings and the associated intelligence, tools and analyses provide valuable input to many departmental processes, such as developing emergency responses to biosecurity issues, furthering trade discussions and agreements and developing approaches to transforming agricultural productivity.

Some online sites and tools ABARES has developed or maintains for use are described in Table 1.

**Table 1: Online sites and tools maintained by ABARES**

<b>Tool or site</b>	<b>Description</b>
The Monitor	The Monitor is an online tool maintained to provide up-to-date information and analyses on climate, water, natural resources, biophysical and economic conditions to support the assessment of impacts of climate and weather events, farm production and performance and their spatial distribution. The Monitor also includes information on food price trends.
Multi-Criteria Analysis Shell for Spatial Decision Support	A user-friendly tool to help decision makers analyse and compare complex spatial information without the need for specialised training or technical support. ABARES maintains collaboration with the development partners and capacity for training and support.
Land Use and Management Information for Australia	Provides nationally consistent land use, land management, land and ground cover information. The site has been developed as part of the Australian Collaborative Land Use and Management Program (ACLUMP), a consortium of Australian and State Government partners that promotes the development of consistent land information.
Forests Australia	Contains up-to-date information on Australia’s forests—from links to forest management organisations and institutions to the latest forest-related publications, maps and tools. It represents collaboration between many Australian forest-related organisations, including all Australian state and territory governments.
AgSurf	Contains a large selection of data collected from 1989–90 to 2014–15 through the annual Australian agricultural and grazing industries survey and Australian dairy industry survey that can be custom reported by industry, state, region or agricultural zone.