



Department of Agriculture  
Government of **Western Australia**



Department of Agriculture

# Annual Report



**2000-2001**

The Honourable Kim Chance, MLC  
Minister for Agriculture; Forestry and Fisheries  
Parliament House  
PERTH WA 6000

In accordance with Section 62 of the *Financial Administration and Audit Act 1985*, I hereby submit for your information and presentation to Parliament the Annual Report of the Department of Agriculture for the year ended 30 June 2001.

The report has been prepared in accordance with the provisions of *the Financial Administration and Audit Act 1985*.

This report summarises the department's outcomes and outputs; presents an overview of achievements; and includes key performance measures and financial statements for the year.

G. A. Robertson  
DIRECTOR GENERAL  
DEPARTMENT OF AGRICULTURE

**DEPARTMENT OF AGRICULTURE  
ANNUAL REPORT 2000/01**

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## ISSUES OF SIGNIFICANCE IN 2000/2001

The agricultural sector of Western Australia faced a series of challenges during 2000/01 and the Department of Agriculture was able to assist the sector to effectively deal with many of these challenges.

In late 2000, a major outbreak of Australian Plague Locusts occurred across a large area of the wheatbelt. The Department monitored the situation and then undertook the largest locust control program in the history of Western Australia. The program involved 330 Department of Agriculture staff and 700 volunteer landholders in its planning and execution. Treatments were carried out on 475,000 ha on 599 properties within 32 shires. The integrated efforts of the department, agribusiness, industry organisations, communities and the media contributed to a successful locust program.

A major outbreak of a virulent strain of Foot and Mouth Disease (FMD) in the United Kingdom and a number of other European countries during 2000/01 could have devastated our livestock and animal products industries had it reached Western Australia. Of particular concern was the source of the strain came from Asia, which is considerably closer than the UK and Europe. The Department of Agriculture in cooperation with the Federal Government, initiated a quick response to strengthen and enforce quarantine measures to reduce the chances of this occurring. Importation of risk items from FMD countries was suspended and additional staff allocated to airports, seaports, mail and cargo clearance.

Poor growing conditions in parts of the State over the 2000/01 season resulted in farmers in a number of shires were experiencing financial difficulties. The Department prepared an application to have these areas declared eligible for receiving assistance under the Federal Government's Exceptional Circumstances scheme to assist rural producers. In addition, the Department prepared information for the Western Australian Minister of Agriculture to negotiate successfully with other State and Federal governments to make the scheme fairer.

The Department continued a strong focus on breeding new crop varieties. The opening of the Department's \$1.2 million Doubled Haploid Laboratories and the re-fitting of its Agricultural Biotechnology Services Laboratory (SABL), will enhance the Department's capability to equip Western Australian farmers with new and improved breeds of crops.

Deregulation of the dairy industry occurred on 1 July 2000. The Department of Agriculture assisted local milk processors to identify and exploit new market opportunities as well as provided technical and statistical information to potential investors in the industry. The Department, together with the Department of Commerce and Trade, oversaw implementation of the State Government's Dairy Processing Incentive Scheme, which has provided more than \$11 million in support to permit local businesses to expand or establish milk processing facilities.

The Department, under its Sustainable Rural Development program, continued to plan for, develop and implement parts of the State's Salinity Strategy including rapid catchment appraisal, catchment water management (including surface water management and drainage planning), high water use farming systems, managing Saltlands as well as its successful Rural Towns Program and Remnant Vegetation Protection Scheme.

## AGENCY PROFILE

### **Role and responsibilities**

The Department of Agriculture assists the State's agriculture, food and fibre industries to be sustainable and profitable, with a clear focus on export-led growth.

The Department of Agriculture aims to enhance the international competitiveness of agricultural industries by working with them to meet the increasingly demanding standards for safety and quality of food and fibre products.

As a leader in research, development and extension, the Department of Agriculture plays an integral role in sustainable agricultural industry development for the benefit of all Western Australia.

The agency's core business is:

- generation, integration and application of knowledge and technology;
- provision of policy development and advice to government;
- management of statutory obligations which meet the needs of industry, community and customers;
- provision of research, development and information services to agriculture, food and fibre industries and the community.

The Department of Agriculture's major strength lies in the capacity of its skilled and dedicated workforce to deliver a diverse range of high quality services across the State.

Staff advise farmers and landholders on production systems, farm management and sustainability issues; undertake basic and applied scientific and market research; assist industries to develop and grow; protect the State from incursions of pests and diseases; provide advice to government on local, national and international issues affecting agriculture; and administer numerous acts, statutes and regulations on behalf of the State.

### **Vision**

Excellence in leadership and innovation for internationally competitive agriculture, food and fibre industries.

### **Mission**

The Department of Agriculture will accelerate the success of agriculture, food and fibre industries through innovations in production, processing, marketing and stewardship of our natural resources.

### **Key Objectives**

The Department of Agriculture will work in partnership with industries and communities to increase the value of sustainable agriculture, food and fibre exports from Western Australia. This will be achieved through:

- increased international competitiveness of the agriculture, food and fibre industries;
- sustainable management of natural resources affected by agriculture;
- minimised impact of pests and diseases on productivity and market access; and
- the Department of Agriculture achieving organisational and service excellence.

### **Key Strategies**

To achieve our mission, the Department of Agriculture will adopt the following key strategies across the agency:

- establish a clear market focus through partnerships and alliances with the agriculture, food and fibre industries;
- measure and continually improve service delivery and outcomes for our customers;
- target investment to activities which will accelerate industry success;
- maintain independence as a research, development and extension organisation by an on-going commitment to recruiting, developing and retaining motivated, high quality staff;
- actively pursue funding from government and industry partners to achieve our outcomes;
- optimise revenue through appropriate fee-for-service and cost recovery options, efficient and effective management and exploitation of intellectual property; and
- stimulate the capacity of the private sector to deliver services.

### **Values**

Management and staff are committed to the following core values:

- Strive for excellence in organisational management, services and products and embrace a culture of continuous improvement and customer service.
- Empower people to exercise leadership and judgment, and use initiative and creativity in seeking solutions with stakeholders.
- Look forward and respond positively to change.
- Deal honestly, fairly and equitably with all people and issues.
- Display competency in those fields of endeavour in which we engage.
- Behave ethically and with integrity in all aspects of our work.
- Be accountable to our customers and the people of Western Australia.

### **Customer focus**

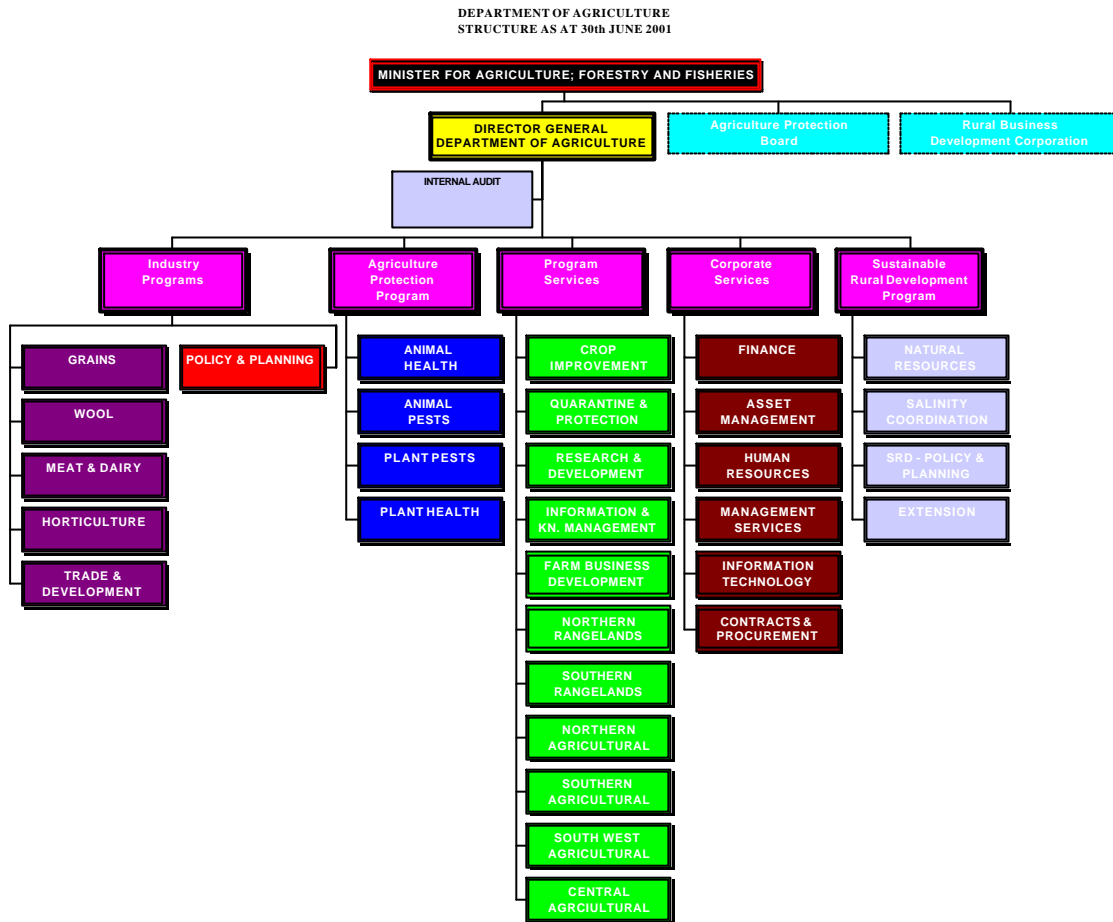
The Department of Agriculture's main customers are in the agricultural sector. As well as primary producers they include rural communities, agriculture, food and fibre businesses, rural and producer organisations, research institutions, service providers and agricultural consultants. The agency also provides the government with advice on agricultural matters and produces public information ranging from specific agricultural issues to home garden advice.

The department's work also benefits the wider community through improved sustainability of land and water systems, and protection against incursions and outbreaks of serious environmental and human health threats.

For more than 100 years Western Australia's agricultural agencies have earned a national and international reputation for professionalism, objectivity and scientific excellence. This reputation is built on a commitment to quality and is reflected in the modern international agricultural practices used in Western Australia.

More emphasis is being placed on recognising the needs of customers, increasing the awareness of employees to their customer service obligations and ensuring the delivery of quality customer services.

# AGENCY STRUCTURE



## Agency Structure

The Department of Agriculture operates under a modified purchaser/provider model to maximise its efficiency and effectiveness of services. Industry Programs, the Agriculture Protection Program and the Sustainable Rural Development Program are on the purchasing side of operations. These areas make strategic decisions and develop relevant strategies for the core business of the agency. The remainder of the agency provides the services necessary to realise these strategies.

The Rural Business Development Corporation and Agriculture Protection Board are statutory authorities.

## DIRECTOR GENERAL'S OVERVIEW

2000-2001 was a particularly difficult year for the agricultural sector. Many areas of Western Australia suffered their lowest levels of rainfall on record. Coupled with this was the impact of frosts and locusts. Yet despite these tough times, performance at a State level remained stable.

The expected Gross Value of Production (GVP) in the current financial year is \$4,664 million (16% of Australia) which is a slight increase on the 1999/00 figure of \$4,595 million. The value of the State's agricultural exports is expected to be \$3,802 million, which represents 15% of the state's total exports and 16% of national agricultural exports.

Some significant issues and trends emerging in the international market place will impact on the way we do business in the future. In particular, increased competitiveness as a result of strong export programs by many countries and reduced trade barriers will require strong supply chain linkages to be forged with key customers if we are to retain market share.

Domestic markets are also being progressively challenged by international competition under expanded trade arrangements under the World Trade Organisation. There is an increasing need to scientifically justify both import quarantine barriers and access to international customer markets. Developing rigorous survey data to demonstrate that Western Australian products are free from pests, diseases and other contaminants of concern to the importing country will become increasingly important.

Further significant market place issues include the rapid adoption of information technology and advances in transport, storage and distribution technology. This has led to the agricultural trade sector becoming increasingly globalised. As a result there is less emphasis on where production is located and increased emphasis on production meeting a specified quality standard.

Some of the main issues arising during the year for the agency's industry and market development, protection and sustainable rural development programs include:

During the 2000/01 season, Western Australia produced 1.5 million tonnes of pulses and oilseeds valued at \$360 million. This is significantly lower than in recent years as a result of poor seasonal conditions throughout the growing season, which impacted on the area sown and grain yields. Canola production was 65% down on last year and lupin production was approximately 35% lower. Greater retention of grain, especially lupins, for livestock industries was also evident.

Despite the poor results, the Department of Agriculture has been making a significant contribution to the rapidly expanding pulses and oilseeds industry through its commitment to innovative research and development of sustainable production systems and key market opportunities.

The reduction of the wool stockpile to an insignificant level and higher wool prices over the last 12 months has raised the profitability and made wool production more appealing. However the recent moves to increase sheep numbers across the agricultural area is creating a bottleneck on the access to livestock. The poor seasons of last year and this one are severely limiting the ability of wool fibre producers to increase stock numbers in response to improved profitability.

During the past year, the Western Market Indicator opened at 584 cents/kg clean and rose to finish the year at 650 cents/kg clean. Wool comprised about 10 % of the State's agricultural exports.

Western Australia has maintained its position as the country's second largest wool producing State, contributing about 17 % of the national clip from 26 million sheep (WA sheep population estimates).

Exports of meat and livestock increased strongly in 2000/01 reaching \$734 million, compared to \$572 million in 1999/00. Major products include live sheep, cattle and goats as well as meat from sheep, cattle, goats, pigs and poultry. About 9,000 producers throughout the State are involved in the meat industry.



Meat and livestock contributes around 17 per cent of the State's Gross Value of Agricultural Production and 16 per cent of the value of agricultural exports. Thus the industry makes a substantial contribution to the performance of the agricultural sector.

Western Australia's horticultural industry is one of the fastest growing primary production sectors. Gross value of production in 2000/01 was \$511 million dollars. Exports continued to grow and are now worth \$166 million, an 6% increase over the previous year. Major markets include Singapore, Malaysia, UK and Europe, with expanding markets in Japan and Taiwan.

The Western Australian dairy industry comprises 4% of the total Australian dairy industry. Milk supply fell by 6% in 2000/01 to 385 million litres following the falling trend in the rest of Australia. Dairy exports increased by about 24% (\$11.5M) to almost \$60 million in the 12 months to June 2001, compared with 2000 at \$48.5 million. Exports of milk, skim milk powder and butter remained unchanged but both ice cream and cheese exports have increased. Cheese exports more than doubled to \$12.2 million.

There is uncertainty in the dairy industry as it adapts to deregulation. However, the long-term outlook for the industry remains excellent. It is well placed to supply the predicted increasing demand in world markets for dairy products. Western Australian dairy farms have the significant advantage of the ability to produce milk from pasture, a low cost feed, and many are as efficient as any in the world. If manufacturing capacity can be developed, the industry will be able to expand and compete successfully on world markets.

The 2001 Crop Updates were a resounding success. Agribusiness Crop Updates continued to strengthen with 440 people attending, and 11 regional grower Crop Updates were held throughout the state capturing an audience of 1094.

A special taskforce was established to assist farmers and rural communities cope with an exceptionally poor season experienced in many agricultural areas. This included publication of a special handbook called 'Dealing with a Dry Season' which was delivered to all farmers in affected areas, and two editions of a revised 'Farm Family Support Directory'. Special editions of Agmemos were produced, material provided on the department website and a Seasonal Solutions Hotline provided to link to sources of specific information in technical, financial and social areas. The department arranged for Farm Family Business Reviews to be undertaken at special rates in co-operation with farm consultants and accountants.

The severity of the major outbreak in the State of Australian Plague Locust in the 2000-2001 growing season was substantially diminished due to early intervention by the agency which acted in cooperation with landholders, industry organisations and the public in the affected areas. The past year also saw effective responses and surveillance of major threats to the fruit industry. During this time eradication of codling moth from the pome industry was confirmed.

Department of Agriculture's extensive Insect Database and Collection won a National Quarantine Award. This recognised its great value as an educative aid to identify insects that may threaten Western Australia's agriculture and environment. With over 100,000 specimens and details, the database is believed to be the largest of its kind in the world. The database allows easier and quicker access to important agriculture protection information.

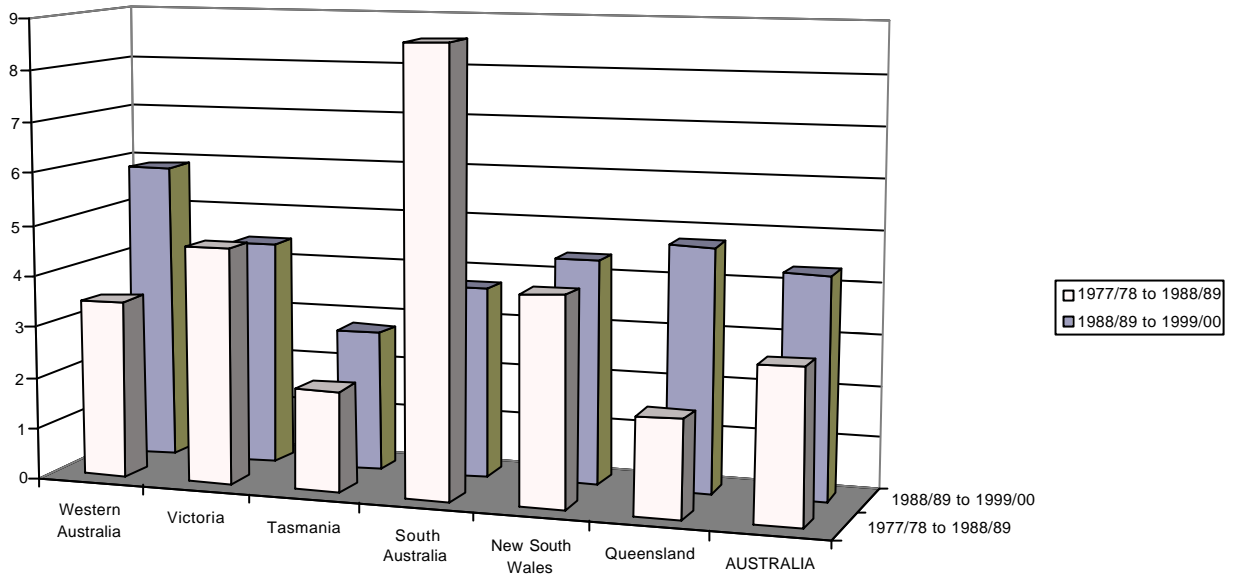
2000/01 was a difficult year for the agricultural sector, however the achievements of the Department have helped minimise the difficulties. The progress made in the agricultural food and fibre industries during 2000/2001 is due in no small way to the efforts and commitments of our staff. I sincerely thank them for their contributions.

GA Robertson

DIRECTOR GENERAL  
DEPARTMENT OF AGRICULTURE

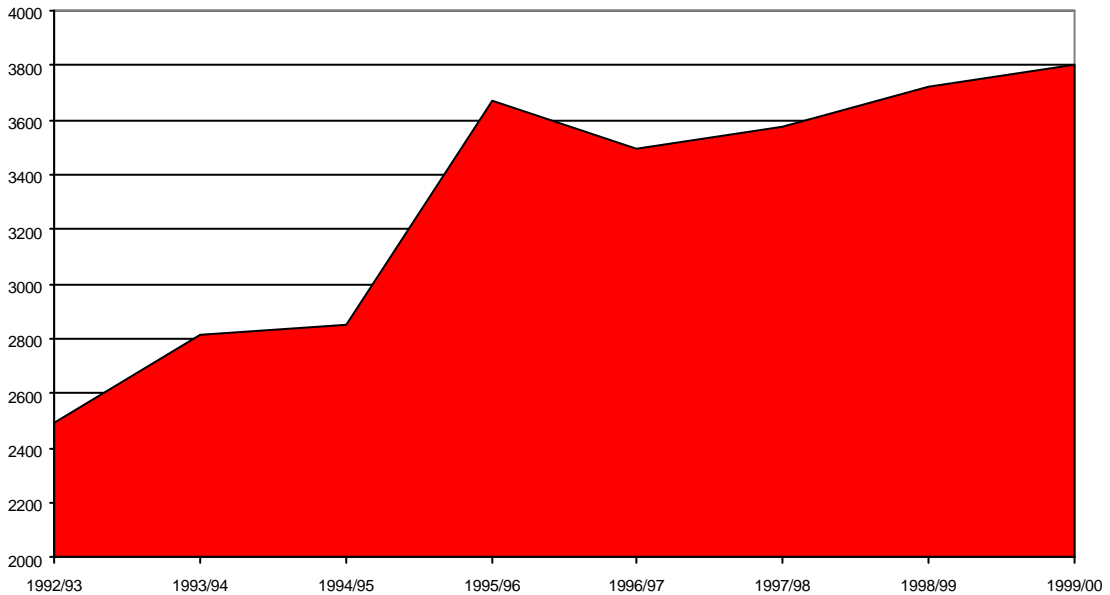
# PERFORMANCE SUMMARY

## TOTAL FACTOR PRODUCTIVITY ALL STATES



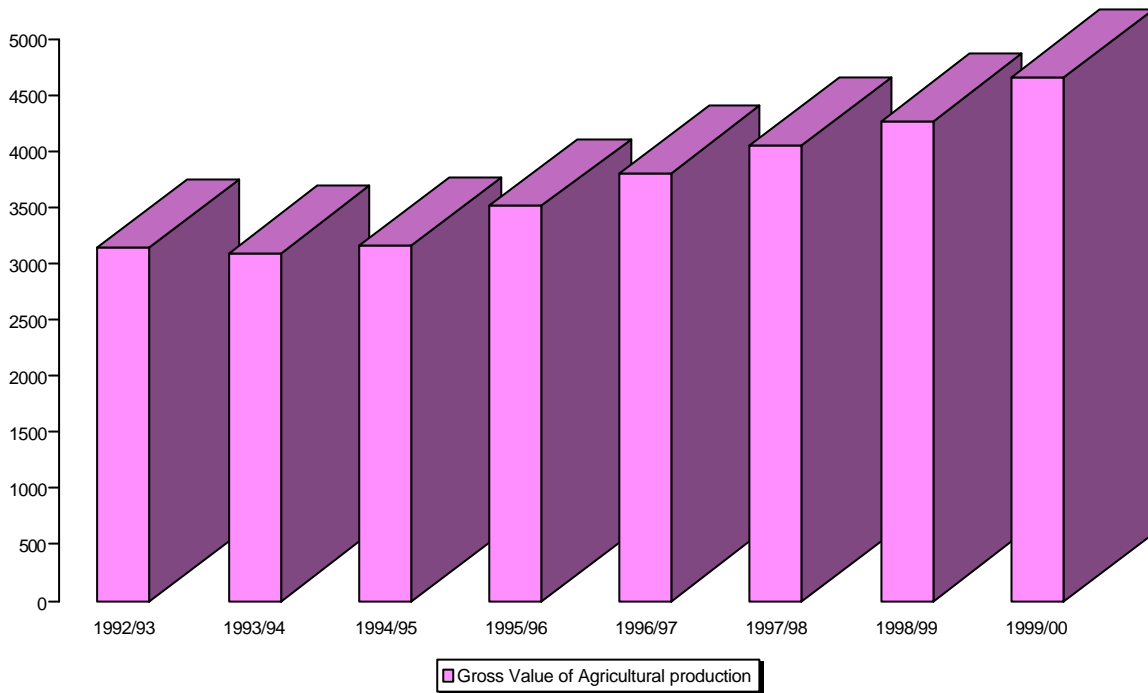
Western Australia has led the nation in total factor productivity for the past decade.

## VALUE OF AGRICULTURAL EXPORTS FROM WA



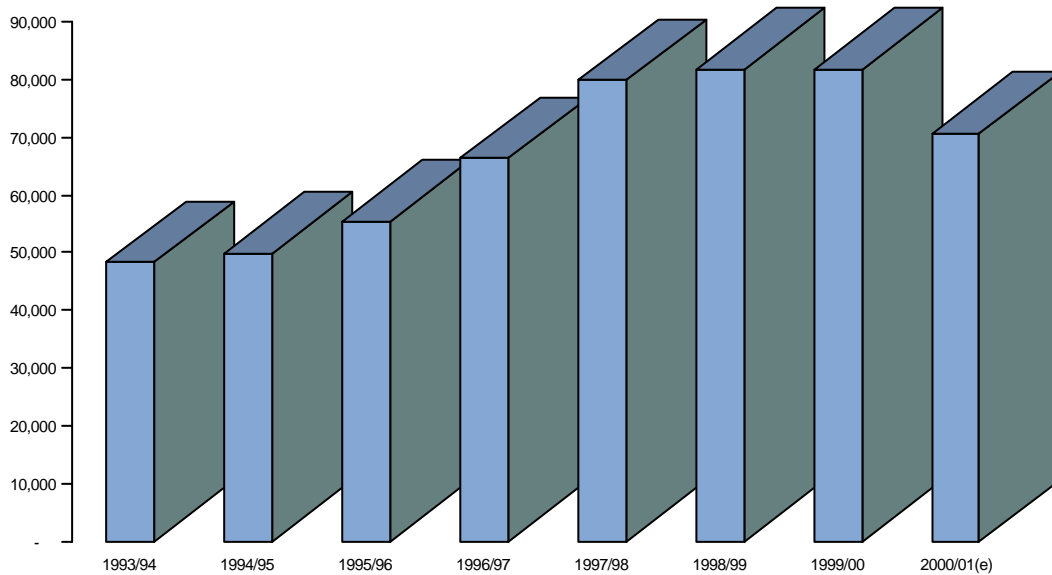
Despite a poor season in 2000 due to adverse seasonal conditions and locusts, Western Australian agricultural exports continue to be strong.

Gross Value of Agricultural production



Production continues to rise, primarily related to the buoyancy of the grains, the meat industry and the efforts of the Department of Agriculture.

Net Farm Income (5 yr average)



Despite the effects of poor seasonal conditions and the impact of locusts, average net farm incomes remain reasonably strong.

## REPORT ON OPERATIONS

### OUTCOMES, OUTPUTS AND PERFORMANCE INFORMATION

The department is working towards the achievement of three primary Government outcomes:

- Increased market competitiveness and profitability of agri-industry.
- Improved ecological sustainable development of agri-industry.
- Protection of the productive resource base.

Five key outputs are the means by which the agency contributes to these outcomes:

- 1 Industry and Market Development (primarily relates to Outcome I)*  
This output involves the generation, integration and application of knowledge that increases the international competitiveness and market opportunities for State agriculture industries.
- 2 Sustainable Rural Development (primarily relates to Outcome II)*  
This output involves the generation, integration and application of knowledge, which, with appropriate policy and regulation, promotes the ecological sustainability of agriculture and the economic and social well being of rural communities.
- 3 Agriculture Protection (primarily relates to Outcome III)*  
This output involves the generation, integration and application of knowledge which, with appropriate policy and regulation, ensures the natural base of agriculture is protected and that safety and quality standards are upheld.
- 4 Services provided to Agriculture Protection Board (primarily relates to Outcome III)*  
This output has been developed to recognise that the agency is contracted by the Protection Board to provide services particularly related to exclusion, eradication and control of specified declared plants and animals.
- 5 Services provided to Rural Business Development Corporation of Western Australia (primarily relates to Outcome II)*  
As per the previous output, the agency is contracted by the Rural Business Development Corporation to assist farmers to enhance their skills, leading to improved sustainable long-term profitability and better capacity to deal with risks inherent in farming.

The business of the agency is structured against outputs 1, 2 and 3, namely:  
Industry Programs (representing Industry and Market Development - output 1.)  
Sustainable Rural Development Program (outputs 2 and 5.)  
Agriculture Protection Program (representing Agriculture Protection – outputs 3 and 4.)

The Department of Agriculture employs project management to deliver outputs from these three agency level programs.

The contractual nature of the Program/Project arrangements provides increased accountability in the application of public funds and allows effective decision-making and resource allocation processes, which reflect government priorities.

The following report on operations has placed an emphasis on key achievements for the 2000/01 financial year. A particular focus has been to report on those key initiatives outlined in the 2000/01 budget statements.

## ***Output 1. Industry and Market Development***

The industry and market development output is directly aligned to the department's industry programs, namely:

- **CEREALS**
- **PULSES AND OILSEEDS**
- **WOOL**
- **MEAT AND OTHER ANIMAL PRODUCTS**
- **HORTICULTURE**
- **DAIRY AND APICULTURE**
- **NEW INDUSTRIES**
- **TRADE AND DEVELOPMENT**

These programs apply a market focus in identifying opportunities for new products, processes and industries, and enhancing the competitiveness and profitability of existing industries.

There is a major commitment to improving market knowledge, which is used to develop new trade opportunities and attract investment in Western Australian agriculture, food and fibre industries.

Much of the project activity in the industry and market development programs is aimed at improving the productivity and profitability of industry through the development of improved production systems, genetic improvement and facilitating rapid access to new technology and information.

There is also a commitment to developing appropriate quality assurance systems for agriculture, food and fibre products to ensure safe and sustainable production and to enhance our market competitiveness.

## ***Output 1. Industry and Market Development cont.***

### **CEREALS**

The Cereals Industry in Western Australia contributes:

54% of the states agricultural exports

9% of the value of the total Western Australian exports

37% of Australia's wheat production

7% of world wheat trade

1% of world wheat production

25% of Australia's barley production

26% of Australia's oat production

31% of Australia's oaten hay production

The Gross Value of Agricultural Production (GVAP) of Cereals Industry in 2000/01 was \$1.85 billion and the total grains industry was \$2.47 billion.

### **Objectives**

- To increase industry returns by focusing the WA industry on producing cereal products that meet changing market needs;
- To increase the profitability of the cereals industry through gains in productivity, and consistent achievement of quality targets;
- To improve the environmental sustainability of the cereals industry as part of the farming system;
- To increase the level of industry ownership and investment in cereals research, development and extension; and
- Maximise and demonstrate the benefits of investment in the Cereals Program.

### **Major Achievements**

#### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative italics)*

- *Develop an industry plan for triticale production and marketing as part of the Feed Grains Strategy* - In December 2000 the agency conducted a series of meetings attended by triticale growers, end users and intermediaries such as the Grain Pool, Milnes and Wesfeeds, to look at potential production, end use pricing, and how the supply chain could be facilitated to operate more effectively. This would provide key input into the feed grains strategy.
- *Encourage the development of the durum wheat industry and downstream processing by releasing and publishing the study on the potential for pasta in Australia and Asia* - A first stage report on markets for durum wheat and downstream processing was prepared by the consultants Stanton, Emms and Sia. This suggested that there is a significant and growing domestic market in Australia for pasta and pasta products. Japan was identified as the major Asian market considered to have potential for exports from Western Australia.
- *Develop more effective mechanisms for delivering crop breeding outcomes from the agency's Crop Improvement Institute with a Western Australian focus but with national application* - Linkages have been negotiated with the CRC for Molecular Plant breeding and the Value Added Wheat CRC for a

joint strategy to implement the two CRC's molecular breeding technologies in Western Australia. The Department of Agriculture is also a member of the consortium led by Murdoch University which secured funding under the WA Department of Commerce and Trade "Centres of Excellence" program to establish the Centre for High Throughput Agricultural Genetic Analysis (CHAGA). Together, these initiatives will enable the Department of Agriculture to establish a Joint Centre for state-of-the-art high-throughput molecular screening platform for its grains breeding programs.

- *Implement an auditable quality assurance process initially into seed industry services, crop variety evaluation and genetic improvement projects* - The first stages of Quality Assurance for Seed Production have been undertaken. A quality assurance document will be presented for audit in August 2001, representing the first steps in obtaining SQF2000 accreditation.
- *The department will develop and promote a management package for cropping waterlogging prone soils using raised beds* - Progress in developing and promoting a management package for cropping waterlogged prone soils using raised beds has occurred. To date this has involved the publication of data from the growing seasons 1997 to 2000 on root-zone soil conditions, the quantity and quality of water draining from raised beds and normal seedbeds, and crop growth and yield.
- *To increase industry understanding of market requirements the agency will conduct two wheat quality courses, two barley quality courses and two Asian wheat uses and market courses for Australian farmers. It will also trial an oat quality training course* - Three wheat and three malting barley courses were conducted during 2000/01 for Western Australian farmers and grain industry members. These courses were held in conjunction with Weston Milling, Swan Brewery, Grain Pool of WA and Joe White Malting. Regional wheat quality courses, developed to cater for similar regional communities, have also proven to be beneficial and in demand.
- *A management package for aphid control in cereals in medium and low rainfall areas will be released* - A management program for cereal aphids and barley yellow dwarf virus (BYDV), which is spread by these aphids, has been formulated for all areas of the State, including low and medium rainfall areas, following investigations over three years.

#### **Other Major Achievements**

- A project on wheat blending, managed by the Quality Wheat CRC, showed that low protein noodle wheat which fails to meet the minimum protein for receipt into ASWN grade, may be upgraded by judicious blending with specially selected high protein wheat. The study showed that the blended wheat was identical in quality to commercially shipped grain and had a protein value exceeding that of its components.
- Industry has made a significant contribution to the Cereals Program with the GRDC being the major contributor to the \$21.9 million Program. In 2000/01, state government investment of \$10.7 million was complemented by \$11.2 million from industry sources.
- Two new wheat varieties were released in 2001 by our partner, BASF. Both these lines are herbicide resistant lines and will offer growers a new alternative in weed control. STL PBR is a backcross of Stiletto and is classified as APW. JNZ PBR is a backcross of Janz and is classified as Australian Hard.
- Prima gland clover, a clover with resistance to red legged earthmite, of early maturity and easily harvested, was released to seed producers.
- Soil management research has shown that the application of gypsum to grey clay soil significantly improves its density and infiltration properties. Consistent, though small and statistically insignificant yield improvements have also been found. Rotations which began with a green manure crop and those with less soil disturbance at seeding have shown improved infiltration properties compared to other rotations. Green manure rotations have also maintained small but consistent yield increases over other crop rotations.

- Phase pasture experiments have shown that crops after a two-year pasture phase have lowest in-crop densities of ryegrass where pastures were resown with legume in each year and spraytopped for seed-set control. This confirms earlier results which suggest that soil disturbance can encourage ryegrass germination allowing seed-set control strategies to be more effective.
- Several integrated weed management techniques which show great promise include high crop seeding rates (up to 150 kg/ha for cereals), green and brown manuring treatments, collecting or concentrating weed seeds at harvest and burning of undisturbed stubbles. Long term integrated weed management sites have also been established to further assist in the development of new strategies.
- Work on the effect of stubble windrow management on the subsequent performance of crops has highlighted deficiencies in our current soil fertility diagnostic and management methods. Trials and opportunistic sampling in the 2000-growing season have shown widespread deficiencies of a range of nutrients in our crops, some of which had been fertilised according to current critical soil tests.
- The year 2000 cropping season presented a high probability of a rust epidemic. As regional rust risk scenarios were more clearly defined in late winter, regional extension programs highlighting revised rust risk were conducted in northern, northeastern, eastern and southeastern areas. The value of emphasis in these areas was underpinned by subsequent experimental results demonstrating yield increases of 24, 25, 29, 35 and 37 per cent in a series of experiments using fungicide to control leaf rust in wheat.
- An El Nino Prediction Index and a Mid-latitude Southern Oscillation Index have been developed to provide more accurate indications of the likelihood of major droughts and favourable seasons.
- Technical information on the impact of the dry season for all levels of the industry and government were produced. Crop prediction modelling was utilised to provide reports and analyses of seasonal conditions to the Dry Season Task Force and Exceptional Circumstances Committee.
- A leakage calculator, designed to indicate potential recharge, was developed. The first draft has been used in workshops and has received positive feedback.
- A specifically built flat bread oven used in the evaluation of advanced wheat lines for their suitability to produce Middle East style pocket breads has been purchased and commissioned. This will assist in the development varieties which are well suited to their end uses.
- The 2001 Crop Updates were a resounding success. Agribusiness Crop Updates continued to strengthen with 440 people attending, and 11 regional grower Crop Updates were held throughout the state capturing an audience of 1094.
- The Department is assisting the American Association of Cereal Chemists in a worldwide series of collaborative tests to assess the utility of the Flour Swelling Volume test which was developed by researchers within the Department. The FSV test has proved vital in the selection of improved noodle wheat cultivars in Western Australia and was also used to provide essential reference data in the development of a molecular marker for starch quality in wheat.
- Wheat doubled haploid production commenced in 1996/1997. The first five doubled haploid lines will be tested in Crop Variety Testing trials in 2001.



## ***Output 1. Industry and Market Development cont.***

### **PULSES AND OILSEEDS**

During the 2000/01 season, Western Australia produced 1.5 million tonnes of pulses and oilseeds valued at \$360 million. This is significantly lower than in recent years as a result of poor seasonal conditions throughout the growing season, which impacted on the area sown and grain yields. Canola production was 65% down on last year and lupin production was approximately 35% lower. Greater retention of grain, especially lupins, for livestock industries was also evident.

Western Australia produced almost 1.05 million tonnes of lupins, 85 thousand tonnes of other pulses, and 350 thousand tonnes of canola. Japan, India, Spain, Netherlands, South Korea and China are the major export markets for Western Australia's production, with lupins being used for stock feed, and canola and other pulses being used mainly for human consumption.

The Department of Agriculture has been making a significant contribution to the rapidly expanding pulses and oilseeds industry through its commitment to innovative research and development of sustainable production systems and key market opportunities. Development of superior varieties, production packages which address key sustainability issues, strong relationships with overseas markets and the identification of value adding opportunities, contribute to the expansion of pulses and oilseeds industries.

#### **Objectives**

- To maximise the market competitiveness of pulses and oilseeds by developing and promoting crop varieties and production and processing systems that deliver to market requirements;
- To increase the productivity and reliability of supply through crop improvement, systems agronomy and the promotion of best practice production systems;
- To improve the sustainability of the pulses and oilseeds industry as a component of the farming system; and
- To expand the application of value-adding to pulse and oilseeds products.

#### **Major Achievements**

##### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative in italics)*

- *Develop and promote the benefits of lupins and canola meal in aquaculture diets in Taiwan and into China through the development of strategic alliances* - To develop and promote the use of lupins and canola in aquaculture diets in Taiwan and China, some lupins have been sold into Taiwan for use as animal and aquaculture feeds. A proposal has been developed by representatives from Dept of Agriculture, Dept of Fisheries and CSIRO Fisheries to visit 2 or 3 target provinces, and meet with local aquafarmers, feed manufacturers and researchers.
- *Additional funds will be invested into pathology and plant breeding to develop pea and chickpea varieties resistant to necrotrophic diseases. This will utilise new biotechnology techniques, which includes marker-assisted selection* - Screening for ascochyta resistance in chickpeas at two field sites (Medina and Mingenew) was increased and the work on blackspot in field peas was continued. A molecular geneticist has been appointed and is currently developing molecular markers to track phomopsis resistance and anthracnose resistance in the lupin-breeding program.

## Other Major Achievements

- The Program was involved in the development of an initiative to attract investment in the establishment of a biodiesel industry based on broadacre oilseed production in the wheatbelt. The plan includes further developing current canola varieties specifically for biodiesel production, investigating alternative oilseeds for use in biodiesel and establishing collaboration with other sectors for testing the fuel and its by-products.
- By analysing the Department's database on lupin protein it was evident that some lupin varieties in the eastern wheatbelt had higher protein levels. Using this information the Grain Pool of WA introduced HiPro lupin contracts for 2000/01, aimed at human consumption markets. Conditions for HiPro lupins included a requirement for the producers to be quality assured and growers were paid a premium for protein contents above 28%.
- It has been found that high specification diets for pink snapper can include at least 40% Australian sweet lupin kernel and yellow lupin kernel meals with no loss of performance. For high specification diets, kernel meal is the commodity of choice.
- The grains industry remains committed to developing the pulse and oilseed industries through its significant contribution to funds for the Pulses and Oilseeds Program. Industry bodies such as the GRDC and GRC contributed 41% to the \$13.7 million Program.
- New early maturity triazine tolerant (TT) lines under test in 2000 show high potential in Western Australia for yield, oil, protein and blackleg tolerance. Two lines had 25% and 3% higher yields in the interstate variety trials with 2% higher oil and protein.
- One line of high oleic/low linolenic canola material tested in 2000 shows promise, with 65% oleic and 2.4% linolenic, early maturity and better blackleg tolerance than Karoo.
- Several sweet, early flowering, anthracnose resistant *Lupinus albus* lines have been identified. Very early flowering lines have also been identified in the yellow lupin-breeding program. These lines flower at least two weeks earlier than Wodjil - similar timing to Belara.
- The early flowering fully domesticated lines of *Lupinus atlanticus* have been successfully bulked and will enter yield trials in 2001.
- Further evaluation of the original 202-ascochyta blight resistant kabuli chickpea lines was conducted both within Western Australia and interstate. Several lines have confirmed superior ascochyta resistance and agronomic adaptation. Single plant selections were carried out at on superior lines and seed from 25 lines will be multiplied and fast tracked at Carnarvon during the 2001 winter.
- The first cultivar (Prima) of a new clover species (*Trifolium glanduliferum*) was released to contracted seed producers (in collaboration with the Department of Agriculture and NAPLIP).
- Trials in 2000 have demonstrated the potential for fungicide seed treatment alone and in combination with foliar sprays to give good blackleg control. Control similar or better than Impact-in-Furrow® can be achieved in a more flexible and potentially lower cost regime. The fungicides concerned are currently unregistered for use on canola and discussions are taking place with the relevant chemical companies.
- Collaborative research with weed scientists has produced 98% in-crop control of rye grass in lupins through the use of wide rows and shielded sprays. Economic modelling of the impact of this technology showed a potential improvement in gross margins of a wheat:lupin rotation of \$135/ha. The wide-spaced rows where inter-row weed control was carried out with shielded sprays in 2000 produced a 0.2t/ha yield increase in lupins compared with lupins grown on the same row spacing with normal herbicide applications.

- The continuation of a project looking at traits for yield improvement of chickpea in drought prone environments of India and Australia has been approved for a further three years. This project involves collaboration with the Australian Centre for International Agricultural Research (ACIAR).
- The molecular marker work on black spot resistance in peas in collaboration with the Crop & Food Research Institute, New Zealand, has identified 11 genetic loci in a cross involving A26 x Rovar. New populations of randomly inbred lines involving an A7 x Dundale cross made in Western Australia are now being studied to examine the application of the above work. Robust PCR based user-friendly markers for 5 of the 11 loci have now been developed.
- Molecular markers for one of the phomopsis resistance genes have been developed and will be implemented in the breeding program in 2001. Three populations of inbred lines are being developed for molecular marker work. These lines will be useful for finding markers for domestication characters and resistance to aphids, anthracnose, phomopsis and brown spot.

## ***Output 1. Industry and Market Development cont.***

### **WOOL**

The reduction of the wool stockpile to an insignificant level and higher wool prices over the last 12 months has raised the profitability and made wool production more appealing. However the recent moves to increase sheep numbers across the agricultural area is creating a bottleneck on the access to livestock. The poor seasons of last year and this one are severely limiting the ability of wool fibre producers to increase stock numbers in response to improved profitability.

During the past year, the Western Market Indicator opened at 584 cents/kg clean and rose to finish the year at 650 cents/kg clean. Wool comprised about 10 % of the State's agricultural exports, worth about \$4,522 million (FOB) in 1999/00.

Western Australia has maintained its position as the country's second largest wool producing State, contributing about 17 % of the national clip from 26 million sheep (WA sheep population estimates).

### **Objectives**

- Improve demand (\$/kg) for Western Australian wool in premium markets;
- Develop new markets and products for Western Australian wool;
- Develop and integrate the most profitable and sustainable practices into farming systems; and
- Achieve excellence in the management of program investment and communication.

### **Major Achievements**

#### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative italics)*

- *A series of 25 Wether Production Trials will be run at numerous locations throughout the State, with over 300 groups of wethers involved. This will assist wool producers in benchmarking the performance of their sheep and in making informed decisions about how to source genetics that can give both higher fleece weight and decreased micron* - Wool producers in WA continue to see the advantage in benchmarking the genetics of their flocks. This is evident by the increasing number of producers who have entered teams of wethers in linked wether trials being run statewide. Producers are also seeing the advantage of larger team sizes to increase the accuracy of their benchmark. When the linked trial scheme started with 1995-drop wethers some trials had only 6 wethers per team. In 2001 all trials have between 15 and 50 wethers per team.

The statewide combined analysis of wether trial data is published in the newsletter for wether trials "Wether Trial News". The last newsletter allowed approximately 200 wool producers to compare the genetics of their flocks with others throughout the state.

- *The agency in partnership with CSIRO Textile Fibre technology, SGS Wool Testing Services and the Australian Centre for International Agricultural Research (ACIAR) will assess the role of fibre diameter profile in improving the prediction of processing performance of WA wool* – Under the ACIAR project in conjunction with CSIRO, spinning benchmarks were reported to the mills in March 2001 and plans for the next stage were negotiated. The mills agreed to process low and High CV (H) wool to allow comparison of spinning performance between mills, and to assess the

opportunity to open up specifications for raw wool. More open specifications would bring greater competition to the Western Australian auction where there is significant quantities of high CV (H) wool.

- *The agency will evaluate and promote in-shed sampling of wool and complete trialing of in-shed testing including delivery of trial consignments to processors* - In collaboration with BSC Electronics and Interactive Wool Group, research was undertaken to validate the OFDA2000 technology for on-farm use. The research undertaken facilitated the commercialisation of the OFDA2000 in WA.

## **Other Major Achievements**

### **Wool Service Desk (WSD)**

- The WSD initially developed the interest of Britain's Marks and Spencer (M&S) in fine end autumn shorn wool. Since then, the WA Wool Alliance has met with M&S to further develop commercial opportunities for WA. £2 million worth of product (particularly women's knitwear and socks) has so far been produced from WA fine end wool and sold at retail in London.
- The WoolDesk Top Model was developed as a way of predicting the fibre length distribution in combed tops using raw wool specifications and was used to prepare a range of differentiated raw wool batches that were tested in the M&S deliveries.
- The Wool Desk Core Price Model was developed to quantify the price changes due to wool and market effects. Price differences between wool selling centres, between styles of wool, and between various wool specifications were identified, and presented for use by wool advisers and wool producers in long term and short-term production planning.
- The Wool Desk Price Benchmarking was developed to highlight to producers how the price they achieved for their wool compares with other wool sold during the same period from the same region and from across Western Australia.
- Forecasts of wool quality were developed using historic wool supply information. These included monthly predictions of average diameter, and the distribution of diameter. The results were delivered into the WA forecasting committee for the first time in March 2001. The quality information complements the WA Wool Production forecasts, which look at future production intentions of wool producers in each region of the state.
- Modeling of multi-stage supply chains was undertaken to study the effect of order transfer, quick response and inventory levels on each stage upstream from retail, and the potential impact on producer co-operatives trying to supply these chains.
- The Wool Industry Technology Transfer Initiative (WITTI) project delivered scholarships to 14 undergraduates undertaking the wool elective and brought 3 technicians to Australia on fellowships. Through WITTI, two Department of Agriculture advisors visited India to study early stage processing of wool.

### **Drench Resistance**

- Research has shown that resistance of nematode parasites (worms) to all known drenches, including the ML (macrocyclic lactone) drenches, is due to the nature of the climate in WA. With our hot dry summers, the summer drenching program is so effective that it actually increases the level of resistance, as only resistant worms survive over summer after drenching. The Wool Program has developed a new management strategy for ameliorating the increase in drench resistance, while providing good control of worms.

### **Wool Production Manual**

- A quality wool production manual was developed as an extension package from the CRC. It contains information in relation to:
  - breeding for finer wool;
  - the need to consider maintaining fleece weight while decreasing diameter (in order to increase profitability); and

- the role of fibre diameter variability as a means for selection for higher staple strength (this was found to be an excellent, inexpensive and indirect selection method for achieving higher staple strength. The research has shown that it is effective for measurements taken in autumn or spring).

#### **Pasture Improvement**

- A new variety of French serradella is poised to be a revolution in pastures. French serradella is an annual species that can send its roots down to two metres. It is a highly productive plant that can be used as an adjunct to other annuals. Current research using the highly successful soft seeded Cadiz has identified some hard seeded lines. Being much easier to harvest and process than the hard seeded Yellow serradellas establishment costs will be much lower and will lead to wide scale adoption. Seed is being increased for final selection in 2002.

#### **Processing Prediction**

- A prediction model has been developed which estimates the hauteur of sale-lots based on the fibre diameter profile of the raw wool staples. This model has been validated on a large data set.

#### **New Spinning Technologies**

- A full report on rotor spinning has been prepared under commercial-in-confidence. In a series of 35 trial batches, 100% were able to be spun without the need to stop the machines and clean the rotors.
- Pure wool rotor spun yarns were developed from a range of wool types and the effects of diameter on yarn count were quantified. Trials were successfully completed for fibres dyed into a range of colours. The successful combination of machine washability, dyeing and fibre length showed that “finished” fibres could be spun into yarns which required minimal preparation before knitting.

#### **Breeding**

- Work on the Katanning Merino Resource Flocks have shown that felting is a heritable trait and that it would be possible to select for wools that have a high or low propensity to felt. Felting of wool is a very desirable trait in non-woven fabrics but undesirable in woven garments.

#### **Product Development**

- A protocol has been developed and validated for on-farm selection of fleeces based on fibre curvature specifications. Robust scientific data has been developed into the effects of fibre curvature on top and yarn properties as well as topmaking and spinning efficiencies. Unique finished fabrics have been created which differ only on tightly specified fibre curvature and MFD parameters.

#### **Integrated Parasite Management**

- A series of courses for sheep worm control advisers and private veterinarians was conducted as part of a national approach
- Experiments have been completed which confirm (the first report):
  - resistance by Ostertagia to slow-release capsules, and
  - that abamectin is a more potent anthelmintic than the more commonly used ivermectin.
 These results have been reported Australia-wide.
- Initial trialing of the new worm control technology, nematophagous fungi fed to sheep, has commenced. Early results will be available in late 2001. Although these trials remain confidential within the agency at present, they will be available for public knowledge shortly (as they will be incorporated into the new Sheep CRC).

## ***Output 1. Industry and Market Development cont.***

### **MEAT AND OTHER ANIMAL PRODUCTS**

Exports of meat and livestock increased strongly in 2000/01 reaching \$734 million, compared to \$572 million in 1999/00. Major products include live sheep, cattle and goats as well as meat from sheep, cattle, goats, pigs and poultry. About 9,000 producers throughout the State are involved in the meat industry. Key markets for live sheep and cattle are the Middle East and Asia, and frozen and chilled meat is exported to more than 40 countries, including the European Union, United States, Japan, SouthEast Asia and the Middle East.

Meat and livestock contributes around 17 per cent of the State's Gross Value of Agricultural Production and 16 per cent of the value of agricultural exports. Thus the industry makes a substantial contribution to the performance of the agricultural sector.

The meat industry is widely dispersed throughout Western Australia, and contributes significantly to the State's economic activity, particularly in rural and regional areas. Research by the Department of Agriculture in 1997 showed that the meat industry's total value-added contribution was the highest of all agricultural industries.

The Department of Agriculture provides assistance through development and promotion of more efficient grazing and management systems, and development and expansion of export markets.

#### **Objectives**

- Facilitate the development of new markets and innovative meat products;
- Provide the meat industry with new products, techniques and processes that will improve productivity and profitability;
- Support the meat industry to improve the sustainability of production and management systems;
- Support and encourage the meat industry to produce certified, quality-assured meat products;
- Actively promote and develop profitable innovation for the Meat Program and hence the Western Australian meat industry; and
- Strive for continuous improvement in the Meat Program so that its operations and service delivery meet the needs of its clients.

#### **Major Achievements**

##### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative in italics)*

- *Develop an eating quality program for sheep and pig meat (in collaboration with Meat and Livestock Australia and the Pig Research and Development Corporation respectively) along the lines of the Meat Standards Australia system for beef* - The agency contributed to the National Sheep Meat Eating Quality Program, which is a collaborative project partly, funded by Meat and Livestock Australia. Three experiments were conducted in Western Australia, with the Program playing a pivotal role.

- *To encourage the further development of the export oriented lot-fed beef industry, feasibility studies will be conducted into beef production in the West Midlands (via tagasaste), the South Coast (via new pasture varieties) and the Wheatbelt (via low cost store production)* - Research and extension into the role of tagasaste in beef production in the West Midlands continued to show this was an option for increasing production. The agency published a report on “New Beef Zone – An analysis of the potential for beef and cattle industry expansion in the Western Australian Wheatbelt” in October 2000. Opportunities for increasing beef production on the South Coast continue to centre around new pasture varieties.
- *The agency will evaluate the potential of new sheep breeds introduced into the southern rangelands to provide a profitable alternative to wool production* - Evaluation by the Department of Agriculture of new sheep breeds – particularly for the Southern Rangelands – has demonstrated that potential exists to provide live sheep and sheep meat for export from these breeds, particularly the Damara and Dorper. Some pastoralists have demonstrated interest in diversification from wool production into the alternative breeds. Further development of management strategies and economic assessments are continuing.

### **Other Major Achievements**

- The Department of Agriculture is a supporting partner in the Australian Beef Cooperative Research Centre for cattle and beef quality (CRC II) and receives funds for investigations into beef production and marketing systems relevant to Western Australian producers. All studies are supported by funds from the Meat Program.
- Developing nutritional and management strategies to reduce the level of ammonia gas build-up in ships used in the live cattle trade is a collaborative project between the Department of Agriculture and Murdoch University, with funds from Meat and Livestock Australia (LiveCorp) and the CRC II. Reducing ammonia levels on ships means a better environment for animals and stockmen. Preliminary results from the nutritional and management investigations were presented to a Live Export Forum in Fremantle in June 2001 with exporters accepting findings that adding gypsum to the sawdust used on ships significantly lowers production of ammonia gas.
- Live cattle exports from Western Australia in 2000-01 reached a record level of \$200 million. The Meat Program has supported producers with research into the requirements of key importing countries.
- The Meat Program continued to support research into mortalities in the live export trade aimed at ensuring high standards of animal welfare from farm-gate to final destination. In 2000, the death rate for sheep was at the low level of 1.31 per cent, and the rate for cattle was 0.22 per cent.
- The Meat Program provided technical assistance in modifying pork products to better suit the requirements of Singapore, which is Western Australia’s largest export market for pork.
- Calving in the South West of Western Australia is traditionally in autumn. Economic benefits should occur by changing the time of calving from autumn to winter. This study is being funded by the Beef CRC II and is undertaken in collaboration with Alcoa Farmlands. Results and recommendations of the study will initially be presented at field days and through Ag Memos, with a detailed recommendation including economic analysis at the end of the five-year study.
- The economic benefits of implanting finishing cattle with hormonal growth promotants are well known. However, their influence on meat tenderness is unclear, and funds from the Beef CRC II are supporting studies in this area. The findings will be incorporated into the Meat Standards Australia grading system.
- PROGRAZE is a grazing management skills course for sheep meat and beef producers in southern Australia. PROGRAZE aims to develop the pasture and animal assessment skills of producers, and encourage changes in management practices. A range of communication methods is employed including group active learning and National FarmWalk field days. In 2000/01, 97 producers attended PROGRAZE courses. National FarmWalk field days were held in March 2001 at Esperance, Albany, Vasse, Gingin and Badgingarra and were attended by 160 producers. The



Sustainable Grazing Systems National Forum was held in Western Australia for the first time in May 2001 at Albany. The forum was attended by around 100 interstate and 20 delegates from Western Australia.

- The first four year contract between the Department of Agriculture and Meat and Livestock Australia for delivery of PROGRAZE ended in June 2001, and PROGRAZE will be delivered from July 2001 as part of the EDGE Network. The Department of Agriculture will contract to EDGE Network to deliver the course.
- The Sustainable Grazing Systems Research Team has demonstrated to livestock producers that kikuyu grass is capable of increasing stocking rate and profitability, while at the same time reducing groundwater recharge when compared to an annual pasture. The team has also collected sufficient data to inform farmers in the higher than 600 mm rainfall zone of Western Australia how to best design tree/pasture systems that meet both their production and sustainability goals. This project will continue in 2001/02.
- The perennial fodder shrub tagasaste has significantly increased the production potential of the deep infertile sands of the West Midlands region of Western Australia. Tagasaste provides production benefits to these areas, and also provides environmental benefits in reducing ground water recharge and reducing the potential for wind erosion. Collaborative research between the Department of Agriculture, Meat and Livestock Australia, CSIRO and Murdoch University has been completed, and the results and recommendations from the trials have been released to the farming community. Case studies documenting how farmers are using tagasaste within their farming systems have been collected and prepared for publication.
- The Perennial Pasture Project is identifying a range of new perennial legumes and grasses to complement lucerne for phase farming, especially for acid soils and waterlogged soils where lucerne is less suited. A wide range of plant material has been acquired from around the world, and field evaluation of promising material has commenced in the southern, central and northern wheatbelt. A network of collaborators is being developed across Australia through the new CRC for 'Plant based management of dryland salinity.'
- Research continued in the northern cattle industry with the key aim of improving productivity and profitability in a sustainable manner. The improved prices for cattle have enabled many pastoralists to increase investment in livestock and infrastructure.
- As a result of research into upgrading the quality of goat meat by the introduction of Boer goat genetics, a report "The role of the Boer goat in the development the Australian meat goat industry" was presented to Meat and Livestock Australia. Key findings on meat quality and market acceptance were presented to two meetings of the Goat Meat Industry Council in Perth.
- Record volumes of live goats and goat meat were exported from Western Australia in 2000-01. This is due, in part, to the increased numbers of goats being managed within domesticated goat enterprises in the Southern Rangelands region, and use of the Boer goat. The Meat Program has worked with producers to identify markets and to address the major constraints of the industry, being inconsistent supply and the variable quality offered to processors and exporters.

## *Output 1. Industry and Market Development cont.*

### **HORTICULTURE**

Western Australia's horticultural industry is one of the fastest growing primary production sectors. Gross value of production in 2000/01 was \$511 million dollars. Exports continued to grow and are now worth \$166 million, an 6% increase over the previous year. Major markets include Singapore, Malaysia, UK and Europe, with expanding markets in Japan and Taiwan.

The industry has a strong export culture that has developed as a result of the limitations imposed by the small local market and our proximity to Asian markets and historic market associations with UK and Europe. It is seen as a supplier of quality products and this perception is enhanced by the industries enthusiastic adoption of quality assurance.

Exports are likely to continue to grow strongly in the next decade. There has been significant plantings of perennial crops in recent years and these will shortly come into production. These plantings are targeted at export markets and examples include plums, Pink Lady™ and Sundowner™ apples, table grapes and wine grapes

Good quality land and water resources are available in areas suitable for horticultural production so there is scope for industry expansion. These areas include irrigable land in the southwest where traditional land uses are no longer economic; Ord River Stage 2 in the Kimberley and Scott River on the south coast.

### **Objectives**

- To identify, develop and promote new market and production opportunities;
- To improve the profitability and sustainability of Western Australian horticulture at industry and farm enterprise level;
- To increase industry capacity to capitalise on new technology, information and market trends;
- To support innovative approaches in research and development as a driver for Program excellence and industry competitiveness;
- To enhance the image and reputation of Western Australian horticultural products; and
- To maximise the effectiveness of Program investments.

### **Major achievements**

#### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative in italics)*

- *Undertake further market research on the potential for exporting fresh fruit into Vietnam and carry out trial shipments* - As part of the Agency's initiative to identify the market for exporting fresh fruit into Vietnam, extensive market information gathering has been completed. Trial shipments of fruit are scheduled for 2002.
- *A new "Future Fruits" biotechnology initiative for breeding apples, mangoes and flowers will commence* - Plant regeneration experiments have been successful in achieving mango callus initiation. This will enable the development of efficient plant regeneration systems via somatic

embryogenesis or organogenesis. DNA fingerprinting of apple and floral material, to ensure identity, is currently being investigated in cooperation with King's Park.

- *Field-testing of new pest resistant cotton varieties will be undertaken in preparation for a 2003-04 release* - A large-scale cotton industry in northern Australia will require the commercialisation of varieties containing two Bt genes (TwINGARD). Excellent results from the 2000 season at Kununurra, using single Bt gene varieties, have encouraged more farmers to collaborate in the field testing program, which has increased from 220ha to the maximum permissible area of 450ha in the 2001 season. Gross returns to farmers exceeded \$4,500 /ha and less than five sprays per crop were required to manage pests in a novel IPM system. Strong commercial and research support, linked through the Australian Cotton Cooperative Research Centre, was a highlight from a successful year that demonstrated the excellent commercial prospects for a cotton industry in WA. An expansion of these trials using TwINGARD varieties will pave the way for commercial cotton production by the 2003 or 2004 season.

### **Other Major Achievements**

- WA growers have agreed to underwrite the propagation and market development of a new strawberry selection bred in Victoria which offers the consumer a quantum leap in flavour over existing US and Israeli varieties now grown. The selection also offers growers up to 100% yield increase over the popular US bred variety Pajaro. If successful this could give Australian producers a unique and superior export product.
- The Tropical Fruits project continues to develop sustainable and profitable industries supplying quality fruits to domestic and export markets. In a collaborative study with Curtin University, the Department of Agriculture is developing new mango varieties through the National Breeding Project. Other projects are investigating organic production of bananas with a view to capturing a share of this expanding market; and developing controlled atmosphere storage for mangoes and melons to extend shelf life and facilitate sea freight export.
- The Export Cauliflower Industry Plan jointly developed by the Department of Agriculture and the industry is being implemented. Some parts of the Industry Plan (eg. Farm focus groups and cost reductions) are being acted on by growers. Other parts of the Plan (eg: WA branding) are still being discussed to ensure these actions are appropriate for the long-term growth of the export cauliflower industry. Work by the Department of Agriculture on fertiliser application technology and pest and disease management has led to production costs per kilogram of cauliflower produced falling by about 50% over the past three years for the best growers. However, total costs have risen substantially, particularly the cost of fuel and fertiliser due to the low A\$.
- Crisping potatoes is a successful export industry with 6000 tonnes per year going to Malaysia and Singapore and now access to the Indonesian market. The Department of Agriculture has had discussions with a company with two Indonesian crisp factories that have the capacity to process 1300 tonnes of raw tubers per month so there are prospects for significant increases in exports, up to 16,000 tonnes per year.
- A \$232,000 investment has been made to develop new export vegetables with particular emphasis on burdock and daikon. Further funding has been sought to continue the establishment of commercial burdock production and tap into the Japanese market worth about \$800 million.
- Western Australia is a major exporter of vegetables, especially carrots, to South East Asia. Over the past decade exports of carrots has increased from 17,000 tonnes (\$8.3 million) to 53,000 tonnes (\$37.1 million). Competition in the markets throughout South East Asia is increasing as new production areas such as China and New Zealand start to export to the region. The Department of Agriculture has completed detailed budget analyses for all the main crops. With industry all costs are now to be bench marked to world best practice to ensure the State remains competitive in its traditional markets.
- Successful CA container trials of melons were sent to Hong Kong and very well received. As a direct result of this work regular CA shipments of rock melons are planned by the industry this season to Dubai, Hong Kong, New Zealand and Singapore.

- The WA strawberry industry completed its generic Quality Assurance scheme with intensive support from the Department of Agriculture specialists and it passed desk auditing to the standards set out in the SQF 2000 code. Individual growers will now be able to use this plan as a template for their own on-farm schemes giving a high level of uniformity in the application of QA across the industry.
- HortGuard™ has been initiated as part of the State Government's \$3.5 million increased commitment to improved industry protection through strengthened risk assessment, quarantine and emergency response. Industry representatives (from growers to exporters) are working with Department of Agriculture officers to develop the HortGuard™ framework and ways in which each industry sector can best contribute to improved overall protection.
- An extensive strategic marketing study of the State's table grape industry identified the Mid West as a potential new production area. This area is able to fill the production gap that exists between the Carnarvon and Swan Valley seasons. An investment analysis of the Mid West indicates that table grape production is profitable.
- Identification of sugarcane varieties with resistance to sugarcane smut has been initiated in the Ord. Most varieties available in the area have now been screened for the potentially serious disease first discovered in the Ord in mid 1998. Use of resistant varieties is considered the most effective strategy for management of the disease.
- In addition the Department of Agriculture has supported the establishment of a large-scale pilot operation in the Ord to assess commercial production of compost from sugar mill by-products bagasse, mill mud and ash. Successful development of a composting industry will improve profitability and sustainability of the Ord sugar industry through more efficient disposal of by-products.
- A detailed survey of fertiliser usage by Swan Coastal Plain growers was completed 10 years ago. Several of the growers who contributed to the original survey were contacted during 1999/00. It was found that growers were more aware of environmental issues and many are now applying fertilisers in accordance with crop needs thereby lessening the danger of groundwater pollution.
- The Department of Agriculture has successfully negotiated \$1.2 million three year funding from the Vegetable Industry and Waste Management funds for a joint WA, Victorian project that will investigate the potential benefits for using composts in vegetable production. Potential benefits include improved crop quality with reduced fertiliser, pesticide and irrigation use that could enhance WA's reputation as an exporter of safe 'clean green' fresh food.
- Plant regeneration experiments have been successful in achieving mango callus initiation. This will enable the development of efficient plant regeneration systems via somatic embryogenesis or organogenesis. DNA fingerprinting of apple and floral material to ensure identify is currently being investigated in cooperation with King's Park.

## ***Output 1. Industry and Market Development cont.***

### **DAIRY AND APICULTURE**

The Western Australian dairy industry comprises 4% of the total Australian dairy industry. Milk supply fell by 6% in 2000/01 to 385 million litres following the falling trend of the rest of Australia. Dairy exports increased by about 24% (\$11.5m) to almost \$60 million in the 12 months to June 2001, compared with 2000 at \$48.5 million. Exports of milk, skim milk powder and butter remained unchanged but both ice cream and cheese exports have increased. Cheese exports more than doubled to \$12.2 million.

There is uncertainty in the dairy industry as it adapts to deregulation. However, the long-term outlook for the industry remains excellent. It is well placed to supply the predicted increasing demand in world markets for dairy products. Western Australian dairy farms have the significant advantage of the ability to produce milk from pasture, a low cost feed, and many are as efficient as any in the world. If manufacturing capacity can be developed, the industry will be able to expand and compete successfully on world markets.

The WA apiculture industry produces less than 0.5% of world honey production and about 10% of Australia's total. Honey production has been fairly static over the last few years at about 3150 tonnes. Small amounts of pollen and beeswax are produced. Sales of queen bees and provision of paid pollination services are also sources of income for some beekeepers. The farm gate value of the industry is estimated to be around \$6m. Nearly 50% of all honey produced in WA is exported at a value of about \$3.5m in 2000/01.

### **Objectives**

- Identify new markets, and new processing and marketing systems, for export of products manufactured from 400 million litres of increased production from dairy farms;
- Increase the capacity of the dairy and apiculture industries to respond to opportunities for growth;
- Increase the international competitiveness, profitability and sustainability of the Western Australian dairy and apiculture industries at a whole-of-industry and at a producer level;
- Assure the quality of Western Australian milk and apiculture products meets market needs; and
- Maximise returns on investment of the Program through operational efficiency and partnerships with industry.

### **Major achievements**

#### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative in italics)*

- *Assist potential investors in processing for the Western Australian dairy industry assisted in conduct of studies of industry and markets for new dairy products to underpin development of new/more milk processing plants* – The Department of Agriculture assisted local milk processors to identify and exploit new market opportunities as well as provided technical and statistical information to potential investors in the industry. The Department of Agriculture and Department of Commerce and Trade oversaw implementation of the State Government's Dairy Processing Incentive Scheme. This program has provided more than \$11 million in support to permit local businesses to expand or establish milk-processing facilities.

The Department of Agriculture continued to assist local milk processors to identify market opportunities in Asia. The process led to several million dollars worth of export orders during 2000/2001. The Department of Agriculture also assisted local processors in their successful efforts to enter the Japanese cheese market.

### **Other Major Achievements**

- Facilitated establishment of links between customers in Japan, Taiwan and Singapore and established potential Western Australian manufacturers of milk products.
- Support provided for investigations of the feasibility of developing a new or upgraded milk product manufacturing plant.
- Work is continuing on investigating the fatty acids of pollens unique to Western Australia. There is potential for these to be exported overseas as supplementary feeds for bees especially during the winter months in the Northern Hemisphere.
- The Vasse Milk Farmlets completed their first year of operations during 2000/01. This major new project focused on the challenges faced by dairy farmers as they intensify production to increase output per hectare and efficiency. Stocking rates and production per hectare on the farmlets were up to twice the state average. The project demonstrates best practice in pasture production, grazing management and efficient pasture use. Pasture harvested per hectare was also more than twice the state average.
- The Department of Agriculture and its collaborators began the Protein *Plu\$* project aimed at increasing protein levels in Western Australian milk. The project combined a farm-monitoring program to gain a better understanding of the causes of low milk protein in Western Australia with an extension activity to supply the best available information on management of milk protein.
- Investigation and demonstration of how to use and manage new pasture legume species, such as purple clover, for dairy pastures continued.
- The Dairy Farm Performance Program (DFP) was reviewed and modified to improve its acceptability to producers. Western Dairy Inc. in collaboration with the Program commenced a short-term project to promote use of the DFP by dairy farmers. A diary was produced by the Program to enable producers to record information required in order to complete their DFP.
- Demonstrated the production and environmental benefits of sub surface drainage of irrigation pastures based on soil salinity mapping.

### **Deregulation of the dairy industry**

- Deregulation of the Western Australian Dairy Industry occurred in July 2000. A Western Australian Dairy Assistance Package of \$27 million was offered to the industry by the Western Australian Government. Grants established under this package have provide top up payments to the producers who supplied manufacturing milk to Wesmilk at Capel, which was not recognised as drinking milk by the DSAP. There was also provision of financial assistance direct to farmers to pay for costs of completing the DSAP's Farm Business Assessment form, farm business planning, and implementation of plans and training.
- The Package also provided support for up to three years for a Dairy Options Team, comprising a rural counselor, a land use planning/options officer and a financial options development officer operating from the Department of Agriculture in Harvey.
- Investment in dairy manufacturing capacity was encouraged by grants paid to existing and new manufacturers with an appropriate business plan for development.

## ***Output 1. Industry and Market Development cont.***

### **NEW INDUSTRIES**

Existing agricultural industries, particularly those that are commodity based, are under increasing market competition and environmental pressure. This will continue the drive in WA towards development of innovative production and processing of existing and new products.

Activities are developed in close consultation with industry, and with a sound knowledge of production systems and international and domestic markets. No development projects are undertaken without thorough assessment of production and market opportunities.

#### **Objectives**

- Implement a process to identify, select and establish a portfolio of new industry opportunities for WA agribusiness;
- Establish a strong market opportunity awareness capability, with assistance from Trade & Market Development;
- Significantly increase WA's capacity to export value added or semi processed food products;
- Drive the further adoption of 'innovators' and serve as a change agent to improve economic viability throughout rural WA;
- Establish new industries by linking closely with industry programs;
- Establish strategic alliances with identified clients/customers, other agencies and industry, nationally and internationally;
- Maintain the Department of Agriculture as the recognised national leader in New Industries Development in agriculture;
- Ensure new industry opportunities move through well structured development approaches; and
- Provide customers with an accessible 'desk' to assist with New Industry opportunities and information.

#### **Major achievements**

##### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative italics)*

- *The department will develop a resources database for all agricultural land to assist in the determination of potentially suitable areas for industry development in Western Australia* - The department's New Industries Program has begun developing the capability to graphically represent the best areas for the establishment of new agricultural industries. This computer system is being developed for the program by the Department of Agriculture's Geographic Information System unit. It will allow the Program to overlay a variety of essential parameters such as soil, climate and infrastructure to identify the most likely areas for potential new industries.
- *Reports will be prepared outlining the market potential for the establishment of new industries in salt affect areas and the pastoral regions* - A number of reports were produced to serve as a key resource tool to assist in progressing the development of new industries in the wheatbelt and pastoral regions.

These include "New Beef Production Zone Analysis for Wheatbelt Areas", "Pistachios - an income producing, reforestation opportunity for the Wheatbelt", and "Profitable solutions to manage salinity", an analysis of 50 new industry opportunities in the Wheatbelt.

### **Other Major Achievements**

- Collaboration continued with a number of multinational pharmaceutical companies to undertake evaluation of crops with potential pharmaceutical benefits. Success was achieved in the selection of specific legumes with higher concentrations of active pharmaceutical ingredients.
- The Program's Organic Farming Project, has built on a whole of industry approach to evaluate opportunities by linking market intelligence to the building of production system guidelines. A range of industry development activities has assisted conversion to organic methods and commercial developments in the beef, cereals, horticulture and honey industries.
- The Program in conjunction with the Department of Commerce and Trade organised and participated in an olive industry study tour to Spain and Italy. The Program also commissioned a study to assess Australia's competitive position in international olive oil markets. Expanding olive oil production in Western Australia will present a marketing challenge, as a large proportion of future production will need to be exported. Producers will have to produce oils of the styles and quality required by export markets and at a competitive price.
- Further progress has been made in the assessment of the potential for developing a green tea industry in consultation with a Japanese company. The number of Japanese varieties available for research has increased and a number released from quarantine for production trials. A detailed assessment of the viability of green tea production in the Southwest of Western Australia was commenced.
- An assessment of Western Australia's potential for developing a large-scale pistachio industry was undertaken in conjunction with a group of visiting producers/investors from Iran. Discussions are continuing. The New Industries Resource Database was used to highlight essential parameters for production such as climate, soils, water resources and infrastructure.
- The Program has gained recognition as a public sector leader in new industry development. This recognition has been assisted through its role as State co-ordinator for both the AFFA Farm Innovation Program and RIRDC Funding Program



## ***Output 1. Industry and Market Development cont.***

### **TRADE AND DEVELOPMENT**

The Western Australian Agriculture, Fisheries and Food industries form a major part of the State's economy. Exports were valued at more than A\$3.7 billion (not including confidential items), remaining the second largest export industry behind the minerals and energy sector.

Significant growth in world consumption and further global trade liberalisation will raise the potential of the Western Australian industry to increase total export values and returns over the long term.

Trade and Development's aim is to assist industry to further increase profitability by increasing exports and investment attraction and guiding research and industry development activity in agriculture. It achieves this through the following objectives.

#### **Objectives**

- In conjunction with the Department Of Agriculture industry programs, to further enhance a strong "market focus" within the Agency and the Western Australian agricultural, fisheries, food and fibre industry sectors;
- To assist the industries to explore and develop export markets;
- To initiate and facilitate effective supply chain management, strategic alliances and implementation of quality assurance systems;
- To attract investment into the Western Australian agricultural, fisheries, food and fibre sectors; and
- To achieve service excellence in assisting internal and external clients.

#### **Major achievements**

##### **PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiative italics)*

- *Follow up on the Middle East Market Development Initiative, particularly with Jordan and Egypt, to enhance and develop export of agricultural, fisheries and food products to the Middle East* - Memoranda of Understanding were signed with Egypt and Jordan to enhance the trade relationship with Western Australia. Representation was made by the Department's Trade and Development Program at regional trade shows, including the Dubai Food Show and the Reyad/Jedah Trade Show, and at several trade negotiations. An increase in the trade of agricultural product has flowed from these initiatives, particularly in the trade of meat and livestock to the Middle East.

#### **Other Major Achievements**

- A group of CEO's from several Taiwanese companies visited Perth during April 2001. This visit aimed to increase awareness about Western Australia's capabilities, and investment and trade opportunities in beverages, food and agricultural production and processing in Western Australia. Negotiations are continuing with several companies.
- Assisted a Western Australian processor with a successful application for A\$100,000 to form an alliance between the Western Australian pig industry and the Singapore market. Trade and Development hosted visits by potential investors from Singapore, one of which has lead to sales of 200 pigs per week, valued at around A\$2.5 million per year. A Western Australian processor was

also introduced to their customer in Japan by the Japan Business Development manager and provided assistance with preparation of samples and facilitation of the trade. This led to the export of 1 container per month to Japan valued at A\$1 million per year and this will increase to 2 containers per month by the middle of this year.

- In March 2001, a Western Australian company shipped its first order to the Japanese cheese market. The outcome of this new order has been to increase returns to Western Australian farmers for milk for cheese from 18c per litre to 26c per litre. This has balanced the reductions in market milk prices brought about by deregulation and allows for increased volumes of milk being purchased and processed profitably.
- Trade and Development worked closely with Western Australian horticultural industries and the Sea Freight Council of Western Australia to solve problems in cool chain management, packaging and long distance transportation to promote the export of fresh produce to overseas markets. The research project focused on the shelf life extension of broccoli using commercial controlled atmosphere (CA) containers, which went to Japan as a trial freight shipment.
- Conducted a feasibility study to explore the opportunity to process barley tea in Western Australia for export to Japan. The feasibility study investigated five potential locations for setting up the processing plant, along with their respective establishment costs. A final report to the client was completed by April 2001 for review.
- Continue direct support to Manana Kimberley live cattle export alliance, which is an alliance of 7 Kimberley cattle farmers and a company in Indonesia. The alliance has been successful in gaining market access and providing the farmers with feedback on product performance and resulting in higher prices for their cattle.
- The program has undertaken a number of strategic analyses on the: Citrus, Olive and Sandalwood Industries and the Malaysian and Singaporean Lettuce Market.
- Launched the Western Australian International Natural Resource Management Initiative. A program to assist Western Australian companies involved with NRM to build capacity to a level where they are able to export to international projects.
- Participate in the Taipei Food Show in June 2001 to consolidate market share and to follow up trade and investment outcomes generated by visits to Western Australia in February and March by three of the largest retailers in Taiwan, 7-Eleven, Carrefour and RT-Mart.
- Produced the following publications:
  - Western Australia's Agriculture, Fisheries and Food Industry at a Glance;
  - Industry trade outlook series;
  - Quarterly Agribusiness Outlook; and
  - Program Web site update and expansion.
- More than 60 visits from industry and government from countries in Asia, Europe, America and the Middle East have been coordinated to expand bilateral relations between the agribusiness sectors and to expand the State's international business networks.
- Trade and Development staff, in conjunction with staff from the Pinjarra office, established a system for disposal of the solids residue from the wool washing process, as a soil improver. This is saving the company around A\$300,000 per year. Agribusiness Opportunities and a financial analysis on topmaking at IP14 and other information for proponents to assess the viability of topmaking in Western Australia. The opportunity has been promoted to proponents in China and Europe and discussions are continuing with a European company.



## AUDITOR GENERAL

To the Parliament of Western Australia

**AGRICULTURE WESTERN AUSTRALIA  
PERFORMANCE INDICATORS FOR THE YEAR ENDED JUNE 30, 2001**

**Scope**

I have audited the key effectiveness and efficiency performance indicators of Agriculture Western Australia for the year ended June 30, 2001 under the provisions of the Financial Administration and Audit Act 1985.

The Director General is responsible for developing and maintaining proper records and systems for preparing and presenting performance indicators. I have conducted an audit of the key performance indicators in order to express an opinion on them to the Parliament as required by the Act. No opinion is expressed on the output measures of quantity, quality, timeliness and cost.

My audit was performed in accordance with section 79 of the Act to form an opinion based on a reasonable level of assurance. The audit procedures included examining, on a test basis, evidence supporting the amounts and other disclosures in the performance indicators, and assessing the relevance and appropriateness of the performance indicators in assisting users to assess Agriculture Western Australia's performance. These procedures have been undertaken to form an opinion as to whether, in all material respects, the performance indicators are relevant and appropriate having regard to their purpose and fairly represent the indicated performance.

The audit opinion expressed below has been formed on the above basis.

**Audit Opinion**

In my opinion, the key effectiveness and efficiency performance indicators of Agriculture Western Australia are relevant and appropriate for assisting users to assess Agriculture Western Australia's performance and fairly represent the indicated performance for the year ended June 30, 2001.

D D R PEARSON  
AUDITOR GENERAL  
October 31, 2001

***Output 1. - Industry and Market Development cont.***

**PERFORMANCE MEASURES** (PAGES 34-44 HAVE BEEN AUDITED BY THE AUDITOR GENERAL)

**Outcome: Increased market competitiveness and profitability of agri-industry**

**Output 1: Industry and Market Development**

**Output description:** Generation, integration and application of knowledge that increases the international competitiveness and market opportunities for State agriculture industries.

**Effectiveness Indicators**

**PI 1 The benefit-cost ratio and net present value of the Department's research and development activity**

Programs of the Western Australian Department of Agriculture apply benefit-cost analysis to assist in the allocation of funds to those areas likely to make the largest contribution to the rural economy and thus to achieve the Department outcome of increased market competitiveness and profitability. Therefore projects do not commence unless the expected benefits far exceed the expected costs. To determine whether these expectations are realised the Department conducts *ex-post* benefit cost analysis. This information provides an excellent indication of the projects contribution towards the outcome of increased market competitiveness and profitability. Projects with a benefit cost ratio-exceeding 1.0 have clearly realised benefits well in excess of the costs. When this is considered along with the fact that no project commences unless it can demonstrate a strong link to the outcome, then we have a good indication of effectiveness against the outcome.

Table 1 shows the results of analyses of 10 recently or partly completed projects. Projects were selected for analysis from among the projects not reported before. All projects, which are completed or near completion are selected for *ex-post* benefit cost analysis. The number of projects selected for this report remains the same as reported in 1999/2000.

All projects in table 1 have a benefit cost ration of 1.0 or better, indicating that these projects have made a positive contribution towards increasing the market competitiveness and profitability of agri-industry.

The primary outcome of the projects assessed is to increase the market competitiveness and profitability of agri-industry. The high returns of most projects provide a strong indication of their contribution to this outcome.

**Table 1. Project benefit-cost analyses in the Department of Agriculture in 2000/01**

<b>Program and project</b>	<b>Benefit/cost ratio</b>	<b>Net present value (\$'000)</b>
<b>Cereals</b>		
Farming Systems for water-logging prone soils on the South Coast	3.2	1,929
The impact of high yielding cropping systems on crop water use and recharge	1.2	141
<b>Meat and Other Animal Products</b>		
Housing systems for pigs (MDK)	6.6	5,100
Expanding cattle production using tagasaste (MCO)	2.7	1,551
<b>Horticulture</b>		
Sugar industry development	6.2	16,400
Developing the cotton industry	1.1	460

Regional sustainable resource development	1.2	500
Citrus Industry Development	1.0	200
<b>Dairy</b>		
Biological control of doc: enhanced distribution of the dock moth (component for WA dairy industry)	2.0	400
Dairy Farm Assurance	5.8	1,300

## PI 2 Uptake of crop varieties developed by the Department of Agriculture

The Department of Agriculture is the main provider of new varieties for the dominant export crops grown in Western Australia (eg. wheat, lupins and barley). A significant contributor to market competitiveness and profitability is the use of varieties, which are disease resistant and suited to our soil and climate types. The Department has been breeding new and improved varieties for many years, resulting in increased production and a lowering of input costs. However, producers are in a position to make commercial decisions on which varieties they will plant. Their choice can be from the Department bred varieties or a host of varieties bred by other breeders (generally for the Eastern States and overseas). The decision to use a particular variety is driven by the need to be competitive and profitable.

Table 2 shows that despite a particularly difficult growing season, there has been an overall increase in the market share of department-bred crop varieties. All crops show over 80% inclusion of Department of Agriculture lines. In total there has been an increase from 76% in 2000 to 79.5% in 2001.

In terms of hectares planted there has been a general trend of fewer hectares under the pulse and oilseed crops. Despite this the area of WA bred field peas has increased substantially on the 2000 figure. For cereals there has been a general increase in WA lines, led particularly by a 5% increase in wheat. Over 55% of the wheat area planted is to the varieties Carnamah, Westonia and Calingiri (all released within the last five years by the Department). These results provide a strong indication that the Department bred varieties provide the majority of producers with the best opportunity for market competitiveness and profitability.

### Other notable issues include:

Whilst maintaining a focus on market quality requirements there has been emphasis placed on disease resistance. This is of particular note in the pulse breeding programs where material is being developed and tested with greater levels of resistance to ascochyta (chickpeas) and anthracnose (lupins).

Over the last twelve months a series of 'minimum standards' have been established for varieties proceeding to release. These address issues of disease resistance, quality characteristics and yield.

Three new varieties have been released in 2001. Dunwa is a superior quality high yielding dun type field pea, Harrismith is a soft wheat offering significantly higher yields than current lines with better disease resistance, and Wyalkatchem is an APW-grade wheat which has a similar yield performance to the recently released Westonia but offers triple rust resistance.

The work undertaken by the Department of Agriculture in this area is directed towards increasing the international competitiveness of our agri-industry, and its profitability.

**Table 2. Uptake of crop varieties developed by the Department of Agriculture: 2000 and 2001 seasons**

Season and variety	% of WA crop area sown to crop varieties developed by the Department of Agriculture	Season hectares planted	Total area planted to crop varieties developed by the Department of Agriculture
<b>2000</b>			
Wheat	78.1	4,622,000	3,609,782
Barley	86.6	1,048,000	907,568
Oats	93.8	192,000	180,096
Lupins	99.8	982,000	980,036
Field peas	0.4	89,000	356
Chickpeas	92.9	65,000	60,385
Canola	0.6	564,000	3,384
<b>TOTAL</b>	<b>76%</b>	<b>7,574,000</b>	<b>5,741,607</b>
<b>2001</b>			
Wheat	83.3	4,365,694	3,637,626
Barley	87.9	1,049,084	922,597
Oats	89.8	217,167	194,961
Lupins	90.0	897,523	807,701
Field peas	2.4	64,884	1,540
Chickpeas	95.4	20,532	19,594
Canola	0	408,684	0
<b>TOTAL</b>	<b>79.5%</b>	<b>7,023,568</b>	<b>5,584,019</b>
Source: CBH delivery data - 66% run projections for 2001.			

### **PI 3 The extent to which new market opportunities are developed and maintained for Western Australian agricultural produce**

The Department of Agriculture has made a commitment to enhancing trade of agricultural products and increasing investment into the Western Australian agricultural industry. One of the Department's roles is to assist producers to identify, develop and maintain new opportunities for exporting their produce.

Over the year, the Department has engaged in on-going activities that have resulted in Western Australian agricultural producers and companies securing and maintaining new and existing export markets. The Department also continued with its effort to encourage and develop stronger trading relations with Taiwan, Japan, the Middle East and Indonesia.

#### **Taiwan**

One example of the Department's activities is the Focus Taiwan initiative which commenced in 1998 that aimed at developing a stronger relationship with Taiwan's agriculture and food industries. As part of the initiative, the Department has brought two groups of CEO's from Taiwanese agribusiness companies to visit Perth to increase awareness about Western Australia's capabilities, and investment and trade opportunities in agricultural production in Western Australia.

As a result of one Taiwan CEO Visit, one of the largest food manufacturer and retailer in Taiwan, placed a significant order of value-added cereal products with a Western Australia company. The Taiwanese company was introduced to a WA processor and this was the first time that a major Taiwanese company purchased value-added cereal products from Western Australia.

Western Australia also secured a large contract for wood products extending from the year 2000 to 2003 to Taiwan as another result of the Taiwan CEO visit. The Department played an integral role in establishing strong trading relations between the WA and Taiwanese companies by identifying export and import agents and arranging and accompanying key meetings.

## **Middle East**

Export opportunities exist for the State because of its competitive cost of production, low disease status, and access to new markets. Disease outbreaks in herds in Malaysia, Taiwan and Korea, and more recently in Europe, have provided opportunities for Western Australian meat and live animal producers to supply additional markets.

In assisting producers to identify, develop and maintain new export opportunities for their produce, the Department sought to gain in-depth knowledge of the Middle East and their live animals import industry. The Department engaged in regular contact with major Middle East importers and hosted official government visits from the Middle East to further strengthen trading relationship. For example, the UAE Deputy Minister of Agriculture visited Western Australia with five of his senior officers to better understand Western Australia's live animal and meat trade, and to identify prospective exporting partners for their industry. As a result of the Department's initiatives and consistent activities, two MOUs were signed between Western Australia and Kuwait and the UAE. These MOUs provided frameworks for programmes of technical exchange aimed at supporting trade in live animals and animal products. Within this context the Department of Agriculture provided training in risk analysis for government veterinarians in both countries. Introductory courses were held in February 2000, with subsequent training workshops in July and November 2000, and 2 further workshops planned for 2001.

The Department participated in two Agriculture exhibitions held in Saudi Arabia and Dubai to promote Western Australia's trade capacity and establish a strong market presence in their live animal and meat industry.

Special training seminars targeting the Middle East markets as a priority export market for local WA producers were also organised by the Department in Perth and regional locations to increase producer awareness of unrealised new market opportunities.

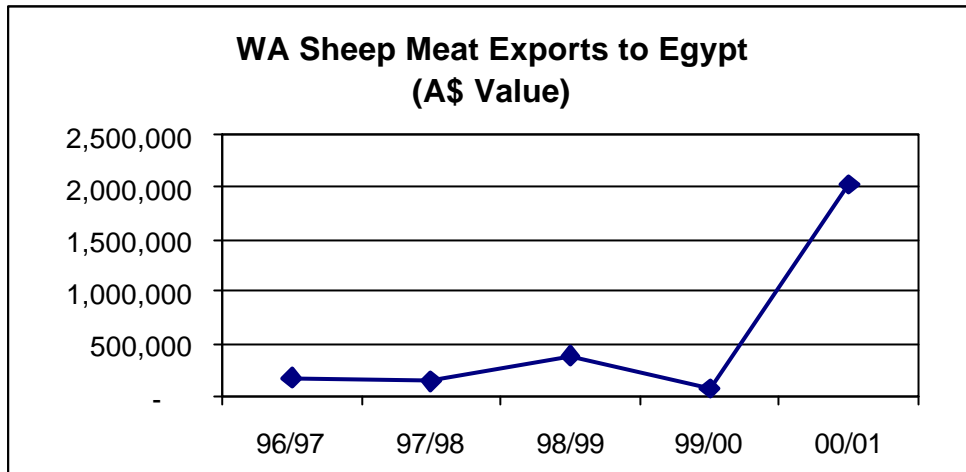
These activities resulted in a number of new export markets being opened up for Western Australia, including new markets to Saudi Arabia, Bahrain, Egypt, and Morocco. As a result of the Department's in-market activities, exports of live cattle to Saudi Arabia jumped from zero exports in previous years to more than \$2.5 million in 2000/2001. In addition, another 1800 head of live cattle valued at A\$2 million was exported to Bahrain from Western Australia in 2000/2001.

Another example of a new market opportunity that has been opened over the past year was Western Australia's live sheep exports to Ukraine, jumping from zero exports in previous years to more than A\$1.6 million in 2000/2001. New markets in Palestine were also secured in 2000/2001, where Western Australia's live sheep exports rose to more than A\$520,000.

Given the recent exports of A\$3 million of processed meat to Egypt and an order from Libya for A\$4 million of processed meat, the Department through its Middle East activities has encouraged the progress of new emerging markets of processed beef and sheep meat, especially in Damaras. In the past, live animal exports have dominated Western Australian exports to the Middle East. With growing meat markets instead of only live exports; Western Australian producers will benefit from increased profit and the industry from increased employment, as well as a decrease in live animal export issues. These new markets will continue to be realised through the Department's activities of highlighting the advantages of importing meat against live animals, and by assisting with the improvement of meat-processing technologies in Western Australia. It is anticipated that meat exports will increase by a further A\$5million per annum.

In the meantime, a key market opportunity that the Department was heavily involved in developing and maintaining for Western Australian meat producers is sheep meat exports to Egypt. Over the last five years, Western Australia sheep meat exports to Egypt were inconsistent developing off a small base. In 1999/2000 the Department engaged in strong market activity that further strengthen Western Australia's trading relationship with Egypt resulting in a tremendous increase in sheep meat exports from A\$72,000 in 1999/2000 to more than A\$2 million in 2000/2001 (See Figure 1 below).

**Figure 1: WA Sheep Meat Exports to Egypt**



The dairy industry in Western Australia is going through a time of change since pricing structures were deregulated in 1999. A shift to more productive farms, offering milk at world parity prices, provides Western Australian producers with new market opportunities.

The Department, through its Trade and Dairy program activities, has been actively focusing its efforts in gaining access to new markets for Western Australian manufactured cheese. Focus has been on a range of new market segments in Indonesia, Malaysia, Brunei and Singapore as a result of their close proximity to Western Australia. Initial orders for 100 tonnes have been received by WA's dairy sector, however it is expected that orders for a further 900 tonnes will be received in 2001. These new market segments will provide extra margins to WA's dairy processors and milk producers.

### **Singapore**

The outbreak of Nipah virus in Malaysia during February 1999 was identified by the Department as providing an opening in the Singapore market for WA pork, a market that had been traditionally dominated by Malaysian imports. As a result of the Department's activities, an alliance between the WA pork industry and the Singapore market was developed and established in 2000. This alliance included Department staff hosting visits by potential investors from Singapore, one of which led to a substantial new order of WA pork for the Singapore market in the order of A\$2.5 million per year.

### **Japan**

The Department has also focused efforts on establishing and developing trading relations with Japanese dairy importers. As a result, the Department worked closely with industry to develop the production and export of cheddar cheese exports especially for the Japanese cheese market. Orders of cheddar cheese exports to at least 2 Japanese dairy companies have already been received by Western Australian dairy processors for the September to December quarter.

A new market for WA pork products into Japan was identified in 1999/2000 where the Department provided strong assistance by identifying new customers for WA, finalising product specifications, preparing sample products to Japan, assisting with product quality assurance, providing staff training and developing a complete supply chain system to support the new Japanese market. Currently new WA exports to Japan have been in the order of A\$1 million per annum and are forecast to increase to A\$2 million per annum by the middle of 2001.



**PI 4 The extent to which the outcomes of research, development and extension projects improve the profitability or potential profitability of rural industries**

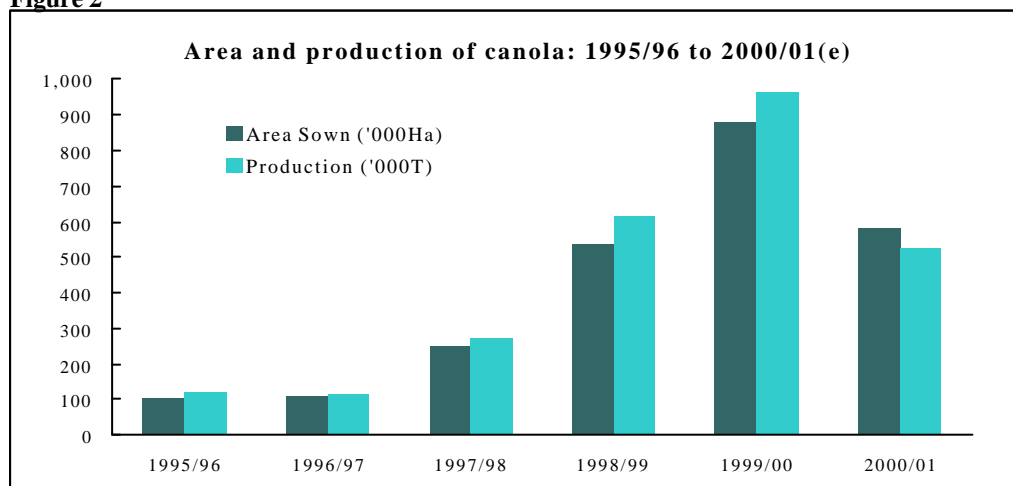
In line with comprehensive research, development and technology transfer activities conducted by the Department of Agriculture, canola area and production have expanded rapidly this decade, particularly over the last two years (see Figure 2). However difficult seasonal conditions, especially in the Southern Agricultural Region, markedly reduced the State’s canola crop to almost half of its potential.

Similar to canola, the production of “new pulses”, namely chickpeas, field peas, lentils and faba beans has expanded since the mid 1980’s (see Figure 3).

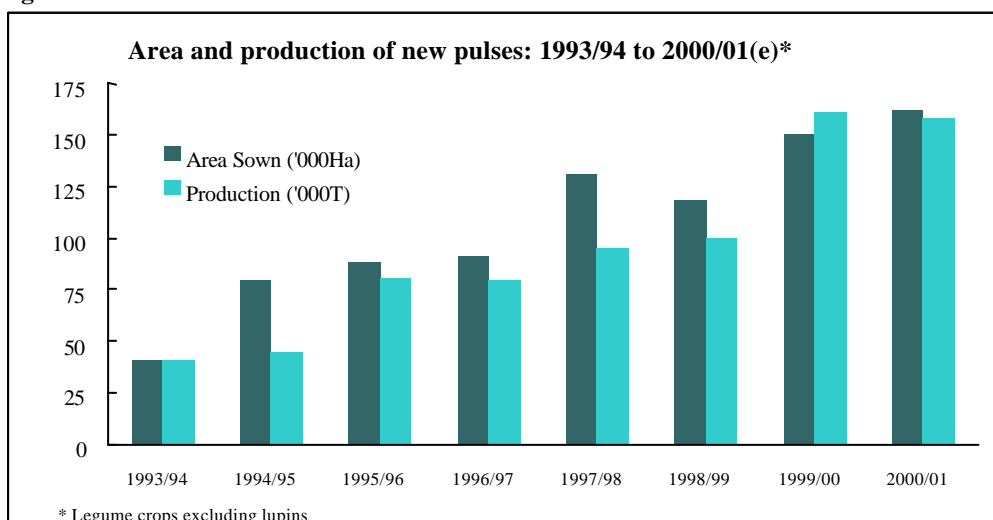
The uptake of canola and many varieties of new pulses can be directly linked to the work undertaken by the Department over the past twenty years. The development of blackleg resistant varieties of canola opened the way for producers of these types of crops. This work has resulted in many producers gaining significant profitability and market competitiveness from these types of crops.

The Department of Agriculture continues to play a leading role in promoting the profitable inclusion of canola in farming systems. To support this claim, the GRDC research prospectus for 2001-2002 notes that the Department of Agriculture is the main recipient of funds for oilseed productivity research in Western Australia. External funds received by the department comprise 68 per cent of the total.

**Figure 2**



**Figure 3**



*Note: The figures for 1999/00 were reported last year as estimates, these have now been updated to reflect actuals. The figures for 2000/01 are estimates and will be replaced with actuals in next year’s report.*

## Efficiency Indicator

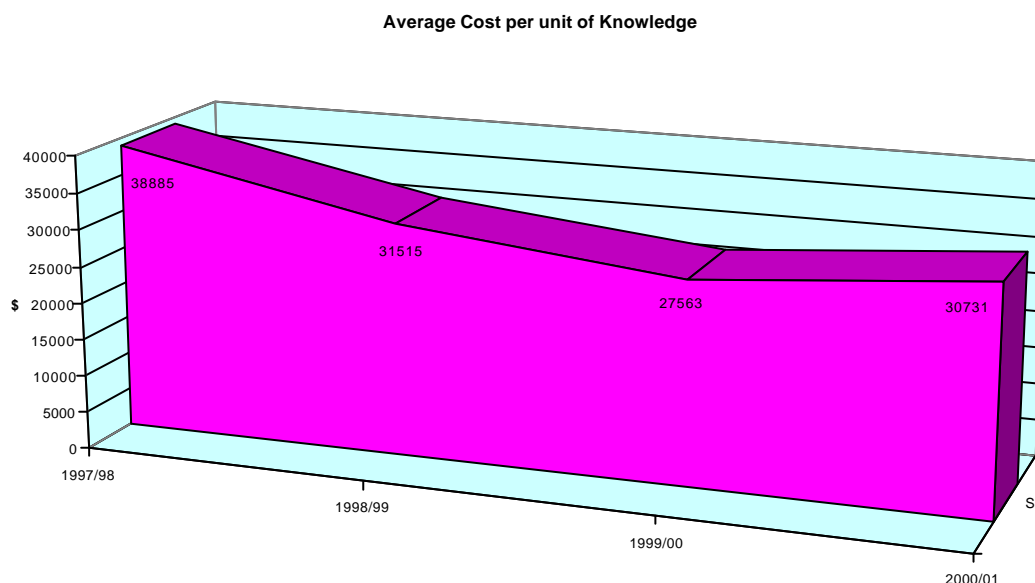
### PI 5 Average cost per unit of knowledge

The Industry and Market Development output is described as the *Generation, integration and application of knowledge that increases the international competitiveness and market opportunities for State agriculture industries.*

R&D organisations tend to have particular difficulty determining meaningful and measurable units of output in order to report their efficiency. In this regard, the output produced is knowledge, and this can take many forms each requiring differing resources and commitment. Some organisations such as the Bureau of Rural Sciences have elected to count variations in person days or hours committed to research. It could be argued, however, that these are strictly units of input.

To fulfil output reporting requirements, in 1998/99, the Department of Agriculture instituted a process to enable annual collection of numbers of publications produced by Department staff associated with Industry Market Development. Publications are considered the most suitable means of capturing - in the form of units of output - the knowledge produced. In addition, another key form of knowledge generation, integration and application are the key strategies directly related to improving the productivity and competitiveness of producers. These strategies include TopCrop, Prograze and Woolpro.

**Figure 4: Average cost per unit of knowledge 1997/98 – 2000/01**



Industry and Market Development's efficiency has risen marginally in 2000/01, however it is worth noting that current levels are well below those of 1997/98 and 1998/99. The Department has continued to refine its data collection methods to more effectively capture all forms of information products. Therefore the above results will have a small degree of bias in favour of the last year. This is primarily due to the fact that not all information products were adequately captured in 1997/98 and 1998/99. In addition, given the nature of our operations, the outputs of research and development will fluctuate between years depending upon the complexity of the research and the duration. A great deal of research projects have a time frame of between 5 and 10 years. The figures for 2001/02 (next year) will enable us to more accurately assess the efficiency of Department operations, particularly as we will have a longer data series of full information capture.

## Notes to the Performance Indicators

### Note 1

As shown below, funding from R&D corporations to the Department's Industry and Market Development Program has been steadily increasing. The ability to obtain increased R&D funding provides evidence of the Department's capacity to add value and achieve positive outcomes in market competitiveness and agri-industry profitability.

	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
External Funding \$'000	17,433	20,862	21,119

Source: Department of Agriculture Financial Statements 1998/99, 1999/00, Finance Section preliminary figure for 2000/01

The Grains Research and Development Corporation (GRDC) is the main funder of contract research for the grains industry in Australia. In 2000/01, the GRDC allocated \$20.0 million to organisations in Western Australia. The shares of GRDC funds allocated to these organisations in 2000/01 are tabled below. The Department of Agriculture is shown to be the major recipient of these funds and is in the "Top 10" of the GRDC's research providers nationally. Further, although not shown in the table, the Department of Agriculture is the main partner in the Centre for Legumes in Mediterranean Agriculture (CLIMA) and several Department staff are the principal investigators in projects whose funding is channelled through the University of Western Australia.

<b>Organisation</b>	<b>Funds received by the organisation in 2000/01 (as a percentage of GRDC funds allocated within Western Australia)</b>
Department of Agriculture	61
University of Western Australia	21
Export Grains Centre	8
Murdoch University	3
Lamont Burgess & Associates	1
CLIMA	3
Other	3

Source: Compiled from GRDC Operational Plan 2001-2002

As part of its accountability framework, GRDC employs a rigorous evaluation program to ensure its funding is efficiently and effectively utilised. The Department was selected on the basis of the importance of the research it performs for the Western Australian grains industry.

## Note 2

The greater diversity of broadacre farming is shown by the data in the following table.

	1983/84	2000/01 (e)
Number of wheat varieties sown over 5 per cent or more of the State's wheat area	3	6
Percentage of State's crop area sown to wheat (%)	73	60
Proportion of State's crop area sown to other cereals (%)	21	13
Proportion of State's crop area sown to grain legumes (%)	5	18
Proportion of State's crop area sown to other crops (eg. canola) (%)	1	9

Sources: Department of Agriculture Bulletin 4372, the Crop Variety Sowing Guide 2001, ABS and Department of Agriculture estimates for 2000/01 based on previous years' ABS data.

The farming system is now less dominated by wheat, with legume crops (lupins, field peas and chickpeas) and canola becoming more important crops. The area sown to wheat is also becoming more diversified insofar as more varieties suited to different growing conditions and targeted at different markets are being sown. In 1983/84, more than 80 per cent of the State's wheat area was sown to 3 varieties that were suited to similar growing conditions and targeted the same markets. In 2000/01, the 3 most popular varieties were sown on only 44 per cent of the State's wheat area. The Department of Agriculture has bred 5 of the 6 most popular varieties in 2000/01. There is now a portfolio of varieties for different lengths of season and different market segregation's (eg noodle, Australian Hard). The greater diversity of enterprises allows a better spread of the production and price risks associated with farming.

## Note 3

The impact of research and development (R&D) investment on productivity growth is not instantaneous. It takes time. Studies on agricultural growth suggest that it may take a few decades to realise full effects of R&D investment (Evenson *et al.*, 1999). In case of US agriculture, Pardey and Craig (1989) found that the effects of research on productivity last at least 30 years from the time the research commences.

In Australia, a good number of studies have been undertaken to measure total factor productivity (TFP) growth in agriculture using different methods (Islam 2000). However, only a limited number of studies so far attempted to quantify the contribution of R&D to TFP growth in Australian Agriculture (Mullen and Cox, 1994 & 1995). Availability of a long and consistent data series is so far the limiting factor in undertaking such studies.

In the context of Indian agriculture, Evenson *et al.* (1999) has used a data set of 8,672 observations covering a period between 1956 and 1987. Their study attempted to explain TFP growth with more than 20 factors including public and private "research stock" (ie. knowledge base) and extension services as separate factors. Based on their study findings they proposed that many of the productivity-related effects of R&D and extension activities become most noticeable around nine-year lag period and 70 percent of TFP growth is attributable to the public sector research and extension systems.

To gain some understanding as to how TFP growth is related to the Department of Agriculture's R&D expenditure, a simple econometric model was applied (Islam, 1999). Analyses indicated a statistically significant relationship with the best goodness-of-fit appearing over an eight-year lag period. As this finding is based on a highly limited data set, before any conclusions are drawn, verification with a larger, more detailed data set and the application of alternative analytic methods are warranted. Further work is ongoing and the Department is likely to be in a position to report in the near future whether a statistically significant relationship exists.

Until then however, a variety of qualitative approach is used to determine the R&D contribution of the Department to the TFP growth in WA agriculture. In a recent study on the growth performance in Western Australian Agriculture, Islam (2001), in line with the earlier study by Knopke *et al.* (2000), reveals that annual productivity growth was the highest in Western Australia. In general, both studies indicate that the factors driving such a high productivity growth were identified as the application of better farm management methods, advances with plant breeding, improved crop rotations with better pest and weed control, development of new herbicides, more efficient fertiliser use, large scale farming and advances in tractor and machinery design. Islam (2001) also indicated that expansion of the pulses & oilseeds production, which is one of the vital examples of the R&D and extension investment contribution of the Department, is also considered to be an important attribute to the TFP growth in WA agriculture.

Henderson and Kingwell (2001) found that broadacre farms in WA are highly efficient and their productive efficiency has an improving trend. This result is also an indication of the R&D contribution of the Department to the productivity growth in WA agriculture.

***Output 1. Industry and Market Development cont.***

**OUTPUT MEASURES (AS DEPICTED IN THE 2000/01 BUDGET STATEMENTS)**

*Outcome: Increased market competitiveness and profitability of agri-industry.*

**Output Description:** Generation, integration and application of knowledge that increases the international competitiveness and market opportunities for State agriculture industries.

***Performance Measures for Output 1***

	<b>1999/00 Estimated</b>	<b>2000/01 Target</b>	<b>2000/01 Actual</b>	<b>Reason for Significant Variation between 2000/01 Target and 2000/01 Actual</b>
<b>Quantity</b>				
Information products and services for enhancing the market competitiveness and profitability of agricultural industries .....	4,181	4,412	4,662	
<b>Quality</b>				
Customers who regard the agency as a leader in strategic and applied (agricultural, food and fibre) research .....	68.4%	80%	60%	
Customers who consider the department is effective in involving industry in its activities	43.5%	75%	52%	
Customers who believe the department's research and development impacts on agricultural productivity	69%	80%	51%	
Funding from sources other than State Government .....	\$18m	\$24m	\$21.12m	
<b>Timeliness</b>				
Customers satisfied that telephone requests for information are responded to within one working day	73%	85%	68%	
Customers who regard the department as proactive in promoting the development of agriculture .....	76%	80%	72%	
<b>Cost</b>				
Average cost per information product and service for enhancing competitiveness and profitability	\$21,425	\$20,835	\$19,216	

***Output 2. - Sustainable Rural Development***  
***Output 5. - Services provided to Rural Adjustment & Finance Corporation (RAFCOR)***

***SUSTAINABLE RURAL DEVELOPMENT***

This program contributes to the Department of Agriculture's outcome of increased export growth by helping to manage the environmental risks associated with agri-industry through delivering a range of activities against the objectives below. The emphasis of the program is to position rural industry so that it can profitably meet market and community demands for environmentally responsible agriculture. The program encompasses the outputs of Sustainable Rural Development (SRD) and services to the Rural Business Development Corporation of Western Australia.

**Objectives**

- Build the capacity of individuals, businesses, communities and industries to be self-reliant;
- Develop agricultural systems that are matched to the capability of the land;
- Provide appropriate and useable management tools for land managers;
- Develop and implement environmental standards for farming systems;
- Monitor and report on resource condition;
- Create an enabling institutional environment; and
- Achieve program excellence.

In delivering the Sustainable Rural Development Program, the Department of Agriculture recognises that for the desired outcome of *sustainable management of natural resources affected by agriculture*, agri-industry requires the following features:

- an agricultural sector managing its impacts on the environment;
- a natural resource base which continues to be productive;
- farm businesses which are profitable in the long-term; and
- viable rural communities.

**Major achievements**

**PROGRESS AGAINST THE MAJOR INITIATIVES IDENTIFIED IN THE 2000/01 BUDGET STATEMENTS** *(original initiatives in italics)*

**Salinity management**

- *Establish project teams to provide advice to landholders on risk of salinity and management options. Catchments totalling two million hectares of agricultural land will be covered in 2000-01* - 6 Rapid Catchment Appraisal (RCA) teams have been established. Interim products discussing risks to the agricultural resource base have been presented to community groups across the state.
- *Through the Land Monitor project, maps predicting salinity in the agricultural regions will be developed and made available to landholders/catchment groups electronically and/or hard copy. This will be supported with 25 Farm Notes on salinity management* - The Land Monitor project has made a significant contribution to meeting the Department's strategic role of monitoring the environmental sustainability of land used for agriculture. The project has produced maps and information for landholders, catchment groups and other land-use planners showing: the extent and

recent change in the area of low-producing/saline land; the land at risk from shallow watertables (salinity and/or waterlogging); areas and changes in remnant native vegetation and timber plantations; and highly accurate land-height information (digital elevation models).

- *A program will continue to map and classify agricultural land affected by salt and provide information packages on land management options* - 23 rural towns have participated in a comprehensive groundwater and salinity investigation project undertaken by the Rural Towns Project. For the purpose of raising awareness, drilling in the 23 towns included installation of piezometers in 45 schools. Sampling and monitoring kits, developed by the Rural Towns Program, were provided to the schools to encourage an active role in monitoring ground water levels. In addition, a 'Community Awareness Bore' has been installed in a prominent position in each of the 23 town.
- *The Rural Towns Program guidelines will be revised to stimulate investment by Local Government in salinity management* - Decision support tools have been developed by the Rural Towns Program to assist with investment decisions on managing town site salinity. MODFLOW<sup>®</sup>, a groundwater modeling software package, has been applied across 29 towns in order to predict the impact of rising water tables and assess proposed treatments.
- *Provide a report assessing risk from rising groundwater for 29 rural towns through a program of establishing and monitoring bores* - The Rural Towns Program completed an economic evaluation of the impacts of salinity on town site infrastructure. The study indicated that the major costs of salinity are due to damage to roads and residential areas. In many cases, it is more economical to implement low cost options to manage salinity rather than attempt to prevent or control it.
- *Assess the effectiveness of salinity management actions on rising water tables through monitoring bores and piezometers* - An estimated 6,000 groundwater monitoring wells and piezometers are now being monitored throughout the agricultural area by landholders, community groups, catchment groups and Department of Agriculture staff to determine impacts of land management practices on groundwater levels and regional groundwater trends. The information is managed by the Department of Agriculture and stored on the agency's Oracle database using the AgBores software application.

A Salinity website (<http://www.agric.wa.gov.au/environment/land/salinity/>) has been produced and presents information on salinity as part of the overall 'Environmental Management in WA' site (<http://www.agric.wa.gov.au/environment/>).

#### **Water management/drainage**

- *Develop a Memorandum of Understanding with other natural resource management agencies to ensure timely and efficient assessment of drainage proposals* - A Memorandum of Understanding has been developed with other natural resource management agencies to ensure timely and efficient assessment of drainage proposals.
- *Commence a three year project to provide catchment level water management plans throughout the agricultural regions to improve drainage and water management planning* - A three year project commenced to provide catchment level water management strategies throughout the agricultural regions to improve drainage and water management planning.

The new 'Drainwise' website (<http://www.agric.wa.gov.au/environment/land/drainwise/>) has been developed in cooperation between the Department of Agriculture, the Avon Catchment Network, and the Water and Rivers Commission.



## Vegetation management

- *Establish a project team to advise landholders on managing native vegetation* - A project team to advise landholders on managing native vegetation was established to implement a Special Assistance Process as recommended by the Native Vegetation Working Group.
- *Produce a package of Farm Notes on the benefits and management of native vegetation* - A series of Farmnotes (three printed and more in draft) and Information Kits has been produced on nature conservation values of revegetation. The agency has established partnerships with Greening Australia WA, the WWF and others to produce these Farmnotes.
- *Implementation of the range of incentives recommended in the Native Vegetation Report to encourage the retention of native vegetation* - Work has proceeded on the range of incentives recommended in the Native Vegetation Report to encourage the retention of native vegetation. An interim Subdivision for Conservation policy was developed in conjunction with the Ministry for Planning, and has now been released. Assistance has been given to a number of landholders keen to use this approach. Cooperative programs are now in place to operate a revolving fund, and to work with the real estate industry on market mechanisms.

## Rangeland management

- *Establish the Centre for Managing Arid Environments, Kalgoorlie as a credible research centre and secure external funding for a major rangelands research project* - The Centre for Managing Arid Environments began operations in Kalgoorlie. It is a collaborative project between Curtin University of Technology and the Department Of Agriculture. The Centre aims to enhance the condition, management and productivity of arid land through quality research and teaching.
- *Develop an effective rangelands monitoring system based on the recently completed WARMS network* - The Western Australian Rangeland Monitoring System (WARMS) has begun producing valuable information on changes in the natural resource base of WA's pastoral rangelands. Draft reports have been prepared which indicate that in the Kimberley about 10% of sites improved, 5% declined and the remainder were stable. In the southern areas, shrub populations have increased on about 80% - 85% of sites reassessed.
- *The Gascoyne Murchison Strategy initiatives for 2000-01 include development of ecological accreditation for rangeland products for organic overseas markets; develop integrated management technology tools for rangeland producers (eg. virtual fencing, remote monitoring technology); and implementation of recommendations from the review of the Voluntary Lease Adjustment Scheme* - The Gascoyne Murchison Strategy achievements for 2000-01 include:

### Ecological Accreditation

Several pilot stations covering the products of beef, sheep meat, wool and goat meat are underway, progressing the testing of certification systems such as ISO14001 and SQF for their support of claims of 'clean, green' rangeland production.

### Integrated Management Technology

The creation of IMT Pty Ltd has been facilitated by the Department of Agriculture. This is a consortium of seven companies who, in association with the Department of Agriculture as the GMS lead agency, are committed to the future development, production and marketing of IMT products for livestock producers.

### Voluntary Lease Adjustment

Following the mid-term review of the Gascoyne-Murchison Strategy and the increased flexibility in the delivery of VLA opportunities for pastoral businesses in the region, two lease adjustments have been brokered in the first 6 months of 2001 with an additional two in the negotiation stages at present.

### **Environmental management system**

- *Establish an Environmental Management System (including best management practices) for producing agricultural products under environmentally sustainable conditions for a broadacre and intensive industry* - A practical guidebook for farmers wishing to develop an environmental management system for their business has been published. There has been considerable interest shown nationally in this initiative. Pilot testing with a cereal farming group in the Northern Agricultural region is well advanced and testing has begun with a potato growers group and a wine growers group. A code of practice for potato growing in sensitive coastal environments is complete.

### **Other Major Achievements**

- The Department completed the WA component of the National Land and Water Resources Audit report on dryland salinity. The data are the most comprehensive available on the impacts of salinity on agriculture, infrastructure and remnant vegetation. Modelling undertaken confirmed the high levels of management intervention required for salinity control. Furthermore, the modelling tool chosen for the Audit and recent Salinity Council analysis (Flowtube), and a hydrograph analysis tool (HARTT) has been developed by the Department and made available as tools to be used by hydrologists.
- Farming systems research and development has been increased by several large co-funded research and development projects with support from GRDC. These projects seek to develop new farming systems in which perennials for a major component. The Low Recharge Farming Systems project has developed the 'leakage calculator', based on AgET, a more detailed water balance model. Training on the productive uses of saline resources has been delivered in collaboration with the Saltland Pastures Association.
- The Cooperative Research Centre for Plant-based Management of Dryland Salinity will receive \$22M in Commonwealth funds over the next seven years. The Department is a major partner in the CRC. The Department has established linkages with the CRC for Landscape, Environment Mining and Exploration in relation to airborne geophysics
- The role and application of airborne geophysics and a cost benefit model for its use in land management was completed by the Department. The findings have been adopted under the National Action Plan on Salinity and Water Quality, 'Ultrasound of the Earth' project. High resolution 'soil mapping' using radio metrics were trailed for the first time in WA and are being assessed for use in precision agriculture.
- A special taskforce was established to assist farmers and rural communities cope with an exceptionally poor season experienced in many agricultural areas. This included publication of a special handbook called 'Dealing with a Dry Season' which was delivered to all farmers in affected areas, and two editions of a revised 'Farm Family Support Directory'. Special editions of Agmemos were produced, material provided on the department website and a Seasonal Solutions Hotline provided to link to sources of specific information in technical, financial and social areas. The department arranged for Farm Family Business Reviews to be undertaken at special rates in co-operation with farm consultants and accountants.

### **Exceptional Circumstances**

- The Department made an application to the Federal Government for areas of the State in the south-eastern wheatbelt to be declared eligible for receiving Exceptional Circumstances assistance. This area incorporated some 680 farms in the region including all of the Lake Grace shire and parts of the shires of Kulin, Dumbleyung, Kent, Gnowangerup, Jerramungup and Ravensthorpe. Under this Federal scheme, eligible farmers in the declared area could apply to access an Interest Rate Subsidy of up to 70% on interest payable and associated costs of borrowings for the first year and an interest subsidy to a maximum of 50% in the second year. The Department was made responsible for processing these applications.

- To 30 June 2001, 426 applications for support had been received. Of these, 40 had been declined while 116 had been approved for a total commitment of \$4,734,315 implying an average grant of \$40,813. Of these approvals, 85 payments totalling \$3,407,357 had been made, an average of \$40,087 per farm business.
- In addition to the Interest Rate Subsidy, eligible farmers could also make application for an Exceptional Circumstances Certificate to enable them to apply to Centrelink for Exceptional Circumstances Relief Payments, or Austudy/Youth Allowance. Assistance was made available for a fixed period of twelve months to 1 February 2002, with a further recovery period of twelve months. 598 EC Certificates were issued to 30 June 2001.

**Release of Alkaloam**

- Environmental approval has been given for the release and use of Alkaloam for soil amendment in the Peel-Harvey catchment. Broad scale land application began in May 2001.

## ***STATEMENT FROM COMMISSIONER OF SOIL AND LAND CONSERVATION***

A report on the Commissioner's operations during the year was submitted to the accountable officer in accordance with Section 25 F of the Soil and Land Conservation Act.

### **Delegations**

The delegation of powers under Part II of the Act by the Commissioner, to the Deputy Commissioner, State Mining Engineer and two Water and Rivers Commission Regional Managers, to administer land clearing remain in effect.

The Sustainable Rural Development Program Regional Managers have delegated responsibility for the appointment of Land Conservation District Committees.

### **Land Clearing Assessments**

In 2000/01, 57 Notices of Intent (NOI) were registered and assessed. This figure includes 22 NOI to clear rural zoned land and 2 Country Areas Water Supply Catchment license applications assessed in accordance with guidelines and criteria of the Memorandum of Understanding for the Protection of Native Vegetation on Private Land in Western Australia.

This Memorandum of Understanding commits the Department of Agriculture, the Environmental Protection Authority, Departments of Environmental Protection and Conservation and Land Management and the Water and Rivers Commission to a single evaluation process which ensures adequate consideration of land degradation and nature conservation values.

**Table 3: Area of vegetation protected under the Soil and Land Conservation Act in 1998/99, 1999/00 and 2000/01.**

<b>Component</b>	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
Soil Conservation Notices issued	4,212	1,394	2,900
Agreement to Reserve lodged	2,923	2,125	2,362
Conservation Covenants (Remnant Vegetation Protection Scheme ) lodged	7,089	1,382*	10,223
Conservation Covenants (non Remnant Vegetation Protection Scheme ) lodged	7	736	868
<b>Total area protected</b>	<b>14,232</b>	<b>5,637</b>	<b>16,353</b>

\* Provisional figure.

The downward trend of recent years in notified clearing continued in response to changing community attitudes and the progressive tightening of controls.

During the year, clearing proposals for 2722.4 ha of native vegetation were assessed. The Commissioner did not object to the clearing of 535 ha for mainly agricultural purposes. This included 444 ha previously assessed and referred to the EPA for further assessment of other environmental impacts. Statewide, 499 ha was allowed to be cleared for infrastructure and other non-rural purposes.

**Table 4: Areas of no objection to clearing in 1998/99, 1999/00 and 2000/01**

<b>Component</b>	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
Assessed under MOU	617	89	535
Non MOU	759	289	499
Total area of no objection	1,376	378**	1,034

\*\*This figure includes the outcomes of two NOIs not finalised at the time the 1999/00 report was published.

During the year, 5 proposals totaling 366 ha were referred to the Environmental Protection Authority for consideration of environmental impacts that are beyond the scope of the Soil and Land Conservation Act. A further 2 proposals to clear a total of 93 ha in Country Areas Water Supply Catchments were referred to the Water and Rivers Commission.

In 2000/01, four woodchip permits were issued allowing the harvesting and chipping of 6,150 tonnes of timber from isolated trees and the clearing of 30 ha under licence from the Water and Rivers Commission.

### **Land Drainage**

Landowners intending to drain saline water submitted 24 Notices of Intent during 2000/01. Following assessment, 19 landowners were issued letters of no objection and 4 with letters of objection where the downstream impacts were assessed to be unacceptable. One drainage proposal was not notifiable.

### **Soil Conservation Notices**

The Commissioner issued 15 Soil Conservation Notices under Part V of the act during the year. Of these Notices, 13 were issued to prevent notified land clearing or in response to land clearing complaints.

During the year, 5 landowners lodged objections to Notices with the Minister in accordance with Section 34 of the act. The Minister heard 1 Soil Conservation Notice appeal and confirmed 1 Notice. The Minister's decision was pending on 4 appeals at 30 June 2000.

### **Land Conservation District Committees**

During the year the number of Districts under the Soil and Land Conservation Act remained at 152. A new District was established at Hyden-Karlgarin and Lake Bryde Land Conservation District (LCD) was abolished and the area was merged into the boundaries of Nyabing-Pingrup LCD and Lake Grace LCD. The number of committee members now totals 1976, following the re-appointment of 44 District Committees and 35 members.

### **Condition of the Resource Base**

#### Agricultural region

Under the April 2000 State Salinity Strategy, the Department of Agriculture is committed to making resource information available to land holders in all agricultural catchments by 2005.

Newly established Rapid Catchment Appraisal (RCA) teams are working in the regions to provide information on: -

- Assessment of the level of risk to their natural resources;
- Assessment of potential impacts on off site assets;
- Options available for managing those risks;
- Biophysical, economic and social impacts from implementation of options.

During 2001, RCA teams in four regions commenced appraisal of 2,600,000 ha. In addition to providing the assessment of salinity risk, land holders will also be able to access information on water repellence, soil structure decline, sub surface compaction and acidification, soil erosion and waterlogging/inundation risks where applicable.

### Rangelands

On a region wide basis, livestock grazing has not damaged the range resource in the Kimberley or the southern shrublands over the last few years. This conclusion can be drawn from the results of the Western Australian Rangeland Monitoring System (WARMS).

### Kimberley

In the Kimberley, the first reassessment of all sites was finished in 1999. This allowed complete analysis of region wide trends from WARMS to be undertaken during the year.

Perennial grass frequency remained constant or increased on 69% of sites over the reassessment period. Averaged across all sites, the frequency of perennial grasses increased from 77% to 81%. Of the eight vegetation groups included in the analysis, only the Northern Ribbongrass group showed a decline in frequency (89% to 86%) but this was not statistically significant. Overall, 10% of sites were judged to have improved, and 5% declined (Table 5).

This result was consistent in the Broome, Derby-West Kimberley and the Halls Creek-East Kimberley Land Conservation Districts.

In the North Kimberley LCD, almost 7% of sites declined and only 2% of sites improved although the percentage of sites which remained static (91%) was higher than for the other three LCDs and so the overall result gives little cause for concern. The crown cover of woody perennials remained constant when averaged across all vegetation types but significantly decreased on Limestone Grass and Black Soil Plain vegetation. However, this is not considered cause for concern from a range health perspective.

Preliminary assessment of the sites sampled in 2000 shows similar results to the full assessment. About 6% of sites improved and 3.5% declined between 1997 and 2000. Over the six years 1994 to 2000, about 9% of sites improved and 6% declined.

### Southern rangelands

Shrub mortality rates were low, recruitment rates high and the canopy size of shrubs generally increased during the period from late 1993 to late 2000. The results were consistent across vegetation groups, both resilient and susceptible species and across Land Conservation Districts. These results come from 214 sites reassessed to the end of 2000. They represent nearly a quarter of all WARMS shrubland sites, which are reassessed on a 5 to 6 year frequency.

An increase in shrub populations, in most vegetation types, is seen as desirable. Furthermore, species with low turnover rates (essentially longer-lived species) are more reliable indicators of range health, being less subject to demographic fluctuations caused by recent seasonal conditions. During the period between installation (1993-1996) and reassessment (1999-2000), only 19% of shrub populations, when considered by turnover rate category declined. Only a few sites showed catastrophic decline and many of these were in areas uncharacteristically inundated by sequential cyclonic rains.

Recruitment rates were unusually high across most vegetation types and areas. If the survivorship of these recruits remains high, this will constitute a significant pulse of increased shrub density in the southern rangelands.

**Table 5: Trends in Kimberley rangelands as reported by the Western Australian Rangeland Monitoring System. The analysis has been broken down by Land Conservation District and by vegetation group using all sites installed during 1994-1996 and reassessed between 1997 and 1999.**

<b>Land Conservation District</b>	<b>Vegetation group</b>	<b>No. of sites</b>	<b>Improved</b>	<b>Static</b>	<b>Declined</b>
Broome	Curly Spinifex	19	2	16	1
	Coastal Vegetation	12	2	9	1
	Northern Ribbongrass	2	-	2	-
	Southern Ribbongrass	1	-	1	-
	Soft Spinifex	9	-	8	1
<i>Sub-total</i>		<i>43</i>	<i>4</i>	<i>36</i>	<i>3</i>
Derby West Kimberley	Black Soil Plains	63	11	51	1
	Curly Spinifex	31	3	26	2
	Frontage Grass	11	1	9	1
	Southern Ribbongrass	59	3	52	4
Soft Spinifex	1	-	-	1	
<i>Sub-total</i>		<i>165</i>	<i>18</i>	<i>138</i>	<i>9</i>
Halls Creek – East Kimberley	Black Soil Plains	46	4	41	1
	Curly Spinifex	6	-	6	-
	Limestone grass	12	3	9	-
	Northern Ribbongrass	5	1	4	-
	Southern Ribbongrass	3	1	2	-
Soft Spinifex	13	1	11	1	
<i>Subtotal</i>		<i>85</i>	<i>10</i>	<i>73</i>	<i>2</i>
North Kimberley	Black Soil Plains	4	-	4	-
	Curly Spinifex	13	1	12	-
	Frontage Grass	2	-	2	-
	Northern Ribbongrass	25	-	22	3
	Southern Ribbongrass	1	-	1	-
<i>Sub-total</i>		<i>45</i>	<i>1</i>	<i>41</i>	<i>3</i>
<b>TOTAL</b>		<b>340</b>	<b>33</b>	<b>290</b>	<b>17</b>

***Output 2. - Sustainable Rural Development***  
***Output 5. - Services provided to Rural Adjustment & Finance Corporation (RAFCOR)***

**PERFORMANCE MEASURES** (PAGES 55-65 WERE AUDITED BY THE AUDITOR GENERAL)

**Outcome: Improved ecological sustainable development of agri-industry**

**Output 2: Sustainable Rural Development**

**Output description:** Generation, integration and application of knowledge which together with appropriate investment, policy and regulation develops the capacity of rural communities and industries to profit from environmentally responsible agriculture.

**Effectiveness Indicators**

The ecological sustainability of agri-industry will be improved if primary producers are able to:

- adopt sustainable land management practices;
- be skillful in the management of their businesses and natural resources;
- be part of rural communities that are robust and viable in the long term.

The Sustainable Rural Development (SRD) output contributes to all these areas.

**PI 6 The impact of Department activity on the adoption of sustainable management practices**

The adoption of sustainable natural resource management practices is crucial to the development of profitable agricultural industries in Western Australia. The SRD Program is involved in raising awareness of sustainability issues and assisting the uptake of these management practices through development and extension activities.

PI 6 includes information on a number of measures that reflect the Department's effectiveness in achieving increased adoption of sustainable management practices.

Table 6 presents data from the Department of Agriculture's Customer Survey over the last four years (1997/98, 1998/99, 1999/00 and 2000/01). Please refer to note 4 at the end of this section for further information on the customer survey. The 2000/2001 survey results indicate a decline in the percentage of primary producers who consider that the Department contributes to the development of sustainable agricultural systems and is a leader in landcare. The variation between years may reflect changing community attitudes and expectations towards sustainability issues. However, it is more likely that due to issues like adverse seasonal conditions and locusts, primary producers are tending to be more critical of Government and its programs. This is partially supported by anecdotal evidence obtained during an internal Farm Health survey, where it was noted that during the difficult times, primary producers were expecting more support from Government. These issues will be further explored over the next twelve months.



**Table 6: Percentage of Western Australian primary producers who consider that the Department of Agriculture contributes to sustainable agriculture and is a leader in landcare.**

Percentage of WA primary producers who consider that the Department of Agriculture:	1997/98	1998/99	1999/2000	2000/01
Contributes to the development of a sustainable agricultural system (%)	59.0	65.4	52.5	46
Is a leader in terms of landcare (%)	66.9	70.3	66.9	60

Source: Department of Agriculture Customer satisfaction Surveys 1997/98, 1998/99, 1999/2000 and 2000/2001.

Tables 7 and 8 list a suite of management practices that the Department promotes through its publications and its work with primary producers. Table 7 shows survey results for the wheat/sheep and high rainfall zones and Table 8 presents findings for rangeland primary producers. The results are reported separately for the two regions as management practices are different and separate questions were asked to establish the levels of adoption.

Table 7 summarises the results from Department-commissioned surveys in 1998-99, 1999-2000 and 2000-01. These surveys examined the adoption of selected sustainable land management practices for the WA agricultural region. The table presents results for the wheat/sheep zone first and the high rainfall region second (see Special Note).

**Table 7: Percentage of Western Australian primary producers in the agricultural area who use selected sustainable land management practices (by wheat/sheep zone and high rainfall zone).**

*Wheat/sheep reported first and high rainfall second*

Selected Management Practice	1998-99%	1999/00%	2000/01%
<i>Cultivation and Agronomy Practices</i>			
Use of perennial pasture species	46 64	58 50	54 59
Stubble retention or mulching to minimise degradation	73 24	68 27	69 33
Manage crop rotation to minimise degradation	87 32	85 42	83 47
<i>Revegetation and Biodiversity Management</i>			
Tree/shrub planting	67 44	64 59	53 43
Preserve or enhanced areas of conservation value	57 77	60 75	82 48
Working to the contour	75 36	72 33	71 41
<i>Livestock Management</i>			
Excluded stock from areas impacted by land degradation	78 66	43 69	75 37

Protected river or creek frontages from grazing animals	37	45	54
	43	40	32
<i>Resource Monitoring</i>			
Regular soil testing or monitoring	65	64	68
	42	54	60
Regular monitoring of the watertable	40	47	40
	30	25	29
Regular monitoring of pasture/vegetation cover	61	81	77
	61	74	77
<i>Surface Water Management</i>			
Surface water control through level banks	56	53	44
	26	28	14
Surface water control through grade banks	57	51	57
	21	22	22

Table 7 shows trends in the adoption of sustainable management practices by primary producers in the wheat/sheep zone and high rainfall zone. Generally the results show there is a high proportion of primary producers who continue to use sustainable practices. A significant component of the Department's activities is the promotion of the latest and most effective practices for sustainable land management. The survey results are a positive sign that much of this work is achieving worthwhile outcomes. However, further analysis is required to determine the real effect of our activities in this area.

#### **Special Note**

The 1998/99 and 1999/00 SRD survey reports incorrectly defined and reported results for the Southern Agricultural and Sheep/Wheat regions. Consequently results were reported incorrectly in the 1999/00 Annual Report.

*Table 8 presents results from the Department-commissioned surveys conducted in 1998/99, 1999/00 and 2000/01. These surveys examined the adoption of selected sustainable land management practices for the rangelands and show the level of adoption of selected practices.*

**Table 8: Percentage of Western Australian primary producers in the rangelands who use selected sustainable land management practices**

<b>Selected Management Practice</b>	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
	<b>%</b>	<b>%</b>	<b>%</b>
Permanent control methods on stock water supplies	91	67	67
Rotational pasture spelling during plant growth season	56	50	57
Specifically spelled pastures for subsequent use by export cattle	23	23	32
Fencing to land systems	56	64	57
Excluded stock from areas impacted by land degradation	60	56	66
Protected river or creek frontages from grazing animals	25	36	36
Conducted a prescribed burn for management purposes	32	24	36
Preserve or enhanced areas of conservation value	49	50	66
Formal monitoring of vegetation/pasture condition	77	82	83

Table 8 shows an increase in the adoption of sustainable management practices by rangelands primary producers. The Department of Agriculture places considerable effort in promoting the adoption of sustainable management practices in the pastoral areas. The maintenance of sustainable practices in the majority of cases is a positive sign. However, further work is required to determine the true effects of the Department's activities in this area.

Table 9 and Figure 5 show the level of adoption of revegetation and application of lime. These two activities are an important component of sustainable agricultural systems.

Table 9 demonstrates the level of planting's for timber or pulp production and for all other purposes over the last five years. Values for 1995/96 and 1996/97 are results from the Australian Bureau of Statistics (ABS). Values from 1998/99, 1999/2000 and 2000/01 are provided by the Department-commissioned surveys.

Revegetation is an important management tool for a range of sustainability issues such as salinity and erosion. Revegetation for conservation and commercial agroforestry opportunities is promoted through SRD Program activities. The results in table 6 shows that in 1999/00 there was a significant peak in the number of seedlings planted for timber or pulp production. This may be explained by external fiscal influences such as interest in tax minimisation schemes and the down turn in commodity prices. The results also show an increasing trend in the number of trees planted for all other purposes including those grown for shelterbelts and managing land degradation. This increase could be reflecting the growing awareness and acceptance of the role of revegetation in sustainable land management.

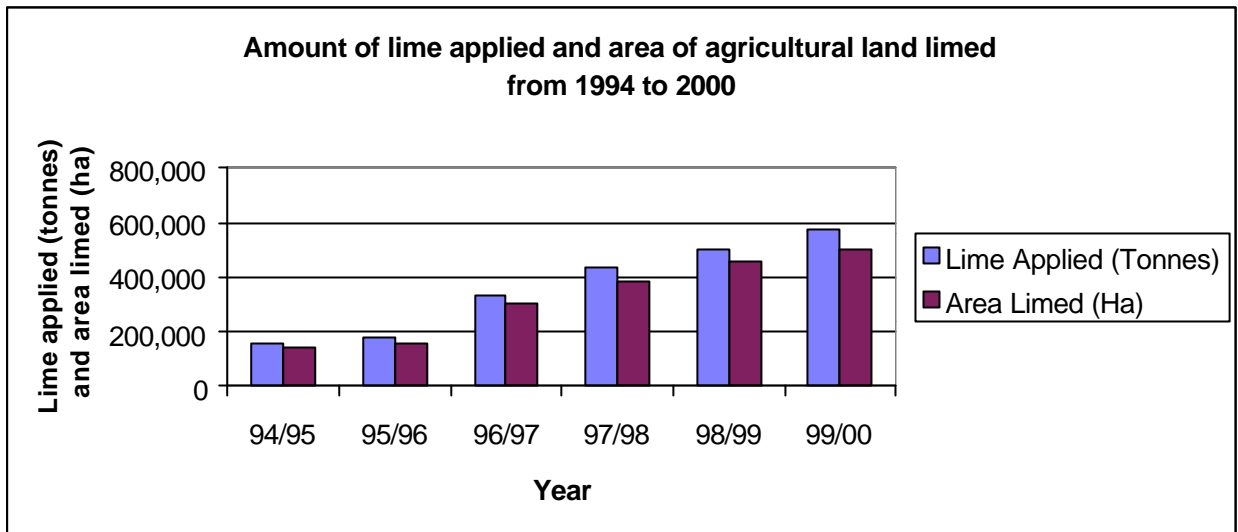
**Table 9: Number and type of revegetation activity on private agricultural land in Western Australia 1995-96 to 1999-99**

Activity	1995/96	1996/97	1998/99	1999/00	2000/01
Seedlings planted for timber or pulp production ('000)	4,564	5,540	5,874	21,868	7,293
Seedlings planted for all other purposes ('000)	6,247	11,343	41,700	42,060	48,558
Total seedlings planted	10,811	16,883	47,574	63,928	55,851

Source: Australian Bureau of Statistics (ABS) 1995/96 and 1996/97, SRD Program Surveys 1998/99 and 1999/00 and the Department of Agriculture Customer Satisfaction Survey 2000/01

Soil acidification threatens the profitability and environmental sustainability of two-thirds of Western Australia's broad scale agricultural industries. The Time to Lime project is a Department initiative that encourages landowners to understand and implement practices for the effective management of soil acidity. A key indicator of its success is reflected in Figure 5, which shows the high rate of lime application and large areas treated in the agricultural region. The initial target of 450,000 tonnes applied per annum by 2002 has already been passed and a new target of 750,000 tonnes per year is now the benchmark. Results for 2000/01 are yet to be obtained from the ABS.

**Figure 5: Lime use by farmers in the WA agricultural region**

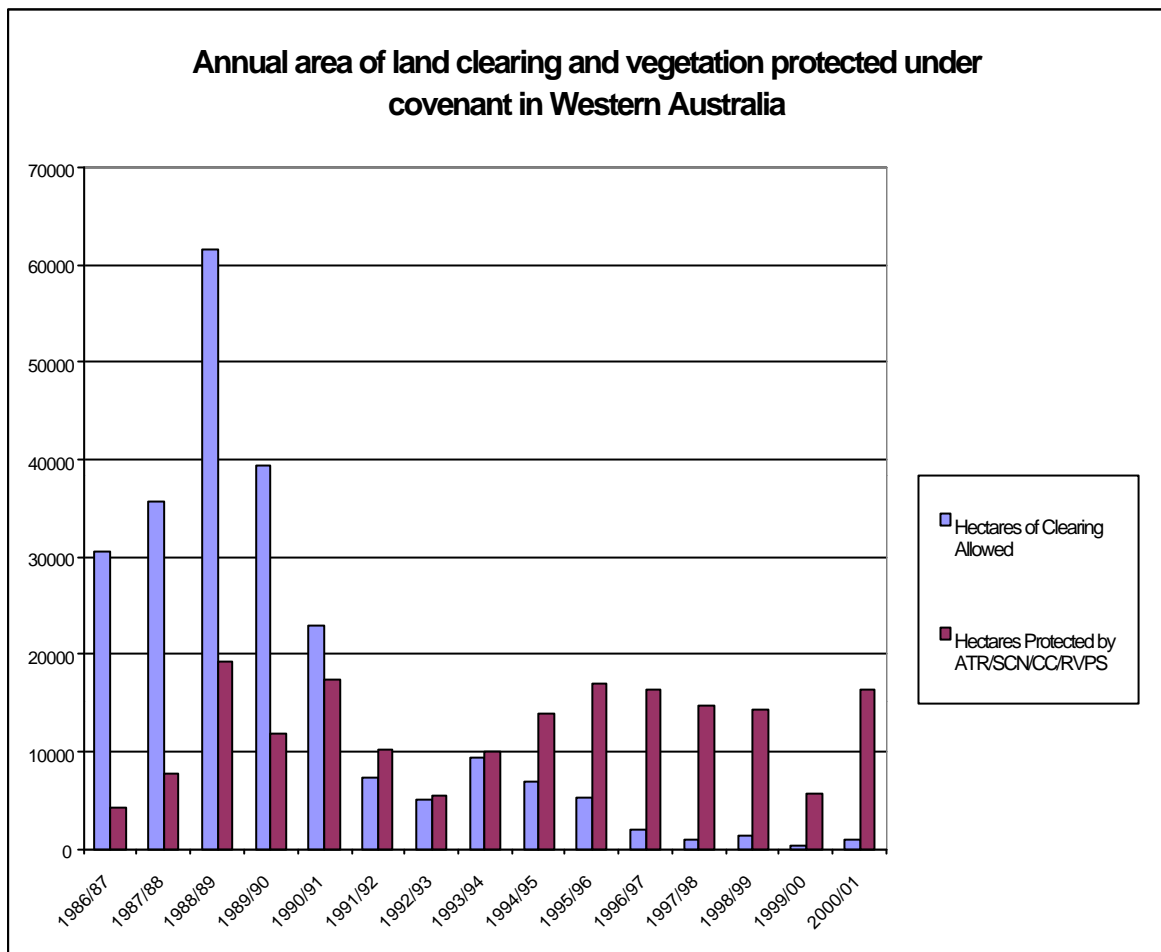


Source: Australian Bureau of Statistics

The regulatory functions under the Soil and Land Conservation Act are a Department responsibility and include the administration of land clearing and drainage controls. The Department is also involved in the protection of remnant vegetation through the regulatory process. These Department activities have an influence on the adoption of sustainable management practices, therefore are important measures of Department effectiveness in this area.

Figure 6 indicates a slight increase in notified clearing to which no objection was raised resulting from an increase in notices of intention to clear for purposes of infrastructure development and extractive industries. However, during 2000/01 there was continuing decline in land clearing for agricultural purposes resulting from changes in relevant Government policy and the implementation of new procedures under the Soil and Land Conservation Act. In addition, the graph shows the return to pre-1999/00 levels in the amount of remnant vegetation protected through the regulatory process, either through Agreements to Reserve (ATR), Soil Conservation Notices (SCN) or Conservation Covenants (CC) established as part of the Remnant Vegetation Protection Scheme (RVPS).

**Figure 6: Land clearing and protection in Western Australia**



Source: Register maintained by the Commissioner of Soil and Land Conservation

## Efficiency Indicators

### Output 2: Sustainable Rural Development

The sustainable rural development output accounts for a diverse range of activities that can be summarised as:

- information products and services;
- strategic management plans;
- regulatory actions under the Soil and Land Conservation Act;
- landcare grant administration;
- farm business development and rural community development.
- Presentations at and participation in events such as field days, workshops, seminars and conferences etc.

The PIs for efficiency of the SRD output relate directly to the above activities. In most cases, the efficiency indicators consist of aggregate data from a number of different activities contributing to the same sub-output, e.g., an information product or service.

The figures in the following tables were allocated from the total SRD output cost of \$60.45 million (2000/01) and \$63.31 million (1999/00). Note that these amounts include the total value of grants approved and advanced to community members of \$24.073m (2000/01) and \$25.045m (1999/00). While contributing to the total cost of the output, these figures do not form part of efficiency determinations.

#### PI 7 Average cost per information product

This was calculated by recognising that information products produced by the output are manifold and can be divided into the following categories:

- publications which include serials, monographs and refereed papers;
- cartographic products such as maps;
- electronic products such as web pages and databases;
- contributions to corporate publications;
- media releases and appearances;
- audio visual products such as CD ROMs and videos.
- Public presentations at and participation in field days, workshops, seminars and conferences.

Information services such as presentations at field days, workshops and seminars were also included. In all, some 30 projects within the SRD Program contributed to this indicator. The number of information products decreased slightly in 2000/01 compared to the previous year however the trend over 4 years is positive.

**Table 10: Average cost per information product**

	1997/98	1998/99	1999/00	2000/01
Total number of information products	475	856	1436	1241
Total Cost (\$)	8,474,084	9,850,608	13,116,648	10,924,706
Average cost per information product (\$)	17,840	11,508	9,134	8,803

The average cost per information product has improved marginally, reflecting continued efficiency.

## PI 8 Average cost per strategic management plan facilitated

The sustainable rural development output facilitates a number of different strategic management plans that are incorporated into this performance indicator. These include:

- Completed Focus Catchment Plans for Focus Catchments as provided for by the Salinity Action Plan (1996) and for the Rapid Catchment Appraisal process as an initiative of the Salinity Strategy (2000);
- funded salinity management strategies for the Rural Towns Program under the Salinity Management Plan;
- funded Implementation Grants under the Gascoyne Murchison Strategy for Total Grazing Management and Station Water Management Plans under the Carnarvon Artesian Basin Program.

Table 11 illustrates that the number of strategic management plans facilitated decreased in the 2000/01 financial year. This is because many projects have moved from the planning process into the implementation phase. Therefore there has been a reduced need for facilitation efforts from the SRD Program in this area.

The new output being introduced in 2001-2002 to replace the “Number of strategic management plans facilitated” is the “Number of hectares assessed for risks, options and impacts”. This is a major Program initiative for addressing dryland salinity with a 5-year target of 19 million hectares. This will be facilitated by the Rapid Catchment Appraisal activity.

**Table 11: Average cost per strategic management plan facilitated**

	1997/98	1998/99	1999/00	2000/01
Total number of strategic management plans facilitated	12	73	75	27
Total Cost (\$)	11,557,930	11,877,868	10,912,870	11,667,768
Average cost per strategic management plan facilitated (\$)	963,161	162,711	145,504	432,140

The average cost per strategic management plan has increased markedly. This is reflected by the significant reduction to the number of strategic management plans. The need for strategic management plans is declining as projects move into the investigation and implementation phases. The initial plans are still in place and are under constant review. Resources have been allocated to implementation issues associated with the strategic management plans, hence the total cost remains constant, however the number of plans facilitated does not capture the effort now being placed on implementation. The measure will be expanded in 2001/02 to better capture other activities, which form part of the total cost. In addition a weighting formula will be introduced to provide a better indication of effort required with the increasingly complex strategic management plans.

### PI 9 Average cost per regulatory activity processed

The SRD Program manages the regulatory process under the Soil and Land Conservation Act. This involves processing a number of regulatory instruments including Notices of Intent to clear land, Notices of Intent to drain, woodchip permits, and compliance.

The Commissioner of Soil and Land Conservation oversees this process and is responsible for keeping records on each regulatory action initiated under the Soil and Land Conservation Act.

As shown in Table 12, the continued decline in 2000/01 of the number of regulatory actions processed reflects the impact of tightening Government policy on land clearing and the decline in farm profitability which has resulted in fewer applications to clear and drain land. The reduction in the number of Notices of Intent to clear indicates that the implementation of policy in this area is effective. As fewer regulatory actions were processed, the cost of each regulatory activity processed shows some increase.

**Table 12: Average cost per regulatory activity processed**

	1997/98	1998/99	1999/00	2000/01
Total number of regulatory actions processed	308	251	195	164
Total Cost (\$)	2,503,415	2,605,931	2,921,199	4,399,307
Average cost per regulatory action processed (\$)	8,128	10,382	14,981	26,825

Source: Register maintained by the Commissioner of Soil and Land Conservation

Resources for this area are being redirected towards education and awareness raising thereby reducing the need for regulatory activity. For 2001/02, a new measure will be developed to more effectively capture the education and awareness activity and hence provide a clearer indication of efficiency. The total cost for this measure in 2000/01 has risen significantly due to addition activities being placed under the area of regulatory actions. These activities will need to be isolated in future for a better determination of efficiency.

### PI 10 Average cost per landcare grant processed

The SRD Program provides an important service to the community and Department through the administration of landcare grants on behalf of the Commonwealth and State Governments.

The decrease in number of landcare grants processed is a reflection of the slight decreased number of landcare applications made by the community during 2000/2001. Accordingly, while the cost remained similar, the average cost per grant processed decreased.

**Table 13: Average cost per landcare grant processed**

	1997/98	1998/99	1999/00	2000/01
Total number of landcare grants processed	789	593	495	418
Total Cost (\$)	3,936,523	4,042,902	5,384,807	4,399,307
Average cost per landcare grant processed (\$)	4,989	6,818	10,878	10,525

Source: Natural Heritage Trust Secretariat, AGWEST Farm Business Development and regional 'Remnant Vegetation Protection Scheme' coordinators

The average cost per landcare grant processed has shown an improvement from the previous year, however improvement is required to reach efficiency levels of 1997/98. As landcare applications



decrease resources for this area of activity are being redirected, however the measure requires refinement to capture this redirection of resources.

**PI 11 Average cost per participant in farm business and rural community development activities**

This indicator demonstrates the efficiency of the SRD output in delivering farm business development and rural community development activities.

The activities that combine to make up this indicator include:

- Better Business;
- Best Prac;
- Doing More with Agriculture;
- WA Rural Leadership Program (includes Future Leaders and Foundations for Leadership);
- Community Builders
- New Rural Generation
- BushNet
- WA Rural Women in Leadership

Figures for the ‘number of participant in farm business and rural community development activities’ have remained relatively similar in 2000/2001 as the previous years as training opportunities and efforts in this area have continued.

**Table 14: Average cost per participant in farm business and rural community development activities**

	1997/98	1998/99	1999/00	2000/01
Total number of participants in rural community development and farm business development activity	504	2,248	3,870	3,669
Total Cost (\$)	5,209,172	5,775,547	7,377,358	8,363,719
Average cost per participant in rural community development and farm business development activity (\$)	10,336	2,569	1,906	2,280

Source: Project Managers, SRD Program, Department of Agriculture

The average cost per participant in rural development activities has remained reasonably constant at very efficient levels. Training and development programs continue to increase in sophistication and complexity and hence costs generally rise. The low cost per participant over the past three years highlights the sound processes in place, which negates these cost increases and minimises any loss of efficiency. The challenge for the Department will be to increase efficiency in the future.

**Output 5: Services provided to Rural Adjustment & Finance Corporation of Western Australia (RAFCOR)**

**Output Description:** Provision of contractual services to Rural Adjustment & Finance Corporation, to assist farmers enhance their skills, leading to improved sustainable long term profitability and better capacity to deal with risks inherent in farming.

Measures related to this Output are reported within the Rural Business Development Corporation (RBDC) annual report – please refer to that report for these details.

## Notes to the Performance Indicators

### NOTE 4

Comments on surveys used to obtain performance indicator information: population and sample sizes, response rates and levels of sampling error.

#### **Department Customer Survey**

In previous years, a separate Department and SRD survey have been conducted. This year, to reduce over-sampling of farmers, and to ensure the interviewing was completed prior to seeding, the surveys were combined. In 2000/01, a total of 560 telephone interviews were conducted with Western Australian farmers. The sample was drawn from the Department of Agriculture's database of farmers as a random stratified sample.

The population of commercial primary producers in Western Australia is estimated at some 10,000 (ABARE 1997/98). The total sample of the general farming community had an associated maximum sampling error of  $\pm 4.21\%$  at the 95% confidence level. That is, if the entire population were sampled, there would be 95% confidence that the results fell within  $\pm 4.21\%$  of those quoted for the whole sample.

Using stratified sampling, quotas were set by region and farm type (with the sample being drawn randomly within each of these categories). The type of farming activity was categorised according to the Department's industry programs.

3,623 calls were made, in which 1,501 contacts resulted. Respondents were telephoned and asked if they agreed to participate in the survey, and if they met the specified criteria. An interview response rate of 47% was achieved from those within the scope of the survey.

The response rate was calculated as follows:

<b>Total contacts</b>	<b>1,501</b>	
<b>Total in Scope</b>	<b>1,199</b>	
Not suitable/incorrect number	252	21%
Refused	371	31%
Terminated	16	1%
Completed interview	560	47%
		<hr/>
		100%

Prior to the commencement of the data analysis, the data was weighted to reflect the actual distribution of farming properties both regionally and by main activity. As such, any of the aggregate results quoted are representative of Western Australia as a whole.

In more detail, the sample was quota'd to ensure that the sample was representative and of sufficient size to comment on individual program areas and individual regions (minimum sub-samples were 50). The data was weighted based on information provided in a producer-by-program table entitled 'WA Farms by Industry by Agriculture WA Region 1998/99' supplied by the Department's Marketing Economics and Rural Adjustment Unit.

**REPORT ON OPERATIONS CONT.**

**Output 2. - Sustainable Rural Development**  
**Output 5. - Services provided to Rural Adjustment & Finance Corporation (RAFCOR)**

**OUTPUT MEASURES (AS DEPICTED IN THE 2000/01 BUDGET STATEMENTS)**

*Outcome: Improved ecological sustainable development of agri-industry.*

**Output Description:** Generation, integration and application of knowledge, which, with appropriate policy and regulation, promotes the ecological sustainability of agriculture and the economic and social well-being of rural communities.

*Performance Measures for Output 2*

	1999/00 Estimated	2000/01 Target	2000/01 Actual	Reason for Significant Variation between 2000/01 Target and 2000/01 Actual
<b>Quantity</b>				
Number of information products and services .....	1,436	1,250	1,241	
Number of strategic management plans facilitated .....	75	62	27	
Number of regulatory actions.....	195	300	164	
Number of landcare grants processed.....	495	650	441	
Number of landcare grants approved.....	447	450	367	
Number of participants in farm business and rural community development activities.....	3,480	2,500	3,669	
<b>Quality</b>				
Customers who believe the department contributes to the development of a sustainable agricultural system .....	46%	70%	52%	
Customers who consider the department is a leader in landcare .....	67%	72%	60%	
Land clearing and drainage assessments involving comprehensive property inspections.....	100%	65%	77%	
Customer's perceived relevance of the department's services in developing farm business skills.....	58%	55%	69%	
<b>Timeliness</b>				
Client satisfied with the department's response time to industry problems.....	74%	75%	67%	
Regulatory assessments (land clearing and drainage) completed within the 90-day statutory period.....	100%	98%	99%	
<b>Cost</b>				
Average cost per information product produced....	\$9,352	\$5,431	\$8,803	
Average cost per strategic management plan facilitated.....	\$148,973	\$124,200	\$432,140	
Average cost per regulatory action.....	\$15,338	\$5,608	\$26,825	
Average cost per landcare grant processed.....	\$11,138	\$6,800	\$10,525	
Average cost per landcare grant approved.....	\$12,334	\$45,884	\$44,605	
Average cost per participant in farm business development and rural community development activity .....	\$2,170	\$2,300	\$2,280	

**Output 5: Services provided to Rural Adjustment & Finance Corporation of Western Australia**

**Output Description:** Provision of contractual services to Rural Adjustment & Finance Corporation, to assist farmers enhance their skills, leading to improved sustainable long-term profitability and better capacity to deal with risks inherent in farming.

**Performance Measures for Output 5**

	1999/00 Estimated	2000/01 Target	2000/01 Target	Reason for Significant Variation between 2000/01 Target and 2000/01 Actual
<b>Quantity</b>				
Number of applications for grants.....	4,249	3,150	4,431	
Number of grants advanced.....	4,699	3,050	5,095	
<b>Quality</b>				
Extent to which recipients were satisfied with the way schemes are administered.....	88%	80%	94%	
<b>Timeliness</b>				
Average turnaround time to consider applications for support (days):				
Farmer Training.....	5.6	4	1	
Farm Business Planning Grants.....	22	15	28	
Progress Rural Grants.....	36	30	30	
<b>Cost</b>				
Administrative expenditure per application approved or rejected.....	\$622	\$994	\$519	
Average amount of each grant advanced.....	\$1,318	\$3,500	\$2,023	

***Output 3. - Agriculture Protection***  
***Output 4. - Services provided to Agriculture Protection Board***

**AGRICULTURE PROTECTION**

In the international market place, Western Australia is recognised as one of the 'cleanest' areas in the world for agricultural production. Good management and vigilance have kept Western Australia's agricultural environment free from many of the serious plant and animal pests, diseases and weeds that plague other Australian States and other countries. A reduced grower reliance on chemical controls further enhances Western Australia's access to markets for agricultural produce.

The protection of ecosystems and agricultural systems from the threat of new pests, diseases and weeds is essential to support the sustainability, productivity and well-being of the State's agricultural economy, environment, and society.

In protecting the agricultural and environmental resources of Western Australia, the Agriculture Protection Program is well regarded for its effective application of agriculture protection principles and methodology. These include threat identification, risk assessment, barrier quarantine, surveillance, rapid response, eradication and containment and management strategies. A key linking theme for effective delivery of the program's objectives is the notion of agency, industry and community working together.

**Industry-focused and risk management-based objectives of the Program include:**

- Maintenance of effective barrier quarantine and protection requirements to minimise the risk of introducing new pests and diseases and to maintain market access;
- Operation of effective surveillance programs to ensure early detection and diagnosis of incursions, define the status for market access and justify quarantine barriers;
- Ongoing capability to undertake emergency responses to incursions and outbreaks of high priority pests and diseases;
- Delivery of effective management programs that target specified pests and diseases; and
- Achievement of a high level of awareness of key threats to agricultural industries and an increased participation by industry members in the management of risk.

**Major Achievements**

**Protecting agricultural industries**

The Agriculture Protection Program provides a wide range of plant and animal health services that are funded by the Department of Agriculture. In addition, the Program manages animal and plant pest services valued at \$15.4 million for the Agriculture Protection Board (APB) and \$5 million is provided by the Australian Quarantine and Inspection Service (AQIS) to manage international quarantine and export inspection services for the State. Memorandum of Understandings has been signed with AQIS and the APB, which includes the provision of policy and planning services.

The agency has successfully delivered a wide range of animal and plant pest management projects for the APB, including: declared plant management, skeleton weed eradication, weed research, coding moth

eradication, insect pest management, animal pest research, barrier fence maintenance, regulation of exotic/introduced animals, and management of starlings, wild dogs, feral donkeys, rabbits and foxes.

### **Regulatory Reform**

A preliminary draft of the Agriculture Management Bill to replace 14 existing regulatory Acts has been prepared. Further development is continuing with Industry/Government Regulation Reference Groups to examine and provide comment on proposals for regulations under the Bill, particularly in relation to proposed changes to existing regulatory controls. Introduction to Parliament and passage of the Bill is dependent on the legislative priority.

Substantial progress has been made under the Standing Committee on Agriculture and Resource Management (SCARM) towards the development of uniform animal and plant health legislation on a national basis. Industry reviewed all Regulations and a cost benefit analysis of the national animal and plant health legislation was completed.

The new Agricultural Produce Commission Act became operational with the progression of funding proposals from the potato, wine and pork industries.

### **Plant pest, disease and weed vigilance and detections**

The severity of the major outbreak in the State of Australian Plague Locust in the 2000-2001 growing season was substantially diminished due to early intervention by the agency which acted in cooperation with landholders, industry organisations and the public in the affected areas. The past year also saw effective responses and surveillance of major threats to the fruit industry. During this time eradication of codling moth from the pome industry was confirmed.

- A survey in the Carnarvon production area confirmed the absence of mango seed weevil, mango flesh weevil and mango leaf hopper in the region, thereby maintaining Area Free status for these pests.
- Seven nests of European wasps were detected and destroyed over the 2000-2001 summer and autumn seasons – all in the Perth metropolitan area. (This level of incidence does not represent ‘establishment’ by this pest.)
- The ‘Regional Surveillance Coordination’ project increased its level of reporting in the media of new finds of serious pests and weeds such as *Salvinia* aquatic weed, Noogoora burr, cane toads and European wasps.
- Agriculture Protection officers contributed to the National Consultative Committee on Exotic Plant Pests and Diseases response to incursions of new exotic pests and diseases. For example, Red Imported Fire Ants in Brisbane, Crazy Ants in Cairns, Banana Black Sigatoka in Tully, Lily thrifs in Victoria and Potato Spindle Tuber Viroid in WA.

### **Embracing the future with industry protection planning**

The “Guard” initiative, developed by the Program, have emerged as a successful joint agency-industry initiative, which involves the Agriculture Protection Board, primary producers, grower organisations, agribusiness consultants, processors and marketers.

The “Guard” initiatives have successfully established a framework of protection plans in collaboration with industry *before* incursions of major pests, diseases and weeds occur. In this way, all parties will be prepared to take preventative action, and, if an incursion occurs, to deal with the response and recovery phase effectively.

- The development of the protection plans for the bee, sheep and goat, pig and poultry industries through the BeeGuard and StockGuard initiatives are well advanced with implementation in 2001-2002.

### **Enhanced quarantine measures**

Surveillance and inspections at entry points to Western Australia have been increased to prevent the entry of animal and plant pest, disease and weed threats to Western Australian agricultural industries and the environment.

A "shared responsibility" approach has increased industry involvement significantly through co-regulation and system approaches which allow industry to operate effectively in reducing the quarantine risk.

With more than 80,000 vehicles entered road checkpoints at Eucla and Kununurra, some 30,000 items were seized, totalling 22,500 kg of fruit and vegetables.

Extra Quarantine Amnesty Bins were installed at the Perth Domestic Airport to meet the demand of over 12,000 flights arriving at Perth Domestic and Regional Airports carrying 1.3 million passengers. Detector dog teams met 76 per cent of flights, with 3000 kg of produce seized. The effectiveness of the checkpoints was demonstrated with the interception of pests, diseases and weeds such as Citrus Louse Scale, Codling moth, Mango seed weevil, Bathurst and Noogoora Burrs and several other prohibited weed seeds.

The ICA-07 (cold storage disinfestation against Mediterranean fruitfly) was implemented. This QA system allows exporters of pome fruit in particular, to issue their own certification for interstate trade, rather than relying on multiple inspections by quarantine inspectors for each export consignment.

Freight surveillance has been strengthened with a stronger focus on interstate sea freight (coastal cargo). Fifty thousand containers were imported into WA via coastal cargo in 2000-01, with 509 containing seed, 75 containing fruit and vegetables, and 312 with consignments of agricultural machinery, which resulted in 1,633 Quarantine Notices being issued as a result of coastal cargo surveillance.

### **Educative value of Insect Database acclaimed**

The Department of Agriculture's extensive Insect Database and Collection won a National Quarantine Award. This recognised its great value as an educative aid to identify insects that may threaten Western Australia's agriculture and environment. With over 100,000 specimens and details, the database is believed to be the largest of its kind in the world. The database allows easier and quicker access to important agriculture protection information.

### **Creating Protection Awareness**

The Agriculture Protection Program manages a comprehensive communication strategy to raise awareness of protection issues and to promote the principle of "shared responsibility and cooperative partnerships" for the protection of agriculture and the environment. By actively promoting agriculture protection, the entire community (industry and individuals) can play a part in keeping the State free from, and minimising the impact of, animal and plant pests, weeds and diseases.

A statewide agriculture protection awareness campaign made significant progress during the year. Using the theme "*Protecting agriculture is everyone's business*", the campaign aimed at a wide range of audiences including farmers, producers, general public, travellers, scientists and agribusiness consultants.

### **Weed and pest management strategies**

The development of a State Weed Plan and other initiatives to combat weed and pest threats in agricultural and metropolitan areas of Western Australia received excellent levels of support from the public.

### **Improved Animal Health**

Western Australia's excellent animal health status has been maintained through rigorous monitoring and diagnosis, tight import restrictions and quick response to the detection of diseases.

Under the Footrot Eradication Project the number of properties in quarantine for footrot has varied from an estimated 15 per cent in the early phase of eradication to about 0.6 per cent (56 of 9500 sheep properties) in June 2001. In the past year, 45 new quarantine orders were issued for virulent footrot. This is the lowest figure for the past four years (the comparative figure for 1999/2000 was 75). The aim of this project is to eradicate virulent footrot from sheep and goats in Western Australia by 2004.

### **Focusing on risk analysis**

The Department Of Agriculture has developed a proposal for the application of a regional approach to risk analysis in the development of quarantine measures. This approach is based on the premise that the risk to particular regions of some threats, such as Johne's disease in animals or fire blight in apples, may be greater in one than another and therefore the quarantine measures needed to meet the appropriate level of protection can vary from one region to another depending on the level of risk posed by the pest.

Among the Plant Policy and Risk Assessment initiatives, the first State Import Risk Analysis for plants and plant products was completed. A draft paper incorporating a Categorisation of Pests of Stone Fruit from Eastern Australia and a State Import Risk Analysis of Cherry Fruit (*Prunus avium*) from South Australia was released for stakeholder comment.



***Output 3. - Agriculture Protection***

***Output 4. - Services provided to Agriculture Protection Board***

**PERFORMANCE MEASURES (PAGES 72-75 AUDITED BY THE AUDITOR GENERAL)**

**Outcome: Protection of the productive resource base**

**Output 3: Agriculture Protection**

**Output description:** Generation, integration and application of knowledge, policy and regulation to ensure agriculture and related resources are protected and that safety and quality standards are upheld.

**Effectiveness Indicators**

Key output areas of the protection program include those activities which prevent, or ensure early detection of, incursions by exotic pests, diseases and other biological and chemical threats. These threats have the potential to cause serious damage through loss of market access, productivity losses or cost increases.

A certain frequency of incursions is inevitable, to which the response is to remove or minimise the risk of spread or damage. Removal of properties from quarantine signifies the effective local eradication or management of a pest or chemical threat.

Three streams of recorded activities are used to demonstrate program effectiveness. These reflect the diversity of activities but also focus on matters of greater significance to the industry.

***PI 12 Animal disease identification***

***PI 13 Pest interceptions by interstate and international barrier quarantine activities.***

***PI 14 Quarantine releases***

The aggregated statistics are shown in Table 15 The table includes numbers of pests and diseases as well as numbers of identifications and interceptions. This to some extent corrects for the exaggerated influence of multiple occurrences associated with a single incident.

**Table 15 Indicators**

	<b>Output measure</b>	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
1	Identifications of notifiable animal diseases	86	53	84
2	Number of animal diseases	18	13	18
3	Interceptions of significant pests, diseases & weeds	95	75	159
4	Number of pests	41	>34	45
5	Removal of properties from quarantine	55	118	76

#### PI 12 Animal Diseases

- 1998/99 figures include Chalkbrood disease, which is no longer notifiable but was identified 18 times in 1998/99; feline and canine mycoplasmosis and chlamydiosis are also no longer notifiable, but were identified 8 times in 1998/99. Indicator 2 shows the number of separate identifiable diseases reported.
- For animal disease identification, early identification is critical to the successful control of disease. A primary focus is the identification of potentially serious diseases. A disease is designated as being notifiable if it matches a set of criteria that relate to the likely scale of impact on agriculture and human health.

#### PI 13 Interceptions of significant pests and diseases

- The total excludes interceptions of insects from international sources, which are reported to the Commonwealth Government; Indicator 4 minimises undue influence of individual species on the total. For pest interceptions by interstate and international barrier quarantine activities, effectiveness is the exclusion of quarantine risk material. Sampling indicates successful exclusion of insect pests, plant diseases and weeds. A given pest is deemed significant when it is capable of inflicting a high damage cost.

#### PI 14 Quarantine

- The ratio of properties placed in quarantine to properties released decreased from 33% in 1999/2000 to 16% in 2000/01, which is a further positive indicator.
- For quarantine releases, two activities - on footrot eradication and chemical residues - were included to demonstrate effectiveness. When a property, flock or herd is released from quarantine, which may be by the issue of a permit, this signifies either freedom from a pest threat or control of the problem by virtue of management arrangements in place. Progressive releases indicate wider freedom from the threat and thereby reduce the number of properties or flocks subject to future release.

## Efficiency Indicators

### **Output 3: Agriculture Protection**

**PI 15 Cost per freight consignment cleared or certified**

**PI 16 Passenger quarantine checking cost (per passenger)**

**PI 17 Cost per property management plan for animal disease**

**PI 18 Cost per diagnostic samples processed (animal and plant disease and plant pest)**

The activities relating to the Agriculture Protection output have generally been classified according to the key areas of:

- providing barrier quarantine and export standards;
- managing animal and plant pests and diseases; and
- surveillance and preparedness activities (systems to detect incursions and outbreaks and take appropriate action).

**Table 16 Agriculture protection output cost measures**

<b>Average cost per output (\$)</b>	<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>	<b>2000/01</b>
Cost per freight consignment cleared or certified	223	229	215	181
Passenger quarantine checking cost (per passenger)	1.74	1.92	2.45	2.08
Cost per property management plan for animal disease	29,065	32,768	23,699	23,515
Cost per diagnostic sample processed	162	158	190	272

The figures in Table 16 were allocated from the total output cost of \$32.69 million (2000/01), \$34.69 million (1999/00), \$33.95 million (1998/99) and, for 1997/98, \$30.55 million. In addition to the impact of increased superannuation and asset management costs, combined with a decrease in overhead charges the following observations and conclusions were drawn from the 2000/2001 results:

#### PI 15 Cost per Freight Consignment

- The cost per freight consignment cleared or certified decreased by 16% in 2000/01 largely as a result of efficiency gains by using mechanical rather than manual checking procedures. There was a 10% increase in the recorded number of consignments cleared.

#### PI 16 Cost per passenger

- While the number of passengers subject to quarantine procedure rose by 5%, the cost of quarantine checking per passenger decreased by 15% largely as a result of meeting more night flights and efficient passenger luggage checking using detector dogs and x-ray machines.

#### PI 17 Cost per property management plan

- The cost per property management plan for animal disease declined by 1%, with the main influence being the absence of any tuberculosis outbreaks which have a high eradication cost.

#### PI 18 Cost per Diagnostic sample

- The cost per diagnostic sample processed rose by 43%, largely as a result of a 44% decrease in laboratory throughput. Adverse seasonal conditions and an outbreak of plague locusts in the Wheat belt led to a major decrease in laboratory samples processed. Funding allocation for the Animal Health Laboratory was however increased by 6% during the year to fund preventative and regulatory animal health activities. Given this change in focus, the indicator will need to be reviewed in 2001/02 to better reflect key outputs.

**Output 4: Services provided to Agriculture Protection Board (APB)**

**Output Description:** Provision of contractual services to Agriculture Protection Board, particularly prevention, eradication and control of specified plant and animal pests.

Performance measures for the Agriculture Protection Board can be found within the annual report for the APB. Please refer to that report for details.

**Output 3. - Agriculture Protection**

**Output 4. - Services provided to Agriculture Protection Board**

**OUTPUT MEASURES (AS DEPICTED IN THE 2000/01 BUDGET STATEMENTS)**

*Outcome: Protection of the productive resource base*

**Output Description:** Generation, integration and application of knowledge, which, with appropriate policy and regulation, ensures the natural base of agriculture, is protected and that safety and quality standards are upheld.

*Performance Measures for Output 3*

	<b>1999/00 Estimated</b>	<b>2000/01 Target</b>	<b>2000/01 Actual</b>	<b>Reason for Significant Variation between 2000/01 Target and 2000/01 Actual</b>
<b>Quantity</b>				
Number of import freight consignments cleared and export consignments certified.....	68,506	57,300	75,636	
Number of passengers subject to quarantine procedure.....	2,107,875	2,207,000	2,217,037	
Number of property management plans for animal disease.....	385	385	370	
Number of diagnostic samples processed (animal and plant disease and plant pest).....	37,076	34,078	20,786	
<b>Quality</b>				
Agriculture protection publications less than 5 years old.....				
Airline passengers contacted by quarantine officers.....	48%	50%	61%	
Emergency incident responses using a prepared contingency plan.....	94%	100%	100%	
Infected properties released from animal disease quarantine.....	34%	50%	52%	
<b>Timeliness</b>				
Customers satisfied with agency's response time to industry problems.....	73%	80%	67%	
<b>Cost</b>				
Cost per freight consignment cleared or certified.....	\$196	\$180	\$181	
Passenger quarantine checking cost ( per passenger).....	\$1.98	\$1.86	\$2.08	
Cost per property management plan for animal disease.....	\$30,221	\$29,165	\$23,515	
Cost per diagnostic samples processed (animal and plant disease and plant pest).....	\$161	\$164	\$272	

**Output 4: Services provided to Agricultural Protection Board**

**Output Description:** Providing resource protection through the exclusion, eradication and control of specified declared plants and animals.

**Performance Measures for Output 4**

	Actual 98/99	2000/01 Target	2000/01 Actual	Reasons for Significant Variation Between 2000/01 Target & 2000/01 Actual
<b>Quantity</b>				
Number of property contacts for animal pests and plant pests & diseases (inspection, audit & advice).....	34,665	30,000	31,058	
Number of properties where agency control/eradication activities are undertaken for animal pests & plant pests & diseases.....	1,453	1,000	1,917	There was a locust plague outbreak in 2000/01 which boosted the numbers significantly.
<b>Quality</b>				
Customers who perceive agency to be leader in agriculture protection.....	84%	80%	67%	
<b>Timeliness</b>				
Days to submit and process Field Inspection Reports.....	11.9	10	10.4	
Average period (days) since last property contact:				
Pastoral.....	704	990	942	
Agricultural.....	1,379	1,050	1,646	
Small holdings.....	1,704	1,150	1,591	
<b>Cost</b>				
Cost per property contact for animal pests and plants pests and diseases (inspection, audit and advice).....	\$363	\$369	\$672	
Cost per property for agency control/eradication activities for animal pests & plant pests & diseases.....	\$1,775	\$5,982	\$1,857	

## CORPORATE AND PROGRAM SUPPORT SERVICES

A brief respite from Y2K, GST and similar issues provided an opportunity to consolidate improved procedures and to extend staff training into risk management and executive development. Regional and localised service delivery enhancement continued together with extended systems.

### Staffing

The Agency's Full-Time Equivalent Employees (FTE) usage for the 2000/01 financial year was 1704 against a budgeted allocation Average Staffing Level of 1718. During this period FTEs reached a seasonal high of 1758 in December 2000, which is in line with trends over recent years and a low of 1666 for January 2001 which is due to annual leave paid in advance.

An examination of employees (total staff) within broad work classifications between 1999/2000 and 2000/01 shows a marked reduction in professional and administrative and clerical positions.

Category	1999/2000	2000/01
Professional	673	619
Technical	462	452
Inspectorial	217	222
Administrative	342	309
Wages	59	66
<b>Total Staff</b>	<b>1753</b>	<b>1730</b>

### Workplace Reform

The third Enterprise Agreement was successfully negotiated with the relevant unions through a Single Bargaining Unit.

The Enterprise Agreement and replacement Workplace Agreement(s) received Cabinet approval and the Enterprise Agreement was formally registered at the Western Australian Industrial Relations Commission on the 7<sup>th</sup> February 2001.

All agreements(s) were for a term of 24 months with salary increases of up to 6%, subject to real and sustainable productivity improvements as measured by the Performance Measurement Model.

The Agreement(s) have introduced initiatives that will allow for greater flexibility and cost effective work practices, with entitlements maintaining current family friendly practices.

### Leave Liability Management

Weeks per FTE	1999/2000	2000/01	% increase
Actual leave liability	7.28	7.36	<b>1</b>

The Agency's leave liability for long service leave and annual leave remained relatively stable with the average for the year of 7.36 weeks per FTE as at 30 June 2001. The management of the agency's leave liability will continue in 2001/02.

The initiatives for leave reduction include:

- Managers accountable for establishing and reaching targets for reduction of liability within their Division/Region.
- Inclusion of provisions for cashing-in or compaction of leave within Enterprise and Workplace Agreements.
- Christmas closure of non-essential services.
- Increased provision of regular management and Executive reports on leave liability figures.
- Inclusion of leave liability at performance reviews with staff.
- It is discouraged for new appointees on promotion or transfer from other Public Sector agencies to carry over leave entitlements to the agency.
- Implementation of an on-line leave rostering system.
- Allow employees to accrue a maximum of 8 weeks annual leave.

## Training

2000/01 saw the enhancement and continuation of existing programs along with the implementation of new initiatives.

Outcomes achieved included:

- Implementation of the Executive Springboard Program for current and potential level 8/9 senior managers;
- Implementation of training in the management and handling of Genetically Modified Organisms;
- Implementation of an accredited “Women into Management” course designed to increase the pool of women in the agency available for promotional and acting opportunities;
- Continuation of the accredited Management Development Program for first and second line managers with 80 people now participating in or completing the program in this period;
- Further enhancement of training provided in Project Management, including logical framework methodologies (LogFrames);
- Implementation of training in risk management principles;
- Implementation of Quality Assurance training in the Grains Program;
- Enhancement of the employee induction program;
- The ongoing training of agency staff in Equal Employment Opportunity;
- Implementation of a number of initiatives to raise the computer keyboard skills of staff; and
- Continuing to raise the safety of the work environment through a number of specific occupational, health and safety training initiatives.

## Staff Development Activities

Other activities intended to enhance the professional capability of the Department include:

**The Graduate Recruitment Program** is a proactive approach to the recruitment and development of high quality graduates from a wide range of academic disciplines. In 2000/2001, 16 joined the department. More than 75% of the intake are based in regional centres between Geraldton and Katanning. For many of them this means a return to the rural area that they left to undertake their higher education.

**The Tertiary Studentship Program** targets high quality students before they commence their final year of studies. In 2000/2001, 5 students entering their final year of study (honours, year, graduate diploma or similar) entered the program. The students work for the Department of Agriculture during university vacations and complete a final year project which is not only relevant to their course work, but to the real needs of industry. During the year they receive formal and on the job training and the support and guidance of highly skilled and experienced staff. At the successful completion of their studies, the students may be offered employment contracts.

**The Visiting Specialist Program** funds staff from other institutions to spend periods of sabbatical leave with the Department of Agriculture to develop the agency’s international networks and to enhance the agency’s reputation as a centre of excellence in research, development and extension. The Year 2000/2001 Visiting Specialist Program selected 4 professionals from a range of countries including the United Kingdom, Israel, South Africa, New Zealand and the United States to visit Western Australia for periods ranging from 3 to 12 months.

## Staff Innovation and Excellence Awards Program

The Staff Innovation and Excellence Awards Program is designed to encourage, support and reward outstanding service and technical excellence within the Department of Agriculture. All departmental staff, regardless of their classification or field of endeavour, are eligible for nomination under the Program. Both individual and team efforts are recognised in two categories, namely:

Innovation Awards

- i. Science and Technology;
- ii. Industry Extension and Development
- iii. Organisational Management and Process Improvement



## Excellence Awards

- i. Customer Service
- ii. Occupational Safety and Health/Equal Employment Opportunity

The department also participates in external award programs. Five nominations were made for the 2001 Premier's Awards.

The Agency's Length of Service Awards continued to acknowledge the loyalty and commitment of employees who have achieved length of service milestones in excess of 20 years. This program provides recognition for employees who have achieved the service milestones of 20, 30, 40 and 50 years.

## Equal Employment Opportunity (EEO)

The Agency has endorsed a revised EEO Plan for the period 2000-2002.

New initiatives for 2000/2001 to enhance the agency's Equal Employment Opportunity (EEO) performance have included:

- Aboriginal Employment Strategy;
- Ten trainees have, or are in the process of being recruited. An expansion from the three trainees recruited last year;
- Four cadets are in the process of being recruited;
- An increased focus on meeting the needs of Aboriginal clients is expected to provide greater drive for this initiative in the future;
- The identification and encouragement of women to participate in the agency's Management and Executive Development Programs; and
- The development of a learning program for women within the agency, which further raises their competitiveness for more senior roles including management.

Previous initiatives that have been maintained to enhance the agency's EEO performance have included:

- Making a "family room" available so parents are able to attend work and care for their children when their regular child care arrangements are not available;
- Support for the International Women's Day celebrations;
- Ongoing training in recruitment and selection skills;
- Ongoing training in Equal Opportunity Awareness;
- The inclusion of family friendly practices in the agency's industrial agreements;
- Ongoing monitoring of the employment status of the Department of Agriculture's female staff; and
- All new job description forms include statements relating to the application and accountability of managers in relation to equal opportunity and safety principles.

## Disability Services

The following are the achievements made in the area of disability services.

- Outcome 1** Existing Services are adapted to ensure they meet the needs of people with disabilities.
- Increased information provided to clients is available via the Internet.
  - A process to identify and prioritise areas requiring attention has been enacted as part of the disability services planning process.
- Outcome 2** Access to buildings and facilities is improved.
- All regional offices have (or are planned to have) disabled toilets, access ramps, car parking bays to at least ground floor reception areas and offices.
  - A process to identify and prioritise areas requiring attention has been enacted as part of the disability services planning process.
- Outcome 3** Information about services is provided in formats which meet the communication requirements of people with disabilities.
- Increased information about the agency is available through the Internet.
  - A process to identify and prioritise areas requiring attention has been enacted as part of the disability services planning process.

- Outcome 4** Advice and services are delivered by staff who are aware of and understand the needs of people with disabilities.
- A process to identify and prioritise areas requiring attention has been enacted as part of the disability services planning process.
- Outcome 5** Opportunities are provided for people with disabilities to participate in public consultations, grievance mechanisms and decision making processes.
- Future customer service surveys will provide opportunities for people with disabilities, and all other customer groups, to provide feedback on how the agency could better meet their needs.

### Occupational Safety and Health

The improvements in occupational safety and health performance of the agency were assessed using the Worksafe Plan assessment framework. The results indicated that the agency's performance rating had improved by 11%, since its last review in 1997, but still requires further improvement. The assessment identified the principle areas for further improvement in OSH systems for casual staff and contractors, and the management of hazards within projects and at a local level. These areas of improvement have been incorporated into the agency's next three year strategy.

Other aspects of the next agency strategy have related to issues identified from injury statistics, feedback from staff and review of WorksafeWA priority areas.

The major systems areas and hazard-based initiatives, which have been addressed this year are as follows:

- Initiation of a local system of OSH inspections;
- Extension of manual handling program to prioritised areas;
- Provision of chemical management training for staff in metro area;
- Evaluation of driving safety program;
- Development of safe work procedures for inspection work in ship holds;
- Commenced implementation of electrical inspection systems ;
- Development of audiometric testing and health surveillance systems;
- Performance of process-based hazardous substance risk assessments;
- Review of S. Perth emergency evacuation procedures and training of wardens; and
- Provision of firearms refresher training.

### Workers' Compensation

Agency performance in workers' compensation and injury management are measured by the following statistical information.

	1998/1999	1999/2000	2000/2001
Premium/contribution rate ( <i>Total premium paid/wages declared</i> )	0.77	0.80	0.65
Cost of claims incurred per \$100 wage roll	0.67	0.93	0.95
Frequency rate ( <i>Lost-time injuries per million hours worked</i> )	13.0	11.11	8.8
Rehabilitation success rate ( <i>Index of successful rehabilitation cases</i> )	1.0	1.0	1.0

Note: Figures for 1998/99 and 1999/2000 have been adjusted to reflect changes to the method of calculation. Figures for all three years are now comparable.

## Government Two-Year Plan for Women 1999-2001

The Agency's Women Clients of Agriculture Project has resulted in the outcomes of:

### *(i) improving the accessibility and responsiveness of the Department of Agriculture's services to women clients:*

- Continued support for establishment of industry groups: women in agriculture, horticulture, dairying, grains, and meat industries.
- Provided administrative support and agency sponsorship for Western Australian Women in Agriculture (Inc.) state conference, The WARM Winter Gathering.

### *(ii) promoting the achievements of women in agribusiness:*

- RRR Network's "Network News" published four issues per year, and achieved circulation of almost 5000. Readership estimated at 6000 women and men.
- Continued development and promotion of the RRR Network information and communication website for rural women in WA.
- Successfully administered the Rural Industries Research and Development Corporation (RIRDC) Rural Women's Award 2001 in Western Australia, providing a study bursary of \$20,000 to a woman in agriculture with a strong vision for industry.

### *(iii) maximising the potential of female employees:*

- Continued regular monitoring of the employment status of the Department of Agriculture's female staff.
- Implemented the Women into Management program, available for up to 20% of the agency's female staff, to increase the percentage of women available for promotion or management positions.
- Designed and contracted a research survey of the impact of organisational culture on women employees.

The second national implementation report for the National Plan for Women in Agriculture and Resource Management, including best practice case studies, has been developed.

## Standards in Human Resource Management

Standards in human resource management continue to be applied within the Department of Agriculture and policies and procedures designed to facilitate and ensure compliance are actively being developed and promoted.

A self-assessment for compliance with the Public Sector Standards in Human Resource Management was completed. Control for the monitoring of compliance against the standards continue to be developed and reinforced. The review applications made for breach of Standards and the corresponding outcomes for the period to 30 June 2001:

Number lodged	7
Non-material breaches found	2
Multiple breaches	Nil
Applications under review	Nil
Material breaches	Nil

The non-material breaches related to a recruitment and selection process, from which the agency convened another selection panel to undertake a new independent selection process.

The Public Sector Standards Commissioner reported an inquiry that the agency did not comply with Section 8(1)(a) of the Public Sector Management Act 1994, the Recruitment, Selection and Appointment Standard and the Public Sector Management (Review Procedures) Regulations 1995. It was recommended that applicants for advertised vacancies are notified of their right to make application for a review under the regulations in every instance and that all human resource policies and practices comply with the Public Sector Standards in Human Resource Management. This has been addressed and compliance with the standards is maintained.

A review of the Agency's Code of Conduct has been completed and is being prepared for distribution. Matters under the Code of Conduct are brought to the attention of Executive through both normal management processes and through internal audits of specific areas under the Code of Conduct. The Code of Conduct is provided to new staff members and amplified at the orientation and induction session.

In addition, specific sections of the Code of Conduct are referred to in various agency-wide training courses and management development courses.

### **Freedom of Information**

A total of 17 new FOI applications were received and 18 completed within the year with five needing subsequent internal review. The primary nature of the requests was for non-personal information.

### **Records Management**

The agency's record management system InfoRMS was progressively installed in a number of its country offices. The new version of InfoRMS is expected to introduce enhanced capabilities, specifically in managing electronic based records.

The assessment of the agency's archives continued during the year.

Significant numbers of old and inactive records continue to be consigned to the agency archive.

The review of the agency's Retention and Disposal Schedule was completed and approved for use by State Records Office.

### **Information Technology**

Expansion of the statewide network commenced using satellite technology available via the STEP panel contract. (State Telecommunications Enhancement Program). It is anticipated 40 regional sites will have satellite communications installed by late 2001/2002.

The rationalisation of mobile communications continued. A priority was given to the deployment of hand held satellite phones with 37 being deployed.

The refinement of the information technology planning process continued with Agency IT priorities linked to the Agency strategic plan and a detailed risk based set of priorities prepared.

Internal information delivery was further enhanced with a particular emphasis given to the deployment of internal web technology based corporate systems. The implementation of a leave application and management system available online to all staff throughout the State was particularly successful.

The technology used to deploy the Agency's Financial Information Management System to staff throughout the State was upgraded to facilitate future savings in costs and system support time.

A system to manage a centralised repository of information pertaining to clients and their properties was deployed to Agency offices throughout the State. The electronically stored client and property information was particularly useful to field staff in the containment of locusts throughout the spring and summer.

New functionality to enable clients to pay department fees on the Internet was introduced with the connection of the Agency to the centralised Government WA FastPay facility.

### **Information and Knowledge Management**

During 2000-2001 the agency continued its investment in information and knowledge management. Focussing on a whole-of-agency approach, the following initiatives were designed and implemented to enhance the capture and sharing of information and knowledge for both staff and customers.

#### **◆ Access to Information**

AccessLine was developed and implemented. It is a distributed telephone information service that operates from each District Office via a 1300 number giving local access to statewide information. Information on specific issues of importance and relevance to our customers was also made available through a variety of telephone services including Cropline, the Seasonal Hotline and the Locust Hotline. In addition, up to the minute information on these issues was made available via regular postings on the agency's website. ([www.agric.wa.gov.au](http://www.agric.wa.gov.au))

◆ **Unified Agricultural Language**

An enabling thesaurus designed to link terminology used across the agency and by customers thus improving access to information in databases, on the website and in other repositories.

◆ **Content Mapping Engine**

A tool designed to assist with the accurate storage and retrieval of information and knowledge within various business processes across the agency. It has been used to audit, track and record webpages and to control metadata, and as a publications database. Its structure and capability is such that it will be used as the basis of a Document Management System and support the website's Content Management System.

◆ **Video Conferencing**

The agency's network was upgraded and enhanced to deliver improved quality service across the state. The network is used for such functions as meetings, training, diagnostic services and interview processes.

◆ **New website**

An extensive project to develop a new website for the agency commenced in this financial year. The development has been guided by the need to provide our customers with improved access to the agency's vast information and knowledge base through a dynamic site with advanced searching tools. The size and complexity of the site made this a challenging project and drove the development of several innovative and leading edge approaches to information and knowledge management. The new site will be available early in 2001/2.

In addition to these achievements, the agency responded to many requests to make presentations on knowledge management and on the various projects underway. The agency also participated in the development of Standards Australia's Knowledge Management Framework.

With regard to the delivery of information in traditional printed formats, an Editorial Style Guide was released as a complement to the suite of Publications Policies and the Approval to Publish Process. These initiatives were designed to improve the publishing process while ensuring the production of consistent quality publications.

### **Internal Audit**

Internal Audit is an integral part of the agency's management control framework whereby regular advice on risks and control issues is communicated to executive and line management.

During the year, the Audit Committee met three times to provide advice on audit matters, to review audit reports, adequacy of management actions and also to provide strategic directions for an effective and efficient audit function. Audits and Reviews were conducted in accordance with the Strategic Audit Plan (1999/2002) and an Annual Plan produced under a risk-based approach to guide the operation of the Branch.

Internal Audit continued to extend its coverage over agency system developments projects to assure management that approved system development methodologies are consistently applied and all risks and control matters are appropriately addressed.

### **Summary of 2001/2002 Projects**

#### **Total number of projects:**

A total of 339 'commitments' were listed in the Project Resource Allocation (PRA) system at the close of the 2000/2001 year. These comprised:

- 284 projects – being the operational units of the agency, through which the Outputs required by each Program are delivered

- 16 Program Management Administrative Nodes – being the administrative unit against which each Program Manager's expenses are recorded
- 12 management commitments – being a listing of Program Services staff commitments to non-project activities including line management, leave and training
- 27 Business Units – being the administrative units against which the time commitments, expenditure and revenue of the agency's various research support, laboratory and information management business operations are recorded

## **Asset Management**

### **Major Capital Works Completed**

- **Great Southern Agricultural Research Institute, Katanning.** New office/laboratory complex at a cost of \$6.0m;
- **Manjimup District Office.** Laboratory and office extension at a cost of \$2.72m;
- **Kalgoorlie District Office/Centre for the Management of Arid Environments.** New office co-location at a cost of \$1.2m;
- **Double Haploid Research facility.** New research facility provided at South Perth at a cost of \$1.05m;
- **Bunbury District Office.** Extensions to the existing office (Stage 2) at a cost of \$0.68m; and
- **Three Springs Office.** Major upgrade of the existing office facilities, completed at a cost \$0.47m.

### **Capital Works Under Construction**

- **Geraldton Regional Office.** Major upgrade of the existing facilities, including laboratory, research and office accommodation. Budget \$4.8m, completion scheduled for December 2001.

### **Capital Works in the Design and Planning Phase**

- **Proposed Centralised Metropolitan Research and Administrative Facility.** Detailed feasibility reports have been completed for a number of development options to replace the existing aging and outdated facilities on the South Perth site, estimated to cost in the order of \$80.0m;
- **Broome/Derby District Office.** A block of land has been purchased in Broome, preliminary planning/feasibility studies are progressing;
- **Jerramungup District Office.** Business case and feasibility study for a co-location proposal with the Shire is being progressed. The budget is estimated at \$0.30m;
- **Wongan Hills Research Station.** Master planning being completed for infrastructure and proposed office extensions. The budget is estimated at \$0.30m; and
- **Waroona.** Feasibility study being completed to ascertain the viability of establishing a District Office at Waroona.

### **Metropolitan and Regional Accommodation**

Regional Strategic Plans have projected the agency's accommodation requirements for the next 10 years. Metropolitan accommodation has been consolidated on the South Perth site with a number of metropolitan and CBD leased premises vacated. In the regions a number of under utilised offices have been closed. Regional co-location opportunities are also being investigated.

### **Asset Management**

The process and accountability for tracking, controlling and the disposal of assets has been reinforced by further developments of the Asset Module, supporting business rules, and the clear definition of asset Custodians. Further initiatives are planned for 2001/2002 to continue the development and upgrade of the asset management framework.

### **Regional and Metropolitan Maintenance**

The amount of \$2.8m was spent on regional and metropolitan maintenance work for the year.

### **Regional Strategic Plans**

Regional Strategic Plans have been completed for the state's six agricultural regions. The plans identify the agency's current and projected requirements in reference to the assets and resources required to carry out core business activities, together with the identification of assets that are surplus to the agency's needs.

### **Capital Equipment**

Capital equipment (>\$10K) has been purchased to the value of \$1.250m to support core business activities across the state.

### **Property Disposal Program**

Treasury revenue of \$3.264m has been received from previous asset sales. In addition Stoneville and Wokalup research stations have been sold for \$0.911m and \$5.4m respectively, with settlement due in the 2001/2002 financial year.

The property disposal program linked to the Regional Strategic Plans has potentially identified a further 22 sites for possible disposal, these are currently under review.

### **Procurement**

During 2000/2001, a total of 10,000 orders were placed. The total value of these orders was \$67.4 m an increase of 20% on the previous year. For procurement of goods and services in excess of \$ 10,000 over 300 formal Tenders and detailed Quotations were called by the Contracts and Procurement Branch at South Perth.

Expenditure by the Departments 1,200 Corporate Cards for 2000/2001 was \$9.04 m compared to the \$7.3m in 1999/2000. This expenditure covered close to 40,000 individual transactions.

External validation of the performance of the Department of Agriculture in its procurement operations was recognised in a favourable report from the State Supply Commission's 'Procurement Health Check'.

### **Fleet management**

The agency's passenger and light commercial vehicle fleet totals 642 units at June 2001, a reduction of 39 units (5.7%) since June 2000. These reductions have been achieved by establishing minimum thresholds for vehicle usage and by the implementation of a rigorous business case evaluation for all new vehicles. During the year, the development of an agency-wide, web-based vehicle booking system was commenced, with the aim of further improving the management of the vehicle fleet.

### **Experimental Workshop**

During 2000/2001, the Experimental Workshop, which operates on a full cost-recovery basis, completed 63 major engineering jobs.

### **Finance**

Financial services are provided to 5 Departmental Operating Divisions and 7 Statutory Corporations. The financial management service extends to in excess 220 projects encompassing 490 research funding arrangements. The finance system is provided to 40 locations across WA.

Investment in staff development included the placement of 4 staff on internally hosted and academically accredited front line management and management development programs.

Key achievements:

- Devolution of fiscal exception reporting process to Regional management teams;
- Development of a web enabled project cash flow budget facility;
- Enhancement of risk profile to align with governance model;
- Enhanced Board reporting for Rural Business Development Corporation and Agricultural Produce Commission;
- Automatic generation of project fiscal performance reports and dissemination to project managers via email;
- Upgrade to Version 6.5 Smartstream;

- Introduction of Terminal Server facility to improve response time and ability to manage future financial system upgrades;
- Commencement of devolution of purchasing system to project managers;
- Implementation of Online WA FastPay payment facility for debtors, EFT for Creditors, Treasury Information Management system;
- Automatic production of business activity statement for GST reporting;
- Implementation of Smartstream Billing module for 4 satellite systems (Animal Health Laboratory, Seed Testing, Protection and Quarantine Inspections); and
- Development of a control self assessment model for central financial services.



## CORPORATE GOVERNANCE

This statement outlines the main Corporate Governance practices that were in place throughout the financial year.

### **Authority to Act**

The Agriculture Act 1988 established the Director General of Agriculture as a corporate body and sets out the powers and duties of the office. The Act was last amended in 1998. See also the Statement of Compliance with Relevant Laws at Appendix 4.

### **Executive Management (Corporate Executive)**

#### **Director General**

Graeme Robertson. Appointed in August 1995.

#### **Executive Director, Agriculture Protection**

Rob Delane. Appointed in September 1997.

#### **Executive Director, Corporate Services**

Mike Marsh. Appointed in August 1997.

#### **Executive Director, Industry Programs**

Ian Longson. Appointed in 1995.

#### **Executive Director, Program Services**

Charlie Thorn. Appointed in January 1998.

#### **Executive Director, Sustainable Rural Development**

David Hartley. Appointed in September 1998.

#### **Program Manager, Trade and Development**

Henry Steingiesser. Appointed in September 1996.

The Corporate Executive meets every week to report and review key performance measures relating to program delivery, financial, human resource, contracts, key business improvements and risk management.

In accordance with Public Sector guidelines, all senior management of the department has performance agreements in place, which are reviewed annually. Members of the Corporate Executive have a particular focus on Corporate Governance within the model provided.

### **Agency Partnership Group**

The Department of Agriculture's Agency Partnership Group was established by the Minister for Primary Industry in July 1997 and ceased its role in February 2001. The Director General and the Corporate Executive team worked with the Agency Partnership Group to set the overall strategic directions and corporate governance framework for the Department of Agriculture. The Partnership Group reported to the Minister for Primary Industry.

The Partnership Group focused on future directions of the agency and in 1997/98 assisted the Director General and the Corporate Executive to establish the agency's strategic plan.

## **Audit Committee**

The Audit Committee is responsible for ensuring:

- all levels of management developing and maintaining adequate managerial, operational and financial controls in accordance with prudent commercial practice, legislative compliance and whole-of-Government requirements;
- quality management information and sound internal controls are actively promoted;
- appropriate and timely action is taken to address issues requiring attention as identified by the internal and external audit process; and
- the corporate control environment is adequate, relevant and complied with.

The Audit Committee is comprised of three members:

The Director General of the Department of Agriculture and two members, external to the department, one of whom is the Chairperson.

The audit committee is supported by the department's internal auditor. The department's external auditor is the Office of the Auditor General.

## **Corporate Governance Committee**

The Corporate Governance Committee has responsibilities to ensure that:

- services provided in relation to the above activities are consistent with whole-of-Government and prudent commercial service delivery standards;
- where necessary, appropriate policies and procedures have been developed and are readily accessible;
- quality management information and sound internal controls are actively promoted;
- the corporate control environment is adequate, relevant and complied with;
- matters requiring Executive endorsement are dealt with in a timely manner;
- ethical standards of behaviour are actively promoted and maintained; and
- communication and interaction is maintained with the other Committees of the Corporate Executive.

The Corporate Governance Sub-Committee comprises three members:

- Director General, Department of Agriculture;
- one member external to the department, who is the Chairperson; and
- another member of the Department of Agriculture's Executive.

## **Specific Corporate Governance issues**

### **Risk management**

Risk management policies and procedures have been introduced in accordance with the requirements of Treasurers Instruction 109.

Consultants are used to assess insurable risks and manage the insurance portfolio.

Procedures are in place to safeguard the assets and interests of the Department of Agriculture and to ensure the integrity of reporting. The system of internal control ensures an appropriate division of responsibilities and provides a reasonable assurance that control procedures are monitored and reviewed.

Written confirmation is obtained from senior management on internal controls, including risk management and the contents of the published accounts.

### **Ethics, Standards and Performance**

The Corporate Executive acknowledges the need for all staff to adhere to the highest standards of corporate governance practice and ethical behaviour. The document Code of Conduct, which conforms with the Western Australian Public Sector Code of Ethics, is available to employees on-line.

Procedures are in place to meet the requirements of the Government of Western Australia Code of Conduct Supplementary Provisions - Conflict of Interest, and the Anti-Corruption Commission document Anti-Corruption Commission Act 1988 - Reporting Under Section 14 - Guidelines and Annual Summary.

The Department of Agriculture's Code of Conduct and Performance Agreements have all been adopted and incorporated in individual Workplace Agreements and in the Enterprise Agreement.

#### **Compliance with Public Sector Management Act section 31(1)**

1. In the administration of the agency, I have complied with public sector standards in human resource management, the Public Sector Code of Ethics and the Office's Code of Conduct.
2. I have put in place procedures designed to ensure such compliance and conducted appropriate internal checks to satisfy myself that the statement made in 1 is correct.

The applications made for breach of standards review and the corresponding outcomes for the reporting period are:

<b>Number lodged</b>	7
<i>Number of material breaches found, including multiple breaches per application</i>	0
<i>Number of non-material breaches found</i>	2
<b>Number still under review</b>	Nil

#### **Compliance with Electoral Act 1907 section 175ZE (1)**

Any public sector agency required to publish an annual report under the FAAA or any other law is required under section 175ZE (1) to include a statement in the annual report setting out details of all expenditure in relation to engaging advertising, media, polling and market research organisations.

In compliance with the above, I submit the following details :

Advertising agencies	\$126,772
Media advertising organisations	\$12,535

#### **Certification of Performance Indicators**

I certify that the performance indicators presented within this report are based on proper records and fairly represent the performance of the Department of Agriculture for the financial year ending 30 June 2001.

G.A. Robertson  
DIRECTOR GENERAL  
DEPARTMENT OF AGRICULTURE

31 August 2001



## AUDITOR GENERAL

To the Parliament of Western Australia

### AGRICULTURE WESTERN AUSTRALIA FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2001

#### Scope

I have audited the accounts and financial statements of Agriculture Western Australia for the year ended June 30, 2001 under the provisions of the Financial Administration and Audit Act 1985.

The Director General is responsible for keeping proper accounts and maintaining adequate systems of internal control, preparing and presenting the financial statements, and complying with the Act and other relevant written law. The primary responsibility for the detection, investigation and prevention of irregularities rests with the Director General.

My audit was performed in accordance with section 79 of the Act to form an opinion based on a reasonable level of assurance. The audit procedures included examining, on a test basis, the controls exercised by Agriculture Western Australia to ensure financial regularity in accordance with legislative provisions, evidence to provide reasonable assurance that the amounts and other disclosures in the financial statements are free of material misstatement and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Accounting Standards, other mandatory professional reporting requirements and the Treasurer's Instructions so as to present a view which is consistent with my understanding of Agriculture Western Australia's financial position, the results of its operations and its cash flows.

The audit opinion expressed below has been formed on the above basis.

#### Audit Opinion

In my opinion,

- (i) the controls exercised by Agriculture Western Australia provide reasonable assurance that the receipt and expenditure of moneys and the acquisition and disposal of property and the incurring of liabilities have been in accordance with legislative provisions; and
- (ii) the Statement of Financial Performance, Statement of Financial Position, Statement of Cash Flows, Output Schedule of Expenses and Revenues and Summary of Consolidated Fund Appropriations and Revenue Estimates and the Notes to and forming part of the financial statements are based on proper accounts and present fairly in accordance with applicable Accounting Standards, other mandatory professional reporting requirements and the Treasurer's Instructions, the financial position of Agriculture Western Australia at June 30, 2001 and the results of its operations and its cash flows for the year then ended.

D D R PEARSON  
AUDITOR GENERAL  
October 31, 2001

**CERTIFICATION OF FINANCIAL STATEMENTS**

The accompanying financial statements of the Department of Agriculture have been prepared in compliance with the provisions of the Financial Administration and Audit Act 1985 from proper accounts and records to present fairly the financial transactions for the year ending 30 June 2001 and the financial position as at 30 June 2001.

At the date of signing we are not aware of any circumstances which would render the particulars included in the financial statements misleading or inaccurate.



G.A. Robertson  
ACCOUNTABLE OFFICER  
31 August 2001



Mike Marsh CPA  
PRINCIPAL ACCOUNTING OFFICER  
31 August 2001

	Note	2001 (\$'000)	2000 (\$'000)
<b>COST OF SERVICES</b>			
Expenses from ordinary activities			
Employee expenses	5	100,593	99,385
Depreciation & amortisation	6	11,406	8,826
Communications		2,766	2,791
Services & contracts	7	50,333	44,377
Other expenses	8	18,100	19,328
Grants, subsidies & transfer payments	9	32,725	28,525
Net loss on disposal of non-current assets	12	408	494
Provision for doubtful debts	10	(89)	26
Total cost of services		<u>216,242</u>	<u>203,752</u>
Revenues from ordinary activities			
Revenues from services	11	99,680	92,428
Net profit on disposal of non-current assets	12	72	134
Total revenues from ordinary activities		<u>99,752</u>	<u>92,562</u>
<b>Net cost of services</b>		<u><b>116,490</b></u>	<u><b>111,190</b></u>
<b>REVENUES FROM GOVERNMENT</b>			
	13		
Appropriations		108,513	90,665
Resources received free of charge		677	910
Assets transferred		(1,095)	(1,019)
Liabilities assumed by the Treasurer		8,100	9,749
Total revenues from government		<u>116,195</u>	<u>100,305</u>
<b>CHANGE IN NET ASSETS</b>		<u>(295)</u>	<u>(10,885)</u>
Net (decrease)/increase in asset revaluation reserve	25	(14,081)	2,102
<b>TOTAL CHANGES IN EQUITY</b>		<u><b>(14,376)</b></u>	<u><b>(8,783)</b></u>

The Statement of Financial Performance should be read in conjunction with the accompanying notes.

	Note	2001 (\$'000)	2000 (\$'000)
<b>CURRENT ASSETS</b>			
Cash assets	14	9,485	6,003
Restricted cash assets and amounts in suspense	15	20,422	22,744
Inventories	16	2,027	2,257
Receivables	17	5,689	3,356
Prepayments	18	346	130
Total current assets		<u>37,969</u>	<u>34,490</u>
<b>NON-CURRENT ASSETS</b>			
Land	19	34,169	55,503
Buildings	19	69,242	59,085
Plant & equipment	19	11,900	12,511
Vehicles & transportation equipment	19	5,003	5,055
IT equipment	19	3,121	4,321
Furniture & fittings	19	455	487
Capital works in progress	20	4,079	8,183
Investments	21	457	254
Total non-current assets		<u>128,426</u>	<u>145,399</u>
<b>Total assets</b>		<u><u>166,395</u></u>	<u><u>179,889</u></u>
<b>CURRENT LIABILITIES</b>			
Payables	22	7,540	9,155
Accrued salaries	23	1,904	1,919
Employee entitlements	24	12,921	10,950
Total current liabilities		<u>22,365</u>	<u>22,024</u>
<b>NON-CURRENT LIABILITIES</b>			
Employee entitlements	24	8,324	7,783
Total non-current liabilities		<u>8,324</u>	<u>7,783</u>
<b>Total liabilities</b>		<u><u>30,689</u></u>	<u><u>29,807</u></u>
<b>EQUITY</b>			
Asset revaluation reserve	25	100,091	114,172
Accumulated surplus		35,615	35,910
<b>Total equity</b>		<u>135,706</u>	<u>150,082</u>
<b>TOTAL LIABILITIES AND EQUITY</b>		<u><u>166,395</u></u>	<u><u>179,889</u></u>

The Statement of Financial Position should be read in conjunction with the accompanying notes.

	Note	<b>2001</b> <b>(\$'000)</b> Inflows (Outflows)	<b>2000</b> <b>(\$'000)</b> Inflows (Outflows)
<b>CASH FLOWS FROM GOVERNMENT</b>			
Recurrent appropriations		101,028	85,650
Capital appropriations		7,484	5,015
Net cash provided by Government		<u>108,512</u>	<u>90,665</u>
Utilised as follows:			
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Payments			
Employee expenses		(88,008)	(87,755)
Communications		(2,639)	(2,812)
Services & contracts		(40,396)	(42,091)
GST payments on purchases		(9,475)	-
Other		(25,035)	(15,674)
Grants, subsidies & transfer payments		(32,303)	(28,984)
Receipts			
Revenues from services		91,829	92,912
GST receipts on sales		2,832	-
GST receipts from taxation authority		5,700	-
Net cash (used in) operating activities	26	<u>(97,495)</u>	<u>(84,404)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Payments for purchase of non-current physical assets		(10,098)	(16,400)
Receipts from the sale of non-current physical assets		241	536
Net cash (used in) investing activities		<u>(9,857)</u>	<u>(15,864)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Repayments of finance lease principal		-	(269)
Net cash (used in) financing activities		<u>-</u>	<u>(269)</u>
<b>Net increase/(decrease) in cash held</b>		<b>1,160</b>	<b>(9,872)</b>
Cash assets at the beginning of the reporting period		<u>28,747</u>	<u>38,619</u>
<b>Cash assets at the end of the financial year</b>		<b><u>29,907</u></b>	<b><u>28,747</u></b>

The Statement of Cash Flows should be read in conjunction with the accompanying notes.



Output	Industry & Market Development		Agriculture Protection		Sustainable Rural Development		Services provided to Agricultural Protection Board		Services provided to Rural Business Development Corporation		Total	
	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>COST OF SERVICES</b>												
<b>Expenses from ordinary activities</b>												
Employee expenses	49,095	47,531	22,505	23,635	21,219	20,232	6,448	6,300	1,326	1,687	100,593	99,385
Depreciation & amortisation	6,045	4,595	2,966	2,467	2,395	1,764	-	-	-	-	11,406	8,826
Communications	1,509	1,458	665	726	592	607	-	-	-	-	2,766	2,791
Services & contracts	14,676	15,356	5,401	5,930	8,020	10,781	11,082	5,319	11,154	6,991	50,333	44,377
Other expenses	9,953	10,373	559	607	4,081	4,797	3,384	3,437	123	114	18,100	19,328
Grants, subsidies & transfer payments	8,137	2,232	515	1,248	24,073	25,045	-	-	-	-	32,725	28,525
Net loss on disposal of non-current assets	216	341	106	75	86	78	-	-	-	-	408	494
Provision for doubtful debts	(48)	12	(22)	9	(19)	5	-	-	-	-	(89)	26
Total cost of services	89,583	81,898	32,695	34,697	60,447	63,309	20,914	15,056	12,603	8,792	216,242	203,752
<b>Revenues from ordinary activities</b>												
Revenues from services	23,321	23,394	13,233	12,761	29,609	32,425	20,914	15,056	12,603	8,792	99,680	92,428
Net profit on disposal of non-current assets	48	92	5	23	19	19	-	-	-	-	72	134
Total revenues from ordinary activities	23,369	23,486	13,238	12,784	29,628	32,444	20,914	15,056	12,603	8,792	99,752	92,562
<b>Net cost of services</b>	66,214	58,412	19,457	21,913	30,819	30,865	-	-	-	-	116,490	111,190
<b>Revenues from Government</b>												
Appropriations	58,442	50,602	19,111	18,073	30,960	21,990	-	-	-	-	108,513	90,665
Resources received free of charge	359	473	176	255	142	182	-	-	-	-	677	910
Assets transferred	(580)	(703)	(285)	(143)	(230)	(173)	-	-	-	-	(1,095)	(1,019)
Liabilities assumed by the Treasurer	4,293	5,069	2,106	2,731	1,701	1,949	-	-	-	-	8,100	9,749
<b>Total revenues from Government</b>	62,514	55,441	21,108	20,916	32,573	23,948	-	-	-	-	116,195	100,305
<b>CHANGE IN NET ASSETS</b>	(3,700)	(2,971)	1,651	(997)	1,754	(6,917)	-	-	-	-	(295)	(10,885)

The Output Schedule of Expenses and Revenues should be read in conjunction with the accompanying notes.

	Note	2001			2000			
		Estimate \$'000	Actual \$'000	Variation \$'000	Note	Estimate \$'000	Actual \$'000	Variation \$'000
<b>RECURRENT</b>								
Amount required to fund outputs for the year	31.1	190,385	204,408	14,023	31.20	169,170	176,859	7,689
Less Retained revenue – Section 23A Financial Administration and Audit Act 1985	31.2	93,712	103,530	9,818	31.21	84,501	91,360	6,859
<b>Item 48 Amount provided to fund outputs for the year</b>	31.3	96,673	100,878	4,205		84,669	85,499	830
Amount authorised by Other Statutes - Salaries and Allowances Act 1975		150	150	-		150	150	-
Sub-total		96,823	101,028	4,205		84,819	85,649	830
<b>Item 50 Administered transactions</b>	31.4	1,178	9,934	8,756	31.22	1,185	1,185	-
Total recurrent services		98,001	110,962	12,961		86,004	86,834	830
<b>CAPITAL</b>								
<b>Item 149 Amount provided for capital services for the year</b>	31.5	4,220	7,484	3,264	31.23	5,015	5,015	-
Grand total		102,221	118,446	16,225		91,019	91,849	830

	2001			2000				
	Note	Estimate	Actual	Variation	Note	Estimate	Actual	Variation
		\$'000	\$'000	\$'000		\$'000	\$'000	\$'000
<b>DETAILS OF EXPENDITURE</b>								
<b>RECURRENT</b>								
<b>Outputs:</b>								
Industry and Market Development (IMD)	31.6	84,478	82,472	(2,006)	31.24	72,741	68,874	(3,867)
Sustainable Rural Development (SRD)	31.7	45,142	58,572	13,430	31.25	46,262	56,148	9,886
Agriculture Protection (AP)	31.8	27,289	28,781	1,492		27,896	28,073	177
Services Provided to Agricultural Protection Board	31.9	17,052	19,258	2,206	31.26	15,851	15,056	(795)
Services Provided to Rural Business Development Corporation	31.10	13,806	12,619	(1,187)	31.27	11,922	8,792	(3,130)
<b>Recurrent expenditure</b>		187,767	201,702	13,935		174,672	176,943	2,271
Less								
* Retained revenue		(93,712)	(103,530)	(9,818)		(84,501)	(91,360)	(6,859)
* Resources received free of charge & other accruals	31.11	3,290	(677)	(3,967)		(1,400)	(910)	490
<b>Total cash cost of outputs</b>		(90,422)	(104,207)	(13,785)		(85,901)	(92,270)	(6,369)
<i>Purchase of Capital Investments from Recurrent and other funds</i>	31.12	-	1,144	1,144		-	8,076	8,076
<i>Adjustment for cash balances</i>	31.13	(522)	2,402	2,924	31.28	(3,952)	(14,428)	(10,476)
		(522)	3,546	4,068		(3,952)	(6,352)	(2,400)
<b>Amount required to fund outputs</b>		96,823	101,041	4,218		84,819	78,321	(6,498)
<b>Administered transactions</b>	31.14	1,178	9,921	8,743	31.29	1,185	8,513	7,328
<b>Consolidated Fund Recurrent Appropriations</b>		98,001	110,962	12,961		86,004	86,834	830

	Note	2001			2000		
		Estimate \$'000	Actual \$'000	Variation \$'000	Estimate \$'000	Actual \$'000	Variation \$'000
<b>CAPITAL</b>							
<b>Capital Investment</b>							
Asset disposal		-	(241)	(241)	-	(536)	(536)
Asset replacement/maintenance		2,036	3,776	1,740	-	8,070	8,070
Asset expansion		10,668	6,322	(4,346)	11,812	8,330	(3,482)
Total Value of Investment	31.15	12,705	9,857	(2,848)	11,812	15,864	4,052
<i>Other non-capital payments/(receipts)</i>	31.16	-	2,305	2,304	-	(795)	(795)
<i>Capital payments from other funding sources</i>	31.17	(2,036)	(3,448)	(1,412)	(6,797)	(7,281)	(484)
<i>Adjustment for cash balances</i>	31.18	(6,449)	(1,230)	5,219	-	(2,773)	(2,773)
		(8,485)	(2,373)	6,111	(6,797)	(10,849)	(4,052)
<b>Consolidated Fund Capital Appropriations</b>	31.19	4,220	7,484	3,264	5,015	5,015	0
<b>Total Consolidated Fund Appropriations</b>		102,221	118,446	16,225	91,019	91,849	830

The Summary of Consolidated Fund Appropriations and Revenue Estimates should be read in conjunction with the accompanying notes.

This Summary provides the basis for the Explanatory Statement Information requirements of Treasurer's Instruction, TI 945, disclosed in note 32.

## 1 Department mission and funding

The Department's mission, "the Department of Agriculture will accelerate the success of agriculture, food and fibre industries through innovations in production, processing, marketing and stewardship of our natural resources".

The Department is predominantly funded by Parliamentary appropriation. The fees charged are determined by prevailing market forces. The financial statements encompass all Funds through which the Department controls resources to carry on its functions

## 2 Significant accounting policies

The following accounting policies have been adopted in the preparation of the financial statements. Unless otherwise stated these policies are consistent with those adopted in the previous year.

### General Statement

The financial statements constitute a general purpose financial report which has been prepared in accordance with Australian Accounting Standards and Urgent Issues Group (UIG) Consensus Views as applied by the Treasurer's Instructions. Several of these are modified by the Treasurer's Instructions to vary application, disclosure, format and wording. The Financial Administration and Audit Act and the Treasurer's Instructions are legislative provisions governing the preparation of financial statements and take precedence over Australian Accounting Standards and UIG Consensus Views. The modifications are intended to fulfil the requirements of general application to the public sector together with the need for greater disclosure and also to satisfy accountability requirements.

If any such modification has a material or significant financial effect upon the reported results, details of that modification and where practicable, the resulting financial effect are disclosed in individual notes to these financial statements.

### Basis of accounting

The financial statements have been prepared in accordance with Australian Accounting Standard AAS 29.

The statements have been prepared on the accrual basis of accounting using the historical cost convention, with the exception of certain non-current assets which have been stated at valuation as provided by the Valuer General's Office (see note 19). Additions to non-current physical assets since valuation are stated at cost.

Administered assets, liabilities, expenses and revenues are not integral to the Agency in carrying out its functions and are disclosed in the notes to the financial statements, forming part of the general purpose financial report of the Agency. The administered items are disclosed on the same basis as is described above for the financial statements of the Agency. The administered assets, liabilities, expenses and revenues are those which the Government requires the Agency to administer on its behalf. The assets do not render any service potential or future economic benefits to the Agency, the liabilities do not require the future sacrifice of service potential or future economic benefits of the Agency, and the expenses and revenues are not attributable to the Agency.

As the administered assets, liabilities, expenses and revenues are not recognised in the principal financial statements of the Agency, the disclosure requirements of Australian Accounting Standard AAS33, "Presentation and Disclosure of Financial Instruments", are not applied to administered transactions.

(a) Appropriations

Appropriations in the nature of revenue, whether recurrent or capital, are recognised as revenues in the period in which the Agency gains control of the appropriated funds. The Agency gains control of appropriated funds at the time those funds are deposited into the Agency's bank account. Appropriations which are repayable to the Treasurer are recognised as liabilities.

(b) Net Appropriation Determination

Pursuant to section 23A of the Financial Administration and Audit Act, the net appropriation determination by the Treasurer provides for retention of the following moneys received by the Agency:

	<b>2001</b>	<b>2000</b>
	<b>(\$'000)</b>	<b>(\$'000)</b>
Proceeds from:		
Direct Mail Services	60	74
Land Management Services	177	246
Animal Health Services	1,682	1,040
Seed Quality Services	432	592
Research Support Units Operations	3,531	4,029
Services to Industry & Commonwealth:		
- Industry Research & Development	21,726	20,704
- Natural Heritage Trust Fund	22,939	29,210
- Other Commonwealth	5,427	5,580
Consultancy Services	145	182
Sale of Intellectual or Genetic Property	1,291	1,511
Program Revenue	4,057	4,344
GST Input Tax Credits	8,531	-
Services Contracted by:		
- Rural Business Development Corporation	12,619	8,792
- Agricultural Produce Commission	1,655	-
- Agriculture Protection Board	19,258	15,056
	<u>103,530</u>	<u>91,360</u>

Retained revenues may only be applied to the outputs specified in the 2000-2001 Budget Statements.

Details of retained revenues are disclosed in the Summary of Consolidated Fund Appropriations and Revenue Estimates.

(c) Grants and Other Contributions Revenue

Grants, donations, gifts and other non-reciprocal contributions are recognised as revenue when the Department obtains control over the assets comprising the contributions. Control is normally obtained upon their receipt.

Contributions are recognised at their fair value. Contributions of services are only recognised when a fair value can be reliably determined and the services would be purchased if not donated.

(Where contributions recognised as revenues during the reporting period were obtained on the condition that they be expended in a particular manner or used over a particular period, and those conditions were undischarged as at the reporting date, the nature of, and amounts pertaining to, those undischarged conditions are required to be disclosed in the notes to the financial statements).

(d) Depreciation of non-current assets

All non-current assets having a limited useful life are systematically depreciated over their useful lives in a manner which reflects the consumption of their future economic benefits.

Depreciation is provided for on the straight line basis, using rates which are reviewed annually. Useful life of each class of depreciating asset are:

Buildings	22 years
Vehicles & Transportation Equipment	8 years
IT Equipment	4 years
Furniture & Fittings	10 years
Plant & Equipment	5 – 10 years
Office Equipment	5 – 10 years
Farm Equipment	10 years
Laboratory & Scientific Equipment	5 years

(e) Inventories

Inventories comprising livestock and grains are valued at net realisable value. Stores comprising chemicals and poisons are valued at the lower of cost and net realisable value.

(f) Employee entitlements

Annual leave

This entitlement is recognised at current remuneration rates and is measured at the amount unpaid at the reporting date in respect to employees' service up to that date. The superannuation component on annual leave entitlements has been included for the first time for the year ended 30 June 2001. This is consistent with the requirements of Australian Accounting Standard AAS 30 "Accounting for Employee Entitlements".

Long service leave

A liability for long service leave is recognised, and is measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given, when assessing expected future payments, to expected future wage and salary levels including relevant on costs, experience of employee departures and periods of service. Expected future payments are discounted using interest rates to obtain the estimated future cash outflows.

The superannuation component on long service leave entitlements has been included for the first time for the year ended 30 June 2001. This method of measurement of the liability is consistent with the requirements of Australian Accounting Standard AAS 30 "Accounting for Employee Entitlements".

## Superannuation

Staff may contribute to the Superannuation and Family Benefits Act Scheme, a defined benefits pension scheme now closed to new members, or to the Gold State Superannuation Scheme, a defined benefit lump sum scheme now also closed to new members. All staff who do not contribute to either of these schemes become non-contributory members of the West State Superannuation Scheme, an accumulation fund complying with the Commonwealth Government's Superannuation Guarantee (Administration) Act 1992.

The superannuation expense comprises the following elements:

(i) change in the unfunded employer's liability in respect of current employees who are members of the Superannuation and Family Benefits Act Scheme and current employees who accrued a benefit on transfer from that Scheme to the Gold State Superannuation Scheme; and

(ii) notional employer contributions which would have been paid to the Gold State Superannuation Scheme and West State Superannuation Scheme if the Department had made concurrent employer contributions to those Schemes.

[The superannuation expense does not include payment of pensions to retirees, as this does not constitute part of the cost of services provided by the Department in the current year].

### (g) Leases

The Agency's rights and obligations under finance leases, which are leases that effectively transfer to the Agency substantially all of the risks and benefits incident to ownership of the leased items, are initially recognised as assets and liabilities equal in amount to the present value of the minimum lease payments. The assets are disclosed as leased assets, and are amortised to the Statement of Financial Performance over the period during which the Agency is expected to benefit from use of the leased assets. Minimum lease payments are allocated between interest expense and reduction of the lease liability, according to the interest rate implicit in the lease.

Finance lease liabilities are allocated between current and non-current components. The principal component of lease payments due on or before the end of the succeeding year is disclosed as a current liability, and the remainder of the lease liability is disclosed as a non-current liability.

The Agency has entered into a number of operating lease arrangements for motor vehicles, buildings and office equipment where the lessors effectively retain all of the risks and benefits incident to ownership of the items held under the operating leases. Equal instalments of the lease payments are charged to the operating statement over the lease term as this is representative of the pattern of benefits to be derived from the leased property.

### (h) Receivables

Receivables are recognised at the amounts receivable as they are due for settlement no more than 30 days from the date of recognition.

Collectability of receivables is reviewed on an ongoing basis. Debts which are known to be uncollectable are written off. A provision for doubtful debts is raised where some doubts as to collection exist.



**(i) Accrued Salaries**

The accrued salaries suspense account consists of amounts paid annually into a suspense account over a period of 10 financial years to largely meet the additional cash outflow in each eleventh year when 27 pay days occur in that year instead of the normal 26. No interest is received on this account.

Accrued salaries represent the amount due to staff but unpaid at the end of the financial year, as the end of the last pay period for that financial year does not coincide with the end of the financial year. Accrued salaries are settled within a few days of the financial year end. The Agency considers the carrying amount of accrued salaries to be equivalent to the net fair value.

**(j) Payables**

Payables, including accruals not yet billed, are recognised when the Agency becomes obliged to make future payments as a result of a purchase of assets or services. Payables are settled in accordance with the change in payment policy as per the amended Treasurer's Instructions, TI 308.

**(k) Joint Venture Operations**

Interests in joint venture operations have been reported in the financial statements including the Agency's share of assets employed in the joint ventures, the share of liabilities incurred in relation to the joint ventures and the share of any expenses incurred in relation to the joint ventures in their respective classification categories.

**(l) Research and Development Costs**

Research and development costs are charged against income in the Statement of Financial Performance as incurred, except to the extent that such costs, together with unamortised deferred costs in relation to that project, are expected, beyond reasonable doubt, to be recoverable.

Deferred costs are amortised over the period in which the corresponding benefits are expected to arise, commencing with the commercial production of the product.

The unamortised balance of research and development costs deferred are reviewed regularly and at each reporting date, to ensure the criterion for deferral continues to be met. Where such deferred costs are no longer considered recoverable, they are charged to the profit and loss account for the financial year.

**(m) Resources received free of charge or for nominal value**

Resources received free of charge or for nominal value which can be reliably measured are recognised as revenues and as assets or expenses as appropriate at fair value.

**(n) Comparative Figures**

Comparative figures are, where appropriate, reclassified so as to be comparable with the figures presented in the current financial year.

(o) Valuations of Assets

a) Valuation of Non-Current Assets

The Agency has a policy of revaluing land, buildings every three years. The last valuation of land and buildings was performed at the 30 June 2001.

Land and buildings are valued at fair value. The annual revaluations undertaken by the Valuer General's Office for the Government Property register are recognised in the financial statements. Revaluations that result in a material value change for a class of asset are reflected in the financial statements.

The transitional provisions in AAS 38 (10.4) (a) have been applied to infrastructure assets.

Revaluation increments are credited to the asset revaluation reserve, except that, to the extent that an increment reverses a revaluation decrement in respect of that class of asset previously recognised as an expense in net profit or loss, the increment is recognised immediately as revenue in the net profit or loss.

Revaluation decrements are recognised immediately as expenses in net profit or loss, except that, to the extent that a credit balance exists in the asset revaluation reserve in respect of the same class of assets, they are debited directly to the asset revaluation reserve.

Revaluation increments and decrements are offset against one another within a class of non current assets, but not otherwise.

(b) Valuation of Self Generating and Regenerating Assets

The Agency has adopted the Australian Accounting Standard 35 "Self-generating and Regenerating Assets" (SGARAs) in the current reporting period. SGARAs disclosures are incorporated into the financial statements where the values are material.

SGARAs are recognised when it is probable that the future economic benefits embodied in the SGARAs will eventuate, and the SGARAs possess a value that can be measured reliably.

Increments or decrements in the Net Market Value (NMV) of SGARAs are recognised in the statement of financial performance as a revenue or expense in the reporting period in which the changes occur.

At the point where the SGARAs becomes non-living it's NMV is deemed to be the non-living SGARAs cost and is accounted for in accordance with the standards applicable to the valuation of inventories.

(p) Goods and Services Tax

On the 1st July 2001 various entities elected to operate within the provisions of a GST group headed by the Department of Agriculture. In accordance with the grouping provisions the right to receive GST and the obligation to pay GST rests with the Department of Agriculture in regard to all GST transactions incurred by members of the group. As a result separate GST transactions are not recognised within the individual members' financial statements as they are all brought to account in the Department of Agriculture's financial statements.

### **3 Memorandum of understanding service costs**

The Department of Agriculture has a memorandum of understanding with the Agriculture Protection Board, the Agricultural Produce Commission and the Rural Business Development Corporation. The objective of this arrangement is to establish the types and standards of services to be provided, the basis for determining the level and the costs of services and responsibilities of the parties to the memorandum.

### **4 Outputs of the Agency**

Information about the Agency's outputs and, the expenses and revenues which are reliably attributable to those outputs is set out in the Output Schedule. Information about expenses, revenues, assets and liabilities administered by the Agency are given in the schedule of Administered Expenses and Revenues and the schedule of Administered Assets and Liabilities.

The five key outputs of the Agency:

#### **Output 1 - Industry and Market Development**

Generation, integration and application of knowledge that increases the international competitiveness and market opportunities for State agriculture industries.

#### **Output 2 - Sustainable Rural Development**

Generation, integration and application of knowledge which together with appropriate policy and regulation promotes the ecological sustainability of agriculture and the economic and social well-being of rural communities.

#### **Output 3 - Agriculture Protection**

Generation, integration and application of knowledge which together with appropriate policy and regulation ensures that agriculture and related resources are protected and that safety and quality standards are upheld.

(In the printed estimates this activity/output is titled Industry Resource Protection)

#### **Output 4 - Services provided to Agriculture Protection Board**

Provision of contractual services to Agriculture Protection Board, particularly exclusion, eradication and control of specified declared plants and animals.

#### **Output 5 - Services provided to Rural Business Development Corporation**

Provision of contractual services to Rural Business Development Corporation to assist farmers to enhance their skills, leading to improved sustainable long-term profitability and better capacity to deal with risks inherent in farming.

In addition, the objective of Corporate Services and Program Services is to develop and manage agency resources for the purpose of efficiently supporting the operational outputs for which the Agency is responsible.

Corporate support is provided from the following areas:

Asset Management  
Finance  
Human Resources  
Information Technology  
Management Services  
Contract and Procurement Services

Program support is provided from the following areas:

Animal Research and Development Services  
Extension Services  
Marketing and Economics  
Natural Resource Management Services  
Plant Research and Development Services  
Protection Services  
Information and Customer Services  
Research Support Services

	<b>2001</b>	<b>2000</b>
	<b>(\$'000)</b>	<b>(\$'000)</b>
<b>5 Employee expenses</b>		
Salaries, wages & allowances	75,107	72,306
Superannuation	8,100	9,749
Change long service leave entitlements	1,718	968
Change in annual leave entitlements	795	316
Memorandum of understanding service costs		
- Agriculture Protection Board	6,448	6,300
- Rural Business Development Corporation	1,326	1,687
Other related expenses	7,099	8,059
	<u>100,593</u>	<u>99,385</u>
<b>6 Depreciation and amortisation</b>		
Current Year:		
Plant & equipment	2,727	2,180
IT equipment	2,453	1,942
Furniture & fittings	65	60
Vehicles & transportation equipment	993	960
Buildings	5,168	2,653
Leased assets (amortisation)	-	65
	<u>11,406</u>	<u>7,860</u>
Prior Year Adjustments:		
Plant & equipment	-	(58)
IT equipment	-	633
Furniture & fittings	-	14
Vehicles & transportation equipment	-	148
Buildings	-	229
	<u>11,406</u>	<u>8,826</u>
Prior year adjustments are a result of the review of the depreciation calculation		
<b>7 Services &amp; contracts</b>		
Expenses incurred for the year	19,292	25,467
Lease or rent payments	8,128	5,690
Resources received free of charge (see note 13)	677	910
Memorandum of understanding service costs		
- Agriculture Protection Board	9,427	5,319
- Agricultural Produce Commission	1,655	-

	<b>2001</b>	<b>2000</b>
	(\$'000)	(\$'000)
- Rural Business Development Corporation	11,154	6,991
	<u>50,333</u>	<u>44,377</u>
<b>8 Other expenses</b>		
Maintenance & repairs	5,922	5,838
Supplies expenses	4,803	5,041
Other	7,375	8,449
	<u>18,100</u>	<u>19,328</u>
<b>9 Grant, subsidies &amp; transfer payments</b>		
Research grant allocations	19,501	24,653
Compensations	117	344
Grants to farmers - adverse seasonal conditions support	2,741	-
Grants to farmers - dairy assistance package	5,505	-
Grants to farmers - other	354	572
Subsidies	3,516	1,575
Scholarships	298	444
Other	693	937
	<u>32,725</u>	<u>28,525</u>
<b>10 Provision for doubtful debts</b>		
Provision for doubtful debts, 1 July 2000	190	190
Less Write-offs approved during the financial year (see note 37)	-	(26)
	<u>190</u>	<u>164</u>
(Decrease)/increase provision for doubtful debt	(89)	26
Provision for doubtful debts, 30 June 2001	<u>101</u>	<u>190</u>
<b>11 Revenues from services</b>		
Grants & subsidies	49,877	52,710
Sale of goods & services	7,981	7,505
Interest received	564	539
Other revenue	7,741	7,826
Memorandum of understanding service costs		
- Agriculture Protection Board	19,259	15,056
- Agricultural Produce Commission	1,655	-
- Rural Business Development Corporation	12,603	8,792
	<u>99,680</u>	<u>92,428</u>
Grants & subsidies consists of:		
<i>Agriculture Research Grants Account No. 1</i>		
Rural Industry Research Funds		
Meat Research Corporation	374	513
Cotton Research & Development Corporation	92	106
Dairy Research & Development Corporation	182	143
Grains Research & Development Corporation	10,145	10,952
Pig Research & Development Corporation	122	207
Wool Research & Development Corporation	-	228
Land & Water Resources Research & Development Corporation	234	477
Rural Industry Research & Development Corporation	66	194
Sugar Research & Development Corporation	77	85
Grain Research Committee	148	180
Australian Wool Innovation Pty Ltd	88	-
AWB Ltd.	-	26
Australian Centre for International Agricultural Research	341	97
Centre for Legumes in Mediterranean Agriculture	227	77
National Landcare Program Third Party Grants	1,001	547

	<b>2001</b> (\$'000)	<b>2000</b> (\$'000)
CRC Research Grants	373	322
Export Grain Centre	120	507
Commercial Grants	3,006	2,090
	<u>16,596</u>	<u>16,751</u>
<i>Agriculture Research Grants Account No. 2</i>		
Horticulture Industry	1,257	961
Commercial Grants	752	284
	<u>2,009</u>	<u>1,245</u>
<i>Governmental Operating &amp; Trust Accounts</i>		
Cattle Industry Compensation	-	338
Pig Industry Compensation	1	2
Plant Research & Development	53	-
	<u>54</u>	<u>340</u>
<i>Commonwealth Grants &amp; Advances</i>		
Commonwealth Agriculture Activity Grants	460	88
Tuberculosis Freedom Assurance Program	205	409
Quarantine & Inspection Service	5,441	4,979
Natural Resource Management	5,711	6,319
Natural Heritage Trust Fund	16,940	21,092
	<u>28,757</u>	<u>32,887</u>
<i>Other grants &amp; subsidies</i>	<u>2,461</u>	<u>1,487</u>
Grants & subsidies	<u>49,877</u>	<u>52,710</u>

## 12 Net profit/(losses) on disposal of non-current assets

### Profit on Sale of Non-Current Assets

Plant & equipment	24	58
Vehicles & transportation equipment	46	76
IT equipment	2	-
	<u>72</u>	<u>134</u>
Gross proceeds on disposal of non-current assets	<u>153</u>	<u>397</u>

### Losses on Sale of non-current assets

Vehicles & transportation equipment	59	125
Plant & equipment	329	228
IT equipment	17	133
Furniture & fittings	3	8
	<u>408</u>	<u>494</u>
Gross proceeds on disposal of non-current assets	<u>88</u>	<u>139</u>

## 13 Revenues (to)/from Government

Appropriation revenue received during the year <sup>(a)</sup>		
Recurrent	101,029	85,650
Capital	7,484	5,015
	<u>108,513</u>	<u>90,665</u>
Resources received free of charge		
Determined on the basis of the following estimates provided by agencies:		
Health Department - laboratory services	23	22
Department of Land Administration - mapping, land details	382	597
Office of The Auditor General - audit services	160	160
Valuer Generals Office	11	36
Crown Solicitor	101	95
	<u>677</u>	<u>910</u>

	<b>2001</b> (\$'000)	<b>2000</b> (\$'000)
The following assets have been transferred to other government agencies during the financial year:		
Land (a)	(1,049)	(837)
Buildings( a)	(46)	(182)
Total assets transferred	<u>(1,095)</u>	<u>(1,019)</u>

(a) Proceeds from the sale of land and buildings are not reflected in the financial accounts as these proceeds are held by the West Australian Treasury Department

The following liabilities have been assumed by the Treasurer during the financial year

- superannuation <sup>(b)</sup>	<u>8,100</u>	<u>9,749</u>
Total liabilities assumed by the Treasurer	<u>8,100</u>	<u>9,749</u>

Total revenues (to)/from Government	<u>116,195</u>	<u>100,305</u>
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<sup>(c)</sup> Administered (refer note 38)	<u>9,934</u>	<u>1,185</u>
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#### 14 Cash assets

Petty Cash/Travel Advance	44	40
Cash at bank	<u>9,441</u>	<u>5,963</u>
	<u>9,485</u>	<u>6,003</u>

#### 15 Restricted cash assets and amounts in suspense

##### Controlled trust accounts

Agriculture Income Tax Deductions	-	-
Agriculture Research Grants Account No. 1	3,994	6,760
Agriculture Research Grants Account No. 2	1,303	728
Australian International Development Assistance Bureau	-	35
Bovine Brucellosis and Tuberculosis Eradication Program	-	33
Cattle Industry Compensation Fund	6,430	5,880
Commonwealth Agriculture Activity Grants	4,069	4,258
Departmental Receipts in Suspense	561	194
Land Conservation Districts Fund	177	-
National Landcare Program	-	1,078
Pig Industry Compensation Fund	1,503	1,459
Plant Research & Development	467	563
Sheep Lice Research	241	275
	<u>18,745</u>	<u>21,263</u>

Controlled trust accounts - receipts & disbursements are in accordance with the Trust Statement (see note 39).

##### Amounts in suspense

Accrued salaries suspense account	<u>1,677</u>	<u>1,481</u>
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Accrued salaries suspense account consists of amounts paid annually to a suspense account over a period of 10 financial years to largely meet the additional cash outflow in each eleventh year when 27 pay days occur in that year instead of the normal 26. No interest is received on this account. Amounts transferred for 2001/2000 totals to \$196,200. (\$378,521 - 2000/1999)

Accrued salaries suspense account is represented by a cash balance and is therefore equivalent to the net fair value.

	<b>2001</b> (\$'000)	<b>2000</b> (\$'000)
<b>Total restricted cash assets and amounts in suspense</b>	<u>20,422</u>	<u>22,744</u>
<b>16 Inventories</b>		
Stores	1,167	1,370
Livestock	<u>860</u>	<u>887</u>
	<u>2,027</u>	<u>2,257</u>
<b>17 Receivables</b>		
Trade Debtors	4,048	3,192
Less: Provision for doubtful debts (see note 10)	(101)	(190)
Interest receivable	44	42
GST receivable	1,255	39
Other receivables	<u>443</u>	<u>273</u>
	<u>5,689</u>	<u>3,356</u>
<b>18 Prepayments</b>		
Registration	346	-
Publications	-	96
Goods	-	11
Rent	<u>-</u>	<u>23</u>
	<u>346</u>	<u>130</u>
<b>19 Property, plant, equipment and vehicles</b>		
Land		
At fair value	34,169	
At Valuation		55,138
At cost	<u>-</u>	<u>365</u>
<i>Total land</i>	<u>34,169</u>	<u>55,503</u>
Buildings		
At fair value	52,100	
At Valuation		51,169
Accumulated depreciation	<u>-</u>	<u>-</u>
	<u>52,100</u>	<u>51,169</u>
At cost	17,688	7,916
Accumulated depreciation	<u>(546)</u>	<u>-</u>
	<u>17,142</u>	<u>7,916</u>
<i>Total buildings</i>	<u>69,242</u>	<u>59,085</u>
Plant & equipment		
At cost	20,404	18,609
Accumulated depreciation	<u>(8,504)</u>	<u>(6,098)</u>
<i>Total plant &amp; equipment</i>	<u>11,900</u>	<u>12,511</u>
Vehicles & transportation equipment		
At cost	8,204	7,384
Accumulated depreciation	<u>(3,201)</u>	<u>(2,329)</u>
<i>Total vehicles &amp; transportation equipment</i>	<u>5,003</u>	<u>5,055</u>
IT equipment		
At cost	10,070	9,101
Accumulated depreciation	<u>(6,949)</u>	<u>(4,780)</u>
<i>Total IT equipment</i>	<u>3,121</u>	<u>4,321</u>



	<b>2001</b> (\$'000)	<b>2000</b> (\$'000)
Furniture & fittings		
At cost	681	651
Accumulated depreciation	(226)	(164)
<i>Total furniture &amp; fittings</i>	<u>455</u>	<u>487</u>
<b>Total assets</b>		
At cost	57,047	44,027
Accumulated depreciation	(19,426)	(13,372)
Total at cost	<u>37,621</u>	<u>30,655</u>
At valuation	86,269	106,307
Accumulated depreciation	-	-
Total at valuation	<u>86,269</u>	<u>106,307</u>
Total non-current assets	<u>123,890</u>	<u>136,962</u>
At cost and valuation	143,316	150,334
Accumulated depreciation	(19,426)	(13,372)
Total non-current assets	<u>123,890</u>	<u>136,962</u>

(a) The valuations reported above are different from the valuations in the Government Property Register managed by the Government Property Office. The Government Property Register shows land valued at \$33,418,900 in the name of the Department of Agriculture. The variation of \$750,100 has been reconciled.

## 19 Property, plant, equipment and vehicles (continued)

### Reconciliations

Reconciliations of the carrying amounts of property, plant, equipment and vehicles at the beginning and end of the current and previous financial year are set out below.

	Land (\$'000)	Buildings (\$'000)	Plant & equipment (\$'000)	Vehicles & transportat ion equipment (\$'000)	IT equipment (\$'000)	Furniture & fittings (\$'000)	Leased assets (\$'000)	Total
<b>2001</b>								
Carrying amount 1 July 2000	55,053	59,085	12,511	5,055	4,321	487		136,962
Additions <sup>(a)</sup>	92	10,314	2,609	1,084	1,280	37		15,416
Disposals <sup>(b)</sup>	(1,687)	(527)	(420)	(141)	(19)	(4)		(2,798)
Revaluation <sup>(c)</sup>								
Increments/(decrements)	(19,739)	5,542	-	-	-	-		(14,197)
Depreciation	-	(5,169)	(2,727)	(993)	(2,453)	(64)		(11,406)
Write-off of assets	-	(3)	(73)	(2)	(8)	(1)		(87)
Carrying amount 30 June 2001	34,169	69,242	11,900	5,003	3,121	455	-	123,890

<sup>(a)</sup> Additions include adjustments and restated.

<sup>(b)</sup> Disposals include adjustments and retired assets.

<sup>(c)</sup> The revaluation decrement of \$19.0m relates mainly to the downward revaluation of South Perth by \$14.02m and Wokalup Research Station properties by \$3.93m.

<b>20 Capital works in progress</b>	<b>2001</b>	<b>2000</b>
	(\$'000)	(\$'000)
Bunbury District Office Upgrade	-	876
Katanning District Office	-	3,842
Manjimup District Office	-	1,721
Wongan Hills Research Support Unit	517	370
Geraldton Agriculture Centre	2,075	370
Controlled Environment Room	388	-
Three Springs District Office	251	-
Other	848	1,004
	<u>4,079</u>	<u>8,183</u>

## 21 Investments

Investment valued as at 30 June 2001

Listed shares	229	103
Unlisted shares	228	79
Unit certificates	-	72
	<u>457</u>	<u>254</u>

Listed shares have been revalued to reflect their current market price as at 30 June 2001. Unlisted shares and unit certificates are stated at their par value. The Agency has no investment powers. The shares held were received at no cost under a trading agreement.

## 22 Payables

Trade Creditors	7,044	8,972
Other payables	496	183
	<u>7,540</u>	<u>9,155</u>
Administered - Accrued interest	<u>150</u>	<u>159</u>

The carrying amount of accounts payable approximates their net fair values.

## 23 Accrued salaries

Accrued salaries represents the amount due to staff but unpaid at the end of the financial year, as the end of the last pay period for that financial year does not coincide with the end of the financial year.

Amounts owing for the 6 working days from 23 June to 30 June 2001(2000 - 23 June to 30 June, 6 working days)	<u>1,904</u>	<u>1,919</u>
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The carrying amount of accrued salaries approximates the net fair value.

## 24 Employee entitlements

### *Current liabilities*

Liability for annual leave	6,938	6,143
Liability for long service leave	<u>5,983</u>	<u>4,807</u>
	12,921	10,950

### *Non-current liabilities*

Liability for long service leave	<u>8,324</u>	<u>7,783</u>
	<u>21,245</u>	<u>18,733</u>

The superannuation component on employee entitlements has been included in the above figures for the first time for the year ended 30 June 2001. Refer to note 2 (f).

The amount of superannuation included in the above employee entitlements for the first time is:	<u>1,938</u>	<u>-</u>
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	2001 (\$'000)	2000 (\$'000)
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## 25 Equity

Equity represents the residual interest in the net assets of the Agency. The Government holds the equity interest in the Agency on behalf of the community.

### Asset revaluation reserve

The asset revaluation reserve represents the portion of equity resulting from the revaluation of non-current assets.

Balance at the beginning of the year		
Investments	39	46
Non-current assets	114,133	112,024
	114,172	112,070
Revaluation during the year		
Investments	116	(7)
Non-current assets		
Land	(19,739)	(392)
Buildings	5,542	2,501
	(14,197)	2,109
Total revaluation	(14,081)	2,102
Balance at the end of the year		
Investments	155	39
Non-current assets	99,936	114,133
	100,091	114,172

The asset revaluation reserve is used to record increments and decrements on the revaluation of non-current assets, as described in accounting policy note.

### Accumulated surplus

Balance at the beginning of the year	35,910	46,795
Change in net assets resulting from operations <sup>a</sup>	(295)	(10,885)
Balance at the end of the year	35,615	35,910
<b>Total Equity</b>	<b>135,706</b>	<b>150,082</b>
<sup>a</sup> Change in net administered assets (see note 38)	434	(6,913)

## 26 Notes to the Statement of Cash Flows

### (a) Reconciliation of cash

For the purposes of the Statement of Cash Flows, cash includes cash at bank, cash on hand, restricted cash and amounts in suspense. Cash at the end of the financial year as shown in the Statement of Cash Flows is reconciled to the related items in the statement of financial position as follows:

Cash assets (refer to note 14)	9,485	6,003
Restricted cash assets and amounts in suspense (refer to note 15)	20,422	22,744
	29,907	28,747

### (b) Non-cash financing and investing activities

During the financial year, there were no assets/liabilities transferred/assumed from other government agencies not reflected in the Statement of Cash Flows.

	<b>2001</b>	<b>2000</b>
	(\$'000)	(\$'000)
<b>(c) Reconciliation of net cash used in operating activities to net cost of services</b>		
Net cash (used in) / from operating activities	(97,495)	(84,404)
<b>Non-cash items:</b>		
Net (loss)/profit from sale of assets	(336)	(360)
Depreciation and amortisation	(11,406)	(8,826)
Superannuation liabilities assumed by the Treasurer	(8,100)	(9,749)
Resources received free of charge	(677)	(910)
Provision for doubtful debts	89	-
Change in investments taken to reserve	(116)	7
<b>Change in assets and liabilities</b>		
Increase/(decrease) in inventories	(230)	(641)
Increase/(decrease) in receivables <sup>(a)</sup>	1,028	860
Increase/(decrease) in prepayments	216	(30)
Increase/(decrease) in investments	203	5
(Increase)/decrease in accrued salaries	15	(826)
(Increase)/decrease in liability for employee entitlements	(2,512)	(1,285)
(Increase)/decrease in payables <sup>(a)</sup>	1,615	(5,031)
Change in GST in receivables/payables <sup>(b)</sup>	1,216	-
Net cost of service (statement of financial performance)	<u>(116,490)</u>	<u>(111,190)</u>

(a) Note that the ATO receivable/payable in respect of GST and receivable/payable in respect of the sale/purchase of non-current assets are not included in these items as they are not reconciling items.

(b) This reverses out the GST in receivables and payables.

- (d) At the reporting date, the agency had fully drawn on all financing facilities, details of which are disclosed in the financial statements.

## 27 Resources provided free of charge

During the year the following resources were provided to other agencies free of charge for functions outside the normal operations of the Department of Agriculture.

The University of Western Australia	27	76
Perth Zoological Gardens - Diagnostic Services	-	44
Horticultural Produce Commission	-	5
Agricultural Produce Commission	7	-
Potato Growers' Industry Trust Fund	3	3
Poultry Industry Trust Fund	7	8
Landcare Trust	130	173
	<u>174</u>	<u>309</u>

## 28 Commitments for expenditure

- (a) Capital expenditure commitments

Capital expenditure commitments, being contracted capital expenditure additional to the amounts reported in the financial statements, are payable as follows:

Not later than one year	5,342	7,789
Later than one year and not later than five years	1,622	1,088
Later than five years	-	-
	<u>6,964</u>	<u>8,877</u>

- (b) Lease commitments

Commitments in relation to leases contracted for at the reporting date but not recognised as liabilities, payable:

	<b>2001</b> (\$'000)	<b>2000</b> (\$'000)
Within one year	3,457	3,959
Later than one year and not later than 5 years	2,262	3,491
Later than 5 years	<u>1</u>	<u>-</u>
	<u>5,720</u>	<u>7,450</u>
Representing:		
Non-cancellable operating lease commitments	<u>5,720</u>	<u>7,450</u>
 (c) Direct grants and subsidy commitments		
Not later than one year	3,789	1,769
Later than one year and not later than five years	2,472	3,162
Later than five years	<u>-</u>	<u>-</u>
	<u>6,261</u>	<u>4,931</u>
 (d) Guarantees and undertakings		
There are no guarantees and undertakings at balance sheet date, not otherwise provided for in these financial statements.	<u>-</u>	<u>-</u>

## 29 Contingent obligations

There were no contingent liabilities which would affect the Department of Agriculture.

## 30 Events occurring after reporting date

There were no events that occurred after balance date which would materially affect the financial statements or disclosures.

## 31 Explanatory Statements

<b>Note</b>	<b><u>2000/01</u></b> <b><u>Estimate</u></b>	<b><u>2000/01</u></b> <b><u>Actual</u></b>	<b><u>Variation</u></b>
	<b><u>Significant Reason For Variance between 2000/01 Estimate and 2000/01 Actual</u></b>		
<b>31.1</b>	<b><u>190,385</u></b>	<b><u>204,408</u></b>	<b><u>14,023</u></b>

The amount required for recurrent services for the year exceeded the estimate by \$14.023m mainly due to the following adjustments:

State contribution to Exceptional Circumstances;	4,625
Bush Bank funding for payment to the National Trust of Australia for the purchase of appropriate land;	1,000
Office of Water Regulation Funding for rural support, counselling and water supply upgrades;	1,000
Carnarvon Farm Recovery Scheme;	2,500
Dairy Assistance Package funding for Stamp Duty payable on loans;	320

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
Transfers of State Funding from the Department of Agriculture to the Department of Commerce & Trade for dairy incentive payments to processors;			(5,105)
Reduction in State Funding arising from savings in travel, consultancies and advertising for the 2000/01 June quarter;			(90)
Increased funding for Agriculture Protection Board Contract of Service for the Locust Plague eradication program;			4,500
Increased industry funding for Grains Research & Development Corporation Projects;			1,735
Increased funding for National Heritage Trust Funding commitments; and			1,765
Newly established Contract of Service with the Agricultural Produce Commission.			1,655
<b>Total</b>			<b>13,905</b>

### 31.2 Revenue Retained - Section 23A Financial Administration and

**Audit Act 1985** 93,712 103,530 9,818

Retained revenue exceeded budget estimate mainly as a result of the following increases in funding for:

Agriculture Protection Board Contract of Service for the Locust Plague commitments;	4,500
Grains Research & Development Corporation Projects;	1,735
National Heritage Trust Funding commitments; and	1,765
The newly established Contract of Service with the Agricultural Produce Commission.	1,655

**Total** 9,655

### 31.3 Amount provided to fund outputs for the year 96,673 100,878 4,205

The variation of \$4.205m relates to the following WA Treasury approved adjustments.

#### *Approved Supplementary Funding*

State contribution to Exceptional Circumstances	4,625
Bush Bank funding for payment to the National Trust of Australia for the purchase of appropriate land	1,000
Office of Water Regulation Funding for rural support, counselling and water supply upgrades.	1,000

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
Carnarvon Farm Recovery Scheme			2,500
Dairy Assistance Package funding for Stamp Duty on loans.			320
<b>Sub total</b>			<b>9,445</b>
<i>Other</i>			
Transfer of State Funding from the Department of Agriculture to the Department of Commerce & Trade for Dairy Incentive Payments to processors.			(5,150)
Reduction in State Funding arising from savings in travel, consultancies and advertising for the 2000/01 June Quarter.			(90)
<b>Total</b>			<b>4,205</b>
<b>31.4 Administered transactions</b>	<b><u>1,178</u></b>	<b><u>9,934</u></b>	<b><u>8,756</u></b>
The variation of \$8.756m relates to supplementary funding approved for the Westrail Grain Subsidy.			
<b>31.5 Amount provided for capital services for the year</b>	<b><u>4,220</u></b>	<b><u>7,484</u></b>	<b><u>3,264</u></b>
The additional capital funding was appropriated to the agency as a result of planned land sales to fund capital initiatives.			
<b>31.6 Industry &amp; Market Development - Net Cost Of Outputs</b>	<b><u>84,478</u></b>	<b><u>82,472</u></b>	<b><u>(2,006)</u></b>
The Program has reported an underspend of \$2.006m mainly due to the transfers of State Funding from the Department of Agriculture to the Department of Commerce & Trade for Dairy Incentive Payments to processors.			
<b>31.7 Sustainable Rural Development - Net Cost Of Outputs</b>	<b><u>45,142</u></b>	<b><u>58,572</u></b>	<b><u>13,430</u></b>
The variation of \$13.43m relates to the following approved adjustments.			
State contribution to Exceptional Circumstances commitments;			4,625
Office of Water Regulation funding for rural support, counselling and water supply maintenance;			1,000
Carnarvon Farm Recovery Scheme;			2,500
Increased funding for National Heritage Trust Fund commitments;			2,870
Additional expenditure for Sustainable Rural Development initiatives including Progress Rural, Better Business, Rural Towns and Natural Resource Management; and			1,813

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
Additional Industry Funds for National Landcare Program 3rd Party and Water Resource Initiatives.			622
<b>Total</b>			<b>13,430</b>
<b>31.8 Agriculture Protection - Net Cost Of Outputs</b>	<b><u>27,289</u></b>	<b><u>28,781</u></b>	<b><u>1,492</u></b>
The Program has reported an overspend of \$1.492m mainly due to the inclusion of newly established Contract of Service with the Agricultural Produce Commission of \$1.6m.			
<b>31.9 Services Provided to Agriculture Protection Board</b>	<b><u>17,052</u></b>	<b><u>19,258</u></b>	<b><u>2,206</u></b>
Services provided to Agriculture Protection Board exceeded the budget mainly due to the Agency Locust Plague eradication program.			
<b>31.10 Services Provided to Rural Business Development Corporation</b>	<b><u>13,806</u></b>	<b><u>12,619</u></b>	<b><u>(1,187)</u></b>
Services provided to Rural Business Development Corporation are lower than anticipated due to less than anticipated grants advanced under the Rural & Natural Resource Adjustment Schemes due to the focus on Exceptional Circumstances Initiatives.			
<b>31.11 Resources received free of charge and other accruals</b>	<b><u>3,290</u></b>	<b><u>(677)</u></b>	<b><u>(3,967)</u></b>
The resources received free of charge and other accruals were less than anticipated.			
<b>31.12 Purchase of Capital Investments from Recurrent and other funds</b>	<b><u>-</u></b>	<b><u>1,144</u></b>	<b><u>1,144</u></b>
Capital purchase of investments/minor assets - represents the value of assets purchased from funds other than the General Loan Fund.			
<b>31.13 Adjustment for cash balances</b>	<b><u>(522)</u></b>	<b><u>2,402</u></b>	<b><u>2,924</u></b>
Adjustment for Cash Balances represents the net cash movement of consolidated and other trust funds that were carried over from the previous year during 2000/01 as detailed below.			
Consolidated Funds	(2,500)	4,920	(7,420)
Commonwealth Funds	2,465	(1,158)	3,623
Industry Research Funds	(1,487)	(2,191)	704
Other Governmental Trust Funds	1,000	831	169
<b>Total</b>	<b><u>(522)</u></b>	<b><u>2,402</u></b>	<b><u>(2,924)</u></b>



	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
<b>31.14 Administered transactions</b>	<u>1,178</u>	<u>9,921</u>	<u>8,743</u>

The variation of \$8.7m relates to supplementary funding for the payment of Westrail Grain Subsidy.

<b>31.15 Total Value of Investment</b>	<u>12,705</u>	<u>9,857</u>	<u>(2,848)</u>
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The budget variance of \$2.8m in the total value of investments mainly relates to the following projects:-

Regional Accommodation Projects at Wongan Hills, Broome Office and other centres			(1,093)
Geraldton Department of Agriculture Centre			(1,582)
<b>Total</b>	<u>-</u>	<u>-</u>	<u>(2,675)</u>

<b>31.16 Other non-capital payments/(receipts)</b>	<u>-</u>	<u>2,304</u>	<u>2,304</u>
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Other Non-Capital net payments represents the usage of capital funds expensed within the Operating Statement in areas such as Regional Accommodation maintenance and payment of a grant to the Royal Agriculture Society

<b>31.17 Capital payments from other funding sources</b>	<u>(2,036)</u>	<u>(3,448)</u>	<u>(1,412)</u>
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Capital payments from other funding sources

Consolidated recurrent funds	(2,036)	(2,527)	(491)
Agriculture Industry and Commonwealth Funds	-	(921)	(921)

<b>Total</b>	<u>(2,036)</u>	<u>(3,448)</u>	<u>(1,412)</u>
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<b>31.18 Adjustment for cash balances</b>	<u>(6,449)</u>	<u>(1,230)</u>	<u>5,219</u>
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Adjustments for cash balances was lower than anticipated mainly due to the 1999/00 planned asset sales not being realised until 2000/01 and available for allocation.

<b>31.19 Consolidated Fund Capital Appropriations</b>	<u>4,220</u>	<u>7,484</u>	<u>3,264</u>
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The additional capital funding was appropriated to the agency as a result of planned land sales.

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
<b>31.20 Amount required to fund outputs for the year</b>	<b><u>204,408</u></b>	<b><u>176,860</u></b>	<b><u>27,548</u></b>

Increased funding for services of \$27.5m in 2000/01 was mainly due to additional approved state funding and revenues generated from the net appropriations as detailed below.

Additional revenues net appropriation (See Note 31.21)			12,170
Supplementary funding approved in 2000/01 (See Note 31.3)			9,445
Dairy Industry Assistance Package funding managed by the Department of Agriculture.			7,240
<b>Total</b>			<b><u>28,855</u></b>

<b>31.21 Amount required to fund outputs for the year</b>	<b><u>103,530</u></b>	<b><u>91,360</u></b>	<b><u>12,170</u></b>
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The increase in the Agency's net appropriation was mainly due to additional funding for Industry Projects and Memorandums of Understanding for Agriculture Protection Board and Rural Business Development Corporation.

Commonwealth Programs	28,366	34,790	6,424
Animal Health Services	1,682	1,040	(642)
Research Support Units	3,531	4,029	498
Intellectual/Genetic Property	1,291	1,511	220
Rural Business Development Corporation Memorandum of Understanding	12,619	8,792	(3,827)
Seed Quality Services	432	592	160
Land Management Services	177	246	69
Direct Mail Services	60	74	14
Industry Funding	21,726	20,704	(1,022)
Consultancy Services	145	182	37
Output Program Revenue	4,057	4,344	287
Goods & Services Tax Input Credits	8,531	-	(8,531)
Agriculture Produce Commission Memorandum of Understanding	1,655	-	(1,655)
Agriculture Protection Board Memorandum of Understanding	19,258	15,056	(4,202)
<b>Total</b>	<b><u>103,530</u></b>	<b><u>91,360</u></b>	<b><u>(12,170)</u></b>

<b>31.22 Administered transactions</b>	<b><u>9,934</u></b>	<b><u>1,185</u></b>	<b><u>8,749</u></b>
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The variation of \$8.7m relates to supplementary funding approved for the Westrail Grain Subsidy payments.

<b>31.23 Amount provided for capital services for the year</b>	<b><u>7,484</u></b>	<b><u>5,015</u></b>	<b><u>2,469</u></b>
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The additional capital funding was appropriated to the agency as a result of planned land sales.

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
<b>31.24 Industry and Market Development (IMD)</b>	<b><u>82,472</u></b>	<b><u>68,874</u></b>	<b><u>13,598</u></b>

IMD Program net cost of service increased in 2000/01 mainly due to increases in the following activities:-

Dairy Industry Assistance Package funding managed by the Department of Agriculture.	8,009
Grains Research & Development Corporation and other industry projects	1,333
Increased expenditure for Crop Improvement Centre.	729
Overseas Projects agriculture development initiative within East Timor	455
Increased state Horticulture, Cereals and Pulses research and development projects.	1,578
Additional Cattle Industry Trust Fund meat initiatives.	296

<b>Total</b>	<b>12,400</b>
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<b>31.25 Sustainable Rural Development (SRD)</b>	<b><u>58,572</u></b>	<b><u>56,148</u></b>	<b><u>2,424</u></b>
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SRD Program reported an increase of \$2.4m in the cost of service mainly due to inclusion of State Exceptional Circumstances initiatives.

<b>31.26 Services Provided to Agriculture Protection Board</b>	<b><u>19,258</u></b>	<b><u>15,056</u></b>	<b><u>4,202</u></b>
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The increased expenditure of \$4.2m for Agriculture Protection Board Contract of Service relates to the Locust Plague Eradication Program.

<b>31.27 Services Provided to Rural Business Development Corporation</b>	<b><u>12,619</u></b>	<b><u>8,792</u></b>	<b><u>3,827</u></b>
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Services provided to Rural Business Development Corporation increased by \$3.8 as a result a increased interest in the new Execeptional Circumstances scheme.

<b>31.28 Adjustment for cash balances</b>	<b><u>2,402</u></b>	<b><u>(14,428)</u></b>	<b><u>16,830</u></b>
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The \$2.402m below shows the application of cash held by the Agency during 2000/01 to meet budget commitments.

Consolidated Funds	4,920	(4,491)	9,411
Administered Funds	-	(7,328)	7,328
Commonwealth Funds	(1,158)	(1,699)	541
Industry Research Funds	(2,191)	38	(2,229)
Other Governmental Trust Funds	831	(948)	1,779
<b>Total</b>	<b>2,402</b>	<b>(14,428)</b>	<b>16,830</b>

	<u>2000/01</u> <u>Estimate</u> <u>\$'000</u>	<u>2000/01</u> <u>Actual</u> <u>\$'000</u>	<u>Variation</u> <u>\$'000</u>
<b>31.29 Administered transactions</b>	<b><u>9,921</u></b>	<b><u>8,513</u></b>	<b><u>1,408</u></b>

The actual of \$9.9m represents loan repayment of \$1.2m for WA Meat Commission and \$8.7m for Westrail Grain Subsidies administered by the Department of Agriculture.

<b>31.30 Total Value of Investment</b>	<b><u>9,857</u></b>	<b><u>15,864</u></b>	<b><u>(6,007)</u></b>
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Expenditure on capital investment included:

Northam Department of Agriculture Centre	45	664	(619)
Regional Accommodation Projects at Worree, Eucla, Wongan Hills, South Perth and other centres	519	1,543	(1,024)
Manjimup Department of Agriculture Centre	944	974	(30)
Merredin Department of Agriculture Centre Stage 1	250	796	(546)
Katanning Department of Agriculture Centre	2,041	3,171	(1,130)
Geraldton Regional Office	1,579	-	1,579
Narrogin Department of Agriculture Centre	-	1	(1)
Bunbury Department of Agriculture Centre	626	528	98
Other capital works & equipment expenditure	3,853	8,187	(4,334)
<b>Total</b>	<b><u>9,857</u></b>	<b><u>15,864</u></b>	<b><u>(6,007)</u></b>

<b>31.31 Capital payments from other funding sources</b>	<b><u>(3,448)</u></b>	<b><u>(7,281)</u></b>	<b><u>(3,833)</u></b>
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Capital payments from other funding sources

Consolidated recurrent funds	(2,527)	(5,958)	(3,431)
Agriculture Industry and Commonwealth Funds	(921)	(1,323)	(402)
<b>Total</b>	<b><u>(3,448)</u></b>	<b><u>(7,281)</u></b>	<b><u>(3,833)</u></b>

<b>32 Remuneration and retirement benefits of senior officers</b>	<b>2001</b>	<b>2000</b>
	<b>(\$'000)</b>	<b>(\$'000)</b>

#### Remuneration

The number of senior officers whose total of fees, salaries and other benefits received or due and receivable for the financial year, fall within the following bands is:

	\$	No. of Officers	
		2001	2000
1	- 10,000	-	-
70,001	- 80,000	-	-
90,001	- 100,000	-	2
100,001	- 110,000	4	2
110,001	- 120,000	-	-
120,001	- 130,000	1	1
160,001	- 170,000	-	-
180,001	- 190,000	1	1

The total remuneration of senior officers is 724 707

### Retirement benefits

The following amounts in respect of retirement benefits for senior officers were paid or became payable for the financial year:

Total notional contributions to Gold State Superannuation Scheme and West State Superannuation Scheme	70	66
Redundancy payments	-	-

No senior officers are presently employed who are members of the Superannuation and Family Benefits Act Scheme.

### 33 Related bodies

There are no related bodies with the Department of Agriculture.

### 34 Affiliated bodies

There are no affiliated bodies with the Department of Agriculture.

### 35 Joint Venture Operations

(i) Cooperative Research Centres (CRCs)

Joint Venture name and principal activities	Interest held in equity <sup>a</sup>
Cooperative Research Centre for Weed Management Systems	2.6%
Cooperative Research Centre for Quality Wheat Products and Processes	5.5%
Cooperative Research Centre for Tropical Savannas	6.6%

The following amounts represent the agency's interest in assets employed in the above joint venture operations which are included in the financial statements:

	Consolidated 2001 (\$'000)	Consolidated 2000 (\$'000)
Assets employed:		
Current assets:		
- Cash at bank	276	87
- Receivables	22	6
	298	93
Non-current assets:		
- Plant and equipment	52	52
Total assets employed	350	145

<sup>a</sup> no saleable products/output has been produced

(ii) Other Joint Ventures

The agency has collaborative arrangements with other parties to perform research and share in the outputs (ie intellectual property) in proportion to each participant's research input, initial intellectual property or cash contributions. These collaborative arrangements also share the characteristics of joint venture operations. The principal activities of these joint venture operations are scientific research and development, extension and technology transfer with the ultimate aim are scientific research and development, extension

and technology transfer with the ultimate aim impractical to list separately. The agency's contributions to these joint ventures are included in the agency's operating statements

### 36 Financial instruments

#### (a) interest rate risk

The following table summarises the Agency's financial instruments which have an exposure to interest rate risks.

<b>2001</b>	Weighted average effective interest rate %	Floating interest rate (\$'000)	1 year or less (\$'000)	1 to 5 years (\$'000)	Over 5 years (\$'000)	Non interest bearing (\$'000)	Total (\$'000)
<i>Financial Assets</i>							
Cash assets		-	-	-	-	9,485	9,485
Restricted assets & amounts in suspense	6.08%	9,944	-	-	-	10,478	20,422
Investments		-	-	-	-	457	457
Receivables		-	-	-	-	5,689	5,689
<b>Total financial assets</b>		<b>9,944</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26,109</b>	<b>36,053</b>
<i>Financial Liabilities</i>							
Payables		-	-	-	-	7,540	7,540
Accrued Salaries		-	-	-	-	1,904	1,904
Lease liabilities		-	-	-	-	-	-
Employee entitlements		-	-	-	-	21,245	21,245
<b>Total financial liabilities</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30,689</b>	<b>30,689</b>
<b>Net financial assets/(liabilities)</b>		<b>9,944</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(4,580)</b>	<b>5,365</b>
<b>2000</b>							
Financial Assets	5.49%	8,940	-	-	-	23,417	32,357
Financial Liabilities		-	-	-	-	29,807	29,807

#### (b) Net Fair Values

The carrying amount of financial assets and financial liabilities recorded in the financial statements are not materially different from their net fair values.

### 37 Supplementary Information

#### Write-offs

Non-current assets written off <sup>(a)</sup>	86	67
Irrecoverable amounts <sup>(b)</sup>	-	26
Livestock written off	21	27
Losses <sup>(c)</sup>	-	-
	<u>107</u>	<u>120</u>

(a) \$37,350.41 was written off under the authority of The Accountable Officer and \$48,864.78 was written off under the authority of The Minister.

(b) The provision for doubtful debts for the current financial year includes amounts totalling to \$9,795.25 subject to Executive approval during the year ending 30 June 2002.

(c) Discrepancies in the annual stock take of non-current assets (not of a material nature) are currently under review which may result in corrections or write-offs during the year ending 30 June 2002.

Insurance recoveries (replacement value) on losses amounted to \$114,605.20 on assets with a carrying value of \$10,605.77.

	Note	2001 (\$'000)	2000 (\$'000)
<b>38 Administered Transactions</b>			
<b>(i) ADMINISTERED EXPENSES AND REVENUES</b>			
EXPENSES			
Grants, subsidies & transfer payments		8,757	-
Services & Contracts		-	7,332
Interest Payments		726	748
Loan Fees		17	18
		<u>9,500</u>	<u>8,098</u>
REVENUES			
Appropriation	13	9,934	1,185
		<u>9,934</u>	<u>1,185</u>
<b>(ii) ADMINISTERED ASSETS AND LIABILITIES</b>			
ASSETS			
Current - cash at bank		38	25
		<u>38</u>	<u>25</u>
LIABILITIES			
Current accruals	22	150	159
Non-current borrowings		8,308	8,719
		<u>8,458</u>	<u>8,878</u>
<b>(iii) CASH FLOWS FROM ADMINISTERED TRANSACTIONS</b>			
CASH INFLOWS FROM ADMINISTERED TRANSACTIONS			
Receipts from appropriations <sup>(1)</sup>		9,934	1,185
		<u>9,934</u>	<u>1,185</u>
CASH OUTFLOWS FROM ADMINISTERED TRANSACTIONS			
Grants, subsidies & transfer payments		8,756	-
Services & Contracts		-	7,333
Repayment of Borrowings to WA Treasury Corporation		1,165	1,180
		<u>9,921</u>	<u>8,513</u>
Net cash inflows/(outflows) from administered transactions		<u>13</u>	<u>(7,328)</u>

<sup>(1)</sup> Administered items are represented by:

- (a) An appropriation of \$1.178m to cover loan repayments owed to the WA Treasury Corporation by the Meat Industry Authority and
- (b) an appropriation of \$8.756 for payment of the Westrail Grain Subsidy.

These are not considered to form part of the Agency's operational outputs.

## 39 Trust Statements

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<b>TITLE</b>	<b>AGRICULTURE INCOME TAX DEDUCTION ACCOUNT</b>
<i>PURPOSE AND OPERATIONS</i>	TO HOLD P.A.Y.E. INCOME TAX INSTALMENTS, DEDUCTED FROM SALARIES AND WAGES OF EMPLOYEES ON THE AGRICULTURE WESTERN AUSTRALIA PAYROLL

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
846,586	<b>BALANCE B/F</b>	- 0
<b><u>ADD RECEIPTS:</u></b>		
24,669,968	Deductions received	20,728,908
24,669,968		20,728,908
25,516,554	<b><u>SUB TOTAL</u></b>	20,728,908
<b><u>LESS PAYMENTS:</u></b>		
25,516,554	Transfer out	20,728,908
-	<b>BALANCE C/F</b>	- 0
THIS IS REPRESENTED BY		
-	<b>Cash at bank</b>	- 0





**TITLE AUSTRALIAN INTERNATIONAL DEVELOPMENT  
ASSISTANCE BUREAU**

*PURPOSE AND OPERATIONS* TO HOLD FUNDS FOR THE PURPOSE OF CONDUCTING TRAINING AND RESEARCH ACTIVITIES TO IMPROVE THAI AGRICULTURAL TECHNIQUES

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000 \$		2001 \$
	37,935 <b>BALANCE B/F</b>	34,954
	<b><u>ADD RECEIPTS:</u></b>	
2,019	Interest	2,166
-	- Other Revenue	-
2,019		2,166
	39,954 <b><u>SUB TOTAL</u></b>	37,120
	<b><u>LESS PAYMENTS:</u></b>	
5,000	Operating	37,120
-	- Capital	-
5,000		37,120
	<b><u>34,954 BALANCE C/F</u></b>	<b><u>- 0</u></b>
	THIS IS REPRESENTED BY	
	<b><u>34,954 Cash at bank</u></b>	<b><u>- 0</u></b>

**TITLE**                                 **BOVINE BRUCELLOSIS AND TUBERCULOSIS  
ERADICATION PROGRAM**

*PURPOSE AND OPERATIONS*         TO HOLD FUNDS FOR THE ERADICATION OF BRUCELLOSIS AND TUBERCULOSIS IN CATTLE PURSUANT TO THE COMMONWEALTH/ STATE AGREEMENT

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000 \$		2001 \$
336,234	<b>BALANCE B/F</b>	33,378
 <b><u>ADD RECEIPTS:</u></b>		
	- Grants & Advances	-
	- Sale of Assets	-
	- Provision of Goods & Services	-
	- Other Revenue	-
<u>-</u>		<u>-</u>
336,234	<b><u>SUB TOTAL</u></b>	33,378
 <b><u>LESS PAYMENTS:</u></b>		
	- Salaries	33,272
302,856	Operating	106
	- Capital	0
<u>302,856</u>		<u>33,378</u>
<u><u>33,378</u></u>	<b>BALANCE C/F</b>	<u><u>0</u></u>
 THIS IS REPRESENTED BY		
<u><u>33,378</u></u>	<b>Cash at bank</b>	<u><u>0</u></u>

**TITLE CATTLE INDUSTRY COMPENSATION FUND**

*PURPOSE AND OPERATIONS* TO HOLD FUNDS, IN ACCORDANCE WITH SECTION 21(1) OF THE CATTLE INDUSTRY COMPENSATION ACT (THE ACT), FOR THE PURPOSES OF ADMINISTERING THE ACT AND PAYING COMPENSATION IN ACCORDANCE WITH THE ACT

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
4,607,689	<b>BALANCE B/F</b>	5,879,349
 <b><u>ADD RECEIPTS:</u></b>		
337,909	Direct Grants & Subsidies	-
868,201	Fees, Charges, Levies	778,286
264,651	Interest	364,565
262,612	Other revenue	2,732
<u>1,733,373</u>		<u>1,145,583</u>
6,341,062	<b><u>SUB TOTAL</u></b>	7,024,932
 <b><u>LESS PAYMENTS:</u></b>		
24,126	Salaries	357,477
425,372	Operating	213,250
12,215	Capital	24,604
<u>461,713</u>		<u>595,331</u>
<u><u>5,879,349</u></u>	<b>BALANCE C/F</b>	<u><u>6,429,601</u></u>
 THIS IS REPRESENTED BY		
<u><u>5,879,349</u></u>	Cash at bank	<u><u>6,429,601</u></u>

<b>TITLE</b>	<b>COMMONWEALTH AGRICULTURE ACTIVITY GRANTS</b>
<i>PURPOSE AND OPERATIONS</i>	TO HOLD FUNDS FOR THE PURPOSE OF CONDUCTING COMMONWEALTH-FUNDED AGRICULTURAL RESEARCH

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
2,668,946	<b>BALANCE B/F</b>	4,258,025
<b><u>ADD RECEIPTS:</u></b>		
31,049,382	Grants & Advances	29,040,771
	- Sale of Assets	295
79,089	Other Revenue	184,590
31,128,471		29,225,656
33,797,417	<b><u>SUB TOTAL</u></b>	33,483,681
<b><u>LESS PAYMENTS:</u></b>		
7,521,701	Salaries	8,318,389
21,987,963	Operating	21,056,617
29,728	Capital	39,928
29,539,392		29,414,934
4,258,025	<b>BALANCE C/F</b>	4,068,747
THIS IS REPRESENTED BY		
4,258,025	Cash at bank	4,068,747

**TITLE DEPARTMENTAL RECEIPTS IN SUSPENSE**

*PURPOSE AND OPERATIONS* TO HOLD FUNDS PENDING IDENTIFICATION OF THE PURPOSE IN ACCORDANCE WITH SECTION 9(2)(c)(iv) OF THE FINANCIAL ADMINISTRATION AND AUDIT ACT 1985

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000 \$		2001 \$
72,664	<b>BALANCE B/F</b>	193,793
<b><u>ADD RECEIPTS:</u></b>		
3,282,130	Receipts to suspense	366,732
3,282,130		366,732
3,354,794	<b><u>SUB TOTAL</u></b>	560,525
<b><u>LESS PAYMENTS:</u></b>		
3,161,001	Transfer from suspense	-
3,161,001		-
193,793	<b>BALANCE C/F</b>	560,525
THIS IS REPRESENTED BY		
193,793	Cash at bank	560,525





<b>TITLE</b>	<b>NATIONAL LANDCARE PROGRAM</b>
<i>PURPOSE AND OPERATIONS</i>	TO HOLD FUNDS FOR THE PURPOSE OF CONDUCTING COMMONWEALTH-FUNDED AGRICULTURE ACTIVITIES

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
4,059,475	<b>BALANCE B/F</b>	1,077,668
<b><u>ADD RECEIPTS:</u></b>		
3,243,482	Grants & Advances	-
58,421	Other revenue	-
3,301,903		-
7,361,378	<b><u>SUB TOTAL</u></b>	1,077,668
<b><u>LESS PAYMENTS:</u></b>		
1,681,732	Salaries	-
4,594,318	Operating	1,077,668
7,660	Capital	-
6,283,710		1,077,668
1,077,668	<b>BALANCE C/F</b>	<b>0</b>
THIS IS REPRESENTED BY		
1,077,668	Cash at bank	<b>0</b>

**TITLE PIG INDUSTRY COMPENSATION FUND**

*PURPOSE AND OPERATIONS* TO HOLD FUNDS IN ACCORDANCE WITH SECTION 13 (1) OF THE PIG INDUSTRY COMPENSATION ACT, FOR THE PURPOSES OF ADMINISTERING THE ACT AND PAYING COMPENSATION IN ACCORDANCE WITH THE ACT

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000 \$		2001 \$
1,592,422	<b>BALANCE B/F</b>	1,459,135
<b><u>ADD RECEIPTS:</u></b>		
242,530	Fees, Charges, Levies	219,265
80,721	Interest	87,537
<u>323,251</u>		<u>306,802</u>
1,915,673	<b><u>SUB TOTAL</u></b>	1,765,937
45,015	Salaries	32,709
408,623	Operating	230,173
2,900	Capital	-
<u>456,538</u>	<b><u>LESS PAYMENTS:</u></b>	<u>262,882</u>
<u><u>1,459,135</u></u>	<b>BALANCE C/F</b>	<u><u>1,503,055</u></u>
THIS IS REPRESENTED BY		
<u><u>1,459,135</u></u>	Cash at bank	<u><u>1,503,055</u></u>

<b>TITLE</b>	<b>PLANT RESEARCH AND DEVELOPMENT TRUST FUND</b>
<i>PURPOSE AND OPERATIONS</i>	TO HOLD FUNDS FOR THE PURPOSE OF PLANT RESEARCH AND DEVELOPMENT IN WESTERN AUSTRALIA

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
1,857,205	<b>BALANCE B/F</b>	563,231
<b><u>ADD RECEIPTS:</u></b>		
	- Contributions from Consolidated Fund	-
	(200) Direct Grants & Subsidies	52,550
	115,377 Interest	47,156
	855,692 Other	439,466
	25,324 Provision of Goods & Services	19,139
<u>996,193</u>		<u>558,311</u>
2,853,398	<b><u>SUB TOTAL</u></b>	1,121,542
	811,966 Salaries	432,019
	1,435,225 Operating	222,008
	42,976 Capital	-
<u>2,290,167</u>	<b><u>LESS PAYMENTS:</u></b>	<u>654,027</u>
<u><u>563,231</u></u>	<b>BALANCE C/F</b>	<u><u>467,515</u></u>
THIS IS REPRESENTED BY		
<u><u>563,231</u></u>	<b>Cash at bank</b>	<u><u>467,515</u></u>

<b>TITLE</b>	<b>SHEEP LICE RESEARCH TRUST FUND</b>
<i>PURPOSE AND OPERATIONS</i>	TO HOLD FUNDS, IN ACCORDANCE WITH THE SHEEP LICE ERADICATION FUND REPEAL ACT 1993 FOR THE PURPOSE OF SHEEP LICE RESEARCH AND RELATED MATTERS

**STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 30 JUNE 2001**

2000		2001
\$		\$
342,660	<b>BALANCE B/F</b>	275,607
<b><u>ADD RECEIPTS:</u></b>		
-	- General Revenue	-
17,456	Interest	15,920
-	- Other Revenue	9,830
<u>17,456</u>		<u>25,750</u>
360,116	<b><u>SUB TOTAL</u></b>	301,357
<b><u>LESS PAYMENTS:</u></b>		
45,256	Salaries	37,964
16,522	Operating	2,560
22,731	Capital	19,886
<u>84,509</u>		<u>60,410</u>
<u><u>275,607</u></u>	<b>BALANCE C/F</b>	<u><u>240,947</u></u>
THIS IS REPRESENTED BY		
<u><u>275,607</u></u>	Cash at bank	<u><u>240,947</u></u>

**APPENDICES**

**Annual Report**

**2000/2001**

## ***Appendix 1. SENIOR MANAGEMENT***

### **Minister for Agriculture - The Hon. K.M. Chance MLC**

#### **Director General - Graeme Robertson**

##### **Graeme Robertson**

Graeme Robertson has been the Director General (formerly Chief Executive Officer) of the Department of Agriculture since August 1995. His career has involved a wide range of research, development and management activities in agriculture, including a period as officer in charge of the Kimberley region, Director of Resource Management and Commissioner of Soil Conservation, before being appointed Deputy Director General of the Department in 1990. During his period as Commissioner of Soil Conservation, Dr. Robertson was involved in the development of the Landcare movement in Western Australia and nationally, and served on the Federal Soil Conservation Advisory Committee for three years during the early development of the National Soil Conservation Program. In 1990 he was appointed as the inaugural chair of the Land and Water Resources R&D Corporation and held this position until 1996.

##### **Rob Delane**

Rob Delane was appointed Executive Director, Agriculture Protection in September 1997. He has spent most of his life in rural Western Australia, including 19 years with the agency at Kununurra and Geraldton. Previous roles have included rice agronomist, crop research officer, District Leader, Regional Manager, Pulses and Oilseeds Program Manager. He has extensive experience in crop agronomy, extension, Landcare, research and development leadership and management. Mr Delane has been a member of various industry and community advisory and management groups and was nominated for the Royal Agriculture Society 'Rural Achiever of the Year' in 1997. He is currently Commissioner, Horticultural Product Commission and Board Member, Plant Health Australia.

##### **Charlie Thorn**

Charlie Thorn was appointed to the position of Executive Director, Program Services in January 1998, returning to the Department of Agriculture after several years with the Department of Fisheries as Director of Aquaculture, Director of Regional Services and Acting Director of Programs. Before moving to Fisheries, Mr. Thorn spent 14 years with the Department of Agriculture in pasture and animal production, extension, landcare research and management positions including Officer in Charge of the Moora District Office and four years as Regional Manager in Geraldton. He is now responsible for managing the majority of the agency's 1,300 research, development, regulatory and analytical services staff who provide technical and professional services to the agricultural sector.

##### **Mike Marsh**

Mike Marsh was appointed Executive Director, Corporate Services in August 1997, having previously worked in tertiary education, mining, health and public transport, and completed a year's exchange service with Bankers Trust Australia Limited. Mr. Marsh is now responsible for the 300 staff who provide the systems and support functions for the Department of Agriculture.

##### **Ian Longson**

Ian Longson was appointed to the position of Executive Director, Industry Programs (formerly Program Coordination) in 1995. His background includes a wide range of economic and policy studies, business investments and the provision of advisory services for agricultural, agribusiness and food processing businesses in Western Australia. Mr. Longson worked with the Department of Agriculture, the Dairy Industry Authority and the Asian Development Bank before spending 10 years as a consultant and manager of the Perth office of ACIL Economics and Policy. He is now responsible for coordinating the operations of the department's industry and market development programs.

##### **David Hartley**

David Hartley was appointed Executive Director, Sustainable Rural Development in September 1998. Prior to that he worked for NSW Agriculture where he was Regional Director for the Sydney and South

East Region. He has had extensive experience in managing a range of farm business management and natural resource management programs, including a period as Principal Officer for Conservation Farming. He also has extensive experience in landcare and catchment management. Mr. Hartley is responsible for managing the Sustainable Rural Development Program and is also Commissioner for Soil and land Conservation.

#### **Henry Steingiesser**

Henry Steingiesser was appointed to the Corporate Executive as Program Manager of the Department's Trade and Development Program in 1997. His background includes extensive international experience in the food industry, particularly trade, and a career that has seen him residing in South America, the Middle East, South East Asia and Australia. He has management experience in dairy farming, vegetable processing and agribusiness consulting for third world countries, ran a trading house in Singapore and was export manager for Clover Meats in Western Australia. Mr. Steingiesser coordinates the department's key activities in investment attraction for the agribusiness and food sectors, development of strategic market alliances, supply chain management, and development of quality systems and market intelligence.

#### **Executive Director, Program Coordination - Ian Longson**

Manager, Cereals Program - Steve Trevenen  
Manager, Wool Program - Mark Dolling  
Manager, Meat and Other Animal Products Program - Renata Paliskis-Bessell  
Manager, Dairy and Apiculture Program – David Windsor (Acting)  
Manager, Horticulture Program - Terry Hill  
Manager, Pulses and Oilseeds Program – David Bowran  
Manager, New Industries Program - Jeff Hastings/Paul Frapple (Acting)  
Manager, Trade and Development Program - Henry Steingiesser

#### **Executive Director, Agriculture Protection - Rob Delane**

Manager, Animal Health – John Edwards  
Manager, Animal Pests - Greg Pickles  
Manager - Plant Pests – Damian Collopy  
Manager, Plant Health - Rowland Gwynne

#### **Executive Director, Sustainable Rural Development - David Hartley**

Manager, Northern Rangelands - Paul Novelly  
Manager, Southern Rangelands - Mark Lewis  
Manager, Northern Agriculture - Jill Wilson/Paul Findlater (Acting)  
Manager, Central Agriculture - Darrel Brewin/Cecillia McConnell  
Manager, South Coast - Julia Fry  
Manager, Policy, Planning and Evaluation - Ross George

#### **Executive Director, Corporate Services - Mike Marsh**

Director, Finance - Ron Lucas  
Director, Asset Management - Brandon Brooksbank (Acting)  
Director, Human Resources - Kim Waller  
Director, Information Technology - Ian Counsel  
Director, Management Services - Judith Higgins  
Director, Contracts and Procurement - Bruce Cunningham  
Manager, Internal Audit - Pauline Kong/Yawar Zoab

#### **Executive Director, Program Services - Charlie Thorn**

Director Crop Improvement Institute - Keith Alcock  
Director, Quarantine and Protection - Ashley Mercy  
Director, Research and Development - Andy Paterson  
Director, Information and Knowledge Management - Janine Douglas  
Director, Farm Business Development - Bruce Thorpe  
Director, Northern Rangelands - Paul Novelly  
Director, Southern Rangelands - Mark Lewis (Acting)  
Director, Northern Agricultural - John Allen



Director, Southern Agricultural - Steve Porritt  
Director, South West Agricultural - Greg Sawyer  
Director, Central Agricultural Centre for Cropping Systems - Peter King  
Manager, Project Management - Richard Payne  
Manager, Business Development - Dennis Thiele

**Policy and Planning**

Director, Policy and Planning - Graeme Wilson  
Manager, Public Affairs - Lynley Jenkins/Lisa Bertram

## *Appendix 2. DEPARTMENT OF AGRICULTURE OFFICES*

### **Department of Agriculture offices - Metropolitan**

Canning Vale  
 Forrestfield  
 Fremantle  
 Newburn - Western Australian Quarantine and Inspection Service,  
 Perth - Farm Business Development  
 Perth - Trade and Development  
 South Guildford - Western Australian Quarantine and Inspection Service,  
 South Perth

### **Department of Agriculture Offices - Regional**

Albany	Karratha
Broome	Katanning
Bunbury	Kununurra
Busselton	Lake Grace
Carnarvon	Manjimup
Derby	Meekatharra
Esperance	Merredin
Eucla	Midland
Geraldton	Moora
Harvey	Narrogin
Jerramungup	Northam
Kalgoorlie	Pinjarra
	Three Springs

### **Community Agriculture Centres (CACs)**

Boyup Brook	Morawa
Coorow	Mt Barker
Corrigin	Mullewa
Cranbrook	Narembeen
Dalwallinu	Perenjori
Darkan	Pingelly
Gingin	Ravensthorpe
Gnowangerup	Trayning
Jurien	Wagin
Kojonup	Westonia (Merredin)
Koorda	Wickepin
Leeman	Wongan Hills
Margaret River	Wyalkatchem

### **Research Stations**

Badgingarra	Medina
Beverly	Merredin
Gascoyne	Mount Barker
Geraldton	Newdegate
Gibson	Salmon Gums
Katanning	Stoneville
Kununurra	Vasse
Manjimup	Wokalup
	Wongan Hills

## District Agriculture Protection Offices

Bencubbin	Kondinin
Beverley	Kulin
Boddington	Leonora
Bridgetown	Marble Bar (Serviced from Port Hedland)
Brookton	Mingenew (Operated out of Shire office)
Bruce Rock	Mount Magnet
Calingiri (Phone diverted to Moora office)	Mukinbudin
Cervantes	Nannup
Cuballing	Narembeen
Cunderdin	Northampton
Denmark	Port Hedland
Dongara (Port Denison)	Quairading
Donnybrook	Southern Cross
Dowerin	Tambellup
Goomalling	Toodyay
Halls Creek	Wandering
Hyden	Williams
Kellerberrin	Yalgoo
	York

## ***Appendix 3. RELEVANT LEGISLATION***

### **ENABLING LEGISLATION**

Agriculture Act 1998

### **LEGISLATION ADMINISTERED BY THE DEPARTMENT OF AGRICULTURE FOR THE MINISTER FOR PRIMARY INDUSTRY AT 30 JUNE 2001**

Aerial Spraying Control Act 1966

Agricultural and Veterinary Chemicals (Taxing) Act 1995

Agricultural and Veterinary Chemicals (Western Australia) Act 1995

Agricultural Practices (Disputes) Act 1995

Agricultural Produce (Chemical Residues) Act 1983

Agricultural Produce Commission Act 1988

Agricultural Products Act 1929

Agriculture and Related Resources Protection Act 1976

Agriculture Protection Board Act 1950

Argentine Ant Act 1968

Artificial Breeding of Stock Act 1965

Beekeepers Act 1963

Biological Control Act 1986

Bulk Handling Act 1967

Cattle Industry Compensation Act 1965

Chicken Meat Industry Act 1977

Dairy Industry and Herd Improvement Legislation Repeal Act 2000

Exotic Diseases of Animals Act 1993

Fertilizers Act 1977

Grain Marketing Act 1975

Marketing of Eggs Act 1945

Marketing of Potatoes Act 1946

Ord River Dam Catchment Area (Straying Cattle) Act 1967

Perth Market Act 1926

Pig Industry Compensation Act 1942

Plant Diseases Act 1914

Plant Pests and Diseases (Eradication Funds) Act 1974

Potato Growing Industry Trust Fund Act 1947

Poultry Industry (Trust Fund) Act 1948

Royal Agricultural Society Act 1926

Rural Business Development Corporation Act 2000  
Seeds Act 1981  
Soil and Land Conservation Act 1945  
Stock (Identification and Movement) Act 1970  
Stock Diseases (Regulations) Act 1968  
The Wild Cattle Nuisance Act 1871  
Veterinary Preparations and Animal Feeding Stuffs Act 1976  
Veterinary Surgeons Act 1960  
Western Australian Meat Industry Authority Act 1976  
Wheat Marketing Act 1989

## **LEGISLATIVE CHANGES**

The Policy and Planning Legislation Unit coordinates the department's legislation program in consultation with Executive Directors and Program Managers. Legislative changes during 2000/2001, and developments, which will, or may lead to legislative changes, include:

- The Horticultural Produce Commission Act 1988 became the Agricultural Produce Commission Act 1988.
- The Rural Adjustment and Finance Corporation Act 1993 was repealed and replaced by the Rural Business Development Corporation Act 2000.
- The Plant Pests and Diseases (Eradication Funds) Act 1974 was amended.
- The Agricultural and Veterinary Chemicals (Western Australia) Act 1995 is being amended to give constitutional certainty to the National Registration System.
- The Plant Diseases Act 1914 is being amended to provide inspectors with the powers necessary to ensure quarantine risk material is not introduced by post.
- The Gene Technology Bill will be introduced to Parliament to complement the Commonwealth legislation and provide a national system for the regulation of dealings with gene technology.
- The Tree Plantation Agreements package of legislation is being expanded and will be re-introduced.
- The Agriculture Management Bill will be introduced. This will involve the repeal of the Acts marked \* in the forgoing list and the incorporation of the relevant provisions of those Acts into one co-ordinated Act.
- Legislation is being developed to allow the commercial production of low-THC Cannabis for fibre and other products.

### **Other Legislation Impacting on the Department of Agriculture's Activities**

Anti-Corruption Commission Act 1988  
Corporation (Western Australia) Act 1990  
Disability Services Act 1993  
Electoral Act 1907  
Equal Opportunity Act 1984  
Equal Opportunity Amendment Act 1992  
Explosives and Dangerous Goods Act 1961

Financial Administration and Audit Act 1985  
Firearms Act 1973  
Government Employees Housing Act 1964  
Government Employees Superannuation Act 1987  
Health Act 1911  
Industrial Relations Act 1979  
Library Board of Western Australia Act 1951  
Minimum Conditions of Employment Act 1993  
Occupational Health, Safety and Welfare Act 1984  
Poisons Act 1964  
Prevention of Cruelty to Animals Act 1920  
Public and Bank Holidays Act 1972  
Public Sector Management Act 1994  
Salaries and Allowances Act 1975  
Soil and Land Conservation Act 1945  
State Supply Commission Act 1991  
Superannuation and Family Benefits Act 1938  
Wildlife Conservation Act 1950  
Worker's Compensation and Assistance Act 1981  
Worker's Compensation and Rehabilitation Act 1981  
Workplace Agreement Act 1993

#### **Statement of Compliance with Relevant Written Laws**

I have complied with all written laws and exercised controls, which provided reasonable assurance that the receipt and expenditure of moneys and the acquisition and disposal of public property and incurring liabilities have been in accordance with legislative provisions.

G.A. Robertson  
DIRECTOR GENERAL

## ***Appendix 4. PUBLICATIONS***

The Department of Agriculture produces a vast range of published material including:

Farmnotes  
Bulletins  
Miscellaneous Publications  
OTHER Publications Not in a Series  
Technical Bulletins  
Technotes  
Journal of Agriculture  
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