



Annual Report 2000-2001

Northern Territory Department of Primary Industry and Fisheries



The Hon Peter Toyne
Minister for Primary Industry and Fisheries
Parliament House
DARWIN NT 0800

Dear Minister

I have pleasure in presenting to you the report for the financial year ending 30 June 2001 on the activities and operations of the Department of Primary Industry and Fisheries in accordance with the provisions of Section 28 of the *Public Sector Employment and Management Act*.

In doing so, I advise that, in respect of my duties as an accountable officer pursuant to Section 13 of the *Financial Management Act 1995*, the Financial Regulations and the Treasurer's Directions, the system of internal control provides to the best of my knowledge and belief, reasonable assurance that:

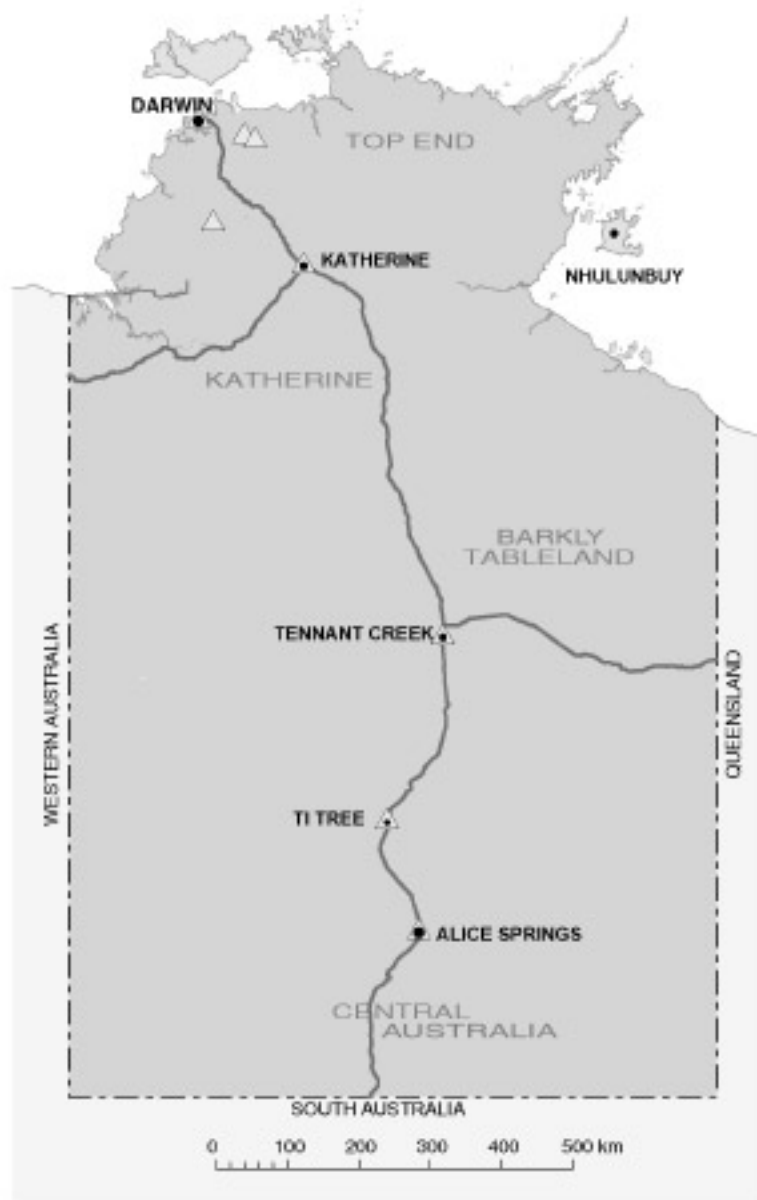
- (a) proper records of all transactions affecting the Department were kept and that employees under my control observed the provisions of the Act, Regulations and Directions;
- (b) procedures within the Department afforded proper control over expenditure, receipts and public property and a current description of such procedures recorded in the accounting and property manual which has been prepared in accordance with the Act;
- (c) there was no indication of fraud, malpractice, major breach of legislation or delegation, major error in or omission from the accounts and records;
- (d) A proper system of internal control was in place;
- (e) The internal audit capacity of the Department was adequate and results of internal audits were reported in accordance with Section 15 of the Act;
- (f) The financial statements were prepared from proper accounts and records and were in accordance with part 2, Section 5, of the Treasurer's Directions, where appropriate. Financial statements prepared by the Department of Corporate and Information Services on behalf of the Department of Primary Industry and Fisheries were prepared from proper accounts and records;
- (g) All Employment Instructions issued by the Commissioner for Public Employment were satisfied.

Yours sincerely



C.D.R. Smith
Secretary

△ DEPARTMENT OF PRIMARY INDUSTRY AND FISHERIES
RESEARCH FARMS AND REGIONAL CENTRES



Department of **Primary Industry and Fisheries**

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Divisions

	Phone	Fax
Executive	8999 2007	8999 2010
Business and Strategic Services	8999 2384	8999 2010
Commercial Development	8999 2162	8999 2200
Pastoral	8999 2385	8999 2089
Horticulture	8999 2284	8999 2049
Fisheries	8999 2027	8999 2065
Resource Protection	8999 2390	8999 2049
Resource Management	8999 2026	8999 2049

Fisheries Research Centre

Day Street, Darwin	8924 4170	8981 3420
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Aquaculture Centre

Channel Island	8924 4258	8924 4277
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Regional Offices

Katherine

Katherine Research Station
Stuart Highway
P O Box 1346, Katherine 0851

8973 9739	8973 9777
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Tennant Creek

Regional Office, TIO Building
99 Paterson Street
P O Box 159, Tennant Creek 0861

8962 4484	8962 4480
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Alice Springs

Arid Zone Research Institute
Stuart Highway South
P O Box 8760, Alice Springs, NT 0871

8951 8111	8951 8112
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Research Stations

Berrimah Agriculture Research Centre (BARC)	8999 2311	8999 2111
	8999 2292	8999 2049
	8999 2301	8999 2043
Beatrice Hill Farm	8988 1612	8988 8008
Douglas Daly Research Farm	8978 2442	8978 2473
Victoria River Research Station	8975 0762	8975 0875
Ti Tree Research Farm	8956 9739	8956 9825
Coastal Plains Horticulture Research Farm	8988 8085	8988 8014
Veterinary Laboratories Berrimah	8999 2122	8999 2024
Water Microbiology Laboratory Berrimah	8999 2347	8999 2024

Australian Quarantine and Inspection Services

GPO Box 1970, Berrimah NT 0828	8999 2378	8999 2381
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The Report

Purpose

The *Public Sector Employment and Management Act* and the *Financial Management Act* are the legislative basis for the presentation of the Department of Primary Industry and Fisheries Annual Report, 2000/2001.

Accordingly, the report provides information on financial management and other corporate activity for the Department, including performance against outcomes under the five departmental activities listed in Budget Paper No 2, the Budget, 2000-01.

The report is primarily intended to inform the Minister for Primary Industry and Fisheries and Parliament about departmental operations. However, the general public, primary industries, other government agencies and private enterprise may also find the report useful in determining the Department's direction and achievements during the reporting period.

Structure

The overall report provides a comprehensive account of activity for 2000/2001 and is presented in six sections:

1. Secretary's Highlights
2. The Department
3. Performance against budget programs:
 - Corporate Management
 - Horticulture
 - Pastoral
 - Fisheries
 - Industry Services
4. State of the Rural Food and Fibre Industries, Northern Territory
5. Financial Report
6. Appendices

The table of contents lists page numbers for each section.

Enquiries

Enquiries in relation to the report should be directed, in the first instance, to the:

Assistant Secretary

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Department of Primary Industry and Fisheries

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An electronic copy of the 2000/2001 Annual Report is available at www.dpif.nt.gov.au.

Table of Contents

List of Acronyms

Secretary's Overview

1

Direction & Governance

2

- 2.1. Strategic Direction
- 2.1.1. Key Functional Responsibilities
- 2.1.2. Operational Context

Corporate Governance

2.2

- 2.2.1. Legislation Administered
- 2.2.2. Statutory Committees/Boards
- 2.2.3. Non Statutory Committees/Boards
- 2.2.4. Senior Management Structure
- 2.2.5. Senior Management Profile
- 2.2.6. Planning and Review
- 2.2.7. Audit Reports
- 2.2.8. Human Resource Management
- 2.2.9. Women in the Budget 2000
- 2.2.10. Rural Leadership

Departmental Performance Against Planned Outcomes

3

As per Budget Paper No. 2

- 3.1. Summary
- 3.2. Corporate Management
- 3.3. Corporate Services
- 3.4. Pastoral
- 3.5. Horticulture
- 3.6. Fisheries
- 3.7. Resource Management
- 3.8. Resource Protection
- 3.9. Commercial Development

State of the Rural Food & Fibre Industry Northern Territory

4

- 4.1. Summary
- 4.2. Pastoral Industry
- 4.3. Horticultural Industry
- 4.4. Fishing Industry
- 4.5. Resource Management
- 4.6. Resource Protection
- 4.7. Regional Perspective

Financial Statements

5

Appendices

6

List of **Acronyms**

A

ACIAR	Australian Centre for International Agricultural Research
AFANT	Amateur Fishermen's Association of the NT
APMP	Aquatic Pest Management Program
AQC	Australian Quality Council
AQIS	Australian Quarantine and Inspection Service
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
ASPIAC	Alice Springs Pastoral Industry Advisory Committee
ATSIC	Aboriginal and Torres Strait Islander Commission
AZRI	Arid Zone Research Institute

B

BTEC	Brucellosis and Tuberculosis Eradication Campaign
BVL	Berrimah Veterinary Laboratory

C

CACIA	Central Australian Camel Industry Association
CAPAG	Central Australian Producers Action Group
CLC	Central Land Council
CLMA	Centralian Land Management Association
CPHRF	Coastal Plains Horticultural Research Farm

D

DCIS	Department of Corporate and Information Services
DLG	Department of Local Government
DLPE	Department of Lands, Planning and Environment
DTW	Department of Transport and Works

E

EC	Exceptional Circumstances
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F

FRDC	Fisheries Research and Development Corporation
FMD	Foot and Mouth Disease

G

GVP	Gross Value of Production
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I

ILC	Indigenous Land Corporation
IPM	Integrated Pest Management

J

JES	Job Evaluation System
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List of **Acronyms**

K

KPIAC	Katherine Pastoral Industry Advisory Committee
KRS	Katherine Research Station

M

MLA	Meat and Livestock Australia
MOU	Memorandum of Understanding

N

NABRC	North Australian Beef Research Council
NATA	National Association of Testing Authorities
NAQS	North Australian Quarantine Strategy
NDVI	Normalised Difference Vegetation Index
NHT	Natural Heritage Trust
NIASA	Nursery Industry Accreditation Scheme of Australia
NTCA	Northern Territory Cattlemen's Association
NTHA	Northern Territory Horticultural Association
NTMIA	Northern Territory Mango Industry Association
NTPS	Northern Territory Public Service
NTSC	Northern Territory Seafood Council
NTU	Northern Territory University

O

OH&S	Occupational Health and Safety
ORD	Office of Resource Development

P

PWCNT	Parks and Wildlife Commission of the Northern Territory
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Q

QDPI	Queensland Department of Primary Industries
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R

RIRDC	Rural Industries Research and Development Corporation
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V

VRD	Victoria River District
VRRS	Victoria River Research Station

W

WAC	Water Advisory Committee
WONS	Weeds of National Significance
WSSV	White Spot Syndrome Virus

Secretary's **Overview**



Primary Industry **Highlights**

- The preliminary gross value of production of the Northern Territory's primary and fishing industries for 2000 was \$439M, a 4.5% increase on 1999, doubled in value over the previous ten years and directly employing 5,600 people. This occurred despite fluctuations in the relative value of the Indonesian rupiah and the Philippine peso which slowed growth in the live cattle export trade, and despite a highly shortened mango season which resulted in transport and supply chain problems. The Northern Territory's food and fibre industries continue to grow at a healthy pace with a major contribution to regional employment.
- The gross value of production of the pastoral (livestock) industry has gone from \$109M in 1988 to \$190M in 2000. The estimated herd size has increased from 1.3 million to 1.6 million with productivity increases in average turnoff from 22% to 30%. In 2000, an estimated \$55M worth of cattle were turned off from NT pastoral properties to abattoirs, interstate and NT. The live cattle export trade has grown from 25,000 head in 1990 to 222,670 in 2000. In addition, in excess of 76,000 head of interstate cattle were exported from the port of Darwin.
- The estimated gross value of production of the horticultural industry has grown from \$17M in 1988 to \$92M in 2000. The major sectors include mangoes, table grapes, bananas, melons, vegetables particularly Asian vegetables, cut flowers and nursery. The estimated area under planting is approximately 6000 hectares. Some 60% of production is sourced from the Litchfield Shire. The industry is currently dominated by mango production. Despite some major setbacks during season, the mango production for 2000 was 11,952 tonnes valued at over \$35M. There are an estimated 800,000 mango trees in the ground, capable of producing between 18 and 16 million trays in the next five years.
- The estimated gross value of production of the commercial fishing and aquaculture industry was \$151M in 2000. Principal sectors included the Northern Prawn Fishery with an estimated value of production of \$61M; pearl aquaculture at \$55M; the wild capture mud crab sector at \$13M; other wildcatch fisheries at \$22M, with demersal and barramundi as the two largest sectors.

Department Achievements **Highlights**

Market Access

- Under a Commonwealth funded arrangement, two Northern Territory veterinary officers and 4 stock inspectors travelled to the United Kingdom and participated in the control program for Foot and Mouth Disease. Planning commenced on developing a Northern Territory FMD response plan.
- Twenty-one training modules in abattoir management, meat handling, feeder management, pasture/fodder management and breeder management were delivered in Train the Trainer programs conducted in Indonesia. This is now a significant resource for the Indonesian cattle industry.
- Support continued for the development of new live export cattle markets in Vietnam and Thailand, for the development of new live export buffalo markets for the supermarket trade in Brunei, and for the development of live export camel slaughter markets in Brunei. Opportunities for live cattle exports to Palestine, Jordan and Middle East were investigated.
- The Berrimah Veterinary Laboratories were NATA accredited.
- Disease management included restrictions on sourcing citrus from Queensland with a view to containing potential spread of Orange Stem Pitting Virus and research into phytophthora disease in durians.
- A high security screening facility was established at the Coastal Plains Horticultural Research Station to screen banana varieties for resistance to Panama Disease.
- A workshop was conducted to identify areas of growth in the NT's offshore demersal fisheries. The demersal industry has changed from predominantly line fishing to fish traps and as a result profitability has increased in both the Timor Reef and Demersal fisheries.

- White Spot Syndrome Virus was discovered in a batch of prawns being used to feed mud crabs at Darwin Aquaculture Centre. Prompt action, including the destruction of stocks and cleaning of tanks prevented the possible spread of WSSV into the environment. Action was taken by the Commonwealth Government to tighten import controls on uncooked prawns from countries with WSSV.
- Market access liaison continued between the Agency for Agricultural Quarantine in Indonesia and the department. Training and auditing of Indonesian fumigation companies and product certifiers were carried out in cooperation with the Commonwealth.
- Certification arrangements were developed to facilitate container entry from countries known to be infested with Giant African Snail.
- Extensive field trials are in place to find a replacement chemical for the chemical Myrex, currently the only effective treatment for *Mastotermes darwiniensis* (giant termite).
- Market opportunities for sesame seed into the Singapore and Japanese markets were developed.

Production Systems and Increased Supply

- A major trial conducted with Heytesbury on Mount Sanford has highlighted the potential for significant increase in sustainable stocking of native pasture by the use of flexible stocking rates, provision of more effective water points and fencing.
- Trials of effects of water medication in the Alice Springs region demonstrated the potential to more effectively use fodder reserves.
- Trials of crossbred cattle in the Alice Springs region are aimed at increasing producer opportunities to access both live cattle export and domestic southern markets.
- Trials continued in collaboration with CSIRO and industry partners on techniques for promoting consistent early flowering in mangoes.
- Irrigation studies in table grapes demonstrated promising results for both profitability and sustainability of cropping.
- Licence reduction schemes are continuing in the coastal line, demersal, Timor Reef and shark fisheries.
- The Darwin regional aquaculture plan is nearing completion.
- The Darwin Aquaculture Centre commenced supply of fingerlings for the Pivot Aquaculture Port Hurd project at Bathurst Island.
- A Fisheries Research and Development Corporation funded project to examine the commercialisation of mud crab aquaculture commenced in collaboration with NT DPIF, QDPI and Sea Farm.
- Barramundi cod were successfully spawned for the first time in Australia.
- A major collaborative weed management agreement continued on aboriginal communities in the Top End in conjunction with the Indigenous Land Corporation and the Northern Land Council.
- A feral animal control agreement in the VRD continued in collaboration with the Indigenous Land Corporation, Northern Land Council, Parks and Wildlife Commission, Department of Lands, Planning & Environment and the pastoral industry.
- A Strategy for Forestry Development on Melville Island was prepared for the Tiwi Land Council in consultation with Sylvatech, Parks and Wildlife Commission, Departments of Lands, Planning and Environment, Industries and Business, and Transport and Works.
- Research was conducted in collaboration with industry into the development of an irrigated peanut industry.
- Research continued into sesame, cotton and other rotation crops.

Industry support

- A successful field day was conducted for district farmers at the Douglas Daly Research Station.
- The open day at the Coastal Plains Horticultural Research Farm was attended by 3000 people.
- The department provided access to legal support to the Northern Territory Horticultural Association with the review of their constitution and similar access to the new Northern Territory Mango Industry Association for the development of their constitution.
- Outbreaks of Queensland Fruit Fly were detected and eradicated from the Ti Tree area.
- Two fisheries division staff with expertise in marketing, seafood safety and quality, and gear technology were seconded to the Northern Territory Seafood Council to develop marketing strategies and quality assurance programs.

Recreational Fishing

- Support was provided to AFANT to secure sponsorship and commence planning for the World Recreational Fishing Conference to be held in Darwin in 2002.
- A review of fish possession limits resulted in the inclusion of Spanish mackerel, barramundi and jewfish in the general possession limit, and the introduction of a possession limit of five for Golden snapper.
- The Recreational Fishing Development Plan was prepared in consultation with all stakeholders and launched.

Direction & **Governance**

Department of Primary Industry & Fisheries

2



Vision

Profitable food and fibre industries through sustainable development.

Mission

The Department of Primary Industry and Fisheries delivers a broad range of research, development, extension and regulatory programs aimed at improving the profitability and sustainability of the food and fibre industries in the Northern Territory and at increasing their contribution to the economic growth of the Territory

Corporate Values

- **Partnerships**

With producers, industry bodies, related agencies and agribusiness for common goals and growth.

- **Development**

Of systems and practices which maintain or enhance economic growth and natural resources.

- **Expansion**

Of horizons that further develop relationships within Australia and Asia to create new markets.

- **Research & Development**

Research & Development that discovers, adapts and extends new technology for industry growth and diversity.

- **Protection**

Of consumer health, the environment and community values.

- **Quality**

In our services, their delivery and productivity.

- **Skill**

Skilled people who foster creativity, innovation, adaptability and commitment to changing needs.

- **Safety**

A safe and healthy working environment for staff.

Key Functional **Responsibilities** 2.1.1

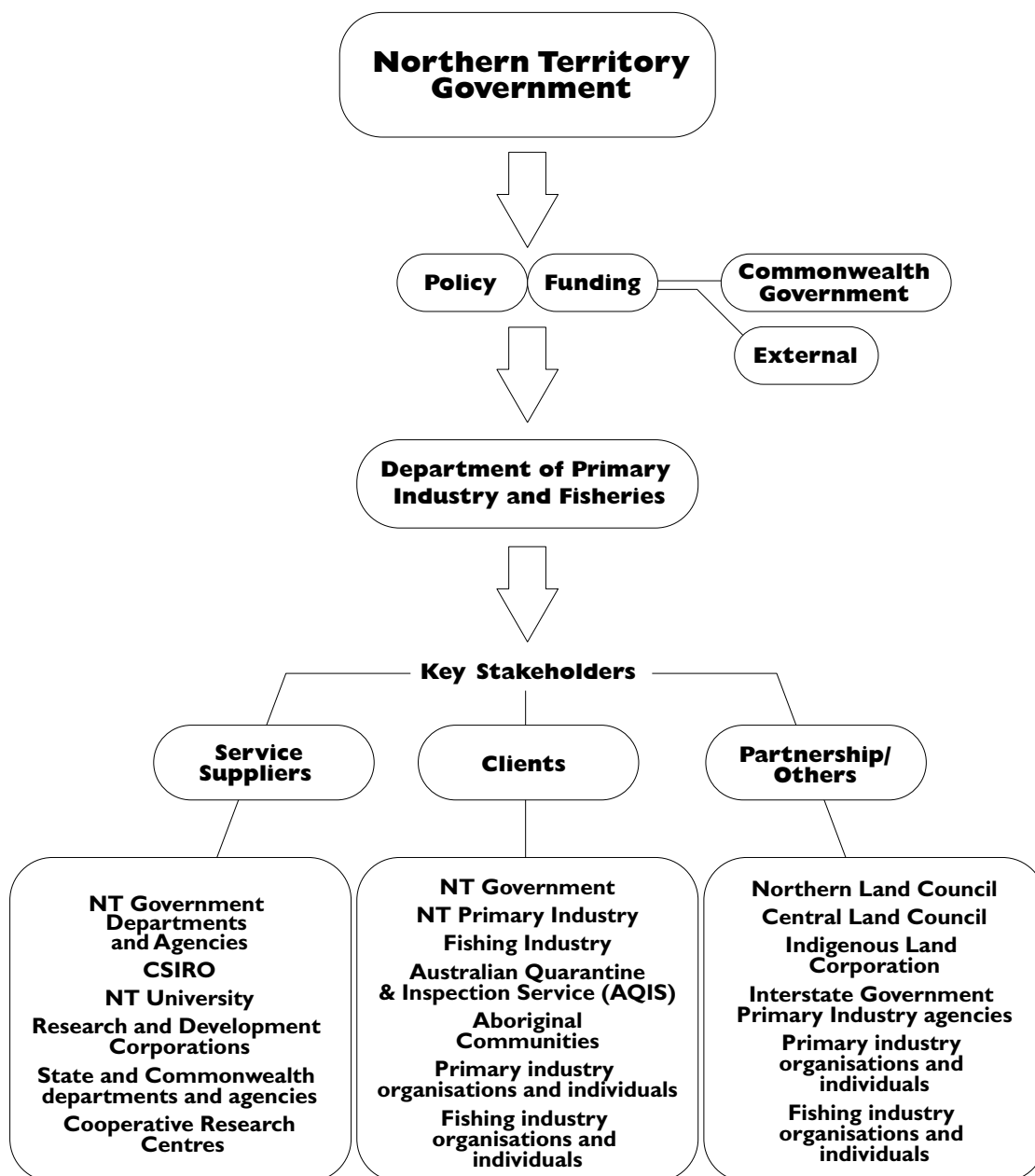
The Department's strategic directions are aimed at developing the food and fibre industry base in the Northern Territory.

In the course of its operations during 2000/2001, the major functional responsibilities for the Department were:

- Identifying sustainable production systems, which encourage the pastoral and agricultural industries of the Northern Territory to continue to increase in value.
- Assisting with the development and promotion of a sustainable horticultural industry in the Northern Territory.
- Ongoing facilitation of the conservation, preservation and optimal utilisation of the Territory's living aquatic resources, while protecting the community, primary industries and environment of the Northern Territory from the adverse impact of exotic pests, diseases and weeds.
- Stimulating and coordinating business and infrastructure development in the Northern Territory's food and fibre industries.
- Promoting diversification and intensification of food and fibre industry development opportunities within a framework of integrated programs for sustainable land management.

In order to implement the Department's strategic directions, the scope of activity includes facilitating development, business/market expansion and research in horticulture, fisheries, pastoral, agriculture, resource protection and management. Relationships span across government, industry groups, research bodies, funding and training institutions and other organisations, locally, nationally and internationally.

The following diagram highlights key links and relationships within that context.



Legislation **Administered** 2.2.1

Legislation administered includes the full provisions of 12 Northern Territory Acts and part provisions of a further Northern Territory Act, the Poisons and Dangerous Drugs Act (details listed below). Four Commonwealth statutes are also administered by the department on a delegation basis.

Northern Territory Statutes

Agricultural and Veterinary Chemicals (Northern Territory) Act

Biological Control Act

Brands Act

Exotic Diseases (Animals) Compensation Act

Meat Industries Act

Noxious Weeds Act

Plant Disease Control Act

Stock (Control of Hormonal Growth Promotants) Act

Stock Diseases Act

Stock Routes and Travelling Stock Act

Veterinarians Act

Fisheries Act

Fishery Management Plans under the Fisheries Act have the force of regulations. Plans currently in force are:

The Northern Territory Barramundi Fishery Management Plan

The Northern Territory Mud Crab Fishery Management Plan

The Northern Territory Spanish Mackerel Fishery Management Plan

The Northern Territory East Point Aquatic Life Reserve Management Plan

The Northern Territory Doctors Gully Aquatic Life Reserve Management Plan

The Northern Territory Pearl Oyster Culture Industry Management Plan

Poisons and Dangerous Drugs Act section 52A (2) and (3) - Part only

Amendments 2000/2001

Fisheries Amendment Act 2000, No 21 became effective from 20 December 2000. Fisheries Amendment Act 2001, No. 34, becomes effective next year. The Weeds Management Bill was passed in March 2001 and to be effective from 1 July 2001.

Commonwealth Statutes as per Commonwealth/Territory Agreements

Export Control Act 1982

Fisheries Management Act 1991

Quarantine Act 1908

Rural Adjustment Act 1992

Statutory **Committees/Boards** 2.2.2

To assist in planning and appropriate targeting of programs, the Department consults with industry groups via a committee framework of statutory and non statutory bodies.

The Department supports two Statutory Committees:

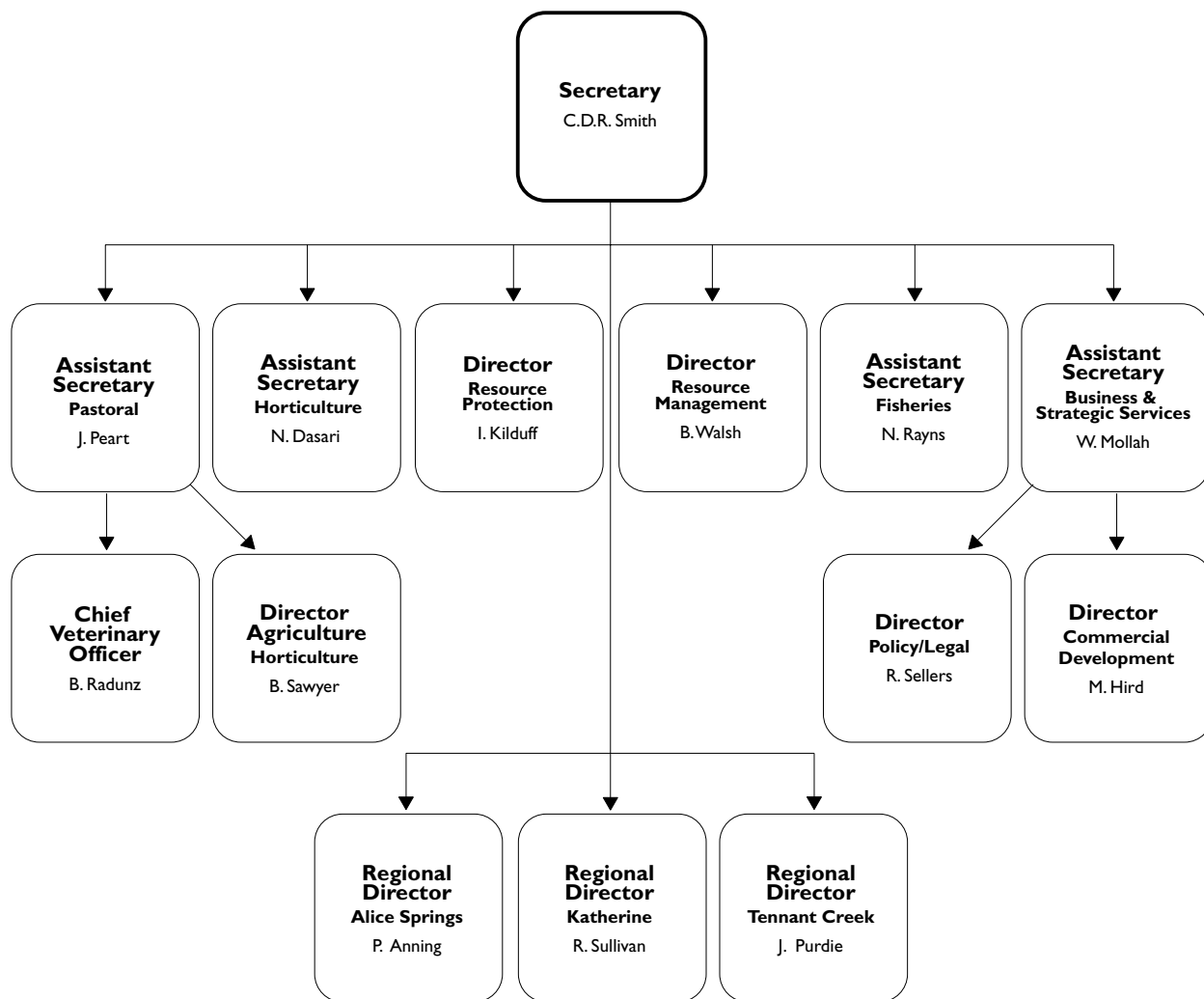
- Northern Territory Fishing Industry Research and Development Fund Advisory Committee
- Veterinary Board of the Northern Territory

Non Statutory **Committees/Boards** 2.2.3

The Northern Territory Rural and Fishing Industries provide directions and priorities to programs through membership on non statutory committees and boards. The extent of the committees and boards demonstrate the department's commitment to the corporate value of working in partnership.

The committees/boards are:

Alice Springs Pastoral Industry Advisory Committee
(incorporating Central Australia Beef Research Committee)
Anindilyakwa (fisheries) Consultative Committee
Barkly Research and Advisory Committee
Beagle Gulf (fisheries) Consultative Committee
Central Australian Camel Industry Association Inc
Coastal Line Fishery Management Advisory Committee
Cobourg Marine Park Fishery Management Area Advisory Committee
Demersal Fishery Management Advisory Committee
NT Fisheries Research Advisory Board
Horticulture Advisory Committee
Katherine Pastoral Industry Advisory Committee
(incorporating Katherine Regional Beef Research Committee)
Manbuynga ga Rulyapa Fisheries Consultative Committee
Mangalpu Fisheries Committee
Mimosa Management Committee
Ministerial Advisory Committee on Recreational Fishing
Ministerial Committee on Northern Territory Fisheries Development Opportunities
Northern Pastoral Advisory Committee
Northern Territory Barramundi Fishery Management Advisory Committee
Northern Territory Drought Committee
Northern Territory Herbage Plant Liaison Committee
Northern Territory Mud Crab Fishery Management Advisory Committee
Northern Territory Pearling Industry Advisory Committee
Numburindi Fisheries Committee
Professional Seafood Producers Consultative Committee
Shark Fishery Management Advisory Committee
NT Spanish Mackerel Fishery Management Advisory Committee
Territory Aquaculture Development Advisory Committee
Timor Reef Fishery Management Advisory Committee
Tiwi Coastal Waters Consultative Committee
Wurralhaliba Fisheries Committee



The senior management profile illustrates the diverse range of skills and knowledge necessary to facilitate successful management of the department and its programs.

Roger Smith, Chief Executive Officer

Since October 1996, Roger Smith has been the Chief Executive Officer. Roger has also served as the Deputy Secretary, Resource Management, Department of Lands, Planning and Environment and Deputy Director of the Conservation Commission of the Northern Territory. He has over thirty years experience in forestry, fire management, parks management, heritage conservation, Landcare, environment protection and natural resource management.

Niranjan Dasari, Assistant Secretary Horticulture

Dr Dasari has been the Director of Horticulture, and more recently Assistant Secretary for Horticulture Division, since 1989. Dr Dasari holds a Bachelor (1968) and a Master (1970) of Agricultural Science degrees from India and a PhD (1974) in Soil Science from the University of California, Davis. He was also awarded an Associate Diploma (1987) in Computer Sciences by the Darwin Institute of Technology.

Prior to 1989, Dr Dasari held various positions in the Department as the Director of Field Crops, Director of Berrimah Research Centre, Principal Crops Agronomist and Rice Agronomist. He joined the department in 1980 after 12 years agricultural research and development experience in India, California, Brazilian Amazon and Western Australia.

Dr Dasari has over 30 years experience in the research fields of soil fertility and plant nutrition, crop production, agronomy and crop physiology. He also has extensive experience in management of Research and Development and policy development, particularly in developing plant industries in various countries.

Nick Rayns, Assistant Secretary Fisheries

Dr Nick Rayns was appointed Director of Fisheries in September 1999. He has a Masters degree in Marine Science and gained a PhD following his work in the area of rock lobster aquaculture.

Since the mid 1980s he has held a number of positions related to fisheries. These include fisheries management scientist for the Ministry of Agriculture and Fisheries, New Zealand; NSW State Aquaculture Manager; Manager, South East Trawl Fishery; Australian Fisheries Management Authority; Senior Manager for Tuna and Billfish; Assistant Director, Aquatic Resource Management, Fisheries Division, Darwin.

Wayne Mollah, Assistant Secretary Business & Strategic Services

Dr Wayne Mollah started as a technical officer with the department's entomology branch in 1973, and then spent nine years with the North Australia Research Unit of the Australian National University. Wayne rejoined the department in 1987 and has worked on issues of agricultural development and sustainable agriculture. In addition he has been acting Director of Plant Industry Division, Director Land Resource Management Division, Director Corporate Services Division, and now Assistant Secretary Business and Strategic Services. From November 2000 to May 2001 he was Acting Director, Agriculture and Resource Economics in the Office of Resource Development.

Jack Peart, Assistant Secretary Pastoral

Jack Peart became Assistant Secretary Pastoral, early in 2000, following a period as Director Pastoral. Former positions held include Director Agriculture and Regional Director, Tennant Creek. He joined the department in 1989 as Senior Advisory Officer in Alice Springs, coordinating the newly formed Advisory Service for the Southern Region. Before starting with the department he managed his own cattle property in Queensland, worked with a fertiliser and feed company and spent eighteen months as a consultant in Asia.

Brian Radunz, Chief Veterinary Officer

Brian Radunz is the Chief Veterinary Officer for the Northern Territory. He manages the animal health system within the Northern Territory and participates in national animal health policy development. Brian has worked in the Northern Territory for about 25 years over 3 separate periods, intermingled with a total of five years experience in two other States and one year working for the Commonwealth. Brian has worked in all four regions and now has the management role for NT wide animal health activities that support trade in animal products and assist producers.

Bryan Walsh, Director Resource Management

Bryan joined the Department in 1999 as Director of the new Resource Management Division. After returning from Papua New Guinea as a Patrol Officer, he joined the Northern Territory Government's Fisheries and Wildlife in 1976. In the ensuing years he has held the positions of Chief Wildlife Ranger, Feral Animals Committee Secretary and Director, Parks and Wildlife Commission, Katherine.

Ian Kilduff, Director Resource Protection

Following 16 years with the New Zealand Ministry of Agriculture and Fisheries, Ian moved to the Territory in 1986 as Executive Officer, Quarantine Service. In 1989 Ian became Director of Quarantine for the Northern Territory. In 1994 he was appointed Director Resource Protection Division with responsibility for Commonwealth quarantine and export inspection services, chemistry, entomology and plant pathology. Ian has had extensive field and policy experience in international quarantine and is the Australian Quarantine and Inspection Service Regional Manager for the Northern Territory.

Murray Hird, Director Commercial Development

Murray recently joined the Department in June 2001 following almost ten years with Westpac as Agribusiness Development Manager for South Australia, Northern Territory and Tasmania. In this role Murray was a frequent visitor to the Territory and developed an indepth understanding of pertinent agribusiness and development issues. He has a long involvement with agribusiness from practical production to complex business assessments.

Bruce Sawyer, Director Agriculture

Bruce Sawyer was appointed Director Agriculture in February 2001. He has worked in a number of roles in the Agricultural Branch of the Department over 27 years in the Northern Territory. He has managed several of the Department's Research Farms, and managed the overall Research Farm Program for the past five years. As a strong proponent of the agricultural development potential of the Top End he has worked in an extension and advisory role with local producers. In addition, he is a long-term member of the board of the Bushfire Council of the Northern Territory.

Brian Kuhl, Director Business Services

Brian Kuhl became Director Commercial Development in July 1993 after joining the Northern Territory Public Sector in 1984. The position was re-titled Director Business Services in February 2000. Brian worked as the Principal Accountant and subsequently Deputy General Manager with the Agricultural Development and Marketing Authority, before joining the department in 1988 as Assistant Secretary, Primary Industry Assistance. Brian held the position of Assistant Secretary Corporate Management between 1990 and 1993. Brian began pre-retirement leave in October 2000.

Phil Anning, Regional Director Alice Springs

Prior to taking up his current position in the Department in 1999, Phil worked throughout North Queensland as an employee of the Department of Primary Industries, Queensland. His experience extends to rangeland research, extension agronomy, horticultural development and agribusiness. In addition he has provided international consultancy services in Africa and Asia, for the World Bank, Food and Agriculture Organisation and private agribusiness consortia.

Jenny Purdie, Regional Director Tennant Creek

Jenny Purdie has held the position of Regional Director Tennant Creek since December 1999. Prior to this she was based in Darwin as the Principal Inspector (Meat). Jenny originally joined the department in Alice Springs where she spent several years in the herbarium. Later moves resulted in many years' experience in the Darwin herbarium, the Berrimah Veterinary Laboratory, the stock inspector service and the domestic meat industry.

Rohan Sullivan, Regional Director Katherine

Rohan Sullivan was appointed as Regional Director Katherine in October 1999. He joined the department in 1986 and has held positions as Animal Production Officer, Manager Victoria River Research Station and Primelink Coordinator, all located in the Katherine region. Rohan comes from a rural background, having grown up on a mixed farm near Adelaide River, NT.

Planning and **Review** 2.2.6

Senior Management, through regular meetings, provides the strategic and operational focus necessary for the effective functioning of the department. Four Directors' meetings were held throughout the year, at quarterly intervals, to achieve this. Venues were selected and rotated through the regions.

Corporate management issues reviewed during the period included the following:

Issues	Background	Output	Result
Continuous Improvement Process Business Excellence Framework (Australian Quality Council (AQC) - seven (7) performance categories in the framework, listed in output)	Staff trained to implement the Business Excellence Framework established by the Australian Quality Council, in June 2000. The aim being to embed the continuous improvement process in the ongoing management and operations of the department.	From the total of 33 issues identified through self assessment, implementation of 16 priorities started, as per the AQC categories of: - leadership and innovation - strategy and business planning - data, information & knowledge - people - customer and market focus - processes, products & services - business results	Working groups established for each of the 16 priorities. 6 priorities have been addressed. 10 remain in progress. These establish benchmarks for further assessment. Three corporate progress bulletins issued.
Corporate Focus	Annual planning process.	Development of a definitive plan to provide context for business plans in 2001-2002, linked to outputs and outcomes in Budget Paper 2.	Implemented and monitored.
Information Management Committee	To improve the management of data, information and knowledge to help achieve Departmental business objectives.	Formation of the Information Management Committee comprised of senior managers from all Divisions and relevant disciplines.	Strategy developed, based on information management principles (approved) and subsequent implementation. Contributes to the Business Excellence Framework.

Issues	Background	Output	Result
Government Energy Management Plan	Implementation of an agency specific plan in line with the whole of government policy to effect savings on energy usage.	Establishment of a departmental committee and subsidiary site committees.	<p>External audit on energy usage at Berrimah Farm and subsequent proposal. Prioritise implementation proposal.</p> <p>Cost saving measures introduced for Katherine office.</p> <p>Continued review of energy management options for Kidman Springs, with implications for the pastoral industry.</p> <p>Proven savings in Alice Springs. Active promotion of energy management strategies.</p>
Human Resource Management business needs	Transfer of HR function to DCIS in 1998. HR Corporate support needs met by DCIS. Gap in strategic HR services identified.	Appointment of a dedicated departmental resource to Human Resource Management.	<p>Training for managers.</p> <p>Review and development of specific policies and programs.</p>

Executive Officers' Meetings

Quarterly meetings for departmental executive officers were held to discuss and deal with issues of a corporate nature or concern, reportable to the Secretary. The forums were an important and useful means of corporate communication and functionality. Through this process reports are provided to Management Board meetings, as necessary.

The Assistant Secretary, Business and Strategic Services chairs the meetings.

During the year the executive officers' forums reviewed a range of administrative matters related to service provision arrangements, corporate support, employment, finance and outsourcing.

Four audits were conducted during the year. Overall, compliance was met by the Department. The audit program is overseen by the departmental audit committee which is chaired by the Assistant Secretary, Business and Strategic Services. Other members of the committee include one divisional executive officer, one regional executive officer, the finance manager and a representative from Strategic and Audit Services, Chief Minister's Department. The committee reports to the CEO after each meeting.

Audit Summary 2000/2001

Audit Title	Auditor	Type of Audit	Comments
Review of the implementation of recommendations from the Clayton Utz Legal Audit	Strategic and Audit Services, Chief Minister's Department (outsourced to Ernst and Young)	Performance	The department responded reasonably to the legal audit recommendations observed. In cases where advice had not been followed a detailed reason for non compliance was found to be reasonable. Two recommendations from the review still under consideration.
Financial Statement 1999-2000 Audit	Deloitte Touche Tohmatsu	Financial	Financial statement qualified as not meeting Australian Accounting Standard AAS29 but complying with Treasurer's Directions.
Managing Fisheries Policies	Auditor-General for the Northern Territory	Performance	Two key findings relating to linking outcomes with business plans. Improvements in the areas highlighted through the key findings will be sought under the Working for Outcomes project.
Australian Quarantine and Inspection Service	BDH Consulting Pty Ltd	Performance/ compliance	The audit is a requirement under the Memorandum of Understanding with the Commonwealth.

Equal opportunity management programs and other initiatives

An Equal Employment Management Plan is in the draft stages of development.

The Department successfully sponsored one cadet under the NTPS Aboriginal and Torres Strait Islander Cadetship Program. The cadet completed a Bachelor of Tropical Environmental Science and the terms of the program were fulfilled by an offer of full time employment within the department.

Staff development

Advice to senior management on staff development matters is provided by the Staff Development Advisory Committee. The committee advises on matters related to the suitability of proposed training programs and expenditure. It also acts as a mechanism for communication between management, regions, divisions and staff on workforce development matters.

Overall, during the year, 220 employees participated in formal training courses. Courses covered a wide range of skills including administration, information technology, management and occupational health and safety.

This included 80 employees from Darwin and the regions who undertook training courses arranged through the Learning Centre, Office of the Commissioner for Public Employment.

Information technology training proved very popular, with a total of 50 employees attending training.

The Department's Study Award Scheme was awarded to two recipients this year. Darryl Savage received \$2,500, and Jocelyn Coventry received \$2,000 towards assistance with airfares to attend interstate courses of study.

A total of 20 employees received funding to undertake technical training. This training provided eligible officers with the opportunity to improve their work skills whilst gaining practical experience in new techniques.

Participation by 37 staff in the presentation of three modules coordinated by the Rural Extension Centre (Gatton campus, University of Queensland) resulted in a further seven employees graduating in June 2001 with a Certificate in Rural Extension.

Two traineeships in Certificate III in Business (Administration Skills) were sponsored during the year. Both trainees graduated in 2001.

Performance management

The department conducted an organisational self-assessment, using the Australian Business Excellence Framework as the benchmark reference model. One of the priorities identified during the assessment was the need to have in place an effective Performance Management system.

A project team has been given carriage of the task and a more suitable model is now being developed to replace the original 'Performance Development Plan'. The new Performance Management system will be more closely linked to the business planning process and will accommodate the new performance requirements associated with the 'Working for Outcomes' framework.

Performance measures and the identification of staff capabilities are now part of the department's annual business planning development and review process.

Occupational health and safety programs

The Department of Corporate and Information Services provided support to enable the department to continue to develop and maintain a positive safety culture. Recognition of the importance of safety in the workplace has been incorporated in the corporate values for the Department.

A departmental 10 point occupational health and safety plan, compliant with legislation, has been developed. The plan is being adopted at all respective work sites. Implementation has commenced with a self assessment by staff, to establish a baseline for the development of an action plan.

Review

- The structure of the department's various OH&S Committees was reviewed. A strategic OH&S Committee was chaired at the Executive level with membership of divisional and regional representation at the Executive Officer level. Most work sites now have 'Work Place' committees established.
- A review was undertaken of the First Aid and Evacuation Officers qualifications and a training program commenced to officers where required.

Implementation

- OH&S checklists and supplementary information for line managers are now included as part of the Agency's Induction Program. All new employees both permanent and temporary over 6 months receive the relevant OH&S induction and necessary training.
- The Department entered into a contract with the Employee Assistance Service (EAS) NT Inc to provide a specialist counselling service to employees and their families.

Staff recognition

Three awards are offered annually by the Department to employees. The presentation of awards is underpinned by:

Corporate values:

- development of systems and practices which maintain or enhance economic growth and natural resources
- research and development that discovers, adapts and extends new technology for industry growth and diversity
- skilled people who foster creativity, innovation, adaptability and commitment to changing need
- quality in service, delivery and productivity; and
- the continuous improvement process, that is, the Business Excellence Framework.

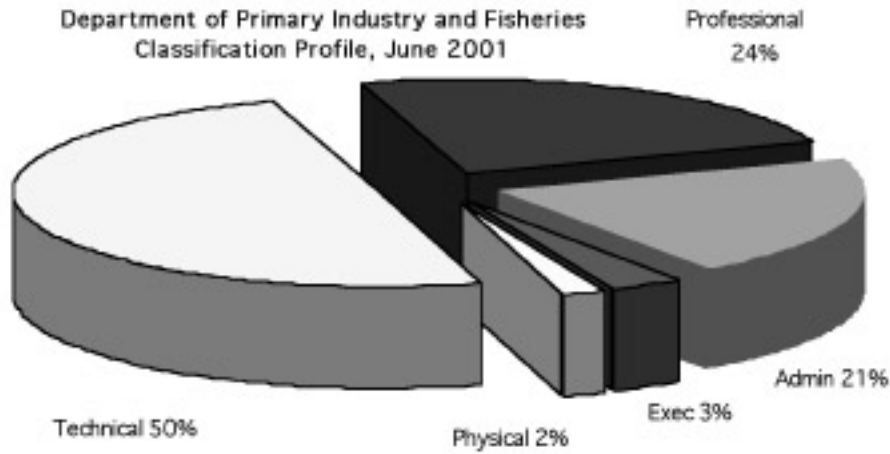
The awards, purpose and recipients for 2000-01 were:

Award	Purpose	Recipient/s	Topic
Minister's Award for Contribution to the Development of Primary Industries and Fisheries in the NT (inception 1993, modified 2000)	<ul style="list-style-type: none"> - Highlight outcomes with benefits to industry. - Foster sound project management. - Encourage publicising work and its value to industry 	Chris Regan, David Ffoulkes, Barry Lemcke, Stephen Sell and Ibu Maemonah Tuhulele	Structured workplace training as a marketing strategy for NT Cattle in South East Asia
CEO's Award (inception 1993)	Outstanding individual performance in the pursuit of excellence in achieving Departmental objectives	Carolyn Ellis Quarantine Officer Alice Springs	
BARC Seminar (inception 1991)	Information sharing Personal development for professionals	Chris Regan	Presentation on Structured workplace training as a marketing strategy for NT Cattle in South East Asia

Regionally, seminars were conducted in Katherine with speakers attending from inside and outside the Department. In Alice Springs sessions were accessed through the CSIRO.

Organisational Profile

At the end of June 2001 there were 398 employees, compared to 377 in the previous year. The figures below illustrate the classification structure (majority in the technical and professional classifications) and the gender distribution across classifications. The employment ratio of male to female is 2:1.



Comparison of Employment Classifications by Gender

June 2000 and June 2001

Employment Category	Males		Females	
	2000	2001	2000	2001
Executive	4	4	0	0
Executive Contract	9	10	0	0
Professional	69	78	20	18
Technical	117	145	43	53
Administrative	42	23	64	59
Physical	8	6	1	2
Total	249	266	128	132

Source: Department of Corporate and Information Services, PIPS

The department contributed to the NT Government Strategy Looking Beyond 2000 themes of Leadership and Economic Independence and Career Satisfaction by strategies linked to three departmental outcomes:

- (1) increasing the value of primary industry production;
- (2) establishing new primary industries and expanding existing industries with a strong regional growth emphasizing the creation of jobs; and
- (3) striving for organisational excellence and continuous improvement.

Goals from the action plan for Territory women in conjunction with the Standing Committee on Agricultural and Resource Management (SCARM) program "National Plan for Women in Agriculture and Resource Management" were also considered in the department's quarterly reporting and annual divisional planning process.

The department's response to the themes of leadership and economic independence and career satisfaction were:

Looking **Beyond 2000**

Theme	Response
Leadership	<p>Implementation of the Continuous Improvement Process: Business Excellence Framework - 36% female participation in focus sessions. Inclusion of the goals of Looking Beyond 2000 in eight priority projects related to leadership and people under the Business Excellence Framework, which will assist to advance women in the Department.</p> <p>2 female staff in Fisheries Division in key positions of principal investigator in the Research and Development Corporation joint NT and Queensland Mud Crab project and National Indigenous Fishing Survey.</p> <p>41% female participation in Property Management Planning training.</p> <p>2 female FarmBis facilitators were appointed.</p> <p>5 key industry group appointments.</p>
Economic Independence and Career Satisfaction	<p>Departmental support given for the Australian Women in Agriculture conference in Darwin in August 2000 through the NT branch of Australian Women in Agriculture.</p> <p>Seed funding was provided to Central Australian Producers' Action Group (CAPAG) to employ a Rural Development and E-Business Strategist.</p> <p>Farm Business Improvement Scheme 113 female participants (34% of total participants, 25% in previous year)</p>

Rural Leadership 2.2.10

Mr Darryl Savage, the Senior Animal Production Officer from the Tennant Creek regional office, was selected as one of two participants from the Northern Territory to attend the inaugural Young Rural Leaders Course conducted by the Commonwealth Department of Agriculture, Fisheries and Forestry in June 2001. The second participant, Mr Wes Press, was from the pastoral industry in Alice Springs.

In addition, Mr Savage was nominated by the Northern Territory Cattlemen's Association for the Young Australian of the Year Award and won his category, the Federal Government's Regional Initiative Award, for his commitment to the Barkly pastoral industry. He travelled to Canberra as a finalist for the overall award where he was one of three recipients of a Foundation for Young Australian Achievement Awards.

Departmental Performance **Against Planned Outcomes**

As Per Budget Paper No 2

3



Summary 3.1

At a program level, the department assists industry sectors to achieve sustainability and growth in production and value by providing:

- Access to well targeted assistance and training
- Access to relevant information and advice across a range of issues
- Support for appropriate industry and related infrastructure
- Market opportunities and applications
- Sustainable use of the existing resource base.

Achievements are reported by activity/program against specific planned outcomes as per Budget Paper No. 2, The Budget, 2000/2001.

Regional Executive **Alice Springs**

Link to Corporate Focus Priorities

Achievements 2000/2001

Building a successful resource based economy

- Buoyant cattle prices have corresponded with two excellent seasons in Central Australia. A review of the NT Drought Policy found that pastoralists valued programs for industry development including Property Management Planning, FarmBis and the Pastoral Water Enhancement Scheme. The Pastoral Water Enhancement Scheme has leveraged significant private investment in property development with increased ability of individual enterprises to manage drought. A further three years of funding for Pastoral Water Enhancement Scheme has been secured.
- DPIF support for the Central Australian Camel Industry Association (CACIA) has led to the opening up of a market for 1,000 head of live camels annually to Brunei. Fortnightly shipments are made from AZRI. A similar number are planned for a feedlot in Malaysia. Results from the DPIF Cograzing Trial at Waite River indicate that cattle and camels can be sustainably grazed together. This information provides a basis for an NHT project titled "Demonstration of Sustainable Camel Production on Aboriginal and Pastoral Land". The goal is ensuring a reliable supply and sustainable resource use in the long term. Securing an export accredited meatworks remains a high priority to supply identified demand for camel meat exports. A stockpile of camel meat has been largely consumed by growing domestic demand which the annual processing of 500 head can barely service. The executive officer and two researchers from CACIA are based at DPIF, AZRI.
- DPIF assisted the Central Australian Producers' Action Group (CAPAG) in a trial feedlotting program at Roma, Queensland with planned marketing through Coles Country Choice. FarmBis funding was supplied to a young pastoralist to attend the processing of the finished cattle. The resulting information feedback to the pastoral industry can provide producers with a guide to accessing a strategic marketing opportunity. This has the specific advantages of being independent of seasonal conditions and linking further along the value chain. The executive officer of CAPAG is based at DPIF, AZRI.
- The Southern Beef Producers pastoral group were assisted in linking with other producer groups via funding from FarmBis for representatives to attend national Beef Net conferences annually. Members of the Southern Beef Producers are active in benchmarking their enterprises and as a buying group.
- A field day was held at Mt Riddock to present the pastoral industry with the results of a five year study of herd performance. Benchmarks from the study provide valuable guides to factors which need to be managed to improve herd productivity and profitability.
- The Central Land Management Association (CLMA) is active in assisting its pastoralist members in areas of land management. DPIF and DLPE are assisting CLMA in an NHT funded project aimed at improving monitoring and management of the pastoral leases.

Link to Corporate Focus Priorities Achievements 2000/2001

- | | |
|---|---|
| <p>Building a successful resource based economy</p> | <ul style="list-style-type: none"> • Monthly meetings of the Horticultural Land and Water Subcommittee were chaired plus two joint meetings with the Ti Tree Water Advisory Committee and one with the Barkly Blueprint horticulture project members. A major tablegrape industry had a turnover estimated at \$18M. The current area under grapes is 300 ha and the water resource can sustain over 1000 ha. The industry had an annual growth rate of 25% in volume and value. The Office of Resource Development is assisting in infrastructure planning for new farms in the Ti Tree Basin. The Subcommittee is progressing horticultural initiatives in other parts of the region, with resource investigations confirming significant ground water resources in the Barkly and at Orange Creek. DLPE has produced maps of the best prospects for horticultural development on Aboriginal land, following workshops with the Central Land Council. |
| <p>Partnerships in Aboriginal development</p> | <ul style="list-style-type: none"> • A review of the Utopia Citrus project became necessary when joint venture partners were no longer able to meet equity in the project. DPIF began working with CLC and Department of Industries and Business in planning a revision of the proposal. Aboriginal agencies also withdrew funding for a large-scale project. The aim is to achieve horticultural development on Aboriginal land at Utopia initially, then onto other areas where water reserves have been identified, including Finke. • DPIF is assisting a proposed joint venture in bush food production and marketing between Tangentyere Land Council and a commercial horticultural enterprise. It is planned to use AZRI facilities for the research component of the project. • DPIF participated in a workshop organized by CLC and ILC for Aboriginal managers of previous pastoral leases, aimed at returning them to commercial pastoral production. Negotiations for leasing Aboriginal properties continue. |
| <p>Tropical and arid zone knowledge.
Centres for excellence in tropical and arid zone knowledge</p> | <ul style="list-style-type: none"> • The Desert Knowledge Project aims to create a thriving desert knowledge economy in Central Australia. Major input from DPIF includes contributions to a prospectus for post graduate projects and towards the preparation of a bid for a Cooperative Research Centre for Desert Knowledge. • DPIF leads a Bush Products initiative as part of the Desert Knowledge Project. The aim is to facilitate development of a significant new industry in Central Australia. Aboriginal business, training and employment is a focus. • A workshop is planned at Centralian College to link wild harvest, wholesalers, marketers, horticulturists, Aboriginal agencies and researchers. Liaison with retailer, Coles has taken place, which is using NT raw ingredients and has established an Indigenous Food Fund to support Aboriginal development. |
| <p>Encourage strong regions and communities</p> | <ul style="list-style-type: none"> • At the request of the Regional Coordination Committee production began of a Masterplan for the Ti Tree Region to guide the development of the area. DPIF chairs the initiative which includes a project officer from DLG. Network Australia was awarded a consultancy to develop a draft plan in consultation with the steering committee and wider community. Terms of Reference for this work were agreed. The broad Masterplan will identify opportunities and specific projects for the development of the region. |

Regional Executive **Tennant Creek**

Link to Corporate Focus Priorities

Achievements 2000/2001

Promote primary industry in the region

- Continued and active participation in the Barkly Blueprint project, a regional plan aimed at the future development of the region. Coordination of projects involving horticulture development and pastoral production and attending relevant sub committee meetings (Barkly Blueprint Horticulture sub committee and Barkly Blueprint Land Access subcommittee)
- Chaired a meeting of a working group (inclusive of other relevant agencies) established to explore horticultural potential of the area.
- Inspections and discussions in relation to the reopening of the abattoir north of Tennant Creek for animal processing (horses, cattle and camels).
- Represented the department on the Aboriginal Horticulture Working Group. Several areas in the Barkly region have been identified as having horticultural potential. The Working Group is exploring the possibility of joint ventures between commercial horticultural companies and Aboriginal traditional owners.
- Meeting with Barkly Enterprise Development Network re possible agriculture enterprises.

Promote departmental activities/
research in the region

- Disseminated extension material via
 - Production and distribution of the Barkly Beef newsletter on a regular basis
 - Barkly Rangeland Management courses (one held early 2000)

Women in the Budget

- Participation at various fora to discuss and support opportunities for women in the rural food and fibre industries in the Barkly region. Assistance and advice to the winner of the RIRDC Rural Women's Award

Ensure effective liaison with industry

- Participated at meetings of the Tennant Creek Branch of the NT Cattlemen's Association.
- Liaised with station owners/managers as opportunities arose or as required.

Regional Executive **Katherine**

Link to Corporate Focus Priorities

Achievements 2000/2001

Promote primary industry in the region

- Contributed to the development of the Katherine region masterplan.
- Coordinated media output on primary industry as appropriate.
- Advice to Minister on industry developments, for example soil conservation issues in the Venn area and outcomes of the Weeds Forum

Departmental representative for the region

- Attended Katherine regional coordination committee and sub committee meetings.
- Assisted with organisation of the Northern Grassy Landscapes conference in August 2000.
- Attended meeting of FarmBis/PMP State Planning Group.
- Meeting with the Indigenous Land Corporation and Northern Land Council to plan an Aboriginal cattle station cooperative on the Roper. Jawoyn Agricultural plan project progressed. Commonwealth funding extended until December 2001. ILC sponsored study of the potential of Aboriginal land in the Roper River area progressed. Consultant appointed to carry out broad study of potential.

Ensure effective liaison with industry

- As secretary for the Katherine Pastoral Industry Advisory Committee (KPIAC), discussed issues of export markets and potential to greatly increase output, scientific methods of calculating stocking rates, the meeting market specifications program and future work at Kidman Springs. A review of strategic issues undertaken for the KPIAC, completed and ready for publication by June 2001.
- Conducted a charting unknowns process with industry members at VRRS to feed into the NABRC strategic plan and provide input for next stage of work at VRRS.
- Coordinated several meetings following the KPIAC initiative of a weeds forum. Formation of a regional weeds advisory group pending.
- Attended several meetings of Sturt Plateau group.

Promote departmental activities and research

- 2001 Katherine Research Station Farm & Garden day held. Approximately 1600 people attended.
- Numerous regular editions produced for the Katherine Rural Review.
- Planning meeting held with Katherine animal extension (Primelink) staff.
- A regular Katherine Research Station seminar program resulted in monthly seminars over the year.

Corporate Services

Planned **Outcome 4**

Timely and appropriate dissemination of information to the agency's clients.

Link to Corporate Focus Priorities

Achievements 2000/2001

Information, storage, management and dissemination

- Distribution of approximately 30,000 Agnotes and Fishnotes to clients.
- 1228 Technical Bulletins and Fisheries reports distributed to clients.
- Revision of departmental website begun by staff and consultant.
- Successful departmental presentations and regional shows.
- Territory primary produce display in Parliament House.
- Technical Annual Report published in November 2000.
- Implementation begun of whole of government records management policies to continue to improve records services to clients.

Pastoral

Planned **Outcome I**

New, expanded and secure markets for live cattle and meat industry products.

Link to Corporate Focus Priorities

Achievements 2000/2001

Market access and new opportunities

- Overseas Market Development staff provided technical support and training for management and workers of a new feedlot operation in Vietnam, and continue to advise an Australian-Thai business consortium on the development of a feedlot operation in Thailand.
- On behalf of Meat and Livestock Australia (MLA) and the Indonesian Feedlot Association, a needs analysis of the Indonesian feedlot industry was undertaken and strategies and benchmarks for improving performance were identified for individual enterprises as well as for the industry.
- A training program for the Indonesian beef cattle industry covering abattoir management, meat handling, feeder management, pasture/forage management and breeder management, was successfully completed. 47 Indonesian trainers acquired the skills to plan, prepare and deliver workplace training in one of the industry sectors, and 20 of these trainers achieved the skills of developing and assessing competency based training. Altogether 21 training modules were produced which are currently being compiled in a handbook. The trainers and the modules that they have developed are a significant resource for the Indonesian beef cattle industry.
- An Australian Centre for International Agricultural Research funded program on competency based training methods was conducted in Sumba, Eastern Indonesia and attended by 14 animal husbandry advisers from the region. This has direct application for the planned importation of breeder cattle from the NT by the local governments of Sumba.
- At the request of UN Transitional Administration of East Timor, a training program in small holder cattle production was conducted in Dili for 14 District Livestock Officers.
- Data obtained from the KRS Feedlot provided the basis for developing a new simple cost-effective system for describing the value-adding potential of individual feeder cattle.
- When the new description system is implemented, differential prices associated with differences in value-adding potential and end-use suitability will have a major impact on production-system decision-making in the NT and in the supply of specification sets commanding higher prices (\$/Kg).
- The Katherine Pastoral Industry Advisory Committee (KPIAC) has decided that the testing of this description system in the market place on a commercially relevant scale (500 feeder cattle) is of very high priority for the live export trade to SE Asia. Therefore, KPIAC commenced a process to petition MLA via NTCA and the North Australia Beef Research Council (NABRC) for the necessary support and operational funding (\$200,000). The Philippines government strongly supports this initiative.
- The genotype comparison project at Victoria River Research Station neared completion and data collation began for analysis in 2001/2002.

Planned **Outcome 2**

Cost effective production systems which increase availability of Territory bred cattle for both domestic and export markets.

Link to Corporate Focus Priorities

Achievements 2000/2001

Supply capacity

- Results from the department's 65 square kilometre research site at Heytesbury's Mt. Sanford Station led to significant additional funding from MLA to enable work establishing the upper limits of sustainable pasture utilisation to continue.
- Two major projects to evaluate breeding herd efficiency on two stations in the Barkly, were initiated with the support of significant funding from MLA.
- An open composite breeding program was initiated at Douglas Daly Research Farm in response to district producers' interest.
- Two major studies on the Barkly were initiated into the effect of supplementation on breeder performance.
- A water medication trial in the Alice Springs region demonstrated significant responses in breeders grazing spinifex country.
- Computer-based herd modelling packages were used to assess a proposal for investors to run breeding cattle on NT properties.

Planned **Outcome 3**

Domestic and export market access through maintenance of adequate animal health and welfare status.

Link to Corporate Focus Priorities

Achievements 2000/2001

Market access and new opportunities

- Legislation relating to ruminant feeding bans amended to harmonise the national response to protect against BSE.
- The Brands Register and Property Identification Code Register and database were maintained.
- Following the identification of the Parkhurst resistant tick on properties in the Mary River area, steps were taken to limit its spread and to initiate an eradication program on 4 properties.
- The National Association of Testing Authorities accreditation of the Berrimah Veterinary Laboratory was completed and is being implemented. Inspection and certification provided for about 200,000 NT cattle exported. Certification and inspection provided for about 125,000 cattle sent to interstate markets.
- A Special Counter Disaster Plan for emergency animal, plant and fish diseases and pest adopted by NT agencies.

Planned **Outcome 4**

Maintenance of TB free area status.

Link to Corporate Focus Priorities

Protection from pests, diseases, and weeds

Achievements 2000/2001

- The eradication process continued in two TB case herds. No further TB cases were found under these programs.
- No new TB case herds were detected.
- The granuloma submission rate exceeded the national benchmark.

Planned **Outcome 5**

Expansion of diversified agriculture in the Territory.

Link to Corporate Focus Priorities

Infrastructure needs and primary industry opportunity

Achievements 2000/2001

- The Katherine Daly Basin development progressed with the first two mixed farming blocks from Stray Creek auctioned in December. The Conservation Plan for the Daly Basin Bioregion was released to landholders for comment.
- Development of the peanut industry during the year included research success with the use of an American expert system for irrigation management. The Peanut Company of Australia is offering contracts to growers for peanuts and they have made available peanut planting and harvesting machinery to growers. A commercial peanut production report was published in conjunction with our main producer.
- A commercial research agreement with a peanut producer in the Douglas Daly region continued to provide commercial production data for use by new producers.
- Irrigated maize production research on sandy soils continued, and commercial crops produced for use in local poultry feed. Production recommendations are now available for industry.
- Sesame research and commercial production continued. Markets are available in Australia and overseas market opportunities in Singapore and Japan were developed during the year.
- Research into irrigated cotton production continued at Katherine Research Station in partnership with the Cooperative Research Centre for Cotton and the Cotton Research and Development Corporation. An entomologist and entomology technician were employed during the year to research cotton insect dynamics.
- The camel industry developed an export market with eighty live camels per month going to the Brunei supermarket trade. Markets in Australia and overseas are developing for camel meat.

Planned **Outcome 5** (continued)

Expansion of diversified agriculture in the Territory.

Link to Corporate Focus Priorities

Achievements 2000/2001

Infrastructure needs and primary industry opportunity

- Buffalo exports to Brunei have doubled during the year to over 2300 head for their supermarket trade. The development of the pure riverine buffalo herd continued with 7, 3/4 cross bulls sold to industry and 27, 3/4 calves born during the year. Some 3/4 heifers were artificially inseminated to imported riverine semen and 6 are pregnant.
- Trial work on farming systems development, and fertiliser and weed management recommendations for cavalcade hay continued on Douglas Daly Research Farm and at producer sites on private properties. Cavalcade hay is an important component of cubes for the live cattle export trade.

Planned **Outcome 6**

Sustainable and profitable pastoral and agricultural industry with adequate access to knowledge and skills.

Link to Corporate Focus Priorities

Achievements 2000/2001

Supply capacity

- Continued support provided to groups including the Sturt Plateau Best Practice Group and CAPAG.
- Extension activities continued in all regions, using individual responses to requests and group meetings.
- Publication of extension newsletters in all four regions continued on a regular basis.
- Twenty Alice Springs properties were audited for continuing accreditation under Cattlecare.
- A successful field day was held at Mt Riddock Station in November to publicise results from trial work carried out on the station.
- The Barkly Rangeland Management course concept was extended to the Katherine region during the year with good attendance and feedback.

Planned **Outcome 7**

Provision of veterinary laboratory services to support Government, industry and community needs.

Link to Corporate Focus Priorities

Achievements 2000/2001

Supply capacity

- The Berrimah Veterinary Laboratories (BVL) were assessed by the National Association of Testing Authorities (NATA) in November and received official accreditation in the field of veterinary testing in February 2000. Internal auditing is a continuing process.
- Continued participation in proficiency testing in serology (ANQAP: Australian National Quality Assurance Program), bacteriology, haematology and parasitology. All of BVL's 23 tests in ANQAP in 2000 received endorsement, as did the tests in the other QA programs. Histology proficiency testing started in March.
- Continuing education of staff was achieved by attendances at the Arbovirus Symposium, and the Australian Society for Microbiology and Animal Health in Australia conferences. External training courses included PCR for prawn diseases and fish bacteriology. Staff received local training in a variety of areas such as first aid, JES and job description. BVL staff assisted with training at the Animal Health conference in Katherine.
- Provision of diagnostic pathology services for the livestock, fishing, aquaculture and pearl oyster industries continued. BVL participated in the National Granuloma Submission Program (NGSP) and the National Transmissible Spongiform Encephalopathy Surveillance Program (NTSESP). BVL also provided a veterinary testing service for the North Australian Quarantine Strategy (NAQS). The workload in aquaculture increased. The provision of diagnostic veterinary testing services for private veterinarians on a fee-for-service basis continued.
- Provision of veterinary testing services for health certification for export purposes continued and included testing of cattle, horses, camels and dogs. Movement testing of horses and pearl oysters was also done.
- Provision of efficient, reliable laboratory testing for diagnosis of viral diseases of commercial livestock, wildlife and fish continued.
- Participation in National Arbovirus Monitoring Program (NAMP) which is concerned with the detection of arrival in Australia, via the northern coastal region, of new arboviruses of livestock and monitoring the spread of endemic viruses, is proceeding. It consists of weekly virus isolation from sentinel cattle at Beatrice Hill Farm and monthly serology at other sentinel herd sites to detect spread of virus.

Planned **Outcome 7** (Continued)

Provision of veterinary laboratory services to support Government, industry and community needs.

Link to Corporate Focus Priorities

Achievements 2000/2001

Supply capacity

- Investigation of possible vectors of Japanese encephalitis - techniques for holding and feeding mosquitoes were established and two species are being tested for vector competence.
- Evaluate the effects of covered pens in reducing the attack of cattle by *Culicoides* spp - funding was received, all collections completed and sorting continued. Data entry commenced.

- Research activities in virology progressed and consisted of:

Flavivirus monitoring - all testing completed and paper presented at the Arbovirus Symposium. Routine testing of pigs and poultry sentinels continued.

Bluetongue antibody persistence trial - continued with monthly collection of sera.

A new virus of horses - antisera were prepared and serology of horses, macropods and bats in progress. Antibody is common in bats a virus was isolated from a possible third case in a horse.

- Bluetongue viraemia in natural infection of cattle - the final report was prepared.
- Chemical repellants for *Culicoides* and mosquitoes on cattle - the final report was finished and a paper presented at the Arbovirus Symposium.

Horticulture

Planned **Outcome I**

Increased value of production and profitability of producers in the fruit, vegetable, nursery and cutflower sectors of the horticultural industry.

Link to Corporate Focus Priorities

Achievements 2000/2001

Horticulture, irrigation and crop production research

- A survey defined the size of the citrus industry in the Top End. The majority of the total of 60,000 trees are mainly lemons and grapefruit. Information from the survey is being processed to finalise the industry priority for departmental programs.
- The first analysis of maturity, and fruit quality work was completed on lemons, oranges and red flesh grapefruit at AZRI.
- Irrigation and nutrition benchmarks for rambutan are nearing completion. Final results are expected by the end of 2001.
- A draft paper identifying issues requiring additional data collection and valuation, or assessment of options to progress the use of effluent for commercial horticultural production was circulated for comment.
- Expertise on crop water use was provided by representation on the Water Advisory Committee (WAC) for the Ti Tree area. The WAC advises the NT Controller of Waters on all issues pertaining to water for primary production in the basin.

Collaborative research with other agencies

- Dr Vinod Kulkarni, Senior Horticulturist Mangoes, spent 4 months with the University of Florida to conduct collaborative research with scientists on flowering mechanisms in mango.
- Efforts of the NT Rambutan Industry, Entomology, Queensland Department of Primary Industries and Rural Industries Research and Development Corporation (RIRDC) to develop Rambutan IPM Project were coordinated.
- Collaboration with officers from Queensland Department of Primary Industries has resulted in the assessment of some 220 hybrids generated by the National Mango Breeding Program. Of the 220, four hybrids have been chosen for further investigation.
- An expression of interest document for Commercial Partners and Grower collaborators to co-invest in the National Mango Breeding Program is nearing completion. This Program is a joint initiative of the NT DPIF, CSIRO, Queensland DPI and Agriculture WA.
- A workshop to review the Northern Australian Cocoa Development Project with Cadbury Schweppes, Agriculture WA, RIRDC and DPIF agreed to extend the work into a six-year project.

Planned **Outcome I** (Continued)

Increased value of production and profitability of producers in the fruit, vegetable, nursery and cutflower sectors of the horticultural industry.

Link to Corporate Focus Priorities

Achievements 2000/2001

Horticulture, irrigation and crop production research

- Growers project group involved in the screening and evaluation of the Zingiber (ginger) hybrid trial at CPHRF commented on the suitability of some Zingiber hybrids as ornamentals. Some 17 hybrids were short listed for further assessment and reduced further to be incorporated into "experimental testing phase" of the project.

Pest and disease free status

- Two outbreaks of the Queensland Fruit Fly were declared in Ti Tree/Pine Hill areas. With cooperation of growers and residents of Ti Tree these areas are in the final phases of attaining area freedom.
- Meetings held with both the allied industries and Asian vegetable growers to explain the options for controlling a Silver Leaf Whitefly outbreak.
- A survey confirmed the detection of Poinsettia Whitefly at a nursery in Alice Springs. Measures were put in place to assist the industry to deal with this problem.
- Citrus Leaf Miner originally detected in Ti Tree Farms spread to Ti Tree town and Jabiru. The insect now appears to be endemic in the Alice Springs area with little chance of eradication.
- A snake bean Fusarium survey was started. Out of 41 properties surveyed, representing 31 growers, 12 (29%) were free of snake bean Fusarium, 7 (17%) had never grown snake beans on the property and 33 (54%) were affected.
- A joint trial between Horticulture and Entomology began on co-operators' properties in the Venn area near Katherine to evaluate various chemical control methods for false wireworm under different irrigation systems.
- A serious incursion of a native borer, usually found in *Planchonia* sp, was found in ornamental gingers. To help clarify options for control a study was started on the life cycle of the borers.
- The department organised and conducted a forum of leading mango growers. outcomes of the forum included the formation of the NT Mango Industry Association (NTMIA) and employment of a Mango Industry Development Officer.
- Assistance given in the development of the constitutions of both the NT Horticultural Association (NTHA) and NTMIA. Assistance was also provided to both these associations in their strategic planning and operational planning for the coming year.
- The Mango Industry Development Officer was assisted with direction for her program and a strategy to initiate the development of an Industry Development Plan for Mangoes.
- Facilitated a forum with the transport industry and the NT Mango Industry Association Steering Committee to discuss the transport issues impacting on mangoes.
- Facilitated a workshop with the Asian vegetables growers to set directions for the industry in the NT.

Planned **Outcome I** (Continued)

Increased value of production and profitability of producers in the fruit, vegetable, nursery and cutflower sectors of the horticultural industry.

Link to Corporate Focus Priorities

Achievements 2000/2001

Producers' skills in business, production and marketing

- Assisted with the group marketing of mangoes and more particularly initiated a bench marking exercise for one of the mango marketing groups to help understand the need to use this tool in decision making.
- With the aim of developing export marketing philosophy, participated in a visit to New Zealand to examine current practices of Zespri Kiwifruit export operations. This has assisted the NT industry develop a better understanding of logistics of export marketing.
- A publication containing the summary sheet on 'Farm Planning' was translated to Vietnamese and distributed to growers of Asian vegetables
- Assistance was given to Asian vegetable growers to help prepare for a visit by a Singapore delegation to the Northern Territory to discuss potential exports.
- The department in conjunction with the industry brought in an interstate expert in Asian vegetables, Dr Vong Nguyen, who was able to effectively help the Vietnamese growers by communicating the production technology DPIF is promoting to the industry. The potential outcome being improved profitability and commercial operation.
- The completed descriptions for a palm poster were sent to nurseries for comment. Surveyed suitable examples of the palms and cycads to be shown in the poster.
- The department finalised selection of Zingiber hybrids, with industry input for further testing.
- The development of a world first testing station to identify banana varieties resistant to Panama Disease was established. This facility will assist in developing collaborative programs with other agencies.
- A draft agreement was developed and negotiated with CSIRO, NTU and NT Horticultural Association to develop a collaborative program to establish a Centre for Tropical Horticulture Research.
- The department took the lead agency role to progress the Australian membership of Tropical Fruit Network (TF Net), a body set up under the auspices of the Food and Agriculture Organisation.
- The Communication Officer project to non-English speaking vegetable growers was highly commended at the second national project team meeting.
- The formation of the NT Mango Industry Association is seen as a significant development in the mango industry.
- The DPIF initiated and took a lead role in developing a Darwin Landscape Alliance - a group of industry sector and government organisations focussed on the development of the area's streetscapes and roadways. The Chair was passed on to a more appropriate organisation.

Centres for excellence in tropical and arid zone knowledge

Supporting new initiatives

Planned **Outcome I** (Continued)

Increased value of production and profitability of producers in the fruit, vegetable, nursery and cutflower sectors of the horticultural industry.

Link to Corporate Focus Priorities

Achievements 2000/2001

Importation of tropical fruits and flowers

- Through a private collection trip to Thailand a selection of ornamental and cut flower plants were imported which will be incorporated and evaluated.
- 25 pitaya plants from Vietnam; 28 ornamentals from Indonesia and 149 ornamentals from Thailand were imported through the Post Entry Quarantine facility at Berrimah Agriculture Research Centre (BARC).
- The last import of cocoa budwood has arrived from Reading University. Seed has also arrived from Papua New Guinea.
- A comprehensive review of the NT DPIF Post Entry Quarantine facility was initiated. In collaboration with key stakeholders, the benefit:cost of maintaining the existing facility will be investigated.

Cut flowers industry

- Approximately 500 stems of Alpinia including the locally bred Federation Lady decorated the NT Float at the Centenary of Federation Parade in Sydney.
- A workshop on Irrigation in the cut flower Industry was conducted.
- Initial development of a commercialisation and intellectual property plan for Psitticorum flower types. The plan will ensure protection of assets and benefits for research and development for both the NT cut flower industry and the Department.

Establishment of a Panama Disease research area at Middle Point

- Construction of the Banana Quarantine Station at the Coastal Plains Horticulture Research Farm (CPHRF) commenced late December. The necessary ancillary construction and machinery is completed. Banana varieties were planted at the Coastal Plains Quarantine Station site. Completed a detailed budget review in conjunction with the management committee (including industry).
- The Banana Congress in Cairns and the International Conference in Malaysia generated a significant interest in the project.
- The Banana Quarantine Screening Facility was officially opened by the Minister for Primary Industry & Fisheries.

Expansion of CSIRO horticultural research capacity in the Northern Territory

- Discussions conducted by CSIRO and DPIF staff in Katherine & Darwin about evaluating selections from the National Mango Breeding Trial at Katherine Research Station. Also discussed was the possible use of data from DPIF in the development of mango software program through a joint venture.
- The CSIRO planting of potential new table grape varieties progressed at Territory Grapes.

Planned **Outcome 2**

Identification and prioritisation of new horticultural development opportunities and infrastructure needs.

Link to Corporate Focus Priority

Achievements 2000/2001

Cross agency and rural industry input for infrastructure planning

- A grower database for the Katherine Region was set up to improve communications between the growers and the Department.
- Assistance was given to a Katherine nursery to set up a database system to record management activities as part of their Nursery Industry Accreditation Scheme of Australia (NIASA). Success will mean the first Katherine nursery is accredited.
- The Department, Northern Territory Horticultural Association and the NT Mango Industry Association initiated a program to assess and document the mango industry size and capacity to pick, pack and transport its product. Parallel to this is the development of a Horticultural Services Directory, to identify business opportunities and gaps in service capabilities.

Aboriginal involvement in Territory's rural industry base

- The Department visited the Mulinge Outstation on Mt Greenwood Station at the request of ATSIC to assess the potential of an 800 tree mango planting. This relatively isolated environment has significant potential to produce quality fruit.
- Staff of the Northern Land Council, accompanied by consultants, visited the Katherine region to discuss viability of various business enterprises on aboriginal communities in the region with DPIF staff. In addition to pastoral, agricultural and tourist ventures they also discussed the potential for horticultural ventures.

Aboriginal communities with interest in horticultural development

- A review of the Utopia citrus project became necessary when joint venture partners were no longer able to meet equity in the project. DPIF began working with the CLC and Department of Industries and Business in planning a revision of the proposal. Aboriginal agencies also withdrew funding for a large-scale project. The aim is to achieve horticultural development on Aboriginal land at Utopia initially, then onto other areas where water reserves have been identified including Finke.
- Assistance was provided in collating and documenting information to assist aboriginal communities considering horticultural development on their communities.

Additional land in Central Australia

- Horticulture staff were involved in discussions and an inspection of the Rocky Hill area with the owners of the property and potential investors. Three blocks of land, 100ha each, at Pine Hill were surveyed and are waiting to go through the Native Title process.
- Assistance was provided to the Ti Tree community in the development of a strategic plan for the Ti Tree area. This includes infrastructure development for future horticultural development.

Planned **Outcome 3**

New and expanded markets for new and existing horticultural produce.

Link to Corporate Focus Priorities

Achievements 2000/2001

Alternative markets for horticulture produce and niche markets

- The harvest of stone fruit at Ti Tree saw very high quality peach and nectarine varieties which would easily meet market specifications.
- Banana growers continued to diversify into melon crops with the assistance of private consultants and DPIF. They seek to fill the domestic winter market niche.
- Discussions were held between DPIF, ORD and Agriculture WA to develop Terms of Reference for a study on the marketing of Northern Australian citrus.
- The department, Asian vegetable growers, the Industry Development Officer and the Department of Asian Relations and Trade began a proposal to export leafy Asian vegetables to Singapore.

Market access and opportunities for produce products and services

- A sea freight trial in October 2000 saw acceptable mangoes into Singapore. The department, ORD and DTW Logistics are seeking to facilitate a further sea freight of mangoes in controlled atmosphere containers.
- Tippindo Indonesia, owners of Tipperary Station, indicated other interests in diversifying their horticultural enterprise beyond mangoes. They are keen to develop horticultural exports using their network of contacts.
- The department met with Coles Supermarket and Robins Foods to discuss potential bushtucker production in Central Australia.

Consolidation, quality assurance and group marketing in the rural industry

- Discussions were held with the Asian Vegetable Growers Association Executive to discuss their future and formalising a five-year plan. Marketing in general and a single packing shed or label was industry's highest priority.
- A task sheet was developed for the Zingiber Hybrid Project, which included assistance from the department's legal section. The issues of Intellectual Property and Plant Breeders rights are of utmost importance to the success of this project.

Fisheries

Planned **Outcome I**

Increased industry production and higher economic returns from aquaculture on a sustainable basis.

Link to Corporate Focus Priorities

Achievements 2000/2001

- Aquaculture planning completed for Litchfield Shire.
- Planning commenced for Tiwi Islands- terrestrial sites completed and marine site work in progress.
- A land use model was produced which will greatly assist development plans for the rest of the coastline.
- Research papers prepared and submitted to the Aquaculture Conference - Larvae 2001, Ghent, Belgium.
- Joint (DPIF & NTU) applications for potential low technology community aquaculture with Fisheries Research and Development Corporation (FRDC).
- Capture spawning of barramundi cod occurred for the first time in Australia.
- Experimental trials have seen improved survival rates in production of commercial numbers of stage one crabs.
- 6 cohorts of fingerlings reared barramundi for Pivot aquaculture farm at Bathurst Island.

Planned **Outcome 2**

Ecologically sustainable development and use of fish and aquatic resources.

Link to Corporate Focus Priorities

Achievements 2000/2001

- Memorandum of Understanding with Indonesia signed to enable joint projects and technology transfer.
- Fisheries Division met with East Timor Fisheries Officials on a regular basis.
- Red Snapper workshop discussion paper completed for consideration by Government.
- Aboriginal Consultative Committees met on a regular basis and resulted in better recreational access and the resolution of several long running issues. 14 commercial fishing licences held by traditional peoples and two more applications made. Seven consultative committees are currently active.
- All relevant agencies including the Ports Corporation have supported the development and implementation of the Standard Operating Procedures in place for the inspection of foreign fishing vessels and seized illegal entry vessels destined for the Port of Darwin
- Baseline environment study for Port Hurd barramundi farms completed and published.
- Eradication of mosquito fish from a number of suburban ponds and Ilparpa Swamp in Alice Springs.
- Racecourse Creek restocked with native fish following eradication of jewel cichlid October 2000.
- An exotic mussel (potentially invasive) discovered and subsequently removed from a US Navy vessel thereby prevented from establishment in Darwin Harbour.
- Assessment of prototype boat envelope for suitability as marine pest management tool commenced. Further modification required by a private enterprise designer.
- A virus similar to White Spot was detected at Darwin Aquaculture Centre in imported prawns and the matter was resolved. Tests of harbour crustaceans indicate no occurrences in the wild.
- New protocol for disease minimization in aquaculture introduced.
- Maintenance of an effective legislative framework to allow sustainable management of NT aquatic resources.

Planned **Outcome 3**

Expanded and profitable commercial fishing sector.

Link to Corporate Focus Priorities	Achievements 2000/2001
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- Status reports for all major fisheries published.
- Mud Crab Fishery review well progressed and draft discussion paper provided to industry.
- Spanish Mackerel Fishery discussion paper on future management options, prepared, circulated and public consultation period completed.
- Fisheries assessment report completed for all major fisheries.
- Fisheries administrative arrangements further streamlined.
- Draft Research and Development Plan completed for Offshore Demersal Fishery.
- Developmental fisheries application process renewed and new process implemented.
- Discussion paper for the development of the Demersal Fishery completed.

Planned **Outcome 4**

Expanded and profitable recreational fishing sector.

Link to Corporate Focus Priorities	Achievements 2000/2001
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- Buy-back of coastal net licences for Darwin Harbour commenced.
- Closure of the McArthur River to commercial barramundi fishing including the buyback of a licence announced.
- Stocking of Manton Dam completed.
- World Conference on Recreational Fishing (May 2002) fully funded by sponsorship.
- Junior fishing clinics completed and interstate tackle shows attended.
- The Division supported both the Barramundi Nationals and Barramundi Classic fishery competitions.

Planned **Outcome 5**

Comprehensive service of surveillance, apprehension and prosecution for foreign fishing activities.

Link to Corporate Focus Priorities	Achievements 2000/2001
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- Intercepted 50 foreign fishing vessels, which resulted in successful prosecutions.
- 22 vessels were sunk or destroyed, security deposits were paid for rest of vessels.
- Completed patrols as scheduled.

Resource Management

Planned **Outcome 4**

Prevention of the introduction and spread of weeds within, into and from the Territory.

Link to Corporate Focus Priorities

Achievements 2000/2001

Protection of the NT economy, industries and environment from the adverse impact of weeds

- The NT Weed Management Bill was assented to in March and commenced on 1 July 2001. Information on the Act was disseminated to industry and the general public through information sheets, radio, the Internet, and by Weeds Officers. The NT Weeds Management Strategy, 1996-2005, continues to provide a framework for management of weeds in the NT.
- Community awareness of weeds issues was raised through media items, show displays, posters, pamphlets and activities. Specific groups targeted included recreational fishermen, Aboriginal communities and rural block holders.

Northern Region

- Rearing of a new agent for biological control of Mimosa, a root-eating beetle, began. Preliminary results indicate a significant decrease in seed production.
- Strategic and cost effective mimosa management strategies were developed in collaboration with Aboriginal stakeholders. The Mimosa Services and Funding Agreement has provided for training and operational resources for communities in the Arnhem Land, Delissaville/Wagait/Larrakia, and Daly River/Port Keats Aboriginal Land Trusts, coordinated by a Weeds Branch officer. Approximately 4,000 hectares of mimosa is being treated annually, and the program has made significant inroads into mimosa management on Aboriginal lands.
- The department and the Northern Land Council initiated the Top End Aboriginal Land Management and Employment Strategy (TEALMES) project. The project provides funds for community land management crews to tackle land management problems and to develop land management enterprises. The work of these crews complements the Mimosa Services and Funding Agreement and ensures community members have the skills and resources to effectively manage their country. The total project budget is \$7.1M over four years.
- Continued regular inspections revealed no further outbreaks of Cabomba and Alligator weed, which are part of an eradication program.
- Overseas investigation continued for agents for control of bellyache bush, hyptis and Mexican poppy. The bellyache bush management program for the Upper Daly catchment continued successfully.

Planned **Outcome 4** (continued)

Prevention of the introduction and spread of weeds within, into and from the Territory.

Link to Corporate Focus Priorities

Achievements 2000/2001

Katherine Region

- A major project was developed for strategic management of Parkinsonia across the Katherine, Victoria River District, Roper River, Gulf and Barkly tablelands regions. A submission for funding was made to the Weeds of National Significance (WONS) program.
- Management of Mimosa in the Katherine region was successful in preventing any new seed being produced in all sites.

Southern Region

- The division led in the national strategy for control of Athel Pine. An Athel Pine National Strategy was produced and approved under the Weeds of National Significance (WONS) program, and an NT Athel Pine strategy completed.
- Weed mapping and control works targeting specific weeds were carried out on a number of southern region properties, and extension and awareness programs were provided to Aboriginal communities.

Planned **Outcome 6**

Diversified and intensified primary industry development

Link to Corporate Focus Priorities

Achievements 2000/2001

Diversification and intensification of primary industry

- A major research project has been carried out at Mt Sanford, in the Victoria River region, investigating the long-term effects on pastures of a range of stocking rates. Associated projects on the same site examine weaner management, the effects of rotational burning, and the effect of different stocking rates on rangeland biodiversity. Results indicate that the key to good production (ie. high stocking rates and sustainable pastures) is achieving even grazing across the paddock, which means fewer cattle per water point. Other results indicate that it is likely that fire can play a major role in maintaining even grazing. As a result of this study, a leading pastoral company in the region is developing its own large-scale research program to better understand the commercial application and implications of the research findings.

Planned **Outcome 7**

Integrated Programs for Sustainable Land Management

Link to Corporate Focus Priorities

Achievements 2000/2001

Development of a conservation strategy in partnership with industry

- A framework for the strategy has been endorsed by the NT Cattlemen's Association Executive, and the Alice Springs Pastoral Industry Advisory Committee (ASPIAC). Discussions continue with the Centralian Land Management Association (CLMA) on how to progress the strategy.

Sustainable rangeland research and development supported by industry

- An industry and departmental panel progressed the review of the Northern Territory Drought Policy to its final phase. The purpose was to integrate it in line with Commonwealth EC (Exceptional Circumstances) policy as agreed by the NT at ARMCANZ in 1997, and to increase its efficacy for industry members in the NT.

Southern Region

- Most historic and compatible rangeland assessment data from the Alice Springs region were consolidated into a newly developed, year 2000 compliant database, which will ensure its ongoing ready accessibility.
- Differences in pasture composition continue to be documented between long term grazed and ungrazed pastures at a single location in Central Australia. Results of an associated study, which examined long term effects of grazing on soil compaction, were published.
- Detailed information regarding the effects of fire on pastoral vegetation in Central Australia continued to be gathered. A review of existing information and an extension guidebook are nearing completion.
- In the Tennant Creek region, 57 participants from 6 stations completed the Barkly Rangeland Management Course. A three poster series to complement the course was distributed to participating stations.
- Calibration of Faecal NIRS technology, for predicting diet quality in grazing cattle in the Barkly Tablelands region, began. The first year of data collection involving six separate feeding trials was completed. The data contributed to the calibration of this technology and improved its accuracy in the Barkly District.
- Estimating pasture yield through satellite imagery began on the Barkly Tablelands. Data were collected from eight participating stations across the Barkly Region and analysis continues. Interested stations received maps of their stations, which were overlaid onto the satellite imagery to show the diversity of country and to enhance pastoralists' knowledge of the technology.

Planned **Outcome 7 (continued)**
Integrated Programs for Sustainable Land Management

Link to Corporate Focus Priorities

Achievements 2000/2001

Sustainable rangeland research and development supported by industry

Katherine Region

- The Feral Animal Control Program in the Victoria River District is into its third year. A total of 47,000 animals have been removed to date, comprising 38,331 donkeys, 6,568 horses and 2701 other animals, mostly feral pigs.
- Completion of the NT and Kimberly Aussie Grass project provided calibrated maps of seasonal pasture growth, total standing dry matter, curing state and grassfire risk. These can be downloaded from the Aussie GRASS web-site for the NT.
- Curing and fuel load standards for selected grassland communities in the Katherine region were completed. The calibration of grass fuel characteristic, such as moisture content and curing state, with remotely sensed NDVI imagery enable the continued development of grassland fuel curing and fire risk maps from satellite imagery.
- Education materials were developed for a Grazing Land Management workshop designed for delivery to the pastoral industry in the Katherine region.
- Significant advances were made in the development of methods for estimating carrying capacity. Factors that determine grazing distribution and pressure across variable grazing lands were identified.

Resource Protection

Planned **Outcome I**

An effective quarantine barrier for the Territory.

Link to Corporate Focus Priorities

Achievements 2000/2001

Pest and disease free status

- Bananas growing in high risk areas of Darwin such as the port and airport precincts were surveyed and found free of black Sigatoka disease.
- Several consignments of bananas originating in a disease outbreak area of Queensland were seized and destroyed.
- Cut flowers and nursery stock from other States were monitored for pests and diseases on a routine basis.
- After intensive negotiations, agreements were reached between other States and the NT on specific import requirements for nurseries and florists.
- Regular monitoring for spiralling white fly in Darwin nurseries commenced.
- Detection and removal of a longicorn beetle infestation in a Darwin house.
- The identification of a wax scale new to Australia necessitated notification to the National Office of Animal and Plant Health in Canberra.
- The gazetted pest, poinsettia whitefly, was confirmed from Alice Springs nurseries.
- Damaging populations of poinsettia whitefly also occurred in vegetable production areas in the Top End. After discussion and agreement, control strategies were outlined to growers at a series of meetings and farm visits.
- Post barrier surveys of Darwin and environs did not detect any exotic weed incursions from East Timor.
- A suspected exotic pest incursion provisionally determined as the Indian cotton leafhopper; a pest of cotton, some field crops and vegetables, is now believed to be a native species. The organism appears to be distributed in Darwin, Gove Peninsula, near Townsville and in East Timor; and restricted to beach hibiscus.
- The ash whitefly was detected at Alice Springs. Previously, this species had been recorded in South Australia (1997) and other southern States.
- Due to a detection of lily thrips in Victoria, investigations were conducted to determine if lily bulbs were imported into the NT. Only one outlet was identified, which had no lily bulbs in stock.

Planned **Outcome I** (continued)

An effective quarantine barrier for the Territory.

Link to Corporate Focus Priorities

Achievements 2000/2001

Pest and disease free status

- Queensland fruit fly was detected in the horticultural production areas at Arid Gold Date Farm and near Ti Tree. The latter required a significant and ultimately successful eradication campaign. One of the Accredited Production Areas (APA) accomplished reinstatement of fruit fly area freedom while two other APAs should be declared free before table grape production commences in 2001.
- Significant Medfly outbreaks in SA, meant additional trapping and increased vigilance for Medfly host produce arriving from that state.
- The NT plant and plant material entry requirements were redrafted.
- Several amendments to notices concerning plant import requirements were finalised and gazetted.
- Darwin nurseries sending produce to Western Australia were monitored for Melon Thrips and Western Flower Thrips.
- A Quarantine Officer was appointed in Katherine in November 2000.
- All produce requiring certification or Government Officer endorsement for treatment, inspection or area freedom was completed to ensure interstate market access. 1320 appointments were attended and 168 audits were conducted.
- Plant Pathology liaised with Agriculture regarding needs to change peanut quarantine for the NT.
- The quarantine plant pathologist continued to provide inspection services for the post-entry quarantine facility at Berrimah.
- The plant pathology laboratory continued to provide identifications of diseases intercepted in plant materials seized by quarantine.

Drafting of amendments to the Plant Diseases Control Act

- A first draft of the Act was received from the Parliamentary Drafting Office.
- An extensive review of legislation instruments began.

Planned **Outcome 2**

Accurate and timely water, soil, plant and pesticide analysis

Link to Corporate Focus Priorities

Achievements 2000/2001

Timely soil, plant, pesticide and water chemical analysis

- Plant pathology processed 320 diagnostic cases during the year.
- The Chemistry Laboratory analysed 9717 samples during the year with the majority of analyses reported within the agreed turnaround times.

Planned **Outcome 3**

Improved exports of livestock and other products

Link to Corporate Focus Priorities

Achievements 2000/2001

Improved exports of livestock and other products

- Protocols were developed for exports of slaughter camels to Malaysia with a shipment of live camels trialed in February 2001. A positive spin-off of this initiative was further live camel exports to Brunei.
- Shipments of live cattle recommenced to Vietnam.
- Discussions with Indonesia regarding hormone growth promotants and tick fever certification resulted in no change to their status.
- Discussion commenced with Indonesia regarding new cattle breeder protocol.
- Discussions commenced with Thai authorities regarding possible future feeder and breeder cattle exports. Negotiations continue.
- Shipments of meat and dairy products from Australia to East Timor increased as a direct result of Foot and Mouth Disease outbreaks throughout the world.
- Fruit and vegetable shipments to East Timor increased by 50%.
- Increased shipments of rambutans to Japan.
- Mango exports to the Middle East maintained.

Commercial Development

Planned **Outcome I**

Profitable rural businesses based on productivity enhancement, improved management practices and access to skills training and professional advice.

Link to Corporate Focus Priorities

Achievements 2000/2001

Producers' skills in business, production and marketing

- 335 participants in Farm Business Improvement program (joint NT/ Commonwealth program).
- 265 industry participants in 26 Property Management Planning workshops.
- Pastoral Water Enhancement Scheme payments of \$211,000 for twenty one payments.
- Fertiliser Freight subsidy for 4634 tonnes totalling \$254,636. (Details for all schemes are in the appendices)
- New agreement negotiated successfully with the Commonwealth Government to extend the new FarmBis from 1 July 2001 to 30 June 2004.
- Two new FarmBis facilitators began, one in Darwin, one in Alice Springs to work with the Northern Territory coordinator who is based in Katherine.
- Continued facilitation of investment development opportunities and promotion of Northern Territory agribusiness potential both nationally and internationally.

State of the Rural Food & Fibre Industry, **4**
Northern Territory



Summary 4. |

Generally, the state of the rural food and fibre industry is positive, with an increase in gross value of production, from \$420M in 1999 to an estimated \$439M in 2000. The table below, using data from the Office of Resource Development, provides comparative information for the past five years for the total sector and each of its major industries. Overall, there has been steady growth during this period, signaling strengthening in industry development and the market, underpinned by government policy, programs and services. In 2000, within the total sector, there were increases in the gross value of production for cattle, horticulture and fisheries. Individual commodities within sectors sometimes vary.

Gross Value of NT Rural **Food & Fibre Production**, 1995 - 2000 (\$ Millions)

Year	Sector						
	Cattle	Horticulture	Fisheries	Other Livestock	Field	Crops	Total
1995		138	45	113	14	3	314
1996		131	48	88	15	2	285
1997		149	62	126	15	6	357
1998		136	60	142	15	8	361
1999		161	84	149	17	9	420
2000		172	92	151	18	6	439

There has been a focus on increased production across all sectors during the year, and this is expected to be ongoing, notwithstanding issues like disease management and control and the need for responsive and appropriate infrastructure to support expansion. Government direction to facilitate and promote industry expansion at all levels is likely to continue to be a leading factor in development.

During the year assistance provided by Government included:

- funding of \$130,000 to the Northern Territory Horticultural Association.
- joint funding (by the department and the Department of Sport and Recreation) of \$80,000 to the Amateur Fishermen's Association of the NT (AFANT).
- provision of an office and vehicle to AFANT.
- funding of \$240,000 to the NT Seafood Council, sourced from an industry levy and the Commercial Fishing Licence Fee for employment and other administrative costs.
- outsourcing of government employees with specific expertise to the NT Seafood Council to facilitate market opportunities.

In addition, several joint industry/government open days were held.

Industry services, (resource management and protection) provided by the department continued to play a vital role in supporting industry development and growth, through technological advances, advocated industry management principals and techniques, quarantine and response strategies and action.

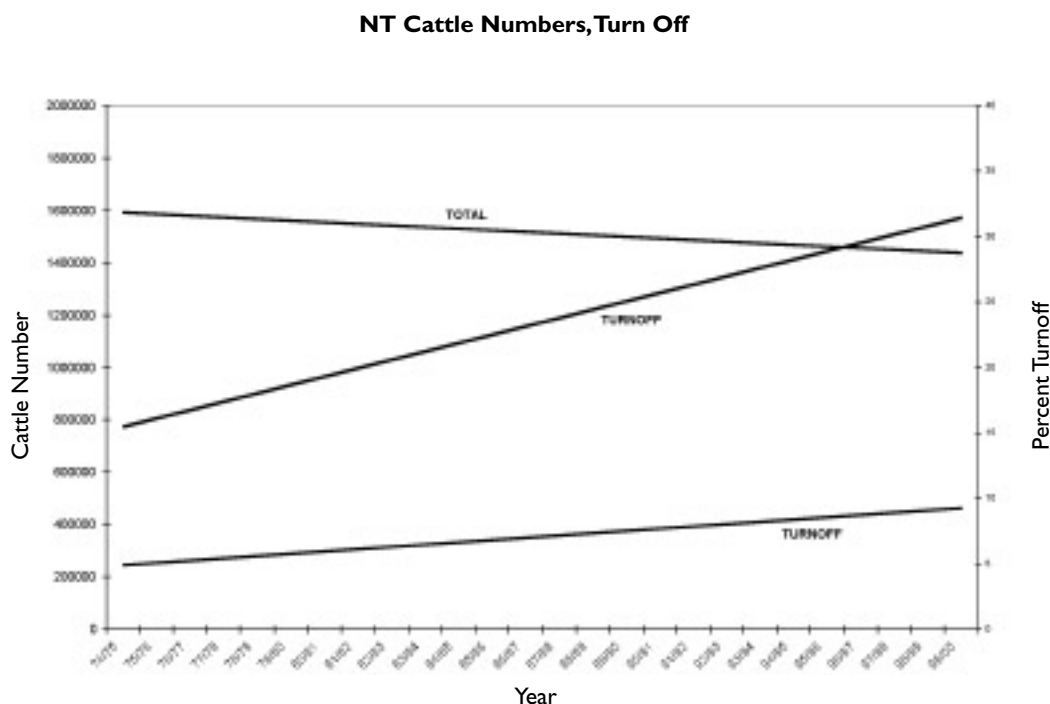
Pastoral Industry 4.2

In 2000, the estimated gross value of production for the livestock industry was \$190M. Cattle dominated with higher turnoff weights and the lower Australian dollar boosting prices and incomes. The industry now represents about 42% of the total Territory rural industries and fisheries production. However, the contribution of the pastoral industry to the Northern Territory economy is much higher as it is a major employer and provides flow-on benefits to other industries such as transportation and materials supply.

An estimated 449,000 head of cattle were turned off from Territory pastoral properties to abattoirs, interstate and overseas markets in 2000, a 3% increase over 1999. Of the total NT cattle turned off, 54% were destined for live cattle exports overseas, 43% went interstate and 3% were slaughtered at NT domestic and export abattoirs.

The live cattle export trade has grown from 25,000 head in 1990 to 222,670 in 2000. The total number of cattle exported through the port of Darwin in 2000 was 299,200, including approximately 77,000 head of interstate cattle. Indonesia remains the major buyer of Territory cattle despite problems with its currency and political uncertainty and is expected to increase imports in the future. Because of a perceived trade imbalance and concerns over the danger of Bovine Spongiform Encephalopathy, the Philippines market remains depressed, although from March 2001, the trade began to recover. The Middle East market, particularly Egypt, is developing well with an increase in imported cattle over the previous year.

Figure 1
Northern Territory Trends in Cattle Numbers, Turnoff and Turnoff Percentage



The lines shown in the figure are trend lines representing total cattle, number of cattle turned off and the turnoff percentage, which is the number of cattle turned off as a percentage of total cattle. Total cattle numbers in the NT have not changed significantly over the last 25 years. The downward trend line results from a peak in numbers in 1980 when the population approached 1.8 million. However, in 1975 and 2000, the population was approximately 1.6 million.

The number of cattle turned off during the period has risen from 160,000 in 1975 to 450,000 in 2000, resulting in a very positive trend in the turnoff percentage. This figure has risen from around 10% at the start of the period to over 30% at the end. This very significant trend reflects the improvements in herd management and nutrition as well as a change to younger turnoff. The BTEC campaign and the introduction of Brahman cattle into the Territory played a part in this change. Continuation of these trend lines indicates that in five years, the turnoff percentage will be 35% and the total turnoff from the NT will be close to 600,000.

The trend lines in the above figure are a reflection of the increasing expertise and awareness of industry managers and a general improvement in property management.

Production Systems and Increased Supply

The Overseas Market Development program ensured that existing markets such as the Philippines and Indonesia are maintained despite problems with political stability and monetary fluctuations. At the same time, vigorous promotion of NT cattle into other countries has provided good prospects for the future in countries such as Vietnam, Thailand, Malaysia, Egypt and Jordan.

The increasing demand, combined with the trend to larger ships in the trade, will affect the ability of the NT to supply cattle in the future. The use of larger ships, a trend which began with the loading of over 16,000 head of cattle onto the Danny F at the East Arm Port in Darwin in June 2001, will place increasing pressure to have large numbers of cattle held in the vicinity of the port. A port such as Townsville has a relative advantage in this aspect, with in excess of 3 million head of cattle in the region compared with only 1.6 million in the NT.

The cattle industry of the NT will need to position itself for the future demands of the large ships by increasing the total population of cattle and hence the turnoff of cattle available for the live trade.

The Department is developing a strategy to increase production from the NT herds. The strategy includes increasing cattle numbers by intensification of infrastructure such as water and fencing. A major trial conducted with Heytesbury on Mt Sanford has highlighted the possible increases in the utilization of native pasture by the provision of more water points (refer to Section 3.4 Performance against Planned Outcomes: Pastoral: Planned Outcome No 2). By increasing waters, the grazing cattle are not forced to walk large distances and are able to utilize the pasture within a restricted grazing radius more efficiently. The Mt Sanford work has demonstrated large increases in carrying capacity without affecting the pasture or the environment.

The outcomes of the Mt Sanford trial are applicable to regions of the Territory other than the Victoria River District, particularly the Barkly region, although the lower and less reliable rainfall needs to be taken into account. Barkly companies are investigating the application of this work to their situations.

A demonstration trial into the effects of water medication in the Alice Springs region has opened the possibility of increasing production by the utilization of country generally regarded as second class grazing or retained as a fodder reserve for dry times (refer to Section 3.4 Performance against Planned Outcomes: Pastoral: Planned Outcome No 2). The cattle herd in this region is based on temperate breeds. A trend towards breeds suitable for the live cattle trade has begun, although commitment to this trade may mean a loss of the southern market. Crossbreeding trials are being conducted to develop crossbreeds that are suitable for both the southern market and the live trade.

Development in the Top End of the Territory for primary production is minimal, with only 0.3% of the NT being cleared for all purposes. Pastoral intensification is occurring in the Sturt Plateau south of Katherine and in the Douglas/Daly. One of two blocks in the Stray Creek subdivision was sold in December 2000. Combined with increasing production in the extensive pastoral areas, intensive development close to the port will provide an opportunity for alliances between producers from both regions. The end result will be a pool of suitable export cattle held in close proximity to the port.

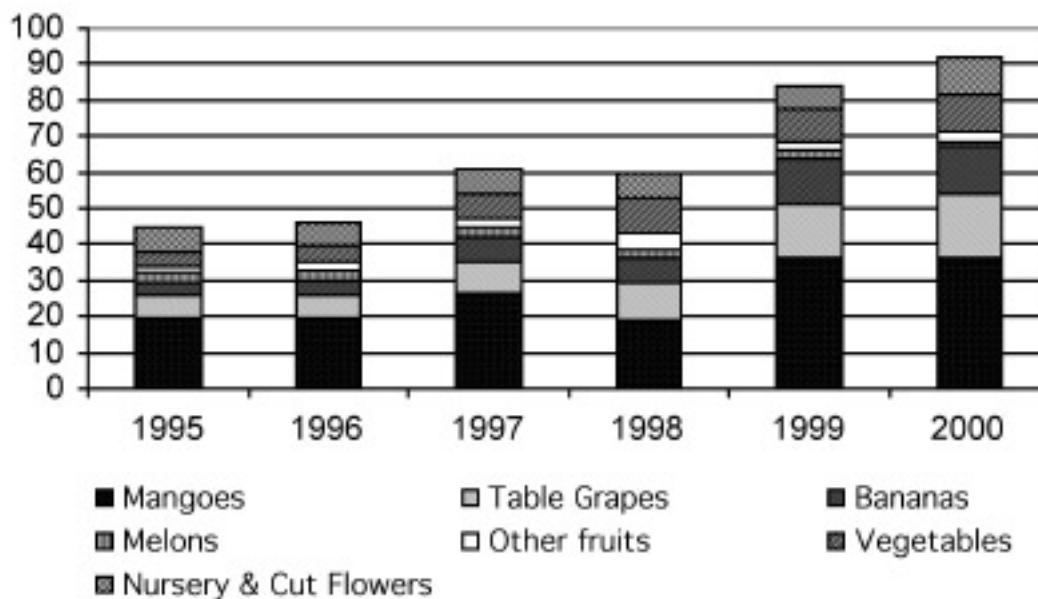
The NT Government commissioned a study into the Port of Darwin in relation to the live cattle trade. The report of this study identified changes in the usage of the port by shippers from interstate. Darwin offers considerable advantages in shipping costs over the major Queensland ports and there is an established chain of infrastructure for transport to Darwin. A priority now is the facilitation of this pattern of cattle movement from Queensland involving transport companies, intermediate holding yards and Government departments.

Horticultural Industry 4.3

The estimated gross value of production of the NT horticultural industries was \$91.7M in 2000, an increase of nearly 9% over the previous year.

The major sectors continue to be mangoes, followed by table grapes, bananas, vegetables, particularly Asian vegetables, cutflowers and the nursery industry.

Figure 2
Value of NT Horticultural Production
1995-2000



The industry is currently dominated by mango production. Despite some major setbacks the mango production for 2000 was 11,952 tonnes valued at over \$35M. The producer base of 550 growers have orchards ranging in size from 50 to 30,000 trees. Territory mangoes are produced in September, October and November, starting earlier than any other Australian state and thereby commanding higher prices. Around 800,000 mango trees are in the ground and these are capable of producing between 8 and 16 million trays, (approximately 56,000 to 112,000 tonnes) in the next 5 years.

The value of the banana industry in 2000 was \$13M and produced 7,515 tonnes of bananas. Production has grown in recent times from supplying the local market to supplying South Australia and Western Australia. The increase in reports of Panama Disease threatens a total collapse of the banana industry unless a solution can be found. Panama Disease is a soil-borne disease caused by *Fusarium oxysporum* f. sp. *Cubense*. It is capable of causing wilting and eventual death of susceptible varieties of bananas. No known chemical or cultural controls exist for this disease.

The NT Government approved funds to construct a purpose built high security screening facility to identify resistant banana varieties, which may offer a longer-term solution to the problem. The facility was completed in April 2001 at the Coastal Plains Horticultural Research Farm and planted with 16 banana varieties, some of which are reported to be tolerant to Panama disease. The department will be seeking to attract more suitable germplasm from international sources for future testing to identify a commercially suitable variety for the Northern Territory banana industry. The recent decline in the area planted to bananas due to the disease has impacted upon the scope of short-term expansion of the industry sector.

Table Grapes are the major commercial horticultural products from Central Australia and production is significant with some 3,000 tonnes produced in 2000 and valued at \$18M from only 300ha of land.

Asian vegetables have emerged as a significant product with a large number of market gardens supplying both the southern markets and local consumption. The total vegetable industry produced 4,207 tonnes in 2000 and the gross value was over \$10M.

The Darwin region is renowned for supplying markets with unique, new and diverse tropical cut-flowers. Heliconia and ginger cut-flower growing has rapidly increased over the last ten years and represents the majority of the total flower production in the Northern Territory.

The nursery industry more than doubled over the past ten years from 22 nurseries in 1990 to in excess of 50 in 2000. The Horticulture Division is working with industry to develop and trial new and exciting ornamental products for the market place and to encourage the industry to adopt best practices as a key factor to influence profitable and sustainable growth.

Citrus crops may play a major part in the future expansion of horticulture in the Northern Territory. Tropical fruits such as jackfruit, carambola, pitaya, durian and a number of other exotic fruits are being trialed by both the division and growers with potential for production in the Territory's tropical region.

The Darwin region continued to dominate with nearly 70% of the gross value of production. However, some significant increases occurred in the Ti-Tree and Katherine regions. The total area planted to horticultural crops continue to increase, but it is still very intensive land use, estimated at 6,000 to 7,000 hectares.

Production Systems and Increased Supply

Estimated mango plantings in the Northern Territory total an estimated 800,000. Plantings appear to be increasing. Opportunities for development of volume for delivery to overseas markets may emerge in the next 3 - 5 years as a consequence. "Celebration", the mango variety released in 1999/2000 was planted in numbers during 2000/2001 and will provide commercial level assessment data for the future. This variety has more attractive fruit in terms of appearance and quality. The mango industry is entering a phase of significant reorganisation with new packing and product consolidation/storage facilities opening to service a rapidly expanding supply capability. The industry is improving its administrative and support mechanisms with the development of the NT Mango Industry Association and employment of an Industry Development Officer. It is expected that a gradual industry restructure will occur as the gap between the costs of production and marginal rates of return closes and larger enterprises or groups become relatively competitive.

Table grape plantings increased to 350 hectares in 2000/2001 in Central Australia, with indications of further expansion.

The department continued to coordinate its efforts in relation to expansion and sustainability of production in the mango and grape producing sectors through collaborative scientific trials (e.g. flower inducing treatments, irrigation studies) and provision of national and international expert advice as identified. Disease containment and management is also constantly being monitored and reviewed (e.g., panama disease in bananas, phytophthora disease in durians, orange stem pitting (OSP) virus in the citrus industry).

In the Darwin and Katherine regions renewed interest in producing melons, particularly rock melons emerged, underpinned by investor interests and the diversification of crop production in the banana industry. High quality melons for a short but under-supplied domestic market niche have the potential to develop into a significant industry sector.

The trend of banana growers diversifying in order to reduce the risks from Panama Disease is likely to continue. It is clear, however, that existing banana growers wish to reenter the industry as soon as a resistant variety can be found. NT banana plantings may expand despite Panama Disease if Black Sigatoka is not eradicated from Tully in Queensland in the medium term.

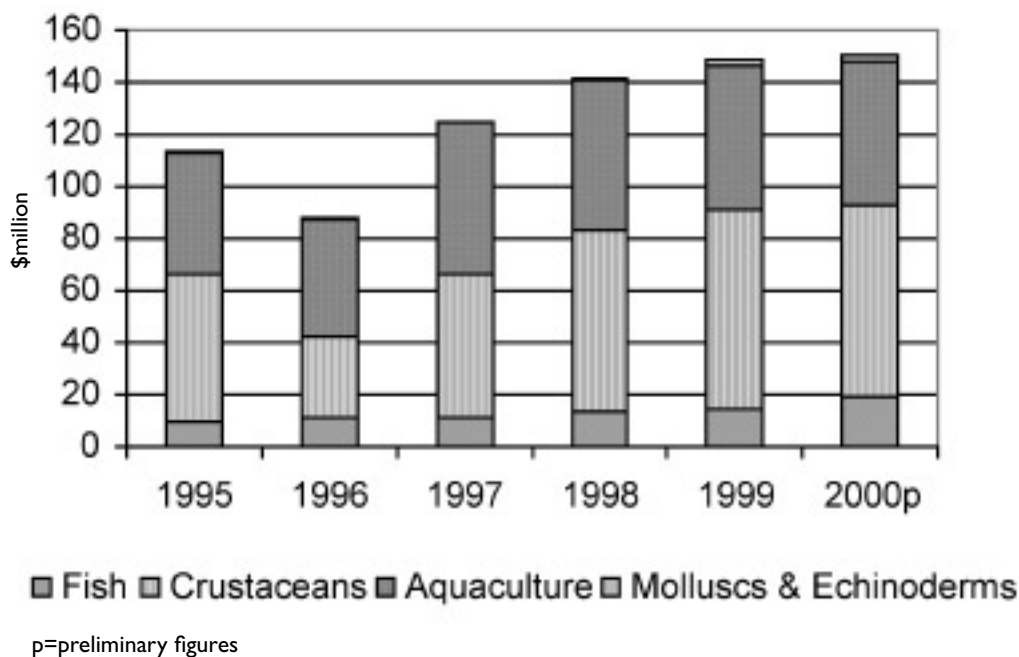
The nursery industry is experiencing a period of consolidation both in terms of production and industry unity and expected to utilise emerging opportunities for expansion. Nurserymen are seeking a competitive advantage by introducing and/or developing their own unique nursery products and market positions.

The development of new cut flower products by DPIF has been received with enthusiasm by the cut flower industry that is keen to participate in the commercialisation process. The cut flower industry is maturing rapidly and plans to formalise its strategic direction through an Industry Development Plan.

The market opportunity for organic or low pesticide fruit and vegetable production systems is yet to be tapped in the NT. The possibility of local farm isolation, low pest and disease levels and a long dry, but relatively warm, 'winter' period could provide advantages over other production areas for this particular market segment.

In 2000, the estimated GVP for the NT commercial fishing industry was \$156M, which represents approximately 36% of total Territory rural industries production. Principal sectors included the Commonwealth managed Northern Prawn Fishery with an estimated GVP of \$61M, pearl aquaculture \$55M and the wildcapture mud crab sector \$13M. In addition, an estimated \$50M was spent directly on recreational fishing activities.

Figure 3
Value of NT Fisheries Production,
1995-2000



The gross value of production (GVP) of the wildcatch sector has doubled in the past three years. In aquaculture expansion of the pearl culture industry, sea cage culture for barramundi, expansion of prawn aquaculture and commercialisation of mud crab aquaculture is underway.

Catch and effort especially in the finfish sector, continues to increase. As product quality is improved across the sector the NT industry can expect higher returns for its product.

Commercial fisheries took over 9,500 tonnes of seafood from NT waters during 2000, a 9.5% increase over 1999. Of the total, 51% was for crustaceans (prawns and mudcrab), the remainder finfish. The catch for the year for prawns was down significantly (10%). It is suggested the impact of environmental factors, like El Nino, combined with overfishing of tiger prawns, reduced prawn catch. The mud crab fishery increased tonnage by 29% from 1999 to 2000.

South East Asia (mainly Singapore) is the main export market for mud crabs with a developing market in the US. Approximately 200 tonnes of mud crab were exported in 2000 - 2001. Currently, most NT product goes to Queensland and/or Sydney and some export of NT product is undertaken from those ports due to lack of infrastructure in the NT. Potential exists for increased supply of "fresh on ice" product which is preferred by the market. The wildstock prawn sector markets to Singapore and Japan present little scope for development due to sustainability limits. Aquaculture development is expected to increase the availability of product to both the crustacean and finfish markets.

Production Systems and Increased Supply

Traditionally the pearling industry has sold its products to Asia, particularly Japan, whereas the food producing sector of the commercial fishery has been domestically oriented. With the increasing production from the latter sector in the last few years, this pattern is changing with increasing volumes being exported to Singapore, Hong Kong, Taiwan and North America. Europe is regarded as an emerging market with great potential.

The Northern Territory Seafood Council (NTSC) formed a marketing committee that coordinated participation at events like the Asian Seafood Festival in October 2000, assisting industry members to identify and access new markets.

Wild catch Sector

The industry has continued to look for opportunities to grow and become more profitable. A workshop between government, industry and external experts was conducted to identify areas of growth in the NT's offshore demersal fisheries. Industry has already taken the initiative of changing its gear from predominantly line fishing to fish traps, and explored new fishing areas. As a result profitability has increased in both the Timor Reef and Demersal fisheries.

The NTSC drafted the first of a series of seafood safety plans in preparation for new seafood legislation, which will take effect within the next two years. The medium term expectation is that all fishing businesses will need to have such a plan for them to continue to sell seafood.

The industry has continued its support for licence reduction schemes in the coastal line, demersal, Timor Reef and shark fisheries. The restructuring is aimed at removing latent fishing effort and making those who remain in the industry more profitable and the fishery sustainable in the long term.

The department has granted a number of new licences and permits to enable new fisheries to develop, including jellyfish and squid. Gear trials, processing techniques and marketing are all being investigated by the developers.

Aquaculture

The Territory Aquaculture Development Advisory Committee (TADAC) is working to the five-year aquaculture industry development plan "Into the Blue" and an Action Plan from an industry wide workshop held in March 2000. A key part of these plans is to develop regional aquaculture plans. The Darwin regional plan is nearly complete and will be included in wider Litchfield Shire Planning. Two others are due for completion by the end of 2001/02.

A reorganisation of the Aquaculture Branch will better meet the needs of industry, particularly in the areas of extension and on-farm assistance. Pivot Aquaculture has developed a sea cage barramundi farm at Port Hurd, Bathurst Island. The Darwin Aquaculture Centre produces the fingerlings to supply the Pivot venture.

A collaboration between DPIF, Queensland Department of Primary Industry and Seafarm, a large aquaculture company based in Queensland, has commenced a Fisheries Research and Development Corporation funded project to examine the commercialisation of mud crab aquaculture. If successful, this may quickly develop into a substantial industry to rival prawns.

The Darwin Aquaculture Centre has a development agreement with McRobert Aquaculture to trial new tank technology which is aimed at improving survival and performance of fish and crustacean larvae. A similar arrangement has been entered into by McRobert Aquaculture and a local aquaculture company to provide a check of results based on a commercial farm.

White Spot Syndrome Virus (WSSV) was discovered in a batch of prawns being used to feed the mud crabs at Darwin Aquaculture Centre. Prompt action, including the destruction of stocks and cleaning tanks, by Darwin Aquaculture staff prevented the possible spread of WSSV. Intense negotiations with the Commonwealth resulted in shifts in Quarantine Barrier Control protocol to protect the growing prawn aquaculture industry.

Recreational Fishing

The Amateur Fishermen's Association of the Northern Territory (AFANT) has been on a major recruitment drive and now has over 2000 members, many of whom are club affiliates.

AFANT has also played a key role in the NT component of the National Recreational Fishing Survey, the data collection for which concluded in June 2001.

AFANT has taken the lead role in holding the World Recreational Fishing Conference in Darwin 2002. A Steering Committee and International Advisory Committee have been formed, and a conference convenor selected. AFANT and the Fisheries Division of the department have worked throughout 2000/01 to secure sponsorship and ensure that the conference receives adequate national and international exposure.

The department and the Ministerial Advisory Committee on Recreational Fishing initiated a review of fish possession limits in order to bring fish possession limits more into line with sustainable fishing practices. The review was finalised in 2000, resulting in the inclusion of spanish mackerel; barramundi and jewfish, in the limit, and the introduction of a possession limit of 5 for golden snapper. These changes have had general support from the recreational industry.

The department has regularly sought AFANT's advice on new recreational fishing infrastructure. In the last year, the department constructed one new artificial reef near Lee Point.

Indigenous fishing

Indigenous fishing is carried out mainly adjacent to each clan's country. An indigenous fishing survey across northern Australia is currently being undertaken by Fisheries Division to quantify seafood use. Indigenous communities will continue to rely on fish as an important part of their diet and culture. Protecting these values will involve managing fisheries in a manner that does not reduce the availability of fish to aboriginal communities.

Summary

The trend in value for commercial, recreational and aquaculture sectors is up, although individual commodities within sectors are sometimes variable. This positive outlook reflects a strong industry based on good aquatic resource management by all stakeholders.

The utilisation of aquatic resources will continue to take account of indigenous needs.

Resource Management 4.5

Weeds are now rated as the greatest threat to land management throughout Australia. In order to achieve ecologically sustainable development and minimise costs to landholders, the department took major steps during the year to integrate control efforts, accelerate extension and awareness, and lead in control techniques and research. To this end significant achievements were:

- the Weed Management Act was passed,
- a major Aboriginal training program in resource management and enterprise initiated and entered into with the Northern Land Council,
- two national strategies for Weeds of National Significance completed,
- further research and release of biological control agents undertaken, and
- departmental membership of the new Weeds Cooperative Research Centre.

The development of an integrated database and geographical information system (GIS) continued. Significant advances were made in the development of methods for estimating carrying capacity. Factors that determine grazing distribution and pressure across variable grazing lands were identified. Indications are that flexible stocking rates and additional waters can sustainably increase production, and industry is keen to apply this research on a broad scale trial. Transfer of technology skills is a growing need in pastoral management. A dedicated officer was made available to address the task on site, and the opportunity keenly taken up by industry.

Data management, including GIS services, further development of the mapping system, and extension and awareness services continued. Major progress was made with land councils in the implementation of the VRD feral animals control program as it enters its third year. The Conservation Strategy being developed with industry for pastoral land is now being discussed at the regional level in Alice Springs. The final draft of the Drought Review (EC) has been circulated to industry. Integration of resources with various agencies and associations to maximise best practice land management has been the hallmark of 2000 for the resource management role administered by the department.

Resource Protection 4.6

With an estimated gross value of production of \$439M in 2000, protection of existing and future potential in the rural food and fibre industries in the Northern Territory is essential to expansion. Early intervention and strategic action by the department assists industry in this aim.

Events, including the Foot and Mouth outbreak in Europe early in 2001, emphasised the need for strong barrier and post barrier quarantine strategies. Close cooperation between the Northern Territory and the Commonwealth eventuated in a well-resourced quarantine barrier backed up by a strong post barrier-monitoring program that targets specific exotic pests and diseases. In midyear the department took over the management of Australia's quarantine operations in East Timor by effecting the clearance of Australian troops and equipment returning to Australia. Significant interceptions included Siam weed seed, Giant African snail, infested fruit and wood material.

In conjunction with NT Importers and Freight Forwarders revised quarantine requirements against the entry of Giant African Snail were introduced. The snail is a pest in South East Asia and would easily establish if its entry to the country remained undetected.

The new requirements now allow industry to obtain overseas certification that the cargo and containers are clean and free from the snail, negating the high level use of methyl bromide as a quarantine treatment applied after arrival in Darwin.

Northern Territory plant-based industries continued to expand and were provided with specialist entomological, plant pathology and analytical laboratory services. Interstate quarantine services enables NT plants and plant products access to interstate and international markets.

In early 2001, an outbreak of fruit fly was detected in the Ti Tree production area, an area previously known as "Area Free." Extensive trapping and baiting was carried out in collaboration with the local producers, with the aim of reinstating the Area Freedom status.

Participation in the Interstate Certification Approval Scheme increased from producers of fruit fly host material. Over 600 growers are registered with the Department, which necessitated in over 200 audits being completed and over 1300 certification inspections carried out.

The department participated in specific programs aimed at achieving closer cooperation with Indonesian quarantine authorities in order to increase market access.

Market access liaison continued between the Agency for Agriculture Quarantine Indonesia and the department. Training and auditing of Indonesian fumigation companies and product certifiers were carried out in cooperation with the Commonwealth and AusAid in order to attain treatment integrity.

Alice Springs

Consecutive favourable seasons in Central Australia coincident with attractive market prices have provided finance to service debts that were incurred during the extended low rainfall years in the mid 1990s. Pasture recovery has seen the natural resource reach a generally excellent condition. In addition, the positive situation has encouraged pastoral enterprises to invest in more property development and maintenance. Regular cattle sales recommenced from Bohning Yards, Alice Springs, approximately monthly in 2001.

Central Australian cattle are attracting interest from a wide range of feedlots interstate. Some crossbred stock were exported to Asia when supplies of cattle were limited by the wet season in the Top End, while British breeds have been sought for the Middle East live cattle market.

Cattle Industry

Breeding studies at DPIF's Arid Zone Research Institute (AZRI) and a recent publication titled, "Beef Cattle Genetics Applied to Extensive Herds" support opportunities for market diversification. Accreditation of many properties under Cattle Care supports future marketing options.

Recent benchmarking by the Southern Beef Producers at AZRI provided participants with comparisons of a range of production and marketing options. This work is assisted by benchmarks derived from a five year herd performance study carried out by DPIF on Mt Riddock Station. NT Government support was provided from the FarmBis program for a representative of the Southern beef producers group to link with Beef Net, a national association of producer groups.

The Central Australian Producer Action Group (CAPAG) secured Commonwealth Government funding for an executive officer to implement strategies to improve the viability of pastoralists in the region. CAPAG carried out a trial of finishing stock at a feedlot in Roma Queensland. Feedback from the trial indicated the need to ensure a high level of performance by selecting stock carefully for feedlotting. This is an important project which could provide the Central Australian industry with access to a high value part of the marketing chain while removing the impact of seasonal conditions.

As part of the NT Drought Policy Review the importance of self-reliance in managing risk was highlighted, in accordance with national agreements. The NT Government's continued support for the Pastoral Water Enhancement Scheme leveraged significant private investment in property improvements which both improve the options for risk management and focus on sustainable management of natural resources.

Aboriginal interests own sixteen pastoral leases or ex-leases covering more than 50,000 square kilometres in the region. Most of these are no longer functioning and consequently do not provide financial returns or paid employment for community people. The department assisted the Central Land Council, Indigenous Land Council, traditional owners and current managers in two workshops focussed on improving the commercial operations of these lands.

Two favourable growing seasons produced a heavy fuel load with inevitable bush fires. In conjunction with the Bushfires Council, DPIF produced a booklet on Burning for Profit to assist pastoralists in planning to use fire in land management, particularly in addressing the increase in density of woody species.

The Central Land Management Association is being assisted with a series of Natural Heritage Trust funded projects for sustainable land management.

Camel Industry

It is estimated that there are more than 200,000 camels in Central Australia with perhaps 40% in the Northern Territory. A current census is designed to improve the level of confidence in these estimates. Originating from animals released from transport duties with the arrival of motor vehicles camels have thrived on the varied vegetation in the region. The population is principally based in the deserts and migrates onto grazing leases during dry times. As numbers double every decade there is concern that feral populations will create environmental damage. Support from the NT Government aims to assist development of a scaled up camel industry to convert this threat into an opportunity for pastoralists and Aboriginal land managers to secure an extra income stream.

The Central Australian Camel Industry Association (CACIA) exported the first trial shipment of live camels to Brunei, following support

from DPIF for market development. Live camels can be processed for meat at low cost in SE Asia, aided by DPIF training. The successful export trial has led to fortnightly shipments of 40 head from the depot at AZRI. Trial shipments to Malaysia and Jordan are planned.

Negotiations continue regarding obtaining processing of large numbers of camels at a registered export abattoir in Australia. The aim is to have halal certification with access to Asian, European and USA markets. Demand for camel meat for export is strong but lack of accredited slaughtering facilities is hampering the supply. Domestic demand is increasing due to the success of CACIA's promotional activities and exceeds the annual kill of 400 head.

Results from the DPIF Cattle/Camel Cograzing Trial at Waite River Station are being used to inform pastoralists on the sustainability of domesticating camels for the meat production. Pastoralists are being encouraged to harvest feral camels for this trade. As part of industry development DPIF is assisting a Natural Heritage Trust funded project titled, "Demonstration of sustainable management of camels on Aboriginal and pastoral land."

Horticulture

Horticulture in the region is dominated by table grape production. The industry growth rate in volume and value of about 25% annually is projected to continue for at least the next two years. The area produces some of Australia's earliest fruit which command a premium on interstate markets. With a gross turnover in the year estimated at \$18.5M, the industry had a major effect on regional development. It already employs approximately 50 permanent and 500 seasonal staff. However, it is essential that native title restrictions on development of five new farms at Pine Hill and Woodgreen be resolved for the industry to continue to develop.

Research on irrigation and nutritional management is providing an essential basis for future sustainability. At the beginning of 2001 an outbreak of Queensland fruit fly in the Ti Tree area occurred. A concerted program of control by DPIF and growers resulted in a return to area freedom status.

Opportunities for horticultural development on aboriginal land have been prioritised at workshops with stakeholders. Assistance is being provided to the Central Land Council in planning for the first of these developments. Horticultural farms at Rocky Hill, adjacent to Alice Springs are planned on freehold land with an allocation of 1,000 ML of good quality ground water, sufficient for a significant enterprise.

Harvesting on 200 ha of commercial date farms was hampered by rain during harvest. However, attractive returns were achieved from marketing fresh dates interstate.

Communication

The Regional Review newsletter provided all stakeholders with current information of relevance to primary industries on a monthly basis. A Regional Outlook Conference in Alice Springs was used to provide perspectives on the industries in the region.

Tennant Creek

For the second consecutive summer the district received well above average rainfall again resulting in excellent pasture growth and cattle in top condition. During the months of December to February much of the district was under water and road access to many properties was either non-existent or very limited; by mid year fire control became an important issue.

The Barkly Blueprint project provided an opportunity for people of the Barkly region to participate in planning for the future development of the region. One of the goals identified in the Barkly Blueprint is to broaden the region's economic base by projects such as establishing horticulture ventures in the region and improving cattle production. Much of the work already being carried out by the department is aimed at improving cattle production.

Horticulture

At present the region has no large-scale horticulture ventures and the establishment of such ventures is deemed as a high priority. Water and soil studies indicate that there is potential for horticulture in the Barkly region. A working group was established to explore the horticulture project. A second working group is looking at access to suitable land. The lessees of Singleton Station have applied to excise an area of approximately 25 km² for horticultural development and the application is currently moving through the native title process.

The Aboriginal Horticulture Working Group, made up of aboriginal groups and relevant government agencies, has identified several areas with horticultural potential in the Barkly region. This group is exploring the possibilities of joint ventures between commercial horticultural companies and Aboriginal traditional owners.

Commercial interest has been expressed in re-opening the abattoir north of Tennant Creek to slaughter horses, cattle and camels and the department's regional office was involved in inspections and discussions with this proposal.

Rural Women

The NT RIRDC Rural Women's Award for 2001 was presented to Carmel Wagstaff from Brunette Downs Station. Carmel is using her \$20,000 award to realize her vision to provide a career path for young people in the pastoral industry through training and by lifting the profile of the industry. Carmel, and finalist Miriam Golding of Katherine Gorgeous Mangoes, attended a leadership seminar held in Canberra prior to the presentation of the State/Territory winners of the award.

Katherine

The Katherine region generally received an above average wet season in 2000/2001. The Riveren Station in the southern Victoria River District, where mean annual rainfall is 500mm, received 1500mm during this period. The southern parts of the region recorded some very high and even record totals as a result of three low pressure systems crossing the region. Flooding caused problems right across the Gulf and Southern Victoria River District. Cattle mustering operations were affected and a number of large early fires occurred particularly in the Gulf.

The market for live cattle generally improved throughout the year and is currently seeing very strong prices. The downside of this is that the Katherine meatworks did not re-open for the 2001 season after only processing around 18,000 head in the 2000 season.

On the horticultural scene, the 2000 mango harvest was affected by the transport problems which occurred in Darwin and also the short picking season as most fruit came in a short period. The reputation of Katherine fruit for high quality helped to maintain the prices for local fruit and prices tended to lift somewhat towards the end of the season. Some citrus was harvested from plantings in the Venn area and Mataranka but full production is still some way off. There was interest from interstate growers looking at melon production around Katherine. Some local growers have substantial areas of melons under centre pivot irrigation this dry season.

There was a renewal of interest in growing peanuts, stimulated by the Peanut Company of Australia looking to source out-of-season peanuts to supply the Australian market. Growers at Katherine and Douglas Daly have peanuts under centre pivot irrigation. The sesame crop was disappointing this year after problems with land access and lateness of sowing for the major growers. Hay production was again a major part of agricultural production in the region.

The Katherine Research Station continued to provide a focus for the local industry in the region. The annual Farm and Garden Day attracted a record crowd of over 1600 people in April 2001. Considerable support was received from industry and the local community in responding to proposed land use objectives for Katherine which would have seen a considerable portion of arable land on KRS identified for urban development.

In the region, the cattle research program at the Victoria River Research Station is entering a new phase. Work on the genotype comparison is being finalised for analysis and publication. The Katherine Pastoral Industry Advisory Committee contributed to the development of projects to follow on from this and aimed at the department's overall objective of doubling the value of production in the next five years. Work at the Mt. Sanford stocking rate demonstration site continues with a number of projects underway. An interim funding application was put to Meat and Livestock Australia to enable the site to continue while a longer term funding application was developed. This will allow some higher stocking rates to be tested for their effect on utilisation rate and subsequent animal production and rangeland condition.

Progress has been made with developments on Aboriginal owned land in the region. The Indigenous Land Corporation funded a study of the potential for commercial land based enterprises in the Roper River region and has also been negotiating the sub lease of one of their properties to outside interests. The Jawoyn Association is making progress with the Nyirungulung Agricultural Plan funded by the Commonwealth Department of Transport and Regional Services with completion due by the end of 2001.

Financial **Statements**

5



Narrative Overview - 2000/01 Operating Account Summary

Cash Receipts – Consolidated Revenue Account

An amount of \$0.320M was credited to the Consolidated Revenue Account. This amount primarily included the administration of research and development projects and agency arrangements provided on behalf of the Commonwealth.

Cash Receipts – Operating Account

Total receipts credited to the Operating Account amounted to \$9.736M. This was approximately \$1.242M more than the budget estimate for the year. The major variations were due to unanticipated revenue from external sources and the early repayment of loans over and above that which was estimated for the year.

The amount credited to the Operating Account comprised:

	%	\$,000
Taxes, Fees and Fines	2	232
Interest Received	1	126
Commonwealth Grants	56	5,425
Charges for goods and services	19	1,825
Miscellaneous Receipts	11	1,118
Sale of Assets	1	9
Other Intrasector Receipts	0	8
Advances Received	10	993
Total	100	9,736

1999/00 Cash Expenditure – Operating Account – Receipts and Outlays

The Department's total expenditure for the year was \$41.350M. This is only a marginal increase of \$148,000 when compared with 1999/00.

Receipts	\$,000
Balance brought forward	2,332
Transfer from Consolidated Revenue Account	30,834
Plus DPIF Operating Account Receipts	9,736
Total	42,902
Outlays	
Corporate Management	5,232
Horticulture	3,087
Pastoral	13,876
Fisheries	6,048
Industry Services	13,107
Total	41,350
Closing Balance	1,552

We certify that the accompanying statements have been prepared in accordance with the requirements of the Financial Management Act and Treasurer's Directions and in our opinion:

- a. The prescribed requirements in respect of the establishment and keeping of accounts have been complied with in all material respects;
- b. The financial statements are in agreement with the accounts and records of the Department; and
- c. The statements have been drawn up so as to present a true and fair view of the financial transactions of the Department for the year ended 30 June 2001.

Dated at Darwin, Northern Territory

This 1st Day Of October 2001



K Simpson
Manager Budgets



C.D.R. Smith
Secretary
(Accountable Officer)





Auditor-General's Report to the Secretary of the Department of Primary Industry and Fisheries on the Financial Statements for the Year Ended 30 June 2001

Scope

I have audited the financial report of the Department of Primary Industry and Fisheries for the year ended 30 June 2001, comprising financial statements prepared in accordance with Treasurer's Directions. As the Accountable Officer of the Agency you are responsible for the preparation and presentation of the financial statements in accordance with the accounting policies detailed in Part 2, Section 5 of the Treasurer's Directions for reporting to the Minister and the Legislative Assembly. These requirements do not allow for the application of Australian Accounting Standard AAS 29, "Financial Reporting by Government Departments". I have conducted an independent audit of the financial report in order to express an opinion upon it to you.

My audit has been conducted in accordance with Australian Auditing Standards, which include a requirement that I consider whether the financial report complies with Australian Accounting Standards and other mandatory professional reporting requirements. My audit is also intended to provide reasonable assurance as to whether the financial report is free of material misstatement. My procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with the prescribed requirements, as well as with Australian Accounting Standards and the other mandatory professional reporting requirements.

My audit opinions have been formed on the above basis.

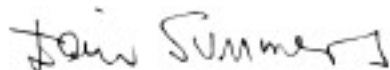
Audit Opinion

In my opinion, the financial report of the Department of Primary Industry and Fisheries as at 30 June 2001 is presented fairly in accordance with Part 2, Section 5 of the Treasurer's Directions.

Qualified Audit Opinion – Variance of the Reporting Format From Accounting Standards

The financial report has not been prepared to include the information required by Australian Accounting Standard AAS 29 to meet the objectives of a general purpose financial report. The major difference between the requirements of the Treasurer's Direction and AAS 29 are that AAS 29 requires the application of accrual accounting policies and procedures, whereas the Treasurer's Direction requires reporting of receipts and expenditure on a cash basis, and only requires limited disclosure of asset and liability items. I am unable to provide the disclosures required by AAS 29 as the Agency is required to maintain its financial records on a basis consistent with meeting the reporting requirements of the Treasurer's Direction, rather than AAS 29.

In my opinion, because of the effects of the matter discussed in the qualification paragraph, the financial report does not present fairly in accordance with Australian Accounting Standards and other mandatory professional reporting requirements, the financial position of the Department of Primary Industry and Fisheries as at 30 June 2001 and the results of its operations and its cash flows for the year then ended.



Iain Summers

Auditor-General for the Northern Territory
Darwin, Northern Territory
8 October 2001

Expenditure by Activity/Program

for Year Ended 30 June 2001

Activity/Program	Final Allocation \$000	Actual Expenditure \$000
Corporate Management	5,250	5,232
Executive	921	921
Corporate Services	4,329	4,311
Horticulture	3,087	3,087
Horticulture	3,087	3,087
Pastoral	14,042	13,876
Tuberculosis Freedom Assurance Program (TFAP)	1,496	1,402
Industry Development/Applied Research	6,261	6,193
Research Farms	4,606	4,605
Berrimah Veterinary Laboratory	1,679	1,676
Fisheries	6,053	6,048
Fisheries	6,053	6,048
Industry Services	13,228	13,107
Resource Protection	5,576	5,571
Commercial Development	2,225	2,149
Resource Management	5,427	5,387
Total Expenditure	41,660	41,350



Expenditure By Standard Classification

For Year Ended 30 June 2001

Category of Cost/ Standard Classification	Actual Expenditure 1999/00 \$000	Actual Expenditure 2000/01 \$000	Variation \$000
Personnel Costs	19,499	20,792	1,293
Salaries	16,662	17,799	1,137
Payroll Tax	1,516	1,457	-59
Fringe Benefits Tax	203	163	-40
Superannuation	1,118	1,373	255
Other Personnel Costs	3,506	2,732	-774
Higher Duties Allowance	335	318	-17
Leave Loading	198	220	22
Northern Territory Allowance	133	131	-2
Other Allowances	102	131	29
Other Benefits	206	311	105
Overtime	467	446	-21
Penalty Payments	52	80	28
Perishable Freight Allowance	0	0	0
Recreation Leave Fares	394	422	28
Salary Advances	-8	1	9
Termination Payments	1,060	362	-698
Workers Compensation	567	310	-257
Operational Expenses / Expenditure	1,735	1,544	-191
Property Maintenance	245	207	-38
General Property Management	397	238	-159
Power	984	902	-82
Water and Sewerage	109	197	88
Other Operational Costs	12,631	12,361	-270
Advertising	71	37	-34
Agent Service Arrangements	12	51	39
Aircraft/Boat Expenses	448	405	-43
Audit Fees	23	18	-5
Client Travel	28	1	-27
Clothing	43	48	5
Communications	775	606	-169
Consultants Fees	300	257	-43
Consumables/General Expenses	3,313	2,505	-808
Document Production	156	134	-22
Entertainment/Hospitality	17	26	9
Food	17	54	37
Freight	63	103	40
Furniture and Fittings	112	91	-21

Other Operational Costs (Continued)

Category of Cost/Standard Classification	Actual Expenditure 1999/00 \$000	Actual Expenditure 2000/01 \$000	Variation \$000
Information Technology Services	1,172	1,152	-20
Insurance Premiums	3	4	1
Laboratory Expenses	177	272	95
Legal Expenses	552	860	308
Library Services	193	191	-2
Marketing and Promotion	86	130	44
Medical Supplies	6	5	-1
Memberships and Subscriptions	10	35	25
Mobile Plant	231	193	-38
Motor Vehicle Expenses	2,308	2,486	178
Office Requisites and Stationery	117	155	38
Official Duty Fares	557	636	79
Other Plant and Equipment	621	741	120
Recruitment Expenses	138	87	-51
Regulatory and Advisory Boards and Committees	20	37	17
Relocation Expenses	93	10	-83
Survey, Drafting and Drilling Costs	4	-1	-5
Training and Study Expenses	181	200	19
Travelling Allowance	784	832	48
Intrasector Payments	399	318	-81
Consolidated Revenue Account On-costs	399	318	-81
Capital Expenditure	111	869	758
Purchase of Capital Assets	111	869	758
Grants And Subsidies	2,598	2,283	-315
Grants	1,928	1,794	-134
Subsidies	670	489	-181
Interest	0	1	1
Interest	0	1	1
Advances	723	450	-273
New Advances	70	100	30
Repayment of Advances	653	350	-303
Total Expenditure	41,202	41,350	148

Receipts By Account

For Year Ended 30 June 2001

Consolidated Revenue Account	Estimated Receipts 2000/01 \$000	Actual Receipts 2000/01 \$000	Variation \$000
Taxes, Fees and Fines	24	5	-19
Other Intrasector Revenue / Receipts	518	315	-203
Total Consolidated Revenue Account	542	320	-222

Operating Account	Estimated Receipts 2000/01 \$000	Actual Receipts 2000/01 \$000	Variation \$000
Taxes, Fees and Fines	221	232	11
Commonwealth Grants	5,662	5,425	-237
Charges for Goods and Services	2,046	1,825	-221
Miscellaneous Revenue / Receipts	-18	1,118	1,136
Sale of Assets	0	9	9
Other Intrasector Revenue / Receipts	10	8	-2
Interest Received	136	126	-10
Advances Received	437	993	556
Total Operating Account Receipts	8,494	9,736	1,242

Transfers from Consolidated Revenue Account	30,834	30,834	0
Total Receipts to Agency Operating Account	39,328	40,570	1,242

Accountable Officer's Trust Account

For Financial Year Ending 30 June 2000

Nature of Trust	Opening Balance \$000	Outlays \$000	Receipts \$000	Closing Balance \$000
Miscellaneous	80	93	102	89
CEO's Awards	15	3	10	22
NTSC Levy	44	83	62	23
Barramundi Levy	180	0	0	180
NTRDC Research & Dev	8	8	0	0
WEB Development	1	1	0	0
	328	188	174	314



Write Offs, Postponements and Waivers

For The Year Ending 30 June 2001

Category	\$
Write Offs, Postponements and Waivers Under the Act	
Amounts written off or waived by Delegated Officers	
Irrecoverable money written off	
Losses or deficiencies of monies written off	
Value of public property written off	37,425.00
Waivers of right to receive or recover money	
Amounts written off, postponed or waived by the Treasurer	
Irrecoverable money written off	79,094.00
Losses or deficiencies of monies written off	
Value of public property written off	
Postponement of money owing	
Waivers of right to receive or recover money	14,833.00
Write Offs, Postponements and Waivers Authorised Under Other Legislation	
Losses or deficiencies of monies written off	
Total	131,352.00

Debtors

As at 30 June 2001

Activity	External			Intrasector				Total \$,000
	Charges \$,000	Other \$,000	Total \$,000	Charges \$,000	Other \$,000	CSO \$,000	Total \$,000	
Corporate Management		94	94		21		21	115
Horticulture		4	4	2	48		50	54
Pastoral	160	217	377	20	41		61	438
Fisheries	36	11	47		23		23	70
Industry Services	11	308	319	21	54		75	394
Total	207	634	841	43	187	0	230	1,071
Less: Provision for Doubtful Debts	29	7	36					36
Net Debtors	178	627	805	43	187	0	230	1,035
Classified as:								
Current	178	627	805	43	187	0	230	1,035
Non Current								
Net Debtors	178	627	805	43	187	0	230	1,035



Creditors and Accruals

As at 30 June 2001

Activity	External			Intrasector			
	Creditors \$,000	Accruals \$,000	Total \$,000	Creditors \$,000	Accruals \$,000	Total \$,000	Total \$,000
Corporate Management	115	74	189	24	100	124	313
Horticulture	25	55	80	5	11	16	96
Pastoral	291	152	443	20	50	70	513
Fisheries	75	76	151	18	22	40	191
Industry Services	276	212	488	14	36	50	538
Total	782	569	1,351	81	220	301	1,652
Classified as:							
Current	782	569	1351	81	220	301	1652
Non Current							
Total	782	569	1,351	81	220	301	1,652

Employee Entitlements Outstanding

As At 30 June 2001

Entitlement	\$000
Current	
Recreation Leave	3,354
Leave Loading	416
Long Service Leave	4,143
Non Current	
Long Service Leave	447
Total	8,360

Methodology

1 Recreation Leave

The value of recreation leave entitlements are calculated by PIPS based on employees' actual salaries and entitlement at 30 June 2001.

2 Leave Loading

The value of leave loading entitlements are calculated by PIPS based on employees' actual salaries and entitlements at 30 June 2001.

3 Long Service Leave

Long Service entitlement is calculated in accordance with Australian Accounting Standard AAS 30. The calculation takes into account the probability of employees reaching ten years of service, the future increases in salary costs and discount rates to achieve the net present value of the future liability.



Lease Liabilities

As at 30 June 2001

Lease Commitments/ Liabilities	Information Technology		Furniture and Fittings \$000	Other Plant and Equipment \$000	Total \$000
	Hardware \$000	Software \$000			
Not later than one year				77	77
Later than one year but not later than two years				32	32
Later than five years					
Minimum lease payments				109	109
Less future financing charges				6	6
Total				103	103
Classified as:					
Current				71	71
Non Current				32	32
Total	-	-	-	103	103

Explanatory **Notes**

Notes to and forming part of the financial statements for the year ended 30 June 2001.

Note 1 – Significant Accounting Policies

- (a) Primary Industry and Fisheries as an accounting entity

The Department is a unit of administration of the Northern Territory Government. Any receipts and payments are made on behalf of the government, which is also responsible for liabilities incurred by the Department.

- (b) Basis of accounting

The Department's accounting records are kept on a cash basis, that is, they account for amounts either received or paid during the financial year, including amounts paid in respect of costs incurred in earlier years. The financial statements have been prepared in accordance with the requirements of Section 11 of the Financial Management Act and Part 2, Section 5 of the Treasurer's Directions. The Northern Territory Government Accounting System is used for the final recording of financial transactions.

- (c) Accounting for assets and liabilities

- i) Departmental assets are recorded in the asset register at cost. As the Department accounts on a cash basis, depreciation is not charged against assets.
- ii) Currently Government departments are not required to provide an annual Statement of Assets and Liabilities as part of the annual report.

Note 2 – Authority for Transactions

- (a) Receipts

All receipts of money by the Department must be credited to the Government's Consolidated Revenue Account, except those which are required or permitted to be credited to an Operating Account. The amounts shown as budgeted receipts for the year are based on estimates prepared for the Northern Territory annual budget and included in the Budget Detailed Estimates (Budget Paper No. 2). These estimates are adjusted during the course of the year to take account of emerging trends.

- (b) Payments

Money shall not be committed for expenditure except by the Accountable Officer or by a person acting on the authority of the Accountable Officer. Allocations are authorised by the annual Appropriation Act and include any variation in that amount authorised in accordance with the Financial Management Act or any other Act. The unexpended balance of an annual allocation lapses at the end of the financial year unless carry forward approval is obtained.

Note 3 – Contingent Liabilities

Where appropriate, details of:

- i) investments held in corporations, trusts, joint venture or similar entities; and/or
- ii) contingent liabilities

have been provided to Northern Territory Treasury in accordance with Treasurer's Directions Part 2, Section 4 for consideration in global reporting in the Treasurer's Annual Financial Statements.



Note 4 – **Accountable Officer’s Trust Fund**

The Accountable Officer’s Trust Account is established in accordance with Section 7 of the Financial Management Act for the receipt and payment of monies held in trust. Trust monies are held on behalf of third parties and it is not intended that the Department of Primary Industry and Fisheries will be a beneficiary.

Note 5 - **Goods and Services Tax**

Revenues and expenses are recorded net of the amount of Goods and Services Tax (GST), except:

- (a) where the amount of GST incurred is not recoverable from the taxation authority, it is recognised as part of the cost of acquisition of an asset or as part of an item of expense; or
- (b) for receivables and payables which are recognised inclusive of GST.

Appendices

6



Fertiliser Freight Assistance Scheme 2000/20

Name	Tonnes	\$ Claim
ABC Plantations	300	1,650
Alder D	6	354
Annaburro Station	36	1,980
Austin Des	5	287
Australian Tropical Produce	6	313
Ausurv P/L	6	330
Ballongilly Farms	24	1,332
Bang Thanh & Nguyen Kim Anh	8	435
Best Rural P/L	24	1,320
Billabong Orchard P/L	4	193
Blackburn K	15	812
Blackmore River Produce	5	275
Bonalbo Pastoral Enterprises	72	3,960
Buntine P	12	678
Caddy P	11	581
Campbell TNC	74	4,077
Caurnamont Farms	45	2,500
Cavanagh Peter	8	448
Cave Creek Station	6	322
Charlie Banana	7	364
Colton Park Tropical Fruits	35	1,940
Dodd R & N	18	998
Doyle W & E	200	11,000
Drina Mangoes	23	1,257
Fantome Pty Ltd	6	329
Forsbrook Traders	28	1,540
Frontier Fruits	9	495
G A Enterprises	7	360
Golding I & M	16	905
Greater North Bananas	20	1,100
Gusher P/L	19	1,049
Hardwick J & JM	46	2,530
Hart Rural Contractors	120	6,600
Hausler P & L & Barker S & A	6	336
Haywire	16	880
Hewitson A	3	77
Hickey K	165	9,094
Howard Spring Mangoes	40	2,204
Howie S & A	72	3,960
Humpty Doo Mangoes	2	136
Ironwood Brahman Stud	7	385
Jabiru Tropical Orchards	147	8,068
Jamal Tropical Fruits	2	121
Jindare Station	6	330
Joh-Mar Farm	6	280
Joyce D & G	4	220
Kensington Plantation	2	119
Kinbacher B & N	2	105
La Belle Downs	48	2,640
Labasheeda Park	17	939
Le Van Tung	13	736
Lemesurier K & J	25	1,375

Fertiliser Freight Assistance Scheme 2000/20

Name	Tonnes	\$ Claim
Lindsay John	3	151
Livingstone Orchards	12	639
Manbullo Mangoes	300	16,500
McLeod P & I	2	130
Middle Point Farm	56	3,055
Milkwood Tropical Orchards	12	661
Millinocket P/L	39	2,168
Nguyen D & Nguyen Van H	25	1,387
Nguyen Huu Phuoc	14	785
Nguyen Nhan Thanh	4	226
Nguyen Thi Thanh An	8	435
Nguyen Thuan Thanh	4	202
NT Garden Products P/L	3	142
NT Quality Hay	11	605
NT Tropical Produce	5	284
PAL Enterprises	52	2,845
Parker DW & ME	19	1,045
Pedersen R	2	110
Phoenix Management	152	8,349
Plant Investments P/L	96	5,280
Power Horticulture P/L	64	3,499
Pucciarmarti R	21	1,155
Quin I	8	452
Rathsmann M	6	330
Red Gum Produce	7	377
Reed W & H	4	220
Rocca Farming	295	16,237
Sallis R	8	440
Saunders G & S	34	1,870
Setter R	13	723
Sheridan Produce	8	330
Shrimp R & J	50	2,750
Stanley R G	37	2,019
Star Palms Landscaping & Mangoe	5	271
Stray Creek Cattle Station	24	1,320
Suncode P/L	144	7,920
Surelines Produce	4	233
Swartz D	39	2,142
Sylvatech Australia P/L	175	9,636
Teece Tom	5	275
Tideman Sonia	63	3,467
Tipperary Group of Stations	300	16,500
Tomlin B	5	264
Top Bananas	300	16,500
Tropical Grafting Services	17	948
Watson Denis	83	4,565
Whatley Chris	4	220
Whites Pastoral Partnership	126	6,930
William T	52	2,868
Williams DA & J & MJ	76	4,169
Witherspoon J & M	15	825
	4,634	254,637



Natural Disasters **Relief Arrangements**

Concessional Loans \$

Orange Creek 100,000

Pastoral Water **Enhancement Scheme**

The Pastoral Water Enhancement Scheme provides grants of up to \$10,000 each for on-station stockwater development.

Twenty-one payments totalling \$211,000 were made in 2000/2001. In the majority of cases, payments were for approvals made in earlier years, but not submitted for claim until 2000/2001.

Approved Payments from three years paid to Stations in 2000/2001

1998/1999	1999/2000	2000/2001
Sturt Downs Station	Avago Station	Gilnockie Station
	Care Creek Station (2)	Horseshoe Bend Station
	Deepwell Station	Idracowra Station
	Edith Springs Station	Lakefield
	Gilnockie Station	Mt McMinn Station
	Horseshoe Bend Station	Neutral Junction
	Larrizona Station	
	Lyndavale Station	
	Mt Keppler Station	
	Numery Station	
	Sturt Plateau Group Station	
	Sunday Creek Station	
	West Eley Station	

Property Management **Planning**

Property Management Planning 2000/2001

Sessions	Number	Primary Production Participation	Agency Participation (employees)
Workshops	12	108	47
Other Strategic Planning	14	157	170
Total	26	265	217

Farm Business **Improvement Scheme** (FarmBis) 2000/2001

There were 335 individuals who participated in the FarmBis Improvement Scheme during 2000/2001 for a total expenditure of \$105,773.

Level of Participation by Category

		No.	%	\$
Gender	Male	- 222	66.3	70,128
	Female	- 113	33.7	35,645
Industry Sector	Beef	- 161	48.1	77,512
	Fruit & Vegetables	- 137	40.9	20,575
	Other	- 37	11	7,687
New Participants		- 191	57	60,291
Repeat Participants		- 144	43	45,483
Training Category	Financial & General Business Management	- 68	24.5	25,888
	Human Capital Management	- 38	24.6	25,993
	Natural Resource Management	- 32	7.1	7,531
	Marketing	- 4	2.9	3,082
	Production Management	- 195	40.9	43,280
Training Format	Group	- 247	73.7	77,955
	Individual	- 88	26.3	27,818
Use of Planned Learning Needs Process to enter FarmBis	Property Management Planning	- 87	26	
	Other Planning Process	- 139	41.5	
	No Planning Used	- 109	32.5	



2000-2001 Weed Management Assistance Scheme

Claimant	Property	\$
Input Pty Ltd	Finnis River Station	\$9,254.00
Carabao Exports	Opium Creek Station	\$4,109.64
Paspaley Pearls Properties	Melaleuca Station	\$79,812.68
Excess Pty Ltd	Beatrice Hill	\$12,575.00
Whites Pastoral Partnership	Mt Keppler Station	\$10,376.95
Delamere Cattle	Delamere Station	\$10,999.71
Brunei Meat Exporting Company	Willeroo Station	\$23,661.50
Total		\$150,789.48

Herbicide Subsidy **Payments** 2000/2001

Claimant	Payment \$
Amungee Mungee Station	108.00
Bernard Tomlin	260.00
Bonalbo Pastoral Enterprises	2,266.00
Bonalbo Pastoral Enterprises	5,000.00
Brunette Downs Station	3,030.00
BR & SR Smith	337.00
Bulwaddy Past Co	60.00
B Whatley	1 17.50
Cheyenne Stud	489.17
Cheyenne Stud	75.00
C J and M E Stopp	294.75
Consolidated Pastoral Company	225.00
Desmond J Stenhouse	571.20
Eileen Doyle	1,483.80
Florina Pastoral Company Pty Ltd	224.00
Forsbrook Traders	1,945.18
Gail Davies	108.00
Gail Davies	108.00
Haywire	1,627.00
Hart Rural Contractors	5,000.00
Ian Hare	4,455.00
Ian Rush	4,455.00
James W Beebe	342.50
Jeff Little	1,283.00
J Murphey	159.07
John Underwood	1,190.00
J P Morrison	56.07
Kerry Mckay	174.75
L J Philips	1,385.38
L & S Nominees	5,000.00
Lorna Melville	808.90
Lorna Melville	330.00
Louise Martin	533.99
Mallapunya Springs Pty Ltd	549.75
Mallapunya Springs Pty Ltd	528.35
Marianne St Clair	82.88
Mariane St Clair	51.10
M & D Cattle Contracting	1,617.50
M E Brook	270.45
Milkwood Farm	342.27
Mr C Smith	71.18
Mt Doreen Proprietors	549.00
Mt Keppler Station	513.04
Nancy and Olive Nyberg	85.00
NT Quality Hay Pty Ltd	897.41





Herbicide Subsidy **Payments** 2000/2001 (Continued)

Claimant	Payment \$
NT Quality Hay	2,161.30
NT Quality Hay	172.35
NT Quality Hay & Contracting	503.86
O & D Eidermann	72.50
O & D Eidermann	73.00
Ortto Eiderman	57.50
Philip J Howie	5,000.00
R J & J A Shrimp	5,000.00
R J & J A Shrimp	5,000.00
R P Walker	321.50
Ruth Murphey	82.50
Shannandoah Stud	600.75
Stanbrook Pastoral Company	2,500.00
Tanumbirini Station Pty Ltd	368.40
Taylor's Park	5,000.00
Tim Capes	1,923.00
Tejas Land and Cattle	433.86
Tejas Land and Cattle	557.50
Wayne Nayda	343.25
Total	79,232.46