

19/4/94

SIX MONTHLY REPORTS

DEC 1993

CROWN RESEARCH INSTITUTES

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The logo for the Agricultural Research Organisation (AOR) is a small square containing the letters 'AOR' in a stylized font.

AgResearch

New Zealand Pastoral Agriculture Research Institute Ltd

HALF-YEARLY REPORT

FOR THE SIX MONTHS ENDED
31 DECEMBER 1998

AgR
AgResearch

New Zealand Pastoral Agriculture Research Institute Ltd

New Zealand Pastoral Agriculture Research Institute Limited (AgResearch) is a government-owned research, technology development and transfer company established under the Crown Research Institutes Act 1992. AgResearch offers a vital partnership role to the food, fibre and biotechnology industries in providing solutions and developing opportunities. It employs 760 scientific staff and 330 support staff in five research divisions:

- *Dairy and Beef – Ruakura, Hamilton.*
- *Forage – Grasslands, Palmerston North.*
- *Animal Health – Wallaceville, Upper Hutt.*
- *Environmental Agriculture – Lincoln, near Christchurch.*
- *Sheep, Deer and Equine – Invermay, near Dunedin.*

The Institute has research capabilities of international standing in physiology, genetics, reproduction, nutrition and management of grazed livestock, and is increasing its research efforts in biotechnology and the environmental impacts of agriculture.

ON THE COVER:

Computer graphics overlay an interpretation of the DNA molecule on clean, green New Zealand pasture – in a symbolic linking of science and the world's most efficient pastoral farmers.

DIRECTORS

CHAIRMAN: A R (ALAN) FRAMPTON,
MAGSc, PhD, FNZIAS.

A J (JOCK) ALLISON, MAGSc, PhD.

H B (BRUCE) ANDERSON.

B B (BRIAN) CHRYSTALL, BAg, MSc, PhD.

N (NEVILLE) JORDAN, BE (ELECT), FIPENZ.

S J (STEPHEN) LYTTTELTON, BCom, LIB,
ACA, ACIS.

J A (JENNY) MOREL, BSc, MA(Hons).

J H (NICK) WALL, QSM.

R D (DAVID) WALLACE, BAgSc FNZIAS.

DIRECTORS' REPORT

The Board of Directors of AgResearch is pleased to present this report to the shareholding Ministers for the six months ended 31 December 1993.

FINANCIAL RESULT

AgResearch made a \$1.7 million profit before tax. This represents a return on shareholders' funds of 3.5 per cent for the half year (equivalent to 7.0 per cent annualised) and compares favourably with the 0.6 per cent (before tax) return achieved in the same period last year.

The profit resulted partly from a pleasing increase in commercial revenue and partly from the deferral of expenditure. Expenditure was deliberately deferred to avert a potential liquidity problem caused by delays in disposing of surplus land subject to claims under the Treaty of Waitangi. The Crown's agreement in December 1993 to AgResearch's borrowing to alleviate this cash constraint will enable planned expenditure to resume. A higher level of expenditure is therefore forecast for the second half of the financial year.

RESEARCH CAPABILITY

The recruitment and retention of key scientific staff has ensured that the strategic research capability of AgResearch has been developed over the reporting period.

Directors are pleased at the number of scientific breakthroughs that have occurred during the last six months, many of which have won international acclaim. These include discoveries in molecular genetics of sheep, reproductive physiology, disease control and plant improvement.

Publications from AgResearch have appeared in *Nature* and *Science*, two of the most prestigious scientific publications in the world, and in a range of other internationally recognised scientific periodicals. The publication on tuberculosis in *Science* was reviewed by the *Wall Street Journal* and the *New York Times* as a major advance toward the development of a vaccine for human tuberculosis.

STATEMENT OF FINANCIAL PERFORMANCE*(Unaudited) For the six months ended 31 December 1993*

AgResearch's high international profile in biological sciences has led to a number of significant developments in international science and technology development collaboration. Major advances have also been made in the formation of strategic alliances and collaborative relationships with universities within and outside New Zealand. These will greatly enhance the Institute's scientific and technology development capabilities that benefit and protect the interests of the New Zealand livestock industry.

Investments have been made to accelerate and support a greater technology development capability within AgResearch in order to link strategically important scientific capabilities with the market and industry.

A subsidiary company, AgVax Developments Limited, has been formed to evaluate and initially develop animal vaccines, to commercially assess efficacy and to establish appropriate distribution channels.

DIRECTORS AND MANAGEMENT

Two new directors were appointed – Mr Neville Jordan and Mr Stephen Lyttelton. Their appointments have enhanced the range and depth of skills and experience on the Board.

A realignment of corporate roles has resulted in the appointment of Ms Mary Cave, the General Manager Finance, as Company Secretary.

During the half year AgResearch continued to operate in accordance with the principles set out in section 5 of the Crown Research Institutes Act 1992.



A R Frampton

Chairman

24 February 1994

<i>Dollars in thousands</i>	Note	6 months to 31 Dec 1993	6 months to 31 Dec 1992
Revenue			
Crown contracts		28,306	27,772
Commercial contracts		13,032	11,310
Farm produce		1,756	1,767
Interest		219	179
Total revenue		43,313	41,028
Less operating expenses			
Personnel costs		22,043	21,868
Other operating expenses	4.1	20,258	17,470
Depreciation		1,737	1,461
Writeback of balance sheet provisions	4.2	(2,431)	(41)
Total operating expenses		41,607	40,758
Net operating profit before taxation		1,706	270
Taxation expense		563	89
Net operating profit after taxation for the six months		\$1,143	\$181

The accompanying Notes form an integral part of these accounts.

STATEMENT OF FINANCIAL POSITION*(Unaudited) As at 31 December 1993*

<i>Dollars in thousands</i>	Note	at 31 Dec 1993	at 31 Dec 1992
Shareholders' funds			
Authorised, issued and paid-up capital			
47,073,000 ordinary shares of \$1.00 each fully paid		47,073	47,073
Retained earnings of the company		3,412	181
Total shareholders' funds		\$50,485	\$47,254
Represented by:			
Current assets			
Cash and bank		2,680	3,588
Net debtors	4.3	4,674	6,485
Prepayments		495	533
Livestock	4.4	6,968	4,495
Tax refund due		159	0
Work in progress		538	36
Inventory – consumables		673	723
Total current assets		16,187	15,860
Investments	4.5	549	158
Fixed assets			
Freehold land		23,617	23,617
Freehold buildings		22,282	23,255
Plant and equipment at cost		7,962	4,519
Plant and equipment under finance lease		257	0
Motor vehicles		2,195	3,831
Total fixed assets		56,313	55,222

STATEMENT OF FINANCIAL POSITION (cont.)*(Unaudited) As at 31 December 1993*

<i>Dollars in thousands</i>	Note	at 31 Dec 1993	at 31 Dec 1992
Long term assets			
Future tax benefit		380	0
Standing timber		421	421
Total long term assets		801	421
Total assets		73,850	71,661
Less: Current liabilities	4.6		
Payables		7,461	7,223
Provisions		2,583	5,211
Total current liabilities		10,044	12,434
Term liabilities			
Finance lease liabilities		174	0
Future tax liabilities		889	0
Provision for long term staff liabilities		2,363	2,078
Crown debt		9,895	9,895
Total term liabilities		13,321	11,973
Net assets		\$50,485	\$47,254

*The accompanying Notes form an integral part of these accounts.**A. R. Frampton*Board Chairman
24 February 1994*H. P. Anderson*

Director

STATEMENT OF CASH FLOWS*(Unaudited) For the six months ended 31 December 1993*

<i>Dollars in thousands</i>	Note	6 months to 31 Dec 1993	6 months to 31 Dec 1992
Cash from operations			
Cash received from clients		42,076	39,299
Interest		193	154
Total cash from operations		42,269	39,453
Less cash disbursed on operations			
Payments to employees		21,818	19,038
Payments to suppliers		20,024	16,624
Interest		185	0
Total cash disbursed on operations		42,027	35,662
Net cash from operations		242	3,791
Cash from investing activities			
Disposal of fixed assets		834	7
Indemnifications	4.8	1,018	0
Total cash from investing activities		1,852	7
Cash disbursed on investing activities			
Investment in fixed assets		2,722	200
Restructuring/deferred maintenance		2,411	11
Increase in investments		290	0
Total cash disbursed on investing activities		5,423	211
Net cash from investing activities		(3,571)	(204)
Total net cash flow		(3,329)	3,588
Opening balance		6,009	0
Closing balance		\$2,680	\$3,588

*The accompanying Notes form an integral part of these accounts.***NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS****1 AUDIT**

These financial statements are not required to be audited.

2 ACCOUNTING POLICIES

The accounting policies as published in the annual report for the year ended 30 June 1993 have been consistently applied.

3 TAXATION

Taxation has been provided for at 33% of net operating profit.

*Dollars in thousands***4 SPECIFIC INFORMATION****4.1 Other operating expenses include the following:**

Audit fees and expenses	28
Directors fees	74
Interest expense	347
Finance lease costs	6
Operating lease costs	472
Restructuring costs	1,942
Other operating expenses	17,389
Total other expenses	20,258

4.2 Writeback of balance sheet provisions:

This credit relates to the amortisation of provisions for restructuring, contingencies and deferred maintenance set up at the establishment of AgResearch.

4.3 Net debtors

Total debtors as at 31 December 1993	4,935
Less provision for doubtful debts	261
Net debtors	4,674

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

4.4 Livestock

Movement in livestock value from last year is explained by the change in national average market values from 1992 to 1993.

Dollars in thousands

4.5 Investments

Investments in associate companies:

Analytical Research Laboratories Limited
(49% shareholding)

Unlisted shares 49

Share of undistributed retained profits and dividends 152

Total equity accounted value of associated companies 201

Shares:

Dairying Research Corporation (50% shareholding) 10

Tui Milk Products Ltd - at par 48

Waste Technology Group Limited 90

Total value of shares 148

Other:

Loan to Waste Technology Group Limited 200

Total investments 549

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

Dollars in thousands

	at 31 Dec 1993	at 31 Dec 1992
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4.6 Current liabilities

Payables:

Creditors	3,024	4,140
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GST	790	467
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Provision for taxation	563	0
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Unearned revenue	285	305
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Annual leave provision	2,799	2,311
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Total payables	7,461	7,223
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Provisions:

Provision for restructuring	1,985	3,461
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Provision for contingencies	112	184
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Provision for deferred maintenance	243	1,000
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Provision for staff entitlements	243	566
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Total provisions	2,583	5,211
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Total current liabilities	10,044	12,434
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4.7 Crown debt	9,895
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Interest is payable at a floating rate for the 1993/94 financial year.

Principal is repayable on 30 September 1997.

The Crown debt is secured by a floating charge debenture over the assets of the Company.

4.8 Indemnifications

Indemnifications represents a reimbursement from the Crown for restructuring expenditure identified at the time of the establishment of AgResearch.

DIRECTORY

CORPORATE OFFICE

12th Floor, Peat Marwick Tower,
85 Alexandra Street,
Private Bag 3115, Hamilton.
Tel 64 7 834 6600.
Fax 64 7 834 6640.

DAIRY AND BEEF DIVISION (RUAKURA)

Ruakura Agricultural Research
Centre, East Street,
Private Bag 3123, Hamilton.
Tel 64 7 856 2836.
Fax 64 7 838 5012.

FORAGE DIVISION (GRASSLANDS)

Grasslands Research Centre,
Fitzherbert West, Private Bag
11008, Palmerston North.
Tel 64 6 356 8019.
Fax 64 6 356 7399.

ANIMAL HEALTH DIVISION (WALLACEVILLE)

Wallaceville Animal Research
Centre, Ward Street,
Box 40063, Upper Hutt.
Tel 64 4 528 6089.
Fax 64 4 528 6605.

ENVIRONMENTAL AGRICULTURE DIVISION (LINCOLN)

Canterbury Agriculture and
Science Centre, Ellesmere
Junction Road, Box 60, Lincoln.
Tel 64 3 325 3011.
Fax 64 3 325 2946.

SHEEP, DEER AND EQUINE DIVISION (INVERMAY)

Invermay Agricultural Research
Centre, Puddle Alley,
Private Bag 50034, Mosgiel.
Tel 64 3 489 3809.
Fax 64 3 489 3739.

AUDITORS:

Audit New Zealand, Hamilton.

BANKERS:

Bank of New Zealand.

SOLICITORS:

Chapman Tripp Sheffield
Young, Wellington; McCaw
Lewis Chapman, Hamilton.

Interim Report

For the six months ended 31 December 1993

*New Zealand Institute for Crop & Food Research Limited
Private Bag 4704, Christchurch, New Zealand*



New Zealand Institute for Crop & Food Research Ltd
Interim Report
For the six months ended 31
December 1993

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MISSION STATEMENT

- To *transfer* technology to enhance New Zealand's economic and social wellbeing.
- To *meet* client needs for innovation in product development, production and processing.
- To *provide* competitive advantage to the crop, food and fish industries.
- To *lead* with research, science, technology.
- To *provide* quality research services.
- To *operate* in an international market.

CORE BUSINESS

The core business of the Institute is in market focused research for the production and processing of arable crops, vegetables, seed crops, flowers, ornamentals, essential oils, medicinal crops and seafood.

This includes research to promote:

- continued diversification of intensive crop and seafood production and processing in New Zealand.
- sustainable production systems that improve product quality and production efficiency.
- expansion of the production and processing capabilities to develop healthy, high quality food products targeted to market demands.
- support for industry strategies to enhance international competitiveness.

Research areas:

- plant breeding research to develop varieties with better quality attributes and lower input requirements.
- introduction of new crops to diversify market opportunities.
- crop management research into systems which improve production efficiency and meet market requirements.
- research to add value to seafood products, including related production technologies.
- processing research to develop new and improved processing methods and products.

This will require research activities in plant breeding, molecular biology, agronomy, physiology, soil science, genetics, chemistry and biochemistry, biotechnology, nutrition, consumer research, pathology, entomology, weed control, aquaculture, food science and technology, food engineering, post harvest physiology, packaging and refrigerated storage, fishing methods, production and market economics.

DIRECTOR'S REPORT

The Directors of the New Zealand Institute for Crop & Food Research Limited have pleasure in presenting the Half Yearly Report for the six months to December 1993.

The Institute has operated in accordance with the principles set out in Section 5 of the CRI Act and to a standard that reflects well on management and staff.

This period resulted in a satisfactory financial performance. Comparisons with the same period of the previous year are misleading due to abnormal expenditure in our first few months after establishment. A more valid comparison can be made with our full year result to 30 June 1993. We exceeded our Business Plan targets for this period and are confident that the final result this year will better the profit of last year.

It should be noted, however, that it is the Directors' intention to undertake long-term development of the infrastructure of the company. This investment in our science capability will depress profits but will enhance our future viability and ability to service industry needs.

The Institute has made some small investments in joint ventures involved in technology transfer. This provides the opportunity to retain a greater measure of control over the application of new technology in the early stages of commercialisation. Our policy is to invest only to the extent necessary to manage the technology transfer process while minimising the commercial risks involved.

We regard our relationship with the private sector as very important. Commercial clients provide resilience to our cashflow and prospects for business growth in the face of changing priorities for the Public Good Science Fund. Good relations with private sector clients are also important in anchoring our science in the relevant commercial sector, thus ensuring that we are able to add value to the industry where it is most needed. We are happy to report that we continue to out-perform our Business Plan in this area. The future of the Institute is sound.

The New Zealand economy is growing with particular emphasis on exporting. There is strong interest in diversifying away from traditional commodity exports to high value products derived from our vegetable, flower, arable and seafood industries. Providing we continue to build on our links with these industries we will contribute to economic growth through scientific innovation for the benefit of all New Zealanders.

The Directors are very conscious of the excellent contribution of the staff. The success of Crop & Food Research and its good standing among the wider community is a direct reflection of the quality effort of all our staff. This effort is greatly appreciated.

Graham Robertson
Chairman

CHIEF EXECUTIVE'S REPORT

This period is part of a year of consolidation following the frantic activity of the early establishment phase. The foundation of the Institute is being developed in a measured way to ensure a vital future.

In particular, the new financial management information system became operational in this period providing much more comprehensive and relevant information for managers, and a two-year collective employment contract with staff has been negotiated. Consequential on the employment contract, a working party has been established to develop new remuneration and performance appraisal systems that are appropriate to our current and future circumstances. The completion of this working party process should provide a sound and ongoing base for our internal management systems.

The Institute is very conscious of the development of its staff and it is satisfying that the first group of Crop & Food Research Fellowships were awarded to cover a range of research staff gaining additional experience and new skills in laboratories in the USA and the UK. Similarly important developments were made with the Centre for Maori Studies and Research at Lincoln University to assist with meeting our obligations under the Treaty of Waitangi.

The release of the results of a survey of customers has been a major input to improve relationships with business and to facilitate the transfer and uptake of technology developed within the Institute. This very comprehensive survey asked essentially all our commercial clients questions related to the services we provide, who are our competitors and areas where we could improve service. Overall, the results were encouraging with 91% of responses rating services as satisfactory or better and the technical aspects of our work obtaining the highest rankings. Learning our customers needs assists technology transfer, and significant steps have been made over the period, notably a new series of regional field days based around off-station cultivar trials. Additionally, a new information transfer agreement in the New Crops Area has been negotiated with Agriculture New Zealand. This agreement may prove a useful model for other areas subsequently, provided it gives satisfactory results.

Overall, success will be assessed by satisfying clients, by increased commercial income and by the retention of key personnel. To this end, it is encouraging to note commercial revenue is above budget in this period.

Mike Dunbier
Chief Executive

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

STATEMENT OF PROFIT AND LOSS AND RETAINED EARNINGS (This statement has not been audited)

For the periods ended

Dollars in thousands	Notes	Six months 31 Dec 1993 \$'000	Six months 31 Dec 1992 \$'000	Full year 30 June 1993 \$'000
REVENUE				
Sales		12 679	12 765	25 646
Income from short-term investments		<u>68</u>	<u>81</u>	<u>198</u>
Total revenue		<u>12 747</u>	<u>12 846</u>	<u>25 844</u>
NET PROFIT BEFORE TAXATION	2	854	1 175	793
Taxation expense		239		287
NET PROFIT AFTER TAXATION		<u>615</u>	<u>1 175</u>	<u>506</u>
NET PROFIT AVAILABLE FOR APPROPRIATION		615	1 175	506
Proposed dividends				
RETAINED EARNINGS AS AT END OF PERIOD		<u>615</u>	<u>1 175</u>	<u>506</u>

The accompanying notes form part of the financial statements

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

BALANCE SHEET (This statement has not been audited)

		As at		
Dollars in thousands	Notes	31 Dec 1993 \$'000	31 Dec 1992 \$'000	30 June 1993 \$'000
SHAREHOLDERS' FUNDS				
Issued and paid up capital	3	10 036	10 036	10 036
Retained earnings		<u>1 121</u>	<u>1 175</u>	<u>506</u>
		11 157	11 211	10 542
TERM LIABILITIES				
The Crown	4	2 231	2 231	2 231
Restructuring provision		1 024	1 200	1 200
Provisions for personnel liabilities		<u>307</u>	<u>427</u>	<u>414</u>
		3 562	3 858	3 845
CURRENT LIABILITIES				
Creditors and accruals	5	2 741	2 060	3 014
Personnel liabilities		1 116	1 261	1 034
Taxation payable		<u>191</u>	<u>—</u>	<u>—</u>
		4 048	3 321	4 048
Total liabilities and shareholders' funds		<u>18 767</u>	<u>18 390</u>	<u>18 435</u>
FIXED ASSETS				
	6	14 222	14 203	14 132
DEFERRED TAX BENEFIT				
		404		277
INVESTMENTS				
	7	89	25	25
EXPENDITURE CARRIED FORWARD				
	8	481		200
CURRENT ASSETS				
Cash and short-term deposits		1 790	2 181	2 030
Receivables and pre-payments		1 610	1 835	1 301
Inventories	9	171	146	294
Taxation refund		<u>—</u>	<u>—</u>	<u>176</u>
		3 571	4 162	3 801
Total assets		<u>18 767</u>	<u>18 390</u>	<u>18 435</u>

The accompanying notes form part of the financial statements

STATEMENT OF CASHFLOWS (This statement has not been audited)

For the periods ended

Dollars in thousands	Notes	Six months 31 Dec 1993 \$'000	Six months 31 Dec 1992 \$'000	Full year 30 June 1993 \$'000
CASHFLOW FROM OPERATING ACTIVITIES				
Cash was provided from:				
receipts from customers		13 213	11 915	25 536
interest received		68	63	190
Cash was disbursed to:				
payments to suppliers and employees		(12 799)	(9 367)	(21 889)
income taxes paid				(740)
Net cashflow from operating activities	10	<u>482</u>	<u>2 611</u>	<u>3 097</u>
CASHFLOW FROM INVESTING ACTIVITIES				
Cash was provided from:				
proceeds of sale of fixed assets		40	17	204
Cash was disbursed to:				
net assets purchased from the Crown				(12 267)
purchase of fixed assets		(619)	(422)	(1 246)
purchase of equity investment		(65)	(25)	(25)
Net cashflow used in investing activities		<u>(644)</u>	<u>(430)</u>	<u>(13 334)</u>
CASHFLOW FROM FINANCING ACTIVITIES				
Cash was disbursed to interest on Government loan		(78)		
Cash was provided from:				
proceeds of calls on shares				10 036
proceeds of term debt issued				2 231
Net cashflow from financing activities		<u>(78)</u>	<u>—</u>	<u>12 267</u>
Opening cash brought forward		2 030	0	0
NET INCREASE/(DECREASE) IN CASH HELD		<u>(240)</u>	<u>2 181</u>	<u>2 030</u>
ENDING CASH CARRIED FORWARD		<u>1 790</u>	<u>2 181</u>	<u>2 030</u>

The accompanying notes form part of the financial statements

STATEMENT OF ACCOUNTING POLICIES

General accounting policies

The general accounting principles recognised as appropriate for the measurement and reporting of results and financial position on an historical cost basis are followed by the company. Accrual accounting is used to match expenses and revenue. Reliance is placed on the fact that the company is a going concern.

The financial statements have not been audited.

Particular accounting policies

The following particular accounting policies that materially affect the measurement of profit and the financial position have been applied.

(a) **Accounting period**

The financial statements cover the financial results and financial position of the company for the six-month period ending 31 December 1993.

(b) **Revenue recognition**

Revenue is recorded when earned, or where provided on contract, on the basis of percentage of work completed.

(c) **Expenditure carried forward**

Work in progress includes direct costs and labour and a portion of all overheads incurred by researchers on projects uncompleted and uncharged at balance date.

(d) **Goods and Services Tax**

These accounts have been prepared on a GST exclusive basis, with the exception of accounts receivable and payable, which are shown GST inclusive on the balance sheet.

(e) **Taxation**

The taxation charge against the profit for the year is the estimated liability in respect of that profit after allowance for permanent differences and timing differences not expected to reverse in the foreseeable future. This is the partial basis for the calculation of deferred taxation.

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

STATEMENT OF ACCOUNTING POLICIES continued

The company follows the liability method of accounting for deferred taxation.

A debit balance in the deferred tax account arising from timing differences is only recognised if there is virtual certainty of realisation.

(f) Fixed assets

Land has been recorded at cost. Buildings, furniture and fittings, EDP equipment, motor vehicles and other plant and equipment are recorded at cost less depreciation written off to date. Certificates of title have yet to be issued for the land transferred to the New Zealand Institute for Crop & Food Research Limited from settlement with the Crown.

All land holdings are restricted assets to the extent that they are subject to Maori land claims.

The cost of purchased fixed assets is the value of the consideration given to acquire the assets and the value of other directly attributable costs that have been incurred in bringing the assets to the location and condition necessary for their intended service.

(g) Depreciation

Depreciation is charged on a straight-line basis to write off the cost of the fixed assets to their estimated residual value over their expected economic lives. The estimated economic lives are as follows:

Buildings	10-100 years
Motor vehicles	5 years
Plant and equipment	5-10 years
EDP equipment	3-5 years
Furniture and fittings	10 years
Office equipment	5-10 years

Fixed assets purchased from the Crown on 1 July 1992, with the exception of land, will be depreciated over their remaining estimated economic lives from 1 July 1992.

(h) Accounts receivable

Accounts receivable are stated at their estimated realisable value.

(i) Investments

Equity investments are recorded at the lower of cost and net current value.

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

STATEMENT OF ACCOUNTING POLICIES continued

(j) Inventories

Inventories are valued at the lower of cost and net realisable value.

(k) Research and development costs

Research and development costs are expensed in the period incurred. Development costs are deferred where future benefits can reasonably be expected to exceed those costs. Deferred development costs are amortised over future periods on a basis related to expected future revenue.

(l) Livestock

Livestock are valued under the herd scheme at national average market values published by the Inland Revenue Department.

(m) Leases

The company leases certain plant and equipment and land and buildings.

Operating lease payments, where the lessors effectively retain substantially all the risks and benefits of ownership of the leased items, are included in the determination of the operating profit in equal instalments over the lease term.

(n) Related party transactions

The shareholders of the company are the Minister of Finance and the Minister responsible for the administration of the Crown Research Institute Act 1992. The company undertakes many transactions with other CRIs, government departments and Crown agencies. These transactions are carried out on a commercial and professional basis and do fall within the intended scope of related party disclosures.

(o) Changes in accounting policies

There have been no changes in accounting policies. All policies have been applied on a consistent basis.

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

1 BUSINESS ENTITY

These financial statements are those of the New Zealand Institute for Crop & Food Research Limited, a Crown Research Institute established with effect from 1 July 1992 under the Crown Research Institutes Act 1992.

Dollars in thousands	Six months 31 Dec 1993 \$'000	Six months 31 Dec 1992 \$'000	Full year 30 June 1993 \$'000
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2 NET PROFIT BEFORE TAXATION

Net profit has been arrived at after charging:

Depreciation	457	314	896
Directors' fees	51	46	91
Audit fees and expenses			43
Rental and operating lease costs	182	184	349

Net profit has been arrived at after crediting:

Abnormal gains			122
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3 SHARE CAPITAL

Authorised and issued capital

10 036 000 ordinary shares of \$1.00	10 036	10 036	10 036
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NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

Dollars in thousands	As at 31 Dec 1993 \$'000	As at 31 Dec 1992 \$'000	As at 30 June 1993 \$'000
4 TERM LIABILITIES			
The Crown	2 231	2 231	2 231
Security: floating charge over all company assets			
Interest rate:			
(i) the Bill Rate computed on the first day of that interest period plus 1% per annum, or			
(ii) such other rate of interest per annum as the Minister may specify for that interest period provided that the rate of interest so specified is less than the Bill Rate so computed plus 1% per annum.			
Repayment terms:			
principal to be repaid in full by 30 June 1997 or such other date the Crown and company agree to before 30 June 1997.			
Restructuring provision			
Provision provided to cover expenditure for the transition from a Government Department structure to a commercial environment structure	824	1 000	1 000
Provision for contingencies	<u>200</u>	<u>200</u>	<u>200</u>
	1 024	1 200	1 200
Personnel liabilities			
Service leave provision and retirement leave provision	<u>307</u>	<u>427</u>	<u>414</u>
	<u>3 562</u>	<u>3 858</u>	<u>3 845</u>
5 CURRENT LIABILITIES			
Creditors and accruals			
Trade creditors	1 456	1 715	2 464
Goods & services tax	253	297	96
Revenue in advance	<u>1 032</u>	<u>48</u>	<u>454</u>
	2 741	2 060	3 014
Personnel liabilities	1 116	1 261	1 034
Tax payable	<u>191</u>	<u>—</u>	<u>—</u>
	<u>4 048</u>	<u>3 321</u>	<u>4 048</u>

NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

6 FIXED ASSETS

	Cost	Accum depn	Closing book value
Land	3 960		3 960
Buildings	6 169	205	5 964
Other assets	5 446	1 148	4 298
As at 31/12/93	15 575	1 353	14 222
As at 31/12/92	14 517	314	14 203
As at 30/6/93	15 028	896	14 132

Dollars in thousands	As at 31 Dec 1993 \$'000	As at 31 Dec 1992 \$'000	As at 30 June 1993 \$'000
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7 INVESTMENTS

Medinza Herbs Ltd (50% equity investment)			
Investment at cost	49	25	25

Technicrop Pacific Ltd (20% equity investment)			
Investment at cost	40		

Lincoln International Ltd

The Institute has an interest in this company to the extent that a 34% shareholding is held in trust for the Institute. At balance date, these shares had no value and have not been transferred to the Institute.

	<u>—</u>	<u>—</u>	<u>—</u>
	<u>89</u>	<u>25</u>	<u>25</u>

8 EXPENDITURE CARRIED FORWARD

Work in progress	<u>481</u>	<u>0</u>	<u>200</u>
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NEW ZEALAND INSTITUTE FOR CROP & FOOD RESEARCH LIMITED

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

Dollars in thousands	As at 31 Dec 1993 \$'000	As at 31 Dec 1992 \$'000	As at 30 June 1993 \$'000
9 INVENTORIES			
Clothing	4		
Livestock			43
Seed stocks	<u>167</u>	<u>146</u>	<u>251</u>
	<u>171</u>	<u>146</u>	<u>294</u>
10 RECONCILIATION OF NET PROFIT AFTER TAXATION TO CASHFLOW FROM OPERATING ACTIVITIES			
	Six months 31 Dec 1993 \$'000	Six months 31 Dec 1992 \$'000	Full year 30 June 1993 \$'000
Reported net profit after taxation	615	1 175	506
Add non cash items:			
Depreciation	457	314	896
Increase in deferred tax	(127)		(277)
Movements in working capital:			
(Decrease)/increase in taxation	367		(176)
Increase in receivables	(590)	(1 048)	(716)
(Decrease)/increase in creditors and provisions	(147)	1 898	2 302
(Increase)/decrease in stock	123	(9)	(114)
(Decrease)/increase in provisions for employee entitlements	(95)	281	548
Decrease in restructuring	(176)		
Plus classified as investing (loss on sale)			144
Less classified as investing (gain on sale)	(23)		(16)
Plus classified as financing (interest)	<u>78</u>		
	<u>482</u>	<u>2 611</u>	<u>3 097</u>

DIRECTORY

DIRECTORS

Mr Graham Robertson (Chairman)
Professor Mary Earle
Mr Graham France
Dr Ross Mitchell
Mrs Kay Peterson
Professor Bruce Ross
Mr Richard Wood

CHIEF EXECUTIVE

Dr Michael Dunbier

COMPANY SECRETARY

Mr John Clark

REGISTERED OFFICE

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Lincoln
NEW ZEALAND

POSTAL ADDRESS

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NEW ZEALAND

AUDITOR

Audit Office NZ

BANKERS

National Bank of New Zealand Ltd

SOLICITORS

Chapman Tripp Sheffield Young
Raymond Donnelly & Co

DIVISIONAL MANAGEMENT

Dr Nick Ashby
Divisional Manager Plant Improvement

Dr Neil Clarke
Divisional Manager Food
Science & Technology

Dr Robert Wynn-Williams
Divisional Manager
Crop Production Systems

Mr John Clark
Divisional Manager Corporate Services

Mr Harry Lim
Divisional Manager Marketing Services



A CROWN RESEARCH
INSTITUTE

HALF YEARLY REPORT
31 December 1995

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STRATEGIC INTENT

The Institute of Environmental Science and Research (ESR) is committed to being:

An international leader in scientific services for the protection of people and their environment.

The purpose of ESR is to provide research, analytical and consulting services in public health, environmental health and forensic sciences to a range of public and private sector clients.

ESR will achieve the strategic intent by:

- *emphasising customer satisfaction and quality improvement;*
- *investing in effective training, research and development;*
- *being committed to providing objective and impartial advice;*
- *ensuring that services are delivered to international standards;*
- *strengthening human capital through the provision of internally funded research opportunities, effective rewards and incentives and career development.*

OPERATING PRINCIPLES

In pursuing the strategic intent ESR will follow these principles:

- Maximise the value of the Crown's investment in ESR's scientific services, research and technology;
- Expand the research base for the benefit of clients and promote the application of the results of research and technological developments;
- Achieve excellence and create value in all activities;
- Maintain and develop the intellectual capital of ESR and treat employees as valuable assets;
- Seek out efficiency gains which can be re-invested in ESR;
- Operate in a financially responsible manner;
- Exhibit a sense of social responsibility by endeavouring to accommodate and advance the interests of the community.

REPORT TO SHAREHOLDERS

We have pleasure in presenting the Half Yearly Report of the Institute of Environmental Science & Research Limited (formerly the Institute of Environmental Health & Forensic Sciences Limited) for the six months ended 31 December 1993.

ESR is wholly owned by the Crown and was established as a Crown Research Institute on 1 July 1992.

On 1 July 1993, the Institute moved from a regional structure to one based on five market related business units. They were formed to support ESR's business strategy by focusing on the needs of our clients and on the capabilities we need to have to succeed in each of them. These units are: Forensic, Environmental Analytical, Environmental Consulting, Food & Water and Public Health.

To reflect this increased client focus the Institute's name was changed on 1 December 1993 to ESR. Under the ESR umbrella the five business units have been positioned under three brands - ESR:Health, ESR:Forensic and ESR:Environmental. Each offers a range of capabilities and services to particular client groups.

ESR is located in Mt Albert, Mt Eden, Lower Hutt, Porirua, Wellington, Christchurch and Dunedin and employs around 330 staff.

Principal Activities

ESR's principal business activity is the provision of analytical and consulting services relating to public health, environmental health and forensic science. Our major clients include the Public Health Commission, Ministry of Health, Ministry of Agriculture and Fisheries and the Police as well as a range of regional and local government and private sector organisations. Research funding from the Foundation for Research, Science and Technology continues to make up a small proportion of our revenue (less than 5%).

Results and Commercial Performance Targets

ESR earned a net profit after tax of \$0.3 million in the first six months of the 1993/94 financial year. This represents an annualised 5.6% return on shareholders' funds for the half year. The Board is satisfied with current performance and in particular, the considerable progress made in strengthening ESR's longer term prospects. This has been done by investing in process efficiencies, developing new technologies, new business development and customer satisfaction research.

Health Reforms

While the full consequences of the health reforms are still unclear, ESR is developing longterm contracts within the health sector. Agreement on the Health Contract service specification between ESR and the Public Health Commission for 1993/94 has been essentially agreed since the beginning of December. Formal signing of the contract has been delayed by the need for the Public Health Commission to ensure the Ministry of Health fully agrees with the contract conditions.

Review of Operations

During this half year the corporate strategy developed in our first year of operation has been significantly implemented. At present all the targets that were set in the 1993/94 Statement of Corporate Intent are being met. However, we must take care to ensure that all efficiencies expected within ESR are made during the next six months.

Progress on initiatives that will build ESR a platform for growth has been very positive in this half year. These initiatives include:

- *Agreement of the Collective Employment Contract in early December with an expiry date in August 1995.* This contract includes a new remuneration system which is based on reward for merit and the application of new skills. The Board and Management are pleased that staff have accepted this contract as it is an important part of becoming a truly commercial organisation.
- *Presentation of a balanced portfolio of research bids to the Foundation of Research, Science and Technology for the 1994/95 year.* The programme bids are well matched to ESR core business activity, where this is appropriate to the desired outcomes of the Public Good Science Fund. A feature of the bids is a significantly increased level of cooperation and collaboration with other Crown Research Institutes, Research Associations and Universities.

The Board and Management are actively encouraging collaboration between ESR and Universities by visiting the appropriate university departments to develop links. A first visit was conducted at Otago University in late September and subsequently a Memorandum of Understanding has been established between ESR and Otago University.

- *The purchase and installation at the Wellington Science Centre of an ICP-MS instrument for the Environmental Analytical Business Unit.* This instrument is the only one of its kind in New Zealand. It will be operational in the first quarter of 1994 after extensive testing and calibration. It will enable ESR to meet market demand for multi-element analysis at ultra-trace levels with very high levels of sensitivity, accuracy and speed.

- A detailed customer survey conducted with key clients in two of the business units. A major finding of this research was that ESR is perceived to be expert in all core performance areas defined by clients. Our work is seen to be highly credible, authoritative, accepted within customer organisations and only rarely falls below expectations. Areas where ESR can improve its performance are: better explanation of the results, improved turnaround time and improved invoicing procedures. Specific actions to address these performance issues are underway.

- Development of a strategy for growing our international business, particularly in Asia where opportunities are significant. This strategy will build up our staff resource base and take a highly targeted approach to particular markets. Exchanges of staff with similar international organisations will also be encouraged.

Over the past six months ESR has completed a major part of the very challenging development programme that arose from the corporate strategy. Against this background of major change, the achievement of financial results very close to the 1993/94 Statement of Corporate Intent targets is most creditable. Further improvement of our position is expected in the second half of the year.



Christopher Mace
CHAIRMAN



Mark Templeton
CHIEF EXECUTIVE

PERFORMANCE INDICATORS

Scientific Output

	6 months ended 31/12/93	SCI target 93/94
% PGSF/commercial work on time/budget	80%	80%
Order to delivery performance	80%	80%
Publication in refereed journals	4	20
Invitations to address conferences, act as referees, participate on scientific boards and committees	15	30

Financial Performance Measures

	6 months ended 31/12/93	Year ended 30/6/93	SCI target 93/94
Total revenue	\$13m	\$25m	\$26m
Operating margin	2.6%	8.1%	3.9%
Annualised return on equity	5.6%	16.1%	8%
Net working capital (liquidity ratio)	1.0	1.1	0.9

FINANCIAL STATEMENTS (UNAUDITED)

EARNINGS STATEMENT FOR THE SIX MONTHS ENDED 31 DECEMBER 1993

	6 months ended 31/12/93 \$'000s	6 months ended 31/12/92 \$'000s	Year ended 30/6/93 \$'000s
Gross income	13,322	12,338	25,417
Operating expenses	12,976	11,075	23,352
Net finance costs/(income)	(69)	(79)	(238)
Profit before taxation	415	1,342	2,303
Taxation	137	445	933
Profit after taxation retained for the period	278	897	1,370
Opening retained earnings	1,370	-	-
Closing retained earnings	1,648	897	1,370

STATEMENT OF CASH FLOWS FOR THE SIX MONTHS ENDED 31 DECEMBER 1993

NET CASH FLOWS FROM:

Operating activities	346	4,545	3,734
Investing activities	(139)	(13,996)	(13,541)
Financing activities	-	10,551	10,551
Net increase in cash held	207	1,100	744
Opening cash position	744	-	-
Closing cash position	951	1,100	744

The notes on pages 10 to 11 form part of these accounts.

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 1993

	31/12/93 \$'000s	31/12/92 \$'000s	30/6/93 \$'000s
ASSETS			
Fixed assets	13,692	12,255	12,642
Cash and bank balances	951	1,100	744
Short term deposits	-	3,000	1,500
Receivables, prepayments and accrued revenue	1,904	1,359	2,116
Stock and work in progress	491	168	424
Total current assets	3,346	5,627	4,784
Deferred tax asset	191	-	191
Total assets	17,229	17,882	17,617

LIABILITIES AND SHAREHOLDERS FUNDS

Payables and accruals	1,226	3,122	1,891
Provisions	3,359	3,312	3,374
Total current liabilities	4,585	6,434	5,265
Crown long term debt	2,057	2,057	2,057
Non current provisions	445	-	431
Total long term liabilities	2,502	2,057	2,488
Total liabilities	7,087	8,491	7,753
Issued and paid up capital	8,494	8,494	8,494
Retained earnings	1,648	897	1,370
Total shareholders funds	10,142	9,391	9,864
Total liabilities and shareholders funds	17,229	17,882	17,617

The notes on pages 10 to 11 form part of these accounts.

NOTES TO THE FINANCIAL STATEMENTS

1. These accounts are unaudited.

2. STATEMENT OF ACCOUNTING POLICIES

A GENERAL ACCOUNTING POLICIES

The general accounting principles recognised as appropriate for the measurement and reporting of results, cash flows and financial position under the historical cost basis have been followed in the preparation of these financial statements. Accrual accounting is used to match expenses and revenue. Reliance is placed on the fact that the Institute is a going concern.

B PARTICULAR ACCOUNTING POLICIES

The following particular accounting policies, which significantly affect the measurement of profit and financial position, have been applied:

(i) Gross Income

Gross income shown in the profit and loss account comprises the amounts received and receivable by the Institute for services supplied to customers in the ordinary course of business. Gross income is stated exclusive of Goods and Services Tax collected from customers.

(ii) Fixed Assets

The cost of fixed assets includes all directly attributable costs which have been incurred in bringing assets to the location and condition necessary for their intended use.

(iii) Depreciation

Depreciation is charged on a straight line basis so as to write off the cost of the fixed assets over their expected economic lives.

Major Depreciation rates are:

Freehold Buildings	25-50 years
Leasehold Improvements	10 years
Scientific Equipment	3-7 years
Other Plant & Equipment	3-10 years
Vehicles	5 years

(iv) Receivables

Receivables are stated at their estimated realisable value.

(v) Inventories

Stocks of consumables and work-in-progress are stated at the lower of cost and net realisable value. Cost is determined on a first in, first out basis. Work-in-progress includes materials and a portion of other costs appropriate to the stage of completion reached.

(vi) Taxation

The taxation charge is the estimated liability after allowance for permanent differences and timing differences not expected to reverse in the foreseeable future.

The Institute accounts for deferred taxation using the liability method and the partial basis of calculation.

(vii) Statement of Cash Flows

(a) Cash means coins and notes, demand deposits and other highly liquid investments in which the Institute has invested part of its day-to-day cash management.

(b) Investing activities are those activities relating to the acquisition, holding and disposal of fixed assets and investments.

(c) Financing activities are those activities which result in changes in the size and composition of the capital structure of the Institute.

(d) Operating activities include all other transactions and events.

C CHANGES IN ACCOUNTING POLICIES

There have been no changes in accounting policies.

ESR CONTACTS

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DIRECTORY

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Christopher Mace (Chairman)
Sir Robin Irvine
Dr Linda Holloway
Professor Ralph Cooney
John Haigh QC

CHIEF EXECUTIVE

Mark Templeton

COMPANY SECRETARY

Neil Wanden

REGISTERED OFFICE

Level 6, Clear Centre, 15-17 Murphy Street
Thorndon, Wellington

AUDITORS

Audit New Zealand

BANKERS

National Bank of New Zealand Ltd

SOLICITORS

Kensington Swan



NEW ZEALAND
FOREST RESEARCH INSTITUTE
LIMITED

Half Year Report
31 December 1993



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Nature and Scope of Activities

The New Zealand Forest Research Institute Limited (NZFRI) is the principal provider of forestry research for the government and forest and wood products industries of New Zealand.

The prime purpose of NZ FRI is to conduct research and development which exploits New Zealand's advantage in production forestry and assists the production of high-quality, high-value products which can yield high profit margins while protecting the environment.

The core business of NZ FRI includes research, development, innovation, and technology transfer in tree propagation, silviculture, management and harvesting systems, tree genetics and physiology, pulp and paper, wood processing, environmental impacts of processing, production and market economics, and sociology.

Sub-sectors of the forest industry serviced by NZ FRI's core business activities include:

- tree-seed producers and nurseries;
- forest owners and managers, including forests on farms;
- logging, log transport operators, and shipping outlets;
- wood processing, wood products, and solid wood manufacturers;
- pulp, paper, and paperboard producers;
- wood products users, including the construction industry;
- industrial chemicals and energy suppliers;
- central and local government;
- environmental agencies;
- forestry consultants.



Chairman's Report

The Directors of the New Zealand Forest Research Institute Limited have pleasure in presenting the Half Yearly Report of NZ FRI for the six months ended 31 December 1993.

The Company has continued to meet its obligations under the Crown Research Institutes Act 1992. A net profit after tax of \$558,000 is considered satisfactory by the NZ FRI Board. Although 13.1% behind budget it is recognised that the impact of a slow start to the year, and overly optimistic revenue targets for technology exploitation included in first half budgets have excessively influenced the position. This view is supported by the upturn in business activity recorded at the end of the first quarter which has been sustained throughout the second quarter, indicating that a full recovery to budgeted profitability can be expected by the end of the third quarter. The favourable business trend is reflected in higher than expected commercial revenue, which if supported by achievement of technology exploitation revenue targets, will enable forecast profits to be exceeded by the end of the financial year.

Meeting year end requirements for the first year of operation provided a challenge for the organisation during July and August. Despite the pressure, all requirements were met and the Management Report received from Audit New Zealand was satisfactory. The report reflects the NZ FRI Board's confidence in the steady progress the Institute is making after weathering a difficult establishment position.

The external operating environment continues to change in the forestry sector. During the year we have experienced a noticeable shift in attitude within the larger corporates toward emphasis on "in-house" control over technology and intellectual property. More focus on integration of activities coupled with a very strong drive to link research and development into strategic planning and positioning, has emerged. To some extent NZFRI has been a catalyst to these changes through strongly promoting the seed to market theme and highlighting value adding opportunities. The management of research and development investment to secure competitive advantage is clearly changing how corporates view their relationships with external research organisations such as NZFRI. This has both positive and negative effects; positive in that there is increasing willingness to invest in strategic research; negative in that NZFRI staff are being sought by industry and offered financial inducements as high as 50% above the science market norm.

Developing stable income streams based on the commercialisation of major technologies is critical to creating flexibility within the organisation. To provide more focus on these activities technology exploitation and commercialisation functions have been given more impetus. A new unit with clear responsibility for dual functions of providing "expert" support to science divisions for business development and establishing and controlling strategic business units set up for managing the commercialisation of major technologies and services has been established.



Good progress has also been made in developing management and information systems which reflect the needs of a research based company. In this regard the NZFRI Board was pleased to ratify a comprehensive series of policies which were developed during the first year of operation to provide a framework for risk management and operational standards. The NZFRI Policy Manual is an important step in progressing the evolution of the new culture and establish clear guidelines for business conduct.

The NZFRI Board acknowledges that this year will be a very testing one, but the clear enthusiasm and confidence now in the company augurs well for the future. The science divisions have completed the first half year well, and whilst some staff have been lost, it is particularly pleasant that the Institute has been able to appoint new scientists with a wide range of skills relevant to our new science directions, many with considerable international experience.

RF Meyer
Chairman



Chief Executive Officer's Report

The successful first half of NZ FRI's second year of operation reflects the rapid transition that has been achieved in adjusting to the new business environment. An upturn in revenue for the six months compared with the same period last year is particularly encouraging. However, overall performance is still influenced by an historical pricing situation which puts additional pressure on bottom line management and cost control. More vigorous adoption of strong pricing policies and guidelines will have a positive impact on future business but there is a lag which has to be managed in the meantime.

Science

During the first half increased emphasis on science output, with greater focus on innovation and researching new and novel opportunities, has been promoted to achieve a more appropriate balance between science and financial performance.

The release of the NZ FRI Annual Report in two papers, one dealing with science and one dealing with finance, has been well received and has solicited favourable comment from many parts of the forestry sector. The science report is a valuable marketing tool both for national and international audiences and is presented in a format which emphasises the importance placed by the Institute on a strong science presentation.

The Biotechnology Division research programme was reviewed by Dr Bruce Zobel, Professor Emeritus at North Carolina State University, at the beginning of the year. Professor Zobel, an internationally renowned tree geneticist, provided positive feedback on the division's programmes.

The number of scientific papers published or despatched in the first half have already achieved the 1992/93 level of publication.

Several NZ FRI 1992/93 Public Good Science Funded programmes were selected for the FRST Achievement Review of outputs achieved against contractual obligations. Programmes reviewed were complimented for either very good and/or excellent work.

NZ FRI has made a concerted effort to work with FRST in completing a process for achieving key sector strategies and managing the impact of funding shifts in the forestry-related outputs. Cross-organisation and inter-agency integrated bids have been developed where possible, and in some instances voluntary cuts to long term funded programmes have been made to provide flexibility to develop new directions.

A protocol for the selection of senior science fellows within NZ FRI is complete. The fellows will play a key role in stimulating innovation and promoting science quality for NZ FRI.



Commercial

Changes in how major corporates are viewing business relationships with NZ FRI are beginning to influence our own commercial strategies. Over the next year we can expect to see significant changes in how NZ FRI interacts with corporates, industry associations, research cooperatives, and the Forest and Forest Products Research Organisation. Whilst these interactions have been held up as models in the recent past, the pace of change in the sector is signalling the need for new approaches.

Agreement over the final details in a contract for licensing Greenweld technology in North America was achieved. The licensing agreement provides for a performance-based option fee and an ongoing fee based on volume of material processed. International negotiations for licensing this technology in other markets have progressed very well.

Negotiations with corporate partners for the development of two very significant research projects, one in molecular biology and one in value recovery, are well advanced following presentations to the companies involved.

Other major contracts entered into included a significant multi-client research programme into upper mid-crown yellowing, and an international agreement with a Norwegian research institute for access to the PAPRO pilot plant facility.

Wood Hardening Technologies Limited, an associate company in which NZ FRI has two commercial partners, has completed market development and planning studies to advance the development of the wood hardening technology. End-user trials have begun and proposals for a commercial scale pilot treatment plant are presently being considered.

Three new provisional patent applications and a new trade mark application were made during the period.

International consultancy business has advanced with the signing of a contract worth over \$1 million to provide forestry support for the Turkish Government. A number of smaller contracts have been won in China and Southeast Asia, and negotiations over major consultancy opportunities in India and China are advancing very well. These opportunities are important to the Institute's internationalisation process, both in enabling us to maintain scope in critical resource areas and in acting as a conduit for developing long term strategic science relationships for the benefit of New Zealand.

Alliances/Education

The development of new programmes and directions has been stimulated by the establishment of national and international linkages with science-based agencies. Through these networks NZ FRI is negotiating a number of key post-doctoral



appointments to enhance the post-graduate research programme established with the assistance of non specific output funding awarded by the NZ FRI Board.

Heads of agreement have been established with research organisations in Australia, India, USA, Canada, and China during the latter part of 1993. These agreements are part of NZ FRI's strategy to out-source specialist capability, to develop research and consultancy opportunities and to enhance international profile and opportunities for the forestry sector.

The development of NZ FRI as a science, education and forestry services centre has continued to grow. A major commercial partner of NZ FRI furthered its relationship by locating an office on campus and Waiariki Polytechnic's forestry unit has consolidated its presence. An agreement between NZ FRI, Waiariki Polytechnic and the Rotorua District Council to establish a permanent science/education joint venture has further enhanced the overall concept.

Involvement in community and education activities has continued to grow. Twenty three Rotorua-based intermediate and high school students attended an inaugural science summer camp at NZ FRI. The programme covered aspects of forest technologies from growing to harvesting and processing, and visits were made to forests and processing plants. A joint University of Auckland/PAPRO diploma programme in pulp and paper technology utilising an upgraded seminar/teaching facility on campus was completed by thirty two participants in December.

Staff

Morale has lifted during the year which is reflected directly in the productivity of the organisation measured either by percentage programme hours or the level of business transacted. With the completion of the campus-wide network and a computer training centre, activity in skills development has increased.

Although staff movements slowed during the first half of the year, known activity within the industry indicates that this position will change during the second half. There have been several significant new appointments including scientists from North America and Scandinavia with specialist skills in wood processing.

Completion of a draft remuneration agreement which reflects the new culture and direction of the organisation is a significant milestone. Staff and management have worked together for twelve months to produce the document.

The inaugural NZ FRI Suffrage Centennial Scholarship attracted a number of high calibre applications. Two scholarships were awarded for the 1993 year.



Awards

Dr Stuart Corson and Shane Foster (PAPRO) were awarded the ECNZ Rutherford Award for their work in identifying the special mechanical pulping characteristics of clone 55.

Rowan Sweeney (Wood Products Division) won a QEII award for advanced training.

NZ FRI's Tissue Culture Group received a Community Enterprises Award for scientific work.

Dr Ruth Gadgil won a Zonta 1993 Achievement Award.

Vivienne O'Kane (Plant Protection) received a Fletcher Challenge Award for academic excellence.

An NZ FRI sponsored team from Otago University won the Australia and New Zealand Agribusiness Association student marketing competition with a creative plan for the production of compostable cellulose diacetate plastic from sawdust.

Frank Wood
Chief Executive



PROFIT AND LOSS ACCOUNT

FOR THE SIX MONTHS ENDED 31 DECEMBER 1993

	<i>Note</i>	1993 \$000	1992 \$000
REVENUE	2	<u>15,604</u>	<u>13,461</u>
NET PROFIT BEFORE TAXATION	3	833	495
Provision for taxation	4	<u>275</u>	<u>163</u>
NET PROFIT AFTER TAXATION		558	332
Retained earnings at beginning of year		<u>1,357</u>	<u>-</u>
TOTAL AVAILABLE FOR APPROPRIATION		1,915	332
Dividends paid		<u>-</u>	<u>-</u>
CLOSING RETAINED EARNINGS		<u>1,915</u>	<u>332</u>

The accompanying notes form part of these financial statements.



STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 1993

	Note	1993 \$000	1992 \$000
SHAREHOLDERS' FUNDS			
Issued and paid up capital	5	15,716	15,716
Capital reserve	6	46	-
Retained earnings		<u>1,915</u>	<u>332</u>
		<u>17,677</u>	<u>16,048</u>
TERM LIABILITIES			
	7	<u>3,650</u>	<u>3,650</u>
OTHER LIABILITIES AND PROVISIONS			
	8	<u>945</u>	<u>1,128</u>
CURRENT LIABILITIES			
Creditors and accruals	9	4,166	3,838
Provision for taxation	4	<u>615</u>	<u>163</u>
		<u>4,781</u>	<u>4,001</u>
		<u>27,053</u>	<u>24,827</u>
FIXED ASSETS			
	10	<u>20,944</u>	<u>17,979</u>
INTANGIBLE ASSETS			
	11	<u>461</u>	<u>2,020</u>
INVESTMENTS			
	12	<u>125</u>	<u>-</u>
FUTURE TAXATION BENEFIT			
	13	<u>654</u>	<u>-</u>
CURRENT ASSETS			
Cash and short term deposits		1,207	1,195
Debtors and prepayments	14	3,159	3,261
Inventories	15	<u>503</u>	<u>372</u>
		<u>4,869</u>	<u>4,828</u>
		<u>27,053</u>	<u>24,827</u>

The accompanying notes form part of these financial statements.



STATEMENT OF CASH FLOWS

FOR THE SIX MONTHS ENDED 31 DECEMBER 1993

	1993 \$000	1992 \$000
Cash Flows from Operating Activities		
Cash was provided from:		
Receipts from Customers	16,331	17,319
Interest Received	<u>103</u>	<u>7</u>
	<u>16,434</u>	<u>17,326</u>
Cash was applied to:		
Payments to suppliers and employees	(15,084)	(14,986)
Interest paid	<u>(67)</u>	<u>(1)</u>
	<u>(15,151)</u>	<u>(14,987)</u>
Net cash flows from operating activities	<u>1,283</u>	<u>2,339</u>
Cash Flows from Investing Activities		
Cash was provided from:		
Proceeds from sale of fixed assets	<u>103</u>	<u>71</u>
Cash was applied to:		
Purchase of NZ FRI	-	(18,366)
Cash outflow for fixed assets	<u>(1,417)</u>	<u>(2,215)</u>
	<u>(1,417)</u>	<u>(20,581)</u>
Net cash used in investing activities	<u>(1,314)</u>	<u>(20,510)</u>
Cash Flows from Financing Activities		
Cash was provided from:		
Proceeds from share issue	-	15,716
Proceeds from long term debt	<u>-</u>	<u>3,650</u>
Net cash flow from financing activities	<u>-</u>	<u>19,366</u>
Net increase/(decrease) in cash held	(31)	1,195
Add opening cash brought forward	<u>1,238</u>	<u>-</u>
Ending cash carried forward	<u>1,207</u>	<u>1,195</u>

The accompanying notes form part of these financial statements.



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

1. Statement of Accounting Policies

GENERAL ACCOUNTING POLICIES

The general accounting principles recognised as appropriate for the measurement and reporting of earnings and financial position on an historical cost basis are followed by the Company. Accrual accounting is used to match expenses and revenues. Reliance is placed on the fact that the Company is a going concern.

PARTICULAR ACCOUNTING POLICIES

The following particular accounting policies, which materially affect the measurement of earnings and the financial position, have been applied:

a) Fixed Assets

Fixed assets are valued at the cost of purchase from the Crown as at 1 July 1992 adjusted for subsequent additions at cost, disposals and depreciation.

Fixed assets other than capital work in progress are recorded at cost less accumulated depreciation. Capital work in progress is recorded at cost.

Expenditure incurred on fixed assets is capitalised where such expenditure will increase or enhance the future benefits provided by the asset. Expenditure incurred to maintain future benefits is classified as repairs and maintenance.

Depreciation of fixed assets is calculated using the straight line method to allocate the historical cost, less an estimated residual value, over the estimated useful life of the asset.

The useful lives of the major classes of assets have been calculated as follows:

Buildings	40-60 years
Plant and Equipment	4-10 years
Furniture and Fittings	5 years
Computer Hardware	5 years
Motor Vehicles	3-10 years

b) Associate Companies

The accounts of associate companies are reflected on an equity accounting basis.

c) Joint Ventures and Partnerships

Interests in joint ventures are accounted for through the disclosure of the Company's proportionate share in the venture.

Joint venture interests and partnerships are not included where the Company does not have a significant influence or their inclusion would be misleading.

d) Debtors

Debtors have been valued at estimated net realisable value. Provision has been made for potential doubtful debts.

e) Inventories

Consumable stores are valued at the lower of cost, on a weighted average price of stock on hand, or net realisable value.

Costs incurred in the establishment of nursery stocks to be sold during the next planting season are recorded as nursery work in progress. Cost includes labour and consumables only.

f) Goodwill

Goodwill arising from the difference between the enterprise valuation agreed with the Crown and the tangible asset value established by independent valuers as at 1 July 1992 will be amortised in equal instalments over a five year period.



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

- g) **Intellectual Property**
Intellectual property arising from research and development expenditure is not valued for accounting purposes unless future benefits are definable. Similarly, research and development expenditure is written off in the year in which it is incurred unless future income potential can be clearly defined.
- h) **Employee Entitlements**
Provision has been made for benefits accruing to employees for annual leave, long service leave, and retirement leave. The recorded provisions represent the actual payment due to employees upon resignation or retirement in accordance with employment contracts.
- i) **Leases**
The Company leases certain plant, equipment and vehicles. Operating lease payments are included in the profit and loss account in equal instalments over the period of the lease.
- j) **Goods and Services Tax (GST)**
All revenue and expenditure is recorded net of GST. However, items recorded in the Statement of Financial Position include all GST payable to or owing by the Company as appropriate.
- k) **Foreign Currencies**
Transactions in foreign currencies are converted at the New Zealand rate of exchange ruling on the date of the transaction. Monetary assets and liabilities at year end are converted to New Zealand dollars at the exchange rate ruling at balance date.
- l) **Revenue Recognition**
Revenue from both Government and commercial sources is recorded when earned based on the percentage of work completed or other contractual commitments.

Work completed but not invoiced is recorded as accrued revenue while work invoiced but not completed is recorded as revenue in advance.
- m) **Taxation**
The income tax expense charged against the profit for the year is the estimated liability in respect of that profit.
The Company uses the liability method of accounting for deferred taxation and applies this on a comprehensive basis. Future tax benefits attributable to timing differences are only recognised when there is virtual certainty of realisation.
- o) **Statement of Cash Flows**
Cash means coins and notes, demand deposits and other highly liquid investments in which NZFRI has invested as part of its day-to-day cash management. Cash includes liabilities which are the negative form of the above, such as the bank overdraft. Cash does not include accounts receivable or payable, or any borrowing subject to a term facility.
Investing activities are those activities relating to the acquisition, holding and disposal of fixed assets and of investments. Investments can include securities not falling with the definition of cash.
Financing activities are those activities which result in changes in the size and composition of the capital structure of NZFRI. This includes both equity and debt not falling within the definition of cash.
Operating activities include all transactions and other events that are not investing or financing activities. Interest and dividends received and interest paid are included in operating activities.

CHANGES IN ACCOUNTING POLICIES

There have been no changes in accounting policies during the period under review.



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

	1993	1992
	\$000	\$000
2. Revenue		
Government Revenue	9,112	8,482
Commercial Revenue	6,393	4,748
Other Revenue	99	231
Total Revenue	<u>15,604</u>	<u>13,461</u>
3. Net Profit before Taxation		
After charging:		
Audit fees	23	20
Depreciation	775	873
Directors' fees	53	27
Lease and rental costs	258	146
Personnel	8,523	7,976
Interest paid on bank overdraft	1	1
Interest paid on crown debt	128	-
After crediting:		
Interest from short-term deposits	83	7
4. Provision for Taxation		
Net profit before taxation	<u>833</u>	<u>495</u>
Prima facie tax at 33%	<u>275</u>	<u>163</u>
The taxation charge is represented by:		
Balance as at 1 July 1993	340	-
Payable for six months to 31 December 1993	<u>275</u>	<u>163</u>
	<u>615</u>	<u>163</u>
5. Share Capital		
Authorised capital		
15,716,000 ordinary shares of \$1 each	<u>15,716</u>	<u>15,716</u>
Issued and paid up capital		
15,716,000 ordinary shares of \$1 each	<u>15,716</u>	<u>15,716</u>
6. Capital Reserve		
Balance as at 1 July 1993	<u>46</u>	<u>-</u>
7. Term Liabilities		
Crown Debt	<u>3,650</u>	<u>3,650</u>
Interest was paid during the period at an average rate of 7% per annum.		
Principal repayable on 30 September 1998.		
Secured by a floating charge debenture over all of the company's assets.		
8. Other Liabilities and Provisions		
PAPRO outside interests	428	428
Provision for deferred maintenance	<u>517</u>	<u>700</u>
	<u>945</u>	<u>1,128</u>



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

	1993 \$000	1992 \$000
9. Creditors and Accruals		
Accounts payable	1,792	1,258
Revenue in advance	532	613
Provisions for staff liabilities	<u>1,842</u>	<u>1,967</u>
	<u>4,166</u>	<u>3,838</u>
10. Fixed Assets		
Land and Improvements		
At Cost	<u>1,825</u>	<u>1,825</u>
Buildings		
At Cost	10,320	10,157
Less Accumulated Depreciation	<u>324</u>	<u>130</u>
Net Book Value of Buildings	<u>9,996</u>	<u>10,027</u>
Plant and Equipment		
At Cost	8,095	4,203
Less Accumulated Depreciation	<u>1,466</u>	<u>590</u>
Net Book Value of Plant and Equipment	<u>6,629</u>	<u>3,613</u>
Furniture and Fittings		
At Cost	868	851
Less Accumulated Depreciation	<u>266</u>	<u>107</u>
Net Book Value of Furniture and Fittings	<u>602</u>	<u>744</u>
Motor Vehicles		
At Cost	155	408
Less Accumulated Depreciation	<u>67</u>	<u>46</u>
Net Book Value of Motor Vehicles	<u>88</u>	<u>362</u>
Capital Work in Progress		
At Cost	<u>1,804</u>	<u>1,408</u>
Total Fixed Assets		
At Cost	23,067	18,852
Less Accumulated Depreciation	<u>2,123</u>	<u>873</u>
Net Book Value of Fixed Assets	<u>20,944</u>	<u>17,979</u>

Land and Buildings were valued by Simes Dunckley during November/December 1991. Values provided included depreciated replacement cost \$51,404,000 and deprival value \$12,500,000. Deprival value has been selected as the most appropriate value for accounting purposes.

Titles to land purchased by the Company from the Crown have not yet been transferred.



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

	1993 \$000	1992 \$000
11. Intangible Assets		
Goodwill		
Balance as at 1 July 1993	458	1,995
Less Amortised to 31 December 1993	<u>57</u>	<u>-</u>
Balance as at 31 December 1993	401	1,995
Patent costs	<u>60</u>	<u>25</u>
Total Intangible Assets	<u>461</u>	<u>2,020</u>
<p>Goodwill represents the unamortised difference between the enterprise valuation and tangible asset value as at 1 July 1992. During June 1993 this difference was reassessed and a transfer of \$1,422,000 was made from Goodwill to Fixed Assets.</p>		
12. Investments		
Associate Companies		
Shares in Wood Hardening Technologies Limited (at cost)	<u>125</u>	<u>-</u>
<p>A one-third shareholding was purchased on 28 June 1993.</p>		
Joint Ventures and Partnerships		
<p>The Company undertakes research projects on a shared funding arrangement with the Logging Industry Research Association (LIRA) through the Logging Industry Research Organisation (LIRO). The Company's interests in LIRO have been disclosed only in so far as monies have been expended on behalf of, and recovered from LIRO.</p>		
<p>The Company also undertakes research projects with the Forest and Forest Products Research Organisation (FAFPRO) through seven cooperatives. Expenditure incurred on research and recoveries from the cooperatives have been included in the financial statements. However, the Company's share of the residual cash assets of the cooperatives are not material and have not been disclosed.</p>		
13. Future Taxation Benefit		
Balance as at 1 July 1993	<u>654</u>	<u>-</u>
Future taxation benefit on timing differences:		
Depreciation on fixed assets	26	-
Provision for doubtful debts	67	-
Provision for staff liabilities	299	-
Provision for stock obsolescence	59	-
Provision for deferred maintenance	181	-
Accruals	<u>22</u>	<u>-</u>
	<u>654</u>	<u>-</u>
14. Debtors and Prepayments		
Trade debtors	1,305	1,618
Provision for doubtful debts	(204)	(240)
Other debtors	153	688
Accrued revenue	1,260	760
Prepayments	<u>645</u>	<u>435</u>
	<u>3,159</u>	<u>3,261</u>



NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

	1993 \$000	1992 \$000
15. Inventories		
Consumable stores	279	259
Nursery work in progress	<u>224</u>	<u>113</u>
	<u>503</u>	<u>372</u>
16. Transactions with Related Parties		
During the past six months, research was undertaken on the Company's behalf by the Logging Industry Research Organisation (LIRO). Operating costs of \$ 157,652 were incurred by the Company and recovered from LIRO. Of this amount \$7,429 remained unpaid as at 31 December 1993.		
17. Contingent Liabilities		
Treaty of Waitangi Issues		
Two land claims affecting the Rotorua Campus currently exist:		
(i) Ngati Whakaue - covering the whole Campus		
(ii) Ngati Whaioe - covering the southern end of the Campus		
18. Commitments		
Capital commitments:		
Expenditure approved and committed	56	340
Operating Lease commitments:		
Lease commitments under non-cancellable operating leases:		
Within one year	506	276
One to two years	325	141
Two to five years	284	37
19. Financial Performance Measures	<i>Actual</i>	<i>SCI Target</i>
Net profit after tax to average shareholders' funds	6.4%	7.5%
Earnings before interest and tax to average net operating assets	9.1%	10.5%
Shareholders' equity	65.3%	63.8%
Net profit before tax to total revenue	5.3%	6.2%
20. These financial statements cover the period from 1 July 1993 to 31 December 1993 and have not been audited		



Directory

BOARD OF DIRECTORS

RF Meyer (Chairman)
BS Ashwin
AR Bellamy
DA Gartner
JBG Groome
C La Grouw
DW McLean

EXECUTIVE MANAGEMENT

FH Wood	Chief Executive
MJ Carson	Manager, Biotechnology
JR Tustin	Manager, Forest Technology
WJ Dyck	Manager, South Island Operations
JE Gaskin	Manager, Logging Industry Research Organisation
DJ Cown	Manager, Wood Processing
RJ Burton	Manager, Wood Products
TJ Fullerton	Manager, Pulp and Paper Research Organisation
JA Butcher	Manager, Commercial
SJ Mayne	Manager, Human Resources
RC Hook	Manager, Finance/Company Secretary

REGISTERED OFFICE

Sala Street
Rotorua
New Zealand
Telephone: +64 7 347 5899
Facsimile: +64 7 347 9380

AUDITORS

The Audit Office

BANKERS

Westpac Banking Corporation, Rotorua

SOLICITORS

Chapman Tripp Sheffield Young, Wellington

**HALF YEARLY
REPORT
TO
DECEMBER 1993**



Institute of
**GEOLOGICAL
& NUCLEAR
SCIENCES**
Limited



Institute of
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& NUCLEAR
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Limited

**INSTITUTE OF GEOLOGICAL &
NUCLEAR SCIENCES LIMITED**

**HALF YEARLY REPORT
TO 31 DECEMBER 1993**



CHAIRMAN'S REPORT

The Directors are pleased to report on the Institute's activities for the six month period from 1 July 1993 to 31 December 1993.

The focus of the Institute continues to be based on scientific output and the review of scientific opportunities. The process for efficient long term strategic planning is being established which will enable the company to develop its future Five Year Plan more accurately. This planning will recognise the longer term effects of reduced funding from Outputs 21 and 30 and will assist in establishing alternative revenue to replace that which will be lost from Public Good Science Funding.

During the period the company purchased the Bell Road property from Landcare. The latter enables the Institute to plan its accommodation needs in the Wellington region more clearly, the majority of which will be centred around Gracefield. A major problem exists in the continuing ownership of the Taita property which is considered totally unsuitable for the needs of the company.

The Taita property contributed positively to net earnings in the first year of the Institute. With Landcare vacating the site and a replacement tenant not as yet found, the Institute's earnings will suffer in the second half of the financial year.

During the six month period the Institute incurred a Net Profit Before Taxation of \$99,000. The reduced profit has resulted from one off redundancy costs together with a reduction in Commercial Revenue.

There are a number of timing differences in the completion of commercial assignments and any shortfall in revenue should be made up in the second six month period. Management will be closely monitoring the various science programmes to ensure that they are completed by 30 June 1994 so that all revenue from the Public Good Science Fund may be accounted for in this financial year. As a result of the reduced income to date, capital expenditure has been closely monitored and reduced where appropriate.

During the period the Institute's Dunedin office was expanded and as a result of this a number of new commercial opportunities have been identified. Establishment of the Earth and Ocean Sciences Centre in collaboration with the University of Otago is proceeding satisfactorily and will contribute to the Institute's activities in the South Island.

The Institute has agreed to partly fund the Chair of Geophysics at Victoria University, Wellington. This is a further example of the Institute co-operating with New Zealand Universities.

The Institute has not deviated during the period under review from the Operating Principles for Crown Research Institutes as set out in the Act. The Directors believe the Institute to be soundly based and in a position to fulfil its financial and science obligations.

T D SCOTT
CHAIRMAN



COMPANY PERFORMANCE

I COMMENTARY

During the first six months of the year, the Institute has worked on further developing its strategy of integration of scientific directions, continuing an aggressive position of marketing its specialised skills and experience to New Zealand consultancies working overseas and refining its skill base to meet new client needs.

The review of nuclear sciences funded jointly by the Foundation for Research, Science and Technology and the Institute, and carried out by Dr. Jay Davis of Lawrence Livermore National Laboratory, California, and Dr. Robert Pidgeon of Curtin University of Technology, Western Australia, was completed on July 24 and a report submitted to the Foundation. The Chief Executives of the Institute and the Foundation have reviewed the report and the actions which have been taken by the Institute to implement the recommendations. A joint letter summarizing these actions has been submitted to the Minister for Science, Hon. Mr Upton. Following acceptance by the New Zealand Vice Chancellors Committee on November 9, of a brief on establishing a National Centre in Isotope Studies, Institute staff have participated with university personnel in establishing a Working Party to review the options and prepare a report to the NZVCC and the Institute CEO. The report is expected to be completed in March.

During the six months, the Board and management of the Institute put considerable time into the review of science strategies which impact on the core capabilities of the Institute and provided input to the Foundation to assist with the finalisation of these strategies. While not agreeing with some aspects of these strategies, the Institute has placed emphasis on developing programmes aligned with the Output Science Strategies which enhance the capability of the Institute in developing its core business and submitting these to the Foundation for Research, Science and Technology for application to the Public Good Science Fund. Submissions recognize the reduction of funding in two particular areas of geological research identified in the Strategies for Output 21 (Energy), and Output 30 (Geological Structures, Processes, and Resources). The Institute has signalled its intent to meet the strategy directions by drastically reducing "public good" research in Sedimentary Basins (funded in Output 21) and Marginal Plateaux (funded in Output 30) over the next two years. Both these programmes support core research in areas of strategic importance to New Zealand and the Institute is taking measures to redress the proposed cuts in PGSF through other funding avenues.

II 1993/94 TARGETS

The Board and management of the Institute look at the second year since the establishment of the Institute as a year of consolidation of change and investment in science programmes. Intrinsic in this is the confirmation of priority core research areas, the establishment of multi-disciplinary research teams including collaboration with universities in key areas, and the encouragement of appropriate international science programmes.



The following performance measures refer to the 1993/94 targets identified as objectives in the 1993/94 Statement of Corporate Intent in which specific achievements have been reached during this first six months of the year.

Science

- ▶ Advertisements for joint appointment (with University of Otago) of the Director, Earth & Ocean Sciences Programme have resulted in several suitable candidates being identified for consideration.
- ▶ The Nuclear Science Review has been completed and strategies for building Institute capability have been initiated. In particular, discussions held with Heads of Earth Sciences Departments of NZ Universities and a brief to NZ Vice Chancellors Committee have resulted in a joint working party being formed to report on options.
- ▶ Memoranda of Understanding were signed with the State Seismological Institute and the Department of International Cooperation of the Ministry of Geology and Mineral Resources in China.
- ▶ The re-deployment of scientific staff from Wellington and new staffing has expanded the capability of the Dunedin office to 10 staff and provided substantial new opportunities for scientific and commercial revenue.

Public Good Science

- ▶ Submissions to the Foundation, policy makers and general public have emphasized the importance of geological science in the development of Science Strategies for New Zealand.
- ▶ 1994/95 Bids for PGSF have been prepared in line with the Science Strategies and where feasible, emphasize enhanced integration and collaboration with other science providers.
- ▶ New bids into Outputs 9, 21, 22, 25, and 32 have been submitted as part of a strategy to develop new research directions in areas of strategic importance to the Institute.

Revenue from Other Sources

- ▶ Commercial sales targets for the half year have not been met; however a strong contribution to revenue earned has been maintained from overseas contracts and efforts in marketing are expected to provide improved results in the second half of the year.



Business Development

- ▶ A series of corporate meetings with staff at each of the Science Groups has provided staff with an increased understanding of the Institute business and the opportunities and constraints on revenue generation for the next few years. The business of the Institute is to build a strong programme of underpinning science, which can be taken to the marketplace to add value to the work of commercial clients and to seek opportunities for enhancing the core science base through commercial research opportunities.

Capital Expenditure

- ▶ Purchase of approved capital equipment has been carried through with the majority of the \$1.3 million approved by the Board now committed.

Location

- ▶ The refurbished Wairakei Research Centre and Taupo Observatory were opened by the Minister for Science, Hon. Mr Upton on July 2. Visitor numbers to the public Taupo Observatory and sale of publications have exceeded expectations for the period.
- ▶ Refurbishing of the Crown Research Building in Dunedin has been completed under a satisfactory agreement with Landcare and transfer of Wellington petrological staff has been implemented to bring the total staff in Dunedin to 10.
- ▶ Purchase of the Bell Road property containing the Sunbeam Building and Feltex warehouse from Landcare has been satisfactorily concluded. Plans to move the Low Background Laboratories are being developed within a longer term accommodation plan now possible for the Gracefield site.

Personnel

- ▶ A new Office Manager for the Dunedin Research Centre has been appointed and two scientific staff from Wellington transferred to build up new programmes.
- ▶ Staffing of the groundwater programme at Wairakei was completed with the acceptance of the Programme Leader position by an international expert in groundwater research.
- ▶ International advertising of the position for Group Manager, Nuclear Sciences was implemented.



- ▶ A Consultative Committee was established in line with Collective Employment Contract and procedures for operating and reporting to management have been established.

Social Responsibility

- ▶ Information on science programmes, in particular on geological events having an impact on local communities, has been provided through media presentations and reports.

III OTHER ISSUES

Sedimentary Basin Research

During this period the Institute's research on New Zealand's sedimentary basins has received considerable attention in the media as a result of the completion of contract work with Natural Gas Corporation in the Taranaki Basin and the acquisition of the five year offshore exploration rights by Du Pont/Conoco in the Northland Basin. The Institute Board and management agree with the statement by the Minister of Energy, Hon. Mr John Luxton, at the 1993 New Zealand Oil and Gas Expo in New Plymouth that, "the growth of New Zealand's petroleum industry is important to our economy", and further believe that:

- ▶ Proposals to shift large portions of Public Good Science Funding from conventional non-renewable energy research to non-conventional renewable energy research will result in prospective sedimentary basins remaining unexplored as existing proven oil and gas reserves are depleted.
- ▶ Funding cuts will result in substantial staff reductions and loss of critical mass in an area of research essential to support of the energy industry.

Sedimentary basin studies must remain a core component of any national institute for geological research, particularly in New Zealand where more than 50% of onshore and offshore lands contain sedimentary basins with high potential for the maturation and entrapment of petroleum resources. The establishment of stable funding to continue this important public good science as a core part of the Institute programme will be a key concern of the Board and management in the second half of this year.

Nuclear Science Review

A major recommendation of the review of nuclear sciences in New Zealand was to establish a "National Centre in Geochronology" under joint management of the Institute and New Zealand universities. The Institute has followed this recommendation up with Assistant Vice Chancellors at Victoria and Waikato universities, and the Heads of Earth Science Departments in all universities. As a result of these discussions, a brief was submitted to the NZ Vice Chancellors Committee for its November 9 meeting recommending the establishment of a joint



Working Party to review the options for establishing a National Centre in Isotope Studies to ensure that New Zealand expertise in these areas is maintained at an international level. This recommendation has been accepted by the NZVCC and the Board and management of the Institute are planning to work closely with the universities in exploring different mechanisms for funding new state-of-the-art facilities for isotope research.

NEW DEVELOPMENTS

I Chair in Geophysics, Victoria University

The untimely death of Professor Jim Ansell earlier this year left the only Chair in Geophysics in New Zealand under some threat. The Institute has worked successfully with the Research School of Earth Sciences to effect the continuation of the Chair and has entered into a formal agreement with the University for joint funding the Chair as part of its broader Memorandum of Understanding with the University.

INSTITUTE OF GEOLOGICAL & NUCLEAR SCIENCES LIMITED

STATEMENT OF PROFIT AND LOSS AND RETAINED EARNINGS FOR THE SIX MONTHS ENDED 31 DECEMBER 1993

	6 months to 31 Dec 1993 \$000	6 months to 31 Dec 1992 \$000	12 months to 30 June 1993 \$000
SALES	<u>\$11,568</u>	<u>\$11,717</u>	<u>\$25,291</u>
NET PROFIT BEFORE TAXATION	99	778	1,752
Taxation Expense	<u>32</u>	<u>126</u>	<u>163</u>
NET PROFIT AFTER TAXATION	<u>67</u>	<u>652</u>	<u>1,589</u>
RETAINED EARNINGS	<u>\$67</u>	<u>\$652</u>	<u>\$1,589</u>

The accompanying notes form part of these financial statements

INSTITUTE OF GEOLOGICAL & NUCLEAR SCIENCES LIMITED

BALANCE SHEET AS AT 31 DECEMBER 1993

	31 Dec 1993 \$000	31 Dec 1992 \$000	30 June 1993 \$000
SHAREHOLDERS' FUNDS			
— Share Capital	6,167	6,167	6,167
— Retained Earnings	<u>1,656</u>	<u>652</u>	<u>1,589</u>
	<u>\$7,823</u>	<u>\$6,819</u>	<u>\$7,756</u>
 Represented by			
FIXED ASSETS	<u>10,638</u>	<u>8,334</u>	<u>9,450</u>
FUTURE INCOME TAX BENEFIT	<u>153</u>		<u>307</u>
CURRENT ASSETS			
— Cash on hand	6	5	3
— Bank	1,578	2,223	2,836
— Receivables and Prepayments	1,363	1,194	1,186
— Government Stock		2,030	
— Taxation Refund	76		551
— Work in Progress	<u>458</u>	<u>92</u>	<u>199</u>
	<u>3,481</u>	<u>5,544</u>	<u>4,775</u>
TOTAL ASSETS	<u>14,272</u>	<u>13,878</u>	<u>14,532</u>
 LONG-TERM LIABILITIES			
— Crown Debt	1,636	1,636	1,636
— Personnel Provision	<u>1,225</u>	<u>1,125</u>	<u>1,425</u>
	<u>2,861</u>	<u>2,761</u>	<u>3,061</u>
 CURRENT LIABILITIES			
— Creditors	2,549	3,138	3,332
— Revenue in Advance	1,039	290	269
— Taxation Payable		126	
— Provision for Restructuring and Contingency		<u>744</u>	<u>114</u>
	<u>3,588</u>	<u>4,298</u>	<u>3,715</u>
TOTAL LIABILITIES	<u>6,449</u>	<u>7,059</u>	<u>6,776</u>
NET ASSETS EMPLOYED	<u>\$7,823</u>	<u>\$6,819</u>	<u>\$7,756</u>

For and on behalf of the Board



T D Scott



R J Bentley

The accompanying notes form part of these financial statements.

INSTITUTE OF GEOLOGICAL & NUCLEAR SCIENCES LIMITED

STATEMENT OF CASH FLOWS FOR THE SIX MONTHS PERIOD ENDED 31 DECEMBER 1993

	6 months to 31 Dec 1993 \$000	6 months to 31 Dec 1992 \$000	12 months to 30 June 1993 \$000
Cash Flows from Operating Activities			
Cash was provided from:			
— Supply of Outputs to Clients	12,062	11,695	23,855
— Interest Received	119	77	321
— GST (net)	<u>(49)</u>	<u>(78)</u>	<u>59</u>
	12,132	11,694	24,235
Cash was applied to:			
— Payments to Employees & Suppliers	12,201	8,788	18,052
— Income Tax Paid	<u>(597)</u>	<u>—</u>	<u>1,021</u>
	11,604	8,788	19,073
Net Cash Inflow from Operating Activities	528	2,906	5,162
Cash Flows from Investing Activities			
Cash was provided from:			
— Sale of Fixed Assets	15		65
Cash was applied to:			
— Purchase of Fixed Assets	<u>1,798</u>	<u>8,481</u>	<u>10,191</u>
Net Cash (Outflow) from Investing Activities	(1,783)	(8,481)	(10,126)
Cash Flows from Financing Activities			
Cash was provided from:			
— Issue of Shares		6,167	6,167
— Crown Debt		<u>1,636</u>	<u>1,636</u>
Net Cash Inflow (Outflow) from Financing Activities		<u>7,803</u>	<u>7,803</u>
Net Increase (Decrease) in Cash Held	<u>(1,255)</u>	<u>2,228</u>	<u>2,839</u>
Beginning Cash Carried Forward	2,839		
Balance at end of period	<u>\$1,584</u>	<u>\$2,228</u>	<u>\$2,839</u>
Represented by			
Bank Balance 31/12/93	1,578	2,223	2,836
Cash on Hand 31/12/93	<u>6</u>	<u>5</u>	<u>3</u>
	<u>\$1,584</u>	<u>\$2,228</u>	<u>\$2,839</u>

Accompanying notes form part of these financial statements.

INSTITUTE OF GEOLOGICAL & NUCLEAR SCIENCES LIMITED

Notes to and forming part of the Financial Statements for the 6 months ended 31 December 1993.

Financial Statements

The Financial Statements of the Institute of Geological & Nuclear Sciences Limited have been prepared in accordance with accounting principles generally accepted in New Zealand.

These Financial Statements should be read in conjunction with the Financial Statements and related notes included in the Company's 1993 Annual Report.

The Financial Statements for the six months ended 31 December 1993 are unaudited. The financial information for the year ended 30 June 1993 and six months ended 31 December 1992 has been extracted from the audited financial statements for the year ended 30 June 1993.

Accounting Policies

The accounting policies used in the preparation of the financial statements for the period ended 31 December 1993 are consistent with those used in the preparation of the published financial statements for the year ended 30 June 1993.

Contingent Liabilities

Foodstuffs Properties (Wellington) Limited has commenced proceedings in the High Court against the Institute (as first defendant) and the Attorney-General (as second defendant). The proceedings claim damages of \$1,460,000 plus interest and costs against either the Institute or the Attorney-General. The proceedings concern work carried out by the DSIR in November 1990/December 1990 in connection with the identification of the Wellington fault. A defence has been filed on behalf of the Institute and the Attorney-General. Under the terms of the Transfer Agreement between the Crown and the Institute, the Institute has a discretionary right to compensation in respect of the claim.

Hort + Research

+ HALF YEAR REPORT 31.12.93

The Horticulture and Food
Research Institute of New Zealand Ltd

A Crown Research Institute

+ MISSION

*To develop and
enhance the
competitive
advantage of the
New Zealand
Horticulture and
Food Industry
through
excellence in
science and
technology.*



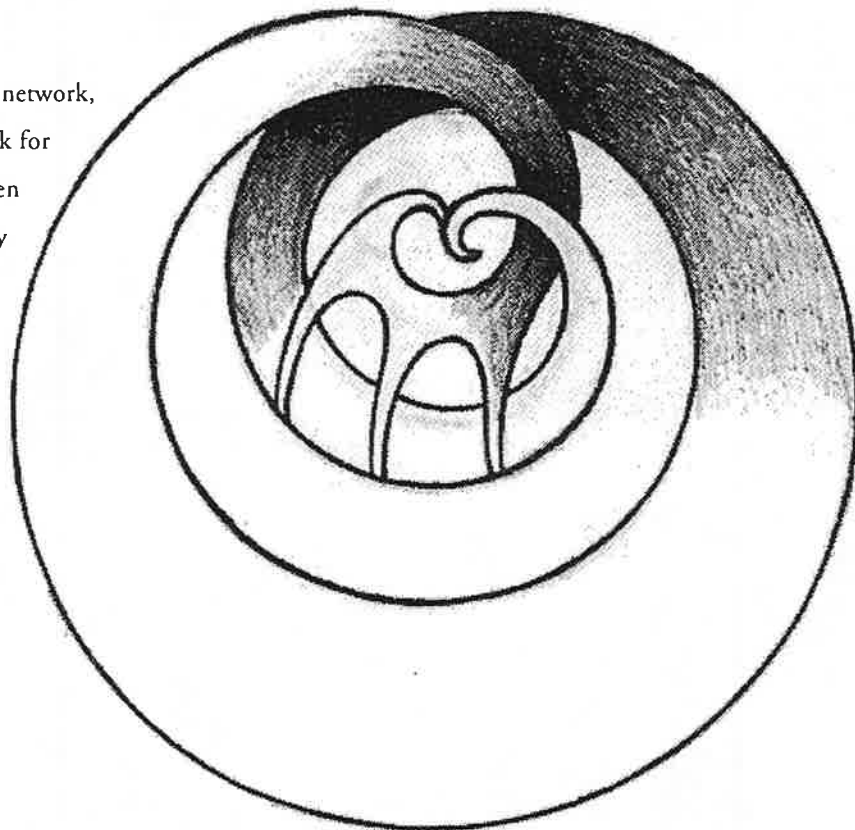
'Nga Toa Ngaki Kai'

'Champions of cultivating food'

As part of our EEO program a Maori network, Nga Toa Ngaki Kai, and a network for those with disabilities have been established joining our already successful women's network, HortWomen.

Mission

'To promote partnership between Maori and HortResearch by enhancing employment and career development of Maori and strengthen links with the Tangata Whenua.'



Goals:

1. Increase the percentage of Maori staff within HortResearch.
2. Promote the development of careers for Maori staff.
3. Strengthen links with the Maori community.

'The Nga Toa Ngaki Kai logo represents a seed starting at a small point at the centre of the figure and opening out into a 3 finger hand. Each finger has its own meaning, being, the past, present and future.'

2	Chairman's Report
4	Chief Executive's Report
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9	Balance Sheet
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CHAIRMAN'S REPORT

The Directors of The Horticulture and Food Research Institute of New Zealand Ltd, trading as HortResearch, have pleasure in presenting the half yearly report for the six months ended 31 December 1993.

HortResearch is registered as a private company, limited by shares in which the shareholding ministers are the subscribers under the Crown Research Act 1992 for the purpose of scientific research.

For the six months to 31 December 1993 HortResearch's earnings were ahead of budget with a before tax profit of \$1 863 034 consolidating on the Institute's successful first year of business. The 1992/93 result was inflated due to the cautious approach to expenditure adopted by the Board after the New Zealand Kiwifruit Marketing Board was unable to meet its financial commitments to the Institute. This debt was finalised early in the 1993/94 financial year, boosting the cash received from customers in the six months to 31 December 1993.

It is gratifying to see the subsequent good performance of the kiwifruit industry and to be assured by the Marketing Board that it will return to funding research in the last quarter of the current financial year. It is also pleasing that the New Zealand Apple and Pear Marketing Board has maintained its level of funding in spite of experiencing a more difficult trading year.

The other fruit, flower and food sectors are also showing an increased enthusiasm to be involved in the planning and funding of research. This was shown by the recent publication of the Fruit Research Council's Report on Fruit Research in New Zealand. A wide range of sector and industry groups were involved in the preparation of the report and then participated in a research consultation day at the Mount Albert Research Centre.

Recent amendments to the Commodity Levy Act have encouraged industry investment in research. Several horticultural sector groups are already well advanced in taking advantage of the amended Act.

The Institute's industry links are also strengthening with the implementation of a technology transfer plan developed following two years of consultation with the horticulture and food industries. Our recently appointed Extension Services Manager is now in the process of developing link teams to liaise with each sector group.

Development of processes by which the Crown Research Institutes are monitored is being followed with interest by HortResearch. Our organisation's ability to operate successfully is dependent on this process developing in a simple and logical manner. It is important that the reporting requirements are not overly restrictive and do not consume excessive energy, distracting Institute staff from their main purpose, the advancement of the horticulture and food industries through research.

It is encouraging that the Foundation for Research, Science and Technology is talking about creating more stability in the funding system and minimizing the time scientific staff need to spend on the application and reporting processes.

The well-being of science in New Zealand depends on this funding mechanism continuing to evolve within a contestable framework where the negotiated partnership between industry groups and the Institute is the mechanism by which much of the funding is determined.

For and on behalf of the Board



R O Davies, *Chairman*

Revenue for the first six months of HortResearch's second year of operation has been up to expectation from both industry sources and the Foundation for Research, Science and Technology. This has permitted the Institute's science activities to continue unabated and to be further developed around the set of science themes adopted by the Institute.

Following on from a successful first year, the upgrading of facilities and equipment is now a priority for the Institute. Repairs and maintenance which were deferred in 1992/93 due to the New Zealand Kiwifruit Marketing Board's outstanding debt are also being undertaken. Capital expenditure is running well ahead of depreciation.

The construction and upgrading of facilities for a number of science groups is in the late stages of planning and will be presented to the Board for approval in the second half of the financial year.

At the Mount Albert Research Centre postharvest physiology, postharvest disinfestation and sensory science staff will be rehoused in modern facilities with access to the latest technology. In Hawke's Bay the two science groups will be rehoused on one site and in Palmerston North food and biological chemistry staff, and some biotechnology staff will be relocated as part of a campus-wide agreement with AgResearch and Crop & Food Research to rationalize facilities at Batchelar.

HortResearch staff have also been working closely with colleagues at the Forest Research Institute. This followed approaches to the Institute from the forestry sector which was keen to find solutions to some pressing issues.

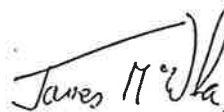
Expansion of the Institute's international business activities has been another recent development. Following from the Minister of Research, Science and Technology's successful Asian tour in 1993, a Business Development Manager has been appointed to develop HortResearch's interests in this region. A second Business

Development Manager has been appointed to oversee activities in Australia and the South Pacific.

It is pleasing to report that staff turnover has now settled at a healthy level. The recruitment of high quality people to replace those leaving reflects the Institute's image as a good employer.

Our EEO Programme continues to flourish. A Maori network, Nga Toa Ngaki Kai, and a network for those with disabilities, disAbility, have been established, joining our already very successful women's network, HortWomen. HortResearch's female staff played a key role in the Women's Suffrage Centennial Science Conference held last September, and are now helping to develop a women's group covering the Crown Research Institutes.

The Institute has a commitment to promoting science within the wider community. Recent initiatives have included the sponsorship of science centres and of school science. For example, the Institute is supporting and encouraging science at Palmerston North Girls' High School by making our researchers and facilities available to both teachers and students. A computer link up will give the school access to international communication systems.



Dr J A McWha, *Chief Executive*

PERFORMANCE INDICATORS

for the six months ended 31 December 1993 (Unaudited)

	6 months to 31/12/93 Actual	6 months to 31/12/92 Actual	SCI Target 12 months to 30/6/94
Financial Targets			
Earnings before interest and taxation (\$M)	1.7	0.8	3.0
Ratio of NPBT total assets employed (%) *	9.8	7.0	20.0
Net Profit after tax (\$M)	1.2	0.5	2.1
Return on Shareholders funds % *	10.4	4.6	20.4
Return on total assets (%) *	7.3	3.3	13.3
Net profit before tax as a % of revenue (%)	7.5	3.9	13.3
Current Ratio	1.3	1.1	1.2
Revenue per staff member	44.9	43.7	44.6
Other Targets			
Total Publications	203	183	172
Science Conference papers	69	43	35
Work related accidents (days lost)	163	175	71
Proportion of EEO target and other minority groups to total staff (%)	28%	30%	28%

* These percentages have been annualised

EARNINGS STATEMENT

for the six months to 31 December 1993 (Unaudited)

	Note	6 mths to 31.12.92 \$'000	6 mths to 31.12.93 \$'000
Revenue		22,250	22,246
Net Profit before Interest and Taxation	[2]	1,673	2,975
Interest Income		190	115
Net Profit before Taxation		1,863	3,090
Taxation Expense	[3]	618	1,020
Net Profit		1,245	2,070
Retained Earnings at beginning of Year		4,782	0
Total Available for Appropriation		6,027	2,070
Proposed Dividend		0	0
Retained Earnings at End of Period		\$6,027	\$2,070

The accompanying notes form part of these accounts.

BALANCE SHEET

as at 31 December 1993 (Unaudited)

	Note	As At	
		\$'000	31 Dec 92 \$'000
<i>Current Assets</i>			
Cash and Call Deposits		5,523	2,202
Receivables and Prepayments	[5]	2,383	5,362
Accrued Income		0	588
Inventories		41	44
Taxation Refund Due		248	0
Total Current Assets		8,195	8,196
<i>Current Liabilities</i>			
Accounts Payable and Accruals		3,646	4,553
Staff Entitlements		2,007	1,839
Restructuring Provisions		700	700
Total Current Liabilities		6,353	7,092
<i>Working Capital</i>		1,842	1,104
<i>Fixed Assets</i>			
Fixed Assets	[4]	25,255	22,630
<i>Other Term Assets</i>			
Future Tax Benefit	[3]	594	0
		27,691	23,913

Term Liabilities

Crown Long Term Debt	3,652	3,652
----------------------	-------	-------

Net Assets

\$24,039	\$20,082
-----------------	-----------------

Represented By:

Share Capital	18,012	18,012
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Retained Earnings	6,027	2,070
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Total Shareholders Funds

\$24,039	\$20,082
-----------------	-----------------

For and on behalf of the Board

Roger O Davies, *Chairperson*

Brent Layton, *Director**The accompanying notes form part of these accounts.*

STATEMENT OF CASH FLOWS

for the Six Months to 31 December 1993 (Unaudited)

	Note	6 mths to 31 Dec 92 \$'000	\$'000
<i>Cashflows From/Used in Operating Activities</i>			
Received from Customers		24,626	18,463
Interest Received		190	116
Disbursed to Employees and Suppliers		(20,686)	(16,140)
Tax Paid		(133)	0
Net Cash Flows from Operating Activities		3,997	2,439
<i>Cashflows From/Used in Investigating Activities</i>			
Sale of Fixed Assets		115	53
Purchase of Fixed Assets		(1,888)	(290)
Net Cash Flows from Investing Activities		(1,773)	(237)
Net Cash Flow		2,224	2,202
Opening Cash Position		3,299	0
Closing Cash Position		\$5,523	\$2,202

The accompanying notes form part of these accounts.

NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 December 1993

1 Accounting Policies

Accounting policies are the same as those adopted in the annual accounts. These conform to the generally accepted accounting principles and policies adopted by the New Zealand Society of Accountants.

There have been no changes in accounting policy since that date.

2. Net Profit Before Taxation

	1993 \$000	1992 \$000
<i>After Charging:</i>		
Audit fees and expenses	20	51
Depreciation	719	722
Directors' fees	50	51
Rental and operating lease costs	314	170
Provision for staff leave	1,229	1,202

3 Taxation

	1993 \$000
Profit before taxation	1,863
Prima facie taxation	615
Plus/(Less) taxation effect of permanent differences:	
Non-deductible entertainment expenditure	3
	<u>618</u>
The taxation charge is represented by:	
Current taxation	662
Deferred taxation	(44)
	<u>618</u>

4 Fixed Assets

	At Cost	Accumulated Depreciation	Net Charging Value
Land	7,664	-	7,664
Buildings	11,116	598	10,518
Plant and equipment	6,712	1,021	5,691
Motor vehicles	1,546	165	1,381
Total	<u>27,038</u>	<u>1,784</u>	<u>25,254</u>

5 Receivables and Prepayments

	1993 \$000
Trade debtors	1,765
Less provision for doubtful debts	26
	<u>1,739</u>
Prepayments	644
	<u>2,383</u>

6 Contingent Liabilities

Under previous employment agreements employees became entitled to retirement leave on reaching the age of 50 and after 10 years service when they left work. The Company's new agreement limits this benefit to staff who retire before 30 June 1997.

Currently 48 staff would qualify for retirement leave if they left the company before 1997. The Board considers this unlikely but a contingent liability exists until June 1997. The current value of this liability is \$622,000.

Directors

Roger O Davies, Chairperson
Professor Ian S Cornforth
Alan P T Haronga
M Jane Hunter
Dr T Brent Layton
M John Paynter
Dr T Neil M Waters

Chief Executive Officer

Dr James A McWha

Company Secretary

Warick P Angelini

Registered Office

Batchelar Research Centre
Tennent Drive
Palmerston North

Auditors

Audit New Zealand

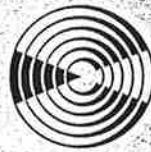
Bankers

Westpac Banking Corporation

Solicitors

Chapman Tripp Sheffield Young





**INDUSTRIAL
RESEARCH**
LIMITED

*Partners with Industry in Scientific
Research and Development*

HALF YEARLY REPORT

31 December 1993

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2. Operation

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2. Financial position
3. Cash Flow
4. Notes to the Financial Statements

DIRECTORY

MISSION

Industrial Research Limited has a mission:

"To conduct viable world class scientific research that leads New Zealanders to internationally competitive added value opportunities"

The company aims to achieve this by developing a fully integrated, innovative, entrepreneurial organisation which is becoming recognised internationally in the areas of:

- . Organic and inorganic materials science
- . Communications
- . Packaging and product storage and distribution
- . Advanced manufacturing

It will conduct research and provide scientific and technical services to the New Zealand manufacturing and processing sectors and will operate in a financially responsible manner.

REPORT TO SHAREHOLDERS

1. Results and Commercial Performance

We have the pleasure of presenting the Half Yearly Report for Industrial Research Limited for the six months ended 31 December 1993.

Industrial Research Limited continues to perform close to expectations both financially and scientifically.

For the first half year the Company has recorded an unaudited net profit after tax of \$612,588 (\$414,470 last year) which is slightly ahead of budget.

Funding from the Foundation for Research Science and Technology for this half year (inclusive of non specific output funding) represents 68.6% of total income. This compares with the corresponding 1992/93 half year of 73.3%

This is a 10% increase in FRST funds accompanied by a 38% increase in commercial revenue and reflects the considerable effort by the Company to increase revenue from non-PGSF sources from the manufacturing and processing sectors. Costs are being held close to budget. This shift in the balance of funding sources is in line with the Company's Statement of Corporate Intent.

The Company is currently on target for meeting all the science performance targets, as it is for the technology transfer targets. One target, the acceptance of three new Technology for Business Growth contracts, was met at the end of the reporting period.

In the Human Resource area, the recruitment of four technical trainees in this half year is close to the target of five. The current staff turnover is in line with expectations.

2. Operation

We have much pleasure in advising that Dr Jeff Tallon has been elected a Fellow of the Royal Society. This is a notable achievement and particularly so as there are relatively few non-academic Fellows. In the latest elections Dr Tallon was the only non-academic in the eleven Fellows appointed. The Institute now has three Fellows: Dr Jeff Tallon, Dr Ken Markham and Dr Bill Robinson.

The Company has continued to consolidate its physical assets, with the announced transfer of the Palmerston North operation to Wellington, and the continued maintenance and restructuring of the Gracefield site in Wellington. The period has also seen the Company elect to purchase its Christchurch site, which addresses a number of unsatisfactory tenancy issues and also signals the Company's long term commitment to a national presence. Settlement will be completed in the second half of the year.

As a result of the restructuring/maintenance already achieved, Power Direct voted Industrial Research Limited the winner in this year's BETA Award for the most impressive energy saving programme for a commercial premises in its Wellington franchise area. The Company is a finalist in the National BETA Awards to be announced 8 March 1994.

The award focuses on energy utilisation within a single building. As part of the planned restructuring IRL increased its staff in the Robertson Building (Gracefield) in 1992/93 from 44 to 75 people, with a total increase of 2.5% in power usage. This equates to a saving of approx 38% energy per person.

The PGSF programmes are developing well, with a number well ahead of planned schedule. We have every expectation that a high level of completion will again be achieved.

Continued research into seismic isolation devices has led to growth in scientific and commercial relationships including the contractors for manufacturing and supplying the isolation devices for the refurbishment of Parliament Buildings and those for the new Museum of New Zealand on Wellington waterfront.

Generally this is a very exciting time in the area of High Temperature Superconductors, with results emerging which are critical to reaching an understanding of the fundamental scientific issues related to the behaviour of High Temperature Superconductor material.

Our Technology for Business Growth (TBG) activities continue to support the importance of this scheme to the transfer of technology to the New Zealand manufacturing and processing sectors. IRL has projects underway in areas as diverse as foodstuffs, communications equipment, new ceramics materials for high technology applications, and packaging.

The ongoing links between the National Measurement Laboratory and overseas counterparts have continued to be fostered, with visits from the Netherlands Measurements Institute and the Australian National Measurement Laboratory. The Laboratory is an essential component in supporting New Zealand's International trade, through the provision of recognised and accepted traceable and primary measurement standards.

These visits continue to build and maintain a strong international infrastructure in support of free trade.

The overseas contacts made over the past year are starting to bear fruit, especially with the Malaysian Rubber Research Institute and Tenaga, the electrical power generation company in Malaysia. The growing scientific relationship with Malaysia is exemplified by the invitation to Dr Page to be a member of a subcommittee of the Malaysian Rubber Research & Development Board.

New Zealand has been awarded a significant part of an OECD funded research programme associated with vehicle suspension and road wear. An Industrial Research Limited scientist will manage the New Zealand project which includes a substantial level of research being carried out by Canterbury University.

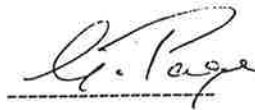
The recruitment of scientific staff has continued. Some difficulty has been experienced in obtaining suitable staff in highly specialised areas. This is particularly so when recruiting staff with suitable industry experience. In this half year, our total staff has increased by 3.5%

The outlook for the company remains positive, and at this stage there is no reason to anticipate the Company's projected taxpaid profit of \$1,270,000 will not be met for the full financial year.

The Company has not deviated during the period under review, from the operating principles of the Crown Research Institutes set out in the Act.



P D Bone
Chairman



G Page
Chief Executive

FINANCIAL STATEMENTS

6 MONTHS TO 31 DECEMBER 1993

INDUSTRIAL RESEARCH LIMITED
PROFIT AND LOSS AND RETAINED EARNINGS STATEMENT
FOR THE 6 MONTH PERIOD ENDED 31 DECEMBER 1993

	Notes	6 months ended 31 December		Year ended
		1993	1992	30 June 1993
		\$000	\$000	\$000
REVENUE	2	19,834	16,859	37,991
NET PROFIT BEFORE TAXATION		950	619	2,036
TAXATION EXPENSE	4	337	205	686
NET PROFIT AFTER TAXATION		613	414	1,350
RETAINED EARNINGS AT BEGINNING OF YEAR		1,350	-	-
RETAINED EARNINGS AT END OF YEAR		1,963	414	1,350

INDUSTRIAL RESEARCH LIMITED
SUMMARISED STATEMENT OF CASH FLOWS
FOR THE 6 MONTH PERIOD ENDED 31 DECEMBER 1993

	6 months ended 31 December		Year ended
	1993	1992	30 June 1993
	\$000	\$000	\$000
NET CASH FLOWS FROM OPERATING ACTIVITIES	(486)	3,573	5,212
NET CASH FLOWS FROM INVESTING ACTIVITIES	(2,398)	(16,090)	(20,573)
NET CASH FLOWS FROM FINANCING ACTIVITIES	(80)	20,107	20,694
NET INCREASE (DECREASE) IN CASH HELD	(2,964)	7,590	5,333

The accompanying notes form part of these financial statements.

INDUSTRIAL RESEARCH LIMITED
BALANCE SHEET
AS AT 31 DECEMBER 1993

	Notes	6 months ended 31 December		Year ended
		1993 \$000	1992 \$000	30 June 1993 \$000
SHAREHOLDERS' FUNDS				
Share capital	5	16,250	16,250	16,250
Retained earnings		1,963	414	1,350
		18,213	16,664	17,600
Long term liabilities	6	6,281	5,361	5,441
Current liabilities	7	5,782	7,010	8,563
TOTAL SHAREHOLDERS' FUNDS AND LIABILITIES		30,276	29,035	31,604
ASSETS				
Fixed assets	11	22,808	17,968	21,678
Future taxation benefit	10	58	-	148
Current assets	9	7,410	11,067	9,778
TOTAL ASSETS		30,276	29,035	31,604

The accompanying notes form part of these financial statements.

INDUSTRIAL RESEARCH LIMITED
STATEMENT OF CASH FLOWS
FOR THE 6 MONTH PERIOD ENDED 31 DECEMBER 1993

	Notes	6 months ended 31 December		Year ended
		1993 \$000	1992 \$000	30 June 1993 \$000
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash was provided from:				
Receipts from Crown		13,872	12,118	27,267
Receipts from customers		7,021	5,448	10,255
Interest received		147	180	450
Goods and services tax		1,734	1,278	2,655
		22,774	19,024	40,627
Cash was disbursed to :				
Payments to employees		10,487	8,435	18,369
Payments to suppliers		12,366	7,016	16,286
Interest paid	3	169	-	26
Income tax paid	4	238	-	734
		23,260	15,451	35,415
Net cash inflow (outflow) from operating activities	14	(486)	3,573	5,212
CASH FLOWS FROM INVESTING ACTIVITIES				
Cash was provided from:				
Proceeds from sale of fixed assets		38	-	-
Cash was applied to:				
Purchase of fixed assets		(2,436)	(2,140)	(6,623)
Net purchase price of the business assets		-	(13,950)	(13,950)
Net cash outflow from investing activities		(2,398)	(16,090)	(20,573)
CASH FLOWS FROM FINANCING ACTIVITIES				
Cash was provided from:				
Finance Leases		-	160	800
Cash proceeds from issue of shares		-	16,250	16,250
Proceeds of long term debt		-	3,700	3,700
		-	20,110	20,750
Cash was applied to :				
Repayment on finance lease		80	3	56
Net cash inflow (outflow) from financing activities		(80)	20,107	20,694
Net increase (decrease) in cash held		(2,964)	7,590	5,333
Add opening cash brought forward		5,333	-	-
Ending cash carried forward		2,369	7,590	5,333
Cash balances in the balance sheet				
Bank		79	80	53
Short term investments		2,290	7,510	5,280
Ending cash carried forward		2,369	7,590	5,333

The accompanying notes form part of these financial statements.

INDUSTRIAL RESEARCH LIMITED
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
FOR THE 6 MONTH PERIOD ENDED 31 DECEMBER 1993 continued

1 The interim financial statements for the six month period to 31 December are unaudited. The financial statements have been prepared in accordance with the accounting policies as stated in the published annual accounts for the year ended 30 June 1993.

	6 months ended 31 December		Year ended
	1993 \$000	1992 \$000	30 June 1993 \$000
2 Revenue			
Commercial	6,218	4,498	11,173
Foundation for Research, Science & Technology	12,530	12,151	24,467
Ministry of Research, Science and Technology	1,086	210	2,351
	19,834	16,859	37,991
3 Net Profit Before Taxation			
After charging:			
Audit fees and expenses	18	30	35
Depreciation	1,272	893	1,667
Restructuring costs	-	-	1,500
Directors Fees	47	53	105
Interest paid			
- finance charges on finance leases	39	-	26
- Crown term debt	130	-	-
Provision for employee entitlements	-	-	287
Rental and operating lease costs	194	187	409
After crediting:			
Investment income			
- Interest received	148	180	471

INDUSTRIAL RESEARCH LIMITED
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
FOR THE 6 MONTH PERIOD ENDED 31 DECEMBER 1993 continued

4 TAXATION

4a Profit & Loss Account

Profit before taxation

Prima facie taxation

Plus taxation effect of permanent differences:

Entertainment

Legal fees

Study grants

The taxation charge is represented by:

Current taxation

Future taxation benefit

Taxation Expense

	6 Months ended 31 December		Year ended
	1993	1992	30 June 1993
	\$000	\$000	\$000
Profit before taxation	950	619	2,036
Prima facie taxation	314	205	671
Plus taxation effect of permanent differences:			
Entertainment	1	-	1
Legal fees	-	-	3
Study grants	22	-	11
	23	-	15
	337	205	686
The taxation charge is represented by:			
Current taxation	484	205	834
Future taxation benefit	(147)	-	(148)
	337	205	686

4b Balance Sheet

Balance as at 30 June 1993

Current taxation

Taxation adjustment from previous year

Income tax payments during the year

Balance as at 31 December 1993

	6 months ended 31 December		Year ended
	1993	1992	30 June 1993
	\$000	\$000	\$000
Balance as at 30 June 1993	100	-	-
Current taxation	484	205	834
Taxation adjustment from previous year	(237)	-	-
Income tax payments during the year	(238)	-	(734)
Balance as at 31 December 1993	109	205	100

INDUSTRIAL RESEARCH LIMITED
 NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
 FOR THE SIX MONTH PERIOD ENDED 31 DECEMBER 1993 continued

	6 months ended 31 December		Year ended
	1993 \$000	1992 \$000	30 June 1993 \$000
5 SHARE CAPITAL			
Authorised, issued and paid up capital 16,250,000 ordinary shares of \$1.00 each	16,250	16,250	16,250
Total issued and paid up capital	16,250	16,250	16,250
6 LONG TERM LIABILITIES			
Term staff liability	1,123	835	1,167
Finance lease liability	664	157	743
Crown term debt	3,700	3,700	3,700
Restructuring provision	1,152	1,297	1,835
Contingency provision	185	185	185
	6,824	6,174	7,630
Less current portion			
Term staff liability	174	-	218
Finance lease liability	67	13	136
Restructuring provision	302	800	1,835
	543	813	2,189
Total long term liabilities	6,281	5,361	5,441
Repayable as follows:-			
(a) Term staff liability			
One to two years	55	55	55
Two to five years	332	332	332
Beyond five years	562	448	562
	949	835	949
(b) Finance lease			
One to two years	212	58	151
Two to five years	385	86	456
	597	144	607

Average interest rate- 9.9%

Finance leases are secured over the assets to which they relate.

(c) Crown term debt

Two to five years

3,700	3,700	3,700
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Crown term debt is secured by a floating charge debenture over past, present & future assets. An interest rate of 6.39 % is currently being charged.

INDUSTRIAL RESEARCH LIMITED
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
FOR THE SIX MONTH PERIOD ENDED 31 DECEMBER 1993 continued

	6 months ended 31 December		Year ended
	1993	1992	30 June 1993
	\$000	\$000	\$000
7 CURRENT LIABILITIES			
Trade creditors	1,272	1,172	2,440
Employee entitlements	1,123	1,331	990
Other current liabilities	1,752	2,620	1,866
Sundry creditors	298	687	525
Accrued expenses	685	182	453
Taxation payable (refer note 4b)	109	205	100
Current portion of term liabilities (refer note 6)	543	813	2,189
Total current liabilities	5,782	7,010	8,563
8 COMMITMENTS			
(a) Capital commitments			
Estimated capital expenditure contracted for at balance date but not provided for	3,614	1,864	825
(b) Operating Lease commitments			
Lease commitments under non-cancellable operating leases:	31	1,588	1,771
Not later than one year	-	373	373
Later than one year and not later than two years	-	373	373
Later than two years and not later than five years	-	1,025	1,025
	-	1,771	1,771

NOTE: The Company has entered into an unconditional contract to purchase the Christchurch property that is currently leased. Settlement date is expected to take place in February 1994. A funding facility has been negotiated with Westpac Banking Corporation.

9 CURRENT ASSETS			
Cash	79	80	53
Short term deposits	2,290	7,510	5,280
Trade debtors	2,295	2,704	2,802
Provision for Doubtful Debts	(210)	(395)	(161)
Prepayments	770	436	272
Sundry debtors	887	143	457
Work in progress	1,156	589	895
Finished goods	143	-	180
Total current assets	7,410	11,067	9,778
10 FUTURE TAXATION BENEFIT			
Balance as at 30 June 1993	148	-	-
Transfer to Statement of Profit and Loss	147	-	148
Adjustment from previous year	(237)	-	-
	58	-	148

INDUSTRIAL RESEARCH LIMITED
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
FOR THE SIX MONTH PERIOD ENDED 31 DECEMBER 1993 continued

11 FIXED ASSETS

Six months ended 31 December 1993

	At Cost \$000	Accumulated Depreciation \$000	Net Carrying Value \$000
Freehold land	3,196	-	3,196
Freehold buildings	4,322	187	4,135
Building auxiliary services	3,403	299	3,104
Furniture and fittings	155	18	137
Computer equipment	2,957	767	2,190
Computer software	373	144	229
Motor vehicles	96	30	66
Office equipment	96	20	76
Plant & scientific equipment	9,844	1,318	8,526
Work In progress	515	-	515
	24,957	2,783	22,174
Fixed assets held under finance leases :			
Office equipment	783	149	634
Total fixed assets	25,740	2,932	22,808

Six months ended 31 December 1992

	At Cost \$000	Accumulated Depreciation \$000	Net Carrying Value \$000
Freehold land	3,196	-	3,196
Freehold buildings	4,322	63	4,259
Building auxiliary services	3,208	98	3,110
Furniture and fittings	-	-	-
Computer equipment	1,169	146	1,023
Computer software	-	-	-
Motor vehicles	91	11	80
Office equipment	61	6	55
Plant & scientific equipment	6,654	569	6,085
Work In progress	-	-	-
	18,701	893	17,808
Fixed assets held under finance leases :			
Office equipment	160	-	160
Total fixed assets	18,861	893	17,968

Year ended 30 June 1993

	At Cost \$000	Accumulated Depreciation \$000	Net Carrying Value \$000
Freehold land	3,196	-	3,196
Freehold buildings	4,322	125	4,197
Building auxiliary services	3,387	197	3,190
Furniture and fittings	85	6	79
Computer equipment	2,474	432	2,042
Computer software	326	80	246
Motor vehicles	111	26	85
Office equipment	85	15	70
Plant & scientific equipment	8,421	715	7,706
Work In progress	138	-	138
	22,545	1,596	20,949
Fixed assets held under finance leases :			
Office equipment	800	71	729
Total fixed assets	23,345	1,667	21,678

INDUSTRIAL RESEARCH LIMITED

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

FOR THE SIX MONTH PERIOD ENDED 31 DECEMBER 1993 continued

12 CONTINGENT LIABILITIES

A contingent liability exists in respect of staff entitlements for long service leave and retirement leave that may fall due in the years beyond 30 June 1998, provided those entitled employees continue to be employed by the company and meet the eligibility criteria set out in the collective employment contract. At balance date this contingent liability was calculated to be \$1,571,429. Full provision has been made for all entitlements expected to fall due prior to 30 June 1998.

No other contingent liabilities are known to exist at this time.

13 SIGNIFICANT EVENTS AFTER BALANCE DATE

No significant events have occurred after balance date.

**14 RECONCILIATION OF NET PROFIT AFTER TAXATION
WITH CASH INFLOW FROM OPERATING ACTIVITIES**

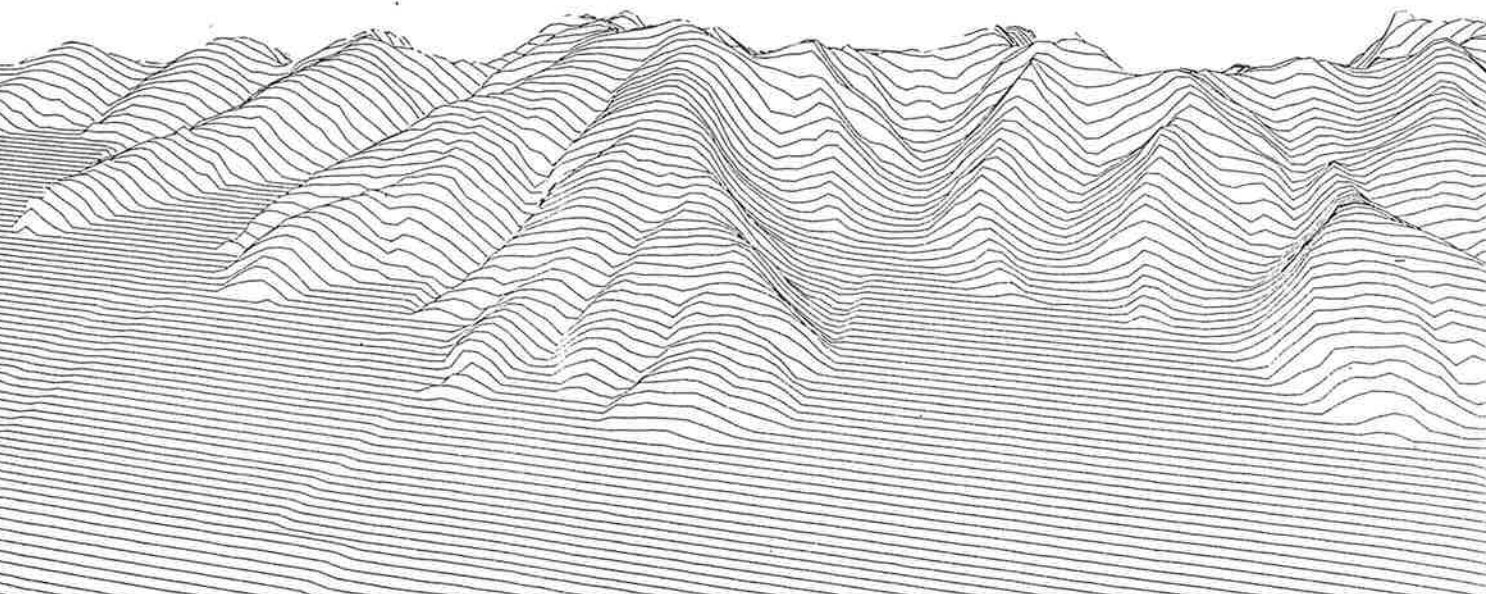
	6 months ended 31 December		Year ended
	1993 \$000	1992 \$000	30 June 1993 \$000
Reported surplus after taxation	613	414	1,350
Add non-cash items:			
Profit on sale of fixed assets	(4)	-	-
Depreciation	1,272	894	1,667
Movement in deferred tax	90	-	(148)
Provisions for employee entitlements	(177)	731	240
Provision for incomplete Crown work	113	150	-
Provision for doubtful debts	50	163	-
	1,957	2,352	3,109
Movement in working capital:			
Increase (Decrease) in trade creditors	(1,124)	3,646	4,900
Increase (Decrease) in taxation payable	9	204	100
(Increase) Decrease in receivables	(422)	(1,186)	(1,504)
(Increase) Decrease in inventory	(224)	(225)	(712)
	(1,761)	2,439	2,784
Movement in provisions			
Decrease in restructuring and contingency provisions	(682)	(1,218)	(681)
Net cash inflow from operating activities	(486)	3,573	5,212



Manaaki Whenua
Landcare Research
NEW ZEALAND LTD

HALF-YEARLY REPORT

31 DECEMBER 1993



DIRECTORS' REPORT

The Directors of Landcare Research New Zealand Limited have pleasure in presenting the Half-Yearly Report of the Company for the six months ended 31 December 1993.

Manaaki Whenua - Landcare Research is wholly owned by the Crown and was established as a Crown Research Institute under the Crown Research Institutes Act 1992 with effect from 1 July 1992.

The Company's financial position is sound. The Company is significantly liquid and surplus funds are actively managed in a prudent manner to maximise returns. The half-year profit is ahead of Business Plan targets for the half year and the Company expects to achieve its financial targets for the entire financial year.

During the first half of this year, the Company has exceeded the targets set for accomplishments in science and technology transfer - we are well on our way to achieving the performance targets set in this year's Statement of Corporate Intent.

We are particularly pleased that the Company has made significant progress in achieving its targets with respect to equal opportunity employment, staff appraisal and training. Similarly, the Company has made real progress in achieving its stated commitments to social responsibility, particularly in meeting its targets for Maori involvement and Treaty of Waitangi responsibilities.

The Company has operated, in fulfilling its purpose, in accordance with the principles set out in Section 5 of the Crown Research Institutes Act 1992.

For and on behalf of the Board

JT Kneebone
Chairman

CHIEF EXECUTIVE OFFICER'S REPORT

As noted in the Directors' Report, the Company is well on its way to achieving the performance targets set in this year's Statement of Corporate Intent.

We continue to take steps that will ensure effective Company performance in future years.

- * Many of our marketing efforts, particularly those aimed at international consultancy, are now focused at achieving revenue and profit growth in the next two financial years and beyond.
- * We invest the non-targeted funds we receive from the Foundation for Research, Science & Technology in strategic new areas of research or to develop new skills of our researchers.
- * We have completed construction of a new science facility at Waikato University, a library at Lincoln and Corporate headquarters at Lincoln. We are currently constructing a new science building at Massey University and have begun to plan new facilities at Lincoln.

The Sirtrack operating group was successfully established as Sirtrack Limited, a subsidiary operation.

The Company has fostered stakeholder relations with government representatives, environmental groups and a variety of parties with an interest in environmental issues. Our Treaty Responsibilities Manager was appointed in July and is guiding the Company towards stronger relations with Maori stakeholders.

I am confident that Manaaki Whenua - Landcare Research is on track to have a profitable and scientifically rewarding year.

Andrew J Pearce
Chief Executive

MISSION

To create environmental, economic and social benefits for New Zealand / Aotearoa through excellence in science by:

- * Conserving biodiversity of New Zealand's flora and fauna and natural ecosystems.
- * Enhancing the productivity and integrity of managed ecosystems and the integrity of natural ecosystems.
- * Developing a public perception of Landcare Research as a recognised and respected company.
- * Providing staff with a stable, stimulating and innovative environment.
- * Providing relevant scientific solutions to a wide-range of national and international clients.
- * Recognising the need for financial viability.
- * Recognising our wider social and ethical responsibilities.

Manaaki Whenua Landcare Research

- Purpose** • To create environmental, economic and social benefits for Aotearoa/New Zealand through excellence in environmental science
- Core Business** • Develop and transfer to public and private sector clients ecologically and socially sustainable management strategies and systems for land-based natural resources

Research Goals	Information Transfer Goals	Human Resource Goals
<ul style="list-style-type: none"> • Knowledge and appreciation of New Zealand's plants, insects and pathogens • Cost-effective land resource monitoring and classification technologies • Process based indicators, models and decision support systems for environmental protection and management • Integration of biophysical and socio-economic sciences in land use systems research • Sustainable management of biodiversity, ecosystems and degraded lands • Sustainable management and control of important vertebrate and invertebrate pests and pan-sectoral weeds • Significant and sustainable reduction in the incidence of bovine Tb and other pest-communicable diseases 	<ul style="list-style-type: none"> • Ensure effective stakeholder input to research programmes, priorities and outcomes • Achieve effective technology transfer from science outputs to users, clients and beneficiaries • Achieve effective involvement and information exchange with tangata whenua • Achieve national awareness of our work 	<ul style="list-style-type: none"> • Stimulate scientific creativity and excellence through effective organisation and management of research • Invest strongly in training and retraining • Create a strong sense of shared purpose and values

Landcare Research New Zealand Limited

Consolidated Profit Statement for the Half Year ended 31 December 1993

(Unaudited)

	Note	1993/4 Half Year \$000s	1992/3 Half Year \$000s
Total Revenue	2	14,257	13,813
Operating			
Staff Costs		8,150	7,898
Depreciation		623	461
Audit Fees		33	60
Directors' Fees		42	46
Rentals and Lease Costs		634	417
Interest Paid	7	76	
Other Operating Costs		4,134	4,226
Total Operating Costs and Overheads		13,692	13,108
Operating Profit		565	705
Interest Earned		222	106
Profit before Taxation		787	811
Taxation	3	270	291
Profit after Taxation	4	517	520

Landcare Research New Zealand Limited

Consolidated Statement of Financial Position

As at 31 December 1993

(Unaudited)

	Note	31 Dec 93 \$000s	31 Dec 92 \$000s
Assets			
Bank Balances and Deposits		6,675	7,301
Debtors and Prepayments		1,654	2,750
Stocks and Work in Progress		558	353
Total Current Assets		8,887	10,404
Deferred Tax Benefit	3	477	
Fixed Assets	5	10,122	8,524
Total Assets		19,486	18,928
Liabilities			
Creditors and Accruals		1,849	2,061
Provision - Staff liabilities	6	2,541	2,711
Provision - Restructuring (Within 1 Year)		1,074	945
Revenue in Advance	2	1,068	573
Provision for Tax	3	206	291
Total Current Liabilities		6,738	6,581
Long Term Debt - Crown	7	2,207	2,207
Term Provision - Restructuring		595	1,605
Long Term Liabilities		2,802	3,812
Total Liabilities		9,540	10,393
Net Assets		9,946	8,535
Shareholders' Funds			
Share Capital	8	8,015	8,015
Capital Reserves	9	210	
Retained Earnings - Opening		1,204	
Retained Earnings - Current Period		517	520
Total Retained Earnings		1,721	520
Total Shareholders' Funds		9,946	8,535

Landcare Research New Zealand Limited

**Consolidated Statement of Cash Flows
for the Half Year ended 31 December 1993**

(Unaudited)

	Note	1993/4 Half Year \$000s	1992/3 Half Year \$000s
Cashflows from / used in			
Operating Activities			
Received from Customers		15,089	15,762
Interest Received		224	106
Disbursed to Suppliers & Employees		(13,675)	(13,044)
Interest Paid		(78)	
Tax Paid			
Net Cash Flows from Operating Activities	4	1,560	2,824
Cashflows from / used in			
Investing Activities			
Sale of Fixed Assets		815	12
Purchase of Fixed Assets		(2,536)	(316)
Purchase of Net Assets from Crown			(5,441)
Net Cash Flows used in Investing Activities		(1,721)	(5,745)
Cashflows from / used in			
Financing Activities			
Proceeds of Capital Injection			8,015
Proceeds of Crown Loan			2,207
Net Cash Flows from Financing Activities		0	10,222
Net Increase / (Decrease) in Cash		(161)	7,301
Opening Bank Balances and Deposits		6,836	Nil
Closing Bank Balances and Deposits		6,675	7,301

ACCOUNTING POLICIES

General Accounting Policies

The measurement and reporting of profit and financial position is based on historical cost. Accrual accounting is used to match expenses and revenues. Reliance is placed on the fact that the Company is a going concern.

Particular Accounting Policies

The following particular accounting policies which materially affect the measurement of profit and financial position have been consistently applied.

a) Current Assets

i) Accounts Receivable

Accounts receivable are valued at their expected net realisable value.

ii) Stock

Stocks are valued at the lower of cost on a weighted average price of stock on hand, and net realisable value.

b) Fixed Assets

Completed buildings, plant, motor vehicles, furniture, and tools, are recorded at cost, less accumulated depreciation. Land, and buildings under construction, are recorded at cost.

c) Distinction between Capital and Revenue Expenditure

Capital expenditure is defined as all expenditure on the creation of a fixed asset, and any expenditure which results in a significant improvement of the original function of a total asset. Revenue expenditure is defined as expenditure which restores an asset to its original condition and all expenditure incurred on maintaining and operating the Company.

d) Depreciation

After taking into account likely residual values, all depreciable assets are depreciated on a straight line basis over their estimated economic lives.

Depreciation Rates -

Buildings	2-10%
Plant and Equipment	10-20%
EDP Equipment	25%
Motor Vehicles	25%
Furniture and Fittings	10%
Office Equipment	20%

e) **Taxation**

Taxation is provided in the financial statements on the basis of the estimated taxation payable on the taxable income after taking advantage of all available deductions and concessions. Deferred taxation resulting from timing differences is recognised using the liability method on a partial basis. A deferred tax benefit arising from timing differences is only recognised if there is virtual certainty of realisation.

Goods and Services Tax is collected on behalf of and paid to the Government net of a deduction for GST paid. Income and expenditure items are therefore stated net of GST.

f) **Foreign Currency Translation**

Transactions denominated in a foreign currency are recorded using the exchange rate at the settlement date. Realised and unrealised gains or losses on foreign currency transactions are dealt with in the profit and loss accounts. Foreign currency balances are converted at the mid point TT rate applying at balance date.

g) **Research and Development costs**

Research and development costs are expensed in the period incurred.

h) **Intellectual Property**

No value is ascribed in the Statement of Financial Position to intellectual property assets managed on behalf of the Crown. Revenue received from the use of intellectual property assets is recognised when earned, and the costs incurred in the maintenance of intellectual property assets are expensed when incurred.

Changes in Accounting Policies

There have been no changes in accounting policies.

**NOTES TO THE FINANCIAL STATEMENTS
FOR THE HALF YEAR ENDED 31 DECEMBER 1993**

1. **Business Entity**

The financial statements are those of Landcare Research New Zealand Limited including its wholly owned subsidiary, Sirtrack Limited.

2. **Revenue**

Revenue shown in the Profit Statement comprises amounts earned by the Company for goods and services supplied to customers in the ordinary course of business during the half-year.

Income received for goods and services which have not yet been supplied to customers has been recognised as Revenue in Advance.

Revenue in Advance shown in the Statement of Financial Position comprises:

	\$000s	<u>31.12.93</u>	<u>31.12.92</u>
MoRST Non Specific Output Funding		357	280
Commercial contracts		<u>711</u>	<u>293</u>
		<u>1,068</u>	<u>573</u>

3. **Taxation**

	\$000s	<u>1993</u>	<u>1992</u>
Reported Profit before Taxation		<u>787</u>	<u>811</u>
Prima facie taxation @ 33%		260	268
Plus/(less) tax effect of:			
Permanent differences			
non-deductible items		<u>10</u>	<u>23</u>
Taxation expense in Profit Statement		<u>270</u>	<u>291</u>
Taxation expense is represented by Current Tax		<u>270</u>	<u>291</u>

The current liability shown in the Statement of Financial Position comprises:

	<u>31.12.93</u>	<u>31.12.92</u>
Provision for Current Tax	270	291
less Provisional Tax Overpaid 1992/3	<u>64</u>	<u>-</u>
	<u>206</u>	<u>291</u>

A Deferred Taxation benefit has been recognised in the Statement of Financial Position using the liability method on a partial basis.

The balance in deferred tax account was derived in the previous year, and represents the taxation effect of timing differences between accounting results and income assessable for tax. No assessment of deferred tax has been made in the current year.

4. Reconciliation of Net Profit after Taxation with Cash Flow from Operating Activities

	\$000s	<u>1993/94</u>	<u>1992/93</u>
Net Profit after Tax		517	520
add back Depreciation		623	461
Movement in Working Capital Items			
Interest Receivable		2	-
Interest Payable		(2)	-
Debtors and Prepayments		539	(1,522)
Stock and Work in Progress		(345)	(152)
Creditors and Accruals		298	2,102
Provisions for Staff liabilities		(82)	767
Revenue in Advance		262	357
Provision for Tax		270	291
Restructuring Provision		(553)	-
Lotteries Board Funding		31	-
Net Cash Flow from Operating Activities		<u>1,560</u>	<u>2,824</u>

5. Fixed Assets

Fixed Assets comprise:

(\$000's) 1993/4	Original Cost	Plus Additions	Less Disposals	Accumulated Depreciation	Net Book Value 31/12/93
Land	2,330	-	(473)	-	1,857
Buildings	4,410	1,224	(202)	(130)	5,302
Other Fixed Assets	<u>3,785</u>	<u>993</u>	<u>(140)</u>	<u>(1,675)</u>	<u>2,963</u>
Total	<u>10,525</u>	<u>2,217</u>	<u>(815)</u>	<u>(1,805)</u>	<u>10,122</u>

(\$000's) 1992/3	Purchased from the Crown	Plus Additions	Less Disposals	Accumulated Depreciation	Net Book Value 31/12/92
Land	2,330	-	-	-	2,330
Buildings	4,032	8	(1)	(34)	4,005
Other Fixed Assets	<u>2,360</u>	<u>308</u>	<u>(52)</u>	<u>(427)</u>	<u>2,189</u>
Total	<u>8,722</u>	<u>316</u>	<u>(53)</u>	<u>(461)</u>	<u>8,524</u>

Certification of Title has yet to be issued for land transferred to Landcare Research New Zealand Limited from settlement with the Crown.

Land and Buildings may not be sold without receiving permission from Shareholding Ministers, who must ensure that Maori interests in the land are protected.

6. Staff Liabilities

Staff liabilities have been provided in accordance with relevant employment contracts. The value reported includes an amount which is not due to be paid out within the current period.

7. Long-Term Debt

	\$000s	<u>31.12.93</u>	<u>31.12.92</u>
Loan from Crown		2,207	2,207

Crown debt is repayable on 30 June 1997 and is secured by a debenture giving a floating charge over all assets.

After an interest holiday to 30 June 1993, interest is now payable quarterly at 1% above the 90 day bill rate.

8. Capital

Authorised and issued capital comprises 8,015,000 ordinary shares of \$1 each, fully paid.

9. Capital Reserves

Capital Reserves comprise:

	\$000s	Half-year <u>Movement</u>	<u>31.12.93</u>	<u>31.12.92</u>
Realised Capital Gains			17	-
Recovery of Provision for Doubtful Debts			103	-
Lotteries Board Funding		<u>31</u>	<u>90</u>	<u>-</u>
		<u>31</u>	<u>210</u>	<u>Nil</u>

10.	<u>Commitments</u>	(\$000s)
	Capital Commitments	
	Estimated capital expenditure contracted for at 31.12.93 but not paid or provided for	2,982
	Operating Lease Commitments	
	Lease commitments under non-cancellable operating leases	
	within one year	526
	later than one year and not later than two years	348
	later than two years and not later than five years	657
	later than five years	1,874

11. **Contingent Liabilities**

The Company is not aware of any significant contingent liabilities as at 31.12.93

12. **Related Party Transactions**

The ultimate shareholder of the company is the Crown. The company undertakes many transactions with other CRI's, Government Departments and Crown Agencies. These transactions are carried out on a commercial and arms length basis, and it is not considered that these fall within the intended scope of related party disclosures.

DIRECTORY

DIRECTORS:

John T Kneebone (Chairman)

Dr Terry D Heiler

W (Bill) W Lee

Ms Raewyn M Peart

Guy W Salmon

Dr Michael M Walker

EXECUTIVE:

Chief Executive Officer

Company Secretary/

Finance and Administration Manager

Human Resources Manager

Strategy and Development Manager

Treaty Responsibilities Manager

Dr Andrew J Pearce

E S John Tan

John F Palmer

Dr Jeffrey A Weber

Rauru Kirikiri

DIVISIONAL GENERAL MANAGERS

Land Management

Native Plants and Animals

Soil and Plant Processes

Weeds and Pests

Ian E Whitehouse

John F Longworth

Alastair D Wilson

Dr Oliver R W Sutherland

REGISTERED OFFICE:

Canterbury Agriculture and Science Centre

Gerald Street

Lincoln

BANKERS:

The National Bank of New Zealand Limited

AUDITORS:

Audit New Zealand

SOLICITORS:

Buddle Findlay

Macalister Mazengarb Perry Castle