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MINISTRY OF AGRICULTURE AND FORESTRY

SITUATION AND OUTLOOK FOR NEW ZEALAND AGRICULTURE AND FORESTRY

JUNE 2011





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Ministry of Agriculture and Forestry

PO Box 2526, Wellington 6140, New Zealand

Tel: 0800 008 333

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PO Box 2526, Wellington 6140

New Zealand

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FOREWORD

The agricultural, forestry and associated processing sectors continue to be the backbone of our economy. They have played a critical role in recent years in assisting New Zealand's recovery from the impact of the 2008 global economic crisis.

Welcome to *Situation and Outlook for New Zealand Agriculture and Forestry (SONZAF)* for 2011.

SONZAF explores some of the issues facing New Zealand's land-based primary and processing sectors. We present the views of the Ministry of Agriculture and Forestry (MAF) on the primary sectors' performance over the previous year and forecast those trends most likely to impact on individual sectors over the next five years.

The agricultural, forestry and associated processing sectors continue to be the backbone of our economy. They have played a critical role in recent years in assisting New Zealand's recovery from the impact of the 2008 global economic crisis.

In the issues chapters, we profile the FarmsOnLine rural property database. This new database holds up-to-date information on farms, lifestyle blocks, stock and crops and enhances communication between landowners and authorities when a biosecurity response is needed.

We outline the findings of the Red Meat Sector Strategy report. The report, commissioned by Beef + Lamb and the Meat Industry Association with the support of MAF and NZTE, looks at the opportunities to sustainably increase the profitability of this important sector going forward.

We also highlight the benefits of a joint food regulation system for food manufacturers, retailers and consumers on both sides of the Tasman. The trans-Tasman food trade has enjoyed significant growth as a result.

MAF is committed to leading the development of policy that will see New Zealand's land-based primary sectors reach their full potential in a constantly changing environment and make the best possible contribution to the well-being of New Zealanders.

I recommend SONZAF to anyone who has an interest in New Zealand's agriculture and forestry sectors and the opportunities and challenges ahead.

Paul Stocks
Deputy Director-General
Policy, Science and Economics

CONTENTS

| | |
|------------------------------------------------------------------------------|------------|
| FOREWORD | iii |
| Contents | iv |
| List of Figures | vii |
| List of Tables | viii |
| 1 OVERVIEW | 1 |
| Global economic prospects are brighter | 2 |
| High commodity prices | 3 |
| Monetary conditions and assumptions | 4 |
| Dairy | 4 |
| Forestry | 5 |
| Meat and wool | 6 |
| Horticulture | 6 |
| Agricultural debt | 6 |
| Gross agricultural revenue and expenditure | 7 |
| ISSUES FACING THE PRIMARY SECTORS | 9 |
| 2 PROTECTING PRIMARY INDUSTRIES THROUGH BETTER INFORMATION SHARING | 10 |
| A critical part of New Zealand’s biosecurity system | 11 |
| Putting FarmsOnLine together and keeping it current | 12 |
| Privacy of information is paramount | 13 |
| 3 CAN THE RED MEAT SECTOR COMPETE AGAINST OTHERS RATHER THAN ITSELF? | 15 |
| 4 THE TRANS-TASMAN FOOD TRADE HELPING GROWTH THROUGH JOINT REGULATION | 20 |
| Growth in trans-Tasman Food Trade | 20 |
| The joint trans-Tasman food regulatory system | 21 |
| MAF’s role in the joint regulatory system | 22 |
| Science and risk assessment | 22 |
| Policy development | 23 |
| Wider trans-Tasman collaboration | 24 |

| | |
|------------------------------------------------------|-----------|
| SITUATION AND OUTLOOK FOR THE PRIMARY SECTORS | 25 |
| 5 WINE | 26 |
| Exports | 26 |
| Production | 28 |
| 6 KIWIFRUIT | 29 |
| Exports | 29 |
| Production | 30 |
| 7 APPLES AND PEARS | 32 |
| Exports | 33 |
| Production | 34 |
| 8 FRESH AND PROCESSED VEGETABLES | 35 |
| Fresh vegetables | 35 |
| Processed vegetables | 36 |
| 9 ARABLE | 37 |
| Cereals | 37 |
| Seeds | 38 |
| 10 FORESTRY | 40 |
| Logs | 40 |
| Sawn timber | 41 |
| Panel | 42 |
| Pulp and paper | 43 |
| 11 DEER | 44 |
| Production and exports | 44 |
| 12 LAMB | 46 |
| Production | 47 |
| Exports | 47 |
| 13 WOOL | 49 |
| Production and exports | 50 |

| | |
|-----------------------------|-----------|
| 14 BEEF | 51 |
| Production | 52 |
| Exports | 53 |
| 15 DAIRY | 54 |
| SONZAF 2010 outlook updated | 55 |
| Prices | 57 |
| Exports | 59 |
| Production | 60 |

LIST OF FIGURES

| | |
|-------------------------------------------------------------------------------------------------------|----|
| 1.1: 2010 Economic growth forecasts | 2 |
| 1.2: Commodity spot and futures prices | 3 |
| 1.3: Days of soil moisture deficit, year to 30 April 2011 | 5 |
| 1.4: Agricultural farm sales by type , 2004–2011 | 7 |
| 5.1: Major wine export destinations by value, 2010 | 27 |
| 5.2: Other wine export destinations by value, 2005–2010 | 27 |
| 6.1: Kiwifruit export volumes by country and variety, 2010 | 30 |
| 7.1: Apple and pear export volumes by variety, 2006–2010 | 33 |
| 8.1: Export values of fresh vegetables, 2002–2010 | 35 |
| 9.1: New Zealand cereal production, 2002–2012 | 37 |
| 9.2: Agriculture inputs to biofuel production and biofuel shares of fuel, 2007–2009 average | 39 |
| 10.1: Export values of forestry products of the main export destinations, year ended 31 December 2010 | 40 |
| 10.2: Chinese log imports by source, 2000–2010 | 42 |
| 11.1 Total deer numbers, 1990–2015 | 44 |
| 12.1: New Zealand lamb production, 2000–2015 | 46 |
| 12.2: Lamb export destinations by value, 2006–2010 | 48 |
| 13.1: Wool sold, 1990–2015 | 50 |
| 14.1: In-market prices of manufactured New Zealand beef in the US | 51 |
| 14.2: Beef exporting destinations by value, year ended 31 December 2010 | 53 |
| 15.1: MAF forecast for total milk solid production | 54 |
| 15.2: Milk solids per cow assumptions, actual and forecast | 55 |
| 15.3: Days of soil moisture deficit in dairy areas | 56 |
| 15.4: Dairy export prices and MAF price forecast in US dollar terms | 57 |
| 15.5: Total dairy export revenue by country in New Zealand dollars | 60 |

LIST OF TABLES

| | |
|------------------------------------------------------------------------------------|----|
| 1.1: Exchange and interest rates | 4 |
| 1.2: Gross agricultural revenue and expenditure, years to 31 March 2008–2015 | 8 |
| 5.1: Wine export prices, volumes and values, 2008–2015 | 28 |
| 6.1: Kiwifruit export prices, volumes and values, 2008–2015 | 29 |
| 7.1: Apple and pear export prices, volumes and values, 2007–2014 | 34 |
| 8.1: Vegetable export volumes and values, 2007–2014 | 36 |
| 10.1: Forestry export prices, volumes and values, 2008–2015 | 43 |
| 11.1 Venison prices, export volumes and values, 2008–2015 | 45 |
| 12.1: Sheep breeding numbers, lamb prices and export volumes and values, 2008–2015 | 47 |
| 13.1: Sheep numbers, wool prices and export volumes and values, 2008–2015 | 49 |
| 14.1: Beef cattle numbers, beef prices and export volumes and values, 2008–2015 | 52 |
| 15.1: Dairy farm production, payout and export values, 2008–2015 | 61 |

OVERVIEW

“Beyond 2012, steady production growth in dairy, forestry, wine and kiwifruit, together with an assumed depreciation in the New Zealand dollar, leads to strong forecast growth in export revenues.”



New Zealand exporters are receiving high prices for logs, wool, lamb, timber, beef and dairy products as the rebounding global economy drives demand for commodities.

With the exception of horticulture, these rises are more broadly based than the 2008 rise, which mainly affected dairy prices.

Short-term supply disruptions such as droughts and floods in various parts of the world are a significant factor supporting recent agricultural price increases. At the same time, the strength of demand coming through from emerging markets, the recovery in many developed economies, and continuing demand for agricultural resources for biofuel production has led the Ministry of Agriculture and Forestry to revise upwards its view of medium-term international agricultural prices.

The relative strength in the New Zealand dollar has seen only a portion of these foreign currency price gains passed through to New Zealand farmers and foresters. The strong New Zealand dollar has, however, also reduced the impact of price rises in imports, especially fuel and fertiliser.

Beyond 2012, steady production growth in dairy, forestry, wine and kiwifruit, together with an assumed depreciation in the New Zealand dollar, leads to strong forecast growth in export revenues.

CHRISTCHURCH EARTHQUAKES

The first major earthquake to strike the Canterbury region occurred on 4 September 2010 and was centred inland from Christchurch in rural Canterbury. A number of homes were destroyed and many properties were affected by liquefaction. On farms there was some damage to infrastructure such as dairy sheds and grain silos.

The second major quake happened on 22 February 2011 and was centred in the eastern part of Christchurch city causing massive building damage and further liquefaction. As at 3 May 2011, the earthquake toll was 181 deaths. The total cost of damage has been estimated at \$15 billion – about 8 percent of New Zealand's nominal gross domestic product (GDP).

Rural areas were less affected by the second earthquake and the impact on primary production was limited, although some processors based in Christchurch city had their operations disrupted.

FIGURE 1.1: 2010 ECONOMIC GROWTH FORECASTS



Source International Monetary Fund (IMF) 2011.

KEY: GROSS DOMESTIC PRODUCT,
CONSTANT PRICES – ANNUAL PERCENT
CHANGE 2010–2011 EST.

- less than 0.0
- 0.01 to 2.00
- 2.01 to 4.00
- 4.01 to 6.00
- greater than 6.00
- No data

Annual percentages of constant price GDP are year-on-year changes; the base year is country-specific.

GLOBAL ECONOMIC PROSPECTS ARE BRIGHTER

The global economy is expected to grow strongly over the next few years, regaining the ground lost during the global financial crisis of 2008 and 2009. The IMF is expecting the global economy to grow at over 4 percent a year in 2011 and 2012.

This growth is concentrated in emerging market economies – especially in Asia. The Chinese economy is expected to grow at over 9 percent and the Indian economy at around 8 percent in 2011 and 2012. Other significant Asian markets such as Taiwan, South Korea, Indonesia, Viet Nam and the Philippines are all expected to grow faster than 5 percent in 2011 and 2012.

The United States (US) economy is recovering, with consumer spending accelerating. While there has been some job creation in the US, unemployment is still at high levels.

The European Union (EU) has the most subdued economic outlook of New Zealand's major trading partners. Fears of banking sector losses and problems with fiscal sustainability in peripheral euro area countries have eased, reducing the likelihood of "double-dip" recession spreading to the main European economies.

KEY FACTS – NEW ZEALAND AGRICULTURE AND FORESTRY

| | |
|---------------------------------------------------------------------------|--------------|
| Production and processing percentage of GDP, year to 31 March 2010 | 12.2 percent |
| Production and processing percentage of employment, year to 31 March 2009 | 11.6 percent |
| Commodities as a proportion of merchandise trade, year to 31 March 2010 | 66 percent |

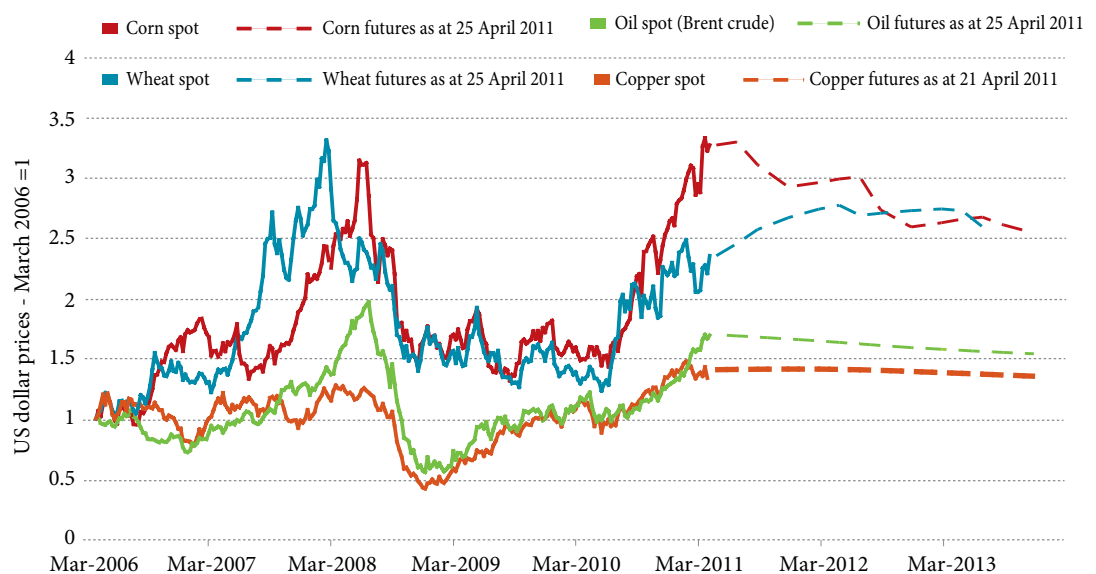
Source Statistics New Zealand.

The economic outlook for New Zealand agriculture and forestry's trading partners, while still uneven, is significantly better than 12 months ago. Many of the financial risks have faded as private sector balance sheets have been repaired.

HIGH COMMODITY PRICES

Commodity prices have risen strongly as the world economy recovered from recession, with consumption of many commodities now above pre-financial crisis levels. Economic growth in the emerging market economies has been particularly intensive in metals and energy. Supply disruptions in the Middle East have pushed up oil prices in recent months, and stagnation in global production has supported prices over the last few years.

FIGURE 1.2: COMMODITY SPOT AND FUTURES PRICES



Sources Datastream and MAF.



MONETARY CONDITIONS AND ASSUMPTIONS

The New Zealand dollar has remained strong against a trade-weighted basket of currencies, up by 3.2 percent in the year to April 2011. In relation to major trading partners, the New Zealand dollar strengthened by a full 10 percent against the US dollar but weakened by 3.1 percent against the Australian dollar in the year to April 2011. Exchange rate volatility has declined over the last year.

Exchange rate assumptions used in this publication, from the *New Zealand Treasury's 2011 Budget Economic and Fiscal Update*, are for the New Zealand dollar to remain at historically high levels until the middle of 2012 and then to depreciate to around the historic averages. This has the effect of lifting New Zealand dollar prices and returns in the last few years of the forecast period.

New Zealand's official cash rate has remained at historically low levels since April 2009. Increases of 25 basis points in June and July 2010 were reversed in the wake of the Christchurch earthquake of 22 February 2011. Interest rates are expected to begin increasing in 2012 as rebuilding in Christchurch picks up.

DAIRY

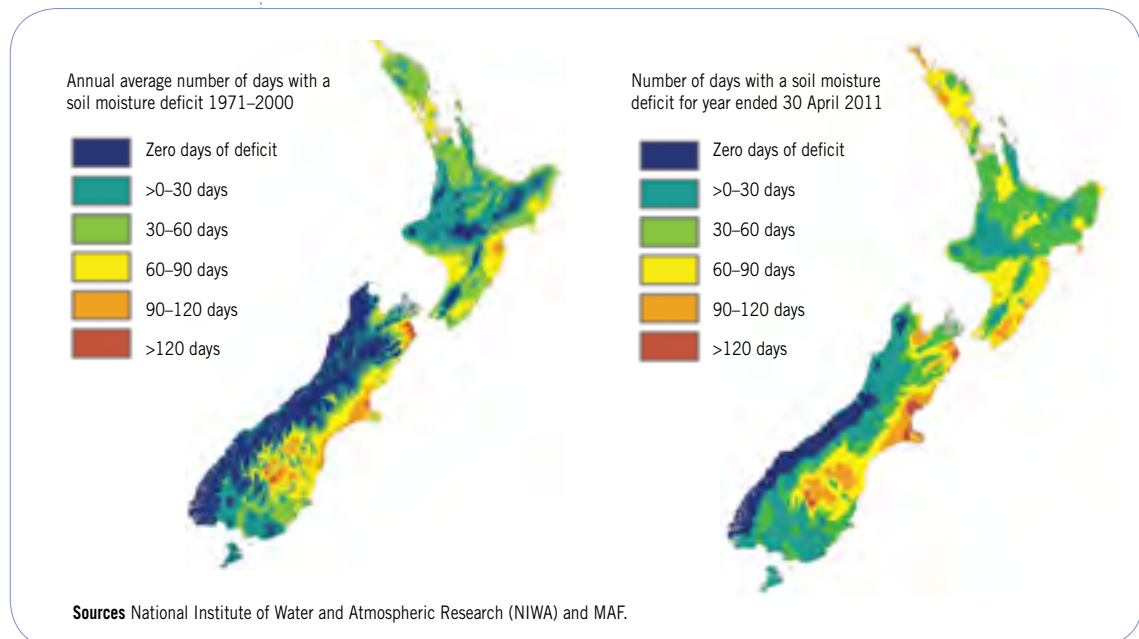
US dollar prices for dairy products have been at high levels over the course of the 2010/11 dairy season, well above the previous year but still below the levels reached in 2007/08. The strong demand driving this rise is likely to remain but additional supply in 2012 and beyond is expected to drive international prices down from current levels.

TABLE 1.1: EXCHANGE AND INTEREST RATES

| | ACTUAL | | | | ASSUMPTIONS | | | |
|---------------------------------------------|------------|------------|------------|------------|-------------|------------|------------|------------|
| | MARCH 2008 | MARCH 2009 | MARCH 2010 | MARCH 2011 | MARCH 2012 | MARCH 2013 | MARCH 2014 | MARCH 2015 |
| Trade weighted index | 71.9 | 53.7 | 65.3 | 67.2 | 66.7 | 64.5 | 60.3 | 56.0 |
| US dollar | 0.79 | 0.53 | 0.71 | 0.76 | 0.77 | 0.73 | 0.66 | 0.58 |
| UK pound | 0.40 | 0.37 | 0.45 | 0.47 | 0.47 | 0.44 | 0.39 | 0.34 |
| Australian dollar | 0.87 | 0.80 | 0.78 | 0.75 | 0.74 | 0.73 | 0.73 | 0.71 |
| Japanese Yen | 83 | 50 | 64 | 62 | 65 | 63 | 58 | 54 |
| Euro | 0.53 | 0.41 | 0.51 | 0.55 | 0.53 | 0.52 | 0.49 | 0.46 |
| 90 day bank bill interest rate – percent | 8.8 | 3.7 | 2.7 | 3.0 | 3.0 | 3.9 | 4.7 | 5.0 |
| Consumer price index inflation – percent | 3.4 | 3.0 | 2.0 | 4.5 | 3.1 | 2.4 | 2.5 | 2.6 |

Source The Treasury.

FIGURE 1.3: DAYS OF SOIL MOISTURE DEFICIT, YEAR TO 30 APRIL 2011



NEW ZEALAND CLIMATIC CONDITIONS

After storms in September and October 2010, the 2010/11 pastoral agricultural season was dry, with the area north of Auckland officially declared in drought on 8 December, followed by the Waikato region and Ruapehu district on 15 December. There was some good rain around Christmas, but the real drought breaker was the two tropical cyclones in late January 2011. Rainfall and pasture were plentiful in autumn 2011.

New Zealand dairy production for the 2010/11 season is below expectations – up by just 2.4 percent – with drought in spring 2010 reducing milk-per-cow to below potential, despite a productive autumn. Also, conversion of land to dairy occurred at a slower rate than expected.

A 5.7 percent increase in milk solid production is expected in the 2011/12 season, with high dairy prices encouraging conversions from sheep and beef and arable farming in the South Island and a resulting increase in milk yields, assuming normal climatic conditions.

FORESTRY

Strong demand for logs and timber has seen New Zealand's exotic forest harvest reach a record 24.8 million cubic meters in the year ending 31 December 2010, up by 19 percent on the previous year. Chinese appetite for raw materials for construction and as intermediate inputs is a key factor.



Demand is expected to remain strong, with Chinese growth continuing and the need for reconstruction following earthquakes in New Zealand and Japan and floods in Australia. Prices are expected to rise but further growth in harvest volumes in New Zealand will be constrained relative to that seen in 2010.

MEAT AND WOOL

International prices of beef, lamb and wool, in particular, rose sharply in the last half of 2010 and early 2011, owing to falling global production and export availability, increasing demand, and for wool inventory rebuilding through the supply chain. Production increases out of Australia, in particular, are expected to ease prices from these peaks, but continued demand growth will support prices at a level higher than for the previous five years.

New Zealand meat and wool production in the year to 30 June 2011 has been reduced by adverse weather in the second half of 2010. Assuming normal climatic conditions, production is expected to recover in the next season; however, beyond 2012 land use change to dairy will constrain production.

HORTICULTURE

New Zealand's main horticultural crops have not experienced the same rises in price as the other sectors. Returns to kiwifruit and apple growers this season are expected to be fairly stable. Wine export prices have declined and profit margins for wineries and growers are tight.

Production of kiwifruit and wine is forecast to rise gradually over the coming years; in the case of wine this increase is significantly less than seen over the past decade as very little new planting is expected.

AGRICULTURAL DEBT

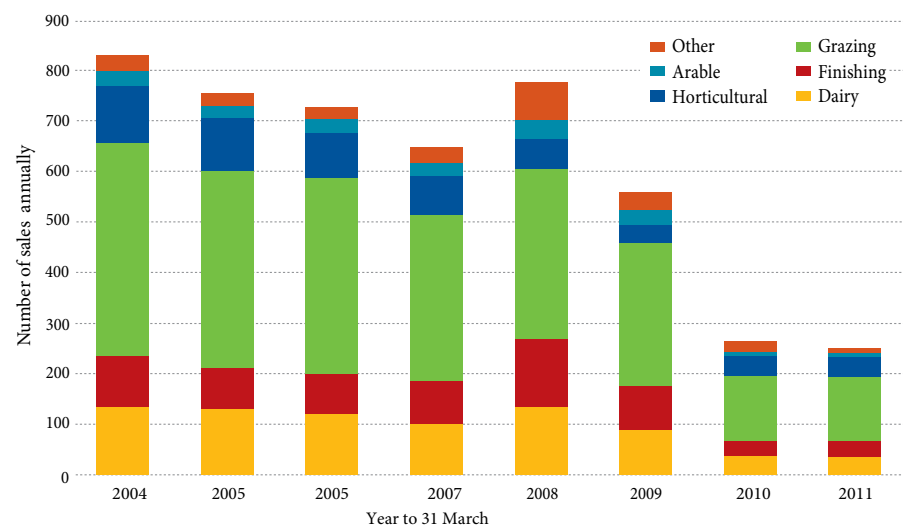
Over the decade, to 31 March 2010, aggregate credit extended to agriculture by both banks and non-bank lending institutions grew at an average growth rate of 14 percent a year. With the global financial crisis in late 2008 and 2009, when international credit availability became more restricted and the outlook for agricultural commodities worsened, agricultural borrowing, farm prices, and farm sales all declined significantly. Aggregate credit extended to agriculture by both banks and non-bank lending institutions was constant in the year ended 31 March 2011.



The decline in farm sales, illustrated in figure 1.4, has reduced the equity withdrawal from the agriculture sector. This occurs with farm sales as older farmers with relatively high levels of equity are more likely to be selling and younger farmers with lower levels of equity are more likely to be buying.

Also, falling land values have, on aggregate, increased the leverage for the sector, which leaves farmers reluctant to take on new debt and increases the perceived riskiness of the sector to lenders. The fall in land values has been significant, with Quotable Value New Zealand's total rural land price index at June 2010 18 percent below the peak achieved in June 2008.

FIGURE 1.4: AGRICULTURAL FARM SALES BY TYPE , 2004–2011



Source Real Estate Institute of New Zealand.

GROSS AGRICULTURAL REVENUE AND EXPENDITURE

Gross agricultural revenue is estimated to have increased by 10 percent in the year to 31 March 2011, driven by significant increases in dairy, cattle, and wool revenue. As a result of a later lamb slaughter in summer and autumn 2011, improving lamb schedule prices do not flow through to revenues until the year to 31 March 2012. Beyond 2012, increases in revenue are mainly driven by the assumption of a depreciating New Zealand dollar.

Aggregate interest paid by the agriculture sector has declined significantly since the year to 31 March 2009, primarily because of lower interest rates but also because the aggregate stock of agricultural debt has stopped growing. Interest payments are forecast to increase with assumed rises in interest rates and the relatively slow growth in the stock of debt.

Agriculture sector income, an aggregate measure equivalent to the overall agricultural sector's farm-gate profitability, is estimated to have risen by 13 percent in the year to 31 March 2011. Further growth in income is expected as revenue rises faster than interest payments, in particular.

TABLE 1.2: GROSS AGRICULTURAL REVENUE AND EXPENDITURE, YEARS TO 31 MARCH 2008–2015

| YEAR TO 31 MARCH | ESTIMATE | | | | FORECAST | | | |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 2008 (\$ MIL) | 2009 (\$ MIL) | 2010 (\$ MIL) | 2011 (\$ MIL) | 2012 (\$ MIL) | 2013 (\$ MIL) | 2014 (\$ MIL) | 2015 (\$ MIL) |
| Dairy | 10 140 | 6 384 | 7 904 | 9 515 | 10 157 | 10 958 | 11 921 | 13 174 |
| Cattle | 1 709 | 2 049 | 1 842 | 2 125 | 2 139 | 2 071 | 2 295 | 2 661 |
| Sheepmeat | 1 667 | 2 136 | 2 134 | 2 044 | 2 448 | 2 278 | 2 561 | 3 018 |
| Wool | 480 | 402 | 448 | 560 | 569 | 533 | 588 | 673 |
| Deer | 258 | 280 | 218 | 222 | 245 | 265 | 287 | 315 |
| Poultry/eggs | 163 | 178 | 204 | 213 | 214 | 216 | 218 | 220 |
| Pigs | 160 | 180 | 171 | 154 | 158 | 159 | 161 | 163 |
| Other farming | 253 | 216 | 217 | 229 | 253 | 240 | 268 | 313 |
| Sales of live animals | 735 | 735 | 806 | 851 | 938 | 891 | 994 | 1 162 |
| Value of livestock change | 154 | 29 | 70 | 10 | 8 | -8 | 11 | 16 |
| Fruit | 1 750 | 2 117 | 1 942 | 1 913 | 1 983 | 2 116 | 2 381 | 2 618 |
| Vegetables | 963 | 918 | 985 | 1 063 | 1 089 | 1 131 | 1 182 | 1 232 |
| Other horticulture | 274 | 246 | 224 | 241 | 247 | 257 | 268 | 280 |
| Crops and seeds | 510 | 698 | 619 | 639 | 654 | 692 | 727 | 727 |
| Agricultural services | 2 974 | 3 752 | 3 864 | 4 087 | 4 309 | 4 531 | 4 754 | 4 976 |
| Non-farm income | 325 | 407 | 403 | 448 | 478 | 494 | 541 | 602 |
| Total gross revenue | 22 515 | 20 729 | 22 052 | 24 315 | 25 889 | 26 823 | 29 157 | 32 149 |
| Intermediate consumption | 11 808 | 11 546 | 11 337 | 12 712 | 13 505 | 13 916 | 14 859 | 16 198 |
| Contribution to GDP¹ | 10 707 | 9 183 | 10 715 | 11 603 | 12 383 | 12 908 | 14 298 | 15 951 |
| Wages | 2 373 | 2 532 | 2 552 | 2 606 | 2 709 | 2 831 | 2 960 | 3 093 |
| Depreciation | 1 429 | 1 578 | 1 507 | 1 681 | 1 839 | 1 866 | 2 039 | 2 256 |
| Net indirect taxes ² | 564 | 624 | 586 | 713 | 762 | 795 | 883 | 987 |
| Operating surplus | 6 340 | 4 448 | 6 071 | 6 603 | 7 073 | 7 416 | 8 417 | 9 616 |
| Interest paid | 2 933 | 3 287 | 2 292 | 2 317 | 2 085 | 2 103 | 2 466 | 2 947 |
| Interest received | 286 | 319 | 210 | 213 | 182 | 206 | 230 | 247 |
| Agriculture sector income | 3 692 | 1 480 | 3 988 | 4 499 | 5 170 | 5 518 | 6 181 | 6 916 |

Notes

1. GDP – gross domestic product.

2. Net indirect taxes are indirect taxes less subsidies.

Sources Statistics New Zealand and MAF.

An aerial photograph of a rural landscape. In the foreground, there are rows of green vineyards. A winding river flows through the middle ground, surrounded by lush green fields and some buildings. In the background, a coastal town is visible, with a blue sea and a clear sky. The overall scene is bright and scenic.

ISSUES FACING THE PRIMARY SECTORS

PROTECTING PRIMARY INDUSTRIES THROUGH BETTER INFORMATION SHARING

2

In the event of a biosecurity threat or natural disaster, the response taken by authorities and landowners needs to be accurate and fast in order to minimise the potential impact to farmers and growers, the sector and to our economy.



New Zealand's biosecurity system is designed to ensure that our primary industries, so critical to our economy and our way of life, are protected from many of the major pest diseases that occur elsewhere around the world.

That system has been enhanced this year with the creation of a comprehensive rural property database – FarmsOnLine. The role of the purpose-built system is to hold up-to-date information on farms, lifestyle blocks, stock and crops, and enhance communication between landowners and authorities when a biosecurity response is needed.

In the event of a biosecurity threat or natural disaster, the response taken by authorities and landowners needs to be accurate and fast in order to minimise the potential impact to farmers and growers, the sector and to our economy.

The information held by FarmsOnLine will ensure that the right people can be contacted quickly, the actions taken are right for the size and function of a property, and the right level of support is deployed to the right place.

It does not matter what the size of property is or what it is used for – be it a commercial dairy farm or a lifestyle block with half a dozen sheep keeping the grass down. Anyone with rural land, stock or crops is part of New Zealand's biosecurity system and will benefit from being part of FarmsOnLine.

There's a lot at stake. A 2003 report by the Reserve Bank of New Zealand and Treasury estimated the potential impact of a Foot and Mouth Disease outbreak here at a cumulative loss in nominal GDP of around \$6 billion after one year and around \$10 billion after two years.

The faster and more efficiently a response to this sort of threat can be co-ordinated, the better the possible outcome for everyone.

FarmsOnLine will also support the primary sector's international reputation as a safe and responsible producer of food and fibre. Knowledge of where stock and crops exist will support ongoing biosecurity surveillance and containment activities, which will give our trading partners greater confidence in our supply chain. With primary sector exports in 2010 generating some \$28 billion, that confidence is critical to our economic success.

The 2005 Waiheke Island foot-and-mouth disease hoax was something of a wake-up call as it took more than a week to locate and contact potentially affected properties across the island...



A CRITICAL PART OF NEW ZEALAND'S BIOSECURITY SYSTEM

FarmsOnLine is a key component of a complete biosecurity system that operates on three fronts.

MAF works offshore, gathering and exchanging information with trading partners about emerging risks around the globe. It also establishes offshore protection programmes that can identify and eliminate pests before they even set off for New Zealand.

At the border, MAF's role is to confirm that goods, passengers and craft meet our biosecurity requirements. The focus is on intercepting high risk and non-compliant passengers and goods.

Even so, despite best efforts and a world-class system, the reality is that some organisms will inevitably get through. Some come via the border through both intentional and unintentional actions, but others fly here, swim here, or simply blow in on the wind. Even if the border was closed tomorrow to travellers and trade, pests would still arrive.

MAF works collaboratively with other organisations with an interest in biosecurity to identify pests that have arrived and then manage or eliminate them.

This is where FarmsOnLine fits in. Being able to quickly ring-fence and stamp out an outbreak will deliver huge benefits to New Zealand farmers and growers, minimising potentially significant economic impacts.

FarmsOnLine has plugged what was once a gap in MAF's biosecurity response readiness. Before the development of the database, a range of property ownership and land use information was held across industry and government organisations, but it was fragmented, duplicated and not easily accessible.

The 2005 Waiheke Island foot-and-mouth disease hoax was something of a wake-up call as it took more than a week to locate and contact potentially affected properties across the island – something that could now be achieved much more quickly.

One of the lessons learnt from the hoax and the response to it was that simply knowing a property exists is not sufficient in managing a biosecurity emergency

The FarmsOnLine dataset covers all livestock, forestry, horticulture and viticulture sectors. It includes rural property location, address, title and land use information that is already publicly available.

effectively. Information on what at-risk species (animals or plants) might be on a property and up-to-date contact details are critical to an efficient and effective response.

As a result, MAF determined that a purpose-built resource to enable fast identification of potentially affected properties was the most appropriate and cost-effective solution.

PUTTING FARMSONLINE TOGETHER AND KEEPING IT CURRENT

At the heart of FarmsOnLine is a dataset of property information that can identify some 98 percent of rural properties and has a confirmed contactability rate of more than 81 percent of that list.

The FarmsOnLine dataset covers all livestock, forestry, horticulture and viticulture sectors. It includes rural property location, address, title and land use information that is already publicly available. Although it also includes personal information, this is protected by a range of privacy measures and is not available on the FarmsOnLine external website.

The project team are now supplementing the baseline data with detail received from data sharing partners, primarily industry bodies. Data sharing agreements are being progressively negotiated and signed up over this year.





The system has a Data Maintenance Centre whose job it is to update and build contactability. The centre manages information about all rural and lifestyle properties, and also includes sale yards, abattoirs, packhouses and other relevant premises. Centre staff will routinely contact some 50 000 listed farmers and landholders each year to ensure that their information is current.

FarmsOnLine has been designed so that no one faces any unnecessary compliance burden. Landowners do not have to do anything to join up to the database, but are encouraged to visit the FarmsOnLine public website (see below) to register, check their details and update if required.

PRIVACY OF INFORMATION IS PARAMOUNT

From the outset, MAF knew that protecting the use of personal information was fundamental to the success of FarmsOnLine. MAF consulted extensively with the Office of the Privacy Commissioner to ensure there are clear rules around the use of personal and commercially sensitive information on the database.

FarmsOnLine has very restricted access to information that is considered personal under the Privacy Act – specifically name, contact details and stock/crop details. That information can be used only for biosecurity response, surveillance and pest and disease management activities described in the Biosecurity Act. Individuals can, however, give their permission for other use of their personal information. These uses include responding to farmer requests for assistance to prevent or mitigate harm to livestock and crops during adverse events such as severe weather events, and voluntary participation by individual farmers in market access schemes where location of origin is relevant.

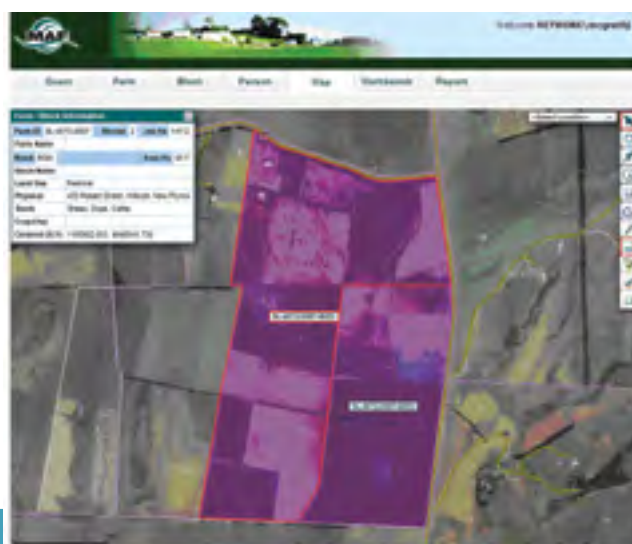
Any additional use will require enabling legislation that would involve separate public consultation and consideration by Parliament.

Significantly, the FarmsOnLine database does not contain information such as commercial values, disease status or other commercially sensitive information. The database is not-for-profit, and the information it contains can be used only for the public good and not for commercial gain.

Personal information will not be available on the FarmsOnLine website other than to registered FarmsOnLine users, who will be able to access their own information to update or correct it if they choose.

FarmsOnLine is a voluntary system in that farmers may choose to opt out if they do not want personal information that is not available in the public domain to be held on the database.

MAF is optimistic, however, that the opt-out rate will be low given the tight privacy controls around use of the information and the clear benefits to farmers of effective biosecurity response. Even so, MAF will respect the right of any individuals who choose to withhold their personal information.



PLAY YOUR PART AT FarmsOnLine

On visiting FarmsOnLine's public website www.farmsonline.maf.govt.nz, landowners can register to access the secure section of the website.

The two-step registration process is part of ensuring information privacy and to use the secure section, users must first have their connection to properties verified. Once registered, users can view their own property information and maps, and print off GIS maps of their holdings.

The site also contains full information about the database and biosecurity, as well as links to other important rural information.

Information and assistance is also available by phoning 0800 4FOLNZ (0800 436 569). This phone line is staffed Monday to Friday 7am to 8pm and Saturdays 10am to 2pm.

CAN THE RED MEAT SECTOR COMPETE WITH OTHERS RATHER THAN ITSELF?

FINDINGS FROM A MAJOR NEW REPORT

The research revealed a disaggregated industry with many independent moving parts along the supply chain, which stands in stark contrast to our other pastoral giant, dairy, where cohesiveness and co-operation abounds.



You can almost hear the collective sigh of relief out there in the dry stock sector as profitability returns to beef, lamb and deer farmers, who after several very hard years had started to wonder if there was a future for their industry. Prices and returns for producers in this year's SONZAF are very much on the up, but stock numbers are still lower than desirable in many places so it's too early to start breaking open the champagne.

Most readers will be familiar with the dramatic reductions in dry stock numbers over the last two decades as a result of land use change, a decline which has been exacerbated by the successive droughts and storms of recent years. In the 20 years between 1990 and 2010 the dairy industry increased its land use by 59 percent, while the area devoted to sheep, beef and deer production dropped by 27 percent. What's more, the number of individual sheep and beef farms declined a whopping 41 percent between 1984 and 2008 through a combination of changes in land use and property consolidation.

Deloitte Consulting was commissioned to develop the strategy, a project jointly funded by the two sector bodies, New Zealand Trade and Enterprise and MAF. As the resulting report from Deloitte points out, the project's impetus arose from a widespread belief that returns are "not sufficient to ensure that sufficient land remains to maintain critical mass for ongoing production of sheep and cattle products."

Today the sector exports about \$7 billion in meat, skins, wool and co-products, roughly 35 percent of all agricultural exports. The goal, says the report, should be to grow the sector to reach a nominal annual export value of NZ\$14 billion

There is a real sense that for some years now forces external to the red meat industry have been knocking the sector around as it has struggled, without much success, to get collective control of its own destiny. But more recently, global market drivers point to a bright and profitable future for the industry, if only it can get geared up to take advantage of growing demand.

In a spirit of determination and optimism sector bodies Beef + Lamb and the Meat Industry Association joined forces to develop a new strategy to take the industry confidently forward. This partnership was progress in itself, given the uneasy tensions that have often existed between suppliers and processors in the sector.

by 2025, a virtual doubling of current performance. This is a great aspiration but a big ask. According to the report, however, it's not only possible but could also contribute to New Zealand becoming “a food super power of high quality premium foods to the world's wealthy.”

But before we get carried away with the potential, we need to think carefully about what is preventing the sector from realising these opportunities for growth. The strategy that emerges from the report is built on the premise that the industry already has access to the science, technology and business practices to succeed. It just needs to start connecting up the disaggregated and dysfunctional parts and invest in uptake and adoption of better practices – this is all about behaviour change, says the report.

The research that underpinned the development of the new strategy – farmer surveys, interviews, literature review, on and off-farm data analysis and public consultation – revealed that much of the industry's debates have been focused on the “less significant issues such as quota, company structure and processing capacity.”

The report points to co-ordinated in-market selling, efficient and aligned procurement and sector best practice as being the most important themes for focus going forward.

According to the report, the need for processors to acquire stock to achieve efficient plant utilisation results in “excessive competition” and is “forcing a tactical, short-term view” which, while rational in the short-term, is “not sustainable in the longer-term”. Furthermore, the approach to procurement is pervading sector relationships by creating “distrust, a lack of alignment and commitment”.

The report argues that current procurement behaviours, particularly “uneven power” relationships, are preventing the sector from making changes and seizing new opportunities without exposing existing businesses to undue risk. Such opportunities, the report says, include new product research and development, market development, and plant and technology upgrades, which arguably occur too incrementally for the sector to stay competitive within the current model.



... “processors and suppliers need to work together to break the continued cycle of excessive competition and shift the focus to export markets to drive the growth of returns to stakeholders and New Zealand.”

The highly competitive stock procurement practices in the industry come in for particular criticism in the report. The research suggests that more than \$100 million is spent by processors every year in transporting stock, much of which is unnecessary given stock is frequently trucked past under-utilised processing facilities. A further \$45 to 50 million is spent in procurement costs. According to the report, both of these areas could benefit from more co-ordinated behaviour, which would reduce cost and improve asset utilisation.

Of course, procurement is a two-way street involving suppliers and processors, so any change to current practice will need to involve both parties. On this score the report is quite clear that “processors and suppliers need to work together to break the continued cycle of excessive competition and shift the focus to export markets to drive the growth of returns to stakeholders and New Zealand.”

The research revealed a disaggregated industry with many independent moving parts along the supply chain, which stands in stark contrast to our other pastoral giant, dairy, where cohesiveness and cooperation abounds. In the red meat sector a paucity of relationships built on mutual interest sees individuals and entities constantly seeking to maximise their arbitrage opportunity on any given day at the expense of their supply chain partners – in essence it is every man for himself and loyalties are thin on the ground.



...the challenge is get a much greater cohort of the red meat sector acting similarly, with a focus on the long-term opportunities for growth rather than short-term opportunities for windfall gains.



The report sees this approach as ultimately self-defeating because sector participants are competing amongst themselves to redistribute the pie, rather than working together to grow the pie for all. It argues that the sector needs to rebalance “incentives and practices to remove any one sector participant’s ability to profit at the expense of another (for example, processor versus farmer or farmer versus processor). Through building greater trust between sector participants the sector will be able to implement a self sustaining change process.”

Changed behaviour in favour of more co-operation won’t happen easily and trust can only be built over time, the report says. Key to this is transparency of information so all parties know what is going on and who is benefiting where and by how much. Transparency of milk payouts, for example, is a powerful driver for collective action in dairy – there is no such equivalent in red meat, where significant variance in payment for stock is widely experienced.

The report sees an urgent need for processors to get market signals better communicated to producers, rather than focusing on current schedule prices. That’s because current processing signals are “masking the true market signals and perpetuating the current process.” And so the challenge for processors, the report says, is to start sending signals to suppliers about what is wanted by the market and by when, which means paying for and rewarding responsive behaviour. But a transition to this new approach can only be effective if the approach is consistently adhered to and not abandoned whenever pressure comes on to procure stock to fill up a processing chain.

It would be wrong to conclude that everything is wrong in the sector and no one is making profits – this is certainly not the case, the report says. The sector’s top performers, both on and off farm, are “highly profitable” because they are deliberate about where they focus their energies, attention and investment. As a result, they tend to be stronger adopters of new science and technologies and look for value chain partners to help build their businesses. According to the report, the challenge is get a much greater cohort of the red meat sector acting similarly, with a focus on the long-term opportunities for growth rather than short-term opportunities for windfall gains.

Now that we have a recommended plan for the future of the industry let's hope that it leads to a strong debate within the red meat sector about a new, more collaborative approach to industry development.

The report's prescription for change is essentially "informed aligned behavioural change", which means sector participants doing things differently, but more co-operatively, with better, more transparent information. In the report's words, "sector stakeholders need to transition to a longer-term strategic model where individual businesses act collectively to achieve sufficient scale to enable market development initiatives and apply science and technology developments to enhance profitability."

The sector continues to be critically important to New Zealand's economic future. New Zealand needs a strong red meat industry to support and compete with dairying, and other forms of land use. Now that we have a recommended plan for the future of the industry let's hope that it leads to a strong debate within the red meat sector about a new, more collaborative approach to industry development. After all, with the overwhelming majority of our red meat exported, the real competition is offshore, not here at home.



THE TRANS-TASMAN FOOD TRADE

HELPING GROWTH THROUGH JOINT REGULATION

4



The joint food regulation system that has developed under the Food Treaty has created significant benefits for stakeholders on both sides of the Tasman. The level of commitment that industry and consumer stakeholders have invested in the system has been critical to its success. MAF will continue to provide high-quality technical and policy inputs, as well as facilitating and promoting a high level of stakeholder involvement.

Exports of food from New Zealand to Australia have grown remarkably in recent years, with expansion likely to continue for the foreseeable future. The “enabling” regulatory environment, and in particular the joint Australia New Zealand Food Standards Code (the Food Code), plays an important part in assisting this growth. The Food Code provides food manufacturers and retailers with a common regulatory environment on both sides of the Tasman, thereby reducing the costs that would otherwise be associated with meeting different food composition and labelling standards, and increasing consumer choice. The joint regulatory environment also has a range of wider benefits.

GROWTH IN TRANS-TASMAN FOOD TRADE

Food exports to Australia are now about \$2.3 billion¹ a year, making up about 11 percent² of New Zealand’s total food and beverage exports. The scale of growth in recent years is reflected in figures available for the period 1999/00 to 2004/05. During this time, the value of New Zealand food exports to Australia increased by 79 percent while the total growth of food exports from New Zealand for the same period was 38 percent. Australia is now New Zealand’s fourth largest food export market.

Food exports from Australia to New Zealand also grew during the same period, although not at the same rate. They increased by 43 percent, while the total growth of food exports from Australia for the same period was 19 percent. New Zealand is Australia’s fifth largest export market for food.

The trans-Tasman regulatory environment is an outstanding example of the benefits that can be realised by both consumers and industry from a willingness to share a common food standards code and its ongoing development.

¹ Statistics New Zealand, Harmonised Trade export data, Table TEX001F, for the year ended June 2010, food exports from New Zealand to Australia.

² Statistics New Zealand, Harmonised Trade export data, table TEX001F, for the year ended June 2010, total food exports from New Zealand to the world.



Since 2005, New Zealand food exports to Australia have increased by a further 56 percent³, and exports to the rest of the world have increased by 31 percent⁴.

THE JOINT TRANS-TASMAN FOOD REGULATORY SYSTEM

In 1995, New Zealand and Australia signed what is known as the “Food Treaty”, or the *Agreement between the Government of New Zealand and the Government of Australia Concerning a Joint Food Standards System*. It established a joint regulatory system for the development and promulgation of standards for food composition and labeling.

The Food Treaty is one of the suite of agreements that sit within the Australia New Zealand Closer Economic Relations Free Trade Agreement. Under two of these – the trans-Tasman Mutual Recognition Arrangement and the Food Treaty – the trans-Tasman market for food has become almost an extension of the domestic market of both countries. The Mutual Recognition Arrangement extends to most food because of the confidence that the joint system provides to both Australian and New Zealand stakeholders that food safety and suitability is managed to an equivalent outcome. This effectively removes regulatory barriers that might otherwise exist.

Under the Food Treaty, standards are set by Food Standards Australia New Zealand (FSANZ). The effectiveness of the system is greatly assisted by the degree of integration that exists between the countries and the level of engagement that stakeholders in both countries commit to the system.

The joint regulatory system has facilitated and supported a significant increase in the trans-Tasman food trade. Today, over half our food exports to Australia (\$1.2 billion, or 55 percent) are made up of value-added processed foods⁵ that are regulated by joint food standards. This is in contrast with our food exports to all other countries, which are dominated by largely unprocessed foods.

³ Statistics New Zealand, Harmonised Trade export data, Table TEX001F, for the period 1 July 2005 to 30 June 2010, food exports from New Zealand to Australia.

⁴ Statistics New Zealand, Harmonised Trade export data, table TEX001F, for the period 1 July 2005 to 30 June 2010, food exports from New Zealand to the world (excluding Australia).

⁵ Processed goods include items such as cheese, infant formula, frozen French fries, chocolate and confectionery.

In addition to the benefits from combining technical resources for food standards for domestic use and that facilitate trade between Australia and New Zealand, the trans-Tasman system clearly supports our trade to many other markets.

MAF'S ROLE IN THE JOINT REGULATORY SYSTEM

The Government has set economic growth as a priority for MAF. This priority is supported by two objectives that are of particular importance to MAF's role in the joint system: facilitating trade and improving the regulatory regime.

The Food Treaty and our Partnership Agreement with FSANZ ensures that the requirements for food composition and suitability are appropriate for both countries. The Food Code also provides a regulatory framework that can facilitate trade in new types of foods or innovative food processes.

MAF contributes to the continuing development of the Food Code through science, risk assessment and policy inputs.

SCIENCE AND RISK ASSESSMENT

MAF provides specialist skills that are employed to steer the science and risk assessment work that informs the Food Code. This includes expertise in food safety aspects of composition of foods, toxicology, dietary modelling and epidemiology.

In contributing to the robustness of the Food Code, to the common benefit of New Zealand and Australia, MAF also ensures that there is an evidence base that takes into account any unique needs of New Zealand and its people. This includes ensuring risk assessments are based on New Zealand food intake data and recognition of other factors such as environmental factors that may influence New Zealand requirements. In doing this, MAF works closely with New Zealand stakeholders to ensure the evidence base is appropriate.



JOINT SCIENCE AT WORK

MAF is working closely with Australia to develop new food standards for tutin and pyrrolizidine alkaloids – two plant-derived toxins found sporadically in honey in both New Zealand and Australia. It is important that the standards that are developed for inclusion in the Food Standards Code are fully protective of health but are not unduly restrictive of trans-Tasman trade.

Robust dietary modeling of both the Australian and New Zealand populations was carried out in developing a mandatory standard for iodised salt in bread so as to address a significant iodine deficiency in both countries.

Co-ordination of the development and implementation of social research has been very effective. Recent examples include the allergen labeling review and the consumer understanding of salt/sodium and of folic acid. This research underpins the trans-Tasman regulatory work programme and the steps taken to meet the needs of populations in New Zealand and Australia.

...there is close co-operation between New Zealand and Australia in response to new and emerging food safety threats as well as co-ordination of rapid responses to food safety incidents.

The science and risk assessment work also contributes to New Zealand's broader trade needs, with the Food Code underpinning many of New Zealand's wider export requirements. Thus, the sharing of technical resources with our Australian counterparts on a range of matters, including some that are beyond the development of the Food Code, is another advantage of the partnership arrangement.

For New Zealand, having a scientifically-robust and well-respected basis for trade to the rest of the world is critical to our economic well-being. In addition to the benefits from combining technical resources for food standards for domestic use and that facilitate trade between Australia and New Zealand, the trans-Tasman system clearly supports our trade to many other markets.

POLICY DEVELOPMENT

MAF's input is also critical for the policy development that governs the trans-Tasman regulatory environment. A key part of that work is MAF's membership of the Food Regulation Standing Committee and support of the Minister for Food Safety at the Australia and New Zealand Food Regulation Ministerial Council. MAF's involvement here ensures that policy decisions that will be made affecting the joint food standards system, such as the current labeling review, are managed in a way that are consistent with our Food Treaty obligations and appropriate for New Zealand stakeholders – both industry and consumers.

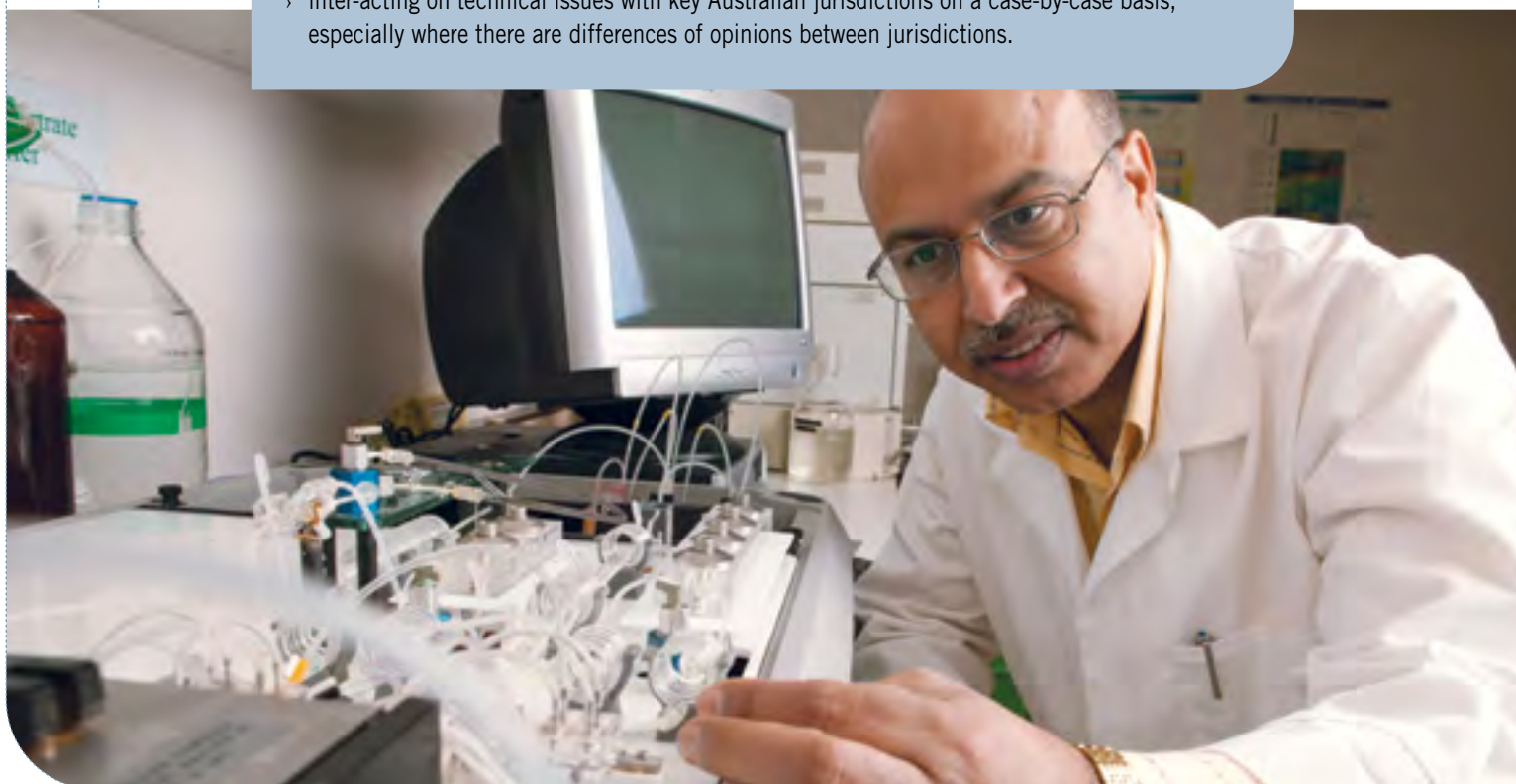
WIDER TRANS-TASMAN COLLABORATION

The relationship that has developed under the joint system has extended beyond those matters covered in the scope of the Food Treaty and joint technical work.

A collaborative trans-Tasman approach allows for effective sharing of wide-ranging technical resources between the two countries and adds rigour in operational areas. For example, although the setting of maximum residue levels is not within the scope of the Food Treaty, MAF participates in the development of Australian-only standards to share experiences and to ensure that any differences are minimised to the extent possible. In operational areas, New Zealand is an active participant in the committee co-ordinating implementation of the Food Code. Also, there is close co-operation between New Zealand and Australia in response to new and emerging food safety threats as well as co-ordination of rapid responses to food safety incidents.

MAF REFLECTS THE POLICY INTERESTS OF NEW ZEALAND BY:

- › responding to Food Standards Australia New Zealand applications and proposals by co-ordinating a whole-of-government response;
- › providing policy and technical inputs to Food Regulation Standing Committee Working groups so that New Zealand's position is fully taken into account;
- › providing policy inputs to partnership negotiations;
- › inter-acting on technical issues with key Australian jurisdictions on a case-by-case basis, especially where there are differences of opinions between jurisdictions.



A photograph of two men standing on a rocky mountain peak. The man on the right is holding a map and pointing towards a vast, snow-capped mountain range in the background. The man on the left is looking in the same direction. The foreground is a rocky, moss-covered ledge. The background shows a wide valley with sparse vegetation and distant, snow-covered mountains under a clear sky.

SITUATION AND OUTLOOK FOR THE PRIMARY SECTORS

WINE

5

Export volumes have been 13 percent higher than they were for the previous year, while export revenues increased only 6.5 percent over this period, reflecting the growth in the sale of lower priced bulk wine.

Average prices for New Zealand wine have been falling, with the average export price for the year ending 30 June 2011 expected to be \$6.90 per litre, a reduction of 24 percent over the last three years. This fall in price reflects increases in wine production and exports, the global recession of 2008 and 2009 reducing demand, and the strength of the New Zealand dollar.

These low prices have tightened profit margins for both wineries and growers and have resulted in an increased number of receiverships and advertised mortgage sales over the last year.

Beyond 2012, as the UK and US economies recover, the outlook for New Zealand wine is more encouraging. Current vineyard plantings mean that the industry has the productive capacity to meet a steadily growing demand for the country's premium bottled wine.

EXPORTS

New Zealand is expected to export about 160 million litres of wine valued at just under \$1.1 billion in the year ending 30 June 2011. Export volumes have been 13 percent higher than they were for the previous year, while export revenues increased only 6.5 percent over this period, reflecting the growth in the sale of lower priced bulk wine.

Bulk wine is typically shipped overseas in large bladders, and then supermarket chains or importers bottle, label and brand it New Zealand wine at a vendor-discounted price. This category of wine now represents about one-third by volume of New Zealand's total wine exports.

The growth in bulk wine has devalued the premium quality image of New Zealand wine built up over many years. However, this trend is seen by some as a consequence of a new world country like New Zealand achieving global wine status. According to this view, there will be a select number of New Zealand brands commanding high prices, another tier of more affordable wines and a bottom tier where bulk supply meets the need.

The US, the UK and Australia are the major markets underpinning our wine industry export earnings. Australia represents the industry's number one market by value, accounting for \$327 million of the \$1040 million sales in the year ending 30 June 2010.

NEW MARKETS FOR NEW ZEALAND WINE

New Zealand wineries, individually and collectively, are investing significant time and money into developing new overseas markets for premium branded New Zealand wine. As a result, other overseas markets contributed over \$200 million to export earnings in the year ending 31 December 2010. These markets experienced real growth in the period 2005 to 2010, notably China, Hong Kong and Canada. Over this period export earnings for China and Hong Kong climbed by 724 percent, and those for Canada by 325 percent.

China is the only market New Zealand sells to where red dominates white wine export sales. This distinction reflects the traditional preference of the Chinese consumer for French red wines.



FIGURE 5.1: MAJOR WINE EXPORT DESTINATIONS BY VALUE, 2010

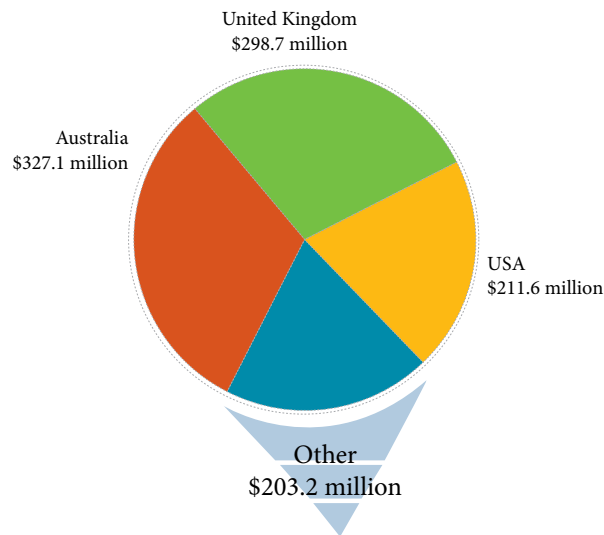
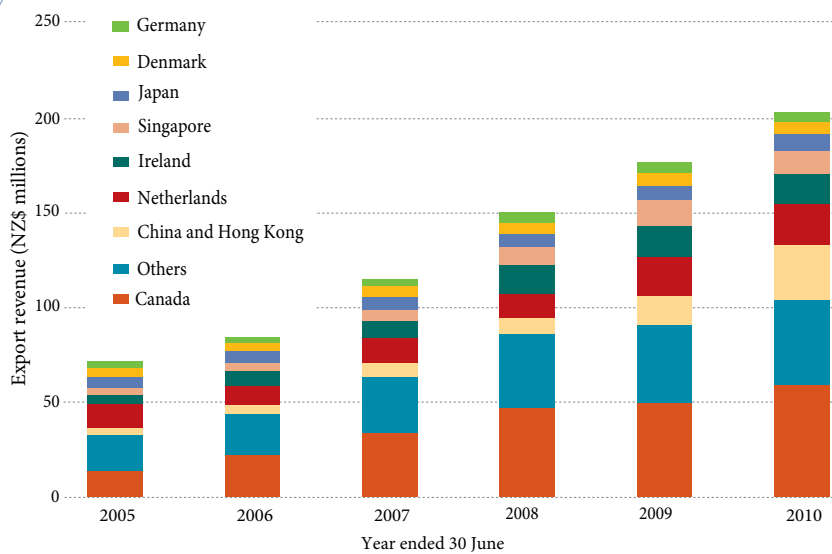


FIGURE 5.2: OTHER WINE EXPORT DESTINATIONS BY VALUE, 2005–2010



Source New Zealand Winegrowers.

VITICULTURE



Source AgriBase.

Export volumes are expected to rise modestly in the years to 2015, which is in contrast to the export growth for much of the last decade. Recovery in price per litre is expected as the industry works to develop consumer preference for our high-end wines in developing markets and as the UK and US economies recover. The projected rise in export prices also assumes the depreciation in the New Zealand dollar.

PRODUCTION

New Zealand's producing vineyard area currently stands at about 33 600 hectares. The industry is focused more on consolidation and some vineyard redevelopment rather than new development for the outlook period.

At the time of writing, the 2011 crop is being harvested, with reports indicating a potential vintage of about 310 000 tonnes. Such a vintage would be in line with the combined domestic and export forecast sales for the year ending 30 June 2011. Wineries are raising their grape intake in response to stronger sales and dwindling stocks.

TABLE 5.1: WINE EXPORT PRICES, VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|-----------------------------------|--------|------|-------|-------------------|----------|-------|-------|-------|
| | 2008 | 2009 | 2010 | 2011 ¹ | 2012 | 2013 | 2014 | 2015 |
| Export volume (million litres) | 88 | 113 | 142 | 160 | 165 | 170 | 175 | 175 |
| FOB ² price (\$/litre) | 9.0 | 8.8 | 7.3 | 6.9 | 6.9 | 7.3 | 8.2 | 8.5 |
| Export value (\$ million) | 798 | 992 | 1 041 | 1 104 | 1 139 | 1 241 | 1 435 | 1 488 |

Notes

1. Figure is estimated.

2. Free on board – the value of the goods delivered to the port of export and loaded onto a vessel for transportation out of the country of origin.

Sources Statistics New Zealand, New Zealand Winegrowers and MAF.



KIWIFRUIT

6

The volume of green kiwifruit exported is expected to increase slightly in the year to 31 March 2012, as a result of good growing conditions.

New Zealand exported more than 100 million trays of kiwifruit during the year ended 31 March 2011, for the third year running. At the same time, export returns decreased by 9.5 percent, to \$944 million, driven largely by the weakening in the Euro exchange rate, although the industry largely mitigated this impact through its foreign exchange policy.

Green kiwifruit remains the mainstay of the industry, contributing 79 percent of the total export volume and 67 percent of the total export value. Gold kiwifruit has grown its share of exports over the last decade, now contributing 21 percent of the total export volume and 33 percent of the total export value. Gold kiwifruit returns per tray are nearly twice that of green kiwifruit.

EXPORTS

Total kiwifruit export volumes are expected to increase to 107 million trays for the year to 31 March 2012, while export returns are forecast to reach above \$1 billion. Gold kiwifruit volumes are expected to increase by 33 percent, to 28 million trays. This will allow the industry to grow markets eager for the gold kiwifruit.

TABLE 6.1: KIWIFRUIT EXPORT PRICES, VOLUMES AND VALUES, 2008–2015

| YEAR TO 31 MARCH | | ACTUAL | | | | FORECAST | | | |
|------------------------------------------------|-----------------|------------|------------|--------------|------------|--------------|--------------|--------------|--------------|
| | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Export volume (million trays ¹) | Green kiwifruit | | | | 78 | 79 | 74 | 72 | 70 |
| | Gold kiwifruit | | | | 21 | 28 | 29 | 32 | 36 |
| | Total | 97 | 106 | 102 | 100 | 107 | 104 | 105 | 106 |
| FOB ² price (\$/tray) | Green kiwifruit | | | | 8.0 | 8.0 | 8.3 | 9.0 | 10.0 |
| | Gold kiwifruit | | | | 15.3 | 14.6 | 15.0 | 16.0 | 17.8 |
| | Total | 8.1 | 9.3 | 10.3 | 9.5 | 9.6 | 10.2 | 11.2 | 12.6 |
| Export value (\$ million) | Green kiwifruit | | | | 622 | 620 | 620 | 649 | 698 |
| | Gold kiwifruit | | | | 315 | 402 | 434 | 512 | 631 |
| | Total | 779 | 987 | 1 043 | 944 | 1 027 | 1 060 | 1 167 | 1 337 |

Notes

1. One trays equals 3.6kg.

2. Free on board is the value of the goods delivered to the port of export and loaded onto a vessel for transportation out of the country of origin.

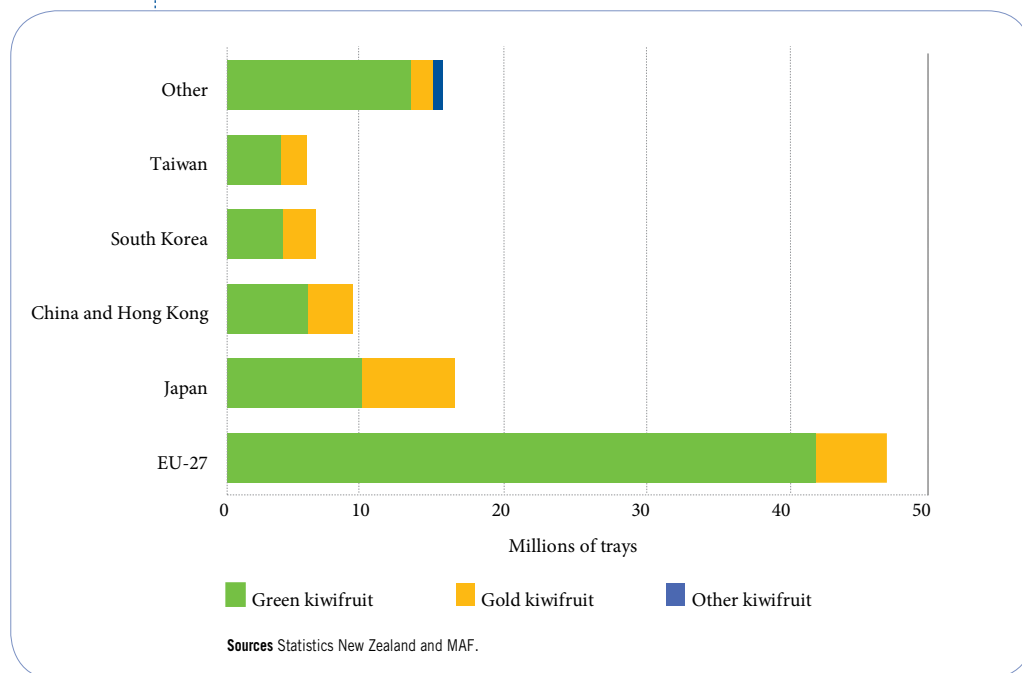
Sources Statistics New Zealand and MAF.

The volume of green kiwifruit exported is expected to increase slightly in the year to 31 March 2012, as a result of good growing conditions. Over the medium term, New Zealand growers who predominantly grow green kiwifruit are expected to take the opportunity to convert some of their orchards to grow new varieties. Green volumes are expected to decline slightly in the medium term, although this is expected to stabilise in time, and volumes are expected to grow in the long run as productivity gains are achieved.

PRODUCTION

Total production is expected to be stable in the medium term, with export volumes expected to sit around 106 million trays in 2015, but with a more balanced variety mix. New gold kiwifruit orchards will have matured, increasing gold production, with exports estimated to total 36 million trays, up by 71 percent by 2015. Green kiwifruit production is expected to fall to 70 million trays, down 13 percent, as orchards are converted to new varieties. This change in variety mix, combined with more favourable exchange rates, is forecast to drive export returns past \$1.3 billion in the 2014/15 season.

FIGURE 6.1: KIWIFRUIT EXPORT VOLUMES BY COUNTRY AND VARIETY, 2010



THE ARRIVAL OF PSA – *PSUEDOMONAS SYRINGAE PV. ACTINIDIAE*

The bacterium Psa was detected on 5 November 2010, on a Te Puke orchard in the Bay of Plenty, the centre of the New Zealand kiwifruit industry. Psa affects the health of the vine but not the quality of the fruit. Psa is not carried by the fruit, and no markets have placed restrictions on the trade of kiwifruit.

Psa has been present in a number of countries for many years, including Italy, Japan and South Korea, where outcomes have ranged from successful management to whole orchards being wiped out. Chile, New Zealand's key competitor, recently identified that Psa was also present on some Chilean orchards.

Kiwifruit Vine Health Inc is an independent pan-industry organisation that was set up in New Zealand to lead the kiwifruit industry response to the Psa incursion. The industry strategy has evolved from eradication, to containment and the development of a national pest management and monitoring plan.

The New Zealand environment, climate, industry structure and support mechanisms are very different from those in other countries where Psa has established. As a result, New Zealand growers are confident that, over time, they will be able to mitigate the impacts of Psa and continue to grow the industry.



APPLES AND PEARS

7

Export returns for apples and pears are expected to improve over the forecast period, helped by an increasing proportion of new varieties in the export mix and the assumed depreciation of the New Zealand dollar after 2012.

The outlook is encouraging for the New Zealand apple and pear sector, with potential for market expansion in Australia and Asia, and an increasing proportion of new varieties planted.

Total export earnings for apples and pears are expected to increase in the year ending 31 December 2011, mainly because of increased export volumes.

Southern Hemisphere apple export volumes in 2011 are estimated at 5 percent above those of last year, especially for the varieties Royal Gala and Cripps Pink. By April 2011, existing stocks in European and UK markets were clearing well, with average producer and retail prices above those of last year.

Asian markets have experienced good demand for the Pacific series of apple. The market potential for New Zealand apples in the US is likely to improve on last year as US stocks are clearing more rapidly than expected.

Average prices for New Zealand apples in 2011 are expected to increase by around 10 percent overall on last year. An orderly entry of fruit into the main markets will be critical in maintaining the price levels needed to offset the high value of the New Zealand dollar.

Export returns for apples and pears are expected to improve over the forecast period, helped by an increasing proportion of new varieties in the export mix and the assumed depreciation of the New Zealand dollar after 2012.

APPLES TO AUSTRALIA – AN UPDATE

Following the successful outcome in New Zealand's favour of the World Trade Organisation's (WTO) assessment of Australia's policy for the importation of apples from New Zealand, the Australian government has agreed to undertake a science-based review of the quarantine measures applicable to New Zealand apples, including the three pests at issue: fire blight, European Canker and apple leaf curling midge. Australia has until 17 August 2011 to comply with the WTO outcome. Australia has indicated that from this date, it will be in a position to issue import permits for New Zealand apples based on any conditions that may arise out of its review process.

FRUIT



Source AgriBase.

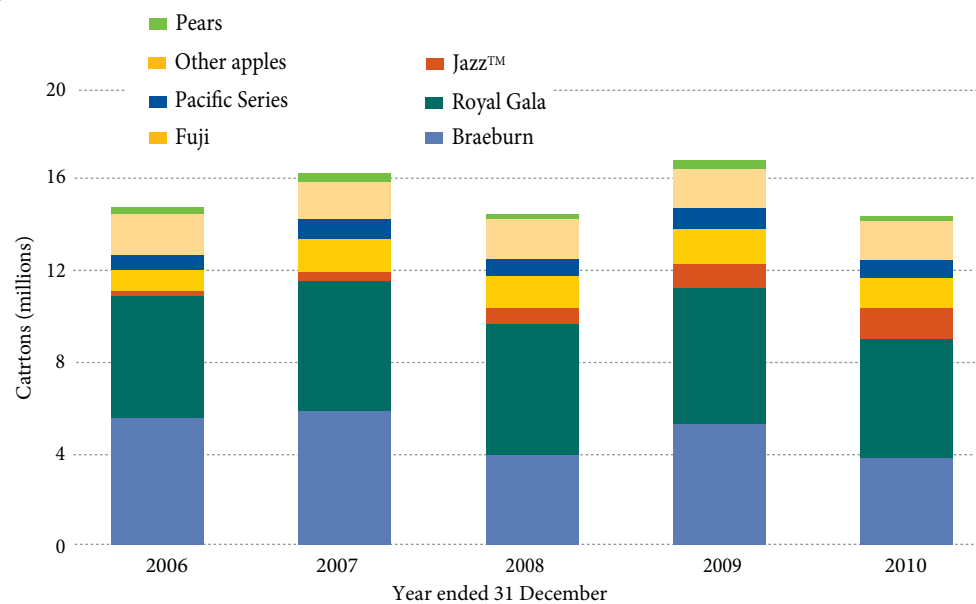
EXPORTS

Annual export volumes have settled into a band between 14 and 17 million cartons, with climatic conditions determining volumes within this range. New Zealand is expected to export around 16 million cartons of apples and pears in the year ending 31 December 2011.

Growers and exporters are working to better co-ordinate market supply with demand for the Braeburn variety, with export volumes likely to drop below 4 million cartons. Higher apple juice prices in 2011, owing to reduced global stocks, provided growers with income options for non-export fruit.

The export volume of Jazz™ is estimated at about 2 million cartons in 2011, an increase of around 35 percent on last year. Export volumes of varieties suited to Asian markets are also expected to increase in 2011, including Fuji, the Pacific series and Envy™.

FIGURE 7.1: APPLE AND PEAR EXPORT VOLUMES BY VARIETY, 2006–2010



Sources Statistics New Zealand and MAF.



PRODUCTION

Apple and pear production in 2011 is expected to be well up on the previous year. The rise is due to a combination of good growing conditions and recently planted orchards coming into full production.

New plantings are expected to slow down in the short-term, as growers and exporters take stock of market performance of available varieties.

A gradual lift in production is expected over the next three years as new plantings reach maturity and the industry continues to maximise yield.

The planted area in apple trees in New Zealand is settling around 9000 hectares, with new plantings matching tree removals.

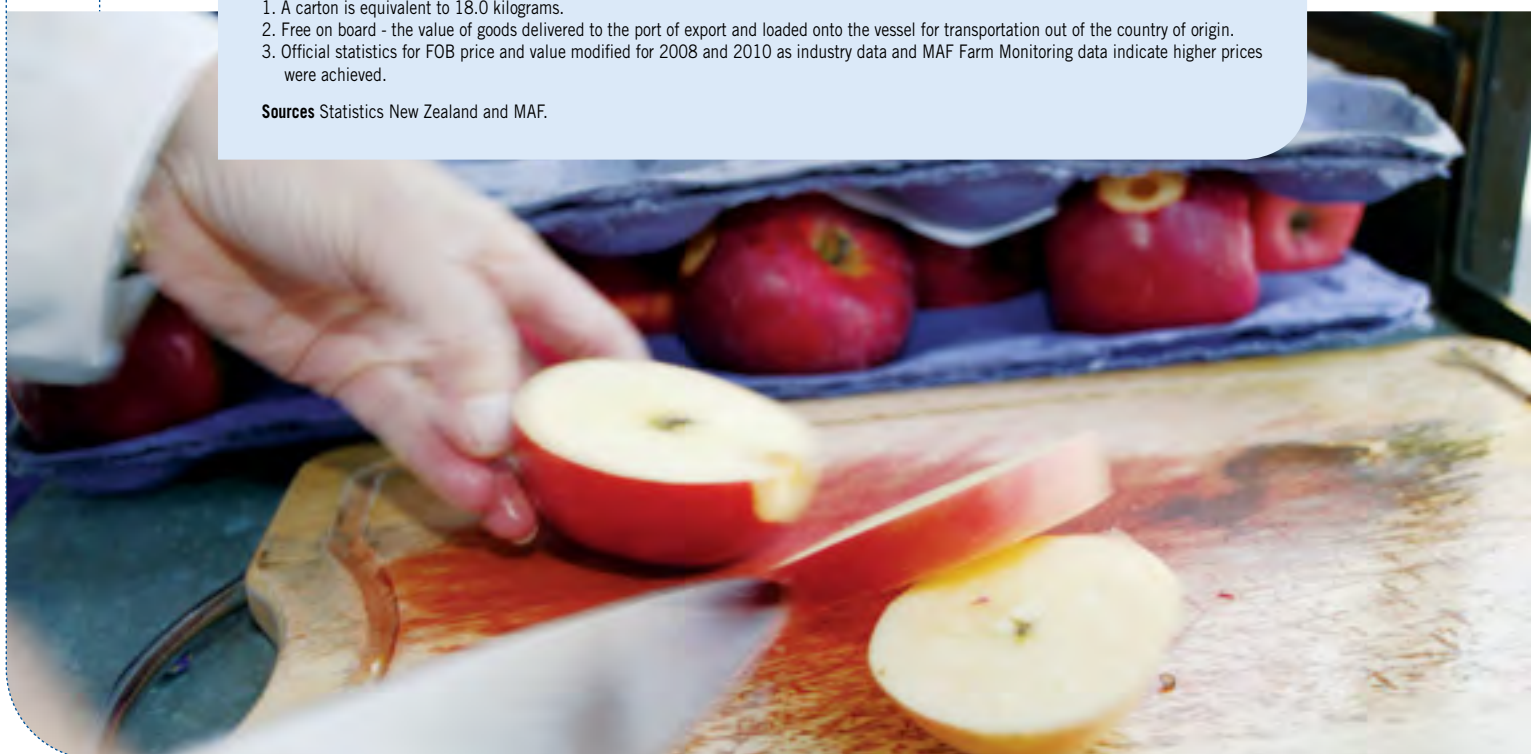
TABLE 7.1: APPLE AND PEAR EXPORT PRICES, VOLUMES AND VALUES, 2007–2014

| YEAR TO 31 DECEMBER | ACTUAL | | | | | FORECAST | | |
|-------------------------------------------------|--------|------|------|------|------|----------|------|------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Export volume (million cartons ¹) | 16.6 | 14.7 | 17.1 | 14.7 | 16.0 | 16.0 | 16.5 | 16.5 |
| FOB ² price (\$/carton) ³ | 22.1 | 28.2 | 24.4 | 24.8 | 25.0 | 25.0 | 26.0 | 27.5 |
| Export value (\$ million) ³ | 368 | 415 | 418 | 365 | 400 | 400 | 430 | 455 |

Notes

1. A carton is equivalent to 18.0 kilograms.
2. Free on board - the value of goods delivered to the port of export and loaded onto the vessel for transportation out of the country of origin.
3. Official statistics for FOB price and value modified for 2008 and 2010 as industry data and MAF Farm Monitoring data indicate higher prices were achieved.

Sources Statistics New Zealand and MAF.



FRESH AND PROCESSED VEGETABLES

8

FRESH VEGETABLES

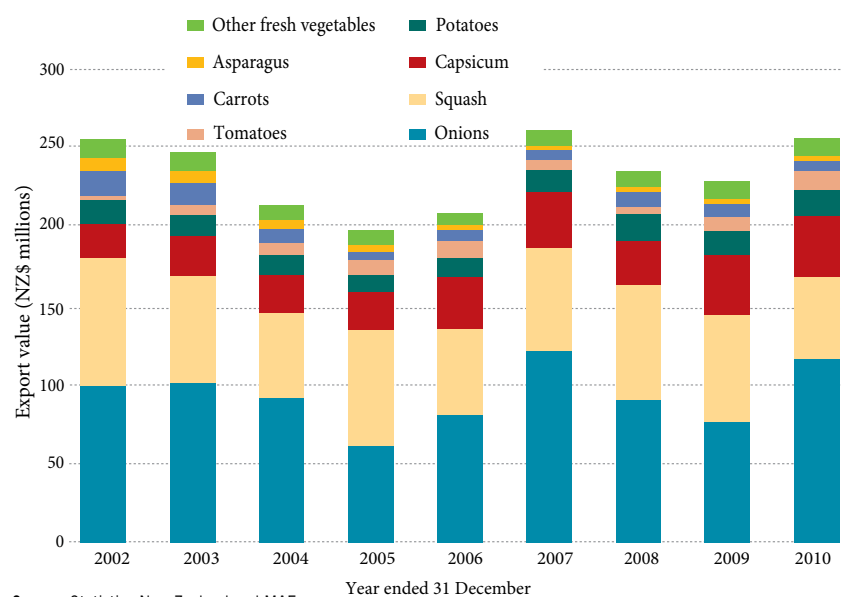
Export volumes for fresh vegetables are expected to be about 12 percent less in the year ending 31 December 2011 than in the previous year, mainly because adverse weather conditions have affected onion production.

Export volumes of onions and squash, the dominant fresh vegetable export crops, are expected to remain relatively static over the forecast period. This is due to rising production costs and, as in the case of onions, a shorter marketing window as northern hemisphere producers increase production and develop better quality storage systems. Initiatives are under way to increase market demand for New Zealand squash in South Korea in the medium term.

A shortage of onions in the main markets of Europe and Asia, the result of adverse weather conditions, is prompting good demand for Southern Hemisphere supplies, with in-market prices expected to increase above last year. Strong demand from Asian markets and the weak value of the UK pound against the New Zealand dollar this season are again limiting export volumes to the UK, a traditional market for New Zealand onions.

Export volumes for squash are expected to increase slightly on last year. Adverse events created opportunities for New Zealand tomato exports to Australia during the latter part of 2010 and into 2011.

FIGURE 8.1: EXPORT VALUES OF FRESH VEGETABLES, 2002-2010



Sources Statistics New Zealand and MAF.

VEGETABLE



Source AgriBase.

PROCESSED VEGETABLES

Exports of processed vegetables, especially frozen vegetables, are expected to increase by up to 5 percent in the year ending 31 December 2011, largely as a result of expansion in vegetable processing capacity in the Hawke's Bay region during 2011. Further increases in export volumes are likely over the forecasting period as this additional processing capacity is fully utilised.

Production and export volumes of frozen sweetcorn will remain at low levels as world stocks clear.

Total fresh and processed vegetable export values are estimated to reach \$560 million for the year ending 31 December 2011, helped by an increase in export volumes of frozen vegetables, likely price increases for onions, and the favourable exchange rate with the Australian dollar.

TABLE 8.1: VEGETABLE EXPORT VOLUMES AND VALUES, 2007–2014

| YEAR TO 31 DECEMBER | ACTUAL | | | | | FORECAST | | |
|---------------------------------------------|--------|------|------|------|------|----------|------|------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| FRESH VEGETABLES | | | | | | | | |
| Export volume (000 tonnes) | 350 | 313 | 269 | 311 | 273 | 300 | 302 | 302 |
| PROCESSED VEGETABLES | | | | | | | | |
| Export volume (000 tonnes) | 198 | 188 | 168 | 169 | 176 | 184 | 190 | 190 |
| TOTAL FRESH AND PROCESSED VEGETABLES | | | | | | | | |
| Export value (\$ million) | 538 | 528 | 521 | 548 | 560 | 580 | 605 | 630 |

Sources Statistics New Zealand and MAF.



ARABLE

9

CEREALS

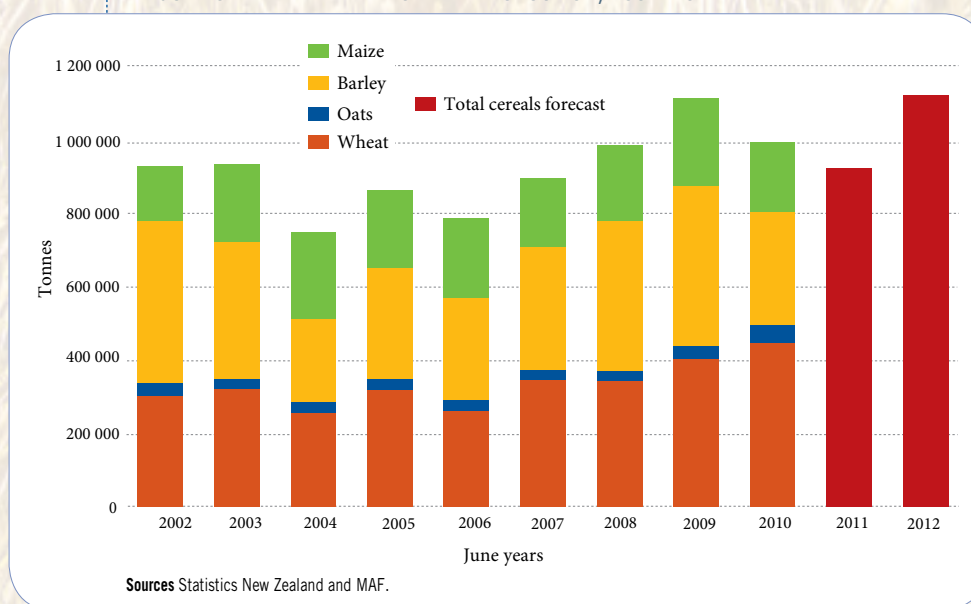
The area of cereals harvested in the year ending 30 June 2011 increased 5.4 percent to 143 500 hectares, with reductions in wheat and maize being compensated for by increased barley area. Total production of cereal grain is estimated to be down 8.3 percent to 922 000 tonnes due to climate impacts.

Global production for the calendar year 2011 is predicted to increase by around 4 percent and consumption by around 2 percent, allowing stocks to rebuild from low levels. In recent years, US biofuel policies have driven demand for corn, with a flow-on to wheat as a substitute animal feed.

The price outlook for the year ending 30 June 2012, assuming normal weather patterns, is for global wheat prices to fall to \$250 US per tonne. Further falls back to a long-run trend of around \$210 US per tonne are expected in the following years.

Recent global price increases have highlighted the impact of climate in major producing areas when stocks are relatively low and there is concern about food security. Relatively small climatic impacts on main production areas can cause significant global price volatility – with prices more likely to increase than decrease.

FIGURE 9.1: NEW ZEALAND CEREAL PRODUCTION, 2002–2012



ARABLE



Source AgriBase.

Milling wheat contract prices in New Zealand are between \$450 and \$465 per tonne for the 2012 harvest. In the medium term, given the expected decline in international prices and with the assumed depreciation in the New Zealand dollar relative to the US dollar, \$320 per tonne is expected by 2015.

SEEDS

Seed export values increased by 7.5 percent to \$190 million in the year to 31 March 2011. This was mainly a production-driven increase, with prices in global markets falling a little as global economies struggled to recover from the global financial crisis of 2008 and 2009.

Seed production from the year ending 30 June 2011 will be exported during the following year. Yields have been average or below and, with prices expected to hold, export receipts are forecast to be similar to the year ending 30 June 2011.

The market outlook for the next few years is positive for producers, as the general rise in agricultural product prices and economic recovery in major markets encourages seed plantings in New Zealand. Perennial ryegrass prices, in particular, are recovering following several years of oversupply.

The international forage and vegetable seed market continues to look on New Zealand as a high-quality, reliable production region.



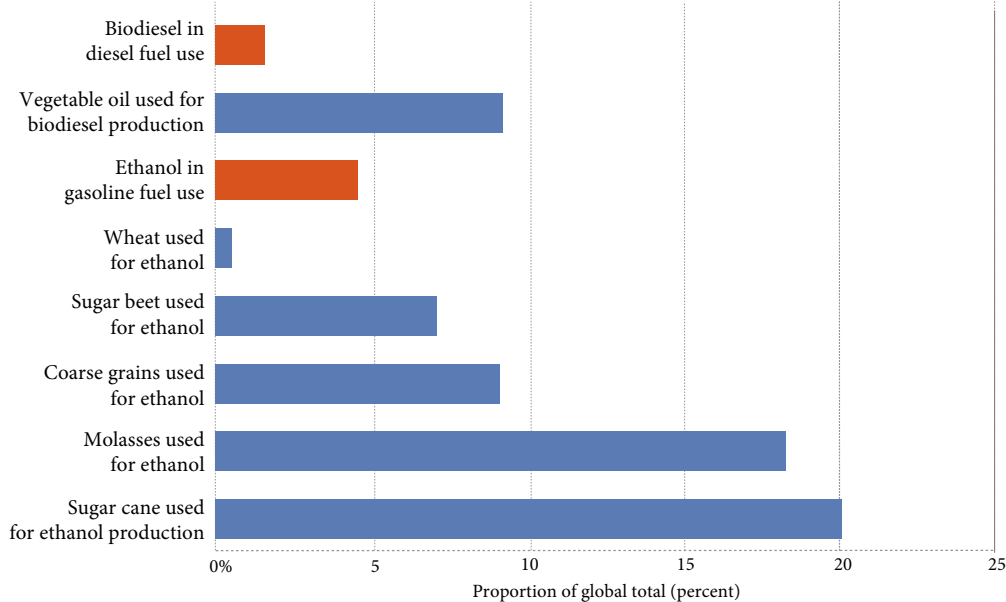
BIOFUEL

Increases in biofuel production from maize and oilseeds will continue to be the single greatest influence on global grain consumption in the medium term.

Mandated production in the US has increased corn used for ethanol from 20 million tonnes in 1999/2000 to 125 million tonnes in 2010/11. Other countries have developed biodiesel targets which are expected to increase oilseed consumption in the future. China is adding to demand for oilseeds for cooking oil, use of which has doubled in the last 10 years.

Nearly 10 percent of global coarse grain production is now used for ethanol production, and a similar proportion of vegetable oil production is used for biodiesel production.

FIGURE 9.2: AGRICULTURE INPUTS TO BIOFUEL PRODUCTION AND BIOFUEL SHARES OF FUEL, 2007–2009 AVERAGE



Sources OECD and MAF.

FORESTRY

10

Total export earnings for the year to 30 June 2011 are projected at \$4.3 billion, with earnings for the June 2012 year forecast to rise to \$4.7 billion.

The growing importance of log exports, largely driven by Chinese demand, has been the major feature of the last 18 months. In 2010, export logs rose to 44 percent of a 24.8 million cubic metre harvest. Strong demand from the export log sector is expected to continue through 2011 and 2012. This, coupled with a relatively strong demand for sawn timber, limited growth in the New Zealand harvest, and supply restrictions from competitors such as Russia, means log and timber export prices are likely to rise.

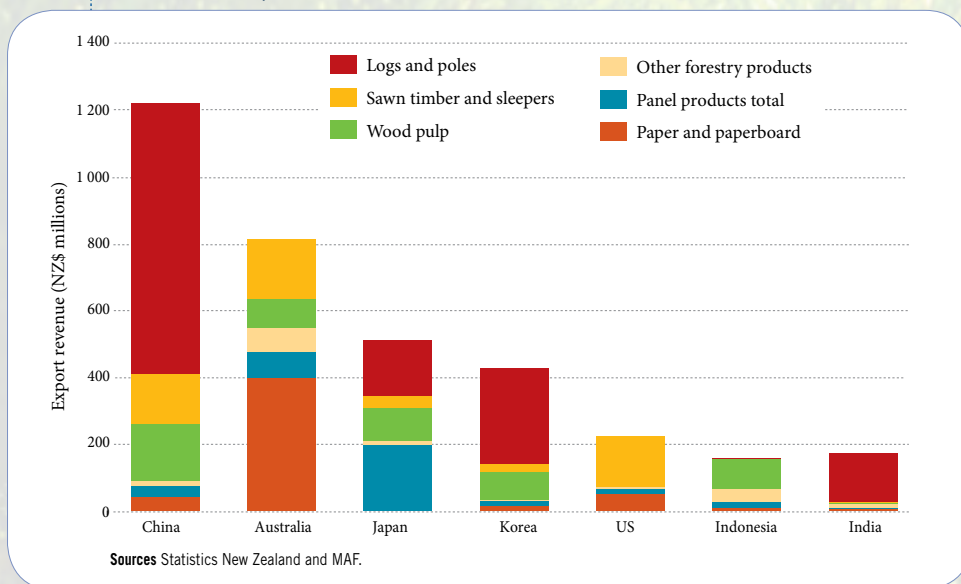
Total export earnings for the year to 30 June 2011 are projected at \$4.3 billion, with earnings for the June 2012 year forecast to rise to \$4.7 billion. The increase is mainly due to increasing volumes and unit prices for logs and timber.

Seven countries – Australia, China, Japan, the Republic of Korea, the US, Indonesia and India – account for more than 80 percent of the value of New Zealand's forestry exports. The mix of product consists of logs, sawn timber, panels, pulp and paper and other products.

LOGS

Log export volumes were 10.9 million cubic metres in the year ended 31 December 2010, with over half this volume destined for China. The rapid

FIGURE 10.1: EXPORT VALUES OF FORESTRY PRODUCTS OF THE MAIN EXPORT DESTINATIONS, YEAR ENDED 31 DECEMBER 2010



The growing importance of log exports, largely driven by Chinese demand, has been the major feature of the last 18 months.



build-up in the log export trade over the last 18 months is impacting on domestic ports, and log storage limitations are now common.

The total demand for log exports is expected to grow. Demand from China is expected to be maintained as 2011 progresses, owing mainly to strong economic growth, continued urbanization, and the effect of the Russian log export tax. The markets of India and Japan have the potential to grow because of strong economic growth in India and earthquake re-building in Japan.

Log prices in overseas markets are projected to increase slightly, with an improving domestic demand for sawlogs also serving to push up prices. Log export prices, in New Zealand dollar terms, are expected to rise in 2012. Shipping costs dropped sharply in the latter part of 2010 and appear to be settling at a level that is around 30 percent lower than the peak of May 2008.

Total production of roundwood in 2010 was 24.8 million cubic metres, which was above all scenarios in the New Zealand wood availability forecasts. The increase was due mainly to strong log demand and high international log prices. There is potential to increase total harvesting from the current level to around 26 million cubic metres after 2015.

SAWN TIMBER

The outlook for timber is improving, with both domestic and export demand rising under conditions of tight log supply. Log export demand is putting pressure on log supply for sawmilling, although timber production in the December 2010 quarter was 15 percent higher than for the previous year. As more timber will be used domestically, export volumes are expected to grow only slightly. Timber prices for 2011 are projected to be 10 percent higher than for 2010, in New Zealand dollar terms.

China has been the largest importer of New Zealand timber in volume terms since 2008. The volume of timber exports to China last year was 13 percent higher than in 2009. In value terms, however, China still lags behind the Australia and US.

New Zealand timber exports to Australia and the US fell by 11 and 15 percent respectively in 2009 in volume terms and then increased by 8.6 and 4.1 percent respectively in 2010. Housing construction in Australia and the US was still at low levels.

FORESTRY



Source AgriBase.

Beyond 2012, the demand for New Zealand timber is expected to increase as the result of strong demand from China, the recovery in Australia and the US, and increased demand from Japan for earthquake re-building.

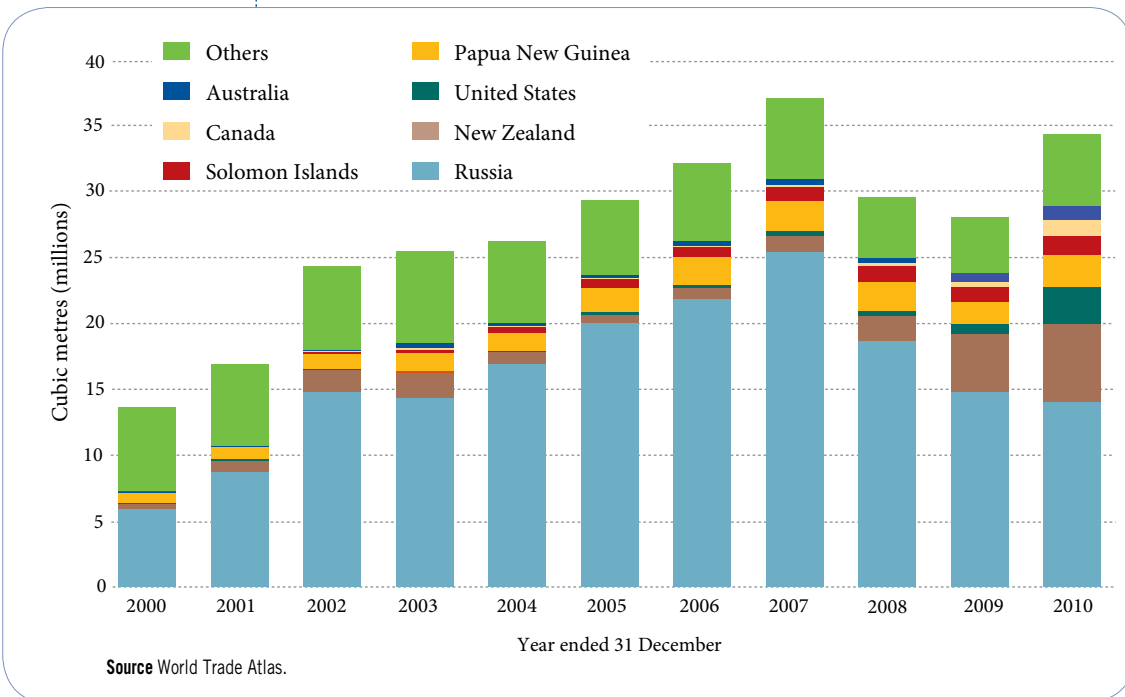
PANEL

Export volumes of veneer rose by 43 percent in 2010, while the price of veneer was 3.6 percent higher than in 2009. The increase was due mainly to the recovery of the Japanese and South Korean market and unexpected strong demand from Malaysia.

Particleboard export volumes in 2010 dropped by 22 percent. Japanese demand increased but Australian demand reduced significantly, mainly as a result of increased export prices.

Modest improvement to the volume of panel exports is forecast during 2011 as a result of recovery in the Australian housing market and re-building in Japan.

FIGURE 10.2: CHINESE LOG IMPORTS BY SOURCE, 2000–2010



PULP AND PAPER

Paper export volumes at the December quarter 2010 showed an increase of 10 percent on the previous year. The Australian market shows signs of recovery in terms of both volume and value. On the other hand, export volumes to the Chinese market decreased by 10 percent, while total pulp export volumes also declined. The strong New Zealand dollar is causing foreign buyers to seek alternative suppliers.

With limited scope to expand production within New Zealand, export volumes of pulp and paper are expected to be static, with gains in export revenue coming from improved prices in the international market.

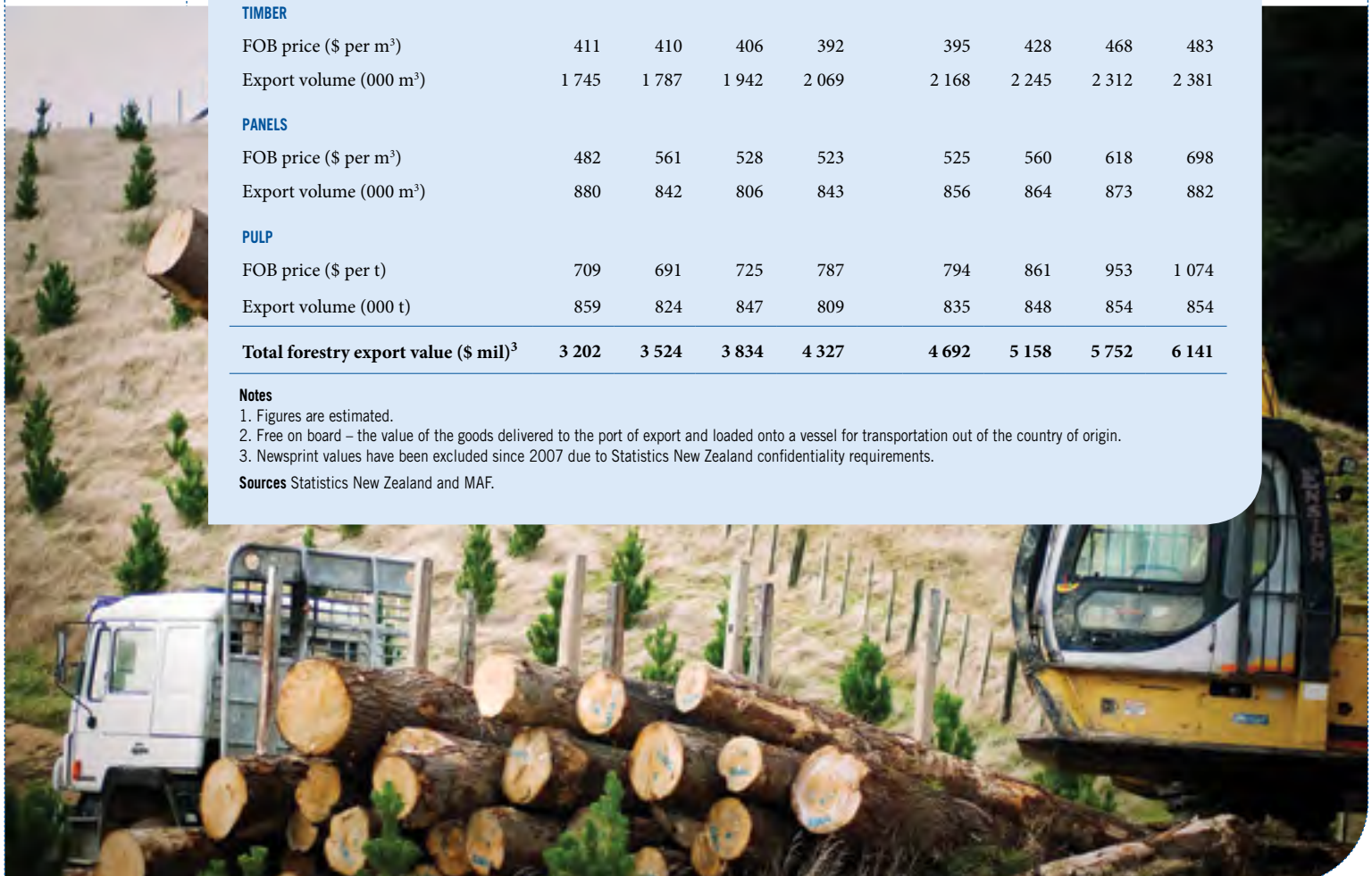
TABLE 10.1: FORESTRY EXPORT PRICES, VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|---------------------------------------------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|--------------|
| | 2008 | 2009 | 2010 | 2011 ¹ | 2012 | 2013 | 2014 | 2015 |
| LOG | | | | | | | | |
| FOB ² price (\$ per m ³) | 89 | 112 | 115 | 128 | 144 | 152 | 166 | 171 |
| Export volume (000 m ³) | 7 010 | 8 250 | 10 720 | 11 850 | 12 087 | 12 271 | 12 394 | 12 518 |
| TIMBER | | | | | | | | |
| FOB price (\$ per m ³) | 411 | 410 | 406 | 392 | 395 | 428 | 468 | 483 |
| Export volume (000 m ³) | 1 745 | 1 787 | 1 942 | 2 069 | 2 168 | 2 245 | 2 312 | 2 381 |
| PANELS | | | | | | | | |
| FOB price (\$ per m ³) | 482 | 561 | 528 | 523 | 525 | 560 | 618 | 698 |
| Export volume (000 m ³) | 880 | 842 | 806 | 843 | 856 | 864 | 873 | 882 |
| PULP | | | | | | | | |
| FOB price (\$ per t) | 709 | 691 | 725 | 787 | 794 | 861 | 953 | 1 074 |
| Export volume (000 t) | 859 | 824 | 847 | 809 | 835 | 848 | 854 | 854 |
| Total forestry export value (\$ mil)³ | 3 202 | 3 524 | 3 834 | 4 327 | 4 692 | 5 158 | 5 752 | 6 141 |

Notes

1. Figures are estimated.
2. Free on board – the value of the goods delivered to the port of export and loaded onto a vessel for transportation out of the country of origin.
3. Newsprint values have been excluded since 2007 due to Statistics New Zealand confidentiality requirements.

Sources Statistics New Zealand and MAF.



DEER

11

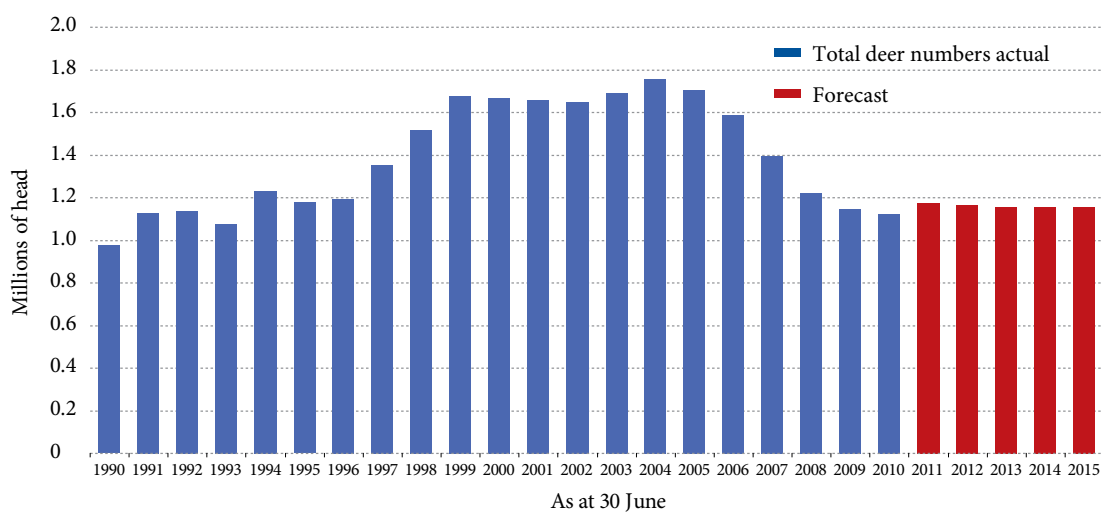
Venison is the main export earner for the deer industry, with the European Union accounting for 80 percent of venison export revenue.

The average stag schedule price for the year ending 30 June 2011 is estimated at \$7.25 per kilogram, down slightly on last year, reflecting the erosion of increases in international prices by an appreciated New Zealand dollar against the Euro. A projected increase in schedule prices from 2012 to 2015 is underpinned by growing overseas demand for venison, a modest outlook for New Zealand supply and an assumed depreciation of the New Zealand dollar.

PRODUCTION AND EXPORTS

Total deer numbers were 1.12 million at 30 June 2010, the lowest since 1993, as those farmers with mixed enterprise farms continue to drop their deer numbers. A slight rebuilding is expected as at 30 June 2011, although pressure of other land uses is projected to cause a slow decline in total deer numbers over the outlook period.

FIGURE 11.1 TOTAL DEER NUMBERS, 1990–2015



Sources Statistics New Zealand and MAF.

DEER



Source AgriBase.

Venison is the main export earner for the deer industry, with the European Union accounting for 80 percent of venison export revenue. Venison export revenue for the year ended 30 June 2011 is estimated at \$223 million, reflecting an 8.2 percent increase in volume on the previous year. By 2015, export revenue is projected at \$310 million, mainly reflecting increased international prices and a depreciated New Zealand dollar.

TABLE 11.1 VENISON PRICES, EXPORT VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|-------------------------------------------------------|--------|------|------|-------------------|----------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 ¹ | 2012 | 2013 | 2014 | 2015 |
| VENISON SCHEDULE PRICE – AP Stag (cents/kg) | 639 | 860 | 739 | 725 | 750 | 784 | 840 | 909 |
| VENISON EXPORT VOLUME (000 tonnes) | 21.8 | 16.9 | 15.0 | 16.2 | 16.7 | 17.3 | 17.6 | 17.8 |
| VENISON VALUE (\$ million) | 288 | 293 | 209 | 223 | 239 | 260 | 282 | 310 |

Note
1. Figures are estimated.

Sources Statistics New Zealand, NZX Agrifax and MAF.



LAMB

12

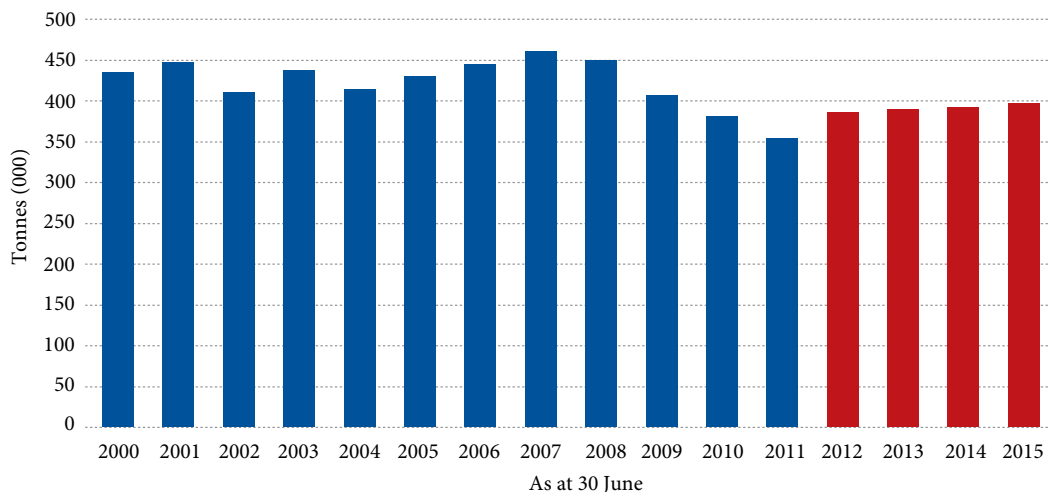
Export prices for lamb and lamb schedules are estimated to be at record highs for the year ending 30 June 2011.

International prices of lamb have been steadily rising since June 2009 but returns to farmers have been muted by an appreciating New Zealand dollar. Export prices for lamb and lamb schedules are estimated to be at record highs for the year ending 30 June 2011. Record prices reflect increasing demand with the recovery from the global financial crisis, declining domestic production in the European Union, and lower export availability of lamb products as a result of adverse climate in New Zealand and Australia.

A peak in international prices is expected in the June quarter of 2011, owing to new season domestic production increasing in the EU and New Zealand quarterly export volumes recovering to last year's level. Over the next two years, international prices are expected to fall as the sheep breeding flock increases in Australia, and lamb export availability improves in New Zealand – assuming average climate conditions.

Over the remainder of the outlook period to 2015, international lamb prices are expected to increase slowly as sheep numbers continue to decline in the EU, and rising numbers of people with moderate to high incomes create greater demand for lamb imports, particularly in the oil-exporting countries of the Middle East and in China. The demand for higher priced chilled lamb products is expected to increase at the expense of frozen products, particularly in developed countries.

FIGURE 12.1: NEW ZEALAND LAMB PRODUCTION, 2000–2015



Source MAF.

Lamb export revenue for the year ending 30 June 2011 is estimated at \$2.7 billion, up 9.7 percent on the previous year...

Schedule prices for lamb will benefit from both relatively high international lamb prices and an assumed depreciation of the New Zealand dollar against the United Kingdom pound and other currencies.

PRODUCTION

New Zealand lamb production in the year to 30 June 2011 is expected to be 6.9 percent below the previous year because of adverse climate conditions causing lamb births to fall by 10 percent in spring 2010 and a slight fall in the breeding flock.

Good pasture conditions at autumn mating and assumed average conditions at lambing should see a significant lift in lambs born in spring 2011.

Beyond 2011, lamb production is expected to increase slowly. Sheep breeding numbers will continue to decline as a result of competing land uses, but productivity in terms of lambs born per mated animal and average lamb carcass weights are both expected to increase.

EXPORTS

Lamb export revenue for the year ending 30 June 2011 is estimated at \$2.7 billion, up 9.7 percent on the previous year, as increased

TABLE 12.1: SHEEP BREEDING NUMBERS, LAMB PRICES AND EXPORT VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|--------------------------------------------------|--------|-------|-------|--------|----------|-------|-------|-------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Sheep breeding numbers ¹ (million) | 28.6 | 25.0 | 24.0 | 23.9 | 23.6 | 23.4 | 23.2 | 23.1 |
| Lamb schedule price (cents/kg) | 341 | 492 | 458 | 577* | 522 | 519 | 596 | 695 |
| Export volume (000 tonnes) | 329 | 317 | 308 | 278* | 302 | 305 | 307 | 311 |
| Export value (\$ million) | 2 172 | 2 630 | 2 454 | 2 693* | 2 727 | 2 735 | 3 168 | 3 734 |

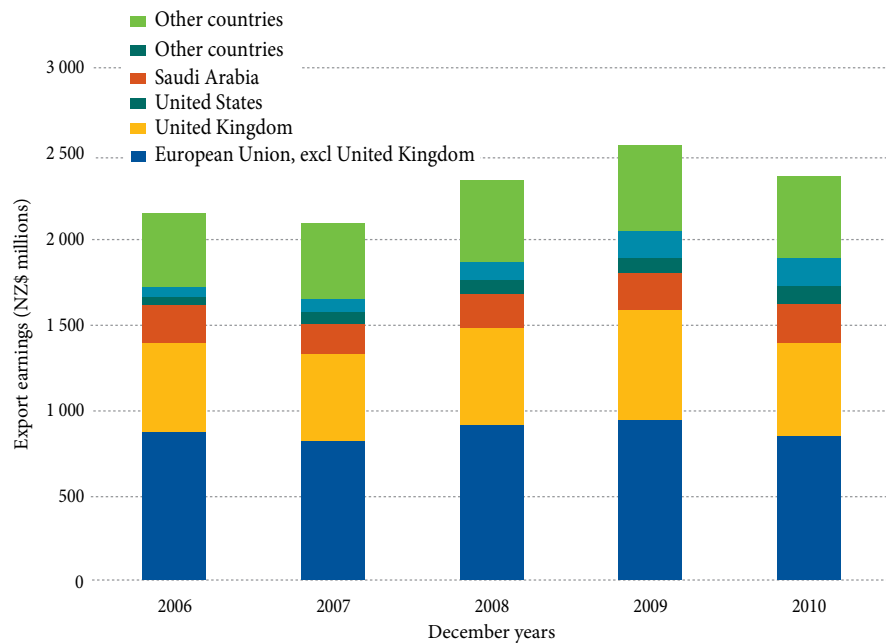
Note
1. Mated ewe and ewe hoggets as at 30 June of the preceding year.

Symbol
* Estimate

Sources Beef + Lamb New Zealand Limited Economic Service, Statistics New Zealand and MAF.

international prices overwhelm the effects of an appreciated New Zealand dollar and a 9.9 percent decrease in export volume. By 2015, export revenue is projected to increase to \$3.7 billion, reflecting rising productivity over the outlook period and exchange rate depreciation in later years.

FIGURE 12.2: LAMB EXPORT DESTINATIONS BY VALUE, 2006–2010



Sources Statistics New Zealand and MAF.

THE EU SHEEP AND GOAT MEAT QUOTA

As part of the World Trade Organisation (WTO) Agreements, New Zealand has the opportunity to export 228 254 tonnes annually of carcass weight equivalent (CWE) of sheep meat and goat meat to the EU at zero duty. The tariff rate quota is administered by the New Zealand Meat Board, which issues Certificates of Origin to New Zealand meat exporters.

The out-of-quota tariff is prohibitively high at 12.8 percent plus 90.2 to 311.8 Euros per 100 kilogram, depending on the product.

The New Zealand Meat Board's analysis of its Certificates of Origin shows a sheep and goat meat quota fill of 87 percent in 2010, the lowest on record. The average quota fill for the four years to 2009 was 99.8 percent. The only other significant under-fill was 95 percent in 2004. In both cases, the export availability of lamb and mutton was down.

WOOL

13

Wool export revenue for the year ending 30 June 2011 is estimated at \$728 million, up 33 percent on the previous year, reflecting higher export prices.

International prices in US dollars increased rapidly from August 2010, peaking in November 2010. This rapid rise was due to inventory rebuilding in the global supply chain, a lower volume of wool available for export in Australia, and China's ban on wool imports from South Africa in September 2010 because of an outbreak of Rift Valley Fever. Prices of competitive fibres such as cotton have also increased strongly.

Since peaking, international wool prices have declined, although the February 2011 price was still 60 percent higher than 12 months ago. Wool prices are likely to remain relatively high over the remainder of the year ending 30 June 2011, continuing into the following year. Constrained supply and rising incomes are expected to support slowly rising wool export prices over the outlook period, 2012 to 2015.

Average sale prices received by New Zealand producers are estimated to be up by 32 percent, to 503 cents per kilogram of clean wool for the year ending 30 June 2011, reflecting strong international prices moderated by an appreciation of the New Zealand dollar. Producer prices are projected to average 515 cents per kilogram over the outlook period, owing to international prices remaining relatively high and an assumed depreciation of the New Zealand dollar. This compares favourably with the five-year average to 2010 of 376 cents per kilogram.

TABLE 13.1: SHEEP NUMBERS, WOOL PRICES AND EXPORT VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|-----------------------------------------------|--------|------|------|------|----------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Total sheep numbers ¹ (million) | 38.5 | 34.1 | 32.4 | 32.6 | 32.0 | 31.7 | 31.4 | 31.3 |
| Average sale price (cents/kg) | 378 | 385 | 380 | 503* | 457 | 469 | 528 | 607 |
| Export volume (000 tonnes) | 146 | 126 | 133 | 133* | 128 | 126 | 126 | 125 |
| Export value (\$ million) | 610 | 567 | 547 | 728* | 631 | 644 | 722 | 827 |

Note

1. Opening numbers are as at 30 June of the preceding year.

Symbol

* Estimate

Sources Beef + Lamb New Zealand Limited Economic Service, Statistics New Zealand and MAF.

WOOL



Source AgriBase.

Wool prices are likely to remain relatively high over the remainder of the year ending 30 June 2011, continuing into the following year.

PRODUCTION AND EXPORTS

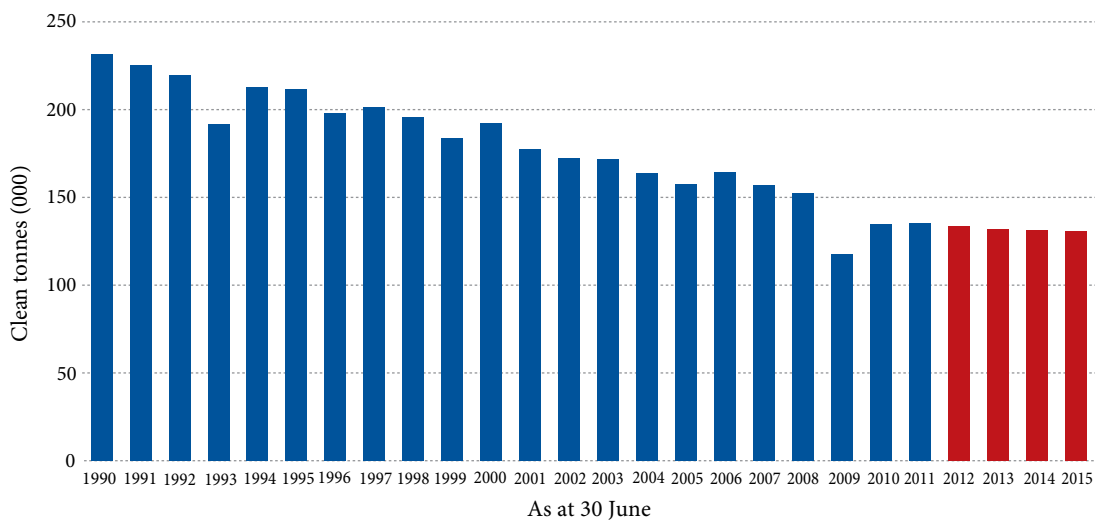
Total sheep numbers in New Zealand had increased slightly to 32.5 million at 30 June 2010. However, numbers are projected to fall slowly over the outlook period because of pressure from alternative land uses. The volume of wool sold in the year ending 30 June 2011 is estimated to rise slightly.

Since 1990, falling wool to lamb price ratios have seen the focus of New Zealand sheep farming progressively shift away from wool to meat. The exception is Merino sheep, a fine wool breed farmed in the high country areas of the South Island. Fine wool accounts for about 8 percent of the total wool volume sold in New Zealand. As both wool and lamb prices increase over the outlook period, the focus on meat production is unlikely to change.

In the year ended 31 December 2010, China took 44 percent of New Zealand's 134 000 tonne export volume. Increased Chinese wool imports from New Zealand largely offset the fall in volumes from Australia and South Africa. Overall, China's wool imports rose 3.1 percent, to 315 000 tonnes.

Wool export revenue for the year ending 30 June 2011 is estimated at \$728 million, up 33 percent on the previous year, reflecting higher export prices. By 2015, export revenue is projected at \$827 million, reflecting continued price increases.

FIGURE 13.1: WOOL SOLD, 1990–2015



Sources Beef + Lamb New Zealand Limited Economic Service and MAF.

BEEF

14

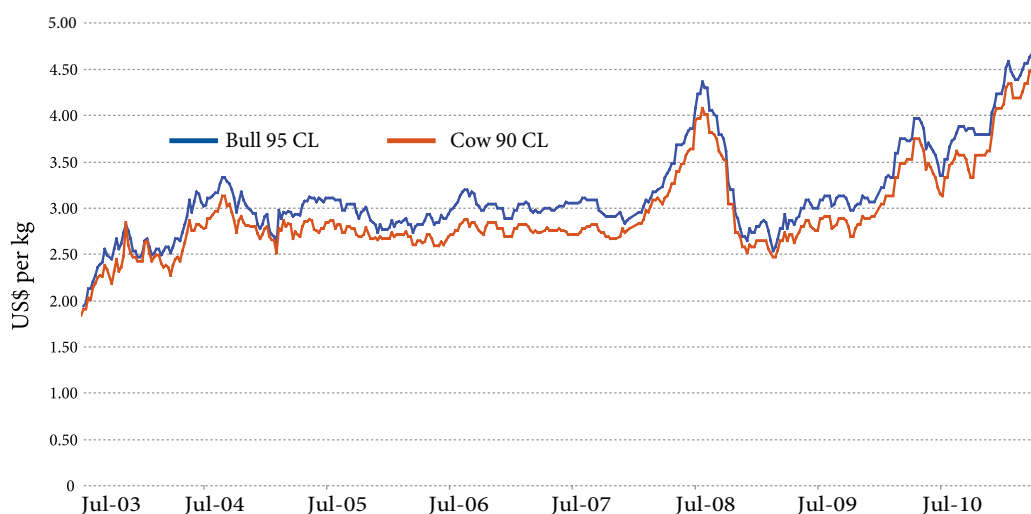
Prices for New Zealand's manufacturing beef in the US reached record highs in early April 2011. Increasing prices from late 2009 reflected the recovery from the global financial crisis, droughts in several beef-producing countries, and higher feed costs in the US.

US domestic beef prices have lifted as the country's beef production and imports have fallen and exports increased. Large-scale beef feedlot operations have had to reduce production and cattle numbers, which has effectively passed on the sharp rises in grain input prices. At 1 January 2011, US cattle inventory numbers had fallen 1.4 percent, to their lowest level since 1958.

Prices for New Zealand's manufacturing beef in the US – the predominant cut of beef in New Zealand's exports to the US – have risen relative to premium cuts of beef. This is due to price-conscious consumers trading down to ground beef and lower import volumes from Australia and New Zealand.

Supply constraints are likely to improve as herd rebuilding takes place in the US and Australia over the next few years, and beef production increases in developing countries, especially in South America. Consequently,

FIGURE 14.1: IN-MARKET PRICES OF MANUFACTURED NEW ZEALAND BEEF IN THE US



Sources Beef + Lamb New Zealand Limited Economic Service and MAF.

BEEF



Source AgriBase.

New Zealand beef export prices, in US dollars, are expected to fall slowly over the next two years. Further out, growing incomes and population in Asian and other developing countries, along with increasing production, mostly in developing countries, should result in rising prices as supply lags behind demand.

Beef schedules in New Zealand are expected to be at record levels for the year ending 30 June 2011, reflecting the impact of high international prices. The prime steer and heifer schedule over the 2012 to 2015 years is forecast to average over 400 cents per kilogram, up on the 340 cents per kilogram average for 2007 to 2010. The forecast is strongly influenced by an assumed depreciation of the New Zealand dollar from the 2012 September quarter.

PRODUCTION

Total beef production in the year ending 30 June 2011 is estimated to be down 9.0 percent because of lower total cattle numbers at 30 June 2010 and lower carcass weights resulting from adverse climate up to early January 2010. Over the outlook period, total production is projected to steadily increase thanks to a rising number of cull cows from a growing national dairy herd and a slow increase in average beef carcass weights.

TABLE 14.1: BEEF CATTLE NUMBERS, BEEF PRICES AND EXPORT VOLUMES AND VALUES, 2008–2015

| YEAR TO 30 JUNE | ACTUAL | | | | FORECAST | | | |
|---------------------------------------------|--------|-------|-------|--------|----------|-------|-------|-------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Total beef cattle ¹ (million) | 4.39 | 4.14 | 4.10 | 3.95 | 4.10 | 4.11 | 4.09 | 4.07 |
| Schedule prime beef price (cents/kg) | 333 | 370 | 335 | 385* | 373 | 364 | 410 | 471 |
| Export volume (000 tonnes) | 357 | 371 | 362 | 341* | 363 | 367 | 370 | 374 |
| Export value (\$ million) | 1 658 | 2 005 | 1 822 | 1 969* | 1 996 | 1 996 | 2 275 | 2 637 |

Note
1. Opening numbers are as at 30 June of the preceding year.

Symbol
* Estimate

Sources Beef + Lamb New Zealand Limited Economic Service, Statistics New Zealand and MAF.

Total beef export value for the year ending 30 June 2011 is estimated to be up 8.1 percent to \$2.0 billion, reflecting the net impact of a 15 percent increase in price and a 5.8 percent fall in volume.



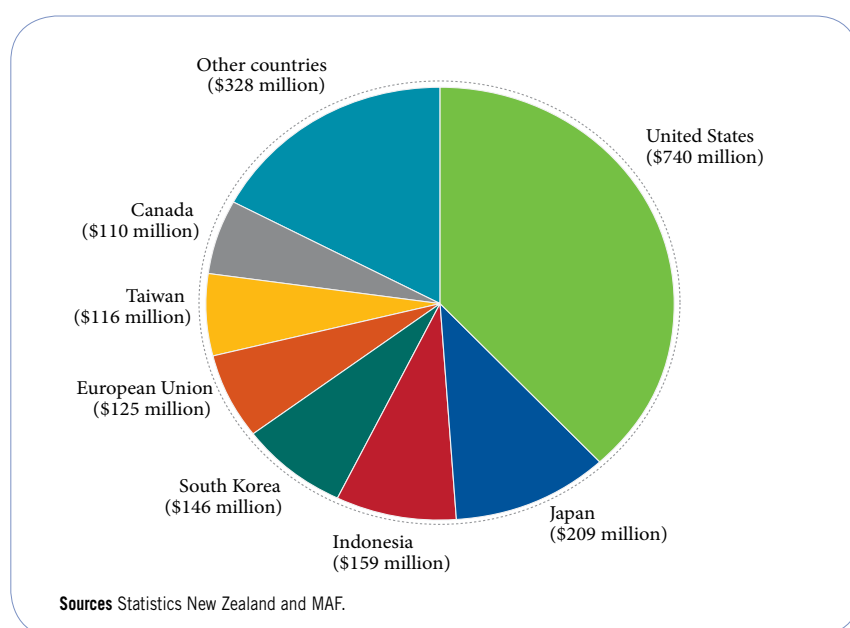
The Agricultural Production Statistics at 30 June 2010 showed total beef cattle numbers down 3.7 percent to 3.95 million, while the beef breeding herd was up 2.0 percent. A recovery in non-breeding beef numbers is expected over the next two years, while further out a slow decline is projected as dairy and dairy grazing activities continue to expand.

EXPORTS

Total beef export value for the year ending 30 June 2011 is estimated to be up 8.1 percent to \$2.0 billion, reflecting the net impact of a 15 percent increase in price and a 5.8 percent fall in volume. By 2015, beef export value is projected to increase to \$2.6 billion, reflecting increased production and an assumed exchange rate depreciation in later years.

The US is New Zealand's main beef market. For the year ended 31 December 2010, the US received 43 percent of total beef export volume and accounted for 38 percent of beef export value. New Zealand's beef market access in the US is subject to a tariff rate quota of 213 402 tonnes of product weight. For the year ended December 2010, New Zealand's quota fill was down to 69 percent, as higher volumes went to Indonesia, Japan, Philippines, South Korea, Saudi Arabia and Russia.

FIGURE 14.2: BEEF EXPORTING DESTINATIONS BY VALUE, YEAR ENDED 31 DECEMBER 2010



DAIRY

15

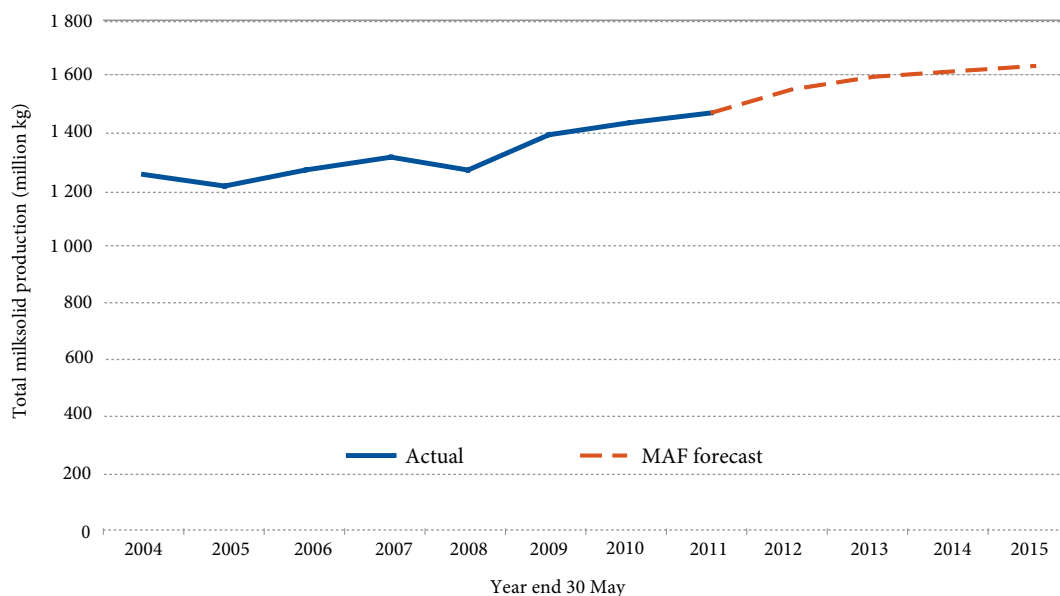
The outlook for New Zealand's dairy sector is positive, a prospect based on high international dairy prices driven by strong global demand, especially from developing countries.

The outlook for New Zealand's dairy sector is positive, a prospect based on high international dairy prices driven by strong global demand, especially from developing countries. Butter prices, in particular, have increased more rapidly than other dairy product prices. International dairy prices are expected to remain at a higher level through the outlook period.

MAF estimates that milk solid production will increase by 2.4 percent for the year ending 30 May 2011, 5.7 percent for the 2011/12 season and 2.9 and 1.2 percent for the following years.

Dairy export revenue for the year ending 30 June 2011 is estimated to be \$13.0 billion. Increased milk solid production, along with high dairy prices, is forecast to increase export revenue for the year ending 30 June 2012 to \$14.6 billion, or 12 percent. Further out, export revenue is forecast to increase by another 6.9 percent for the year ending 30 June 2013, with more gradual increases thereafter.

FIGURE 15.1: MAF FORECAST FOR TOTAL MILK SOLID PRODUCTION



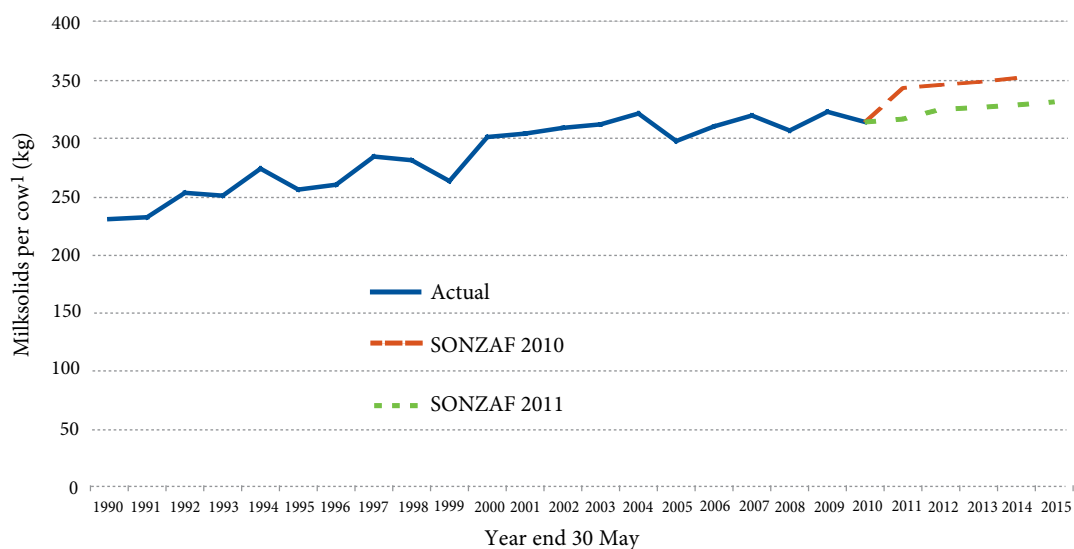
Sources MAF and DairyNZ.

SONZAF 2010 OUTLOOK UPDATED

In last year's report, MAF forecast milk production to increase by 14 percent for the 2010/11 season. Another 2.9 and 2.1 percent increase in milk production was forecast for the 2011/12 and 2012/13 seasons respectively. These forecasts were based on three key assumptions: the increase in the number of cows and heifers in milk; the increase in the milk solids per cow produced; and weather conditions to return to the 30-year average. As it turned out, however, actual cow numbers increased less than was expected and dry weather in spring and early summer meant there was little increase in milk solids per cow. Actual variability relative to the assumptions used in forecasting meant that the increase in milk solids production forecast was not realised.

MAF has improved the method used to estimate potential milk solids per cow since last year's report. This improvement resulted in a downward revision of estimated total milk solids forecast. The new method accounts for additional factors such as nitrogen application and stocking rates, causing the potential milk solids per cow to be lower in the absence of weather shocks. Figure 15.2 shows a comparison between previous projections of milk solids per cow and current projections.

FIGURE 15.2: MILK SOLIDS PER COW ASSUMPTIONS, ACTUAL AND FORECAST



Note

1 Actual milk solids per cow is calculated on the opening numbers of cows and heifers in milk based on the Agricultural Production Survey.

Sources DairyNZ, Statistics New Zealand and MAF.

WHY FORECASTS CAN VARY

Forecasting is always subject to variability. Three key components are primary contributors to the variability inherent in MAF's SONZAF forecasts.

METHOD

To forecast milk solid production MAF employs an econometric model using information such as dairy animal numbers from the Agricultural Production Survey, future farm gate milk prices derived from international dairy prices, and past weather patterns. The model compares the relative profitability of the dairy sector, sheep and beef sector and forestry. The relative profitability between these sectors then determines how land moves from less profitable sectors to more profitable sectors. The projections are then used to forecast total milk solids produced.

PRICE

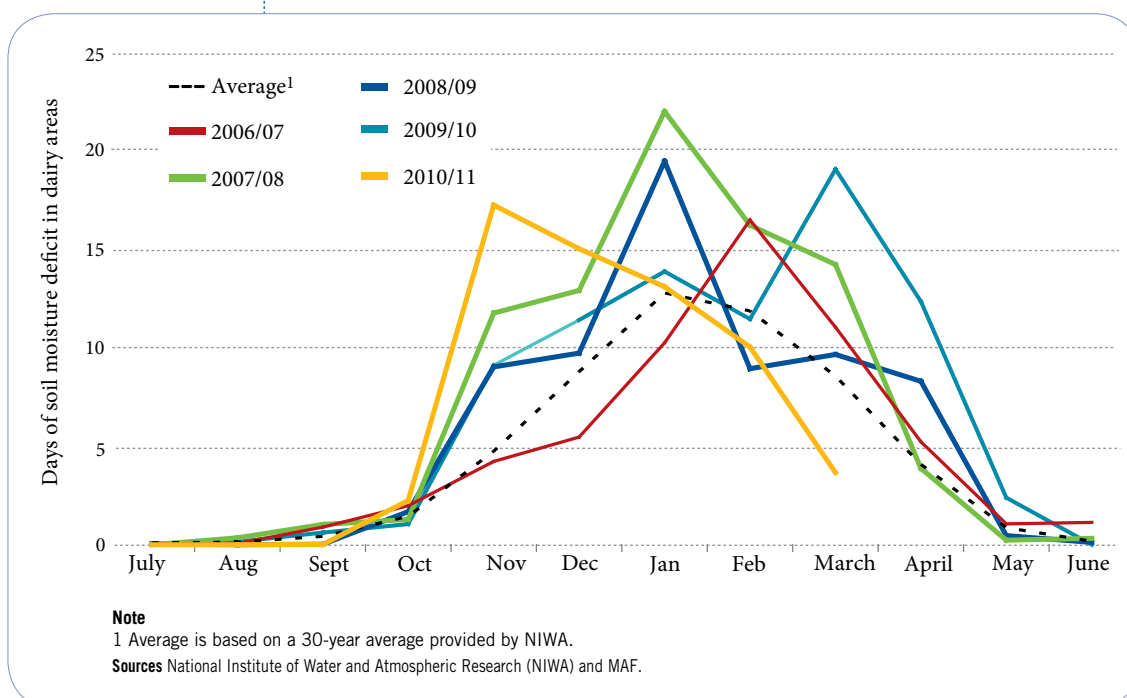
The New Zealand farm gate milk price is interlinked with international dairy prices. Any variation to the exchange rate assumptions add to the variability of the forecasts.

WEATHER

Weather plays another critical part in the forecasts. Total milk solids produced in a season are very sensitive to weather changes since the New Zealand dairy system relies on pasture grown throughout the production season, unlike the US and the EU, which mostly use grain-fed systems. Over the last few dairy seasons, the weather in New Zealand has deviated substantially from the 30-year average, thereby increasing the variability between forecast and actual production. Figure 15.3 shows the number of days of soil moisture deficit in dairy producing regions for the last five dairy seasons compared with the 30-year average.

In the absence of information on future weather or any other weather shocks, MAF assumes weather patterns to return to the 30-year average over the outlook period. This is referred to as an average weather season.

FIGURE 15.3: DAYS OF SOIL MOISTURE DEFICIT IN DAIRY AREAS



New Zealand is the world's largest exporter of whole milk powder, and in 2010 China overtook Algeria and Venezuela as the largest importer.

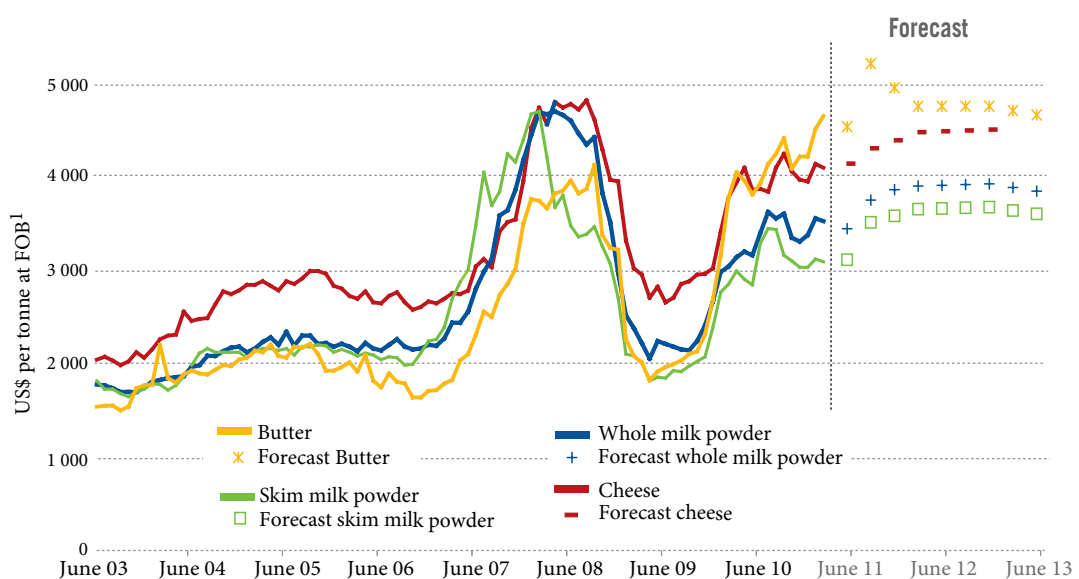
PRICES

International dairy prices have been increasing since the middle of 2009 but have not yet reached the highs of 2008, with butter being the exception. Since mid-2010, butter prices have increased faster than all other dairy product prices (see figure 15.4). Most other commodity prices have also increased rapidly in recent months, fuelled by strong demand.

The outlook for dairy demand in 2011 is robust, based on both rising incomes and population growth in developing countries. Dairy products, especially milk powders, are in strong demand in developing countries like China, underpinning high international dairy prices. Increasing world oil prices should also support strong demand, and thus high international prices, for dairy products from oil-exporting countries, like Venezuela, United Arab Emirates and Saudi Arabia. These countries are already important dairy export markets for New Zealand.

An assumed return to average weather and high international prices is expected to encourage higher milk production in the major producing and

FIGURE 15.4: DAIRY EXPORT PRICES AND MAF PRICE FORECAST IN US DOLLAR TERMS



Note

¹ Free on board - the value of the goods at the port of export and loaded on to a vessel for transportation out of the country of origin.

Sources Statistics New Zealand and MAF.

Export revenue earned from dairy products is expected to reach a new high of \$13 billion for the year ending 30 June 2011.

exporting economies, such as the EU, US and Australia, lifting world dairy production beyond 2011. Producers in the US are already responding to high dairy prices by increasing exports and production, despite high corn prices. High corn prices are expected to moderate production growth in countries that mainly use feed-based systems but the additional product available should ease some of the pressure on international prices over the medium term.

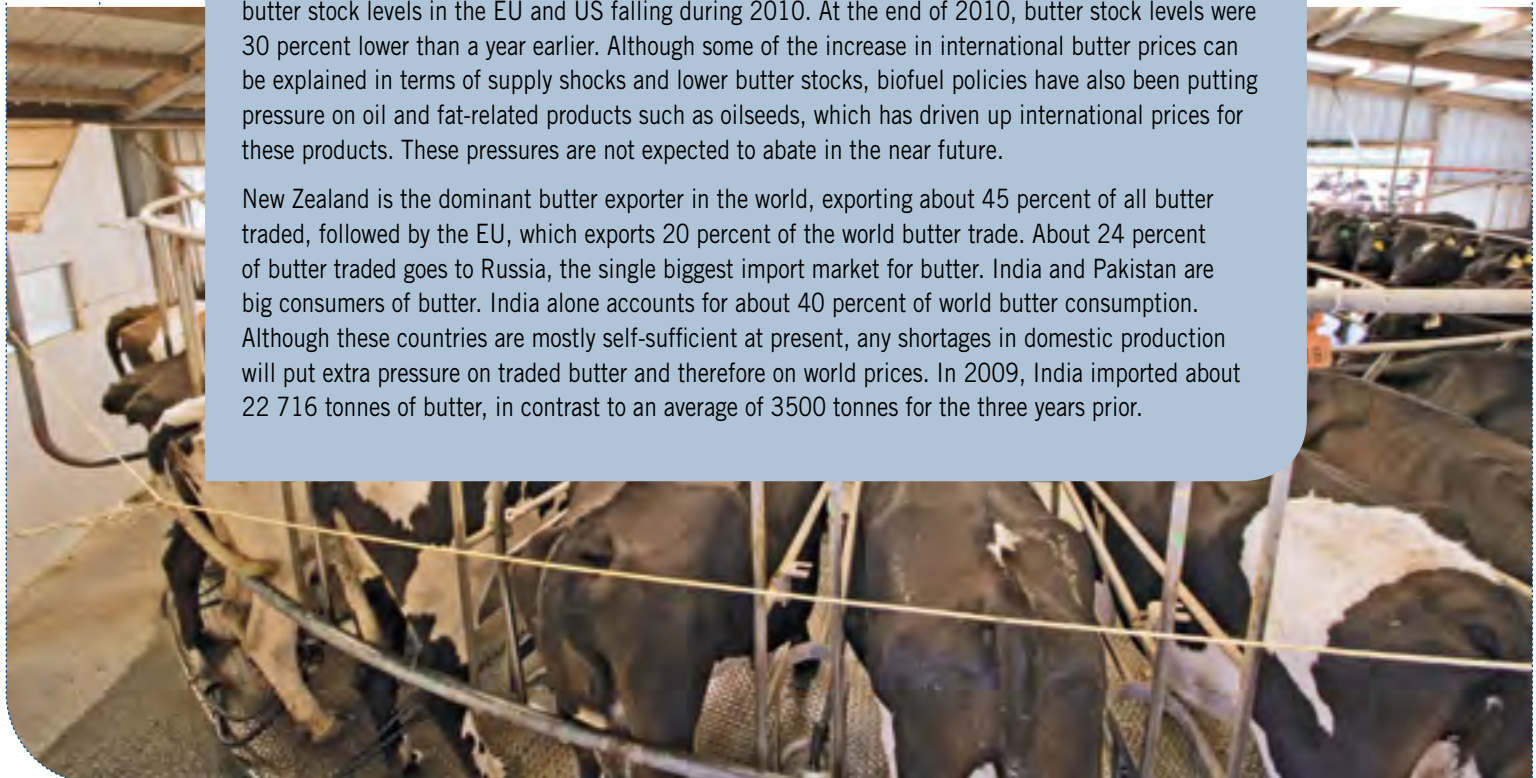
The milk price for the 2010/11 season is estimated at \$7.50 per kilogram of milk solids, 9 cents short of the historic high of three seasons ago. International dairy prices improved as the season progressed, lifting the milk solid price. MAF forecasts the milk price for the year ending 31 May 2012 at \$6.87 per kilogram of milk solids. This price reflects the assumption of softening international dairy prices as world supply starts to respond to increasing world demand. Beyond 2012, the assumption of a depreciating New Zealand dollar drives most of the lift in the milk price, which is projected to be \$8.64 per kilogram of milk solids by the year ending 31 May 2015.

BUTTER

International butter prices in 2010, in US dollar terms, were almost double those of 2009. A combination of factors contributed to the significant increase in butter prices. Indian and Russian demand for butter imports increased as a result of disruptions to local supply.

Another factor pushing up butter prices is that less butter was available for international trade, with butter stock levels in the EU and US falling during 2010. At the end of 2010, butter stock levels were 30 percent lower than a year earlier. Although some of the increase in international butter prices can be explained in terms of supply shocks and lower butter stocks, biofuel policies have also been putting pressure on oil and fat-related products such as oilseeds, which has driven up international prices for these products. These pressures are not expected to abate in the near future.

New Zealand is the dominant butter exporter in the world, exporting about 45 percent of all butter traded, followed by the EU, which exports 20 percent of the world butter trade. About 24 percent of butter traded goes to Russia, the single biggest import market for butter. India and Pakistan are big consumers of butter. India alone accounts for about 40 percent of world butter consumption. Although these countries are mostly self-sufficient at present, any shortages in domestic production will put extra pressure on traded butter and therefore on world prices. In 2009, India imported about 22 716 tonnes of butter, in contrast to an average of 3500 tonnes for the three years prior.



DAIRY



Source AgriBase.



EXPORTS

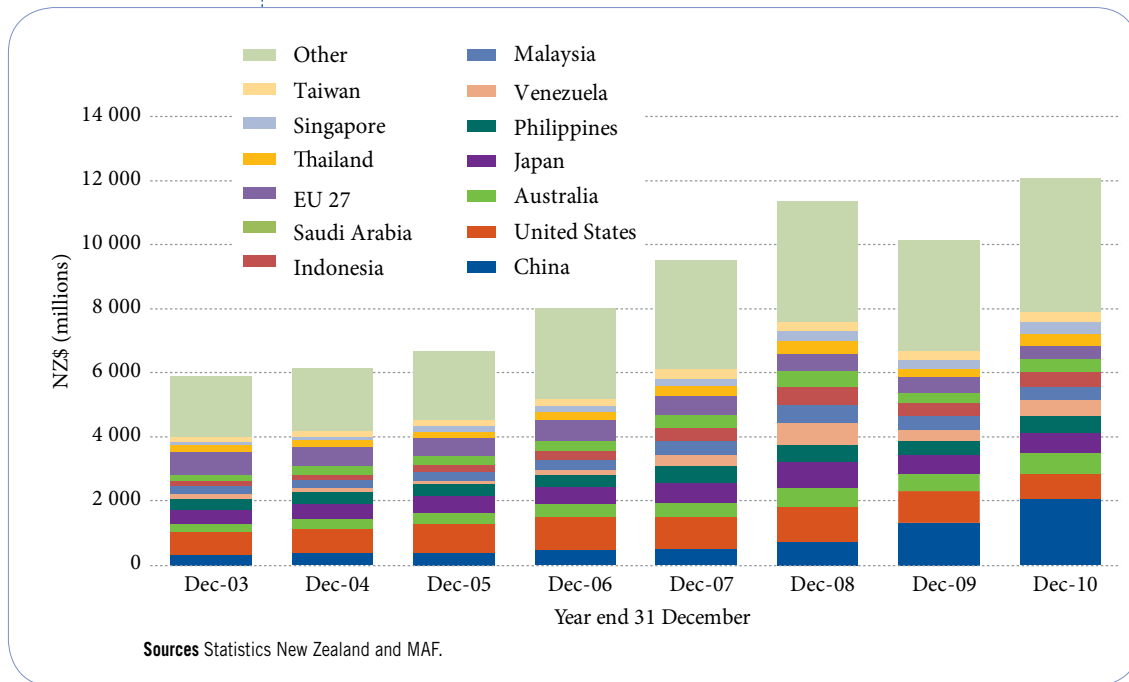
Export revenue earned from dairy products is expected to reach a new high of \$13 billion for the year ending 30 June 2011. Over the outlook period, export revenue is projected to increase, mostly owing to the assumption of a much weaker New Zealand dollar but also to growth in domestic milk production.

The focus of New Zealand's dairy exports shifted in 2010. The volume of whole milk powder exported increased by 16 percent, while cheese, butter and skim milk powder export volumes fell between 9 and 17 percent. Whole milk powder exports made up 37 percent of New Zealand's dairy export earnings in 2010.

There have been considerable changes in the last few years to the profile of New Zealand's dairy export markets. In 2008, China became the third biggest export earner for New Zealand dairy products, making up about 6 percent of total dairy export earnings. The Chinese market has maintained a pattern of steady growth to become the top export earning market in 2010, worth \$2.1 billion, or 17 percent of total dairy export earnings. China is now New Zealand's single biggest dairy export market. New Zealand exports a variety of dairy products to China such as whole and skim milk powder and anhydrous milk fat.

New Zealand is the world's largest exporter of whole milk powder, and in 2010 China overtook Algeria and Venezuela as the largest importer. While there has been increased demand for dairy products in China from all sources, including domestically produced products, most of China's whole milk powder imports came from New Zealand, and 31 percent of New Zealand's whole milk powder exports go to China. There are many factors driving the increase in dairy exports to China, including, for example, China's impressive economic growth, the sheer size of China's dairy market and its rapid growth, effects of the melamine crisis in 2008 on consumer confidence in domestically produced dairy products, and the China-New Zealand Free Trade Agreement, which came into effect in October 2008. This trend in growing dairy imports into China is expected to continue in the future as domestic demand continues to expand.

FIGURE 15.5: TOTAL DAIRY EXPORT REVENUE BY COUNTRY IN NZ DOLLARS



PRODUCTION

Over the last decade, dairy cow and heifer numbers have been growing steadily. As at 30 June 2010, there were 4.68 million dairy cows and heifers in New Zealand, a 1.6 percent increase on 2009 numbers.

Adverse weather in spring and an exceptionally dry November during the peak of the 2010/11 season depressed milk solids collected, in spite of these recent increases in dairy cow and heifer numbers. Favourable weather in autumn should ensure good pasture growth for the remainder of the season, getting cows in good condition for the next season.

MAF estimates that milk solids collected for the current season to be 2.4 percent above the previous season. According to the Agricultural Production Survey data, however, there are 7.6 percent more dairy cows and heifers in milk than in the 2008/09 season, but total milk solids collected have increased by only 5.6 percent over this two-year period. Adverse weather has played a significant role by depressing milk solids per cow, which are 2 percent lower than two seasons ago.

Dairy cow and heifer opening numbers for the 2011/12 season are forecast to increase by 2.9 percent. Milk solids per cow are expected to improve by 2.7 percent on last season, and returning to the trend of increasing milk solids per cow over time. Given the assumptions of increasing milk solids per cow and increasing cow numbers, MAF forecasts milk solids production for the 2011/12 season to increase by 5.7 percent, with 2.9 and 1.2 percent increases in the following years. This forecast relies on an average weather season throughout the 2011/12 season, and any unexpected dry periods throughout the season would create a downside risk to the milk production forecast. More gradual increases in milk production and dairy cow and heifer numbers are expected in later years.

TABLE 15.1: DAIRY FARM PRODUCTION, PAYOUT AND EXPORT VALUES, 2008–2015

| | ACTUAL | | | | FORECAST | | | |
|------------------------------------------------------------|--------|--------|--------|--------|----------|--------|--------|--------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Cows and heifers in calf or in milk ¹ (million) | 4.17 | 4.35 | 4.61 | 4.68 | 4.82 | 4.93 | 4.96 | 4.98 |
| Milk solids produced ² (million kg) | 1 270 | 1 394 | 1 437 | 1 472 | 1 555 | 1 600 | 1 619 | 1 638 |
| Milk price ² (cents per kg milk solids) | 759 | 472 | 610 | 750 | 687 | 727 | 785 | 864 |
| Total export value (\$ million) ³ | 10 787 | 11 429 | 10 562 | 13 042 | 14 576 | 15 575 | 16 742 | 18 287 |

Notes
1. Opening numbers are as at 30 June of the preceding year.
2. Year to 31 May. The milk price excludes distributable profit.
3. Year to 30 June.

Sources Statistics New Zealand, DairyNZ, Fonterra Co-operative Group, and MAF.

