

New Zealand's Agricultural Reforms and their International Implications

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1. Introduction

NEW ZEALAND IS ONE OF THE FEW COUNTRIES IN THE OECD and elsewhere to abandon price support systems for its agricultural sector and to embark on a free trade policy for agriculture. Starting in 1984, subsidy programmes for agricultural products were discontinued or phased out as part of a general reform programme for the economy. The effects of the programme have been to improve productivity in the agricultural sector particularly and to encourage growth in the rest of the economy.

New Zealand was a founding member of the Cairns Group in the Uruguay Round and was particularly disappointed at the implications of the Blair House agreement for the future of agricultural subsidy policies in Europe. The World Trade Organisation (WTO) Agreement on Agriculture made significant progress but did not reach the high goals that New Zealand had set itself and expected of others.

This paper asks whether there is an alternative to the continuation of subsidies for agriculture in developed countries and, if there is, how it might be achieved? New Zealand has set an example which others could follow by deregulating the agricultural sector in a general framework of economic reform. Although there were problems of short term adjustment to the new regime, the New Zealand experience shows that agricultural producers can adjust to changing market conditions and lower subsidies and yet maintain incomes at reasonable levels.

This paper therefore sets out the reasons for the success of the New Zealand experiment and the problems it was designed to overcome. Lessons are drawn on the role of social safety net measures in the context of the WTO Agreement on Agriculture, on the multi-lateral growth of subsidies, on the benefits of internal adjustment

of factor and product markets which follow deregulation, and on the possible encroachment of environmental measures on agricultural policy programmes in other trading countries.

The paper is organised in four parts:

- in Chapter 2, the New Zealand agricultural economy is briefly described
- in Chapter 3, agricultural policies prior to the reforms are enumerated
- in Chapter 4, the reforms of the period 1984–97 are set out and assessed
- in Chapter 5, the paper concludes with a discussion of the wider implications of the New Zealand agricultural policy reforms for other countries with particular regard to the liberalisation of international trade and support policies for the agricultural sector.

2. New Zealand's Agricultural Economy

New Zealand was formally annexed by the British Crown in 1840; before this it had been the haven of US whalers, adventurers and missionaries. The British representatives in New South Wales were instructed from London to seek peace with the indigenous inhabitants (the Maoris – Polynesians of Pacific origin) who were coming into increasing conflict with the intruders. At the same time, British entrepreneurs, charitable societies and individuals like Edward Gibbon Wakefield were establishing settlement schemes for the far-flung colony, notably at Dunedin, Christchurch, Nelson and Wellington.

Compared with Australia, the new destination was not very large – about the size of the British Isles – but was endowed with verdant greenery, virgin forests and plentiful sea resources. It represented the last link in the opening of the New World to European influence and expansion. It was also the furthest away from the centre of European culture, an important consideration in the days of sailing ships.

The growth of the new colony was most uncertain until the introduction of refrigerated ships in the early 1880s. Industry

depended on timber sales to passing ships, ship provisioning and the wool industry which was introduced from New South Wales. The development of the colony was dependent on loans from Britain and private investment resources from a small stream of immigrants. The local economy was transformed over a period of years by the advent of refrigeration. An export economy could be developed on a sustainable basis by the development of livestock farming on all available lowland areas. Immigration was increased, new land settlement schemes were established for smallholders and much of the forested area was converted to pastoral land use. Britain was the major market for increasing supplies of lamb, butter, cheese and beef.

Between the turn of the century and the end of the Second World War, trade with Britain increased steadily though with severe setbacks immediately after the First World War because of oversupply in the British market, and then in 1929–30 because of the world depression and its consequent effects on commodity markets. Policy stances taken in this period included maintaining the market relationship with Britain through the Ottawa Agreement in 1931 and accepting world prices and markets as arbiters of wealth generation. Nevertheless a protectionist attitude to marketing organisation prevailed from the 1920s with the establishment of New Zealand-based producer-controlled sole selling agencies aptly named ‘Producer Marketing Boards’. The New Zealand Dairy Board was established (under another name) in 1922 and other boards were introduced later for meat, wool, apples and kiwifruit. Toward the end of the 1930s the view of world markets changed considerably under the impact of the 1930s depression, and the Labour government of the time introduced a system of industrial protection in the form of increased tariffs and import rationing. This change of emphasis from free trade to trying to create employment and growth by national policies of industrial protection produced the economic regulatory framework which had to be dismantled in the reforms of the 1980s.

New Zealand emerged from the Second World War with a highly regulated economy as a result of wartime restrictions and the foundations laid down earlier. Wealth had expanded owing to the maintenance of trade throughout the war and income surpluses accumulated on commodity trading with Britain under wartime

conditions. Colin Clark has established that income per head in New Zealand was one of the highest in the world by 1945 (Clark 1951). The agricultural sector dominated trade but the industrial sector continued to work toward self-sufficiency in import requirements as far as possible. In the immediate post-war years, expansion was rapid, but in time it was restricted by the narrowness of the export base, fluctuations in commodity income and ever-increasing demand for imports. Internal expansion drew to a halt through balance of payments shortfalls and the cost of excessive capital borrowing (World Bank 1968).

In 1971, the sterling standard for exchange rates was abandoned and New Zealand moved on to a self-managed parity system with the US\$, including for a period pegging the exchange rate to price differences between New Zealand and its major trading partners (1976–82). In 1972, the United Kingdom joined the European Community (EC) and access for most New Zealand commodities had to be negotiated on a commodity by commodity basis or pay the common external tariff: only New Zealand butter and lamb were exempted. In both 1974 and 1979, oil prices caused a deterioration in New Zealand's terms of trade and competitive advantage was lost as internal prices inflated. As a result, in 1981–84 the government experimented with exchange rate and interest rate controls to control inflation and speculation.

The 1984 election heralded major changes in economic policy as a Labour administration took over the Treasury benches. This government introduced a wide programme of reform of all the major economic institutions including *inter alia* a reduction in tariffs and import protection, a freeing of interest rate and exchange rate controls, and a major reform of government ownership of utilities and services. Suddenly 'Fortress New Zealand' no longer existed; structural impediments to growth and enterprise were removed. In the process, support measures for the agricultural sector were phased out or removed, including subsidised rural credit, tax concessions, subsidised credit for the marketing boards and input subsidies.

3. Agriculture in the New Zealand Economy Before the Reforms of the 1980s

Overview

New Zealand society is highly urbanised and farming has become a specialist sector concentrating on export production. Over the years since the Second World War, the economy has expanded and diversified with increasing emphasis on forestry, fishing and light manufacturing; farming sector value added has continued to grow but it has been outpaced by the growth in other sectors. As a result, the proportion of exports derived from farming has declined from around 90% to the present level of 55%, although this level is still high compared with that in most OECD countries.

There are some 50,000–60,000 commercial farms in New Zealand, predominately specialising in livestock production and well established in terms of size and capital investment. The rate of productivity growth (total factor productivity or TFP) in the farm sector since 1970 has been one of the highest in the OECD (Johnson 1996). It is higher in the farm sector than in the business sector. Traditionally, the sector was well represented in political terms through large country constituencies and its dominance of the export market. This influence has declined markedly since the initiation of reforms in 1984 and especially since the introduction of proportional representation in 1996. Proportional representation on the German model has reduced the number of constituencies by 50% and thus diluted the rural vote, and list MPs have not represented to the same degree the dominant economic interests of the voters in those rural constituencies.¹

As other sectors have expanded, national income derived from agricultural production has declined as a percentage of GDP from 14.6% in 1960 to 5.2% in 1999 (Table 1). Although the real level of output has been maintained, less input resources are employed in farming because of efficiency gains including economies in the use of labour.

¹ The decision to change to proportional representation through a national referendum is believed, by some commentators, to be a voter response to the perceived haste of economic reforms in the 1980s. There is disagreement at present about the efficacy of coalition government brought about by proportional representation.

Table 1: New Zealand: farming's share of gross domestic product

<i>March years</i>	<i>Farming (NZ\$ million)</i>	<i>Total economy (NZ\$ million)</i>	<i>Share (%)</i>
1960–61	410	2,813	14.6
1965–66	560	4,012	13.9
1970–71	590	5,832	10.1
1975–76	1,071	11,668	9.2
1980–81	2,161	23,002	9.4
1985–86	2,891	44,719	6.5
1990–91	3,912	73,126	5.4
1995–96	5,009	91,461	5.5
1996–97	4,992	95,206	5.2
1997–98	5,154	98,247	5.2
1998–99	5,188	98,960E	5.2

E = Estimate.

Source: Statistics New Zealand, Ministry of Agriculture.

Over the same period, agricultural exports have declined from 92.5% of total merchandise exports to 50.9% (Table 2) because of the expansion of forest products (10.7% in 1998–99), fishing (5.7%), and manufacturing exports (30.7%) (Table 3). Among livestock products, there has been a marked expansion in dairy products in recent years but almost static supply responses from the wool and meat industries. Some horticultural products, such as apples and other fruit and vegetables, have been expanding.

The most significant change between 1960 and 1998 has been the complete re-alignment of market destinations. When Commonwealth Preference was abolished and the UK entered the (then) EC, a major restructuring of the export sector took place and new markets and new products had to be developed (Table 4). As recently as 1959–60, the United Kingdom was buying 53% of all merchandise exports from New Zealand. Combined with the rest of Europe, this total market was absorbing 70% of all New Zealand exports in that year. The economic historian J.B. Condliffe has referred to New Zealand as 'Britain's distant farm' in this context. However, by 1998–99, the UK was only taking 6.2% of total

Table 2: New Zealand: farming's share of total merchandise exports

<i>June years</i>	<i>Farming (NZ\$ million)</i>	<i>Total exports (NZ\$ million)</i>	<i>Share (%)</i>
1960–61	519	561	92.5
1970–71	904	1,132	79.9
1980–81	3,787	6,065	62.4
1990–91	8,751	15,065	58.1
1995–96	10,924	20,546	53.2
1996–97	10,905	21,033	51.8
1997–98	11,363	21,990	51.6
1998–99	11,516	22,623	50.9

Source: Statistics New Zealand, Ministry of Agriculture.

Table 3: New Zealand: composition of main exports 1998–99

	<i>Value (NZ\$ million)</i>	<i>Share of total (%)</i>
Farming		
<i>Pastoral products</i>		
Wool	735	3.4
Meat	2,873	13.2
Dairy	4,620	21.2
Other	878	4.0
Live stock	143	0.7
Total Pastoral	9,249	42.4
<i>Fruit and cereals</i>		
Kiwifruit	473	2.2
Apples	484	2.2
Other horticultural	488	2.2
<i>Other products</i>	822	3.8
Total farming	11,516	52.8
Other		
<i>Fish</i>	1,248	5.7
<i>Forestry</i>	2,337	10.7
<i>Manufactures</i>	6,699	30.7
Total NZ produce	21,802	100.0

Source: Ministry of Agriculture, Wellington.

Table 4: New Zealand: destination of total merchandise exports (%)

<i>June years</i>	<i>1959–60</i>	<i>1998–99</i>
<i>Europe</i>		
UK	53.0	6.2
France	6.7	1.0
Germany	3.5	2.8
Italy	2.5	1.8
Belgium	2.5	2.1
Netherlands	1.4	0.7
Other EU	–	3.3
Total Europe	69.6	17.8
<i>Rest of the world</i>		
Australia	4.4	21.4
Japan	2.9	12.7
Korea	–	3.9
China/Taiwan	0.8	7.4
SE Asia	0.8	8.9
USA	11.9	13.3
Canada	1.2	1.3
S America	–	3.8
Other	8.4	9.5
Total rest of the world	30.4	82.2
Grand total	100.0	100.0

Source: Statistics New Zealand.

merchandise exports and Europe as a whole only 17.8%. The most significant new destinations are Australia, Japan, Korea, China and SE Asia; the share going to the USA has increased slightly. ‘Regionalism’ has become important for Australia and New Zealand: increased trade shares between the two countries reflect the Closer Economic Relations (CER) agreement signed in 1980.

The removal of British market preferences has therefore been the most significant factor affecting New Zealand trade in the post-war period. From Britain’s point of view, Edward Heath wanted the advantages of a greater market near at hand and he was prepared

to go in that direction at the expense of the old Commonwealth. For countries like New Zealand, the adjustment was harsh and complicated. However, new markets were developed, new products were found and New Zealanders were encouraged to stand on their own feet and face the world. This made New Zealand more competitive in trade relationships with other countries and also encouraged, in the end, a set of economic reforms which built on this independence and were compatible with a more market approach to the economy and to trade.

1963 Conference on Livestock Production

As a response to balance of payments problems in the 1950s, the Institute of Agricultural Science produced a paper in 1962 on livestock production that showed there was unutilised potential that could contribute to a major expansion of the industry and hence export earnings. The government decided to base its export strategy on the report's recommendations and chose to secure the commitment of the community to the initiative by calling a public conference in 1963 including all interested parties (APC 1966). The conference agreed that a livestock expansion was possible over a 10-year period and that extra resources should be made available by the government.

After 30 years of industrial protectionism the government thus turned to export-led growth as a solution to the recurrent balance of payments problems. The Treasury was in favour of as little direct intervention as possible, though most of the other official bodies were more pragmatic in their approach. Other influences on changing government policy included favourable attitudes to indicative planning on the French model which were being widely discussed at the time (J. Pryde 1998).

The 1963 conference drew up and endorsed a programme of assistance for the agricultural sector to promote the expansion of livestock production. Targets were established for the following 10 years and suitable assistance measures were identified based on known impediments to capital investment by individual farmers (such as borrowing limits from the banks, the cost of certain essential inputs like fertiliser, and the disincentive effects of the individual income tax regime). The Treasury saw these measures as altering the incentive structure at the margin but not creating a

major change in its non-interventionist stance. Indeed, the measures were largely invisible to the public eye although they were significant to individual investors as subsequent events proved.

New Measures in the 1970s

In the mid 1970s, it was decided to upgrade the stabilisation measures administered by the Marketing Boards, enhance farm lending programmes, and to provide a floor price scheme for all major commodities. These measures were highly visible and largely opposed by Treasury economists, but had considerable political impetus and support from the conservative National Party which had a strong farm electoral base.

The 1978 price support scheme involved additional supplementation of the Producer Board minimum price schemes.² The aim of the scheme was temporarily to lower still further the price risk to farmers associated with the determination of product prices during the commodity cycle. It operated by supplementing low prices but leaving in place the Board arrangements to levy surpluses when commodity prices were high. In effect, the risks of the stabilisation operation were transferred to the Government in the name of reducing the income risks faced by individual farmers investing at the margin.

These agricultural support arrangements involved a high level of transfers to the agricultural sector. The opportunity cost of interest rate concessions to the Marketing Boards was \$148 million in 1985–86 and interest concessions to farmers through the Rural Bank, the Department of Maori Affairs and the Department of Lands and Survey³ added another \$155 million in 1984–85 (SONZA,

² The Dairy Board had a self-balancing scheme from its introduction in 1938 and the Apple and Pear Board operated a similar scheme from the early post-war years. In effect, the Boards did not pay out all the surpluses in good years but paid more than the market in bad years. The reserve funds were held at the Reserve Bank and attracted interest at 1% or a penalty of 1% when in deficit. The Meat and the Wool Boards had built up their surpluses from wartime trading with Britain and used these funds occasionally to supplement product prices at downturns in the commodity cycle. They also had powers, which were utilised in some years, to purchase product if they so desired (see pp. 25–26, 33).

³ Since the war, large programmes for the resettlement of servicemen and civilians on farms had been funded through departmental votes. There was an unwillingness to adjust these loans for inflation, hence the opportunity cost to the taxpayer rose higher and higher.

Table 5: New Zealand: fiscal costs of support in pastoral agriculture (average for each period in NZ\$ millions)

<i>June years</i>	<i>1980–84</i>	<i>1985–90</i>	<i>1991–95</i>	<i>1996–98</i>
Support prices	209	47	0	0
Fertiliser subsidy	49	9	0	0
Interest transfers	136	186	1	0
Marketing board debt	132	158	0	0
Tax transfers	73	54	1	0
Inspection services	49	46	5.5	3
Advisory services	10	13	1	0
Research services	38	54	59	61
Quarantine services	27	34	34.5	48
Other	49	76	13.5	3
Total	772	677	115.5	115
Average farm GDP	2,356	3,619	4,660	5,052
Transfers as % of farm GDP	32.7	18.7	2.5	2.3

Source: Ministry of Agriculture, Wellington.

various). Total government income lost through tax allowances to farmers was \$70 million in 1984–85.

Table 5 shows estimates of all government transfers to the livestock sector in the period 1980–84, compared with later periods. In the 1980–84 period, total assistance or transfers to the pastoral sector rose to 33% of the value of GDP generated. Support prices and debt write-offs were nearly half the transfers in these years. Other main line items include inspection, research and extension services. As reform took place in the later 1980s, the proportion of farm GDP represented by transfers dropped to 18.7% in the late 1980s and to 2.3% in the 1990s.

These transfers do not influence consumer prices, hence the Consumer Subsidy Equivalent (CSE) for these products is zero. However, pricing and quarantine arrangements for poultry and eggs did influence consumer prices to the extent of NZ\$93 million in 1993–95, giving an average CSE across the sector of -5% (OECD 1997). For the same period, the average sector producer subsidy equivalent (PSE) was +3% (*ibid.*).

The downstream effects of this subsidy programme affected many businesses involved in processing, transport, insurance and wholesale activities.⁴ Guarantees at the farm gate level affected the incentive for intermediate businesses to innovate and seek efficiencies in management as farmer incomes were protected by the subsidy arrangements. After 1984, changes in shipping arrangements for primary products and changes in labour management laws encouraged more competition in the downstream sector.⁵ In the fertiliser supply industry the result has been both increased competition and amalgamations.

4. Economic Reform 1984–97

Reform Policies Set Out

MACROECONOMIC POLICIES

1984

In 1984, circumstances changed abruptly at the change of Government and a fresh appraisal of macro-economic policies and direction was undertaken. As it developed, pressure group interests were pushed to the background while more basic structural problems were addressed for the first time since the 1930s.

During the election in 1984, there was an accelerated movement of foreign-held funds out of the country precipitating an exchange crisis immediately after the election. With the previous Finance Minister reluctant to intervene, it was left to the new Prime Minister to direct the Reserve Bank to devalue the currency by 20%. This started a massive review of existing policies that was to extend throughout the whole economy. The view of the new government was:

We are committed to maintaining firm monetary control, to reducing the fiscal deficit substantially and to maintaining a realistic exchange

⁴ These effects continue down the line to financial arrangements. Support for farmers guarantees loan repayments and debt servicing. Less support involves closer monitoring of loan portfolios. Past debt must be refinanced or frozen in some way. 'Despite the adjustments to debt, aggregate sheep and beef farm debt levels have remained high'. J. Kerr, *Farming News, Special Supplement*, 1992. This observation, and other observations which follow, were published in England following a visit of UK farm representatives to New Zealand in March 1992.

⁵ See Brash (1996, p. 26) for further details.

rate. These policies will be consistent with the achievement of a faster growing, more flexible economy with low inflation, with a sound balance of payments and higher employment (Minister of Finance, Budget 1984).⁶

The devaluation of the \$NZ was followed by a broad-based programme of new national policies based on improving the competitiveness of the economy and removing constraints to the workings of most goods and services markets. Controls on interest rates were removed, and an active public debt policy was instigated to control money and credit growth in order to offset the substantial liquidity flowing into the financial system from devaluation and the continuing fiscal deficit financing. Open market operations were enlarged by the Reserve Bank and a tender system introduced for Treasury bills. Fiscal policy included a programme of budget cuts and the introduction of a value added tax.

Improved resource allocation was to be achieved by more use of the price mechanism. Current pricing of capital and other resources was to be applied to the state sector as well as the private sector. Export assistance schemes were to be phased out by 1987, and volumes of imports under licensing were to be brought up to pre-devaluation levels followed by yearly increases in licences of 5% of the domestic market until phasing out was possible (Minister of Finance, Budget 1984).

The broad policy package of the 1984 Budget was followed in March 1985 by the floating of the exchange rate. This was considered necessary to free the control of the money supply from fluctuations in the balance of payments; such fluctuations would then impinge on the exchange rate through changes in net private capital flows.

1985

In a mini-Budget in December 1985, the Minister of Finance announced changes in farm taxation (discussed below), relaxation of rules regarding foreign investment in land, a speeding up of the tariff reform process and a set of principles for state-owned enterprises for improving efficiency in that part of the public sector.

⁶ *ibid.* pp. 22–43.

These reforms involved a thorough review of the economic structures and institutions which had developed over the previous 50 years. Government intervention had become entrenched. Isolationism was encouraged by excessive import regulations and rationing of foreign funds. The export sector (mainly agricultural) functioned within a regime of government-administered exchange rates and high costs caused by local industry protection. Not only were import costs high but wage levels and interest rates were mandated. State trading departments were regarded as employers of last resort and exempt from realistic pricing policies. Together, these policies failed to encourage economic growth and obscured the incentives needed to encourage innovation, diversification and product development.

AGRICULTURAL POLICIES

1984 Budget

The 1984 Budget set out:

1. The general principle of the new government that reductions in assistance to land-based industry would occur at the same speed as in other sectors: ‘the objective is to reduce or remove subsidies on inputs where these subsidies have discriminated between farmers or between land uses’. The reference to reform at the same speed as other sectors was a veiled warning to the farmers’ union that it would be treated equally with other sectors. In the event, the agricultural sector was reformed first, then the finance sector, then the government sector. The labour market came last, some five years later.
2. The return to market principles would be achieved by:
 - phasing out price support
 - abolishing input subsidies
 - providing credit at realistic interest rates.
3. Concessionary farm loans through the Rural Bank would be terminated.

4. Interest rates on government funded rural lending would be progressively brought in line with market rates⁷ (see Table 7).
5. Use of the Government Loans Account to fund farm lending would be phased out by 1986–87 so that all new borrowings would be funded at market rates.
6. All fertiliser transport subsidies were abolished from the night of the Budget and the fertiliser price subsidy would terminate on 31 March 1986.
7. The first year investment tax allowance for new machinery and buildings was abolished.
8. Services provided by the Ministry of Agriculture were to be charged out at full cost.

The new thrust of agricultural policy was to:

- abolish input subsidies⁸
- phase out farm credit concessions
- increase charges for government services
- reduce distortions in taxation provisions
- charge more realistic interest rates on marketing board trading
- wind up stabilisation accounts.

⁷ 'Prior to the 1984 Budget, New Zealand had a highly regulated financial market, and the majority of term farm institutional lending was through four trading banks and the farm merchants. These merchants also provided seasonal capital. In this period, financiers had not needed, and did not generally possess, specialist rural sector financing skills ... [lending] decisions were made on apparently sound equity positions and adequate ability to service debt. [However] in 1989, a major seasonal lending agency set about restructuring firstly its own portfolio, and secondly farm balance sheets'. J. Kerr, *Farming News*, 1992.

⁸ 'The reduction in fertiliser worried many of us – 50% in total since the removal of fertiliser subsidy. ... Some say that to sustain the pasture it must be applied on conservation grounds, and therefore justify the re-introduction of subsidies'. M. Ritchie, *Farming News*, 1992. In 1996, phosphatic fertiliser use was nearly back to 1985 levels but not back to 1979–80 levels.

In line with this philosophy, the various marketing boards were required to modify their operations where these were seen to contain a high regulatory content.

1985 Statement

A statement of 12 December 1985 announced that the tax allowance for capital expenditure on farms would be phased out in steps over five years and that the option of entering unit stock values at zero for tax purpose should be replaced by a new system of market values. The statement said: 'these tax changes go a long way to ensuring that land-based activities are taxed as a normal activity. They will provide a sound economic basis for continuing investment in the industry in the medium and the long term'. On the question of concessionary rural development loans, it was decided to treat the target conditions as being achieved, and to discharge the remaining loans subject to any other conditions surrounding the loans being met.

Marketing boards

Changes in the arrangements for funding the marketing boards were already in the pipeline at the time of the 1984 election. The Supplementary Minimum Prices Scheme was terminated from 30 June 1984. In December 1986, the low interest trading account held at the Reserve Bank by the Dairy Board was withdrawn and \$750 million of the overdraft was converted to a subordinated loan of \$150 million to be paid back to the government. Future operations were to be funded from the private sector. The Wool Board was required to pay 10% interest on its borrowings from the Reserve Bank from 1 July 1984 with provision for the rate to be adjusted periodically in line with market rates. The Meat Board also had large borrowings from its stabilisation funds to fund meat purchases in the period 1982–85. Government directed that the Board raise further finance from the private sector or run down its other reserves. In the 1986 Budget it was announced that all the Reserve Bank reserve accounts were to be wound up. In 1987, the government decided to pay off the debt of \$930 million in the Meat Stabilisation Account in exchange for a payment of \$100 million from the Board out of its reserves (Sandrey and Reynolds 1990).

THE CHANGES SUMMARISED ... AND THE PARTIALITY OF REFORM

In summary, farm producers were required to pay commercially determined prices on the inputs they used, to accept product prices determined by free market interchange, to pay the full cost of loan money and to accept stabilisation arrangements where the full opportunity cost of funds put aside was met.

Thus between 1984 and 1987 the agricultural input and output markets were largely deregulated from government interference, but the same did not apply to the institutional arrangements within which farming must operate. The course of product prices was still determined by government decisions on monetary and fiscal policy and their effects on exchange rates, and the monopsonistic marketing boards still dominated marketing activities. There were institutional rigidities in the labour market which dictated the conditions for employment of farm labour and labour employed further down the marketing chain. There were increasingly rigid environmental and safety regulations which impinged on farm activities. The freedom to choose farm levels of inputs and outputs was greater but the constraints on some new activities were increasingly circumscribed by new laws and regulations.

Reform Policies Assessed

MACROECONOMIC POLICIES

The changes in macroeconomic policy following the election of the Labour Government (which had indirect effects on agriculture) took some years to produce the desired results. The rate of inflation (as measured by the CPI) had been lowered by the Muldoon controls in 1983–84 and 1984–85 but continued at high levels through 1985–86 and 1986–87 and only declined gradually to 1% per year by 1991–92. Apart from the exchange depreciation year of 1985–86, there was little growth in real output throughout the late 1980s and an upturn only occurred in 1992–93 (nearly eight years after the programme began) (Table 6). The lack of growth impinged on employment levels, with the rate of unemployment climbing steadily to reach over 11% of total employment in 1992–93 before declining subsequently to 6–7% in the mid 1990s.

Table 6: New Zealand: macroeconomic indicators 1982–83 to 1998–99

<i>March years</i>	<i>Real GDP^a</i>	<i>CPI^a</i>	<i>Employment^a</i>	<i>Terms of trade^a</i>	<i>Balance of payments^b</i>	<i>Government deficit^b</i>	<i>Unemployment (%)</i>
1982–83	+0.5	+16.2	-1.2	-3.9	-6.2	-5.4	6.0
1983–84	+2.7	+7.3	+1.2	+1.3	-4.6	-8.9	6.1
1984–85	+5.6	+6.2	+4.0	-2.6	-7.3	-8.3	4.8
1985–86	+1.7	+15.4	+1.6	-2.7	-6.6	-4.6	5.7
1986–87	+2.6	+18.2	+1.2	+7.2	-5.2	-3.5	4.1
1987–88	+0.5	+9.6	-1.9	+9.1	-4.1	+0.7	4.1
1988–89	-0.7	+4.7	-4.1	+6.0	-1.1	+2.6	5.0
1989–90	+1.7	+7.2	+0.4	+2.9	-3.6	+3.9	7.4
1990–91	-0.6	+4.8	+0.0	-6.6	-2.8	+2.4	7.3
1991–92	+1.2	+1.3	-0.8	-1.3	-1.9	-2.5	9.9
1992–93	+1.2	+1.4	+1.0	+4.1	-1.7	-4.7	11.1
1993–94	+6.3	+2.8	+3.9	-0.6	-1.3	+0.7	10.2
1994–95	+5.4	+4.0	+5.0	-0.3	-3.3	+3.8	6.9
1995–96	+3.8	+2.2	+3.9	-1.5	-3.2	+3.8	6.5
1996–97	+2.6	+1.8	+1.4	-1.0	-4.9	+2.0	6.9
1997–98	+2.0	+1.1	+0.8	-0.4	-6.6	+2.8	7.5
1998–99	-0.2	+0.9	+0.6	-0.6	n.a.	+1.3	7.5

^a % annual changes.

^b % of GDP.

Source: Statistics New Zealand, Key Statistics.

The government had run a fiscal deficit from the days of the first oil shock in 1974, so it was some achievement for the Labour government to record a fiscal surplus from 1987–88 to 1990–91 thanks to greater restrictions on government spending. However, the deficit appeared again in 1991–92 and 1992–93 as revenues faltered in the context of static economic growth. Further restrictions on government spending were introduced in the 1991 Budget by the new Conservative government and through 1995 and 1996 the fiscal surplus was maintained at 3.8% of GDP, though there was a further decline through 1997 and 1998.

Reserve Bank Act and its effects

One of the most significant national policy changes introduced by the Labour government was the introduction of the Reserve Bank Act in 1989.⁹ The Act gave the Governor of the Reserve Bank the independence to react to specific monetary parameters that affect the rate of inflation. The Governor was required to sign a Policy Targets Agreement with the Minister of Finance setting out the conditions under which he or she may act and initially was required to maintain the national rate of inflation between 0 and 2% per annum as measured by the Consumer Price Index (CPI).¹⁰ In December 1996 the target range was raised to between 0 and 3%. The Governor acts only through controls on the level of the monetary base such as liquid claims on the Bank, consisting of cash balances held by the settlement banks and short-term Reserve Bank Bills.

In 1993–94 and 1994–95 the rate of inflation exceeded the target and the Bank tightened money supply accordingly, making borrowing more expensive both in the short term and the long term. This consequently attracted foreign investment into New Zealand shares and securities, which in turn put pressure on exchange rates (Table 7). From 1992–93 to 1996–97, the trade weighted exchange rate index (TWI) increased by 18% as a result of these flows, putting great pressure on the tradable goods sector, and export agriculture in particular, with reduced revenues and lower incomes for farmers

⁹ See Brash 1996, p. 41.

¹⁰ The Bank works on a measure of the CPI which has oil prices, interest rates, indirect taxes and changes in government charges removed – the so-called underlying rate.

Table 7: New Zealand: macroeconomic indicators affecting farming

	<i>Exchange rate index (1979 = 100)</i>	<i>Average farm interest rate (%)</i>	<i>Average interest rate new mortgages (%)</i>
1982–83	75.9	10.7	17.2
1983–84	72.8	10.7	15.0
1984–85	58.2	10.6	15.7
1985–86	62.6	11.8	19.1
1986–87	59.6	12.2	18.4
1987–88	65.2	12.8	18.9
1988–89	61.1	12.4	15.6
1989–90	60.8	12.5	14.9
1990–91	59.3	11.6	14.4
1991–92	55.1	9.6	11.1
1992–93	53.6	8.4	9.3
1993–94	56.2	7.7	7.9
1994–95	59.2	8.3	10.1
1995–96	63.2	9.2	10.5
1996–97	67.4	9.4	10.4
1997–98	62.2	8.9	10.5
1998–99	57.5	7.9	7.2

Sources: Reserve Bank, Statistics New Zealand, NZ Meat and Wool Boards' Economic Service.

as a result. In 1998, the inward flow of capital diminished, interest rates and exchange rates fell and there was some respite for the export sector.

Increased stability

From the point of view of agriculture, the change in exchange rate policy has been the most important change arising from the reforms of the 1980s. In the 1960s and 1970s, downward changes in the terms of trade could be compensated for by unilateral devaluations of the NZ\$: the benefits of the devaluation could last several years until internal costs caught up again. Under floating exchange rates, trade competitiveness depends on maintaining internal and external

prices on an even keel and parity theory suggests that there are forces which act to bring exchange rates and costs into balance. But if the exchange rate is reacting to policy-induced capital movements, the necessary compensatory movements in prices are obscured, if not blocked out altogether in the short term.

In early 1997, the trade-weighted exchange index reached 69.0 compared with the average for 1995–96 of 63.2 (Table 7), but it has since eased back to the high 50s owing to a realignment of the yen and other cross rates. Initially, interest rates rose to counteract any potential for movement of funds offshore but have since fallen back. The Reserve Bank has taken no further action and, with current forecasts of low inflation increases, it may not be necessary to intervene.

In late 1996, the Governor of the Reserve Bank maintained that any benefits of a looser monetary policy would be short-lived and would soon be reflected in increased farm costs (Reserve Bank 1996). The Governor stated that ‘enduring competitiveness can only be ensured by productivity, innovation and marketing’. Official spokesmen for the farming lobby had advocated that the Bank take a more positive position to lower the TWI to around 60 points but this has occurred automatically without Bank intervention.

AGRICULTURAL POLICIES

After 1984, the agricultural sector entered an extended period of economic adjustment. After the devaluation of 1984, farmers had a relatively prosperous season even with the removal of all price support. However, the floating of exchange rates in 1985 reversed the situation as the NZ\$ appreciated unexpectedly and product prices declined by 20% for sheep farmers in one year (Table 8). The government was obliged to step in and underwrite a debt relief programme through 1986 and 1987. Farmers also faced rapidly rising market interest rates on loans which themselves were being inflated by government policies elsewhere in the economy (Table 7) and inflation of prices of farm inputs (Table 8) as the CPI rose 15–20% per year (Table 6).

Terms of Exchange

By 1990–91 general economic reforms had brought down interest rates and the CPI, and the terms of exchange for farmers recovered

Table 8: New Zealand: farmers' terms of exchange

	<i>Product prices^a</i>	<i>Input prices^a</i>	<i>Terms of exchange</i>
1982–83	+2.6	+12.6	-9.0
1983–84	+12.5	+4.2	+8.0
1984–85	+13.8	+9.2	+4.3
1985–86	-5.1	+9.3	-13.1
1986–87	-0.2	+4.3	-4.3
1987–88	+5.5	+5.0	+0.5
1988–89	+11.6	+5.3	+6.0
1989–90	+11.2	+6.2	+4.7
1990–91	-12.8	-1.6	-11.5
1991–92	+5.3	+0.8	+4.3
1992–93	+9.2	+3.8	+5.2
1993–94	-2.3	+5.0	-6.9
1994–95	-1.2	-1.6	+0.4
1995–96	-4.9	-2.6	-2.3
1996–97	-0.8	+0.6	-1.4
1997–98	+2.4	+1.9	+0.5

^a Annual % changes.

Source: Johnson 1996, 1999 (All data are derived from national averages at the farm gate).

to earlier levels (Table 8). The period of adjustment was just about over. Some farmers had to exit the industry, others had to consolidate their resources, others had to change their enterprise mix.¹¹ Extra government assistance was needed at a critical stage. Income levels were restored on dairy farms in the 1988–89 growing season and on sheep farms in the 1989–90 season, though prices still continued to fluctuate (Table 8).

¹¹ '... [restructuring] of the industry was not as perfect as many economists imagined. Many farmers hung on and are still hanging on to their holdings and living off less than £3,000 per year. In total, the numbers of farmers who left the [sheep] industry was relatively small, numbering only 800 out of 45,000 depending on whose estimate one took'. J. Allen, *Farming News*, 1992. In 1986–87, the Rural Bank reviewed 8,099 farm balance sheets, of which 4,706 were adjusted for debt relief, averaging \$50,000 per farm.

Risk

Following the 1984 reforms of agricultural policy, farmers have been more exposed to the vagaries of commodity markets from which earlier Government interventions had tried to protect them. In the past, government-sponsored institutions like the Dairy Board had absorbed a great deal of the market risk for trading enterprises thereby tending to reduce farmers' appreciation of volatile market conditions. As a result of the reforms, farmers needed to re-assess their risk management strategies, particularly with regard to financial exposure and weather variations. At the industry level, the marketing boards needed to reassess their role in income stabilisation interventions, realising that they would bear the full cost of holding reserves in kind or in cash. In 1991, the Wool Board found itself in this position following the failure of the Australian Wool Board support scheme. It had to cease buying into the wool market and seek bank accommodation for the stocks already bought until they could be sold.¹²

Likewise, the Kiwifruit Marketing Board commenced paying out to producers at a level that the market could not sustain in the 1992 season. The government forced the board to seek bank accommodation until the outflow of funds could be drawn back. The net result has been a freeing of the direct link between government responsibility and private responsibility for risk bearing, and a change in the burden of meeting the resulting costs of such policy programmes.

Exports

Following the adjustments of farm output that have taken place, export earnings have been maintained since deregulation but the composition of farm exports has changed significantly. From 1988

¹² The compulsory purchase powers of marketing boards have been retained to the present day. However, the use of subsidised credit, and the administration of Government-supported product prices, were abolished from 1984. This left the marketing boards as middlemen in the selling of export products, taking all product supplied to them, and finding buyers and developing markets wherever they could on commercial terms. In 1998, the government announced that statutory support for compulsory buying would cease as soon as practical and asked the boards to submit plans for moving their remaining activities to a commercial environment. At present, discussion of these plans is still continuing.

(three years after the first measures were introduced) to 1995, the volume index of all exports rose 39%, though it has levelled off since. Sheepmeat and wool exports have declined in volume but exports of cheese, wholemilk powder and apples have expanded by over 50%. These changes are due to fluctuations in market demand and changes in supply (where producers have diversified or changed their farming activity). New Zealand farmers have been surprisingly flexible in response to market-driven change and have shown a remarkable ability to adapt.¹³

Effects on Farmers

The aggregate level of value added in farming rose sharply in 1984–85 but then declined in 1985–86 (Table 9). Sheep farmers and crop farmers were more affected than dairy farmers. Incomes then recovered to 1989–90, when the terms of exchange moved against dairy farmers particularly. In the following years, aggregate income has flattened out due to pressures on the exchange rate, with dairy farmers benefiting most from world market trends. In the 1980s there was some evidence to show that the employment of hired labour on farms was dropping faster than in previous decades, though evidence for a large exodus of farmers is non-existent. In dairy farming, sheep farming and fruit farming, total numbers employed fell by 12% between 1986 and 1991 (SONZA 1993).

The prevailing structure of family farming units continues. Reform has tended to strengthen the family interest in farm ownership by encouraging better business structures and means of inheritance. Family ownership still prevails over corporate ownership, because of its flexibility in dealing with fluctuations in income and the ability to survive on a lower rate of return on equity. The decline in the active farm population also affects other rural dwellers though with different effects in different regions. Census data show that the number of people in population centres of less than 1,000 has stayed remarkably constant over the critical period from 1981 to 1991. Regions where forestry and tourism are active do not show

¹³ 'For me, the real potential lay in horticulture. I do not believe there is a country where the combination of climate, land prices, and potential markets exists in such harmony'. C. Anstey, *Farming News*, 1992.

Table 9: New Zealand: trends in farm incomes – aggregate, arable, sheep and dairy farms

	<i>Value added (NZ\$ million)</i>	<i>% of total value added</i>	<i>Arable farms (NZ\$)</i>	<i>Sheep farms (NZ\$)</i>	<i>Dairy farms (NZ\$)</i>
1982–83	2,117	6.8	15,545	23,395	20,809
1983–84	2,413	7.1	11,062	18,491	21,714
1984–85	2,973	7.7	31,847	34,208	28,047
1985–86	2,891	6.5	-11,840	15,338	23,756
1986–87	3,153	5.9	-6,752	25,857	22,700
1987–88	3,513	5.9	19,337	28,487	25,800
1988–89	3,877	5.8	13,555	28,257	52,812
1989–90	4,280	6.0	53,854	37,285	64,410
1990–91	3,912	5.4	43,741	28,784	33,039
1991–92	4,510	6.3	50,779	31,065	50,657
1992–93	4,345	5.8	34,413	36,216	57,829
1993–94	4,956	6.2	48,644	48,702	59,315
1994–95	4,850	5.5	63,487	36,972	64,021
1995–96	5,009	5.5	62,757	26,084	54,170
1996–97	4,992	5.2	57,357	41,220	43,148
1997–98	5,154	5.2	48,081P	30,857P	47,085
1998–99	5,188	5.2	37,900E	29,700E	n.a.

P = provisional E = estimated.

Note: Farm incomes are measured as farm profit after depreciation but before tax.

Sources: Statistics New Zealand, NZ Wool Boards' Economic Service, NZ Livestock Corporation.

any population decline at all, though the proportions dependent on farming appear to be in active decline (SONZA 1996). This is typified by trends in the numbers of employees in slaughtering and meat processing, dairy product manufacturing and food preparation, which fell by 16% in the period between 1986 and 1991 (*ibid.*, p. 26).

Some rural communities dependent on farming have found that other services tend to be withdrawn as the farm base declines. These communities have expressed concern to government agencies that access to education and health services is inadequate compared

with the rest of society (SONZA 1996, p. 24). There is a lack of formal early childhood services and the small scale of rural schools means that some urban type services are not provided (*ibid.*, p. 25). By contrast, in other areas, such as those near tourist activities, rural community facilities have expanded (*ibid.*, p. 24).¹⁴

Environmental Protection

From 1953 to 1991, the principal legislation concerning environmental protection was the Town and Country Planning Act of 1953 – substantially modelled on the British legislation of 1947. As might be expected, the thrust of this legislation was concerned with incursions of the urban areas into the countryside rather than pollution and third party effects. Separate planning legislation dealt with river bank control, flood prevention and soil conservation on hill lands. Environmental legislation was changed in 1991 to consolidate previous Acts into the Resource Management Act and more specifically to encourage land developers and others to take into account all third party effects of their actions,¹⁵ including non-sustainable farming practices.

From 1953 onwards, partial government funding was available for river bank containment, flood prevention, soil conservation measures on hill country farms, irrigation headworks and tree planting in hill conservation areas, usually in association with local government authorities. Direct charging for infrastructure improvements was not the norm. There are no similar programmes in New Zealand that reflect the thrust of the Countryside Commission or the Environmentally Sensitive Area programmes in Britain,¹⁶

¹⁴ Compared to the UK, the visitor to New Zealand will notice the absence of small villages, a dependence on small towns for services and greater distances between the towns.

¹⁵ 'The philosophy of the Resource Management Act is way ahead of us, giving the lie to some influential people here who still talk only in terms of "economic" sustainability. Economics actually means the careful management of resources; between organisms and their environment'. Joy Greenall, *Farming News*, 1992.

¹⁶ 'Funding for environmental, conservation, and welfare interests must remain directed to the rural population. New Zealand has got away without putting public money towards these issues so far, but is undeniably facing problems of erosion, pollution, loss of native species of plants and animals, and a continuing depletion of soil nutrients'. Mary Munro, *Farming News*, 1992.

although it has been pointed out that some of the ‘assisted hill country development’ programmes initiated in the 1970s in some locations in New Zealand would correspond to the Environmentally Sensitive Area situations (OECD 1994, p. 118). The agricultural policy reforms of the late 1980s removed the pressure on development of hill lands in New Zealand and discontinued the central government subsidy of river, flood and conservation works. Programmes are gradually being put in place to identify and monitor sensitive water catchment areas, excessive chemical usage and areas suffering from abnormal pest infestation.

Programmes are funded out of local government rates. The legislation is administered through district and regional councils.¹⁷ National incentives to reach desired environmental standards are not provided and there expensive compliance costs to be met through the legislated permit system of resource consents.¹⁸ New Zealand policies do not envisage massive subsidies for environmental programmes that could potentially distort resource use, but rely on internalisation principles such as ‘polluters pay’ and rating systems charging the beneficiaries of such programmes.

Lessons from Agricultural Reforms

There are some very important lessons from the New Zealand agricultural reforms which have implications for farm reform in other countries.

1. The New Zealand reforms show that agricultural markets do adjust by themselves and that farmers do not bear all the costs of reforms. In particular, land markets adjust to the expected flow of net returns and land values will find their appropriate levels as discussed below. There will certainly be some losses in asset values by existing property holders but for many these are only paper entries. One class of farmers affected seriously by the adjustments of land markets will be recent entrants. Special arrangements might be justified in

¹⁷ Regional councils tend to have 5–10 district councils in their jurisdiction in a two-tier local government structure.

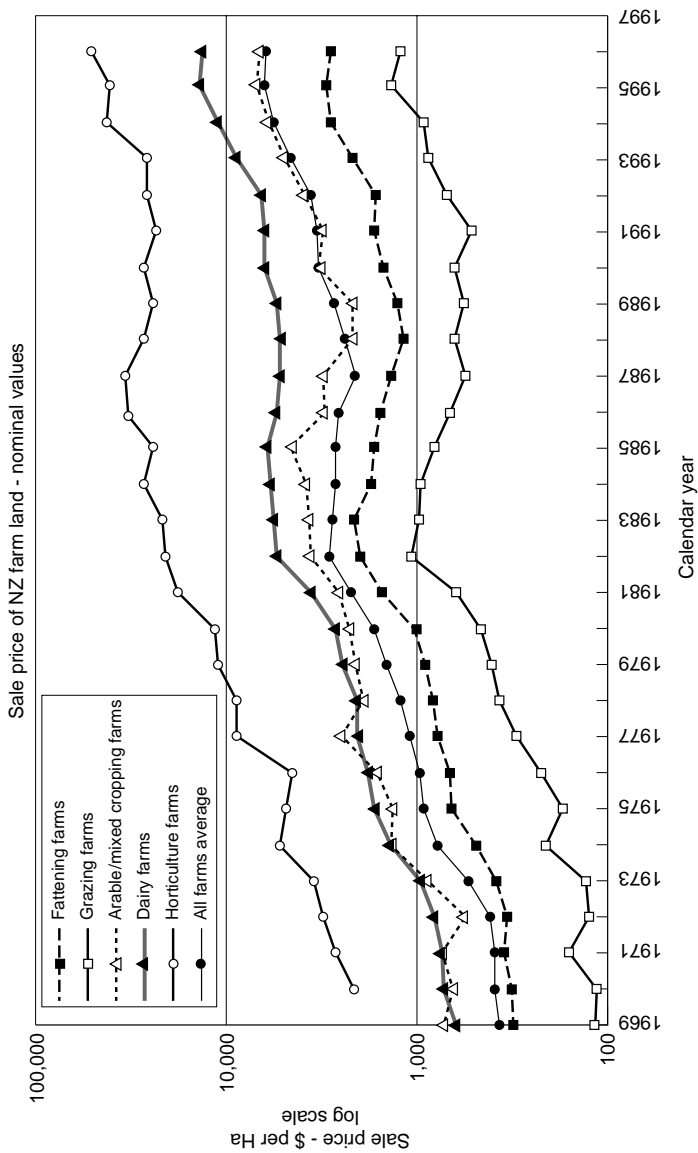
¹⁸ ‘The transition from farmland to urban use is not as dramatic as in the UK, traditionally taking place through a process known as “sub-division” – a form of farm intensification leading to an urban environment in some areas’, J. Kerr, *Farming News*, 1992.

this case, but wholesale compensation for losses in asset values has not been provided for.

2. The New Zealand reform policies reduced the costs of government intervention substantially. The welfare of farmers, as measured by income streams, was markedly reduced in the period immediately after the reforms were introduced, but over a seven year period necessary adjustments were made in choice of enterprise, input levels and capital investment. In the case of sheep farmers, the terms of trade at farm gate prices recovered their former levels in 1989–90, only five years on.¹⁹ Interest costs returned to pre-1984 levels in 1991–92 and 1992–93 (Table 7, p. 30). Farm incomes were rising by 1988–89 (Table 9, p. 35). Exchange rate changes have proved to be an unpredictable factor in the recovery and have increased uncertainty in planning decisions for both farmers and marketing organisations (Table 7, p. 30). The marketing boards, particularly, need forward exchange cover on all overseas transactions in this kind of environment.
3. The farm sector would have benefited from a more coordinated sequencing of reforms in the economy. Farmers' cooperation in the agricultural reform programme was underpinned by the plans to remove tariffs on imported inputs, but the lowering of tariffs did not proceed as quickly as the removal of agricultural support. Farmers also suffered from falling output prices some years earlier than they experienced the benefits of labour deregulation in, for instance, the processing and other downstream industries (Horesh 1995). From the point of view of individual sectors, deregulation should be multi-sectoral and proceed as uniformly as possible throughout the whole economy.
4. The reforms have had significant effects in factor markets. Prices of land have returned to a normal relationship with product earnings (Figure 1). The cost of risk has been incorporated into farm decision-making which, together with market

¹⁹ 'Outside the beef and sheep sector the picture is generally brighter, just as in the UK.' J. Allen, *Farming News*, 1992.

Figure 1



Source: Valuation New Zealand

level charges for credit, have contributed to a less inflated land market. A more detailed examination of the agricultural land market shows that asset prices for different production categories adjusted at different times to the deregulation process (Figure 1). Buying prices on extensive grazing land (usually on hill country) rose rapidly to 1982 and then fell back continuously to 1987. Prices on fattening land (good quality grazing land generally flat to moderately hilly) peaked in calendar 1983 before declining.

On land suitable for arable crops and intensive livestock farming, the land boom continued until 1985, when reform of the wheat industry commenced and competitive supplies from Australia were made available. The price of land then fell sharply in the following years as the currency appreciation had a significant effect on this sector. It was in this sector of arable and livestock farming that welfare assistance was most needed in 1986–88. The market for dairy land faltered in 1985, but did not decline significantly in the way other sectors did as it had been protected less in the early 1980s. Similarly, the market for horticultural land (high quality nearest to towns) stabilised in 1986 and 1987, but did decline marginally for the following six years. Since 1991, the demand for agricultural land has strengthened considerably as forestry ventures and dairy farming expansion have become important.

5. The New Zealand agricultural reforms were unilateral. Research by the OECD has demonstrated that the benefits of agricultural policy liberalisation are maximised when countries deregulate multilaterally.

Most OECD countries, under pressure from bigger farmers who would not benefit from income supplement programmes, have resorted to a series of measures to raise agricultural prices by restricting imports or by levying duties on imports. [These] keep prices higher than they would be under free market conditions which leads to overproduction and structural surpluses, and they complicate international trade for other countries by depressing prices in international markets through reduced imports and by making it difficult for other exporters to compete with subsidised prices (OECD 1990b, p. 50).

6. The Uruguay Round outcome for agriculture is a move in the direction of multilateral deregulation but does not match the changes made in New Zealand. As discussed in the next section, the implications of decoupling subsidies from production levels will be the key to further progress.

Summary

Adjustment to new prices of factors and outputs was accomplished in the New Zealand reforms.²⁰ The price support arrangements, in particular, had stultified flexibility between enterprises. There has been a decline in production of sheep products and an expansion in cattle products, dairying and forestry. Horticultural production has increased over 100%. Farm sizes have increased as small units have been amalgamated and the labour force has fallen in the livestock sector. Jobs have expanded in horticulture. As a result, the sources of income in farming have changed and expanded.

Reform of agricultural policy has allowed signals about new products, new markets, innovations, and new technologies to reach those in a position to make important decisions in a changing economy. At the same time, environmental protection programmes have been introduced on a 'polluter pays' basis so that the chance of renewed subsidisation of production is largely avoided and the costs of such programmes fall on those who created the externalities.

5. Wider Implications for Agricultural Policy in Trading Nations

International Trade Issues

THE CAIRNS GROUP PROPOSALS

New Zealand has been a member of the Cairns Group since its inception. The Cairns Group of countries came together for the Punta del Este meeting of GATT members in 1986. As a result, the

²⁰ 'Many [sheep and beef] farms depended on income earned outside agriculture. Imaginative examples of alternative sources of extra income included working as an advertising model, cutting roadside flowers for export and exporting bees to Holland'. R. Gueterbock, *Farming News*, 1992.

Punta del Este Declaration included special mention of the desirability of liberalising agricultural trade through

... improving the competitive environment by increasing disciplines on the use of direct and indirect subsidies and other measures affecting directly or indirectly agricultural trade, including the phased reduction of their negative effects and dealing with their causes ... (GATT 1986).

Proposals were submitted to the GATT Negotiating Group on Agriculture during 1987 and 1988. A common set of themes ran through these proposals although there were also elements of disagreement, for example, liberalisation or management of trade and the need, or lack thereof, for an aggregate measure of support (AMS). In each proposal, agricultural protectionism was approached by classifying the main elements into market access, domestic support and export subsidies.

The Cairns Group proposal lay somewhere between the bold, but unrealistic, liberalisation proposal from the United States (in which all trade-distorting measures would be removed and only the decoupled policies permitted) and the more cautious proposal from the European Community (Rossmiller 1988). The essence of the Cairns Group proposal was to suggest a staggered approach to reform.

- Phase I (up to the end of 1988) would freeze import barriers and subsidies affecting trade, sanitary and phytosanitary regulations.
- Phase II would involve adjustments over a 10 year period to reduce both levels of overall support and the use of most trade-distorting measures. It was accepted in the proposal that some forms of assistance, such as decoupled income support and aids for structural adjustment, could be exempted. Phase II covered more general aspects of the way in which GATT was applied to agriculture and the ways in which governments should be bound by the disciplines of the General Agreement (MacLaren 1995).

The proposal also favoured the use of an AMS based on Producer Subsidy Equivalents (PSEs). For countries such as Australia and New Zealand these proposals could easily have been accommodated

because the consequent changes in their own agricultural policies would have been relatively minor in comparison with those that would have been required in most other OECD countries (*ibid.*, p. 53).

The GATT Agreement on Agriculture (GATT 1993) was based on the report by de Zeeuw, Chairman of the Agriculture Negotiating Group until 1990, and on the Draft Final Act produced by Arthur Dunkel in December 1991. The negotiations were long and difficult and, at times, threatened the sheer existence of the Uruguay Round. However, it was recognised by most governments that by negotiating across a number of groups simultaneously, it was possible to make transparent the benefits which would be foregone in non-agricultural areas if negotiations on agriculture were allowed to cause the Round to fail (MacLaren 1995).

The most important of these impediments to progress was the EC Common Agricultural Policy (CAP). But, following an assessment by member countries in 1992 under Commissioner MacSharry, the United States and the EC reached an accommodation at Blair House in November 1992, thereby paving the way for the conclusion of the Round in 1993 (*ibid.*).

BLAIR HOUSE AGREEMENT

From the point of view of New Zealand farmers, the outcome of the Uruguay Round took a negative turn at the time of the Blair House agreement. Admittedly, the Americans and the Europeans had reached an impasse over the agreement. There was dispute over the time period over which subsidies would be phased out, over the base year for the beginning of tariff reduction, and over concessions for US access for oilseeds. The US had proposed at the original Punta del Este meeting that all trade barriers were to be eliminated over a 10 year period, that agricultural subsidies coupled with production levels should be removed and that some aggregate measure of support be used for monitoring purposes.

Commissioner MacSharry's positive contribution was to get EC Ministers to agree to some concessions in May 1992. The Draft Final Act had proposed that there would be a reduction of 36% in subsidy outlays and 24% in the subsidised export volumes phased in over a period of six years. The Blair House accord agreed that

the reduction of agricultural export subsidies would be 21%. The base period for the reduction provisions was fixed at the average of 1986–90. The MacSharry proposals were incorporated in the Agricultural Agreement. Although the six year reduction period was shorter than the US proposed, the base period decision was a major reversal for the agricultural trading nations subscribing to the Agreement, incorporating as it did, several programmes which had already taken effect.

TARIFFS

On market access, the Blair House agreement envisaged the tariffication of all barriers to imports based on their values in 1986–88 and a reduction in tariffs. This agreement was essentially a shift from a non-tariff barrier (NTB) to a bound tariff that is ‘equivalent’ to the original barrier. Special safeguards were agreed in the form of an upward tariff adjustment if either the prices or volumes fell short of the average for the base period (Burrell 1995). Tariff quotas would ensure that imports enjoyed a minimum share of domestic consumption, starting at 3% and rising to 5%. Tariffs resulting from tariffication and other tariffs on products without NTBs were reduced by 36% on a simple (unweighted) average basis. Therefore, there was substantial scope for governments to cut high tariff rates on politically sensitive products by the minimum rate of 15%, and to cut by 100% tariff rates on lightly protected products, while still achieving the necessary 36% overall (MacLaren 1995, p. 35).

A classification of instruments into ‘amber policies’ (which distort production and trade) and ‘green policies’ (which do not) was agreed. All amber policy instruments are to be part of the total AMS calculation. It was agreed that this statistic would be reduced by 20% over the six year period from 1995 from the base period of 1986–88. The AMS calculation would be based on aggregate support levels thus avoiding singling out individual products. This aggregation principle was enough to assure that no policy in the US or the EU would be significantly affected by the required 20% reduction (Sumner 1994).

Most important, ‘blue box policies’ such as US deficiency payments and – the cornerstone of the 1992 MacSharry reforms – the EU’s area and headage payments, were excluded from the AMS as

a result of the Blair House accord. This means they are exempted from reductions even though they were not part of the green box definition (Burrell 1995, p. 15; MacLaren 1995, p. 54).

SUBSIDIES

New Zealand supported the principle of decoupling subsidies from production levels. But the description of the policies that would be exempt from the reduction provisions (the so-called green box policies) was again a political decision which included many programmes New Zealand would consider to be at the border of eligibility. The New Zealand view is that the basic reasons for high agricultural subsidies in the EU should be re-examined and alternative measures considered. These matters had been canvassed in OECD fora and direct income payments had been suggested as a suitable alternative to delivering welfare to disadvantaged communities.²¹

SOCIAL WELFARE

New Zealand is one country that has fully explored the social welfare (safety net) alternatives to price support (Chadee *et al.* 1990, Chadee and Johnson 1994). Price supports in some countries have replaced, or substituted for, social security measures as protection of the agricultural sector has increased. In the Uruguay Round Agreement, a first attempt was made to separate safety net measures from economic protection measures. It was agreed that reform of domestic support involved individual countries examining their internal assistance programmes to identify those measures which were output-inducing and those that were not. Direct income support payments would not be linked to production, or factors of production, but aimed at facilitating the process of reform by reducing distortions in production, consumption and trade (OECD 1990a, p. 43).

²¹ 'Direct income payments constitute one of several options, whose relative advantages and drawbacks need to be evaluated in specific situations. Often, they will be suitable as a temporary measure only. Policy makers wishing to assist the incomes of a particular group should also consider alternative measures for increasing the group's income generating potential' (OECD 1990a, p. 11).

A lowering of domestic levels of price support would result in a reduction in farm incomes and an increase in their variability (*ibid.*, p. 44). Temporary direct income support was seen as facilitating structural and farm-level adjustment. Other justifiable direct income support could provide the means to aid specific groups of farmers which have suffered cyclical income losses due to unforeseen and uninsurable circumstances, such as natural disasters; groups of farmers who are in disadvantaged areas or circumstances; and groups which wish to pursue environmental goals. Disadvantaged groups involve considerations of social welfare, but environmental aims should be considered to be more in the realm of public goods. Other justifiable forms of assistance include R&D, infrastructure improvements, crop insurance and farm extension.

EXCEPTIONS TO DOMESTIC SUPPORT COMMITMENTS

In the event, Article 6 and Annex 2 of the Uruguay Round Agreement on Agriculture set out the provisions for exceptions to the agreed domestic support commitments described above (GATT 1993, pp. 6–7).²² These policies must conform to two criteria:

1. Support shall be provided through a publicly-funded government programme.
2. Support shall not have the effect of providing price support to producers. Programmes exempted included:
 - research expenditure
 - pest and disease control
 - training services
 - extension and advisory services
 - inspection services

²² The Uruguay Agreement on Agriculture and individual member's 'schedules' set out the terms in which market access would be improved through multilateral reductions in tariffs and minimum access tariff quotas. Domestic support measures that had minimal impact on trade were excluded from the reduction commitments. The setting of the base period for the reductions in internal support at 1986–88 and the starting year of 1986 for previous reductions in support severely undermined the effectiveness of the Uruguay Agreement for countries like New Zealand.

- marketing and promotion services
- infrastructural services
- environmental services
- public stockholding for food security purposes
- domestic food aid.²³

Decoupled income support should have clear rules of eligibility and payments should not be related to, or based on, the type or volume of production (or livestock units); to prices, domestic or international, applying to any product; to factors of production employed. (Environmental services are discussed further below.)

The New Zealand argument was that comprehensive safety net services should be available to all citizens whether rural or urban.²⁴ Income support services should provide all people with a minimum level of family income (OECD 1990a, p. 52). The ideal was to secure equality of treatment to farmers in similar circumstances to those in the rest of society. Countries should therefore ensure that old age pensions, unemployment benefits, hardship benefits and minimum income guarantees were provided for all. Acceptable measures should include disaster relief and income support after such events.

One lesson from the reform of agricultural policy in New Zealand is that society should provide family support to adequate levels not only in times of emergency but as a safety net when farm incomes deteriorate as a result of needed adjustment. Capital compensation should not be provided, nor should compensation be provided for high farm incomes previously derived from excessive access to subsidies, as in larger farms in the EU. If such payments

²³ It can be seen that this list is not exactly explicit about the inclusion of welfare services *per se*.

²⁴ Mr A.A. Shepherd, New Zealand OECD representative 1972–75, informed the author that it was considered in his time in Paris that many communities were beyond the reach of safety services and the costs of setting up appropriate organisations was prohibitive. The author attended OECD meetings where it was stated that safety net measures could not be routed through the income tax system as farmers did not keep records and did not pay tax!

are contemplated, the OECD argues that they should have the characteristics and meet the recommendations for all other direct payments (OECD 1994, p. 33). To be WTO-compatible such payments would have to match the green box specifications for income, insurance and structural assistance programmes.²⁵

Growth of Environmental Barriers to Trade: the Rise of Environmental Consumerism

One of the emerging problems of world trade in agricultural products is the proliferation of environmental regulations that potentially restrict trade between countries. An accomplishment of the Uruguay Round was the declaration of new rules for technical impediments to trade. These impediments arise from rigidly enforced sanitary and phytosanitary regulations, quality standards and safety standards. Just when agreement was reached on such technical standards for international trade in agricultural products, new demands are appearing for constraints on trade based on environmental consumerism, tit-for-tat responses to environmental conditions in exporting countries and opportunities of exporting environmental problems from one country to another.

In addition to these potential threats to trade, some concern has been expressed that the agri-environmental and other policies for agriculture in the EU are evolving toward new measures of protection that seek to enhance or protect some particular attribute of the agricultural sector in member countries. These include countryside and landscape values, enhancement of biodiversity and sustainability, reductions in negative externalities and maintaining the socio-economic viability of rural areas (OECD 1998). Where there is an absence of effective markets for such public goods, some intervention is thought to be warranted.

Environmental consumerism includes such matters as pesticides in food, use of animal drugs in livestock production and animal welfare considerations in livestock husbandry and transport of live animals. There is a growing demand for organically grown products.

²⁵ If payments are made on a non-sectoral basis, it is not clear that they could be described as subsidies to agriculture – they may be outside the scope of the Agreement on Agriculture.

There is a debate about free-range and factory-produced eggs, methods employed to slaughter animals, CFC-free aerosols, phosphatic-free detergents, and so on. The risk in these increasing demands for government action is that mandatory policies will be introduced that restrict not only domestic trade in the products produced by these methods but also international trade. It is accepted that some guidelines are required in setting safety parameters within the boundaries established by scientific analysis; it is unacceptable if such demands are merely introduced to act as a barrier to foreign products and to protect local producers.

Trade disputes can arise when one country challenges the need for another country's environmentally-based import restrictions and the issue cannot be resolved amicably. Such situations create tension between environmentalists who see such restrictions as legitimate and necessary and those promoting free trade (Sinner *et al.* 1993). Some environmentalists have suggested that freer trade would encourage more use of environmentally damaging production methods, especially among developing countries.

Related to this is the situation where firms move their location from countries of higher environmental costs to countries of lower costs on a net advantage basis. Theoretically the move could raise welfare in both countries because the same product would be produced at less total cost given the respective costs of pollution in the two countries. On the other hand, environmentalists would say that in such a situation the first country is exporting its environmental problems to another country without dealing with its own basic problems by appropriate internalisation policies.

Another concern is that free trade would discourage a country from raising its environmental standards because the competitiveness of its domestic producers would suffer. This has led to suggestions that countries with high standards should be allowed to protect their producers by restricting imports produced under lower environmental standards. However, a country using import restrictions to maintain its environmental policy, instead of internal taxes and incentives, prevents the needed shift of resources to lower damage production methods and everyone is worse off (*ibid.*, p. 93).

The protection of human life and health was recognised in the 1947 GATT Agreement. The Agreement specifically provided for

exemptions to its general rules for trade measures that were necessary to protect plant, animal, and human life and health. The WTO Agreement on Sanitary and Phytosanitary measures in 1994 confirmed this exemption and strengthened the rules by requiring scientific justification for any new import rules that are stricter than internationally accepted standards. The risk is that a new wave of consumer-led food quality requirements could manoeuvre countries into raising further import barriers in the name of environmental purity.

As discussed in the previous section, environmental payments are exempt from the reduction commitments in the WTO Agricultural Agreement in so far as they meet the relevant green box criteria. Such payments to producers are regarded as being independent of production levels and therefore not trade-distorting. This approach recognises that trade distortions are a by-product of the price supports used in some countries to encourage production and self-sufficiency. It has been pointed out that this new approach tackles the trade effects of such policies without necessarily stopping support payments to farmers (Fraser and Edwards 1997, p. 3).

In the case of environmental programmes, eligibility for such payments must be determined as part of a clearly defined government environmental or conservation programme and be dependent on the fulfilment of specific conditions under that programme, including conditions related to production methods and inputs.²⁶ The amount of payment is to be limited to extra costs or loss of income involved in complying with the government programme. (GATT 1994, p. 62). In effect, the full cost of complying with environmental requirements is allowed.

According to WTO, countries that wish to pursue their own environmental policies may do so provided the policies are not more restrictive than necessary to achieve the environmental objective, and do not discriminate between imports and like domestic products. The 1992 Rio Convention endorsed this

²⁶ The potential impact of environmental policies on production can be seen in the development of such policies in the UK, where there has been a close association of production goals and 'countryside' goals in the past (Sandiford-Rossmiller 1998).

principle confirming that states have the sovereign right to exploit their own resources pursuant to their own environmental policies but to take into account the effects of their policies on other states. The WTO Committee on Trade and Environment was established in 1994 and its programme of work includes consideration of multilateral environmental agreements, unilateral approaches to the use of trade restrictions, environmental charges and taxes including cost-offsetting adjustments imposed at the border, packaging and recycling requirements, eco-labelling and processes and production methods among others. Most importantly, countries may take disputes over such matters to the WTO for further investigation and possible resolution.

Within the EU, the 1992 CAP reform created a fund for country specific policies to promote environmental protection, afforestation of agricultural land and early retirement (Regulation 2078/92) (Burrell 1995, p. 11). These measures were jointly funded by the member states and the EU Budget. By mid 1994, over 200 agri-environmental schemes had been put forward. In addition to these programmes, there was also the environmental component of set-aside arrangements (*ibid.*, p. 10). The EU contribution to such programmes was raised from 25% to 50% in these reforms (75% in regions covered by Article 1 of the Structural Funds) (Sandiford-Rossmiller 1998, p. 14).

A wider perspective is that farmers in western Europe are increasingly being viewed as producers not only of agricultural products but also of public goods based on countryside values, amenity and access values, landscape preservation and maintenance, and objectives such as biodiversity, for which they have a right to compensation (Rossmiller and Sandiford-Rossmiller 1998, p. 13). There is a danger that such compensatory approaches are more popular in member countries than 'polluter pays' approaches, and this raises the overall public cost. In cases where compensation does not act directly on a given concern, but through the production system, it can be misused by interest groups to preserve the *status quo*. Nevertheless, the new emphasis on environmental protection on a compensatory basis signals that EU governments are prepared to divert public monies in exchange for specific environmental services rendered by farmers and/or for specific restrictions on the use of land (Petit 1998). Petit has christened this

‘the new social contract’ between Europe’s farmers and their governments.²⁷

AGENDA 2000

In July 1997 the EC published its Agenda 2000, outlining the broad outlook for the development of the EU and its policies beyond the turn of the century (EC 1997, p. 1).

The 1992 reform of the Common Agricultural Policy is taken as highly successful. The time has come to deepen the reform and to take further the movement towards world market prices coupled to direct income aids. Several reasons militate in favour of such an approach: the risk of new market unbalances, the prospect of a new trade round, the aspiration towards a more environment-friendly and quality-oriented agriculture and last but not least the perspective of enlargement.

Among the particular objectives of the CAP, the Commission continues to include ‘the integration of environmental goals into the CAP’; and the ‘promotion of sustainable agriculture (*ibid.*, p. 7).

The Commission notes that rural areas are increasingly required to fulfil important environmental and recreational functions:

A prominent role will therefore need to be given to agri-environmental instruments to support a sustainable development of rural areas and respond to society’s increasing demand for environmental services.

Targeted agri-environmental measures should be reinforced and encouraged through increased budget funding, and where necessary, higher part-financing rates. Most important are services which call for an extra effort by farmers, such as organic farming, maintenance of semi-natural habitats, alpine cattle keeping etc.

²⁷ The compensatory costs of dealing with these externalities, if this is the route to be followed, is made higher by the additional levels of income offered by production compensation. If production and environmental attractiveness are regarded as joint products of the land, and the two products are substitutable, higher production subsidies raise the incentives to produce more and hence raise the cost of additional environmental protection that is needed to achieve a more balanced approach (Haebig *et al.* 1998).

Later draft proposals spell out that member states will also have the option of introducing environmental requirements as a condition for direct payments ('cross-compliance') (*Agra Europe*, 1998). These would be brought in as member states consider to be appropriate and allow the member states to cut, or even completely withdraw, CAP aid payments to producers who fail to fulfil national environmental criteria. This suggests a 'carrot and stick' approach, as this provision will run alongside the existing agri-environmental programmes under which farmers are actively offered financial incentives to farm in an environmentally sensitive way, says *Agra Europe*. Member states may also withhold up to 20% of payments from farmers who fail to meet the standards and the money can be used by national authorities to fund other agri-environmental schemes (*Agra Europe*, 20 March 1998).

In summing up these issues, it is important to remember that there is a general restriction on the use of environmental measures linked to production in the WTO Agriculture Agreement through the decoupling requirement of the green box. 'Good' environmental policy measures therefore need to be fully transparent, targeted at particular objectives and completely decoupled from production incentives. It is also pertinent that other programmes which qualify for the green box include:

- research expenditure
- pest and disease control
- training services
- extension and advisory services
- inspection services
- marketing and promotion services
- infrastructural services
- food security and domestic food aid

Research and extension in particular, can be used as a means of pursuing environmental objectives through education.

In addition, regulatory approaches (either negative like ‘thou shall not pollute’ or positive like ‘thou shall have window boxes’) are not affected by WTO rules.

The Agenda 2000 proposals appear to be consistent with the philosophy of the WTO Agriculture Agreement in that agri-environmental policy measures are more decoupled from production than price support. The continuation of compensatory payments for livestock and crop production, on the other hand, will continue to contribute to intensive systems of agriculture which produce many of the environmental ‘bads’ in the first place. These high levels of compensation make it more difficult to wean farmers away from such management methods, implying a ‘first-best’ approach would be to start from a clean palette – no protection and/or subsidisation and specific targeted measures as necessary for environmental and social objectives.

6. Conclusions

This paper has concentrated on three areas of agricultural policy where the New Zealand experience has some bearing on policy positions in other countries. In international trade negotiations, product and factor markets and in the environmental area there are changes that can be made that would improve national welfare as a whole.

The thrust of economic deregulation in New Zealand has been driven by two sets of circumstances. First, there was dissatisfaction with economic growth rates in the 1960s and 1970s under a generally protectionist regime. Second, partly as a result of the first, there was an urgent need to rein in government spending and move government out of economic enterprise.

For the agricultural sector in New Zealand, this meant moving away from a system of price supports and other assistance measures and seeking appropriate measures that allowed markets to work within a macro-regulated framework largely effected through monetary policy

Deregulation was a policy of both the ‘left’ and ‘right’. The initial measures were introduced by a Labour administration, and were continued by a National (conservative) administration. In November 1996, a coalition government took over this role, and in mid 1998 a minority government continued these policies.

As Dr Brash has identified (Brash, op.cit), the switch to fiscal conservatism in 1984 was determined by the circumstances of the time and was not directly due to the utilisation of ideas developed elsewhere. The Secretary to the Treasury has remarked that advisors had been preparing proposals for change several years before the 1984 election. The general direction of the reforms was established immediately after the election in a series of meetings between senior Ministers and key advisors (*The Dominion*, 1996).

The agricultural sector was the first sector to be deregulated. It took some six years for factor and product markets to adjust. Farmer incomes were depressed in the short run. But in the 1990s, farmers moved to new products and farming systems, and asset prices followed the recovery upwards. As Figure 1 (p. 39) shows, land prices have been rising steadily since 1992. Prices of livestock in the sheep and beef sector have remained low (due to product prices), but prices of dairy cattle have risen substantially with rising prices for milk. The losers in the 1980s were those with high investments in the land, those starting out just before deregulation and those in import substitution activities. To some extent, their positions were alleviated by temporary assistance measures introduced by the government.

There has been no wholesale movement of population out of the farming areas of New Zealand. In fact, selective (targeted) safety net measures have assisted people to stay where they are and not to move to the less desirable parts of the urban conurbations. Selective, income-based social assistance measures, as suggested by the OECD time and time again, are the proper way to compensate owners of, and workers in, enterprises that are going to be changed by reforms needed elsewhere in the economy.

In common with the Cairns Group, New Zealand wishes to see similar reforms adopted as widely as possible, and particularly in the farm sectors of those countries whose subsidised output competes with New Zealand's in international markets and trade.

Countries like New Zealand are also concerned that a fresh wave of technical barriers to trade could develop from the rise of consumer environmentalism. The 1994 WTO Agriculture Agreement established that sanitary and phytosanitary policies were justified if they could be defended on scientific grounds. The Agreement also established the important principle of decoupling new policies

from production levels. The risk is that new protectionist domestic policies could emerge that discriminate against foreign producers using unachievable standards and other tit-for-tat policies.

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