

RESEARCH NOTE

**AGRICULTURAL REFORM AND BUDGET CHANGES
IN NEW ZEALAND**

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Key words: reform, budget, investment, loan, subsidy, appropriation, structural change, privatization, transition

ABSTRACT

New Zealand started to increase agricultural subsidies to promote agricultural export in the 1970s. Subsidy programs inevitably entailed increased tax payer burden and financial deficit. In the early 1980s, the government acknowledged that the level of agricultural support was unsustainable. Most income support programs were abolished with the economic reform and the Ministry of Agriculture and Fisheries(MAF) was restructured by reducing number of staff members from about 5,600 to 1,000 in 2000. New Zealand could achieve the agricultural reform without severe adverse effects because the government introduced some transition programs for the farmers to adjust to the new economic environment. The government participated to share people's agony of the reform. Reform budgets are classified into contestable and non-contestable and managed on the basis of recovering cost. New Zealand could hone it's economic competitive edge from increasing transparency of budget management.

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I. Introduction

New Zealand is well known as a country that achieved a successful economic reform. As a result of the economic reform, international competitiveness has been increased(Choi et al. 1997). In any sector subjected to rapid policy reform, we can expect rapid structural changes. It was by necessity that the agricultural sector was severely affected by the economic reform in New Zealand. Drastic cuts have been made in agricultural subsidies and government intervention. The Ministry of Agriculture and Forestry has been restructured.

In order to understand and learn about the economic reform from a successful example, we need to trace the origins and effects of government intervention to the agricultural sector and how the intervention policies are related to government budget. The impact of introducing and removing assistances on government budget is closely related to the consequences or results of the reform. New Zealand is a relatively small country and the society is relatively simple. This provides us a good intuition on distortions and the related issues, specially the government budget.

Even if agricultural subsidies and support programs diminished significantly, the agricultural sector maintains its international competitiveness and plays an important role in the New Zealand economy(Sandrey et al. 1990). Policies are closely related to the economic environment and ministry's budget is undividable from programs or policies. In this context, this paper tries to review the reform process and budgetary changes as programs or policies revised in New Zealand. It will provide information on how New Zealand agriculture moved from a subsidy distorted market to a competitive market.

II . Agricultural Policy

1. Before the Reform

The typical pattern of economic development in most OECD countries starts with an agriculture based economy, develops the manufacturing sector as a dominant sector of the economy, and then culminates in a stage of economic maturity where the service sector takes over the leadership of the economy. However, New Zealand has special experience of economic development, i.e. agriculture still has large share of economic activities compared with other OECD countries and did not have the economic development pattern of manufacturing sector based economy. The manufacturing sector does not have leadership in New Zealand economy. Thus agricultural programs have taken representative industry policies in New Zealand. The GDP share of agriculture was 6 percent in 1999 but the commodity export share of agricultural products was 50 percent. With the importance of pastoral exports, agricultural policy has focused on productivity enhancement of the livestock sector and increase in export of livestock products.

New Zealand had reacted to the depression of the 1930s by putting a comprehensive import barriers into place. New Zealand relied on quantitative restrictions rather than tariffs. Import quotas and import licenses provided the important form of border protection for the manufacturing sector. This form of import restrictions remained until the early 1980s and resulted, in the end, in lowering competitiveness of the economy, specially, of the agricultural sector by increasing input prices.

Agricultural policy focused on compensation for the loss from the import barriers for the manufacturing sector rather than resolving the fundamental problem of dampening agricultural prices and constraints of foreign market access. Agricultural subsidies were provided to cope with the depression of 1930s and not a significant subsidization at the farm level until the early

1970s. But agricultural subsidies started to increase in the 1970s mainly because of the low international price and decreases in export(Gouin et al. 1994). Poor export performance was triggered by increased competition and export subsidies by competitors such as EEC and the US, and the entry of the United Kingdom into the EEC in 1973.

Subsidy programs before the reform were of three types: investment development, income support and stabilization, and input subsidy. Income support and stabilization programmes include price stabilization of the Dairy Board and the Meat Board, Supplementary Minimum Price scheme(SMP), and Town Milk Subsidy. Investment development policy encompasses the Livestock Incentive Scheme(LIS), and the Land Development and Encouragement Loans(LDEL). Subsidies for fertilizer and capital inputs are representative input subsidies.

The LIS and LDEL were introduced in 1976 and 1978, respectively, to increase investment in the farm sector. The LIS was a direct investment program to increase the number of livestock retained for production. If the increase in stock units of livestock was above two percent and maintained for more than two years, the loan was written off, i.e. a kind of direct subsidy. The LDEL program had the objective of encouraging the development of unimproved land into developed pasture. Preferential loans were available for a term of 15 years for a maximum of \$250 per hectare. The interest accumulated was written off periodically and only a half of the capital had to be repaid for the program.

Input subsidy programmes had been applied as compensation paid to the agricultural sector for costs derived from the border control of industrial imports, e.g. fertilizer and agricultural machinery imports. At the beginning of 1980s, the subsidies on fertilizer totalled more than 50 million dollars annually(Tyler and Lattimore, 1990). For tax concessions, a high depreciation rate was allowed for the first year of buying new equipment and machinery, the construction of farm buildings and housing for employees. In addition, capital inputs were subsidized

by means of a reduced interest rate.

Income support and stabilization programmes had been administered by the Boards. The Dairy Board administered stabilization funds working on a self financing basis from the late 1930s. The Meat Board and the Wool Board intervened the markets and purchased products to maintain a certain level of price. At the beginning of the program, the Meat and Wool Boards received governmental funds for price stabilization but self-financing methods, a kind of check-off system, were extended to the activities of the Meat Board and the Wool Board in 1975 followed by the large fluctuations in market prices. The Government created a new stabilization program for pastoral agriculture, the Supplementary Minimum Price(SMP) scheme, in 1978. The SMP scheme was financed by public funds. If the market price was lower than the program price, a direct income subsidy was paid for the difference. Income support payments were also paid for adverse climatic conditions and for reduced production.

SMPs for dairy and wool products are characterized by deficiency payments and for beef and sheep meat are closer to export subsidy(Tyler and Lattimore, 1990). SMPs was implemented in line with the producer board's price stabilization programs. The floor price set by the boards was lower than that for SMPs. If the market price was lower than both of the floor prices set by the boards and SMPs, the government met the difference between the SMP price and the board minimum price, while the producer boards made up the remainder, the difference between the market price and the board price. The Reserve Bank provided credit with 1 percent interest for the program if there was no credit balance.

These programmes entailed increased tax payer burden and financial deficit because domestic production increased substantially while international prices decreased(Wallace, 1990). The late 1970s period was a turning point for agricultural policies. New Zealand's terms of trade worsened as world food surplus grew. The government tried to protect producers from the

effects of falling world prices by relying on and expanding SMPs. However, in the early 1980s, the government acknowledged that the level of agricultural support introduced over the years was unsustainable in the face of falling international prices. The government had to choose the economic reform and the agricultural sector was at the center of the reform.

2. After the Reform

The economic and budgetary crises which hit New Zealand at the beginning of the 1980s led to a total reform in all economic activities. The deficit of balance of payments increased from the mid 1970s and it surpassed 5 percent of GDP in 1983 and 1984. Parallel to the deterioration in the balance of payments, the unemployment rate began to increase. Unemployment rate stayed under one percent until the end of 1970s and it began to exceed five percent from the early 1980s. The deficit of the current account and an increase in public debt led to the government budgets in a permanent and increasing deficit. In 1984, the overseas public debt reached 24 percent of GDP. The New Zealand economic situation became unsustainable(Gouin et al, 1994).

The fiscal costs of assistance to the agricultural sector increased sharply as a result of a widening gap between market prices and intervention prices set by stabilization programs. Agricultural subsidies reached close to 40 percent of the budget deficit in 1985. There was no indication that the situation improved and thus agricultural subsidies and budget deficit were reduced. There was no other choice than to open the agricultural sector to the law of the market principle. New Zealand's agricultural policy began to be dismantled from 1985.

As Johnson(1986) described, the new agricultural policy can be summarized as "the new agricultural policy has been to abolish input subsidies, phase out farm credit concessions, increase charges for government services, reduce distortions in taxation provisions, and to charge more realistic interest rates on marketing board trading and price stabilization accounts."

The government accepted liberalization of financial market and deregulation of interest rates. New Zealand government also gave up controlling exchange rates in 1985. Liberalization of financial market and the government decision to borrow only from the domestic finance market caused increase in interest rates significantly. The obligation given to the boards, meat, dairy and wool, to finance their program deficit at market rates combined with the increase in interest rates put boards' price stabilization programmes to an end in 1985.

The Supplementary Minimum Prices(SMP) as an income support program was abolished in 1984. Producer board's price stabilization programmes were required to pay market interest rates and closed the account. Farmers found that there was no income support and price stabilization programs with the

TABLE 1. Changes of Agricultural Programs after the Reform

Programs	When introduced	Year of change	Changes made
Development Investment			
Livestock incentive scheme	1976	1985	abolished
Land development encouragement	1978	1985	abolished
Income Support and Price Stabilization			
Stabilization by Wool Board	1976	1985	(increase interest rates on program deficit)
Stabilization by Meat Board	1976	1985	
Stabilization by Dairy Board	1938	1985	
Supplementary minimum price	1978	1984	
Input Subsidies			
Fertilizer	n.a.	1986	abolished
Interest on loans	n.a.	1984	market rate
Rural Bank	n.a.	1987	privatized
Services			
Research	n.a.	1985	recovering cost
Advisory services	n.a.	1985	"
Inspection	n.a.	1984	"

Source: Gouin et al. 1994.

simultaneous abolition of SMP and stabilization programmes from 1985. Interest rates were progressively raised to the market level and the Rural Bank was privatized in 1987. Programmes to develop agricultural investment were ended in 1985. Subsidies on fertilizer and noxious weed control were abolished. Cost recovery concept was introduced for services provided by the Ministry of Agriculture and Fisheries including inspection, animal health, quarantine and advisory services. The Ministry of Agriculture and Fisheries(MAF) was restructured by reducing divisions from 10 to 4 in 1987, selling out advisory service to the private sector in 1995. Number of staff members in MAF gradually reduced to 1,000 from about 5,600.

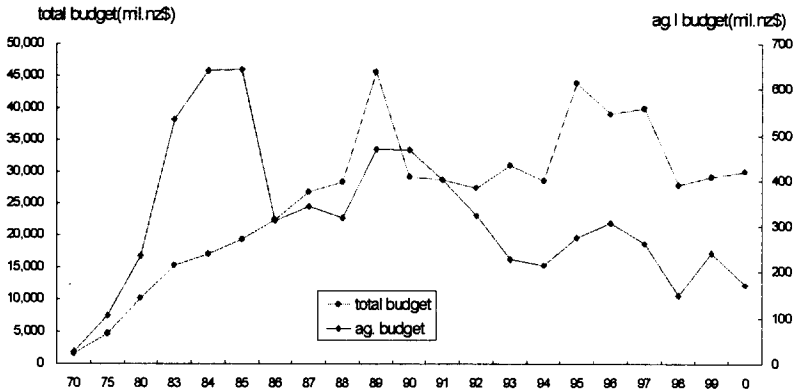
III. Agricultural Budget Changes

1. Trends of National and Agricultural Budget

New Zealand's national budget reached the peak of 44 billion dollars in 1995. 1989 budget of 46 billion dollars was an exceptional case for the government's capital participation of 15 billion dollars. After the peak, total budget shows a decreasing trend and the total budget for the year 2000 was 30 billion dollars. The share of the budget for agriculture and fisheries to national budget was around 2 percent in the 1970s. But this share increased to over 3 percent in the mid 1980s. After the economic reform of 1984, agricultural budget started to decrease rapidly. Agricultural budget of the year 2000 decreased to 171 million dollars and it was a similar amount for the late 1970s. The share of agricultural budget to the total budget was 0.57 percent in 2000.

In the 1960s, the agricultural sector was mostly put in market economy and agricultural policy measures were relatively loose. Therefore, MAF budget, in the 1960s, was less than \$20 million and maintained at around 2 percent of the value of agricultural output. Entering into the 1970s, agricultural policy and intervention of agricultural market were getting strengthened

FIGURE 1. Trends of N.Z. Budget



in order to cope with stagnation of the economy. MAF budget increased in the 1970s as the government increased agricultural subsidies to promote export of pastoral products while the economy stagnated and the balance of payment had deficit problem. MAF budget was raised to \$200 million in the late 1970s and took 6.4 percent, on average for the decade, of the value of agricultural output in the 1970s. MAF budget in the 1970s was a huge increase of ten times compared to the 1960s.

As farm subsidy programs were consolidated, MAF budget had been increased until the early 1980s. Just before the reform budget of 1986 was put in effect, 1985 MAF budget raised to 644 million dollars and it was the biggest MAF budget except for 1987 of special restructuring and saviour budget of the reform. After the peak of 1985, MAF budget decreased rapidly and resulted around 171 million dollars in the year of 2000. MAF budget in 2000 is below the average of 1970s. Abolition of farm subsidies and MAF restructuring contributed to the budget cut in the agricultural sector mostly. The government gave up most of price support programs, and more than 80 percent of MAF staff members left their office.

2. Budget by Program

2.1. Before the Reform

Agricultural budget before the reform is characterized by the inflationary budget. In the early 1980s, fiscal assistance to the agricultural sector increased sharply as a result of the export promotion policy for pastoral products and income support programs. Agricultural subsidies reached up to 40 percent of the budget deficit just before the reform. Agricultural budget increased by 50 percent per annum, on average, during the 1980 to 1985 period. Another prominent feature of agricultural budget at that time is a lion's share of transfer payments. The share of transfer payments increased from 48 percent in 1980 to 69 percent in 1984.

Breakdown of agricultural budget is pretty simple as it shows just five categories; administration, animal health, meat inspection, dairy inspection and grading, advisory services, and agricultural research. Ministry's expenditure on these programs decreased because of the rapid increase of transfer payments and the stagnated total outlay. The share for advisory services to the total agricultural budget decreased from 15 percent in 1980 to 10 percent in 1985. Expenditure on meat inspection and research programs was 45 million dollars and 44 million dollars, respectively, in 1985. Budget for animal health and dairy inspection and grading programs remained stable in terms of absolute amount but experienced a big loss of relative share.

Agricultural budget was closely related to agricultural policies. The MAF budget targeted to the export promotion policy or export subsidy. The SMP scheme was one of the examples of export subsidy. SMPs for dairy and wool products were characterized by deficiency payments and that for meat programs by export subsidy. These export subsidy programs created a huge accumulation of deficits by the Meat Industry Stabilization Account and the Dairy Board. An oscillated transfer payment made agricultural policy measures unsustainable and ended up with dismantlement.

TABLE 2. Trends of Agricultural and Total Budget

Unit: NZ\$ 1,000

	Total(A)		MAF(B)		B/A (%)
	Budget	Annual change, %	Budget	Annual change, %	
1970	1,664,754	n.a.	27,516	n.a.	1.65
1975	4,648,068	n.a.	104,335	n.a.	2.24
1980	10,102,816	n.a.	234,345	n.a.	2.32
1983	15,382,831	n.a.	536,415	n.a.	3.49
1984	17,130,740	11.4	642,715	19.8	3.75
1985	19,401,791	13.3	644,470	2.7	3.32
1986	22,411,394	15.5	312,088	-51.6	1.39
1987 ¹⁾	26,833,097	19.7	343,873	10.2	1.28
1988	28,385,923	5.8	319,078	-7.2	1.12
1989	45,642,447	60.8	469,803	47.2	1.03
1990	29,256,414	-35.9	467,179	-0.6	1.60
1991	28,648,177	-2.1	403,634	-13.6	1.41
1992	27,449,354	-4.2	324,751	-19.5	1.18
1993	30,962,471	12.8	227,083	-30.1	0.73
1994	28,579,256	-7.7	214,648	-5.5	0.75
1995	43,843,243	53.4	275,273	28.2	0.53
1996	39,010,615	-11.0	306,180	11.3	0.78
1997	39,912,153	2.3	262,341	-14.3	0.66
1998	27,929,737	-30.0	150,186	-42.8	0.54
1999	29,163,081	4.4	241,845	61.0	0.83
2000	29,944,578	2.7	171,115	-29.2	0.57

1) Expenditure in 1987 was over 1.8 billion dollars because of subsidies for producer boards' program deficit wright off.

Sources: House of Representatives, "The Journal of the House Representatives", Appendix, Various Years.

2.2. *Transition Period*

During the transition period or just after the reform, agricultural budget was curtailed and the breakdown of outlays was simplified. New Zealand agricultural policy began to be dismantled very quickly in the mid 1980s. With the change of overall economic policy, the agricultural sector had to become more responsive to the market signal. In order to achieve this, a large cut of the support programs, specially transfer payments which took about 70 percent of agricultural budget, had been undertaken. It could have brought panic to the farm sector.

The government put in place some transition programs for the agricultural sector to release the panic and adjust to the new economic environment. Transition programs focused on lightening the burden of farm organization's and farmer's debt.

The debt of the Meat Board had been written off by the government, through contributions of 930 million dollars. A part of farmers' debt to the Rural Bank was written off. The government had to pay nearly 15 billion dollars for the write off of farm debt in 1987. However, the government could reduce farm expenses gradually after 1987 mainly due to the liberalization of farm policies including abolition of price support and concessional farm loan. As a result, agricultural budget decreased significantly. 1986 budget for MAF was below a half of the previous year's.

MAF budget breakdown shows administration, quality assurance, research and advisory services, and transfer payment. As transfer payment decreased rapidly, breakdown of this outlay had been merged in one category. Transfer payment headings were put in each program before the reform. Budget for quality assurance and productivity enhancement could gain its share under the expense of transfer payment.

TABLE 3. Agricultural Budget before the Reform

	Unit: NZ\$ 1,000					
	1970*	1975**	1980	1983	1984	1985
Administration	13,510 (8,606)	58,702 (48,520)	136,363 (107,802)	368,296 (331,791)	467,708 (436,349)	450,569 (410,705)
Animal Health	2,820 (1,424)	11,189 (3,282)	15,800 (2,415)	25,584 (5,695)	25,382 (5,215)	24,724 (3,897)
Meat Inspection	3,079	9,343	25,341 (5)	43,124 (5)	44,496 (5)	45,454 (10)
Horticulture	490 (2)	-	-	-	-	-
Dairy Inspection and Grading	1,256 (129)	2,910 (196)	6,268 (364)	9,848 (400)	9,451 (273)	9,386 (630)
Advisory Services	2,152 (51)	5,622 (312)	11,995 (842)	19,452 (1,142)	21,257 (1,124)	22,297 (1,535)
Ag. Research	4,209 (153)	11,230 (587)	24,088 (1,132)	39,987 (1,649)	42,000 (1,812)	44,167 (3,029)
Fishery Administration	-	1,946 (120)	4,471 (222)	6,922 (327)	7,613 (328)	8,450 (505)
Fishery Research	-	1,193 (20)	4,325 (20)	7,436 (29)	7,822 (32)	8,323 (-)
Education	-	-	1,994	5,407	6,186	-
Others	-	2,200	3,700	10,359	10,800	11,100
Total	27,516 (10,365)	104,335 (53,037)	234,345 (112,802)	536,415 (341,038)	642,715 (445,138)	644,470 (420,311)

* Ministry of Agriculture

** Ministry of Agriculture and Fisheries

() represents subsidies or transfer payments.

Sources: House of Representatives, "The Journal of the House Representatives", Appendix, Various Years.

TABLE 4. MAF Budget in Transition Period

	Unit: NZ\$ 1,000			
	1986	1987	1988	1989
Administration	21,137	26,519	32,819	35,785
Fishery	19,487	25,981	29,337	36,489
Quality Assurance	96,697	119,585	127,622	146,470
Research and Advisory Services	63,872	77,674	87,207	127,652
Subsidy	100,730	1,576,582	31,028	115,102
Others	10,165	10,714	11,065	8,305
Total	312,088	343,873	319,078	469,803

Sources: House of Representatives, "The Journal of the House Representatives", Appendix, Various Years.

2.3. *In the 1990s*

The Public Finance Act 1989 represents major steps in the government's reform of public sector financial management. In the past, public sector management emphasized control on resources or inputs used by departments or ministries. This was reflected in the budget with the emphasis on personnel and operating costs. But less attention was paid to the results achieved using these resources and it was not clear even for the departments themselves what performance was expected. Financial management reform is designed to make explicit the outputs which are produced by each department and this not only provides greater clarity, but also provides greater accountability.

Budget format for each ministry has been changed and cost recovery concept or commercial basis has been added in distributing budget. Budgets are classified into contestable, i.e. distributed by competition, and non-contestable. Reform budgets

are managed on the basis of recovering cost. Programs with decreasing demand received less budget and discontinued in the end. Even public services were provided on the basis of the basic idea of cost recovering. In particular, advisory and inspection services have been supported in part by the users of these services and advisory services have been privatized in 1995. Inspection services including sanitary and phytosanitary measures tend to be commercialized.

MAF budgets in the 1990s show a decreasing trend. Budget for 2000 reduced to 171 million dollars, a 63 percent decrease from 1990 budget. Budget for insect control, inspection, subsidies, and animal welfare has decreased drastically. Inspection and insect control program received 10 percent of MAF budget in 1990 and decreased to 1.7 percent in 2000. Relating to income support, there remained only occasional programs for natural disaster. Notwithstanding the severe draught in 1997-99 season, the government put only 25 million dollars for natural disaster budget in 1998. On the other hand, quality assurance and resource management budget have increased the share to about 80 percent in 2000. Policy advice budget remains relatively stable. Transfer payment budget in 2000 was 1.2 percent of the MAF budget. Subsidies are nearly abolished specially when we compare it to the early 1980s budget.

Recently, the Ministry of Agriculture and Forestry set the goal of the ministry as "The best contribution from the land based sectors to New Zealand's welfare through sustainable economic growth and environmental quality". MAF roles are focused on providing policy advice on trading environment, sustainable resource use and the regulation of product safety, biosecurity, administering the regulation of product safety and biosecurity, and providing services where government needs. As we have discussed, MAF budget is allocated to attain this basic role of the ministry. Budget for quality assurance and policy advice takes more than 90 percent of the ministry's budget. Sanitary and phytosanitary assurance measures become more important and focused on food administration and risk

TABLE 5. Agricultural Budget after the Reform

	Unit: NZ\$ 1,000										
	1990	1991	1992	1993	1994	1995	1996	1997	1998 [*]	1999	2000
Policy Advice	19,106	16,339	22,009	19,655	21,842	29,209	22,193	21,837	8,283	22,743	16,129
Quality & Resource Manage.	116,964	98,997	114,672	73,328	71,620	95,775	139,024	126,751	52,485	147,119	84,713
SPS Measures	14,931	15,655	14,560	15,4682	15,658	20,939	18,776	18,647	3,707	7,182	2,961
Disease Control	29,733	32,205	27,178	24,765	35,569	47,565	38,229	32,982	0	0	0
Animal Welfare	1,342	1,802	1,810	1,796	1,789	2,392	727	727	0	0	0
New Tech.	82,409	70,929	51,581	0	0	0	0	0	0	0	0
Irrigation	20,989	6,379	7,260	3,000	1,760	2,354	2,875	15	0	15	15
Subsidy	20,829	10,765	2,299	1,390	1,078	1,442	1,091	477	852	2,238	1,996
Disaster Payment	51,810	45,426	18,489	21,780	2,740	3,664	27,945	400	24,984	430	2,650
Fisheries	109,066	105,137	64,893	65,901	62,592	71,933	55,320	60,505	59,965	62,118	62,651
Total	467,179	403,634	324,751	227,083	214,648	275,273	306,180	262,341	150,186	241,845	171,115

* Ministry of Agriculture and Fisheries changed to Ministry of Agriculture and Forestry in 1998. However, budget for fisheries is included instead of budget for forestry for consistency of the data from 1998.

Sources: House of Representatives, "The Journal of the House Representatives", Appendix, Various Years.

management policies. Sustainable resource use program contains sustainable land management, biodiversity, water, climate change issues.

IV. Conclusions

In New Zealand, agricultural subsidy programs were introduced to cope with the depression of 1930s and not a significant subsidization until the early 1970s. But the government started to increase agricultural subsidies to promote agricultural export in the 1970s when the international price was low. Subsidy programs inevitably entailed increased tax payer burden and financial deficit because domestic production increased substantially while international prices decreased. In the early

1980s, the government acknowledged that the level of agricultural support was unsustainable and had to choose the reform of farm programs. Most income support programs were abolished with the economic reform and the Ministry of Agriculture and Fisheries(MAF) was restructured by reducing divisions from 10 to 4 in 1987 and number of staff members from about 5,600 to 1,000 in 2000.

MAF budget is closely linked to agricultural programs. In the 1960s, MAF budget was around 2 percent of the value of agricultural output as the agricultural sector was put in market economy. But MAF budget increased in the 1970s with increased agricultural subsidy programs to promote export. MAF budget was raised to over 6 percent of the value of agricultural output in the 1970s. Just before the reform, MAF budget was raised to 644 million dollars and it was the biggest MAF budget. With the reduction of farm programs, MAF budget started to decrease rapidly and resulted around 171 million dollars in the year of 2000. MAF budget in 2000 is below the average of 1970s.

New Zealand could achieve the agricultural reform without severe adverse effects because the government introduced some transition programs for the farmers to adjust to the new economic environment and implementation of the Public Finance Act 1989 to streamline public services. The government participated to share people's agony of the reform. A drastic reduction of staff members in MAF, from 5,600 before the reform to 1,000 in the year of 2000, was one of the example that shows a leadership from the public sector and providing a momentum of strong national cooperation from divided interest groups. Reform budgets are classified into contestable and non-contestable and managed on the basis of recovering cost. New Zealand could hone its economic competitive edge from increasing transparency of budget management. The reform of agricultural policies is evaluated not to lead major disruption of the agricultural sector. The abolition of transfer payments did not modify significantly the structural trends(Gouin et al. 1994). Notwithstanding the reduction and abolition of farm subsidy programs, New Zealand's

agricultural sector maintains steady growth and it is projected to attain 18 percent increase in 1999-2003 period.

REFERENCES

- Choi, S.K. and Shin S.Y.1997. "Measurement of International Competitiveness: the Case of New Zealand Agricultural Products." *Journal of Rural Development* 20(1). Korea Rural Economic Institute.
- Johnson, R. 1986. "Livestock and Feed Policy in New Zealand." Agricultural Policy Discussion Paper no. 15. Center for Agricultural Policy Studies, Massey University.
- Gouin, et al. 1994. *New Zealand Agricultural Policy Reform and Impacts on The Farm Sector*.
- House of Representatives. various years. *The Journal of the House Representatives*. Appendix B.7 Pt.1.
- MAF. various years. *Agriculture Statistics*.
- _____. 1996, 2000. "Ministry of Agriculture and Forestry Briefing Papers for Incoming Minister."
- _____. various years. *Situation and Outlook for New Zealand Agriculture*.
- Statistics New Zealand. various years. *New Zealand Official Yearbook*.
- _____. various years. *Key Statistics*.
- _____. various years. *New Zealand in Profile*.
- Sandrey, R.A. and R. Reynolds. 1990. *Farming without Subsidies: New Zealand's Recent Experience*. MAF Policy Service Project Report.
- Taylor, L. and R. Lattimore. 1990. "Assistance to Agriculture." in *Farming without Subsidies: New Zealand's Recent Experience*. MAF Policy Service Project Report.
- Wallace, R. 1990. "The Macroeconomic Environment." in *Farming without Subsidies: New Zealand's Recent Experience*. MAF Policy Service Project Report.