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An alternative to regulatory control of farm
management

AN ALTERNATIVE TO REGULATORY CONTROL
OF FARM MANAGEMENT

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AN ALTERNATIVE TO REGULATORY CONTROL OF FARM MANAGEMENT

PREVIEW

This paper considers:

1. The failure of regulatory management in the farming sector looking specifically at:
 - Irrigation schemes
 - Pest Control
 - 1948 Land Act
 - Water rights administration.
2. Whether the Resource Management Act is regulatory or non-regulatory.
3. How to achieve non-regulatory farm management under the Resource Management Act.
4. Some brief observations of mine as to whether Regional Councils or unitary authorities are the preferred authority to carry out the rural resource management functions under the Resource Management Act.
5. The economic implications of regulatory control in farm management.

INTRODUCTION

The reason for regulatory control in our lives is self evident. It is to protect the interests, or perceived interests, of the wider public from the actions of the individual. Some areas of regulatory control are essential and justified, e.g. vehicle maintenance standards by way of a warrant of fitness procedure and road safety laws policed by the Ministry of Transport. These two examples show different levels of control.

The vehicle maintenance standards by a warrant of fitness procedure demonstrates a regulatory management in the form of setting standards however the implementation is carried out under a competitive free market enterprise regime. The second example of road safety laws policed by the Ministry of Transport demonstrates both a regulatory standard and bureaucratic/regulatory implementation.

The concerns in terms of regulatory management, in terms of critical thinking, are whether:

1. Regulatory control should be imposed in the first place or could protection be achieved in another way;
2. If regulatory control is required to what extent is it required; and
3. If regulatory control is required should the implementation be carried out by a regulatory/bureaucratic authority or can it be left to the market system?

My intention is to point out later in this paper how regulatory management is prone to failure consequently the questions listed above are important.

It is accepted that the critical analysis of the requirements for regulatory control are affected by social attitudes at the time which can then become outmoded. The licensing changes of the liquor industry in terms of hours of trade are a good example of this with the historic 6.00pm closing being now seen as an anachronism with 24 hour trading licences now available. It is unrealistic to criticise regulations in hindsight while ignoring the social demands which applied at the time. This example does however demonstrate the fickle nature of social attitudes and demonstrates a caution in passing regulations to protect social attitudes which may have a short life span in terms of their fashionability.

This paper is not so concerned with the temporary nature of social attitudes and their impact on the passing of regulations but rather is more concerned with the critical analysis of alternatives to the passing of regulations and the alternative to implementation by regulatory authorities in the commercial environment, more particularly being the farming environment.

The de-regulation of the provision of health services, the energy sector reform, and de-licensing of the liquor industry and motor spirits industry are a small number of the examples of the de-regulating commercial environment in reflecting the current thinking that the regulatory management of commercial activities is not the most effective or efficient form of management. However the rural sector appears to still suffer from a large amount of regulatory control.

I don't come from a pure school of market economics seeking to leave all controls to the market place, however I am concerned at the failures in the past of regulatory control in the rural sector and the implications of the all encompassing Resource Management Act in terms of rural management.

THE FAILURE OF REGULATORY MANAGEMENT IN THE FARMING SECTOR

I want to discuss briefly four examples of regulatory control and management in the rural sector which in my mind demonstrates the failure of the regulatory approach and the alternatives. These four examples are:

- Crown administration of irrigation schemes.
- Regional Council management of pest control.
- Crown management of the high country pursuant to the Land Act.
- Management regime of water rights.

1. IRRIGATION SCHEMES

Prior to 1989 the community irrigation schemes in New Zealand were owned by the Crown and constructed and managed firstly by the Ministry of Works & Development and latterly by the Ministry of Agriculture & Fisheries employing Works. [I refer to 1989 as although the Irrigation Schemes Act privatising irrigation schemes was not passed until 1990, during the 1989/90 irrigation season a number of irrigation schemes were managed under licence to the Crown pursuant to the sales program.]

Considering only the Central Otago irrigation schemes, being the area in which I work, the historic data is quite telling.

Summary of Central Otago Irrigation Scheme Costs
(Standardised to September 1988 Dollars)

<u>Area</u> <u>(Ha)</u>	<u>Capital Costs</u> <u>(\$/Ha)</u>	<u>Cost of Operations</u> <u>(\$/Ha)</u>	<u>Accumulated</u> <u>Losses (\$/Ha)</u>
24,874	4,712	92	995

Attached as Appendix A is a table detailing the general scheme data for the Central Otago irrigation schemes.

The following additional points should be noted:

- (a) The Central Otago schemes (which are the oldest schemes in the country) have the greatest district losses in the country. These losses result from under-recovery of operating expenditure with revenue being half the operating costs while interest charges are minimal. Growth of historic losses has been outstripped by inflation leading to a decrease in real terms.
- (b) The losses of the Central Otago schemes take into

account very little expenditure on renewals. Given the age of the schemes, expensive renewals are likely in the near future.

- (c) The country's total accumulated loss at the end of 1987/88 amounted to \$58 million dollars.
- (d) The Crown/MAF administration charges are not included in the assessment of loss. This cost would be considerable.

As mentioned above, it should also be noted that there was very little, if any, significant renewals or money being set aside for renewals. Given the age of the Central Otago schemes, renewal expenditure is inevitable.

Given the high cost of scheme operation, even under the Government subsidised arrangement, the position had, before privatisation, become critical for such schemes as Arrow and Teviot. Almost all Central Otago schemes faced unsustainable charges if the Crown regulatory body changed over to a full user pay costing regime.

You may have noticed that the Bannockburn Scheme is the one exceptional performer of the old Central Otago schemes. This is certainly not because it is an easy scheme to operate. This scheme was inherited from the old mining structures in the area. It operates at a very high altitude bringing water over ancient fluming, around steep faces and through rock tunnels. You will note that there is a nominal accumulated loss. On Appendix B attached you will see that the mean standardised cost of operations was \$18.80/ha. The irrigation company now operating the Bannockburn Scheme under private ownership is currently charging \$25.00 per hectare which includes provision for significant reconstruction and renewals currently being carried out.

The difference between the Bannockburn Scheme operation and the other Central Otago schemes was that the Bannockburn Scheme had been run by a Board made up of the users, whereas the other schemes were run by the Crown.

One further interesting example to note demonstrating the advantages achieved through private ownership is a study of the completion of the Maniototo Irrigation Scheme. The Government estimates to complete that scheme were in the order of \$15 million dollars. Under private ownership, the irrigation company actual costs of completion were \$1.3 million dollars, i.e. less than the GST content of the Government's estimated costs. The privately completed scheme produced the same water to the same locations as the proposed Crown scheme. One of the factors which enabled the irrigation company to achieve major savings was reducing the standard from that of a 100 year quality to a quality in life span which more properly reflected the planning period for irrigation demand and which was more suitable to the operational circumstances of that scheme.

The reason for the regulatory management of community irrigation schemes was that at the start of the century the Government through its Public Works Department was heavily involved in the development and growth of national works including roading and rail and including, for Central Otago, the very important irrigation development. Part of this process of irrigation development was the taking over of mining rights, aggregating them and making them available back to the community as community irrigation schemes. There was also a number of capital irrigation works by the Government during the depression years. It can therefore be seen that the original Central Otago irrigation schemes' development, ownership and operation was a consequence of the social and political climate at the time and was associated with rural land subdivision, allocation and development. History has unfortunately demonstrated that the retained

ownership and operation of the irrigation schemes by the Crown was to the detriment of the public and farmers in terms of expenditure, inefficiencies and losses.

The Government has now privatised the irrigation schemes transferring ownership to the irrigators who have formed co-operative irrigation companies to own and operate the schemes. The result is that the farmers are managing the water as a co-operative retailer providing:

- Maximum efficiency
- Lower cost to the irrigators
- Provision of funds for future renewals
- Lower operating costs
- No ongoing Government subsidy and no ongoing Government administration costs
- Better resolution of conflict between irrigators and management.

It is conceded that the terms of settlement of the privatisation process were sufficiently favourable to give a good chance of survival of the schemes however the fundamental factor responsible for the recent success has been the innovative, energetic, efficient and flexible management by the irrigation schemes by the farmers themselves.

The irrigators are not only benefiting from low irrigation charges but are also receiving the benefit of innovative methods to solve problems such as looking to pipe relining rather than replacement, the provision for renewals and an ability to resolve disputes.

The wider irrigator interests are protected by the structure of irrigator ownership of the shares in the irrigation companies, which are linked to the irrigators water entitlement. The company documents have been drawn up to protect the irrigators.

In summary, the dismantling of the regulatory ownership, control and management of the irrigation schemes has resulted in greater efficiency, greater innovation, lower costs, greater long term security and greater protection to the individual irrigators and the wider community. The old regulatory management would have resulted in a collapse of the systems in a user pay environment.

2. PEST CONTROL BY REGIONAL COUNCIL

The Regional Council administration of pest control in Central Otago has resulted in the following justified complaints:

- High cost in terms of administration and implementation.
- Ineffective implementation.
- Cross subsidy from the efficient farmers carrying out secondary control themselves who fund, by way of the rating system, inefficient farmers carrying out no secondary control.
- Reliance on a single method of control being 1080 poisoning.
- Applying control techniques after rabbit numbers have got out of control.
- The system does not provide the protection of market pressures or market options on cost control and effective implementation.

These complaints are an inevitable result of the regulatory/bureaucratic centralised management of rabbits. Looking at the farmers who have successfully taken on themselves the control of the rabbits, there has been a reduced reliance on 1080 poisoning, a variety of secondary control methods used and rabbit numbers are maintained at a much lower level.

The solution to achieving a much more efficient, cost effective and greater rabbit control is to bring the

responsibility of control back to the farmer. The farmer knows his property best and stands to make the greatest gain from his innovative methods and hard work in rabbit control. The regulatory system of management is simply counter productive.

Your response might now be "what about the farmers who won't control the rabbits resulting in a sustainability problem and a spread of rabbits to properties well controlled". My response is that we can't do totally away with regulations. There needs to be an underlying requirement for the Regional Council to police the effective control and implement such control, at the cost of the individual farmer concerned, when that farmer fails to provide a specified minimum control. The critical issue in this case is not the importance of requiring control by regulation but rather to remove the implementation by regulatory body unless individual farmers fail to carry out their responsibilities. It is the demarcation point which is important rather than an argument for the total elimination of any regulatory control.

Incidentally, the Regional Council's monopoly on 1080 poison application should be terminated. There should be put in place a licensing system for applicators and in that way market forces would create the best and most cost competitive performers in terms of 1080 applicators.

3. 1948 LAND ACT

From reading the address of the Honourable Mr C F Skinner (Minister of Lands) on moving the second reading of the Land Bill, you will note that the reason behind pastoral leases was for soil conservation purposes, to prevent erosion, to prevent overstocking and to regenerate the land contained in

the leases (Hansard Parliamentary Debate on the Land Bill [1948] 3993 - 4243).

After four decades of regulatory control under the Land Act:

- The high country sustainability issues are of more concern and the debate more intense.
- There are extensive examples, especially in the McKenzie country of unproductive land.
- The Land Act has been attempted to be used by the Department of Conservation to protect their perceived areas carrying conservation values (the PNA/RAP classification) by introducing conservation values to the discretionary decision making process under the Land Act to an extent whereby conservation values have interfered with the good husbandry and exclusive pastoral rights of the pastoral lessee and to an extent beyond the powers of the Land Act.
- The farmers are concerned about the security of their perpetually renewable leases in terms of possible statutory amendment.
- Farmers are severely limited in terms of their development and use options for the land.
- The Department of Conservation is now concerned that (following a successful challenge of their rights of influence under the Act) the Act does not give DOC the protection powers that DOC required.
- Sectors of the general public want continued Crown control of pastoral leases for public access not understanding that the farmer has the exclusive right under the pastoral lease regime and could stop public access (subject to the easement and reserve provisions of the Land Act).
- The Land Act is not really dealing effectively with the sustainability issues.
- The cost of Crown administration of pastoral leases is more than double the rental received.

- The soil and vegetation protection provisions of the Land Act are duplicated, surpassed and rendered obsolete by the more comprehensive provisions under the Resource Management Act.

Four decades of regulatory control have passed only to demonstrate the failure and expense of the regulatory control of pastoral leases.

The solution is a tenure change incorporating the freeholding of pastoral leases and using the Resource Management Act to protect the sustainability issues with respect to the freehold farm land. Selected areas of high conservation or recreational value could be retained in public ownership, acquired off the farmers by way of a trade off. (Public ownership of such land creates its own particular problems in terms of sustainability maintenance and rabbit control which I am not detailing in this paper.)

4. WATER RIGHTS MANAGEMENT

Under this heading I consider the regulatory approach to water rights management and a market alternative. The goal of a good water management regime is the appropriate allocation of the water resource in an economically and socially acceptable fashion, in a manner which meets the changing economical and physical environment, in a way which achieves the best efficiencies in water use and in a way which protects environmental and other in-stream values.

The regulatory management of water, which appears to be the current preference of the Regional Councils, is to totally control the water allocation under a water permitting system revolving around short term permits to ensure an ability to reallocate on expiry to other users either abstractive or in-stream should circumstances require it, so as to meet the changing economical, social and physical environment and to

provide a fair allocation between competing water users. In my opinion this system is possible in theory but doomed in practice for the following reasons:

- (a) Short term permits and the possibility of a refusal of a renewal of the permit on expiry so that it can be allocated to a different user (whether that be environmental in-stream use or another abstractive user) results in total insecurity and consequently threatens investment and development, which in turn threatens; efficiencies, the investment into new opportunities and the best use of water.
- (b) The refusal to reissue permits on expiry or the carrying out of major reallocations of permits or priority reallocation to different groups at various intervals, would result in social and economic upheaval, would be socially unacceptable and would clearly result in conflict and antagonism on the part of those permit holders who have had their water rights/permits compulsorily removed or benefits eroded by priority changes or by introducing more abstractive users to the system thereby eroding the rights of prior water users.
- (c) Applications to regulatory authorities encourage over exaggeration of submissions in an effort to succeed with the applications and also encourage over applications for water requirements to build in a buffer against a cut-back situation.
- (d) The system is based on advocacy, competition and conflict, which polarises the parties and which is counter productive when trying to achieve compatible sharing and lateral resolutions to water shortage problems.
- (e) The system is inflexible and is not immediately

responsive to changes in the markets and environmental and human demands.

- (f) The human failure element is ever present.
- (g) The system requires full participation of all existing and potential users, however, the contradiction is that the expense, awareness and time commitments involved in such a process, narrows the field of the participants. This results in decision making without full knowledge or full participation.
- (h) The system is expensive for all participants, both in terms of time and money.
- (i) The system carries with it the risk of expensive and resource wasting appeals.
- (j) The results are uncertain.
- (k) There is no easily accessible method for weighing up the opportunity cost of alternative users.
- (l) There is no market created opportunity cost with respect to water which therefore denies an incentive for water use efficiency.
- (m) Such a system is usually non-priority based which permits new entrants and the over-allocation, during times of shortage, of the water resource. This forces a pro-rata reduction of available water on existing users and increases the unreliability and insecurity of the water supply.

I suggest that the much preferred alternative to this regulatory management of water is an arrangement which provides for a secure water right necessary for capital

investment and production both on-farm and off-farm. The two essential ingredients of security of water rights are; security of tenure and security of priority. Security of tenure is a long term water permit. Security of priority is an arrangement whereby existing permit holders are unaffected, in terms of their water availability, by new permits subsequently issued. Such a system, linked with the market mechanisms for easy transferability of water permits rather than the regulatory reallocation approach provides the following benefits:

- (i) Confidence and protection for capital works and the high cost of maintaining and refurbishing high cost structures including irrigation works to improve the more efficient use of water and water augmentation during water short periods.
- (ii) The long term of security of rights can be maintained yet there is immediate availability of a responsive method for transferring permits whenever circumstances require and can support a change. You therefore have long term security for protection and encouragement of investment, yet still have available a method of short term responsiveness and flexibility of transfers.
- (iii) The movement of water permits is voluntary rather than imposed.
- (iv) The system encourages communication and negotiation between the parties to bring about a shared and multiple use of the resource.
- (v) Tradability works at a level that people are familiar with and can readily participate in.
- (vi) The participation expenses are minimised and hearing expenses are avoided.

- (vii) It identifies the opportunity cost of the inefficient use of water and under utilised water rights.
- (viii) It identifies the relative value of water to competing users so that the true cost of transfers is apparent.

Incidentally such a system provides better benefit for in-stream values and users in that the system promotes greater efficiencies and provides a secure framework in which to establish and maintain water storage structures and other off-farm capital works.

I recognise that some regulatory control under the Resource Management Act is required to provide for minimum in-stream flows to protect the "ecological bottom line" and that on particular rivers, a greater level of minimum in-stream flow, above the ecological bottom line, is desirable for environmental/recreational purposes. Such minimum in-stream flows for environmental/recreational purposes require the same protection of security of tenure and priority and would benefit from the transferability regime just as the abstractive users.

This analysis of water management options highlights the desirability of providing an alternative secure tradable mechanism and market tradability to the regulatory approach of allocation.

A good working example of competing water users resolving their differences and reaching a sound agreement to the benefit of both parties, is the agreement between the Teviot Irrigation Company Limited and the Otago Central Electric Power Board with respect to their shared use of the water resource on the Teviot River (in Central Otago). The consequences of the shared arrangement and the previous agreement between the Crown and the Otago Central Electric Power Board, is that the high cost capital works undertaken

by the Power Board benefits the irrigation scheme as the historic water user and water right holder. The parties share the common works and have reached agreement between themselves as to the abstraction of water to give best effect to both users. Throughout this arrangement, the secure water right (which was a secure mining privilege) was preserved and made available to both users. This was much preferred to a system of reallocation of the right or the overissuing of the available water, by a regulatory authority, which would have merely bought the parties into conflict and would not have achieved the common sharing and efficiencies which in fact resulted.

I suggest that a similar symbiotic arrangement resulting in substantial capital investment in water storage and use, the sharing of the capital works, the sharing of the water right on terms acceptable to both parties and the retention of a secure water right, would not have been achieved under a regulatory allocation system.

These four examples of high cost in damaging regulatory management relating to farm land and water fail because they lack the key ingredients of; accountability, incentives, efficiency, motivation, flexibility and security. These factors are best achieved by self management and implementation. If some regulatory control is required to protect the wider public good, this should be provided judiciously and should without doubt not extend into implementation.

In summary therefore:

- The irrigation scheme example is one where the Crown should have no role whatsoever in irrigation scheme management.
- The pest control example demonstrates a regulatory role for the Regional Councils in terms of setting standards and policing but not in implementation.

- The Land Act model demonstrates at the worst the failure, and at the best the obsolescence, of a particular regulatory approach.
- The water management regime model demonstrates the danger of regulatory management becoming too extensive and resulting in a damaging or potentially damaging regime which does not achieve the most desirable outcome.

If a regulatory system is to apply in relation to the rural sector it is essential that the regulatory authority (who sets the regulatory requirements and standards) and the farmers (who must implement the regulatory standards) are able to work in co-operative partnership, with the demarcation points between the parties defined at a point which promotes maximum success and efficiencies and is most cost effective.

RESOURCE MANAGEMENT ACT - REGULATORY OR NON-REGULATORY

The Resource Management Act has enormous potential to influence, control or manage our use of the land and water.

The fundamental purpose of the Act is to promote the sustainable management of our natural and physical resources. However the purposes and principles extend to sustainability, protection of the environment and protection of conservation values. This Act has the potential to touch everything we do. It is a very important piece of legislation both in terms of land, water and air use and in terms of our future generations use and enjoyment of these resources.

Although the Act is clearly regulatory in the sense that it requires regional and territorial authorities to administer the functions under the Act, in my mind the Act doesn't predetermine a regulatory approach. I concede that on the face of it, you can't carry out a land or water use without the presence of resource

consents, hearings, tribunal appeals and land management officers. That is the ultimate in regulatory management. On the other hand these methods are not necessarily the consequence of resource management under the Act. The Act provides for uses under policy statements and management plans as permitted uses which is a process avoiding the resource consent requirements.

It is worthwhile at this point to refer to the speech by the Minister for the Environment when moving the third reading of the Resource Management Bill which explains the legislative intent in relation to controlling activities. I have annexed as Appendix C the extract from Hansard (1991) page 3016. I have copied out this extract in full as it does provide some enlightenment as to the legislative intent. From reading this extract you will note that the Government has moved from planning activities to regulating only the effects. The intention is clearly to provide environmental bottom lines but to legitimise intervention only to such degree as is required to achieve the purposes of the Act. The outcome should be that the use and development of resources will only be restricted to the extent required to protect against adverse environmental effects.

It is also relevant to refer to section 32 of the Act which requires that any authority administering the Act must consider whether:

- (a) Their proposed methods are necessary to achieve the purposes of the Act; and
- (b) Whether there are other means to achieve the purposes including provision of information, services, incentives or levying of charges; and
- (c) The reasons for and against adopting the proposed methods considering alternatives or the option of no action.

In relation to the above, the authority must:

- Carry out an evaluation of the likely benefits and costs of the alternative means including an assessment of how likely the method will be in achieving the objective and including implementation and compliance costs.
- Be satisfied that the method is necessary in achieving the purposes of the Act and is the most appropriate means of exercising the function having regard to its efficiency and effectiveness in relation to other means.

In other words, the authority must choose the best methods having regard to; achieving the purposes under the Act, efficiency, effectiveness, and implementation and compliance costs. It is this section 32, more than any other section in the Act, which provides protection against ineffective and high cost regulatory management and implementation.

What I am saying is that the Act doesn't predetermine a regulatory approach. Rather, it is the methods used by the administrative authorities in giving effect to the Act which is critical.

Considering that Regional Councils are at the moment determining their methods, policy statements and regional plans to deal with the sustainability issues, now is the critical time for land users to influence the methods and controls for administering resources.

My next section therefore has been included in this paper to provide some suggestions on how the farming community can assist in avoiding a regulatory management of their farming activities.

HOW TO ACHIEVE NON-REGULATORY FARM MANAGEMENT UNDER THE RESOURCE MANAGEMENT ACT

I have written this section of my paper as a sequential plan rather than as a narrative.

1. Action, to be most effective, needs to be taken before the Local Authority has prepared its draft policies. The key is to influence both councillor and staff thinking before they irreversibly determine their own views on the issues. This means that the time for action is RIGHT NOW.

2. Understand the reasons for minimising regulatory control in terms of environmental effects and certainly in avoiding any regulatory involvement in implementation, i.e. understand and identify the threat posed by the Resource Management Act and its interpretation and implementation by Regional Councils. The examples given by me relating to pest control and water allocation management earlier in this paper demonstrate the failure of regulatory control. In addition to these examples, I make the following further comments:
 - (a) The Resource Management Act requires Regional Councils (which reference to Regional Councils is also a reference to any unitary authorities which take over their role) to administer the rural resources so that they are used on a sustainable basis with any adverse environmental effect to be minimised or avoided.

 - (b) Traditionally statutory authorities have carried out their administrative functions by regulation, field officers management, and notified application procedures.

It is suggested that, with respect to resource management, if a Regional Council chose to carry out its administrative functions in this way:

- It would not be effective;
- It would be time consuming for all concerned;
- Farmers' independent decision making would be regulated and managed by policy and officials;

- There would be limited participation by farmers in service delivery which could be carried out in an inefficient and expensive manner;
- The farmers would be paying for the administration, service delivery and monitoring as the resource users.
- Such a system could not easily reflect climatic and physical differences or different management practices.

(c) As the farmers will be paying for the resource management and control and as their farming businesses will be affected by the methods chosen to achieve the purposes of the Resource Management Act, and because the farmers best know their land and visually monitor it daily, the farmers are best to design and implement sustainable management methods on-farm. In fact, those same decisions on sustainability and environmental effect are also important from a farmers own on-farm management plan situation.

To put it briefly, the farmers own the problem, they will have to pay for the resolution and therefore they must be most active in creating and managing the solutions in terms of implementation.

(d) The Regional Council threat is therefore its implementation of the Resource Management Act, i.e. a concern of high cost and inflexible regulatory control.

3. Identify the action to be taken by the farmers to bring about an outcome satisfactory to the farmers. I suggest the process should be:

- Establish in the minds of the decision makers and interest groups the credibility/professionalism of the farming community.

- Form professional groups of common interest.
- Balance the message in the minds of the public.
- Establish in the minds of decision makers the farmers' perspective.
- Influence the Regional Council policies and decisions.

These processes can be divided up into a key catalyst and the support items and the sustaining items.

The catalyst (i.e. the single direction which would start giving effect to resolving the threat) is:

- The forming of groups.

The support items are:

- Establish in the minds of decision makers and interest groups the farmers credibility and professionalism.
- Establish in the minds of decision makers the farmers' perspective, on site.

Sustaining the direction would come by:

- Educating the public.

4. (a) I have recorded that the key to establishing farmer credibility, educating a Regional Council and the public and influencing a Regional Council is the effective use of land management groups. This process is broken down into two parts:

- (i) The formation of groups which I discuss under Part 5 which follows; and

(ii) The more general matters in terms of the strategy and effectiveness of the groups which I discuss under Part 6 which follows. This part deals with such things as the importance of standards of conduct, full farmer support of the group and a strategy for dealing with a Regional Council.

(b) The purpose of the group is:

- To firstly increase the group's own area of influence, control and independent decision making in terms of on-farm sustainability implementation and to decrease that of the Regional Council; and
- Secondly to increase the Regional Council's contribution in terms of sensible and workable policy establishment, research, education and facilitation.

(c) The basic principles which need to be impressed on the Regional Council could be along the following lines:

- The farmers are best to design and implement sustainable management methods on farm. As the farmers are paying for the resolution of their own problems, they must be most active in creating and managing the solutions.
- Co-operative land management groups and peer pressure is the best way to achieve farmer support.
- Successful sustainable land management in the farming situation requires full farmer support.
- The Regional Council should encourage co-operative land management and farmer initiative to implement sustainable management.

- The Regional Council should use its resources to support co-operative land management and support sustainable land management by promoting research, studies and education.

- (d) It is important to keep the issues and points simple when presenting a proposal to the farmers to establish the land management groups and also to the Regional Council when pursuing the influencing of its policy.
- (e) The greatest influence would be obtained by a unified and co-ordinated approach by representatives of all the land management groups of a particular district. This entails a co-ordination of the representatives of all the groups in a particular district and a good level of communication between those groups.

5. The process of implementing the groups is:

- (a) Define the aims, objectives and goals for the group.

This gives the group its meaning and provides a reason and motivation to initiate the group and for the members to attend.

- (b) Establish tentative initial boundaries for the purposes of initial communication with proposed members. I feel that once the group is up and running the ultimate boundaries will naturally form themselves.

The initial boundaries could be geographic or could be a mixture of geographic definition and the involvement of existing groups.

Once the initial tentative boundaries of the group is defined, the prospective members can be targeted and informed as to the purpose, aims, objectives and goals of the group.

- (c) Achieve community support. Full support is needed if the group wishes to establish its credibility and influence with the Regional Council, i.e. the group needs to be able to say that it represents almost all of the farmers in that particular area.
- (d) Redefine the groups aims, objectives and goals as an ongoing process.

In following the above framework I suggest that the following should be considered:

- (i) The areas "movers and shakers" are needed to get the process started. These drivers provide the energy to establish the group. There must be at least two working together. They would communicate firstly with those people who they considered would be enthusiastic followers of the concept and together work on establishing the group.
- (ii) Inform the community of the reasons for the group:
 - By holding a community meeting.
 - Call this meeting by letter detailing the background, need, aims, etc.
 - Phone around after the letter.
- (iii) Reasons for the group include:
 - What the Regional Council under the Resource Management Act and other outsiders could do, i.e. identify the threat.
 - If the individuals want self implementation it appears that this would most likely be supported by the Regional Councils if groups are established.
 - Co-operative management shares information and reduces the individual costs. It may also assist with more effective on-farm implementation and once the groups are formed and if the representatives of

the different groups combine together with a view to presenting a unified policy approach to the Regional Council, the groups would be much more effective in influencing future policy than any individuals.

- (iv) Activate the community in support of the group.
- (v) Include local conservationists (which phrase is intended to include environmentalists). The logic behind this is that with the local conservationists' support the more militant full time paid advocates of the conservation groups may become less polarised (i.e. opposed), may have less influence and will certainly be better informed. It would be more effective to educate and make more aware the "rank and file" of the conservation groups by involving them in the land management groups and giving them a voice, rather than the only communication coming from opposite positions when advocating a farm management practice in front of a Regional Council or Tribunal.
- (vi) Approach existing community organisations. Interrelated with this is the concept of your co-operative land management group providing an umbrella structure for subgroups.

6. The key to establishing credibility of the farmers is the establishment of the groups. This establishment has already been detailed by me under the preceding part number 5.

As well as establishing the groups, the credibility of the groups and their influence needs to be determined. The credibility of the groups and the success of the groups:

- (a) Requires a high standard of conduct of its members. This will require some monitoring of members and application of peer pressure.

- (b) Requires that the group reflects the farming community views, i.e. most of the farmers in the particular area, and must convince the Regional Council that the group does represent this group of farmers.
- (c) Requires a strategy of influence:
 - Present a united case to the Regional Council.
 - United both in terms of full support from the group's own members and united in terms of a combined and co-ordinated approach from all the group representatives to the Regional Council.

The process should then be to:

- (i) Express basic simple principles to the Regional Council:
 - What is necessary to gain and maintain farmer support.
 - What will be the consequences of a failure to gain and maintain farmer support.
- (ii) Present a professional case to the Regional Council.
- (iii) Invite Regional Council representatives to visit on site for a presentation of the farmers' perspective.
- (iv) Seek a commitment from the Regional Council that it takes the groups and issues seriously.

REGIONAL COUNCIL v UNITARY AUTHORITY

Currently in Otago and no doubt in other centres in New Zealand there is some different opinions as to the establishment of unitary authorities in the place of Regional Councils. My opinion on this issue is that the following fundamental matters are of importance in determining the right authority:

- The resources available for technical research monitoring, education and facilitation. Regional Councils, with their large urban populations, would have greater resources available.
- Availability of quality personnel. Again Regional Councils with their larger rating base should be able to have available a higher quality of personnel.
- Which authority will provide the most innovative, non-regulatory policies. This could be either type of authority. Naturally, the threat of a unitary authority should be the ultimate persuasive influence in bringing about a sensible management approach from a Regional Council.
- If unitary authorities were to prevail there could be some savings in administration and councillors costs, however there would be substantial duplication in policy and plan developments, research, monitoring etc, between unitary authorities, unless there was a significant degree of communication, technology transfer and information transfer between unitary authorities in a region. If unitary authorities were to prevail, I believe that the advantages which could be achieved by the Regional Council in terms of greater resources and lack of duplication, would need to be achieved by unitary authorities by interaction and communication between the unitary authorities.

ECONOMIC ISSUE

At the end of the day, this total paper is about the higher costs posed by regulatory control in relation to farm management. These costs are incurred through direct payments for such things as resource consent fees, lawyers and payment of rates and services and also comprise of indirect costs such as demanding more time input from the farmers, a loss in efficiency and a loss in

production. This adds up to a loss of a competitive sale price. These losses can all be considered as transaction costs resulting from the regulatory system.

The higher the transaction costs the greater a wedge is driven between the crossing point where demand equals supply.

I have attached as Appendix D an extract from Mansfield E; Micro-Economics Theory and Applications, 227. This copy extract demonstrates the effect of transaction costs on reducing the quantity of goods able to be sold. The ominous message is that if the transaction costs are high enough there may no longer be any profit to be made out of those goods.

The issue of costs in production and transaction costs is of major importance to the farmer. Accordingly this issue of regulatory management is an important management issue and I believe is one which can be influenced by effective farmers.

SUMMARY

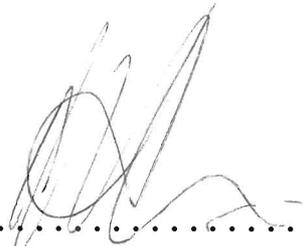
In this paper I have sought to:

- Demonstrate examples of the failure and expense of regulatory management in the farming sector and have shown preferred alternatives.
- I have concluded that the Resource Management Act is not by necessity an unduly regulatory and onerous piece of legislation. Rather, it is the chosen method of implementation by Regional Councils or unitary authorities which is of fundamental importance.
- I have demonstrated a model, in terms of the land management groups, to influence the bringing about of a non-regulatory farm management under the Resource Management Act and have suggested how to go about setting up such groups.

- I have briefly provided some comments on the issues between Regional Councils and unitary authorities in terms of the preferred authority, from the farmers' perspective, in carrying out the Resource Management Act.

- I have concluded by drawing attention to the on-farm impact of over-regulatory management in terms of a farmer's ability to trade profitably.

Generally, I have sought to establish that over-regulatory control of farm management is not desirable, is avoidable and can be influenced by effective farmers, who at times will need to seek professional assistance in achieving the most desirable outcome.



.....
John Williamson
Alexandra

14th November 1992

ACKNOWLEDGEMENTS/REFERENCES

1. The financial data relating to the Crown operation of the Central Otago irrigation schemes detailed under my section "The Failure of Regulatory Management in the Farming Sector - Irrigation Schemes" is taken from "New Zealand Community Irrigation Schemes Historical Accounts up to the Completion of the 1987/88 Irrigation Season" Volume One Report on Irrigation Financing December 1989 by B R White & P L Blackwood and prepared for MAF Technology.
2. Don Bagnall, the Irrigation Adviser to MAF Policy Wellington assisted me with some background information on the reasons for the original Crown ownership of the old Central Otago Irrigation Schemes. However naturally, I take responsibility for the comments expressed on this matter.
3. The copy extract from Hansard [1991] with respect to the Resource Management Act is copied from the Brooker & Friend Ltd Resource Management Act publication Volume 1 paragraph A 5.07.
4. The plan, procedures in forming groups and matters relating to the credibility of groups is from work I was involved with in the bringing together of representatives of land management groups in Central Otago, reflects the consensus of the Central Otago groups and is a process being following by those groups.

TABLE A 3.1 General Scheme Data

Scheme Name	Irrigable Area (ha)	Water Availability Area (ha)	No of Irrigators	Legislation	Approved	First Supply	End of Development Period	Form of Capital Liability	Notified Interest Rate (%)	Accumulated Loss End of 87/88 (\$000s)	Operator	Irrigator Organisation
<u>Central Otago</u>												
Ardgour/Beggs	527	527	12	PW Act 10 Charges S199 of PW Act 81	1923/34	1923	n.a.	Int on 1/4 capital	4	598	Works	Formal committee with Tarras
Arrow	930	930	50	PW Act 10 Charges S199 of PW Act 81	1926	1930	n.a.	Int on 1/4 capital	4	1927	Works	Formal committee
Bannockburn	321	321	26	PW Act 10/28	Agreement 1957	1922	n.a.	Int on 1/3 capital	4	1	Irrigators	Elected board
Earnsclough/Blackmans	1159	1159	88	PW Act 10/28 Charges S199 of PW Act 81	1924	1922	n.a.	Int on 1/4 capital	4	988	Works	Formal committee
Galloway	1064	1064	28	PW Act 10 Charges S199 of PW Act 81	1924	1920	n.a.	Int on 1/4 capital	4	combined with Ida Valley	Works	Incorporated society
Hawkdun	3308	3308	60	PW Act 10 & 28 Charges S199 of PW Act 81	1926	1929	n.a.	Int on 1/4 capital	4	3651	Works	Formal committee with Idaburn
Ida Valley	5000	5000	49	PW Act 10 Charges S199 of PW Act 81	1912	1917	n.a.	Int on 1/4 capital	4	4011	Works	Formal committee

TABLE A 3.1 General Scheme Data (Cont'd)

Scheme Name	Irrigable Area (ha)	Water Availability Area (ha)	No of Irrigators	Legislation	Approved	First Supply	End of Development Period	Form of Capital Liability	Notified Interest Rate (%)	Accumulated Loss End of 87/88 (\$000s)	Operator	Irrigator Organisation
Idaburn	228	228	6	PW Act 28 Charges S199 of PW Act 81	1931	1931	n.a.	Int on 1/4 capital	4	158	Works	Formal committee with Hawkdun
Last Chance	983	983	30	PW Act 10 Charges S199 of PW Act 81	1923	1923	n.a.	Int on 1/4 capital	4	1529	Works	Formal committee
Manuherikia	1854	1854	158	PW Act 10 Charges S199 of PW Act 81	1923	1922	n.a.	Int on 1/4 capital	4	3168	Works	Formal committee
Omakau	5560	5560	67	PW Act 28 Charges S199 of PW Act 81	1962	1936	n.a.	Int on 1/4 capital	4	2792	Works	Formal committee
Pisa	1019	1019	17	PW Act 28 Charges S199 of PW Act 81	1955	1956	n.a.	Int on 1/4 capital	4	505	Works	Formal committee
Ripponvale	366	366	35	PW Act 28 Charges S199 of PW Act 81	1955	1957	n.a.	Int on 1/4 capital	4	685	Works	Formal committee
Tarras	1038	1038	12	PW Act 10 Charges S199 of PW Act 81	1923	1925	n.a.	Int on 1/4 capital	4	1534	Works	Formal committee with Ardour/Beggs
Teviot	1386	1386	49	PW Act 10 Charges S199 of PW Act 81	1923	1924	n.a.	Int on 1/4 capital	4	1825	Works	Formal committee

Table 5.1 : Summary of Irrigation Costs

Scheme	Category	Irrigable Area (ha)	Historical Capital Cost-Off Farm (\$/ha)	Standardised Capital Cost-Off Farm (\$/ha)	Standardised Cost of Operations			Standardised Losses	
					Min (\$/ha)	Max (\$/ha)	Mean (\$/ha)	(\$/ha)	% Change 1 year
<u>Central Otago Schemes</u>									
Ardgour/Beggs	Otago	527	165	4493	75.0	173.5	116.2	1202	-5.9
Arrow	Otago	930	341	10840	89.4	225.4	148.4	2194	-4.3
Bannockburn	Otago	321	39	1290	3.1	50.3	18.8	3	-30.8
Earnsclough	Otago	1159	309	6182	62.8	126.6	101.4	903	-7.0
Galloway/Ida Valley	Otago - Large	6064	122	3832	42.8	91.0	64.3	700	-8.4
Hawkdun	Otago - Large	3308	82	1783	82.1	249.3	114.8	1169	-4.6
Idaburn	Otago	228	87	2055	33.7	230.9	93.9	734	+4.6
Last Chance	Otago	983	253	4867	100.0	269.0	161.0	1647	-5.0
Manuherikia	Otago - Large	1884	367	9996	87.1	205.9	139.4	1781	-6.5
Omakau	Otago - Large	5641	124	3864	43.5	80.9	57.2	524	-8.3
Pisa	Otago	1019	196	3074	37.3	143.0	87.4	525	-10.8
Ripponvale	Otago - Hort	386	501	7878	156.1	349.5	233.4	1879	+7.7
Tarras	Otago	1038	342	9854	62.6	187.0	119.0	1565	-6.0
Teviot	Otago	1386	153	4164	81.5	236.2	131.9	1394	-6.8
<u>Mid Canterbury Schemes¹</u>									
Ashburton/Lyndhurst	Canterbury - Large	24535	73	2474	13.1	24.1	16.9	10	-6.4
Mayfield/Hinds	Canterbury - Large	30978	91	3053	8.5	13.2	10.6	4Cr	-592.8
Redcliff	Waitaki - Large	1825	44	1450	22.7	42.5	33.3	171	-8.9
Valletta	Canterbury - Large	7385	71	1151	3.8	13.5	10.8	14	+98.3

Notes 1 Levels costs are included with post-1960's schemes. Rangitata Diversion Race costs are omitted as they do not relate to irrigation.

(c) Amenity values; and

(d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters:"

“‘Amenity values’ means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes:”

A5.07 Legislative intent

It will of course be for the Planning Tribunal and the higher Courts to interpret and apply the section. But the following extracts from the speech of the Minister for the Environment *Hansard* (1991) p 3016, given when moving the third reading of the Bill, give some indication of the legislative content:

“In adopting the present formulation of [section 5] the Government has moved to underscore the shift in focus from planning for activities to regulating their effects of which I have spoken. We run a much more liberal market economy these days. Economic and social outcomes are in the hands of citizens to a much greater extent than they have previously been. The Government’s focus is now on externalities — the effects of those activities on the receiving environment — and those effects have too often been ignored.

“[Section 5] enables people and communities to provide for their social, economic, and cultural well-being. Significantly, it is not for those exercising powers under the Bill to promote, to control, or to direct. With respect to human activities it is a much more passive formulation. People are assumed to know best what it is that they are after in pursuing their well-being. Rather, those who exercise powers under the legislation are referred to a purpose clause that is about sustaining, safeguarding, avoiding, remedying, and mitigating the effects of activities on the environment. It is not a question of trading off those responsibilities against the pursuit of well-being. Well-being is mentioned because the Bill is, of course, about the effects of human agency on the environment. The Bill would be quite unnecessary if there was no human activity. The Bill provides us with a framework to establish objectives by a physical bottom line that must not be compromised. Provided that those objectives are met, what people get up to is their affair. As such, the Bill provides a more liberal regime for developers. On the other hand activities will have to be compatible with hard environmental standards, and society will set those standards. [Section 5] sets out the biophysical bottom line.

“Unlike the current law, the Bill is not designed or intended to be a comprehensive social-planning statute. It has only one purpose — to promote the sustainable management of natural and physical resources, and it does that in two ways: first through the allocation of resources in public ownership such as the coast and geothermal energy; and, secondly, through limiting the adverse environmental effects of the use of natural and physical resources. For the most part, decision makers operating under the Bill’s provisions will be controlling adverse effects, especially in relation to the use of private land. The Bill should be seen as legitimising intervention only to achieve its purpose. To limit the reasons for and focus of intervention is intended not only to achieve sustainability of natural resources, but also to facilitate matters for those who seek consents.

“Benefits will flow from there being fewer but more targeted interventions. Better environmental quality will be achieved with fewer restrictions on the use and development of resources, but higher standards in relation to their use.”

A5.08 Relationship with WSCA67

For a discussion of the interpretation of “sustainable management” in subs (2) and the “balancing” test which applied under the WSCA67, see WR2.2. •

6. Matters of national importance—In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

18. Effects of Transaction Costs on Price and Quantity

In previous sections, we have assumed that no middlemen existed who facilitated the workings of the market by helping to match up buyers and sellers. In many real-life markets, such middlemen play an important role. Among other things, they often help to provide relevant information to buyers and/or sellers, to execute whatever sales contracts are involved, and to help guarantee that the good is of the proper quality and that the buyer will pay the seller promptly and fully. For services of this sort, the middlemen receive a share of the price paid for the good. For example, in the New York Stock Exchange, a purchaser or seller of a stock must pay a commission to the broker handling the transaction. Also, there is a spread between the bid price (the price to a seller) and the ask price (the price to a buyer); that is, the former price is less than the latter price. This spread goes principally to the Exchange's specialist who continually stands ready to buy or sell this particular stock. To stay in business, the specialist must pay less, on the average, for a share of the stock than what he or she receives for it.

The costs of these middlemen's services are often called *transaction costs*. What are the effects of these transaction costs on the equilibrium price and the equilibrium output of a good? For simplicity, assume that the transaction cost is proportional to the amount spent on the good. In particular, suppose that the transaction cost per unit of the good sold equals AB in Figure 8.20. That is, for every unit of the good that is sold, middlemen must be paid an amount equal to AB . Under these circumstances, there will be a gap between the price to the buyer and the price to the seller. In Figure 8.20, the equilibrium price will not be OP , as it would be if transaction costs were zero. Instead, the price to the buyer must exceed the price to the seller by AB , because this spread is required to pay the middlemen. Consequently, the price to the buyer must be OB and the price to the seller must be OA , because this is the only pair of prices differing by AB where the quantity supplied equals the quantity demanded.

Clearly, the effect of a transaction cost of this type is to drive a wedge between the price to the seller and the price to the buyer—and the larger the transaction cost per unit of the good sold, the bigger the wedge driven between these prices. Further, the effect of the transaction cost is to reduce the quantity of the good that is bought or sold. Whereas the equilibrium quantity is OQ when the transaction cost is zero, it is OQ' when the transaction cost is AB per unit of the good sold. This demonstrates an important point: As the transaction cost per unit of good sold increases, the amount of the good sold will tend to decrease. Eventually, if the transaction cost becomes big enough, the market for the good will cease to function at all; that is, the good will no longer be traded. This has happened to some commodities. For example, the market for used clothes has largely disappeared in the United States in recent years. Because the cost of selling used clothes is now so high relative to what people are willing to pay for them, there is no longer any profit to be made by trying to sell most types of used clothes; instead, they are thrown out or given away.

228 Price and Output under Perfect Competition

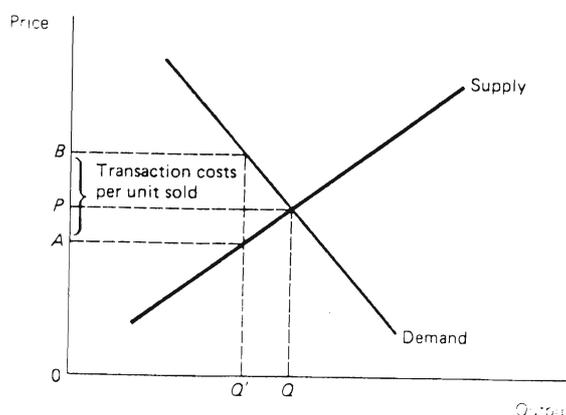


Figure 8.20 Effect of transaction costs on price and quantity

EMBARGOED UNTIL 3.30PM

PRESS RELEASE

RT HON GEOFFREY PALMER

AUGUST 4 1989

MINISTER FOR THE ENVIRONMENT

ENVIRONMENTAL PROTECTION ENHANCED

An exciting new era in environmental protection will get under way next year, with the establishment of an agency for environmental protection, Environment Minister Geoffrey Palmer announced today.

The new agency would be set up as part of the resource management law reform.

It would have important responsibilities in two major areas. It would deal with major pollution issues and it would be responsible for assessing and controlling hazardous substances.

"This move will give the environment a strong voice in the way we manage our resources," Mr Palmer said.

"The present environmental protection system is fragmented and inconsistent. It is a maze. It doesn't make sense and, more importantly, it doesn't work.

"We are an industrialised society. Despite our relatively small size and clean, green image, some of our environmental problems are quite serious

"We are going to set up a system that works for the community and for the environment we all cherish.

"Many groups have argued that a single streamlined and effective organisation is the best way to give the environment a voice."

The new ~~agency~~ would:

- * set national standards for pollution, waste management, hazardous substances and hazardous installations;
- * assess and identify substances that are hazardous to the environment and/or to human health;
- * develop workable controls designed to manage the importation, storage, use and disposal of hazardous substances;
- * develop a manifest-based tracking system for very hazardous substances;
- * develop a workable system for monitoring pollution and hazardous substances;
- * develop a centralised data base, bringing together current information from diverse sources;
- * provide technical advice and ensure adequate training on major pollution matters, and on hazardous substances issues.

It would be formed by combining functions currently undertaken by the Pesticides Board, the Animal Remedies Board, the Radiation Protection Advisory Council and the Toxic Substances Board.

The new agency would be set up in the Resource Management Act to be introduced into Parliament later this year.

A further package of legislation dealing with specific powers and functions would be introduced next year, Mr Palmer said.

The proposal for an agency for protection of the environment originated the November 1988 report of the Inter-Agency Co-ordinating Committee on Hazardous Substances.

The need for an agency was highlighted in many submissions to the Government on Resource Management Law Reform.

"Many people - industry, environmentalists, farmers, individuals - spoke their concern that pollution of air, land and water is a growing problem New Zealand.

"Many people endorsed the need for a new agency, and the Government has listened to that concern," he said.

The Manukau Harbour was a graphic example of how the old administrative systems had served the environment poorly. The harbour had been severely damaged by toxic heavy metals, waste oil, chemicals and other pollutants. The situation was made worse by the total lack of any integrated control over pollution.

The fact that pollution controls were currently operated by various authorities lay behind the problems authorities had experienced in trying to stop pollution in their areas, said Mr Palmer. Each agency or authority usually dealt with only one form of pollution. There were too few links between authorities, and often no consistent national standards.

"Establishing a new agency to protect the environment will put an end to fragmented and inconsistent pollution management. The agency will not ensure national standards are set and maintained. It will involve local government in implementing and enforcing standards," he said.

The new organisation would be a central agency which would work closely with regional and territorial government, and with other central government agencies.

"It will operate in a way that enables public involvement in its decisions," said Mr Palmer.

"It will also be required to be cost effective. To that end I have directed officials to investigate the links between the agency and the functions of the Department of Health, The Ministry of Agriculture and Fisheries and other agencies."

The officials group was expected to report back to Government within six weeks.

"In particular, officials have been asked to ensure that MAF continues to have responsibility for seeing New Zealand meets export market access requirements for food products."

Mr Palmer said the establishment of the agency would mean New Zealand could look forward to a safer future in which pollution will be prevented, or at least be better controlled, and the risks posed by hazardous substances would be greatly reduced.

"All this will result from having proper management systems in place, and with the new agency established to act as watchdog."

ENDS