

Plotting a Course for Agriculture in South Australia

SOUTH AUSTRALIAN DEPARTMENT
OF PRIMARY INDUSTRIES

Final Report
November 1992

McKinsey & Company

52 MARTIN PLACE, SYDNEY NEW SOUTH WALES 2000. TELEPHONE 232 4344. FAX 235 3114.
McKinsey Pacific Rim, Inc. A.R.B.N. 005 131 443. Incorporated with limited liability in Washington State U.S.A. Registered as a foreign company in N.S.W.

November 4, 1992

The Honourable Terry Groom
Minister of Primary Industries
17th Floor
25 Grenfell Street
Adelaide, South Australia 5000

Dear Minister,

We have pleasure in submitting our final report from the Organisation Development Review, entitled *Plotting a Course for Agriculture in South Australia*. This report summarises our findings and recommendations from our 5-month review of the former South Australian Department of Agriculture's activities and strategies. It identifies the changes we believe the new Department of Primary Industries should adopt in its agricultural activities in order to fulfil its mission of the economic development of South Australian agriculture.

Based on our review, we believe that the reorganisation and reorientation suggested in this report would, if adopted by you and the organisation and implemented effectively, deliver significant value to South Australian agriculture. It would reduce the Government role in agriculture and the commitment of taxpayers' funds to this area, but substantially increase the return on those funds through greater competitiveness and performance of South Australia's agricultural industries.

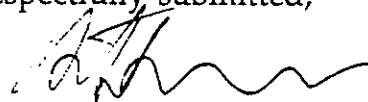
Implementing the suggested strategies and improvements in an organisation as complex as the former Department of Agriculture is no small challenge. It will require a systematic implementation program over at least the next 2 years, clear vision and committed leadership from management, the support and enthusiasm of the Department's employees, and the backing of the Government.

However, with committed leadership and effective implementation, the actions described in this report would make the new Department of Primary Industries the premier Government agricultural organisation in Australia.

* * *

We also take this opportunity to acknowledge the full support and cooperation we have received through the review from all levels of the former Department of Agriculture. We also would like to acknowledge the enormous contribution made by the Department members assigned directly to the team: Peter Gibson, Geoff Auricht, Andrew Barr, John Burley, Susan Burns, Joy Conaghty, Ken Holden, Locky McLaren, Stuart Matthews, Michele Nardelli, Robin Vandegraaff, Roger Wickes and Barry Windle.

Respectfully submitted,



McKinsey & Company

Contents

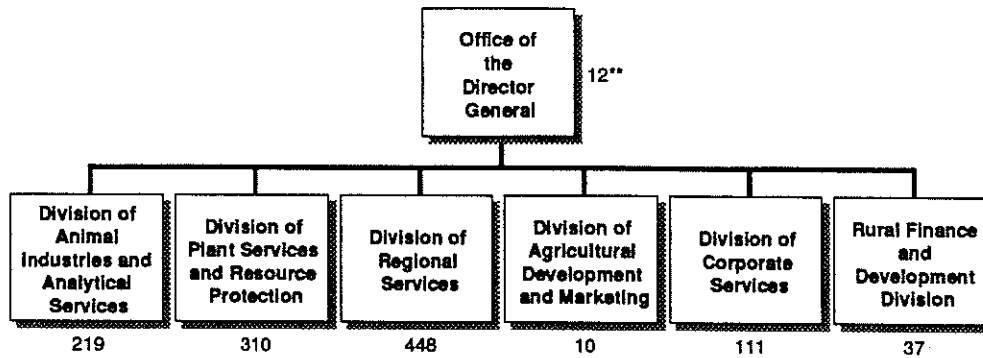
	<i>page</i>
Background	1
Introduction	3
1. Redefine Mission	6
2. Build Strategy Around Highest Value Opportunities	8
The 'Opportunities and Role' Methodology	8
Implications for Balance of Activity	9
3. Restructure to Clarify Accountability	11
Establish 'Program Areas'	11
Reorganise Headquarters Support	13
4. Strengthen Planning and Measurement Processes	15
Build Top-Level Planning Process	15
Identify Key Leverage Points	16
Measure Economic Impact	16
5. Focus on Creating Economic Impact in Existing Activities	17
Focus Extension Effort	17
Refocus Research and Development	21

Develop a More Effective Range of Resource Protection and Regulatory Activities	23
Rationalise Support Services	25
Reduce Number of Sites	29
 6. Initiate a Major Change Program	 31
Plan and Launch Implementation	31
Restructure by May 1993	33
Save \$8 Million by 1994-95	33

Exhibit 1

DEPARTMENT OF AGRICULTURE DIVISIONS

FTEs*



* Full time equivalents

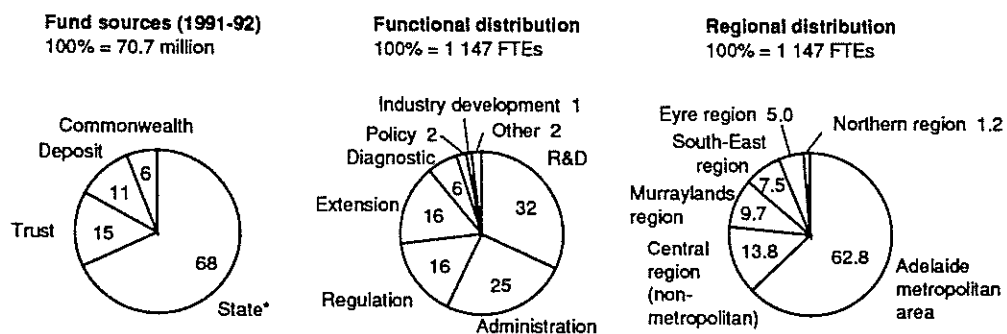
** Includes Northfield relocation staff, executive support staff and the legislative coordinator

Source: Work force database

Exhibit 2

FUNDING AND STAFF SPLITS

Percent



* State expenditure (recurrent plus capital) less receipts

Source: Work force database; Estimates of Payments and Receipts 1992-93; Program Estimates and Information 1992-93

Plotting a Course For Agriculture in South Australia

Background

The South Australian Department of Agriculture employs 1 147 people. Department officers engage in a range of work—including research, extension, regulation, resource protection, diagnostic and analytic laboratory work, administration, finance, and policy formulation. The Department has staff in 46 locations; nearly two-thirds of staff are in metropolitan Adelaide. The Department's 1991-92 net expenditure was \$71 million: \$48 million from the State and \$23 million from other funding sources (Exhibits 1 and 2).

The South Australian Department of Agriculture initiated the Organisation Development Review (ODR) for two reasons. The first was the need to effectively reduce the annual departmental call on State funds by \$13 million between 1989-90 and 1993-94. This amount is the net effect of a target reduction of \$9.4 million, agreed with the Government Agency Review Group, and the need to absorb an estimated \$3.6 million in cost increases. Second, the former Minister and many staff members—including the senior management team—felt that there was a need to review the strategy, activities and effectiveness of the Department.

The Department has adopted an approach, therefore, which recognises that cost cutting should not be the only, or even the primary, focus of the ODR. The ODR has provided an opportunity to review all departmental activities. It is the first comprehensive examination since the Callaghan Report of 1973, which recommended the establishment of the regional structure.

In June 1992, a joint McKinsey & Company/Department of Agriculture team started work on the ODR. The team's purpose was to review the organisation and recommend a strategic development plan. The terms of reference (Exhibit 3) emphasised:

- ¶ The need for the Department to be more market/client oriented in its identification, development and delivery of products and services.
- ¶ The need for the Department to demonstrate the benefits of its activities in relation to its costs.

Exhibit 3

TERMS OF REFERENCE FOR THE ODR

Purpose of the ODR

- To undertake a detailed review of the organisation and recommend a strategic organisation development plan

Issues to be addressed

- The need to be more market/client oriented in the identification, development and delivery of products and services
- The need for the Department to demonstrate the benefits of its activities in relation to its costs
- To clarify the Department's role in natural resource protection, public health, responsibility for rural affairs and economic development of South Australia through agriculture
- Relocation to the Waite campus and the potential for the establishment of Cooperative Research Centres (CRCs) in South Australia
- Opportunities for rationalisation with service providers from other States
- Consideration of funding arrangements within which the Department must operate

The ODR was initially designed to last for 5 months, with a report on the team's findings to be presented to the Minister on October 16.

On October 2, 1992, the Premier announced a reorganisation of State Government departments. The Department of Agriculture has been amalgamated with Fisheries and Woods and Forests to form a new Department of Primary Industries (DPI). The research elements of all three departments, along with those of the former Environment and Planning Department, will be combined into a separate South Australian Research and Development Institute (SARDI)—an administrative unit outside the DPI but within the Minister of Primary Industries' portfolio.

These changes raised some additional questions the ODR team needed to resolve—particularly in considering how the relationship between the Department and the Institute would work, and in deciding how the Department's agricultural activities should be organised in the light of the split¹. These issues are addressed in this report.

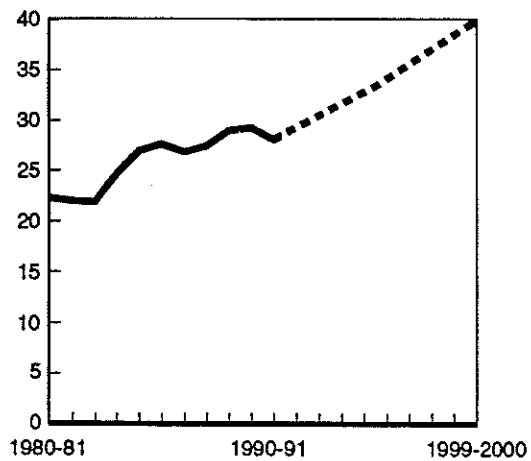
¹ For the purposes of this report, we continue to use the word 'Department' to connote the elements of the former Department of Agriculture which remain in the new DPI. We have not sought to expand the scope of the recommendations to embrace the other departments which have been included in the DPI. Where findings or recommendations relate to SARDI, they are so identified.

Exhibit 4

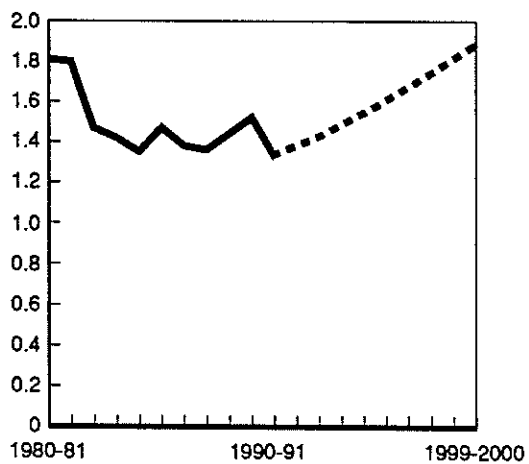
ECONOMIC GROWTH TARGETS*

1991 \$Billions

Gross State product



Agriculture contribution**



- * Based on growth rate targets specified in 'New Directions for South Australia's Economy'. Historical data indicates that a \$100m increase in gross value of agriculture is equivalent to approximately \$50-60m in GDP
- ** 3-year rolling average

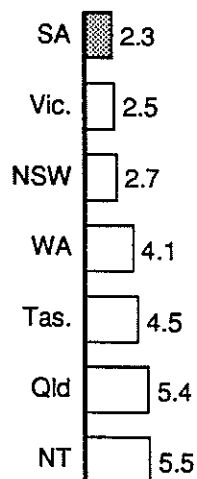
Source: ABS

Exhibit 5

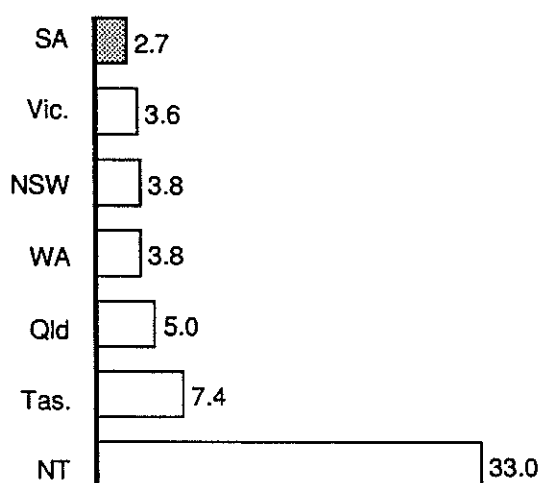
GOVERNMENT SPENDING ON PRIMARY INDUSTRY

Percent

Proportion of budget*



Proportion of output value**



- * Average of 14 years (1977-78 to 1990-91) (except Tasmania, Northern Territory, most recent 9 years); includes agriculture, forestry, fishing, hunting

- ** Average of 14 years (1977-78 to 1990-91) (except Tasmania, Northern Territory, most recent 3 years)

Source: ABS

Introduction

Economic development is the major emphasis of the South Australian Government, as identified in the Government-commissioned study into the future of the State economy by the consultants, A.D. Little in July 1992. In the decade to 1991-92, real growth in gross State product averaged 2.3 percent per year compounded. The Government has set a target of 4 percent annual growth to the year 2000. This implies growth in agriculture's contribution of about \$55 million per year, a major challenge when set against historical performance (Exhibit 4).

Australian States have shown ongoing support to the rural sector by devoting part of their budgets to primary industry (Exhibit 5). In South Australia, about \$50 million per year of State spending has been devoted to agriculture through the Department alone. The State Government also funds other agriculture-related activities, notably research undertaken by other institutions, such as the Waite Institute.

The South Australian Department has built a strong public image and is regarded well by its key constituencies. Over the past two decades, it has been involved in many successful programs such as the national campaign to eradicate bovine brucellosis and tuberculosis; the breeding program for oats and grain legumes; and advances in dry land agricultural output and approaches to soil conservation.

In addition, a departmental survey² of almost 1 000 farmers identified the Department as their primary source of reliable and independent technical information. The Department's officers are seen both by farmers and by farmer representative bodies as a valued resource, and are respected for their commitment to the advancement of technology and to serving the rural community.

But the strengths on which the Department has built its reputation may not be the right foundation for its future role. Trends in agriculture are changing. Traditionally fragmented agricultural industries are tending to concentrate: there are likely to be fewer participants in production, processing and marketing as industries mature. Market forces and government pressures will mean that farming is undertaken by the most efficient economic 'owners' of agricultural productive assets, not necessarily family landholders: a technically literate farm management population will move to the forefront of technical and commercial

² Harrison Market Research Pty Ltd, December 1990

innovation. (Intensive livestock industries are good examples of this shift.) Policy and regulation matters will be decided nationally and implemented at the State level. Research agendas will also be set at a national industry level.

The market inefficiencies, such as those described above, which now justify State government intervention in a broad range of agricultural industries can be expected to lessen. The problem that this poses is twofold. First, the Department must decide how it can add the most value in the short term. Second, the Department needs to know when to withdraw from areas of activity which can be performed better by other agencies or market participants.

This problem is compounded by the Department's broad mission. It is generally accepted both inside the Department and among its stakeholders that the Department supports a large number and variety of activities, and that continued support of these will not be possible with a reduced budget—nor is it desirable if it is to focus on a mission of economic development. Only a mission that forces the Department to focus on its evolving role will allow it to succeed in this new era.

We recommend, therefore, that the Department must focus and reorganise its effort to maximise its impact on the South Australian economy.

Specifically, we recommend that the Department should take six actions:

1. Redefine its mission to emphasise its economic development role
2. Build its strategy around the highest value opportunities
3. Restructure the Department to clarify accountability
4. Strengthen measurement and planning processes
5. Focus on creating economic impact in existing activities
6. Initiate a major program to implement these changes.

These recommendations amount to a fundamental change of direction, organisation and style for the Department. Along with the Department's restructuring into DPI and SARDI, they can provide the impetus for improved management of the agriculture sector in South Australia. Properly executed, the recommendations should help to create more competitive and sustainable agricultural industries.

The ODR team's vision for the Department is that its role would be to **manage service delivery** to clients at every stage of the industry chain. In many cases the Department would facilitate, rather than supply, services: it would deliver services directly only when other providers were not willing or able. It would work closely with other industry groups, its counterparts in other states and with research institutions. The Department's ambition should be to be recognised by its clients and the public as one of the most effective agricultural service providers in the world.

The stakes are high. The work of the ODR indicates that the potential for growth in agricultural contribution to the South Australian economy by 1998 is of the order of \$540 million. This equates to a compounded growth rate of approximately 3 % per year.

In addition, there is an opportunity to maintain current performance in some industries which would otherwise decline by about \$80 million over the same period. The Department has a vital role to play in helping the industries seize both the growth and maintenance opportunities.

The following report is divided into six sections which set out the recommendations in detail.

Exhibit 6

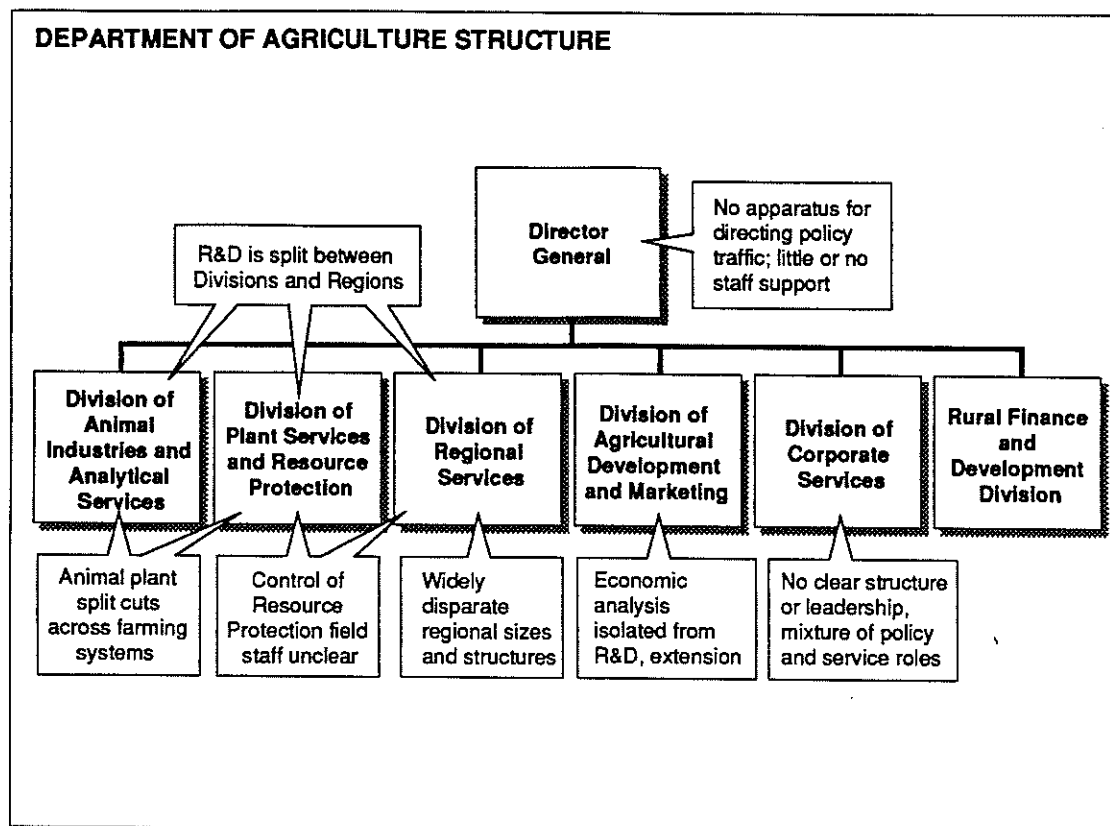


Exhibit 7

PROGRAM FRAGMENTATION

Function	Number of projects or programs	FTEs	FTE/unit	Comment
Research	430	366	0.85/project	<ul style="list-style-type: none"> About half state-funded Less than 1 FTE per project suggests insufficiently focused technology development and transfer
Extension	540	181	0.34/project	<ul style="list-style-type: none"> Diverse client base justifies some fragmentation, but coordination between locations appears inadequate
Regulation and resource protection	63	357*	5.67/program	<ul style="list-style-type: none"> Rapid growth occurring in these activities

* There is significant overlap in the numbers of FTEs involved in the extension, regulation/resource protection and research areas

Source: Work force database

1. Redefine Mission

The Department's current mission is:

To enhance the quality of life for all South Australians by maximising potential gains from agriculture through the pursuit and adoption of excellence in technology and the protection of the State's resources.

Because of its broad nature, this mission has created tension for the Department. A conflict exists for departmental officers between providing community service activities and pursuing programs which advance economic development in the agricultural sector. Further, the economic development goal has not been clear enough in the mission to provide department managers with a decision rule which can be applied in setting priorities.

The diagnostic findings of the ODR point to three areas of weakness in the Department's organisation which constrain its ability to fulfil the economic development goal.

1. Hybrid structure. The Department's structure has evolved from the original Callaghan recommendations as a hybrid between a central divisional structure and a decentralised regional organisation. This structure tends to separate program development from program delivery, and has a number of other weaknesses (Exhibit 6). This creates difficulties in executing specific commodity strategies, and also fragments accountability for program delivery.

2. Fragmented activities. At present the Department does not have a structured approach to developing coherent portfolios of activities in either research or extension. As a result of trying to be responsive to both local service delivery needs and industry funding bodies' requirements for research effort, it has spread its effort too thinly. For example, there are about 540 projects in extension, which are conducted by fewer than 200 people (Exhibit 7). In addition, the Department has been expected to support a wide range of regulatory activity.

3. Lack of focus. Most importantly, the Department appears to have little or no focus on economic impact. There is a lack of attention paid to **output** measures.

¶ At an aggregate level, no attempt has been made to quantify the Department's impact on the agricultural sector's economy.

¶ At a project level, apart from some limited calculation of cost-benefit ratios, there has been little attempt to measure outcomes.

Information on rates of technology adoption or on economic outcomes for farmers or industries is scarce and, when available, generally of poor quality.

The ODR team's first recommendation is that the Department should redefine its mission with the emphasis on **maximising economic value of agriculture** to South Australia while protecting the natural resources relevant to agriculture. This is not to say that the Department should not continue to take into account environmental and social issues, but these roles will be subsidiary and complementary rather than primary ends in themselves. The Department needs to seek out the opportunities which give the greatest impact for the application of its scarce resources—people and State funds. Skills in identifying opportunities and allocating resources will therefore be key factors for success in fulfilling the mission: a more rigorous approach to identifying opportunities is discussed in Section 2. The Department must also be able to measure and demonstrate its impact if it is to justify continued government spending on its activities. These are recurring themes throughout the remaining recommendations.

2. Build strategy around highest value opportunities

The Department is failing to focus its efforts on opportunities which are of the highest economic value.

Overall, the Department does not use systematic economic decision rules to allocate its effort between commodities and between functions. In research, the balance of effort tends to reflect the availability of industry funding and researcher skills as much as identified valuable technology opportunities. Extension activity is mainly driven by the need to respond to local client problems and tends not to be prioritised on the basis of economic outcomes. Similarly, regulatory activities are not subjected to detailed economic analysis. The fairly low level of attention given to market and industry development initiatives reflects the Department's capacity rather than the level of economic opportunity.

As part of the review, the ODR team developed an analytical method for identifying economic opportunities in agriculture and downstream industries. At the same time, the team also determined the role of the Department in realising the opportunities. This method became a pivotal part of the study and the team concluded that it should become a key planning tool for the Department in the future.

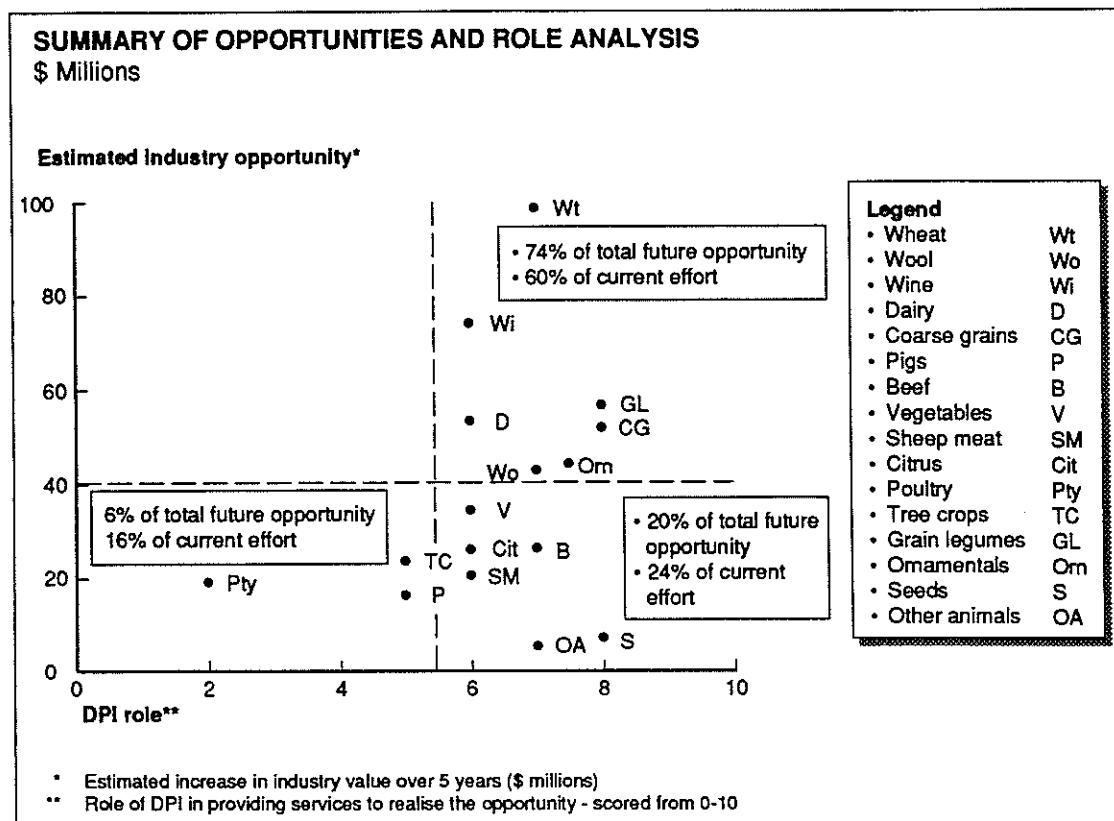
This section of the report describes this methodology and its implications for the balance of the Department's activities.

THE 'OPPORTUNITIES AND ROLE' METHODOLOGY

Traditional bases for resource allocation such as farm gate revenue, or even value added, are inadequate because they do not indicate how much the economic outcome can be influenced by investment, nor do they indicate who is best placed to make the investment. The assessment carried out by the ODR team was based on understanding how the Department could make a difference to the economic value of agriculture. This involved two factors:

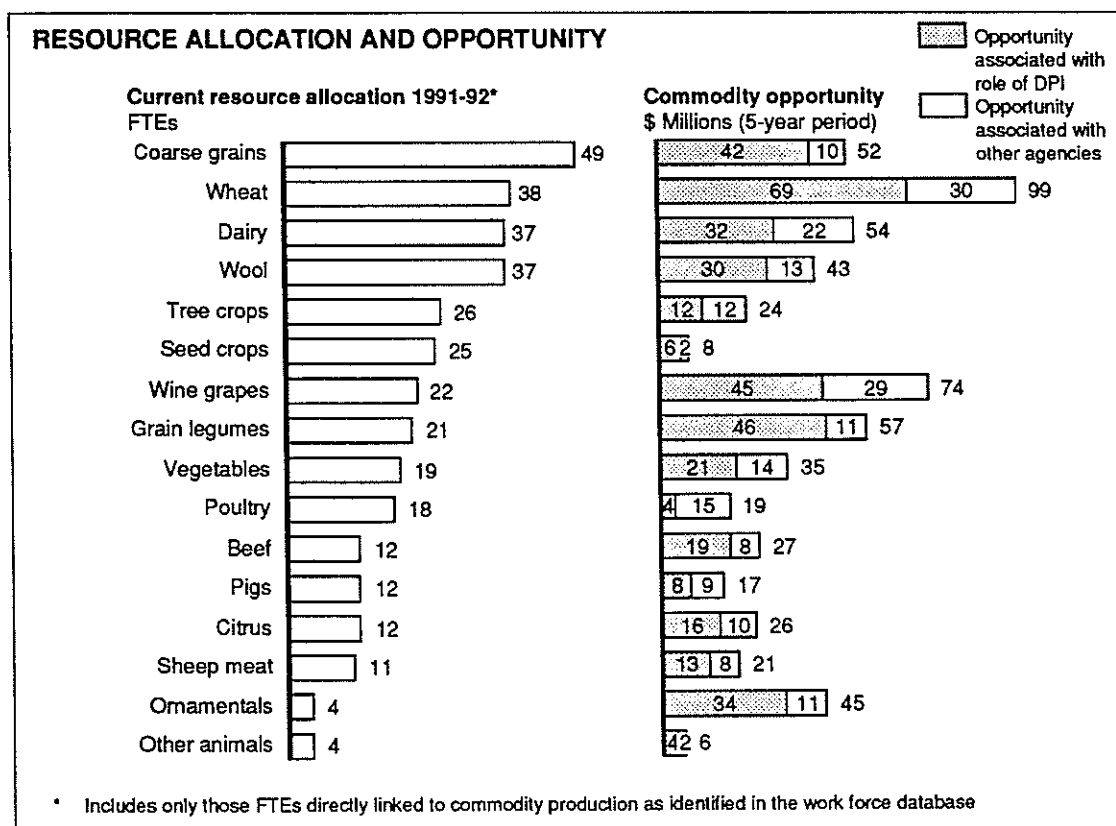
1. The annual opportunity to increase the contribution of any given commodity within the State. This part of the analysis includes a process for identifying the size and nature of the opportunity for a commodity. It seeks to distinguish between opportunities requiring research (to close a perceived 'technology gap'), adoption of known technology (to close an 'extension gap') and other opportunities, including those such as industry restructuring and

Exhibit 8



Source: Team analysis

Exhibit 9



Source: Opportunities and role team analysis; work force database

market development. Moreover, it explicitly recognises the need to maintain the existing production base. (The continuing need for new rust-resistant varieties of wheat is an example of spending directed at maintaining rather than increasing production. Much of the State's expenditure on resource protection is similarly directed at long-term maintenance of production.)

2. The role of the Department in realising the opportunity. In many instances, there are other potential providers of the services needed to realise opportunities. For example, the need for market development activity is frequently dealt with by industry bodies such as the Wheat Board or by private enterprise. The 'opportunities and role' methodology identifies those opportunities that can only be realised if the Department gets involved; it also enables the Department to define what its role will be.

The results of this analysis can be aggregated either by commodity or by function. Exhibit 8 details the results of aggregating by commodity. Using a matrix form allows the commodities/industries to be grouped into four categories according to priority for the Department.

High opportunity, major role. These commodities should become the primary focus of the Department. They offer opportunities to increase the agricultural production of the State by applying known or foreseeable new technology, and the market situation is such that the Department can play a major or unique role. Examples are wheat and wine grapes.

Low opportunity, major role. These commodities are secondary areas of activity where opportunities are lower on an absolute basis. The Department is still important to realising opportunities as it is unlikely that change will come about purely through the operation of market forces or industry initiative. Examples in this category are sheep, meat, beef and citrus.

High opportunity, minor role. Interestingly, the analysis identifies no industries which are in this category. Theoretically, such industries would be large or high growth industries where industry bodies and private enterprise were capable of capturing the opportunity without State intervention.

Low opportunity, minor role. These commodities offer a comparatively low level of opportunity and a high degree of industry ability to progress the opportunities with little or no help from the Government. The poultry and pig industries are examples.

IMPLICATIONS FOR BALANCE OF ACTIVITY

The Department's current balance of effort among commodities is not well matched to identified economic opportunity (Exhibit 9).

Alignment with opportunity would mean a substantial shift of DPI and SARDI resources. It would mean increasing the proportion of effort on 'high

opportunity' commodities from the current 60 percent, and decreasing the effort on 'low opportunity' commodities, from 40 percent of the total.

The analysis can also be aggregated to show the balance of opportunity for the Department **by function**. However, the estimation of opportunity by function is more subjective and less reliable than estimation by commodity. The analysis indicates a substantial decrease in research and an increase in extension. While we believe this direction is correct, a more detailed analysis at a project level shows a much smaller swing.

What does clearly emerge from applying this methodology is that effort on market and industry development should increase severalfold, albeit from a low base. The Department is currently not well equipped to respond to this challenge. Relevant skills are being developed in the Agricultural Development and Marketing areas, and through the commodity planning process, but resources devoted to post-farm gate activity are small. There is a need for the Department to work closely with other agencies—the South Australian Economic Development Board, Austrade, industry marketing bodies and private enterprise—as it seeks to define its role in these areas.

In summary, the economic analysis of 'opportunities and role' provides valuable insight into the best balance of activity by industry and function. Moreover, the process imposes a high level of rigour in data collection and analysis, and has proven to be a useful learning and communication tool during the review.

It cannot, however, be assumed that impact achieved is in direct proportion to effort. Thus, it is still necessary to go to a program and project level of detail to allocate resources. This two-level resource allocation approach is taken up in more detail in Section 4.

'END-TO-END' ORGANISATION

Program manager responsible for linking and integrating all activities and managing entire clientele

Opportunity Identification → Research → Technology transfer/extension → Client outcomes → Industry outcomes → Market Impact

Measurement processes concentrate on outputs/impact and link back to opportunity identification

The diagram illustrates a linear process flow from Opportunity Identification to Market Impact. A Program Manager oversees the entire process, linking and integrating all activities. Measurement processes focus on outputs/impact and link back to opportunity identification.

2

RECOMMENDED STRUCTURE

```
graph TD
    CEO[CEO] --- CL[Change Leadership]
    CEO --- CC[Corporate Centre]
    CEO --- H1[ ]
    H1 --- RP[Resource Protection]
    H1 --- CLS[Cereal/Livestock]
    H1 --- HR[High Rainfall]
    H1 --- P[Pastoral]
    H1 --- H[Horticulture]
    CLS --- PS[Program support]
    CLS --- PP[Program planning]
    RP --- PM[Program Management]
    PM --- FTS[Field Technical Support]
    CLS --- SDM[Service Delivery Manager]
    CLS -.->|Funding, performance agreements| PM
```

3. Restructure to Clarify Accountability

The Department must be able to identify and address opportunities which have an economic impact to fulfil its economic development mission. Traditional, functional groupings of resources have made it difficult to be flexible in resource allocation and have worked against good priority setting at an overall program level. The ODR team recommends linking all aspects of the industry chain, and providing program managers with the opportunity to direct effort at key leverage points³ whether they be in research, technology transfer, industry development or market development. That is, the Department should create management units with 'end-to-end' accountability (Exhibit 10): this concept underpins the key elements of the recommended structure for the Department of Agriculture within a new DPI context:

- ¶ Establish five 'program area' Divisions⁴ as the primary line management structure of the Department, and give program area leaders and line managers clear accountability for both program design and program delivery.
- ¶ Reorganise the headquarters area to more clearly separate the group responsible for providing staff and policy support to the Chief Executive, and establish a shared resource unit to provide scarce specialist skills to the program areas where necessary.

ESTABLISH 'PROGRAM AREAS'

The Department needs to establish a new primary line management structure. The ODR team evaluated a number of structure options against criteria of accountability, front-line customer focus and simplicity.

The ODR team recommends a structure which has five program areas designed around the primary dimension of farming type (Exhibit 11). Four program areas deal with production commodities, and one with natural resource protection and regulation.

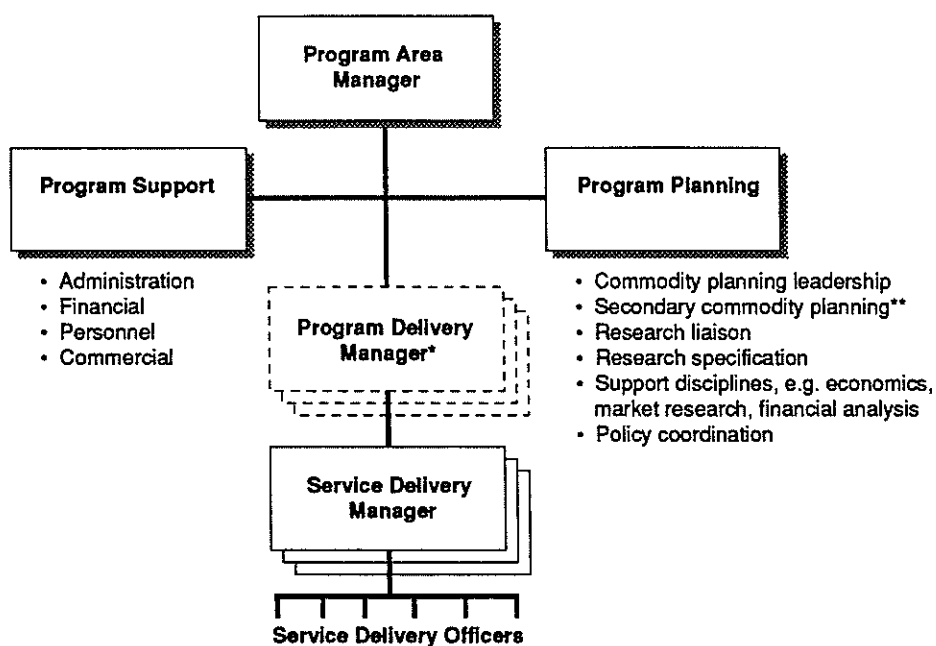
Commodity planning leadership in this structure resides in the program areas rather than the corporate centre. Many commodities span more than one

³ Key leverage points are those points at which an investment does the most to increase economic value; that is, effect the most change for the least investment.

⁴ Nomenclature presented problems here. The organisation unit responsible for a program area is a Division, in keeping with standard public service usage.

Exhibit 12

PROGRAM AREA STRUCTURE



- * Could be defined geographically or by industry sector; could be 0-3 positions, depending on program area
** Leaders reside in other program areas

program area. (In these cases one program area would lead the commodity planning process with inputs from other interested program areas.) The proposed assignment of commodity leadership would group livestock leadership in the High Rainfall program area, field crops in Cereal/Livestock, and other plant commodities in Horticulture.

The delivery of resource protection and regulatory programs can take place in three ways.

1. The program could be included in a commodity program area. For example, Plant Health could be integrated into the Horticulture program area.
2. The program could be designed in, and directed from, the Resource Protection program area, but delivered through the commodity program area field staff. In this case, the Resource Protection program would control funding and would write performance agreements with the commodity program area for delivery of specified outputs.
3. The Resource Protection program could be delivered through dedicated field staff in a vertically integrated structure. The Animal and Plant Control Commission is currently organised this way.

The ODR team favours the first two approaches because they give most farmer clients a single point of contact with the Department and they help staff to integrate production and sustainability issues.

The recommended farming type structure has a number of strengths:

- 1. Clear line control.** The proposed structure gives program area Division heads and their staff clear accountability both for program design and for delivery of service to clients. Divisional managements will have control of the human and financial resources they need to meet their accountabilities. Front-line staff will have a clear reporting line to the program area Division head.
- 2. Integration and customer focus at the front line.** The ability to field multi-disciplinary teams has been a strong and successful feature of the current regional structure, and the new structure retains this feature. It also maintains the ability for local program managers to provide whole farm advice and adjust priorities between commodities. Another strength is that most clients will be served by a single Division.
- 3. Simplicity.** The structure avoids matrix management in day-to-day service delivery. It introduces some complexity in commodity planning (which will be cross-Divisional), but that is a modest price to pay for clear accountability and customer focus. Unlike alternatives based on commodity groupings, the recommended structure is geographically simple. Most operational sites will house only one program area. The program area structure under these arrangements is depicted in Exhibit 12.

The local Service Delivery Manager has a new and pivotal job. His or her role will be to provide the supports and disciplines to help front-line staff to deliver impact. These include the development of local program action plans, the establishment and maintenance of adoption and impact measures, and coaching and motivation of staff.

REORGANISE HEADQUARTERS SUPPORT

There are three basic roles within the headquarters (corporate centre) of the Department of Primary Industries.

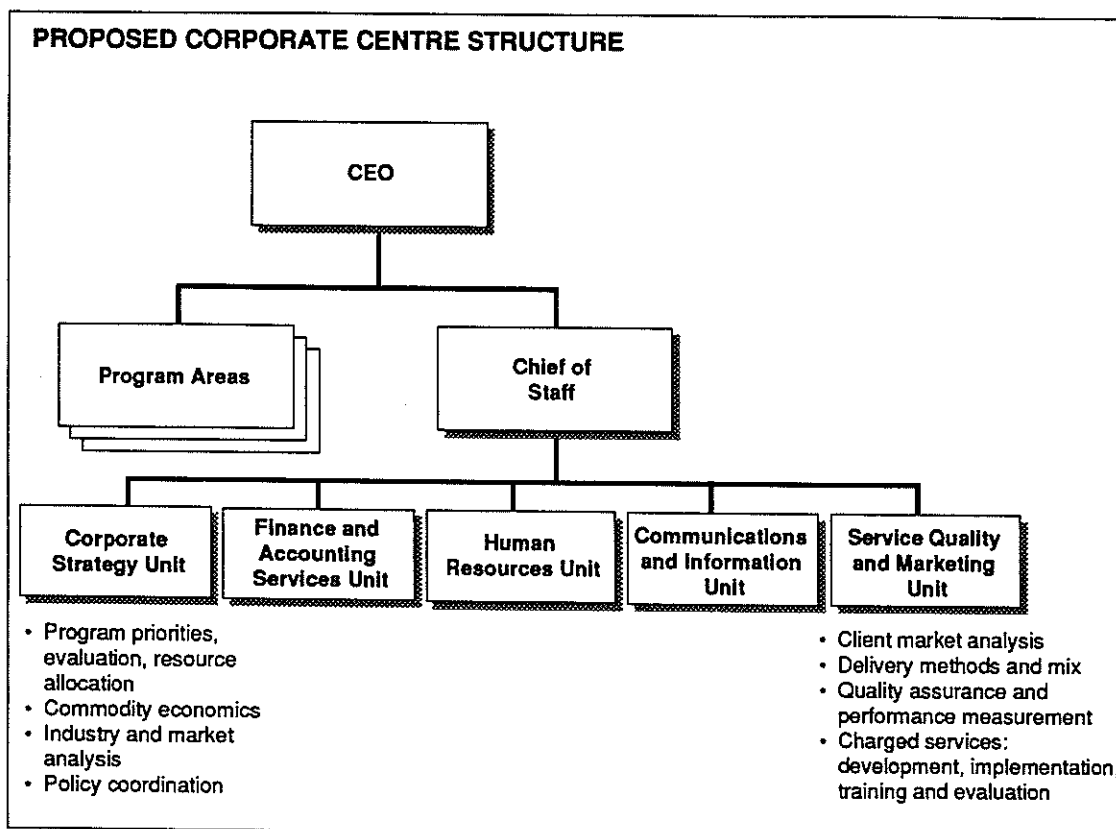
The first role is policy, planning and strategy support to the Chief Executive. The second role is the provision of specific scarce functional skills to the service delivery elements of the Department (for example, skills in market research, training, impact evaluation, commercialisation and extension methods). The third role is the provision of specialist skills in finance, human resource management, data processing and management information together with related routine services such as payroll, accounts payable, and personnel administration.

The first role of the corporate centre is to provide support to the Chief Executive.

- ¶ The Chief Executive and his or her staff need to be able to deal with policy issues both pro-actively and in response to specific enquires and requests. Thus, a primary responsibility of the corporate centre is to 'direct traffic' on policy matters.
- ¶ The Chief Executive and his or her staff have a major role in setting strategic direction, and reflecting that direction in the priorities which are set for the organisation as a whole. These priorities will largely determine what resources are allocated to program areas and support activities. To perform this role successfully, the Chief Executive's staff need to have an educated perspective on economic and political matters.
- ¶ Relationships with key external stakeholders (that is, industry bodies and statutory authorities such as South Australian Farmers' Federation and the Agricultural Bureau Movement) need to be coordinated centrally and at an executive level.

The lack of a corporate strategy unit within the current corporate centre is reflected in reactive priority setting and fragmented policy development

Exhibit 13



activity⁵. The ODR team recommends that the Department form a Corporate Strategy unit which would have a number of responsibilities.

- ¶ Provision of overall guidance and support to the Commodity Planning process, including macro-economic, political and methodology inputs.
- ¶ Overall carriage of the top-level resource allocation process, using the methods developed by the ODR team.
- ¶ Coordination of development of policy, review of legislation and liaison with the Minister.
- ¶ Overview of international, export, and broad industry opportunities, and liaison with other main economic development agencies, for example, the Economic Development Board and Austrade.

This group would be expected to maintain close links with the managers of the Finance and Human Resource functions and to receive frequent policy input from both.

The second role of a corporate centre is the provision of **specialist skills** to the programs areas. Examples of these skills are extension methods, cost benefit analysis, and various forms of training for extension and other staff. (There may also be a case for maintaining a central repository of market and industry development skill and economic know-how, rather than devolving these scarce resources to the program areas in the first instance.) The establishment of a service quality and marketing unit is a high priority task.

The overall corporate centre structure is depicted in Exhibit 13. The third role—provision of central services and advice—is dealt with in Section 5.

⁵ The maintenance of effective policy-making has been a central concern of departmental managers during the ODR. A survey showed that 116 people are involved in policy work, with total effort amounting to 45 full-time equivalents (FTEs). The new program area and commodity leadership structure creates clear lines of responsibility for dealing with this workload.

4. Strengthen Planning and Measurement Processes

The Department needs to set up planning and measurement processes which will reinforce its economic focus and support the case for continued government and external funding. This will involve fundamental changes to the way the Department sets its strategic priorities, and also entails the introduction of several new disciplines. Specifically, the Department should:

- ¶ Build a top-level planning process based on the ODR's 'opportunities and role' work to allocate resources among program areas
- ¶ Build a priority setting process within program areas based on the identification of key leverage points
- ¶ Routinely measure economic impact of the services the Department delivers.

BUILD TOP-LEVEL PLANNING PROCESS

In Section 3, we indicated the need for stronger staff support to the Chief Executive. One major task of this staff support would be to conduct a top-level planning process based on the models developed by the ODR team. This process would be used annually to provide broad opportunities by commodity and function, and an initial definition of the programs which the Department needs to undertake to realise those opportunities. These programs would include research projects to be commissioned from SARDI and other technology providers.

The experience of the ODR team indicates that this planning processes requires the rigorous application of a framework for the identification of valuable opportunities, as well as extensive consultation with internal and external parties. The ODR team used this approach during the review and found that it is effective in understanding industry needs and in identifying current areas of activity which are not valued by the industry. The planning process should then drive the Department's budgeting activities and its decisions on industry funding applications.

IDENTIFY KEY LEVERAGE POINTS

Within program areas, the team envisages a priority-setting process which is truly end-to-end in that it considers all possible departmental involvement in research, extension, industry development, market development, and related activities such as value added in downstream processing, and the attraction of infrastructure investment. The aim of this process is to identify the key areas where State investment can have maximum impact.

The team has now piloted this type of planning process in the wool and grain legume commodity areas. The learning from these sessions is that this is a more rigorous way of thinking about the Department's role. It also leads to a different view of the Department's most valuable contribution than has emerged from previous planning processes. For example, using this process in the area of wool has identified a number of projects with little economic potential, and others which, while potentially valuable, are under-resourced and so are unlikely to be effective.

MEASURE ECONOMIC IMPACT

If the Department is to make end-to-end management work and meet its goal of directing resources to where they will have maximum economic impact, it is essential that the measurement of economic impact becomes a central skill for the whole organisation. This will only be achieved if appropriate measures of impact are set up in advance at a project level, outcomes of effort are forecast, and rigorous post-audits are performed regularly. An important task in the implementation of the ODR recommendations will be to outline in detail the processes and formats needed for this function to become routine enough to allow comparison among projects. The ODR team has already demonstrated that this can be done by assessing the agronomy program. Extending this approach needs to be a major focus of development and training over at least the next 12 months, and needs to apply to the whole range of services delivered, not only to extension.

Exhibit 14

COST OF REACH AND IMPACT

\$/person

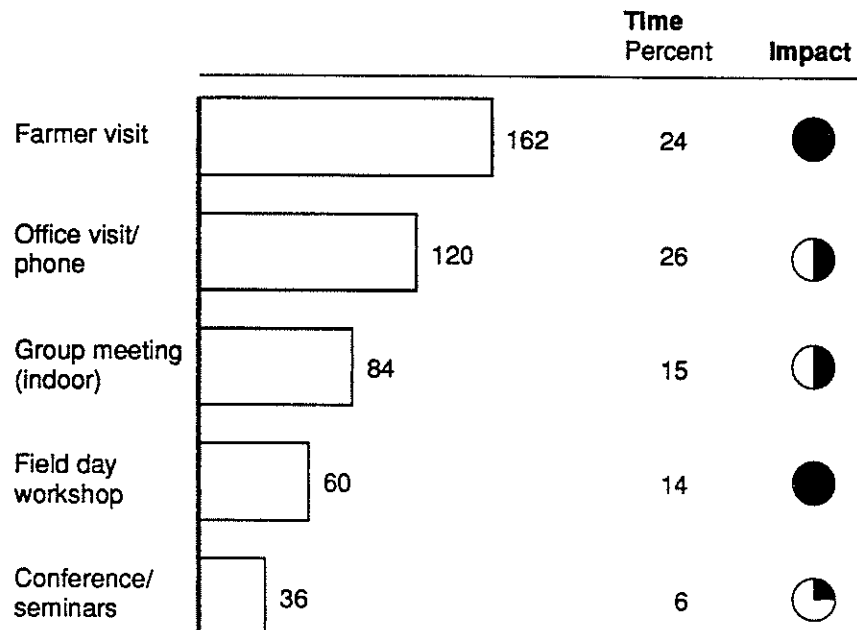
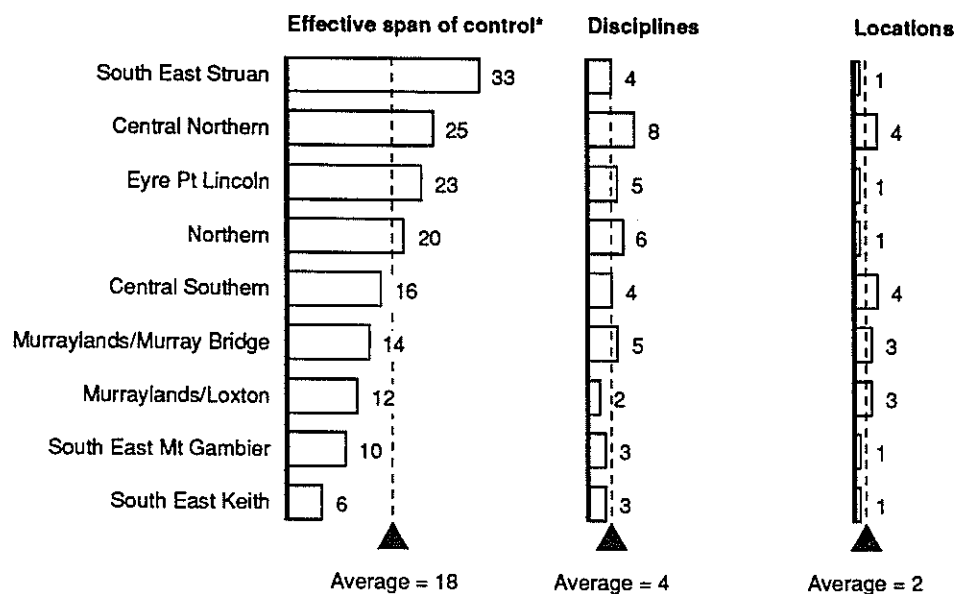


Exhibit 15

FRONT LINE MANAGEMENT COVERAGEESTIMATE

* Number of staff divided by management FTEs

Source: Organisation charts; interviews; team analysis

5. Focus on Creating Economic Impact in Existing Activities

In extension, research, and resource protection and regulatory activities, effort is spread across a large number of projects and sites. The Department needs to concentrate its efforts, and apply rigorous tests at a project level in order to determine what should and should not be done. The Department needs to apply this principle across all of its traditional areas of activity. Specifically, it needs to:

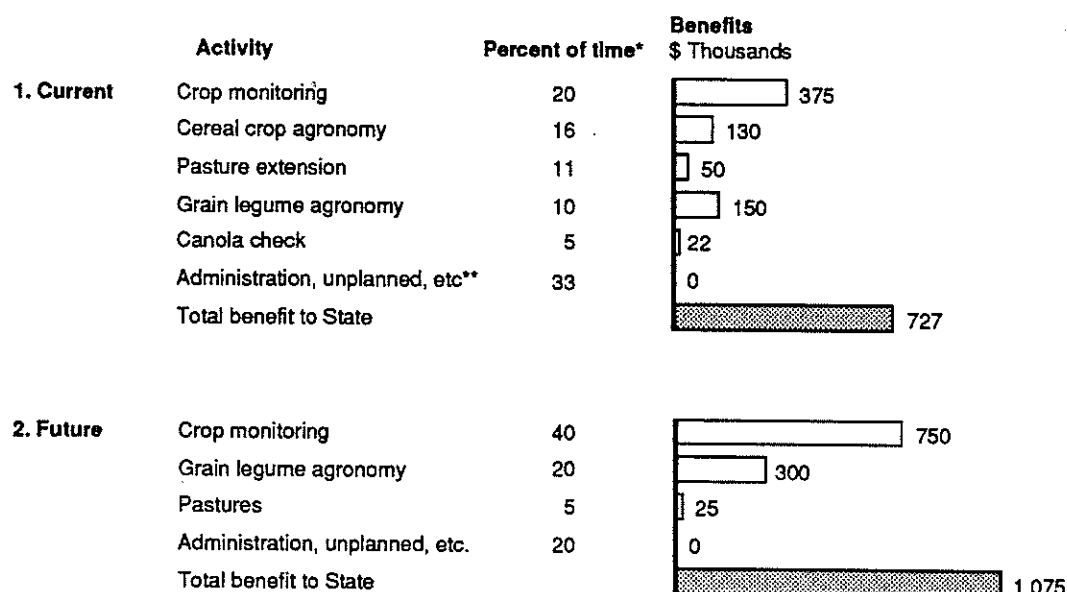
- ¶ Focus extension effort on fewer, properly packaged, demonstrably effective products, based on a better understanding of client opportunities and needs. The Department should progress towards commercialisation while testing that it helps to reinforce a focus on impact.
- ¶ Reduce the slate of projects in research and development, focusing on high opportunity commodities, and explicit strategies for adoption in South Australia.
- ¶ Develop a more effective range of programs in resource protection and regulatory activity, and establish appropriate funding arrangements.
- ¶ Rationalise administrative and diagnostic support services, using other public or private sector suppliers when it is more cost-effective.
- ¶ Reduce the Department's large number of operational sites (research centres, district and regional offices) over a period of time to a smaller number of sites which have effective critical mass.

FOCUS EXTENSION EFFORT

The Department of Agriculture's technology transfer and extension efforts are conducted mainly through the five Regions. These service delivery structures were set up in the reorganisation resulting from the Callaghan recommendations in the early 1970s. Extension accounts for 181 full-time equivalents (FTEs) and 147 of these are officers dedicated to the service delivery function. Of this 147, 71 are in directly production-related activities, and 76 in resource protection roles.

Since regionalisation, the service delivery role has evolved from one of District Adviser to a genuine extension role where both technology transfer and client education activities are conducted through a mixture of one-on-one, group and

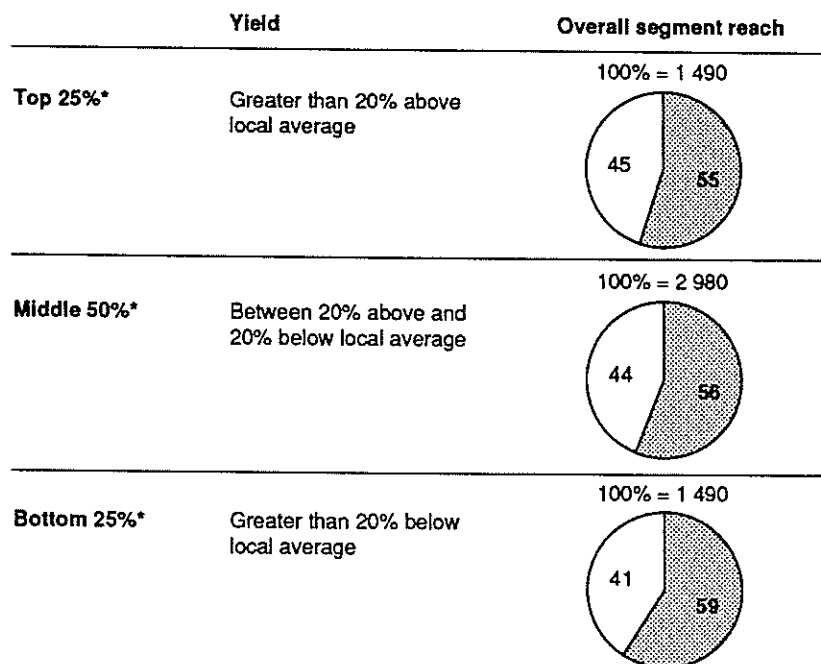
Exhibit 16

ACTIVITY MIX OPTIONS

- * The Right Rotations program (5% of current, 15% of future effort) is too new to be evaluated
 ** Including Enterprise Workshop

Source: Survey

Exhibit 17

DEPARTMENT'S REACH OF CEREAL GRAIN FARMERS
Percent
 Reached by the Department


* Based on yield performance

Source: ABS; farmer survey

mass media delivery channels. In recent years, the Department has gained substantial leverage of its extension efforts through the Agricultural Bureau Movement, Soil Boards and Landcare groups, and, to a lesser degree, through TAFE, agribusiness representatives and the few private agricultural consultants who operate in South Australia. Nonetheless, extension officers have consistently expressed the concern that the demands on them are becoming more complex, and that with tightening funding they are overstretched—sentiments generally echoed by client groups.

The ODR found that the Department needs to support the dedication and commitment of extension staff with new management, marketing and measurement disciplines if it is to fulfil its economic development mission effectively.

1. Management of the extension effort needs to be strengthened. Effort is currently fragmented across some 540 separate projects, about three-quarters of which are initiated at Region or District level. Extension officers spend only about 36 percent of their time in contact with clients, and a substantial proportion of client contact work is unplanned and reactive to specific client needs. There is still a high proportion of one-on-one work: a quarter of client contact time was spent in farm visits at an average cost of \$162, while field workshops, which cost much less, were judged equally effective (Exhibit 14). In the field, management is too thinly stretched to provide adequate guidance, training or specialist support to the front line (Exhibit 15). Moreover, effort in the field is seriously hampered by a lack of operating funds. State-funded field personnel have an average of \$3 500 a year to run a car and meet a variety of other field expenses.

2. Tighter marketing disciplines are needed. The enormous range of extension 'products' should be reduced to those which are demonstrably effective and which relate to valuable opportunities. Concentrating on the highest impact activities can make a substantial difference to overall economic outcomes. For example, rebalancing one agronomist's activity around four valuable projects has the potential to increase his contribution to the State by about 50 percent (Exhibit 16).

Customer segmentation offers another opportunity to increase impact. Historically the Department's coverage of clients has been unselective. For example, an ODR survey shows that the Department achieves a uniform reach of cereal farmers (Exhibit 17). Greater impact can be achieved by targeting high potential clients.

There also appears to be scope for much more tailoring both of the product mix and of delivery methods. At an industry level, delivery mix decisions should be influenced by industry characteristics such as the level of overall opportunity and client fragmentation (Exhibit 18). At a client level, costly one-on-one methods should only be used when the client's potential and the nature of the product justify them.

Exhibit 18

DELIVERY MIX OPTIONS

ILLUSTRATIVE

Industry fragmentation*	High	Low opportunity, high fragmentation <ul style="list-style-type: none"> Minimal support, issue-specific mass media coverage only No direct extension except for resource protection issues 	High opportunity, high fragmentation <ul style="list-style-type: none"> Issue-specific extension programs targeted to segments selected Some focused one-on-one and small group consultancy with selected segments
	Low	Low opportunity, low fragmentation <ul style="list-style-type: none"> Minimal support, issue-specific mass media coverage only No direct extension except for resource protection issues 	High opportunity, low fragmentation <ul style="list-style-type: none"> One-on-one and small group consultancy with selected segments
Low	High	DPI extension role in industry opportunity	

* Defined as the number of producers accounting for greater than 80% of primary agricultural production.

Source: Team analysis

Finally, a more commercial approach needs to be adopted. Evidence from England, Scotland, and New Zealand, and from the recent Enterprise Workshop experience in South Australia, is unanimous on a number of points. Market pressure drives design of services to be geared to delivering real and measurable value to clients. There is a correlation between charging for service, the perceived credibility of the service, and the likelihood of adoption. Commercialisation has a positive influence on morale and on accountability.

The English and Scottish approaches both sought to recover between one-quarter and one-half of the cost of service provision, generally through an annual contract or subscription. These services have achieved substantial market penetration (56 percent of the target market and 19 percent overall in England, and 47 percent of farmers in Scotland). The level of repeat business in England suggests a high level of satisfaction and adoption. In New Zealand, with a full cost recovery goal, there has been lower market penetration (12 percent) and advisory staff numbers have declined by half.

Analysis done by the ODR team on demand for fee-paying services supports this finding. While charging full cost maximises profit for the provider, it limits market penetration and reduces economic benefit below that of a free or subsidised service. On the other hand, charging up to about 30 percent of cost of provision appears not to reduce economic benefit. Fees should also be used to ration some services (such as one-on-one farm visits), and may be helpful in establishing what value clients place on various types of service or technology. Thus, the Department should raise fees from service delivery more broadly—in part to meet its overall financial targets. However, the Department should be careful that the pursuit of revenue does not divert it from its overall mission: economic impact, not cost recovery, is the objective.

3. The measurement of impact in extension must be improved. Impact can be defined as the effect of the Department's efforts in influencing the rate and level of adoption of technology and sound management practices, economic outcomes for clients, and changes in the attitude and skills of South Australia's farmers. Pressure of work and lack of formal systems have meant that information on client coverage, adoption of new technology or assessment of economic outcomes for clients is either incomplete or non-existent. This makes it difficult to devise a strategy for more effective field service delivery.

A key element of impact measurement is the setting of program targets. For example, the aim in coarse grains might be to help lift value at constant prices by 20 percent. This goal would have a time frame (say, 5 years), the resources and strategies needed to achieve it would be defined, the target client group identified, and interim targets would be defined for the managers involved. Major programs would require formal surveys both before and after program delivery. More limited activities would be tracked using farmer index groups. Ultimately full client and project databases would be built; these will not only help assessment but also be a valuable planning resource.

The Department will need to embark on a major campaign to collect and codify information about which products and delivery approaches work with different client segments. We see this as being an important task for the Service Quality and Marketing unit in the corporate centre, and for the Program Delivery and Service Delivery Managers in the program areas. Reliable measurement of impact is essential if the Department is to be able to demonstrate the value of extension activities over the next 3 to 5 years.

The ODR recommendations on extension are based on the principle of concentrating effort where it will have highest impact:

1. Focus effort on identified opportunities in high potential commodities.

This implies a greatly reduced range of well packaged extension 'products', which should be manageable and easier to measure. Local projects and effort in response to client enquiries would not be eliminated but should be planned and directed at key opportunities. In fact, such activity may continue to reveal local client needs and identify new opportunities.

We would expect that the elimination of low impact activities would allow a reduction of about 30 percent in effort devoted to current projects, and a concentration of projects to about 200. Some of the FTE savings could be used to provide a more workable operating budget for field staff. The extra effort devoted to measurement and field management would also offset the savings, and some projects would warrant greater effort than they now receive. Overall, the team believes there is only modest potential for savings in extension

2. Use mixes of delivery methods which are appropriate to the industry segment. The Department should seek the delivery methods which maximise impact per dollar in the target client segment. Expensive delivery methods such as farm visits should be undertaken selectively.

3. Introduce 'commercialisation' and charge fees, provided it is demonstrably consistent with maximising economic impact. There is a need for properly controlled experimentation to see how the demand for extension services and rates of adoption of new technology are related to fee level. The Department should pilot the introduction of a range of 'whole farm' consultancy services on a fee-for-service basis.

4. Routinely measure adoption and impact. Program managers must set up formal measurement systems with the support of the Service Quality and Marketing unit. The formal measurement system should focus on measuring the level and rate of adoption economic impact for clients, as well as inputs. Ultimately, full client and project databases should be built.

REFOCUS RESEARCH AND DEVELOPMENT

Research and development is the dominant activity of the Department, accounting for about one-third of total staff (366 FTEs) and \$11 million of State funding. The research effort has been spread over 430 projects covering the full range of commodities, and is carried on in three Divisions (Animal Industries and Analytical Services, Plant Services and Resource Protection, and Regional Services) at 11 research centres.

As in extension, the ODR diagnostic work reveals that the Department's overall management of research effort needs strengthening and that the quality of research products delivered by the Department is attributable to the dedication and professionalism of its personnel rather than its organisational skills. The diagnostic findings can be grouped under four main headings.

1. The Department's control of project initiation is weak. Internal mechanisms for setting research priorities are weak, and most projects are initiated by researchers, whose key objective is often obtaining external funding or furthering specific research interests. The result is that research activities are fragmented, and are managed and accounted for in small units, leading to administrative inefficiencies and a lack of overall coordination

Moreover, for many commodities, the ODR team's analysis indicates that development of more and better technology is **not** the prime lever in generating value for the State. Instead, this work suggests that the overall level of the research and development effort should be reduced. This 'top-down' finding is supported by limited project-by-project analysis which found that much of the effort was in low opportunity commodities, or in fields of work where adoption was unlikely or potential impact low.

2. Research management is undisciplined. There is little formal tracking of outputs against objectives, and no routine mechanism for terminating unsuccessful projects. Screening processes are ineffective and projects are often inadequately resourced.

3. Research support is inadequate. The Department offers little training in research skills and research evaluation expertise is scarce. Research centres are not managed to optimise cost-effectiveness. Short term industry-funded work is less productive than work by permanent staff and there are perceived inequities between permanent and industry staff.

4. The research-extension link needs strengthening, particularly now that it must bridge DPI and SARDI. In some cases, such as plant breeding and variety testing, relationships are close and work well. Elsewhere there is a need for a more disciplined exchange of information, both in injecting client needs into project design, and in ensuring that results are translated into forms which clients can adopt. End-to-end planning is part of the answer, but it needs to be complemented by the routine development of detailed adoption strategies at a project level.

These findings support the rationalisation and refocusing of effort in research, and strengthening of the research management apparatus.

In framing the ODR's recommendations on research and development, the team has considered the potential broad role of SARDI. SARDI's mission could be to become South Australia's premier provider of research and development, providing excellent research to specific Australian users—not only in the primary industry sector—on a competitive and possibly commercial basis. It would be results rather than discipline oriented (which is the realm of the universities), and its key management competencies would be the tight management of research services and the transfer of results to clients, through DPI or other agencies. SARDI would actively support the economic development goals of the State Government.

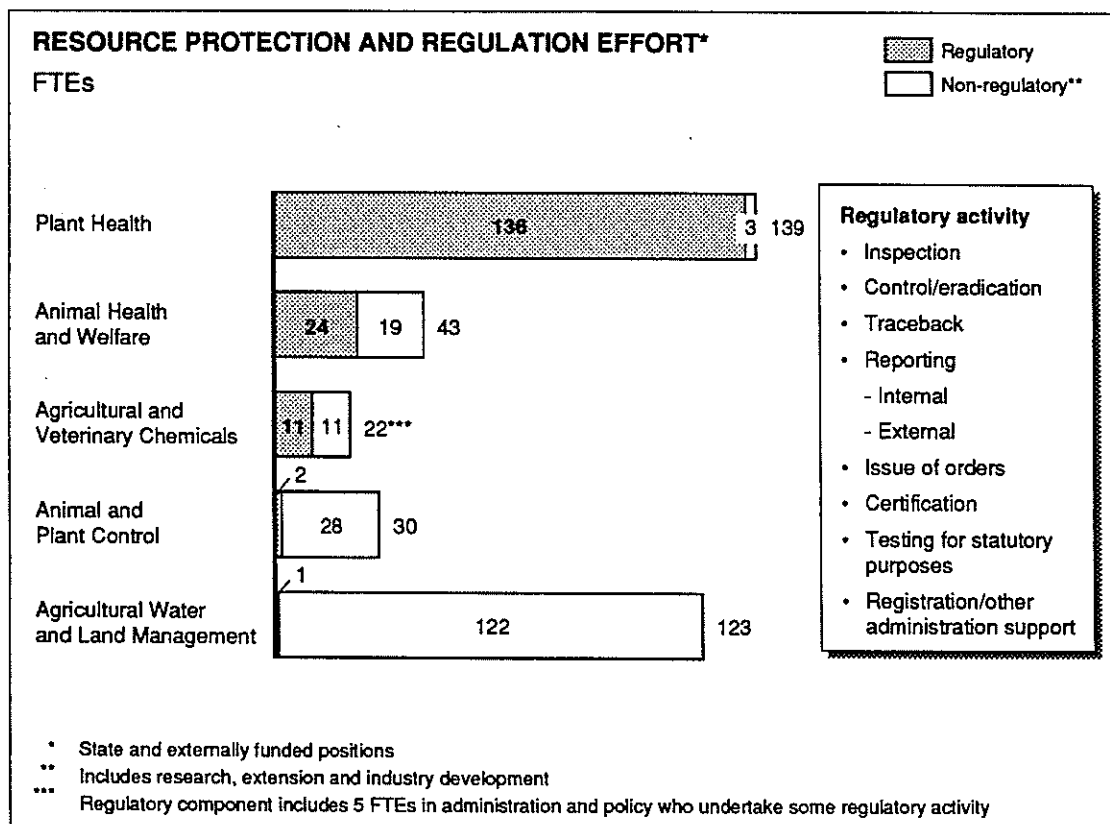
But regardless of the role adopted by SARDI, its formation has two immediate implications for the recommendations.

1. If managed well, it will achieve a rationalisation and focusing of research more rapidly than would have been likely in the former structure.
2. It occasions a re-appraisal of the proposed relocation of the Department to the Waite Institute. The original proposal involved three new buildings occupied mainly by the Department (Plant Sciences, Diagnostic Laboratories, and the administrative headquarters), as well as a share of the Soils Building and relocation of some Northfield units to the main Waite Institute building. Cost of the full proposal was estimated at \$61 million. Fewer than half of the staff originally earmarked for relocation are likely to become members of SARDI.

The ODR team makes the following recommendations on research:

- 1. Deal as quickly as possible with the separation of SARDI.** This process involves the establishment of criteria and identification of the people, projects and sites which should form the Institute.
- 2. Overhaul the slate of projects in both organisations using appropriate screening processes.** For the DPI, this screen would include applicability of the findings in South Australia and the appropriateness of the Department of Primary Industries as provider, as well as an assessment of potential for economic impact. Overall, we would expect a reduction of about one-third, or \$3.7 million, in State funded research. The remaining effort would be spread across fewer than 200 projects of direct relevance to South Australia.
- 3. Give the Department of Primary Industries substantial control over the State's agricultural research budget.** This is important in order to preserve two basic ODR principles: that program managers should have 'end-to-end' ability to make trade-offs between investments including investments in research; and that the customer for research should set the agenda. The split of funding

Exhibit 19



Source: Work force database

should give the Institute the ability to maintain a core of State-funded scientific and managerial staff.

4. Establish research liaison groups in the program areas. Industry development groups should be set up within each program area to ensure that client needs are factored into research design, and that research briefs include explicit strategies for adoption. As well as specifying research requirements these groups will work with other research funding bodies to develop joint funding for SARDI, and to attract funds directly into the Department of Primary Industries for application, demonstration and extension activities.

5. Establish effective research management disciplines and support systems in both SARDI and the DPI. These include project initiation mechanisms which will assess alignment of effort with economic opportunity, stronger research processes and training in research skills.

6. Reassess and modify the Waite relocation proposal. Even though the Plant Sciences complex is committed, the need for expenditure of \$28 million should be reviewed, and the cost of this element of the plan reduced if still possible. The Soils and Main Building elements of the proposals appear to achieve sensible collocation of related groups and should probably proceed. However, the team's view is that the administration building is not appropriate given the changed circumstances. In the light of the findings of the ODR on diagnostic and analytical services, the proposed laboratory building should not be proceeded with. These modifications would save \$19 million of departmental capital expenditure.

DEVELOP A MORE EFFECTIVE RANGE OF RESOURCE PROTECTION AND REGULATORY ACTIVITIES

Regulatory and resource protection activities account for 357 FTEs and \$7 million of State funding. There are more than 60 separate activities in five main programs. The Department's regulatory and resource protection functions fall into two main categories:

1. Market and consumer protection. Activities include the Animal Health and Welfare, Plant Health and Quarantine and Agricultural and Veterinary Chemicals programs. These are essentially mature, established programs with a high and continuing regulatory content (Exhibit 19). The team's findings in these areas are that activity was fragmented and that some activities were of questionable effectiveness or had low economic impact. Moreover, in many cases the main proponents (and beneficiaries) of regulation were participants in the industry, indicating potential for greater cost recovery.

2. Natural resource protection. Activities include the Agricultural Water and Land Management and Animal and Plant Control programs. These programs are rapidly evolving and many are supported by Commonwealth funding. In

fact, current levels of State funding are failing to match Commonwealth funds in some areas. The programs tend to have a research and extension emphasis rather than a purely regulatory one, and a greater element of 'public good' than the market and consumer protection category.

There is substantial evidence that more needs to be done in these programs if the State's agricultural production base is to be maintained. Current efforts are sufficient only to slow the rate of resource degradation. Preliminary estimates by the ODR team suggest that Department spending needs to increase by at least \$4 million per year (\$2 million of which would be State funded), in order to maintain the present value of the agricultural production base.

The other important diagnostic finding relates to both categories. With one main exception (Animal and Plant Control), these programs are defined and coordinated centrally but delivered by staff who are managed and funded through the regional structure. This dilutes accountability for program delivery and has caused irritation in both divisional and regional management.

The ODR team's recommendations for regulatory and resource protection activities are as follows:

1. Refocus activities in the market and consumer protection segment, and rebalance its funding. The development of change strategies should be completed, ineffective and low value programs should be terminated, and under-resourced programs should be reinforced. For the remaining programs, opportunities should be identified to have industry be more responsible for policy development and funding. These initiatives should save about 60 FTEs and more than \$2 million per year.

The Department should seek to manage a transition in some programs from State-funded and State-delivered regulation to industry self-regulation. State Government can overview such regulation through licensing, audit and certification mechanisms.

2. Emphasise natural resource protection. The Department should clarify its role with respect to other Government bodies, both Commonwealth and State, and develop an overall program which minimises duplication and maximises long term economic impact. The Department should, subject to overall budget constraints, be prepared to allocate more State funding (at least \$2 million per year) to maintain the agricultural production resource.

3. Deliver resource protection and regulatory programs as an integrated part of field service unless a strong case can be made to the contrary for specific programs. Given that program priorities, policy and funding will be set by program managers, performance agreements between service deliverers and program managers need to be set up. These agreements should specify inputs to resource protection activities and set out measurable results.

RATIONALISE SUPPORT SERVICES

The four areas of the organisation not covered by the previous sections are the diagnostic and analytical laboratories, Corporate Services Division, the Rural Affairs Branch within the Directorate of Regional Services, and the Rural Finance Development Division. We now discuss each of these in turn.

Diagnostic and Analytical Laboratories

Diagnostic and analytical effort in the Department accounts for around 100 FTEs. The two major elements are Central Veterinary Laboratories (CVL), with 54 FTEs and a budget of \$2.7 million, and State Chemical Laboratories (SCL) with 39 FTEs and a budget of \$2.9 million. A number of other smaller diagnostic laboratories are associated with specific efforts at various research centres.

CVL and SCL joined the Department from other organisations in 1982 and 1989 respectively. They brought with them expertise and a client base which is broader than just agriculture. The laboratories have been under pressure to recover costs which has provided an incentive to perform work for non-agricultural clients.

The ODR found a number of operating and funding issues in the laboratories. A detailed analysis of CVL's activities reveals that:

- ¶ Only about one-third of diagnostic effort is directly related to the prime role of the unit—prevention and surveillance of animal diseases of economic importance. The rest was companion animal and routine production animal work, as well as some zoo animal and wildlife activity.
- ¶ Most of the 38 research projects in CVL are of, at best, marginal relevance to creating value in South Australian agriculture.
- ¶ About \$0.3 million is devoted to extension, ad hoc responses to public enquiries, teaching, field days and policy work. These activities are perceived to be poorly focused and of marginal value to the Department.
- ¶ Three-quarters of the funding (\$2.2 million) for CVL is provided as a direct grant from Treasury. Cash fees account for only \$0.5 million of funding. The state funding is not linked to specific services, and the chief client for CVL's services, Animal Health, has had no direct control over CVL's activities.

SCL has a different set of issues.

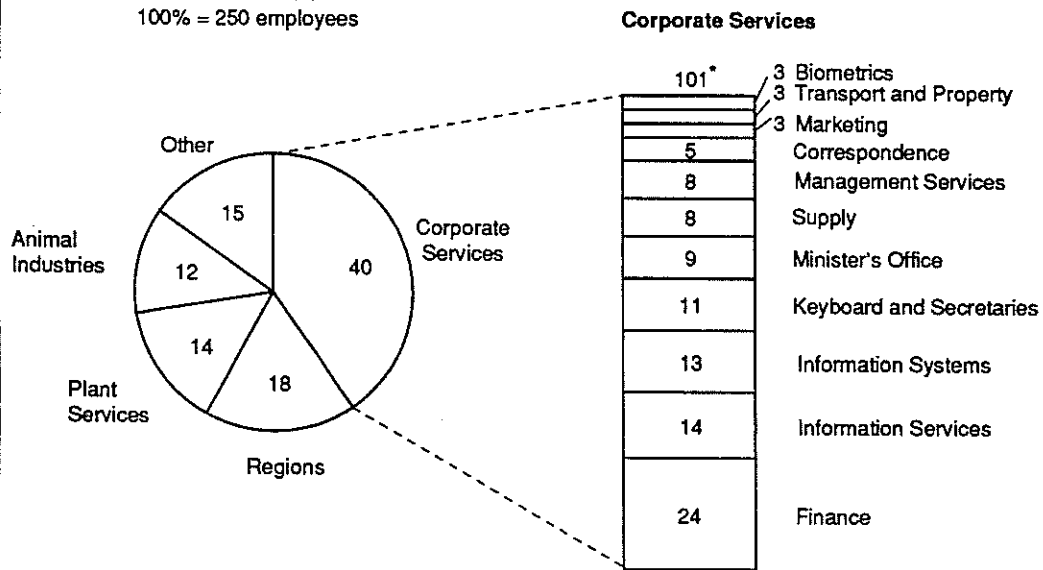
- ¶ With few exceptions, the services provided are available, often more cheaply, from other providers, though SCL is seen as a reliable and competent provider.

Exhibit 20

TOTAL ADMINISTRATIVE EFFORT

FTEs

All administration
100% = 250 employees



* Excludes contract staff

Source: Work force database; interviews

- ¶ One section, Cereals, is almost solely devoted to serving the breeding programs at Roseworthy and the Waite Institute.
- ¶ Only one client, Agricultural and Veterinary Chemicals, has expressed a need for continued service from SCL.
- ¶ The Department of Agriculture has tied funding of \$1.2 million which users are obliged to spend with SCL. This arrangement perpetuates an implicit subsidy of \$0.4 million.

The ODR conclusion is that most of the services and activities in both CVL and SCL are discretionary, and not obviously aligned with the mission of the Department. It is therefore recommended that these units be substantially reduced and reorganised.

1. Merge CVL with Animal Health. Funding for diagnostic work should be provided through the Animal Health program. Diagnosis of companion animal samples from metropolitan vets should be discontinued. Support for country vets should continue but at a reduced level and with greater emphasis on disease surveillance; and routine work should be charged to recover full costs. Almost all research and 'community' work should be discontinued: this is a funding priority judgment which the Manager of the Animal Health program needs to make. We would expect that only 15 to 20 FTEs would be required to conduct the diagnostic part of the Animal Health program.

2. Disband SCL The Cereals section should become part of the Waite breeding program and relocate as originally planned. Elements of the Food and Pesticide sections which serve the Agricultural and Veterinary Chemicals program should be attached to it; the program should control funding for analytical work. Other SCL activities should be wound down and the testing outsourced, with a view to closing SCL formally in due course.

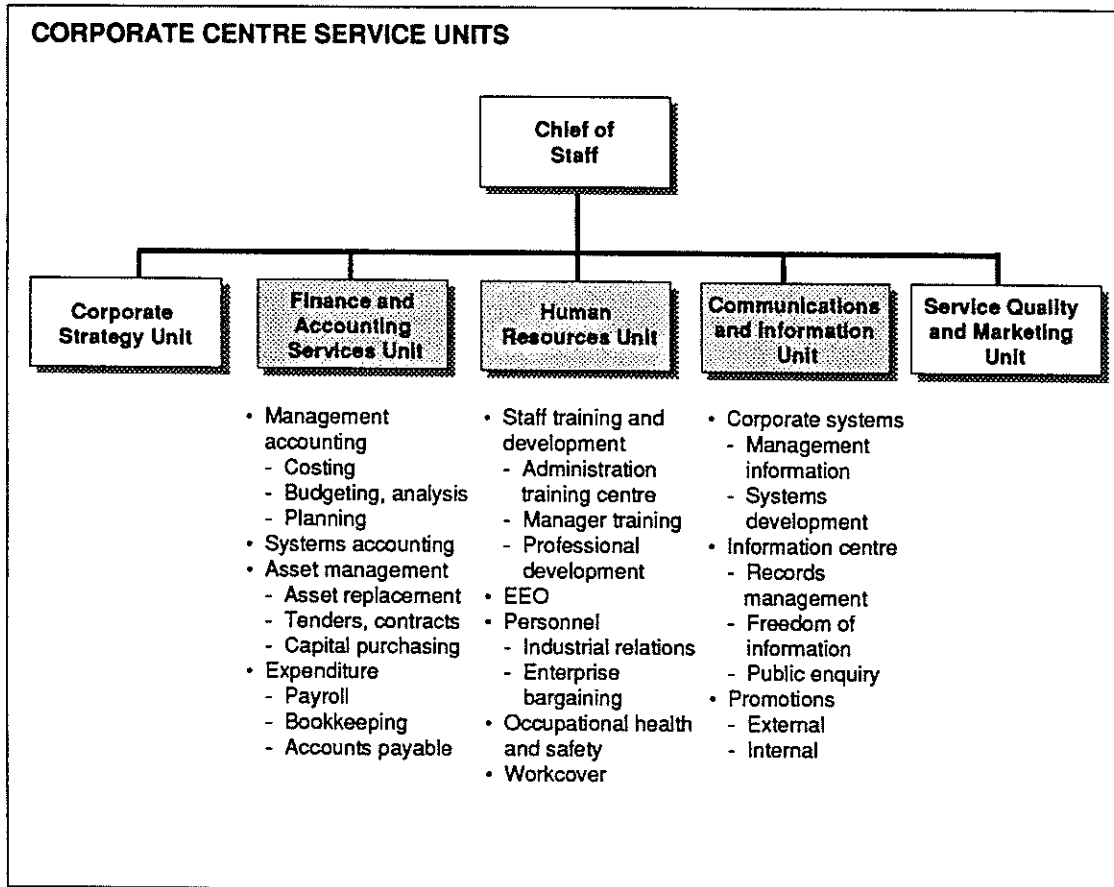
Minor diagnostic laboratories should be examined during the course of the review of research activities: the principle is that users should provide the funds and that program managers should have the task of deciding what level of service they will pay for in the context of overall budget allocation.

Corporate Services Division

Administrative support activities account for about 250 people (Exhibit 20) and the largest single group is Corporate Services Division. Most of the regional and divisional staff are concerned with personnel administration, budgets and accounting, office administration and clerical support. Corporate Services, however, has a broader focus which includes finance, human resources, marketing, data processing and communications, and so has been the major focus of ODR attention to support activities.

The ODR identified a number of weaknesses. Much of the current effort in Corporate Services is devoted to straight transaction processing. Some

Exhibit 21



administrative processes are unnecessarily cumbersome. Capacity for providing policy advice is limited and management information systems are weak. Many of these deficiencies are traceable to progressive tightening of the overall budget and an understandable reluctance to fill key vacancies in Corporate Services.

In summary, the recommendations for administrative support are:

1. Outsource, devolve or discontinue identified activities which are not cost effective as a first step towards a more comprehensive rationalisation of administrative support activities. Overall, outsourcing of some services would allow a reduction of between 10 and 15 FTEs. Supply and accounts receivable can largely be devolved to the program areas. However, the savings would be partly offset by additional effort in the divisions and by the cost of purchased services.

2. Restructure remaining Corporate Services activities to provide higher level, more client-oriented policy, advice and central service providing units. The structure proposed has three units (Exhibit 21). Finance and Accounting Services would have responsibility for overall budgetary and financial management, financial management information systems and investment analysis, as well as centrally provided financial and accounting services.

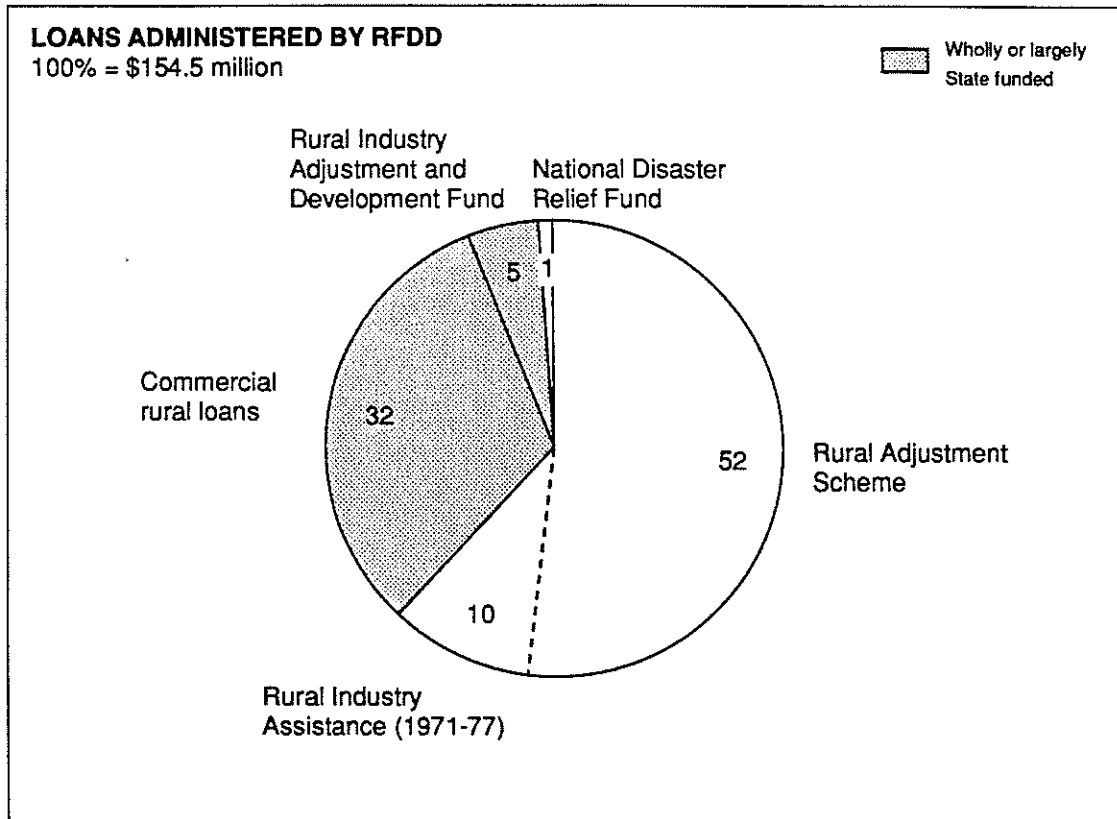
Human Resources would be responsible for human resources policy, recruitment and retraining strategies, and staff development matters. Most personnel administration activities would be devolved to operating units. Communications and Information would be responsible for both staff communications and corporate data processing and most management information systems. The team maintains a bias towards devolving routine service activities to the program areas.

3. Undertake a more detailed internal review of all administrative support. Downsizing of the Agriculture elements of DPI and SARDI, the simplification of structure in DPI, and better networking of the computer system should create the opportunity to make long-term savings in overall administrative activity. It is difficult to estimate these precisely, but savings in the order of 20 percent, or about 50 FTEs, should be achievable.

Rural Affairs Unit

The Rural Affairs Unit (RAU) consists of nine people and has a wide variety of activities for which it is responsible. Providing support for rural counsellors and farm business advice to farmers in financial difficulty represents about one-third of its effort. The unit also undertakes social research and community services activity, and provides support to the Advisory Board of Agriculture (ABA), the South Australian Rural Advisory Council (SARAC), the Women's Agricultural Bureau, and Rural Youth. The RAU also manages the National Disaster Preparedness Program.

Exhibit 22



Source: RFDD Finance and Account Group

The Government's overall approach to rural community matters tends towards having the Department of Family and Community Services take responsibility for general community services. The Department's proposed emphasis on economic development through agriculture also supports a narrower focus for DPI.

It is recommended that the non-agricultural rural community services currently provided by the RAU be moved to Family and Community Services. The DPI should retain the capability to generate and provide farm business advice, and can do so on a contract basis if that service is required by Family and Community Services. The Department should maintain its secretarial support to the ABA and SARAC within the Corporate Strategy unit. The Natural Disaster Preparedness Program should also be retained. These proposals would result in a net transfer of some of the Department's effort to Family and Community Services, but will have no net effect on State expenditure.

Rural Finance Development Division (RFDD)

This Division operates four major funding activities. It has the responsibility for administering the largely Commonwealth funded Rural Adjustment Scheme (RAS), and also administers funds under its predecessor, Rural Industry Assistance. It also operates a portfolio of commercial rural loans (CRL), which are State-funded. The fourth activity is to provide finance through the Rural Industry Adjustment and Development Fund (RIADF). In addition, it oversees the smaller Natural Disaster Relief Fund, and the Marginal Dairy Farms Program. Total assets are about \$155 million, more than half of which are RAS loans (Exhibit 22).

The ODR did not attempt a detailed analysis of RFDD's position. The team was more concerned to understand RFDD's role in the context of the Department's mission. The main findings are as follows:

1. There is a significant level of subsidy to agriculture from State funds through RFDD. One contribution to this subsidy is the difference between CRL and RIADF interest rates and commercial rates, which total about \$1.5 million per year. The less easily quantified subsidy comes from the low (4.4 percent) return on RFDD's notional equity. This could be construed as a further subsidy in the order of \$3 million to \$4 million a year: the magnitude, however, depends on interpretation of the status of a number of reserves in the balance sheet, notably the interest equalisation reserve.
2. An analysis of application of RFDD's state-funded loans shows that the funds have not been distributed in line with economic opportunity as gauged by the ODR team. For example, over one-third of loans has been made to wool producers, who account for only 8 percent of identified economic potential over the next 5 years.

3. Beyond observing that the provision for doubtful debts has more than doubled over the last 2 years, the analysis performed did not allow a conclusion to be drawn on whether or not RFDD's exposure to bad debts was adequately provisioned.

4. RFDD appears to be efficiently operated, on the basis of comparisons with similar lending institutions.

Hence the ODR recommendation on RFDD is that it should be examined in more detail during 1993 by a task force which includes representatives from DPI, Treasury and probably client representative bodies. Among the issues we would expect the task force to address are:

- ¶ Should responsibility for administering RAS funds remain with the Department of Primary Industry?
- ¶ Does the State create value by participating in the commercial rural loan market? (What risks are involved?) If not, how should RFDD withdraw from this activity?
- ¶ Should the current arrangements for RIADF be changed? In particular, is it appropriate for RIADF to act as a source of funds to 'seed' industry development projects which is separate from normal funding through the Department's budget?

These are important issues because resolving them should lead to the better application of under-utilised funds in RFDD.

REDUCE NUMBER OF SITES

The Department currently operates 11 research or agricultural centres and 24 district and/or regional offices, but should act to reduce these over the next 3 years. The ODR has examined the research centres in some detail and has done preliminary analysis on district offices.

1. Research centres. A total area of 4 900 hectares of arable land is owned by the Department; less than half is currently being used for research. Two sites (Northfield Piggery and Parafield Poultry) are dedicated to commodities where there is little identified opportunity for the Department to have an economic impact.

There are opportunities to transfer research and demonstration work from centres to client farms. There is also scope to rationalise remaining activities to fewer centres, which could allow research work to wind down at two more centres (Kybybolite and Wanbi).

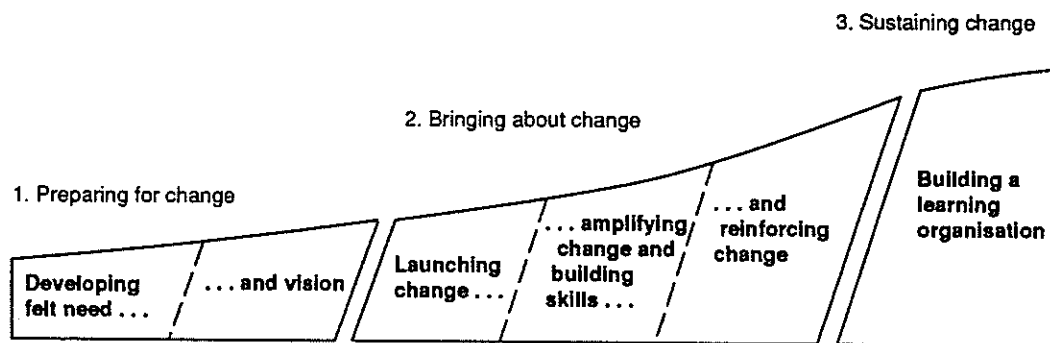
Overall, this suggests the possibility of rationalising active research and demonstration sites to as few as seven. The unused sites could remain available for future revival of research activity by being leased as commercial production

farms. If this rationalisation could be achieved, savings of about \$1 million per year would come mainly from a lower need for research support staff, and lower property, plant and equipment maintenance.

2. District offices. Some offices could be closed in order to create a leaner network—with good facilities and a critical mass of staff—without compromising accessibility. Decisions on the optimum spread of local representation would be made by program managers accountable for effective service delivery.

Exhibit 23

MAKING CHANGE HAPPEN: ORGANISATIONAL PHASES



Key ingredients of a successful change program

1. A change vision
2. A cohesive leadership team
3. Early dramatic action
4. Felt need for change
5. Sensible sequence of key initiatives. Thoughtful approach to each initiative
6. Closely watched measures and targets
7. Vehicles to promote learning
8. Overcommunication

6. Initiate a Major Change Program

The Department faces a period of major change. The ODR's recommendations mean large changes in structure, priorities and processes. The formation of SARDI and appointment of a new Chief Executive also signal the beginning of a new era.

Embarking on a major change is complex and demanding. The process has a number of stages (Exhibit 23) and prerequisites for success. The Department is at the point of launching change and must now follow a 'sensible sequence of key initiatives' to realise its potential for positive change.

This sequence for implementing the ODR recommendations is:

- ¶ Plan and launch a combination of implementation activities immediately.
- ¶ Aim to move to the new processes during the 1993-94 budget cycle, and institute the new structure in April or May 1993.
- ¶ Set a savings target of \$8 million to meet the Government Agencies Review Group target.

PLAN AND LAUNCH IMPLEMENTATION

A combination of initiatives will be required to implement changes successfully. Three categories can be identified. 'Top-down' activities are needed for management to signpost the direction of change to the organisation. Cross-functional initiatives are needed to change how decisions are made and priorities set. Finally, a detailed 'bottom-up' review of activities at the front line is required to ensure alignment with the new direction.

Suggested **top-down** initiatives are to:

- 1. Define the DPI/SARDI split.** This is already under way.
- 2. Formally redefine the mission and role of the DPI.** This is envisaged as a workshop task for the Department's top management during November 1992.
- 3. Design the program area structures in detail.** This task could be completed by a post-ODR task team by the end of December 1992. It entails developing detailed structures and assigning units, sites and commodity responsibilities to the program areas. This would be followed in early 1993 by appointments to the

senior management positions, and then the more detailed process of assignment of staff into the new structure.

4. Codify the top-level resource allocation process. The main tasks are to formalise the inputs and outputs of the 'opportunities and role' methodology and define links to the budget planning activities for 1993-94 and thereafter. This could be completed by March 1993.

5. Define an overall framework for performance measures, emphasising key output indicators such as adoption rates of departmental programs, yields, production costs, farm gross margins and downstream value added.

6. Develop an approach for deciding the future of RAU and RFDD. In both cases this will involve setting up working groups which include other Government agencies and clients.

There are two main parts of the cross-functional effort.

1. Establish the end-to-end planning process. While some aspects of this have already been piloted during the ODR, more detailed work will be needed to codify and refine this new approach. Processes for economic opportunity analysis and priority setting by function, and measures of adoption and impact will need to be set up. This work should be completed by March 1993, by which time 20 people would have been trained in the end-to-end planning techniques.

2. Start on service delivery skill-building. This would include developing job design and training packages for the new Local Program Manager positions by April 1993. A second activity could be to roll out the new product development approaches used in the Enterprise Workshops, with the goal of launching new products in each program area by the end of 1993.

Bottom-up initiatives include:

1. Review the research and development slate, in both the DPI and SARDI. This could begin when SARDI is broadly defined and be complete by May 1993.

2. Rebalance resource protection and regulatory activities. These have been examined in detail during the ODR, and in many cases strategies for change have already been developed and agreed with program managers. Implementation could begin in early 1993.

3. Set up a detailed review of the extension project portfolio. A timetable and approach should be developed and a database established by April 1993. The review would be conducted by a task force in conjunction with the new line management structure.

4. Review administrative support. This is likely to be more effective once the new structure is operating and should be delayed until the second half of 1993. This would also allow consideration of opportunities for rationalisation of support functions of the three former Departments.

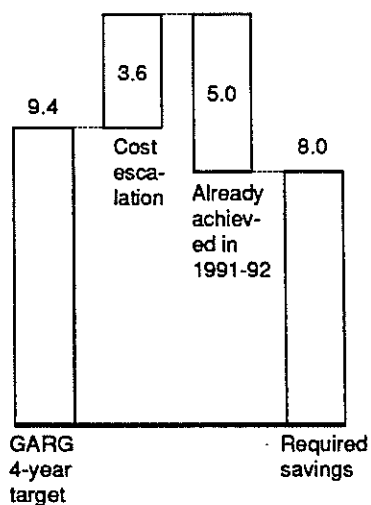
Exhibit 24

POSSIBLE SAVINGS FROM ODR IMPLEMENTATION

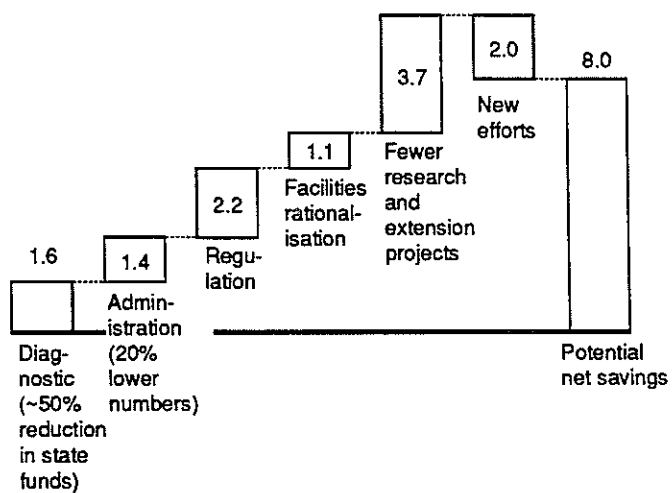
ESTIMATE

\$ Millions p.a.

Savings targeted



Possible savings



RESTRUCTURE BY MAY 1993

The main events over the next 6 months will be the formation of SARDI (in an operational sense) by about January 1993, and the adoption of the new DPI planning processes in conjunction with the development of the 1993-94 budget. These planning activities should be advanced enough by May 1993 to allow the new program area structure to replace the current one. 'Bedding down' the new structure and processes, and particularly building the skills which support the Department's new focus, will be a challenge; full implementation may take 2 or 3 years. But this challenge must be met if the Department is to achieve the impact, and the savings, signalled by the ODR.

SAVE \$8 MILLION BY 1994-95

The original Government Agencies Review Group target, adjusted for expected cost increases, was for the Department to reduce its costs by some \$13 million by 1993-94. In 1991-92, the actual result was \$4.4 million below 1989-90, and an estimated \$0.6 million of increases had been absorbed. Thus, \$8 million of savings remained to be found.

If the expected reductions identified by the ODR are realised, savings of this magnitude can be achieved (Exhibit 24). The main contributors will be reduced levels of activity in research; savings in and increased industry contributions to regulation; a sharp reduction in diagnostic and analytical services; lower expenditure on research centres; and some reduction in administrative support. These could be offset by some spending on new efforts, for example, in resource protection and in the headquarters. No account has been taken of possible fee revenue from extension.

* * *

In summary, we recommend wide-ranging changes in the organisation of DPI. If they are implemented successfully, we believe they will enable the organisation to be more effective and to have more impact on helping Agriculture in South Australia. This will be a challenging task but we believe the potential benefits to the State are substantial.

November 4, 1992