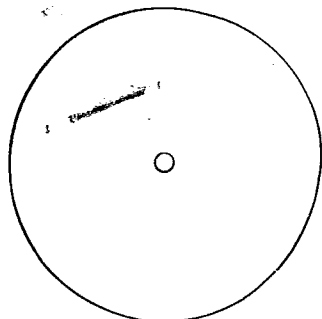


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MINUTES forming ENCLOSURE to.....No.....19

MR1 Report II

TO THE HONOURABLE THE MINISTER OF AGRICULTURE:

Attached is a copy of my report to the Public Service Board on the future role of the Department of Agriculture.

This report was prepared at the request of the Hon. the Premier following my earlier submission on the aims and objectives of the Department.

It has been necessary to refer to the changing conditions in agricultural industries and to spell out in as brief terms as possible, the present scope of the department's activities.

The proposals for the future take in some new areas and suggest a revision of priorities. Some savings on existing commitments will be possible.

No attempt has been made to estimate the costs of the proposed changes. The purpose of this report is to suggest firm lines of departmental activity which the government may see fit to accept as its immediate and short term policy for agricultural services in South Australia.

If all or part of the proposals is acceptable to the government details of re-organisation and costs will be quickly determined. Implementation will involve considerable problems of adjustment under public service conditions especially in respect of any re-alignment of activities of existing staff.

If approved, the transition could be put into effect during the coming financial year and no major budgetary considerations would be likely to arise before 1973-74.

I would be pleased to discuss with you the implications of the proposals in the report before it is forwarded to the Hon. the Premier.

30/6/72

(Marshall R. Irving)
DIRECTOR OF AGRICULTURE.

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FUTURE ROLE OF THE DEPARTMENT OF AGRICULTURE

I INTRODUCTION

The Department of Agriculture was originally established to administer legislation concerned with the control of pests and diseases of livestock and crops. The formation of the Agricultural Bureau in 1888 led to the development of the Department as an advisory organisation providing assistance to industry through the bureau system in promoting improved techniques of husbandry and production. This service was supplemented by several strategically placed Government farms which were used to investigate and demonstrate new farming techniques and methods.

These activities were directed mainly towards the development of new country and the expansion of production to serve overseas markets and to earn overseas capital.

The second World War gave a stimulus to production and in the post-war decade more sophisticated techniques produced a vast expansion in production to meet world needs. The success of these developments was aided by the establishment of regional research centres and an expansion of extension services which were concerned mainly with the dissemination of technological information. The aim was to adapt research findings to local conditions and promote their widespread adoption.

The Department of Agriculture played a leading role in this development which improved substantially Australia's balance of payments and contributed to the State's economic and industrial development. Several of the major primary industries and the Commonwealth Government contributed substantial funds for regional research and extension and the department's personnel and facilities were greatly expanded.

In recent years, the agricultural industries engaged in substantial export trade, have faced grave difficulties in adjusting to a rapidly changing economic situation, primarily as a result of rising costs of inputs of production which have not been matched by rising prices of produce sold. Other factors include the competition from synthetic products and from agricultural exports from countries with heavily subsidised agriculture. The resultant decline in farm incomes has created a demand for more specialised advisory services, particularly those related to farm management and economics. Industry is also now looking for guidance in the handling and marketing of produce.

This demand has strained the resources of the department and created an urgent need for specialised training in extension techniques and in other fields not previously serviced by the department. New skills are needed to meet this challenge and some major adjustments in the organisation and functions of the department are necessary.

Some progress has been made in adapting to these new demands, e.g. the appointment of additional economists and the training of personnel in modern extension techniques, but more rapid progress is essential in the future if the department is to achieve its proper role in serving the State's rural industries.

II

PRESENT SCOPE OF DEPARTMENTAL ACTIVITIES

The objectives of the department, as at present constituted, are defined as follows:-

To promote healthy, productive and efficient agricultural industries adapted to the environment, aimed at providing the food and fibre needs of the growing population, contributing through exports to the nation's balance of payments position, and supporting a stable and prosperous rural community.

Through the activities of the Australian Agricultural Council and the Standing Committee on Agriculture the department's overall objectives are integrated with those of other States and Commonwealth in a joint effort to provide for Australia's domestic requirements for agricultural produce and to ensure a continuing and profitable export trade.

To achieve its objectives within South Australia the department employs one or more of the following avenues:-

(a) Regulatory activities

The department administers a wide variety of State and Commonwealth legislation aimed at protecting primary industries from the introduction and spread of exotic pests and diseases and at controlling or eradicating diseases already present.

Considerable success has been achieved in this area. Bovine pluro pneumonia has been virtually eliminated from all States and progress is being made to free the country from bovine tuberculosis and brucellosis. Australian produce enjoys a reputation of freedom from many of the world's most devastating pests such as foot and mouth disease, bluetongue, fireplyht and Khapra beetle. The producer is thus saved the enormous additional costs of control which would be incurred should such pests and diseases become established in Australia.

Other legislation administered by the department provides for the preservation of soil resources against exploitative forms of farming; the establishment of standards of efficacy and purity for chemicals, fertilisers and seeds; the maintenance of quality standards in foods supplied to both local and overseas markets especially in respect of biological purity, and freedom from pesticides and other impurities; and the control of weeds.

Altogether some 22 Acts of the State Parliament are administered by the Department, in addition to responsibilities under other State Acts. The achievements of South Australia in these respects compare more than favourably with those of other States and much credit is due to this Department and to the co-operation it receives from industry.

(b) Research

The achievements of South Australia in agricultural research are internationally recognised. In many of these the Department has been associated with the Waite Agricultural Research Institute and the C.S.I.R.O. The research role of the Department has been concerned with 'applied or 'developmental' aspects of district or regional problems in South Australia, as distinct from the basic 'fundamental' research undertaken by the Waite Agricultural Research Institute. (Basic research relates to the definition of the principles governing the behaviour of matter or of plants or animals, while applied research aims to relate those principles to problems of immediate concern to man.)

The department's role, therefore, is to get research findings adapted to local conditions and adopted by practising farmers.

The department has 13 research centres strategically located throughout the State and concerned with the problems of most agricultural, horticultural and livestock industries. The worth of these centres and the overall programme of departmental research is acknowledged by industry by way of significant financial contributions in recent years.

In addition the department has a central research laboratory at Northfield which houses the headquarters of extensive research programmes in soil science, agronomy, horticulture and dairying. The work undertaken at this laboratory is essentially related to the immediate problems of industry and is complementary to trials being carried out in the field.

(c) Extension (Advisory Services)

The extension process involves the changing of attitudes and performance of individual producers. In line with the modern trend of extension in developed overseas countries it is recognised that individuals and communities function through specific groups, and the department's extension techniques are now being geared to the complex sociological factors involved in influencing groups of producers.

High priority is now given to the development of extension services manned by well-informed and well-trained officers in close touch with industry problems. These officers are located in groups at all the main provincial centres and a move has been made to establish regional centres with the aim of decentralising administration and promoting a more effective liaison with industry. The first of these regional centres will be based at Struan House and serve the South East.

The department provides its own in-service training in basic extension principles and techniques. In addition courses at Roseworthy College and interstate institutions are now used for specialist training of selected personnel.

The Commonwealth has made considerable sums available over the last few years to assist in the training of extension services to meet the changing needs of industry. The Commonwealth has also allocated funds to enable the appointment of agricultural economists to assist extension officers in providing producers with more effective advice in the area of farm management and marketing.

(d) Other services

The department provides a number of routine services for industry, usually on a partly or wholly self-supporting basis, such as herd recording, seed testing and certification, pure seed production, cheese starter culture, water analysis and poultry laying tests.

A free service is provided as adjuncts to the advisory services for the identification of weeds, weed seeds, insect pests, plant and animal diseases, dam siting and specifications for irrigation purposes or flood control, flood irrigation layouts, farm fence planning and surveying for contour bank construction.

Preliminary plans have been formulated for a fodder analysis service, and the feasibility of setting up a soil fertility testing service is being investigated.

Integration of Activities

All of the above functional activities of the department (regulatory, research, extension and other services) are inter-related, and are frequently brought to bear in an integrated fashion on particular problems. Where regulatory objectives can be achieved by extension methods, as with the very successful campaign for the eradication of foot rot, these techniques are preferred. Research projects provide information for extension officers, who in turn define problems requiring investigation; extension officers may also indicate needs for regulatory action or provision of departmental services.

A close liaison with industry is achieved primarily through the Agricultural Bureau of South Australia. This active organisation of 8,000 members is serviced by the department; it provides a valuable vehicle for promoting extension programmes and for co-ordinating departmental research programmes with industry needs.

The recent creation of four Regional Research Liaison Committees composed of representatives of the department and several industry organisations is a further step in adjusting research and extension programmes to the day to day problems of agriculture.

Marketing pressures, both local and export, have imposed substantial changes on South Australian (and Australian) agriculture in recent years.

These changes have been most marked in the cereal-sheep zone where both wool and wheat have been subjected to major marketing stresses. While wool production has been maintained and the state wheat quota of 50 million bushels for 1972-73 was exceeded only on four occasions during the pre-quota period, there have been major developments in the production of ^{peas} barley, oil seeds and particularly of beef cattle.

These developments have brought fresh problems in both production and marketing. New technical and economic advice is needed to guide producers through this period and the inevitable changes which lie ahead.

Apart from the over-riding necessity to provide the home market with an adequate, wholesome and economical food supply in keeping with its rising standards of living, the agricultural industries do and will continue to provide more than half of the State's export earnings.

Agricultural exports from Australia are mostly organised on a Commonwealth-wide basis and are subject to supervision as to quality by the Commonwealth government. The Australian Agricultural Council, of which South Australia is a member at ministerial level, determines national policies for agricultural production and research.

In this context production policies in South Australia are geared to national programmes and to available markets. This imposes certain constraints and obligations on the Department of Agriculture. In particular the maintenance of quality standards has become a critical factor in export marketing and is assuming a higher priority in departmental activities.

Considerable adjustment of production techniques will be necessary and the Department of Agriculture has an important role to play in maintaining the efficiency of agricultural industries. The same technological services which successfully achieved increased production are necessary to effect more economical production and to protect against the side-effects of technological advances. Greater economy of production is largely dependent on a progressive improvement in techniques. Restructuring of the industries will be necessary to meet the continuing decline in relative farm income and greater emphasis is needed on social, economic and marketing aspects of agriculture.

Research programmes will need to be re-orientated to quality and economy of production and the preservation of the environment. Rehabilitation of non-viable areas will need to be undertaken on a scientific and economic basis.

Many of the problems implied in these proposals are within the present technical capacity of the Department of Agriculture and are not provided for under any other government instrumentality.

Specific areas which require attention are outlined briefly in approximate order of priority within the following general categories of activity:-

1. Regulatory Activities

The prime responsibility of the department is to maintain adequate protection of both animal and plant industries against exotic diseases. Despite former success in this direction, the resources allocated to this activity need to be expanded to meet the increasing risks posed by expanded import trade and influx of personal items particularly from European and Asian countries to migrants. The establishment of new exotic diseases in this country would result in increased

production costs and in some circumstances the loss of valuable markets, (e.g. an outbreak of foot and mouth disease would mean a cessation in trade of meat and animal products to the U.S.A. and the United Kingdom and probably to other markets).

Local and interstate quarantine are both of great importance. Any practicable action which can be taken to limit the spread of weeds and pests within the State, or to prevent the introduction of pests and diseases from other States, assists in keeping production costs down. Continued freedom from fruit fly infestation of commercial citrus crops is essential to maintain South Australia's favoured position in respect of the New Zealand and other markets.

Phoma disease of potatoes, Argentine Ant and Serrated Tussock are examples of pests in other States of Australia against the introduction of which continuous precautions have to be maintained. Conversely legislative requirements of other States require that much of the produce exported to those States be inspected and certified as conforming to their regulatory requirements. As interstate trade is encouraged, the demands on the department's inspection services will increase.

Of particular growing importance are the stricter quality standards being imposed by importing countries on produce exported from this country and elsewhere. European countries and Japan are continually upgrading their standards for imported food materials with regard to bacteriological and chemical contamination; the U.S.A. has imposed higher hygiene standards for meat acceptable to them; customers of Australian grain are becoming increasingly concerned with both insect pests of stored products and chemical residues.

To meet these requirements for our export produce, increasing demands have been made not only on the department's regulatory services but also on the advisory and research sections. The increased activity being undertaken by the mainland States and the Commonwealth to eradicate bovine brucellosis and tuberculosis from cattle is an example of action necessary to ensure the acceptability of Australian beef on the lucrative American market.

There would be an advantage in having certain technical services at present located in other departments transferred to the Department of Agriculture to provide more effective administration of these regulatory activities. The inspection services of the Government Produce Department, responsible for inspection of export cereal grain, would be more effective with close association with agronomy, plant pathology and entomological specialists within the Department of Agriculture. The Vermin Branch of the Department of Lands, whose activities are centred around methods of control of an agricultural pest, would benefit with closer and more formal association with this Department dealing with production aspects from agricultural land. The veterinary division of the Institute of Medical and Veterinary Science providing diagnostic services for animal diseases would provide a more effective service to livestock industries if it were located within and under the supervision of the Department of Agriculture.

2. Economics and Marketing

During the last decade, the rural industries in Australia have been subject to increasing economic pressures. The tremendous expansion which occurred in some industries resulted in over-supply. Competition from other exporting countries became more intense while in some traditional markets demand fell, partly as a result of government policies which subsidised domestic agricultural production. These factors combined to reduce the price of agricultural commodities or to keep the rate of price increase well below that at which costs of production rose.

Under these circumstances the whole economic structure of the agricultural industries needs critical examination and greater emphasis placed on the business management aspects of farming. It has become vital

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for this department to provide increased economic services both to government and to primary producers.

Expert economic advice is needed to assist in policy determination in regard to such matters as rural reconstruction, development of alternate enterprises, machinery syndication, land and water use and marketing policies.

At the farm level production efficiency must be lifted by improved advisory services covering cost saving, all aspects of financial management and the comparative economics of new crops or lines of production. This will involve the appointment of additional agricultural economists to conduct advisory and instruction programmes for farmers and to provide specialist advice to district advisers in the industry branches. These farm management specialists would be located on a regional basis.

Marketing is another area in which greater emphasis must be placed and the staff establishment strengthened. There is an urgent need for a market intelligence service and for market research, exploration and forecasting so that information on commodity trends and outlook may be more readily available to the government and to producers.

The department should become more involved in the establishment of market grades and standards and in quality control of produce. Outmoded marketing methods, particularly in livestock and fruit, should be investigated and more up-to-date methods of handling and processing introduced.

Specialist officers should be seconded to explore potential overseas markets and to advise industry on the technical needs and standards of production, grading and handling.

The department should have a representative on appropriate marketing Boards so that access is available to commodity marketing information and statistics. This would enable the department's advisory services to be in a better position to advise the government and industry on product development and the adjustment of production to potential market outlets.

Some re-organisation of the department's structure would be required to enable the necessary development of the farm management and marketing sections. It is proposed that an Economics and Marketing Branch be established, with the Branch Head reporting direct to the executive.

The strengthening of the department's marketing services would in all probability not be entirely a charge on State revenue funds. As South Australia is now a claimant State increased services directed to exports and the balance of payments position would attract increased Commonwealth financial support.

3. Extension (Advisory) Services

Notwithstanding the emphasis on economics and marketing, there is still need for improved technical advisory services. Rapid technological advances and the need to shift from one form of production to another (e.g. to meat and oil seed production) and the need for more intensive forms of production (e.g. pastures, livestock) all require more specialised advisory services.

More economic production requires greater biological efficiency as expressed in conversion ratio, growth rates and the quality and composition of the product.

There will be a need to re-locate some industries, such as vegetable production, and technical advice will be needed on husbandry techniques, water resources, and production methods.

These services will need to make greater use of the mass media, supported by regional specialists and group training of farmers.

4. Research

A searching review is to be made into the department's research with the view to providing greater flexibility in programming and allocation of priorities.

A Research Policy Committee and a Research Liaison Committee have recently been formed within the department.

The Research Policy Committee will develop new criteria for determining research priorities. These will provide the necessary flexibility to meet urgent new research needs, and to phase out existing programmes of lower priority.

The Research Liaison Committee will see that the research policies laid down by the Policy Committee are put into effect, ensuring efficient use of financial, physical and personnel resources.

Special emphasis will need to be given to biological means of control of pests and to the discovery of alternative forms of treatment to those chemicals which have residue hazards. Greater attention needs to be given to integrated forms of control and management techniques.

Mechanisation, and the more economic use of fertilisers and chemicals require special attention.

The regional facilities of the department are well adapted to provide for research into local production problems.

5. Industry Liaison

Considerable progress has been made in recent years in achieving a closer liaison between industry and the department. This in turn has brought increasing demands for departmental services.

Industry liaison operates in two directions. Apart from providing information on the research and service needs of industry, it also provides a means by which national policies and programmes may be implemented. Production can be adjusted to provide for specific market outlets.

It is intended that industry liaison will be raised to a higher level by departmental representation on marketing boards, by the formation of industry liaison committees and by training programmes for consultants and service personnel.

There is also an increasing demand on departmental resources for assistance to other government departments, such as Education, Lands, Environment, and Industrial Development.

6. Agriculture and the Environment

The Department of Agriculture, as at present constituted, contains the largest resources of experience and scientific knowledge within the State required to investigate and advise on the problems of range management, the reclamation and rehabilitation of marginal lands, drought mitigation, and land-use mapping and planning. The more effective use of water resources by efficient irrigation and drainage methods are within the scope of the department's activities. Allied to this is the control of water and land pollution by agricultural practices and chemical by-products.

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Agricultural training is an essential background to the development and rehabilitation of national parks and reserves and the control of the many pests of native flora which have not yet been given adequate attention, but which will have increasing significance to the quality of life in the future.

7. Administration

A start has been made in the introduction of program budgeting as a means of more effectively indentifying and controlling areas of departmental activity in relation to expenditure of funds. The experience gained in preparing the 1972-73 sub-estimates of expenditure and controlling approved funds within this framework will be built on in succeeding years with the objective of developing a full system of program budgeting for the department.

The proposed relocation of the department's head office at Northfield and grouping all activities, (other than those which are regional), at the one site will have many advantages in terms of integration of planning and activity.

8. Resources Needed

The Department of Agriculture already possesses the basic requirements to undertake most of the activities outlined in the foregoing.

Some of the existing resources have already been deployed along the lines indicated. Some present activities of the department may be curtailed.

Staffing } ?
Funds

Generally, the programme outlined will require an increase in resources and personnel, some specialised training, and a minor re-organisation of the structure of the department.

Priorities in implementing the proposals are difficult to assess. In general terms they can be listed as follows:

- (a) Protection of industry from pests and diseases and the promotion of an adequate wholesome food supply to the home market.
- (b) Promotion of marketing, both local and export, by the maintenance of high standards of quality, market research and intelligence, and more efficient marketing techniques.
- (c) Economy of production by adapting research and extension programmes to this end.
- (d) Restructuring of industry and rehabilitation of marginal lands.

The department's research and advisory services will need to be regionalised and full advantage should be taken of opportunities for specialised training of personnel.

Before any development programme can be designed and the costs assessed in detail it is necessary for a government decision to be made on the acceptability of the proposals outlined.

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