

## PRESIDENTIAL ADDRESS

### ANIMAL PRODUCTION - LEADING THE RECOVERY

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### INTRODUCTION

The significance of this Biennial Conference cannot be overstated. It occurs at a time which I can best describe as a **major** and complex economic discontinuity. This is not to say that we are the only ones ever experiencing massive frame-shifts or that they occurred suddenly and with no warning. Projection into the future, in philosophical terms, is no more difficult or simple than ever it has been. However in our prevailing case, the scope, scale and rates of changes are unprecedented and the characteristics of the responsible factors and their coincidence in time are unique. Uncertainty has been magnified by our need to attend simultaneously to the environment, to identification and definition of specifications of changing markets, and to profitability of production linked to the capture of economic benefits of value-addition.

We are not making minor correcting adjustments, over the medium term, to a continuing trajectory from our past. Recession and the huge change in world order with the collapse of the USSR and Central and Eastern European systems has set new parameters and time-lines for response. The bewilderment has been compounded by the costly phenomena of empty entrepreneurialism, competency-distanced managerialism, unbalanced policy response to single issue lobbies and a prevailing mind-set that accepts perceptions, whether founded on reality or on misinformation, as the basis on which public response will be determined. Financial deregulation and the "level playing field" may be right in the long term when every player participates according to the same rules, but at present they compound the perturbations.

We are plotting the course to recovery under these conditions. However, while some significant and necessary reorganisations are taking place, they are hard to distinguish from other changes best described as distractions and rearrangements of the furniture. We are caught up in events of both kinds. This also is something we need to recover from.

### THE CONTEXT OF OUR WORK

We work in or serve a beleaguered agricultural economic sector of which much continues to be expected. The expectations are largely implicit. Indeed the rhetoric has been, until recently, to downplay this Nation's dependence on success of the agricultural sector and to turn the warm sunrise of political attention on industries that we have not seen emerge as self-starters in better times. This includes industries that the Industries Commission has, at some earlier time, assisted out of operation. Banks, amorally and perhaps unsustainably determining their own short-term profitability to be above the national long-term interest, are hiding behind the distortion that they stand ready to lend to finance the forthcoming key developments in industry. Their track record in the direction of their lending is a large part of our problem, and has led to enormous damage to the farming community.

In some of these arenas, many producer and scientist members of ASAP are not merely laymen or affected parties. There are significant areas in which we have influence and can affect outcomes. We have much to contribute through community leadership in arguing policy and in setting the directions for research and industry development. Above all, scientists and agriculturalists are used to operating under conditions with many uncontrollable sources of variability and without the assumption of steady state in the system. They have expertise in the solution of complex problems and are well placed collectively to apply it to problems of wider scope. They are, by and large, optimistic but keenly aware of the perils of self-delusion. These are qualities we require above all else in those who will lead the recovery.

We will focus our attention on the needs for and our ability to deliver scientific contributions to enhance the performance of the animal industries. There is urgency in the search for opportunity. The context is a comprehensive reordering, for a range of commodities, of the relationships between the producer, the processing and value-adding sector and the target market. There is rapidly diminishing

scope, if ever it existed, for producers to take consumers for granted or ignore their preferences. The markets make, or will make, increasingly imperious demands upon competing alternative suppliers, and these will be about product qualities as much as price.

In the new world order, existing trade relationships are precarious but other opportunities are emerging. This requires a comprehensive re-reading of the absolute requirements and marginal preferences of current and potential markets. Previously much of what was expected of a product may have been poorly defined or only loosely acknowledged. Now increasingly tight specifications are being set for our products by the domestic and export markets, or pro-actively by those trying to identify some quality characteristic that will favour their product in a competitive market setting.

In the light of these realisations, policy changes and reviews of industry sectors are occurring. The process involves many of us directly. The objectives, performance and capabilities of Research and Development Corporations and the many public research performing institutions are under scrutiny. These reviews are presented as evidence of renewed institutional commitment and determination to succeed, and particularly to apply the talents of scientists to the key targets for improvement of industrial productivity in Australia. However determination alone will not ensure that the process is carried out well. Producers, processors and market and services personnel, and those who will perform the research need to make active inputs into the process. The outcomes must engender confidence and support personal conviction of those who will carry out the new undertakings.

One certainty reinforced by all these reviews is that agriculture and the livestock industries remain essential major foundations for any path to recovery that we might like to propose.

### THE NATURE OF 'RECOVERY'

We have to realise that 'the recovery' is not an event, but is a continuing process. Just as we will always be trying to find better ways of doing what is currently required, we will always be recovering from some shift in the production, processing or marketing domains. Our systems, and consequently the research that goes into attending to their effectiveness, will always operate in a climate of change, some steady and some abrupt. In gearing up to respond to the current circumstances we need also to build in flexibility, acquire the state of preparedness, and ensure an enhanced capacity to respond to future change.

While changes will continue to come, their nature and timing is unknown. Some we may be able to foresee and even to drive in our favour. We need to be both imaginative and realistic as we attempt to identify long-term and short-term strategies in attending to industry needs and opportunities. There are four intertwined aspects to this.

First in relation to ability to produce to satisfy domestic and export markets, we have simultaneously to clean up from past practices, introduce new management procedures that utilize most efficiently any new technology or genetic resource becoming available, and meet the current market demands for quantity, timeliness in delivery and reliability of quality. In this area the contributions of diverse technologies have to be married into alternative strategies, setting the stage for rapid response to changed resource availabilities, imposed constraints and new production objectives.

Second, for the various animal products, quality is related partly to prevailing fashion and partly to real nutritional and health-related characteristics. Some quality characteristics are preset by the production system; others are subject to beyond-farm effects or are capable of modification by subsequent processing. A quality trait has to be re-defined not only as something assessed in the product objectively by measurement or subjectively by the senses, but as something arising out of community attitude to the source or the means of production. The product is of unacceptable quality if it fails on the balance of current prejudice. Sound factual information and better communication aimed at community education might work on the attitudinal end of quality issues. However we are all familiar with examples where misinformation fed by competitors or those with a different agenda has put the market beyond reach.

Third, environmental stewardship, husbandry of resources and welfare of farm animals are matters high in the public concern. There is increasing evidence of public willingness to apply pressure at both the production and the market ends against systems or practices perceived as undesirable. For the sake of long continuing productivity and resilience in the soil-plant-animal system and also because of market discrimination, our systems have to achieve, to the best of our ability, objectives that are not obviously compatible.

Fourth, the global aspects of population growth, and macroenvironmental change are on-going issues. On a worldwide basis we are told by the United Nations Report on the State of the Environment to expect a population increase of another 1.7 billion in the next two decades. However, of this 90

percent will be born in countries with little capacity to import food under commercial trade conditions. Also global warming or the threat of it will result in altered world wide production capabilities and distribution of industrial development. In the face of these, how will markets shift? In which industries and market sectors will Australia be able to concentrate in the longer term ?

### **THE 'INTERCONNECTEDNESS' OF IT ALL**

We can pose a series of questions, the answers to which lead deep into all the strategies, tactics, practices and technologies that we have or can conceive.

For the respective livestock industries with their current and potential range of products, what domestic, import replacement and export opportunities really exist? Have we identified and defined the export market and our market advantages correctly? What balance should be established among our exports of raw commodity and of value-added products? How, if at all, do domestic and export markets parallel each other or differ in the specifications for the product in demand? What qualities are demanded of the raw materials to be processed into value-added product and what qualities can be imparted by processing? What about our production systems should be retained and what should be changed to assure those qualities?

Existing and potential trading partners all have, or will have, domestic programmes for development of industries supporting employment for wider income distribution. These will involve, on a selective basis, value-addition processes applied to domestically produced and imported raw materials. What are the priorities of these countries? What are their relative strengths and weaknesses in that mix of production and processing? What are the resources they need and the qualities they seek that they cannot achieve themselves? What is the degree of their dependence on a raw material we produce, and how competitive can we become in the value-addition stakes? Where in their portfolio of current or intended import and export trade do we find evidence of likely acceptance of our value-added product? Under what circumstances will their pattern change?

More and better choices of technology and practices can and must be developed to meet combined objectives in productivity and improving the marketability of the products. In seeking and selecting among these, it is not unreasonable that our decisions about future developments in production and value-addition be based on the full costs of the processes. Delivering undisclosed costs on neighbours, on the "commons" and on the future may be good business but is unacceptable behaviour. These unaccounted outputs are also inputs into the system at some other place and time, and are frequently productivity-diminishing or anti-quality. Some arise from practices, including practices long discontinued, introduced to increase agricultural productivity. Some arise beyond the farm gate and some from non-agricultural sources. Waste disposal and pollution on-costs therefore have to be computed into industry balance sheets or impact statements. Estimating those costs is not something we have done well and calling them externalities does not solve the problem.

Furthermore, there is discrimination in some markets against products arising in systems regarded as having undesirable environmental, animal handling or food contamination aspects. As such they constitute anti-quality factors resisted by the market. Where we can achieve market benefit from the qualities that our production and processing systems impart, we should value that benefit, even if it is delivered in full only at some time in the future. In this I note a problem with discounting future benefit if greater current profit is based on systems that lead to losses of productivity, response capability, or acceptability in markets.

Australian animal industries need access to alternatives that allow success under such conditions of production and market sensitivity, whether we consider the discrimination to be well-founded or misguided, transient or continuing. Some of the responses we might mount at the various levels are mutually compatible; that is, there can be a confluence of objectives. It is our role to identify these and provide the methods through which the overall objectives are achieved.

### **RECOVERY AND THE INDUSTRIES**

Not only are the industries having to change but the vertical and horizontal relationships between them are reshaping. Farmers as marketers can operate individually, through cooperatives, or through marketing authorities. Each mode of operation has some advantages in responding to some types of opportunity presented in the span of markets. But do farmers get adequate and timely access to market intelligence? Do they understand and have opportunities to participate in the steps beyond the farm gate?

Our markets change and the qualities they demand change. Our initiative needs to be directed **first** to identification of the abiding basic qualities as the primary specifications for farm products as raw materials. For each commodity some of the qualities required of raw material depend in part on the

limitations and tolerances of steps in subsequent processing methods. Engineering developments will permit some changes in specifications and tolerances. There is one set of qualities to which all markets will trend and that is the absence of contaminants or components which are perceived to impair health. In this area we have considerable advantages over Europe and North America. However, if we aim to use this in the future as a basis of market advantage, we need to be investing in systems that will absolutely ensure our ability to meet the specifications, and the certification, regulation and monitoring procedures that will immediately be invoked.

When a specific market niche is **recognised**, what inputs are needed to ensure that industry or individual businesses can gear up rapidly, secure contracts, and assure continuity of supply with effective quality control? Which industries or parts of industries are truly well placed, with flexible response capabilities? For those that are not, is this a characteristic of the industry that is not alterable by any conceivable change in structure, method or configuration? Do we have the infrastructure or the investment capital to support success in new areas?

## **RECOVERY AND RESEARCH**

Response capability today depends on knowledge developed in the past. Our capacity for response tomorrow depends on current investment in ideas and the stuff that ideas are made of. Strength in innovation comes from diversity of approach, and this has been an important ingredient in the undoubted success of the past research effort. The more so will this be a major requirement in the future, because among the different ways in which a problem can be solved lie the alternative options for change to suit different circumstances.

While the breadth and depth of the combined capabilities of our researchers working on animal industries issues is impressive, gaps exist or are being created. In the conditions of overall inadequacy of funding, some areas are relatively over-subscribed. What linkages exist in our research between work aimed at innovation to increase productivity and that aimed at product quality? How much research attention to environmental issues will also have its pay-off in market approval?

The Corporation model with its reliance on contract research and short-term funding will be found to constrain innovative research and preparedness. Some specific objectives of each of the industries, as expressed in the Corporations' strategic plans and statements of research priorities, are laudable but not immediately achievable. In research, methodological limitations and deficiencies in the scientific background knowledge do exist. If this is not appreciated by those contracting for the research, it can lead to acceptance of attractive sounding research proposals put forward by those venturing outside their area of expertise, with neither party aware that they are unachievable. Researchers and those who commission research need to confer on this because the answer is not simply a quick change to a new priority.

Collectively we have to achieve better balance of resources to meet the needs for the strategic basic research and the multi-disciplinary programmes to open up avenues favouring achievements in currently unattainable areas. Too often unreasonable and irrational expectations have been raised by those promoting strategic basic work as if it were on the verge of implementation. For example the publicity surrounding "spectacular gains" promised for molecular biology, genetic manipulation and other popular modern research fields, has led to expectations that "saltation" will occur - a one-step leap to a new, "fitter" genotype. When the benefits come they will be immensely valuable but they will be incremental and require bedding down in systems that demand or permit other changes to realise the benefit.

Research productivity also depends on time to think, consult and confer. That time is not an optional extra, nor is it a **free** good; and it is an increasingly scarce input. This has to be re-acknowledged by employers and those contracting research. It must be structured into the profile of each scientist's research, development and implementation activities. Even informal discussions provide a clearing house for ideas among colleagues and can set up novel collaborative research assaults on the currently unattainable.

## **THE RECOVERY AND EDUCATION**

This is an era for the adequately informed and appropriately skilled. Information and skills come two ways - you have them yourself or you know how to get those in possession aligned to your purposes. Access to education and training programmes for producers, their families and staff, and for the support and service persons involved animal production and related industries is a critical matter. Preparation, awareness of information systems, and ongoing communication underlies all the processes of development. There always has been a need for a comprehensive system for education, research and

extension in agriculture and related industries. It has not emerged as strongly as it should have, considering the beginnings laid in all States in the last century and in the research and teaching institutions growing through this century. Perhaps it has fallen victim to **compartmentalisation**, the pretensions of individuals, the tendencies of politicians to play favourites, and that unhealthy brand of competitiveness generated by gross underfunding compounded by perceptions of funding distortion. Whatever the causes, the amount and types of work to be done in education relating to the animal industries now demands massive effort and strong spirit of cooperation across all educational and research institutions.

We are recruiting into research and into the service and consultation areas of agriculture and related industries people of diverse background. Their contributions can be enormous if their talents are joined in with those having different experience and a wealth of industry understanding. Access to continuing education, facilitation of mobility and limited term secondments within such a system are essential parts of a career structure for staff. There is a need for the training guarantee provisions to feed into the comprehensive system of agricultural and related education, research and technology transfer. Major developments of education and skill training are needed in the animal industries area, and a wealth of opportunities for their improved provision exist.

#### **LEAD ON!**

We need to ensure that we have linked a strong operating matrix of market awareness, quality and productivity consciousness, and technical facility in production, processing and value-addition. We know that animal agriculture does capture and turn to advantage the results of research. In the animal industries, our leadership in recovery depends on using every bit of ingenuity, every chance for cooperation and every avenue available in education, research and communication to serve the sector comprehensively.