

CHANGING REQUIREMENTS FOR RURAL RESEARCH AND EXTENSION —THE PRIMARY PRODUCER'S VIEWPOINT

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ABSTRACT

The traditional role of the rural industries as the primary source of Australian foreign exchange has changed radically with the progress of industrialisation and the expansion of mineral exports. Following the withdrawal of many Government concessions from rural industry and a change of emphasis away from increased production, new approaches to research and extension programs must be developed. Weaknesses which are apparent in the developmental stages of new research technology could be overcome if producer organisations became more directly involved with research and extension organisations. The past emphasis on production research should be replaced with a more balanced approach where economic, marketing and social aspects of rural production and living receive increased research attention.

A CHANGING RURAL ENVIRONMENT

Ever since European settlement of our country, the general political attitude towards primary industries has been one of encouraged expansion of production. Initially the aim was to achieve self sufficiency in the nation's food requirements. As the national aim moved towards increased industrialisation, primary produce exports became a means of acquiring the foreign exchange necessary for purchasing the capital equipment and consumer goods required within the Australian economy, but not available locally.

Given this expansionist political attitude, and the long term position of power of the Country Party in a Federal Government, the nature and amount of assistance received by Australian farmers has been determined on political criteria, rather than economic ones. Such assistance obviously modifies the agricultural market economy with regard to what farmers produce, how much they produce, and how much they receive for their produce. It is in this environment that rural research has taken place in Australia and it is obvious that research will have been oriented towards increased rural productivity.

Recently the economic and political rural environment in Australia has changed radically. A marked rural recession suddenly reverted to a "boom" for many industries. Wool, grain, sugar and meat prices rose substantially as a Labor Government came to power, obviously without any real rural policy other than to eliminate existing concessions that could not be justified by economic reasoning. Obligations to urban social reform programmes are possibly causing a more ruthless approach than would otherwise be adopted. The "boom" situation allowed the removal of many concessions without causing a decrease in the net income of farmers as would normally be expected. The present depressed state of the meat and wool markets has however caused farmers to realise the impact of Government policy.

With the progress of industrialisation, the local availability of crude oil, and the expansion of mineral exports it is clear that the role of agriculture has changed, no matter what political party is in power. Assessments of the need for "concessions" to primary producers will in future be made by economists through bodies such as the Industrial Assistance Commission, rather than by farmers themselves or their political representatives. Expansion of production is no longer

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an automatic requirement, and in many industries a contraction of production is deemed to be desirable.

Due recognition must also be given to the inflation rate existing within our economy and the probability of the inflation rate continuing at a level far higher than previously experienced. It is in this very different rural environment that future research programmes should be planned.

Having stated that rural policy is now subject to "economic justification" I would like to turn to the major economic role of farming in the Australian economy. This can now be stated as the supply of "low-cost" food and raw materials for consumers and secondary industry.

Agriculture is now important as an earner of foreign exchange only in conjunction with other export industries. The growth of the mining export industries is thus very relevant to the new role of agriculture, and I would doubt that any moves by rural industry to seek a devaluation of the Australian currency could be successful while total export income remains at a satisfactory level.

Two lesser economic roles of agriculture are as a source of employment, and as a market demand factor for inputs into farm businesses and for farm consumers. As only seven per cent of Australia's population live on rural holdings these cannot be considered to be significant economic roles of agriculture.

In past years primary industries have appeared to contribute to two major social objectives; firstly the geographic decentralisation of population and small industry, and secondly the use and occupation of land that otherwise might be unused and unoccupied. It would appear that neither of these social roles are now recognised by the Federal Government. Decentralisation is considered to be more economically efficient if achieved by encouraging urban growth centres on established lanes of communication and relatively close to existing cities. Much of the presently farmed "marginal" land is considered to be better left unproductive and unoccupied.

Perhaps one of the most concerning features of the present rural situation is the obvious animosity that exists between the urban section of our nation, and the rural section. "Concessions" have become part of the farmer's business economy and consequently considered an entitlement. Urban taxpayers and consumers feel that they should no longer encourage excessive production or subsidise farming enterprises that are not economically viable on export markets. Farming leaders, politicians and the media all have vested interests in telling their audience what the audience wants to hear, rather than presenting both sides of the case objectively. Consequently the urban-rural "communication gap" continues to grow.

I will not try to examine the multitude of factors that should be considered when assessing the economic and social right to "concessions" for various sectors of our community. I merely outline the radical changes that have taken place in the rural environment to emphasise the uncertainty of many primary producers and to set a background for my belief in the need for research and survey to assist farmers to adjust to this new environment. Changing patterns of resource allocation and cost structures are developing and there is an urgent need for farmers to be able to assess the effects of these changes and to determine their most desirable production patterns within the new environment.

THE PRIMARY PRODUCER'S VIEWPOINT

It is quite clear that the majority of primary producers have not, and possibly do not, wish to face up to the reality of a new rural environment. A great deal of energy is being expended by producers and producer organisations in emotional outbursts, rather than in making objective economic and social analyses of the actual and proposed government rural policies.

The Government sponsored "Green Paper" on the Principles of Rural Policy in Australia provides a basis for farmers to motivate an Australian Government

"White Paper" on rural policy. The opportunity to participate in the drawing up of principles for a "White Paper" should not be neglected by the rural community in general and by farmer organisations in particular.

Additionally, many of the "concessions" withdrawn from farmers were directly related to production or the ability to develop land. Consequently, they gave little assistance to the farmers most in need of assistance. There is every indication that well-presented cases for alternative "more equitable" assistance would receive favourable consideration. It is difficult to anticipate what reaction would be produced by a "welfare approach" to farmer assistance.

Having witnessed the farmers' attitude to a changed rural policy, it is not surprising that the majority of primary producers in general adopted a negative attitude to rural research programmes. Many research projects appear to be research for "researchers" and results appear to have little hope of assisting farmers, other than in a very obtuse and limited way.

On the other hand many or even the majority of the major technical advances in agriculture, have resulted from research projects. Commercial agriculture has developed some technical advances, however in general commercial innovators have adapted and modified the results of research to suit large-scale application. In reality, the considerable increase in productivity accompanied by falling employment in rural industries has been made possible by improved technology.

RESEARCH—DEVELOPMENT—PRACTICAL APPLICATION

This perhaps leads to one of the very real problems as far as farmers are concerned. Many results achieved in "plot" or small area trials are not applicable to large-scale situations. Limitations exist in the form of management ability, climatic conditions, and sheer physical factors such as machinery or flexibility in livestock numbers.

A further problem seen by producers is the adoption of new technology before all aspects have been fully researched. There is a strong desire to use any "promising" developments and this fault lies mainly with innovator farmers and with commercial industries servicing agriculture. Initial research results normally are well qualified, but such qualifications are too often ignored.

Long term or side effects applicable to the adoption of new technology are a further problem to farmers. The pressures of rising costs, and incentives to increase production have resulted in very few farmers adopting a long term approach to the productivity of their properties. Consequently if research indicates a new technology which offers potential to increase productivity, then the new technology is adopted without regard to possible long-term effects on factors such as soil fertility, genetic and other biological problems, or alternative future land use. Again the influence of new technology on a range of alternative enterprises is often overlooked (e.g. the effect on horses grazing setaria or buffel grasses).

There presently exists a gap in the research—development—commercial application process. There does not appear to be sufficient recognition of the "development" phase which is essential. Often researchers must promote their ideas to innovator farmers if they are to see some assessment made of research results in a commercial environment.

The innovator farmer often "risks" his capital in applying the new technology. The potential reward for early adoption of successful new technology is often not very great. Thus the situation exists where research work often progresses only to the publication of a "paper" and does not enter the development phase. Other research results are adopted by innovator farmers who bear the cost of development work where promising research results do not stand up to a commercial environment.

The separation of "federal" controlled research organisations from "state" controlled development and extension organisations accentuates the shortcomings in the research—development—practical application process.

RURAL INDUSTRY INVOLVEMENT IN RESEARCH AND EXTENSION

In the past individual farmers have been left to draw their own conclusions about new technology and survey results. The majority have little time and limited ability to make a well informed assessment. Government Department extension services have assessed new technology and communicated with producers and they should continue in this role. I feel however that producer organisations with a direct responsibility to their members, and access to a wide range of technical and academic experts, could well become involved in the assessment of surveys and new technology, and in organising extension services possibly in conjunction with Departmental Officers.

Farm organisation involvement in, and communication with research organisations should be of high priority. All too often "groups" formed to carry out particular research projects continue to function after these projects have been completed. One aim of the group then appears to be to find research projects sufficiently worthwhile to justify the retention of that research group.

Producer involvement could well lead to improved communication between various survey and research organisations and a consequent more efficient utilisation of survey resources. While it is obvious that research organisations should not be obliged to conform to economic criteria, they should however be open for scrutiny by those who finance their operation, whether this be society in general or sectors of it such as primary producers.

RURAL RESEARCH: A CHANGE IN EMPHASIS

In the immediate future rural research should adapt to the new rural environment if it is to be of maximum benefit to primary industries. It is fair to assume that the general themes running through the four hundred-odd pages of the "Green Paper" will influence future rural policy. Despite the length of the "Green Paper" the major themes are few. An attempt to state them should probably be made, and I see them as follows:

1. Rural policy should involve equity between people within rural areas, and between rural and non-rural individuals.
2. Rural policy should aim to assist agriculture to adjust to market requirements, rather than to produce whatever can be produced, yet should assist in minimising the effect on individual farmers of short-term market fluctuations.
3. Rural policy should encourage economic market forces as the means of resource allocation yet should permit government intervention where market forces work against other goals, such as long term rural or social objectives.
4. Rural policy should be an integrated part of the overall national economic and social policy rather than an isolated policy in itself.

Research and survey programmes can and should be of great assistance to farmers in their adjusting to a new rural environment. Past emphasis on agronomic and animal husbandry research should be replaced with a more balanced approach. Economic, marketing and social aspects of rural production and living require an increased emphasis in future research programmes.

Such research will not only aim to improve the individual farmer's potential for profitability, but should be designed to assist the rural sector in the presentation of cases to bodies such as the Industries Assistance Commission or the Federal Government itself. Bodies such as the Industries Assistance Commission will be staffed by numerous economists whose jobs entail the "expert" appraisal and advice to individual Ministers and the Government.

To effectively present its cases the rural sector will need to employ qualified economists, academics and experts from various disciplines and have access to survey and research results. Submissions should be based on economic, social welfare, land and resource utilisation, and long term objective criteria.

The urgent requirement for technical research appears to be in determining lower cost production techniques and in establishing land utilisation practices that permit a degree of diversification and a mobility in diversified production. Biological pest and disease control methods will become increasingly important as health and ecological consideration receive greater emphasis.

In the field of animal and plant breeding research, efficiency of production rather than total production potential, should be the aim. Techniques such as hybridisation, artificial breeding and embryo transplants offer considerable scope for the farmer.

Economic surveys and the economic aspects of research should receive increased attention. An immediate requirement is to assess the effects of the considerable changes in cost structures on particular industries, particular geographic areas and on particular processing or manufacturing units in rural areas. Resource utilisation, social implications and long-term productivity are also factors that should receive the attention of rural research.

One aspect of most rural areas that has been somewhat neglected is that of marketing. There is an urgent need to assess marketing methods and examine the need for the various profit margins that exist between the producer and the consumer.

The "auction system" is accepted as the farmer's means of marketing his produce; however, a full assessment of the "auction system" could well disclose considerable disadvantages. Farmers tend to accept their role as "price takers" rather than "price makers" due to the old philosophy of producing whatever can be produced. It may well be that in the new environment farmers will become "price makers" at least in portion of their total market.

Advertising and promotion of farm products has been undertaken only on a limited scale. This is possibly due to the farmer being a "price taker" and consequently retail businesses were able to achieve greater profitability by paying the farmer less than they could by selling more produce as a result of advertising and promotion. The rural community can ill afford to allow this situation to continue and I see market research as an important factor in the new rural environment.

The same logic applies to research aimed at developing improved consumer products based on primary produce inputs. Competition within consumer spending power will be severe and individual products can no longer anticipate "protection" by way of regulation or subsidy.

CONCLUSION

The present preoccupation with economic criteria in rural policy is almost certainly a result of the past neglect of economic criteria. It appears likely that as this "reaction" modifies, the Federal Government will adopt an outlook towards primary industries and rural areas in general, which places all relevant criteria in a truer perspective. Social, moral, economic and long-term planning criteria will all be assessed.

It is also probable that man's preoccupation with his own nation's affairs and problems, through the various political systems, will lessen. The extraordinary

inequality between the living standards of the mass of the world's population and those of us in affluent nations cannot be ignored.

Some farmers even now see the existence of the underfed millions in the Third World as a justification for their continued efforts to increase production. In reality, however, except for disaster relief, the more developed countries of the World—both communistic and capitalistic—show little enthusiasm for deliberately expanding the production of food beyond what can be "sold" on world markets. The world's underfed people remain underfed because they cannot produce or purchase their needs.

The present growing awareness within a nation of ecological criteria and social injustices, should logically extend to the social injustices of a world where the majority of the population are underfed yet where the total productive capacity to produce food is far in excess of present production.

When this happens, Australia's rural policy will be less influenced by economic criteria. The present situation for Australian agriculture is perhaps one of an interruption of past goals and trends rather than a change in its direction. It can be best used as a period for consolidation and assessment prior to moving into an era requiring presently unconceived increases in production.

The direction of rural research should be in anticipation of the required role of primary industries. Thus, in addition to assisting in the adjustment to a new rural environment, the present research aimed at increased productivity must continue.

The role of Marketing Boards and Primary Producer Organisations should also be assessed in relation to the new rural environment. Board members and executive officers at least should be fully aware of the changes in rural policy and their effect on the particular organisation. Possibly a thorough survey should be carried out to assess the functions and efficiency of the various bodies. The suitability of their membership and executive structure should also be assessed in relation to their required role.

Study and research of social aspects of the rural community should also be undertaken. Applicable subjects should include educational opportunities in the rural community, the present urban bias of education and the general availability of social amenities in rural areas. Any study of education should examine the need for adult education facilities, particularly in the fields of agricultural techniques and business management.

Finally, there is the urgent need to improve the rural-urban communication gap. It is very much in the interest of the rural community to have the sympathy of, or at least some understanding from the major proportion of Australia's population who live in high density urban areas. Without such understanding, the task of achieving the most favourable policy will be made far more difficult.

There are obvious reasons why the interests of urban and rural areas should be compatible. To date the public relations efforts of farmers and farmer organisations has been poor, to put it kindly. Public statements continue to be emotional rather than factual and contain the old clichés that have been used for so many years.

The newly formed National Rural Advisory Council has adopted this problem as one of the major ones for examination. It is to be hoped that sufficient resources are employed to effectively research this question of communication and public relations.

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