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A CRITICAL APPRAISAL OF CURRENT ADJUSTMENT PROGRAMME IN AUSTRALIAN AGRICULTURE

by

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A CRITICAL APPRAISAL OF CURRENT ADJUSTMENT PROGRAMME IN AUSTRALIAN AGRICULTURE

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Australia has been described as "the lucky country". Certainly, if, over the post-war period, one compares the economic position of the Australian national farm with that of other countries of similar affluence and wealth, one is tempted to apply the adjective "lucky" to Australian agriculture.

If we accept relative income as a measure of economic well being, Slattery (Quarterly Review of Agricultural Economics, Vol. 19, No.3, July 1966) showed that in 1953, the average income of Australian primary producers was 21% higher than that of other self employed operators, and 27% higher than that of wage and salary earners. In the U.S.A., by contrast, average farm income was only 42% of that of other self employed persons, and was only 31% of that of wage and salary earners. Ten years later, in 1963 the respective figures in Australia were 3% and 4% higher, whereas in the U.S. average farm incomes remained considerably lower than that of self employed persons and wage and salary earners.

In short, Australian agriculture, over the most of the post-war period, has not been subjected to the same pressure for change and adjustment as have the agricultural industries of other advanced countries; moreover, where such pressure existed, resources have adjusted themselves to the new situation relatively easily.

At first sight this might seem surprising, as Australia exhibits all those features of wealthy countries which have tended, in other countries, to produce pressures for change and adjustment. For instance,

(i) it enjoys a high level of per capita income;
(ii) it boosts a well fed population;
(iii) its population typically spends less than 25% of its income on food;
(iv) it is a country which has a low price and income elasticity of demand for food, particularly at the farm gate;
(v) although its population is increasing at a faster rate than that of other wealthy countries, largely because of its immigration policy, its rate of growth is still considerably

lower than that experienced in the so-called "developing" countries.

Standen and Musgrave ('The Agricultural Adjustment Problem with Particular Reference to Australia', in Problems of Change in Australian Agriculture, 1968) have suggested some reasons for the slower impact of adjustment pressured in Australia than in most other wealthy countries:-

(a) Land settlement in Australia took place under conditions that resulted in a farming structure that differed from that of Europe and even that of the U.S. Throughout the period of land settlement in Australia, agriculture was subjected to a constant shortage of labour relative to capital, partly as a result of low rates of immigration and partly due to the attraction of the gold fields. These patterns led to the development, over a large area, of a growing technology and a farm structure, that used large amounts of land, and minimised the use of labour and capital.

(b) The impact of new technologies has been different on the farming industries of the U.S., Western Europe and Australia. In the cropping systems of the U.S. and Western Europe, the adoption of new techniques such as fertilisers, plant breeding, insecticides, pesticides and machinery development has meant that cost economies can only be realized when throughput is relatively large. This has meant strong pressure for greater farm size and fewer labour inputs. In contrast, it can be argued that capital substitution in land extensive production processes such as grazing in Australia, has not generally required greater farm areas for cost economies to be effected. The most significant technological advances in the grazing industry of Australia in recent years have been the development of pasture improvement, with newly introduced plant species, and superphosphate use, and rabbit extermination; these improvements do not necessarily require large farms to minimize costs.

(c) Another factor that has diminished the adjustment problem in Australian agriculture is the nature of the principle markets for Australian agricultural produce. In many wealthy countries agriculture

is producing for a limited home market, which is well fed and expands only at the same rate as population. In contrast, Australian agriculture has traditionally produced largely for export markets, in particular the British market under the protection of Commonwelath preference.

These factors have, in the past, tended to mitigate against the development of an adjustment problem in Australian agriculture. But the general picture that emerges of Australian agriculture over the larger part of the post-war period, needs to be qualified in two major respects.

(1) Throughout the whole of the period, there have been sectors within the industry which have been faced with the problems of adjustment and change - notably the dairy industry (particularly in the manufacturing zone), the dried vine fruit industry and the banana industry. McKay, in an article in 1967 ("The Small Farm Problem in Australia") showed that in the early 1960's, 80,000 Australian farms (i.e. 1/3 of the total number of rural holdings) had incomes of less than $2000, and that between 40,000 and 45,000 had incomes of less than $1000. Moreover, McKay showed that these low incomes were not confined to one type of farming, but were spread throughout the industry e.g. 75% of berry fruit farms had incomes of less than $1000, but so had 4% of wheat farms.

(2) Throughout the whole of the past 10 years in particular, pressures towards adjustment have been building up in Australia, as is evident in the trend of relative incomes revealed in Slattery's figures.

As these pressures build up, there developed within Australia a rather belated, but nonetheless welcome recognition, by Government if not by the industry itself, of the need for a comprehensive national adjustment programme. Previous schemes had been somewhat piecemeal in their approach, and had tended to be specific to individual sectors of the industry, rather than the industry as a whole. For instance, the Marginal Dairy Farm Reconstruction Schemes and the quota scheme for the wheat industry. However, the sudden unprecedented and

completely unexpected fall in the price of wool in early 1970, although a sectional problem by definition, became a national, rural crisis in effect, accelerated existing moves towards a national rural reconstruction scheme and resulted in the States Grants (Rural Reconstruction) Act of 1971.

The Act gave statutory authority to a national Rural reconstruction scheme, geared to three goals:-

1. Debt reconstruction - to make loans to farmers with sound prospects for long term commercial viability, but who are unable to meet their current financial commitments.
2. Farm Build-Up - to make loans to farmers to finance amalgamation of uneconomically small properties to economic size.
3. Out imigration - to make loans of initially, $1000 (but later raised to $3000) to farmers wishing to leave their properties.

In intent such a scheme must be welcome. It is, in many respects, a revolutionary change of emphasis from the traditional idea that farmers in trouble can only be assisted through the provision of product price support, or through the establishment of statutory trading boards.

But from its inception, the scheme had some obvious weaknesses.

1. The first relates to the amount of financial support that Government was prepared to offer. Initially, Government ear marked $100 million to be spread between the States, over a period of 4 years (i.e. $25 million per year), of which 25% was to be in the form of a grant while the balance represented a loan to the States repayable at 6% over 20 years. When set against the magnitude of the reconstruction programme in the mid 1970's (it has been variously estimated for instance, that the percentage of farmers in Australia in need of some form of reconstruction assistance ranged from a low 10% to a high 60%) the offer of $25 million a year, over 4 years, seemed from the very outset niggardly. In other words, it seemed as though Government was merely paying lip service to the need for a sound, workable, comprehensive reconstruction programme.

Criticism has been levelled at the large number of applicants who have been rejected by the various State Rural Reconstruction Boards, relative to the number who applied, and the length of time taken by the Boards to assess an application. It seems reasonable to suggest that both criticisms were due, in large measure, to a shortage of funds relative to applicants. For instance, during the first year of the scheme, total applications numbered 5866 of which 3731 (or 64%) were rejected. If we assume that only 10% of the total number of property owners in Australia require reconstruction assistance, at an annual rate of 2135 successful applicants, and assuming a static economy, it would take 10 years to assist this 10%.

Government it is true, quickly realized the inadequacy of the initial financial programme, and allowed the $100 to be spent over 3 years, but even this is an insignificant contribution to the size of the problem.

2. Another criticism of the scheme relates to the distribution of the expenditure between debt reconstruction and farm build-up. It was Government's hope that each objective would claim one half of the funds available. In fact, by far the larger part of the expenditure was incurred on farm build-up as shown in the following figures relating to the number of applicants approved and rejected in 1971-72.

				% Successful
Farm Build-up	Rejected	499	815	38%
	Approved	316		
Debt Reconstruction	Rejected	3208	5015	36%
	Approved	1807		

In fact, almost 3/4 of all expenditure on reconstruction went on debt reconstruction. One possible reason for this is the descrimatory rate of interest charged on both loans. The interest rate charged on debt reconstruction loans has been 4% compared with an interest charge of 6¼% on farm build-up loans. Senator Wreidt's attempt last month to get the Agricultural Council to agree to raise the interest charge on debt reconstruction loans from 4 to 5% so as to encourage more farmers to apply for assistance under the farm build-up

scheme, failed. The best he could achieve was to get the States to agree that they would endeavour to achieve a 70% expenditure on farm build-up, against 30% on debt reconstruction during the 1973-74 year.

But these are relatively minor criticisms. My major criticism of the current Rural Reconstruction Scheme is its failure to understand properly the basic philosophy underlying reconstruction, and to implement a programme geared to this end. In this respect, I am not too concerned at the percentage of total expenditure incurred on debt reconstruction, compared with farm build-up. What really concerns me is the complete and utter failure of the Scheme to facilitate a major and fundamental requirement of an effective reconstruction policy - that is, the rehabilitation of redundant farmers. In the first year of the Scheme's operation, only 36 farmers applied for reconstruction of whom only 12 were successful.

This almost lack of response by primary producers to the rehabilitation aspects of the current Reconstruction Scheme, highlights a major weakness of the Scheme - that is, that the successful reconstruction of Australian agriculture requires the withdrawal from the industry of those farmers who, due to the changing position of agriculture, have become redundant.

Makeham - "Farm Management Economics" asserts -

> "Under present prices and costs at least 12½% of Australian farmers are not viable. They have little hope of economic survival because their overhead costs, including interest and debt redemption, are too high in relation to their ability to cover income; they are either too small or have too low an equity, or both. Although the majority of the farmers in trouble are undersized, non-viability is certainly not confined to small units. On the other hand, we can reasonably predict that at least 60% of farmers in business today will still be very much in business in 20 years' time because they have the ability to adjust to change".

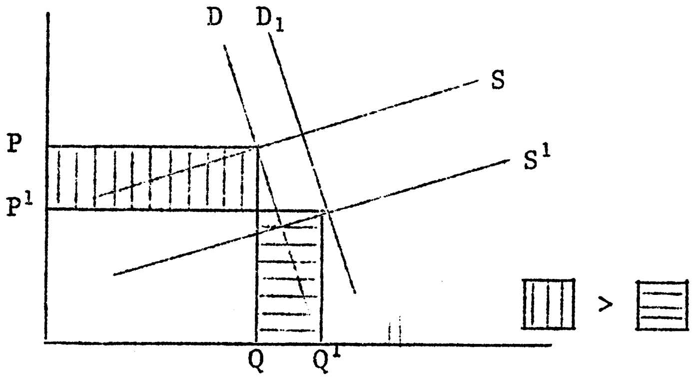
While we may question Makeham's 12½%, it is less easy to question the sentiments that he expresses. Schemes designed to reconstruct debts, or to build-up farm properties, will make only a marginal contribution to rural reconstruction, if the number of properties in the industry remains unchanged.

The pressures that have built-up in Australian agriculture over the past decade have reflected themselves in a tightening of the cost price squeeze.

This fall in the prices received by farmers for their products, associated with a rise in the prices paid by farmers for their inputs, has resulted in a fall in the income earned by farmers which has had 2 consequences:-

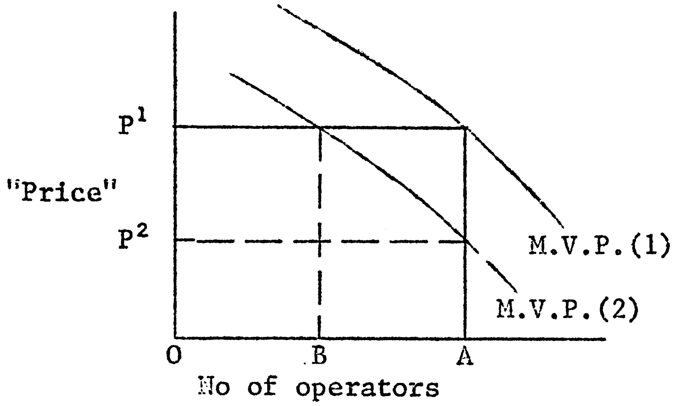
(i) an intensification of existing farming systems
(ii) successful request for price support increases (e.g. wool)
i.e. $Y = [(O \times P) - C]$

The net effect has been to shift the supply function of farm products to the right, at a more rapid rate than the shift in the demand function. That is, farmers have increased their ability to increase food production at a greater rate than the ability of consumer to increase the consumption of food. The situation has been further aggravated by the inelastic nature of the demand function for food, especially at the farm gate.



The overall effect has been a decline in the marginal value product of operator labour which can only be arrested if the number of operators

in the industry is reduced.



To maintain Y reduce number of operators from OA to OB Otherwise "price" will fall from P^1 to P^2.

Indexes of Price Received and Paid by Farmers(2)

(1960-61 to 1962-63 = 100)

1.1. Indexes of Price Received

Item	1966-67	1967-68	1969-70	1970-71	1971-72
Wool	104	91	83	65	82
Wheat	102	105	93	97	100
Cattle and Sheep	134	133	132	131	134
Dairy Products	105	103	99	101	111
All Products	110	107	101	97	104

2. Indexes of Prices Paid

Item	1966-67	1967-68	1969-70	1970-71	1971-72
Equipment and Supplies	109	112	111	114	121
Wages	117	122	129	136	144
Service and Overheads	123	127	140	146	155
Marketing Expenses	114	116	121	125	131
TOTAL PRICES PAID	114	118	121	126	133
Ratio: Prices Received to Prices Paid	-	-	-	77	77

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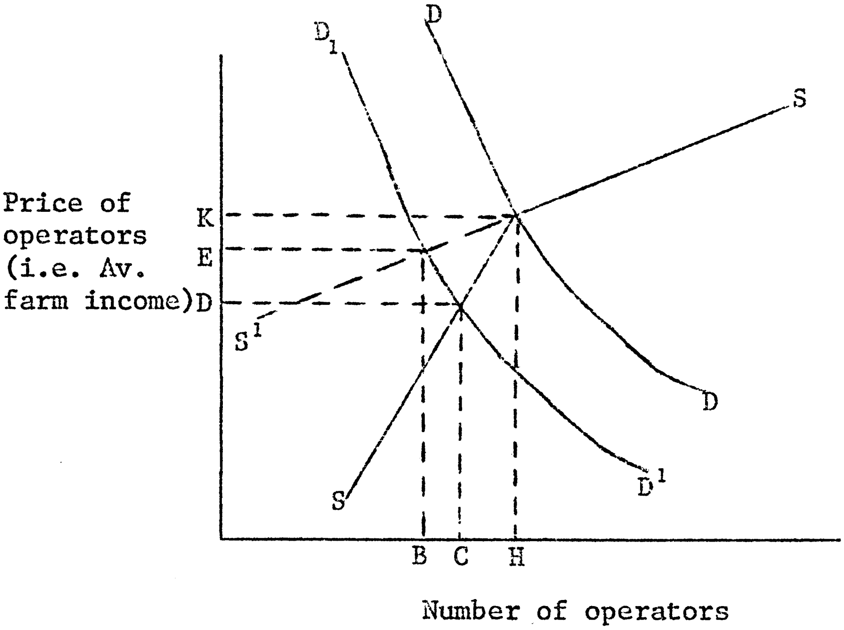
(2) Source: Various issues of *Quarterly Review of Agricultural Economics*, 1966 to 1971.

A successful reconstruction programme for national agriculture implies a proper understanding of this fact. It also requires a proper understanding of the supply function of farm operators.

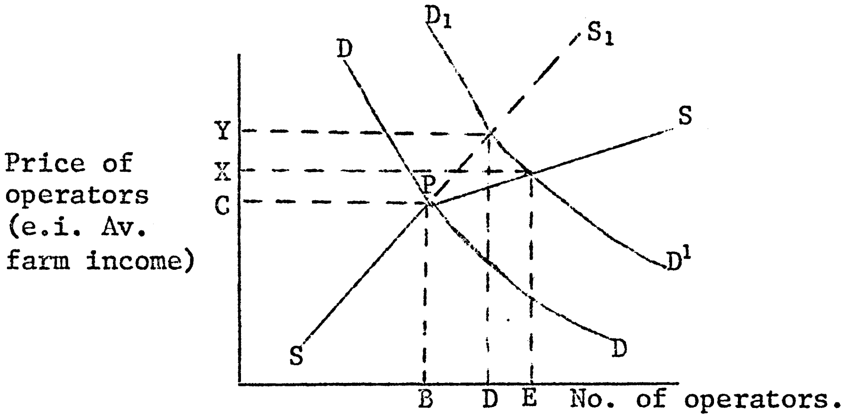
Below we show a typical demand (DD) and supply (SS) curve for farm operators. The demand for farm operators is fairly inelastic, as is the demand for the products of the farmer. The supply curve, however, is not a simple straight, or moderately curved line. It has a kink in it at the point of intersection with the demand curve. It is very elastic upwards to the right, indicating the willingness of new operators to enter the industry, as the "price" of operators rises; it is very inelastic downwards to the left, reflecting the immobility of existing operators, as their "price" falls. Over the past twenty years, the demand curve for farm operators has been shifting to the left (from D to D^1) as production per farmer has been increasing more rapidly than the demand for farm products, under the impetus of new technology.



The characteristic feature of the supply curve of farm operators has resulted in a smaller decrease in their number (from OH to OC) and a greater fall in their "price" (from OK to OD) than would have occurred had the supply curve been of more normal shape (SS_1)

Had this been so, the number of operators would have fallen to OB, and the price of operators would have fallen to only OE.

In the following Figure, we consider the converse situation, and assume a shift in the position of the demand curve to the right from DD to D^1D^1. The more elastic character of the supply function to the right of P would result in a greater increase in the number of operators (from OB to OE) and a smaller increase in their income (from OC to OX) than would have occurred had the supply function retained its original elasticity throughout its length (SS_1). In this situation, the number of operators would have only increased to OD, and their income would have increased to OY.



From these two Figures we can determine the required response of national agriculture to economic development, if the industry as a whole is to fully benefit from such development.

1. On the one hand measures should be adopted that will increase the elasticity of supply of existing farm operators, so that they are more responsive to the effect of a contraction in their demand, as evidenced by a fall in their price. In other words, the mobility of existing operators should be increased.

2. On the other hand, measures should be adopted that will reduce the elasticity of supply of "new entrant" farmers so that gains resulting from an increase in the rate of out-migration are not lost by an unchecked inflow of replacement operators.

In considering the occupational mobility of farm operators, we must start off from the basic premiss that farm operators are no

less rational than any other occupational group in society. If they decide to remain in farming, rather than move out to some alternative employment, their reasons for doing so are no less valid than those that persuade shopkeepers, teachers, dockers or bus conductors to remain in their occupations. The apparent irrationality of farmers springs from the observed fact that they do not leave farming when, and as, their incomes fall. We assume that as the market price of their labour declines (that is, as their income falls) farmers will automatically and necessarily leave agriculture. We become disconcerted when, in fact, they do not. To explain this, we need to distinguish between six different "prices" of farm operator labour.

Acquisition Price: This may be defined as the price needed to attract farm operators into agriculture from the non-farm sector of the economy.

Opportunity Price: This is the sum of two parts: first, it is the price that operator labour currently employed in agriculture could command in the non-farm sector; second, it is the value of any saleable assets owned by the farmer in agriculture.

Salvage Price: The movement out of agriculture saddles the farm operator with transfer costs. The salvage price of the farm operator is his opportunity price less such transfer costs.

Market Price: This is the current cash price of farm operators within agriculture. More popularly, it is his net cash income.

Reservation Price: This is the sum of the operator's market price and the money value he ascribed to the psychic satisfaction of farming, and the values of the perquisites enjoyed in farming - in particular, the value of foodstuffs produced on the farm, but consumed by the operator and his family.

Incentive Price: This represents the minimum market price at which, over time, the operator will remain in farming.

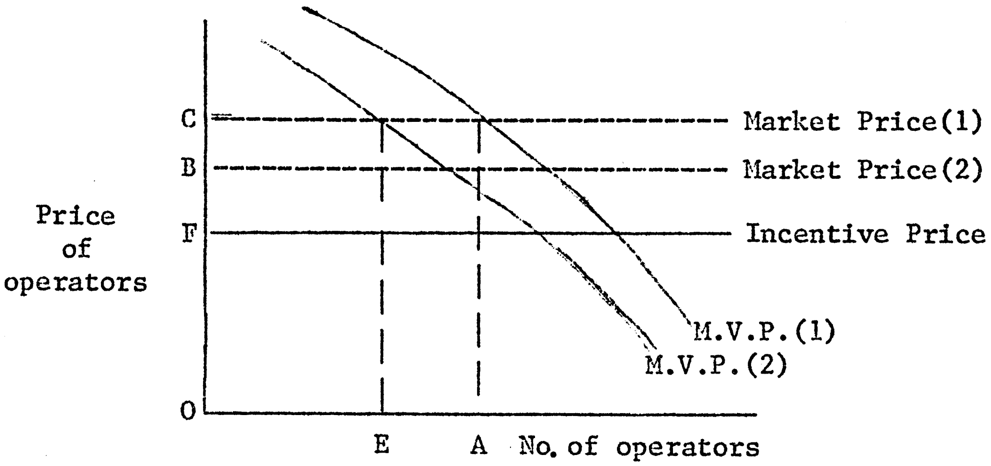
Of these six prices, the last four are significant in explaining the relative immobility of farm operator labour. In particular, it is explained by two price relationships -

(i) The relationship between the operator's market price and his incentive price, and,

(ii) The relationship between the operator's salvage price and his reservation price.

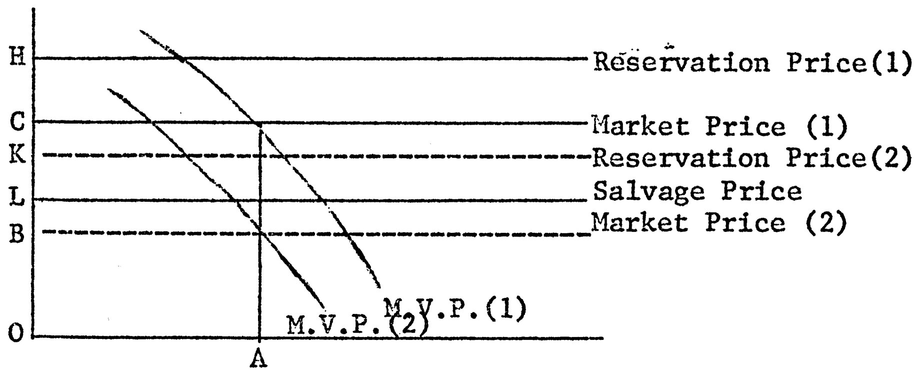
Market Price and Incentive Price

If the long-term level of an individual operator's market price is below that of his incentive price, he will be forced out of the industry into an occupation whose earnings promise to be higher than his incentive price. This is because the operator will be unable to meet his family commitments, and there is a limit to the extent that he can continue to "tighten his belt", and lower his, and his family's standard of living. However, if the new, and lower level of the operator's market price (that is, his cash income), following economic development, remains above that of his incentive price, he will remain in farming. This situation is presented in Figure VI. If the MVP of farm operator labour falls, due to an increase in the supply of farm products greater than the increase in demand, the MVP curve will shift to the left, from MVP_1 to MVP_2, If the number of operators in the industry remains unchanged at OA, their average market price will fall from OC to OB. It could only be maintained at OC if the number of operators declined to OE. But whether an individual operator will leave the industry as his market price falls will depend on the level of the new, lower market price, relative to that of his incentive price. If, as in figure VI, the new level of market price (OB) is higher than the incentive price of the individual operator (OF), he will remain in agriculture. In aggregate, therefore, the reduction in the number of operators which will result from a decline in their market price, will be limited to those whose new, lower market price, is below the level of their incentive price. For this reason, the aggregate reduction that occurs is not always sufficient to maintain the average level of market price of farm operators at OC.



Salvage Price and Reservation Price

In those instances where the market price of the operator exceeds his incentive price, his mobility will depend on the relationship that exists between his reservation price and that of his salvage price outside agriculture. If his reservation price is less than his salvage price, he will seek alternative, non-farm employment. If, however, it is higher than his salvage value, he will remain in farming, and his decision to do so will be essentially rational. This relationship is shown in Figure VII. If we assume the same situation as in Figure VI, in which the MVP of the farm operator is falling, the new, lower market price OB (assuming on reduction in the number of operators) is inflated by a value of BK to achieve a reservation price of OK (where AK = CH). Provided that the new level of the operator's reservation price is higher than his salvage price (OL), he will not find it profitable to leave the industry, even though his salvage price is higher than his expected market price. This is the situation facing a large number of farm operators. Although the level of their market



M.V.P.(1)
M.V.P.(2)

M.V.P.(1)
M.V.P.(2)

price has been falling over time, the salvage price of their labour and other saleable assets, outside agriculture remains lower than its continued use-value within agriculture, as determined by their reservation prices. Out-migration is consequently impeded.

Given this situation, Government can approach the problem from either of two standpoints:

(i) It can control the level of the operator's market price;

(ii) Alternatively, it can influence the level of the operator's salvage price.

The out-migration of farm operators would clearly be encouraged if the market price of the individual operator were reduced below that of his incentive price. The implications of this for Government policy are obvious. Government could facilitate the out-migration of farmers by reducing the level of price support enjoyed by agriculture, or by completely abolishing its price support programmes. While such an approach is theoretically attractive, from a practical standpoint it suffers from three difficulties.

(i) Except at the margin, the difference between the achieved market price and the incentive price of the farmer might be greater than the inflationary effect of Government sponsored price support schemes on the level of net farm incomes. Hence, while the resultant decline in the market price of individual operators would force a number of farmers out of the industry, it might not achieve the desired rate of out-migration. Indeed, it would have no effect whatever on the income of those farmers whose products receive no price support from Government.

(ii) The welfare costs incurred in achieving the out-migration of farm operators through a reduction, or abolition of Government price support schemes, might indeed be regarded by society as being excessive, in relation to the economic gains that might follow. To return agriculture to the free market can effectively achieve labour mobility out of agriculture; it can drive farmers off their farms if the price of the product falls to a low enough level. One

significant indicator of the success of the market mechanism, as a reallocator of resources, is the number of farmers who declare themselves bankrupt during an economic recession. Economic theory is occasionally a harsh remedy, particularly when adjustment to changing economic conditions is hampered by factors largely outside the control of the individual operators.

(iii) The third difficulty is more difficult. Such a change of policy by Government would surely be politically unacceptable. Price support policies remain the "sacred cow" of agriculture in virtually every country of the world. There is therefore little point in adopting an ostrich-like attitude and burying our heads in the sand to political expediency. Governments throughout the world are politically committed to continue their sponsorship of price-support policies for agriculture; they might, over time, gradually modify the method and type of such support, either in total, or in respect of individual products. But it would be unrealistic to expect any Government to dissolve, at the drop of a hat, the responsibility it has shouldered in many instances over the past thirty years, however conducive such a decision might be to facilitating the out-migration of operator labour from agriculture.

The alternative approach is, however, more realistic, both in its method and in its effects. It is for Government to ensure that the salvage price of the operator's labour and his saleable farm assets is greater than their continued use-value in agriculture, as measured by his reservation price. This implies identifying those factors that create the gap between salvage price and incentive price. We can list some of the major ones briefly -

1. To the elderly operator, a <u>zero</u> opportunity price for his labour. In many cases he is too old to be effectively employed in the non-farm sector.

2. To the younger operator, a <u>low</u> opportunity price for his labour, reflecting an absence on his part of the skills required to undertake a well-paid non-farm occupation.

3. To both the elderly and the younger operator an unreasonably low offer price for his property - unreasonably that is in relation to the price he paid for it and/or to the capital that he may have invested in it. This low offer price reflects the uncertain economic future of agriculture to the potential purchaser.

4. The high costs of finding alternative housing in the urban sector of society.

5. A high debt burden that may have to be redeemed.

6. An unwillingness on the part of many operators to leave a rural environment, even when they are prepared to give up farming.

Recognition of these constraints should lead to a more pertinent policy approach geared to overcoming them so that the mobility of existing operators, with poor chances of future viability is increased, with a resultant improvement in the structure of the industry.

However, a successful policy of out-migration of farm operators from the industry will be jeopardised if the operators who leave are replaced by new entrants. In other words, the aim of Government should be the achievement of net out-migration, which implies not only encouraging existing operators out of the industry but also controlling the number and quality of new entrants to the industry.

Given the complexity of modern agriculture it seems reasonable to suggest that the supply of new entrants to the industry might be controlled by applying minimum entry requirements in respect of previous training, experience and capital availability, as is done for instance in Holland. Such an approach would ensure that the supply of new blood into the industry is not completely dried up,but that only blood of the correct group would be transfused into Australian agriculture. Present indications suggest that the current Government's approach to this aspect of reconstruction is to be through the Pitt Street farmer. I am not altogether happy with this suggestion. Although not necessarily trained or experienced himself, the Pitt Street farmer invariably employs a well trained and experience farm manager. He also has sufficient capital funds available, both to

develop and work the property. I see no reason why income tax concessions that are available to commercial farmers should not be available to Pitt Street farmers, in respect of capital investment in their properties, although I would agree that income earned from non-farm sources should not be allowed against farm income.

But to allow every Tom, Dick and Harry to enter the industry unrestrained, aggravates the problems of those farmers who decide to remain in the industry, reduces their future chances of viability, and perpetuates the income problem of the industry. In short, it would defeat the ostensible goals of rural reconstruction.

In conclusion, rural reconstruction is a complex issue, requiring a multi-purpose approach. Fundamentally, it involves withdrawing out of the industry surplus operator resources and restricting the number of new entrants, so that their potential for future viability can be more readily realized. This latter approach implies farm build-up and debt reconstruction. But to operate a rural reconstruction programme on the basis of farm build-up and debt reconstruction, without an effective out-migration programme, limits its chances of success considerably.