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EMERGING TRENDS IN AUSTRALIA'S LIVESTOCK- GRAINS ECONOMY: IMPLICATIONS FOR TRADE

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There is considerable value at a conference such as this in placing the Australian agricultural scene in perspective. Australian agriculture will almost certainly continue to be oriented toward international trade. The United States has a vital interest in the international markets for livestock products and grains in which Australia also specializes.

The Australian agricultural scene should be interpreted within the framework of dynamic and differential sectoral growth in the overall economy. The current situation and outlook in Australia should also be viewed with reference to the longer term agricultural supply situation, given on the one hand, the residual nature of world agricultural trade, and on the other hand, the high degree of production risk in agriculture—both giving rise to short-term fluctuations in the supply of and demand for agricultural products.

The two parts of this paper are broadly addressed to the above issues. Part 1 summarizes the major results from the Bureau's most recent, and as yet unpublished, medium-term (5-year) projections for Australian agriculture. These projections are then placed in perspective by briefly reviewing, first, the economic conditions confronting the agricultural sector in smaller, exporting countries such as Australia; second, reactions on the part of producers to these economic conditions; and third, whether international stabilization policy has anything to offer in terms of influencing the environment for trade in agricultural commodities.

In the context of economic development, the Australian and United States agricultural sectors have many similarities. In both countries, agriculture is declining relatively within the economy. Thus, the degree to which productivity increases can be achieved to enable continued competition for national resources is of paramount importance. Relatedly, questions of the role of Government in facilitating change and ensuring a viable agricultural sector are widely debated.

When it comes to markets for agricultural products, however, the situation is somewhat different. The United States is a major world producer and, inevitably, exporter of many agricultural products. The size of the U.S. agricultural sector is such that it is capable of influencing world agricultural prices. In addition, the U.S. domestic market is large and U.S. national agricultural policies have a considerable impact outside the United States. Australia, on the other hand, whilst having a comparative advantage in grain and meat

production, is in most products a price taker on world markets simply because of the size of the agricultural sector. Australia's domestic market is small. On the export side our voice is therefore more closely akin to that of the smaller and in many cases still developing countries, characterized by export orientation and a high degree of vulnerability to even minor swings in world prices. Security of food supplies, of relevance to the developing countries generally, is, however, not of concern in the Australian domestic market.

1.—Agricultural supply projections, 1982–83

The Bureau's third set of medium-term (5-year) projections for Australian agricultural commodities has been recently completed. These are revised regularly in an endeavour to take account of seasonal changes in the production and marketing of the major products. While only the major results of these projections are presented below, the conditional status of the projections is highlighted in the final report. The report also contains a review of the underlying assumptions and sensitivity analyses for key explanatory variables.

The Bureau now has a complete, albeit still developing, analytical base for simulating short- and medium-term future situations in the major agricultural industries. These econometric models are used regularly, together with necessary judgments, to provide short- and medium-term forecasts.

Projections are influenced by interrelationships between commodities. Thus, the projections are carried out in two steps. First, individual commodity projections are made from the econometric models, taking account of broad relationships between industries. Major features of each commodity/industry are then combined into the Bureau's mathematical programming model of the sheep, beef, and cropping industries to obtain an overall set of projections for the agricultural sector. This two-phase method ensures some consistency both between industries and relative to the resource base.

1.1. The current agricultural outlook.—For Australian farmers, 1978–79 is shaping up to be a good year. Gross value of production is expected to be over 10 percent higher than the record level of last season (table 1). This improvement is attributable in part to moderate increases in prices received for most commodities, but also to a rise in the overall volume of rural output, particularly of grains. Farm costs are expected to continue to rise. However, net income per farm is expected to be some 30 percent above the low levels of the past 3 years (table 2). The situation, though varying for individual industries, reflects a general recovery in market prospects, some improvement in growth prospects for Australia and major trading nations, and the assumption of a return to average seasonal conditions.

1.2. Some results from the projections (1982–83).—Projections of the aggregate volume and value of production of rural products to 1982–83 are shown in tables 1 and 2. The total volume of rural output is still projected to rise from the base level, but this reflects a downward revision from earlier judgments. The volume of agricultural exports is also projected to remain high, indicating Australia's continuing role as a major exporter of rural products—and in turn, the continuing influence which overseas market developments are likely to have on Australian agriculture. Principal constraints on agricultural production in Australia are likely to continue to be of an economic nature

stemming largely from profit considerations, uncertainty in production, and economic growth of the major trading countries, and restrictions on overseas markets.

Beef and veal (table 3).—Output in 1978–79 is forecast at 1.82 Mt, a decline of 14 percent from the previous year's record output. Saleyard offerings are forecast to be lower reflecting a smaller cattle herd and reduced slaughter rates associated with a return to more normal seasonal conditions. We expect export prices for Australian beef to increase in 1978–79 and this, coupled with reduced offerings in Australia, is expected to result in increases in saleyard prices of at least 35 percent. Exports of beef and veal in 1978–79 are forecast at 1.02 Mt, similar to levels of around 1 Mt in the previous 2 years.

TABLE 1.—VOLUME OF RURAL OUTPUT AND INPUT AND FARMERS' TERMS OF TRADE

	1968-69 equals 100			Average 1960-61 to 1962-63 equals 100		
	Volume of output	Volume of input	Output: input ratio	Prices received (P _r)	Prices paid (P _p)	Terms of trade (P _r /P _p)
1970-71.....	99	95	104	97	126	78
1971-72.....	105	93	113	106	133	79
1972-73.....	97	96	101	144	143	101
1973-74.....	101	94	107	168	165	101
1974-75.....	107	85	126	148	215	69
1975-76.....	113	78	145	155	251	62
1976-77.....	116	74	157	173	281	62
1977-78 ¹	114	71	161	179	310	58
1978-79 ²	116	70	166	196	335	59
1982-83 ²	109	64	170	-----	-----	-----

¹ Subject to revision.

² Estimated by BAE.

Source: Australian Bureau of Statistics and Bureau of Agricultural Economics.

TABLE 2.—GROSS RETURNS, COSTS AND INCOME

	[In millions of dollars]				Index of real income per farm (average 1970-71 1972-73 =100 ³)
	Gross value of agricultural commodities	Farm costs	Farm income ¹	Income per farm ² (dollars)	
1970-71.....	3 566	2 664	897	4 692	70
1971-72.....	3 957	2 743	1 165	5 977	96
1972-73.....	4 957	3 051	1 779	9 400	134
1973-74.....	6 412	3 482	2 060	15 924	201
1974-75.....	5 878	4 061	1 753	9 638	105
1975-76.....	6 175	4 357	1 818	10 077	89
1976-77.....	6 771	4 636	2 135	12 297	96
1977-78 ⁴	6 876	4 784	2 092	12 270	87
1978-79 ⁵	8 150	5 250	2 900	17 300	115
1982-83 ⁵	8 300	-----	-----	-----	-----

¹ Including adjustments for changes in the value of stocks from 1959-60 to 1975-76.

² From 1974-75 income per establishment (see ABS, 7102.0).

³ Income per farm deflated by Consumer Price Index.

⁴ Subject to revision.

⁵ Estimated by BAE.

Source: Australian Bureau of Statistics and Bureau of Agricultural Economics.

Projections for beef and veal are sensitive to the nature and extent of recovery in the beef market. Export demand for Australian beef is likely to continue to strengthen in the next 2 years and remain at

high levels for the remainder of the projection period. Reduced U.S. production coupled with increasing U.S. consumer demand for lean beef points to higher beef prices and greater import demand over the projection period. This situation, an expanding Japanese market and continuing exports to Canada, South Korea and Middle East should mean a ready outlet for Australian supplies.

Beef prices in Australia have varied about a 3 percent upward trend from 1950-51 to 1977-78. In 1974-75, beef prices dropped from 40 percent above to 40 percent below this trend and since then have remained well below trend. My judgement is that beef prices will approach the long-term trend by 1982-83. Saleyards prices for cattle in Australia are anticipated to double from 50 c/kg (1977-78) to over 100 c/kg in 1982-83. Allowing for inflation, this implies increases in the real price of beef at saleyard of 8 to 10 percent a year.

Under this scenario, the present decline in Australian cattle numbers will reverse. By 1982-83 the herd is again likely to be around 30 million head. However, due mainly to a reduction in slaughter rates from recent record high levels, total production in 1982-83 is not likely to be much greater than 1.7 Mt (table 3). Because of increased prices, consumption of beef in Australia is expected to decline over the projection period. Hence beef available for export is likely to be above 1978-79 levels (table 3).

TABLE 3.—MEAT: AUSTRALIAN SUPPLY AND UTILIZATION
[Mt, carcass weight equivalent]

Item	Average, 1970-71 to 1974-75	Actual			Forecast, 1978-79 ²	Projected 1982-83
		1975-76	1977-78	1977-78 ¹		
Beef and veal:						
Production.....	1.29	1.84	1.99	2.11	1.82	1.69
Domestic use.....	.60	.96	.98	.90	.77	.71
Exports.....	.65	.80	.94	1.11	1.02	.92
Lamb:						
Production.....	.30	.26	.24	.25	.25	.35
Domestic use.....	.26	.23	.20	.20	.19	.27
Exports.....	.04	.03	.04	.05	.06	.08
Mutton:						
Production.....	.41	.32	.30	.27	.25	.27
Consumption.....	.19	.10	.06	.04	.05	.08
Exports.....	.21	.21	.22	.23	.19	.21
Total meats:³						
Production.....	2.00	2.42	2.53	2.63	2.32	2.42
Consumption.....	1.05	1.29	1.24	1.14	1.02	1.03
Exports.....	.90	1.04	1.20	1.39	1.26	1.21

¹ Preliminary Australian Bureau of Statistics and Bureau of Agricultural Economics estimates.

² Projected figures are based on "average" seasonal conditions. Apparent discrepancies in the totals are due to marginal estimated changes in stocks and the fact that canned meats are now shown.

³ Excludes pigmeat and poultry.

A more rapid rate of beef price increase than assumed above could mean a more rapid increase in beef numbers in Australia with production increasing strongly towards 2 Mt by 1982-83. However, this scenario is critically dependent on high beef prices in the short run to encourage disillusioned Australian producers back into high levels of beef production. Our analyses indicate that the Australian herd is unlikely to rebuild substantially in the near future if prices fail to rise above 65 c/kg by 1982-83.

The United States is still by far Australia's largest market for beef. Our production is very much influenced by U.S. import policies and,

as can be expected, there has been nervousness in the Australian meat industry during the recent debate on the U.S. import law.

It seems to me that these laws are to a large degree based on two erroneous beliefs.

The first belief is that the U.S. beef industry can be stabilized through the regulation of imports. Imports of beef to the United States constitute only some 7 percent of total U.S. consumption. Attempts to stabilize the industry through anticyclical import legislation is therefore futile. Establishment of stable and predictable, albeit limited imports to the United States would seem much more logical and would certainly be more acceptable to Australian producers.

The second erroneous belief is that the Australian beef industry is characterized by a well-defined beef cycle. This is not true. The Bureau's analyses indicate that there is no cattle cycle in Australia and that saleyard prices are very much determined with reference to the beef industries in major importing countries. For the bill to be effective, it would therefore have to induce a cycle in Australia. If such attempts to create a cycle are coupled with the variability caused by climate in our rangeland-based beef sector, the resultant income instability would transform beef production to an extremely high-risk venture. In such circumstances it is doubtful whether the increased supplies needed to meet expanding demand for lean beef in the United States would be forthcoming.

Sheep meats (table 3) and wool (table 5).—Although not as important as in past years, the Australian sheep industry still contributes over 20 percent to the gross value of rural production. Sheep numbers in Australia have been steadily declining during the past 3 years, and this trend is likely to continue in 1978-79 when numbers are expected to be 131 million. However, with continuing strong export demand for sheep meat and live sheep and steadily rising prices for wool, this trend is likely to reverse with the flock reaching approximately 143 million by 1982-83.

The increased export demand for sheep meats and live sheep is expected to come largely from the Middle East countries, but also Japan and Korea. The Bureau's recent detailed analysis of the Middle East market, which explored both the likely future demand for sheep meat and the potential of the Australian flock to supply world markets, indicates that live sheep exports are likely to remain close to 1977-78 levels—around 4.5 to 5 million head. Only marginal increases in mutton exports are expected, above 1978-79 levels. However, exports of lamb, largely to Iran, are likely to double by 1982-83 (table 3), more than compensating the loss of additional markets.

There has been some firming of the wool market in the past two seasons. This trend seems likely to continue. On the supply side, world wool supplies and stocks held commercially and in exporting countries are anticipated to remain restrictive. Prospects for some recovery in economic growth in wool-consuming countries should improve the demand for wool. However, despite rationalization of production in the manmade fiber industry, competition from manmade fibers is expected to remain strong. No sharp upward or downward movement in wool prices is therefore expected.

Given the above, and bearing in mind the expansion in the meat trade with the Middle East, the Bureau's judgment is that Australian wool production and exports are likely to increase marginally over the projection period to around 770 kt.

Grains (table 4).—Australian wheat production in 1978-79 is forecast at around 13.8 Mt. This is some 48 percent higher than in 1977-78, resulting from a 3 percent rise in area planted (10.3 million ha) and above average rainfall in the Wheat Belt. World wheat production is likely to be close to the record of 1976-77, and there is some expectation of further increases in world wheat stocks. Taking into account policies of the major world traders in grains and the numerous imponderables that make forecasting a hazardous business, average f.o.b. export price for Australian Standard White seems likely to be around \$110/t in 1978-79 or some 10 percent higher than the estimated 1977-78 average.

TABLE 4.—GRAINS: SUPPLY AND UTILIZATION

[kt]

Item	Average 1970-71 to 1974-75	Actual			Forecast, 1978-79 ²	Projected, 1982-83 ³
		1975-76	1976-77	1977-78 ¹		
Wheat:						
Production.....	9,286	11,982	11,667	9,299	13,800	12,790
Domestic use.....	2,995	2,742	2,467	2,512	2,600	3,119
Exports.....	7,383	8,233	9,763	2 8,260	8,500	9,600
Coarse grains:						
Production.....	4,794	5,575	5,019	4,168	6,445	5,764
Domestic use.....	2,370	2,015	2,277	2,297	2,630	2,808
Exports.....	2,424	3,560	2,742	1,871	3,815	2,956
Total grains:³						
Production.....	14,080	17,557	16,686	13,467	20,245	18,554
Domestic use.....	5,365	4,757	4,744	4,809	5,230	5,927
Exports.....	9,807	11,793	12,505	10,131	12,315	12,556

¹ Preliminary Australian Bureau of Statistics and BAE estimates.² BAE estimates.³ Wheat and coarse grains.

TABLE 5.—AUSTRALIAN WOOL: SUPPLY AND UTILIZATION

[kt greasy]¹

Item	Average, 1970-71 to 1974-75	Actual			Forecast, 1978-79	Projected, 1982-83
		1975-76	1976-77	1977-78		
Production.....	800	754	703	677	2 685	770
Domestic use.....	33.9	23.9	30.9	26.8	NA	NA
Exports.....	625	624	743	617	NA	NA
Supply stocks (kt clean):						
Carryover.....	14	15	13	11	NA	NA
AWC stocks.....	42	137	116	95	NA	NA

¹ Note that figures do not balance due to some unrecorded stock carryover between years.² Official forecast by Australian Wool Production Forecasting Committee, Nov. 10, 1978.

Australian wheat prices follow movements in U.S. prices. In 1976-77 they fell approximately 35% below 1973-74 levels, due largely to a record world harvest in 1976-77 and reduced import demand, and growth of world stocks. World grain stocks have continued to grow since, particularly in the U.S. where some three quarters of major exporters' stocks of wheat and coarse grains are now held.

Management of these world stocks is crucial in determining stability in the world grain market. There is considerable interest on the part

of exporters like Australia, concerning the operation of the U.S. Government's 1977 farm legislation, CCC and PL 480 programs and the outcome of international negotiations for wheat and coarse grains. The projections are based on the proposition that recent policies of the major grain trading countries will be maintained in the period under review.

Though providing a buffer against price fluctuations, the present magnitude of grain stocks diminishes prospects for a significant price recovery in the short term. The policies which have contributed to the holding of these stocks provide some basis for believing that they will not suddenly become a major market depressing influence. However, the question is whether the same policies will bring about further expansion of production. If so, and if at a rate faster than the rate of growth of consumption, then one year's bumper crop can disrupt market prices perhaps inducing an abrupt change in policy. My judgement is that major exporting countries are likely to implement collectively or individually policies to attempt to reduce (or at least contain) world grain stocks from their present high levels by 1982-83.

Indications are that world consumption of wheat is likely to increase in line with past growth rates of around 3% a year. Main growth in wheat imports is expected to come from developing countries. The Bureau expects world consumption of coarse grains to increase at slightly more than historical rates, particularly in developed countries in view of the likely increased demand for livestock products.

Given the above, a range of further assumptions and further assuming continuation of past levels of technological growth in Australia (table 1) and normal seasonal conditions, Australian wheat plantings in 1982-83 are projected at 10.8 million ha producing 12.8 Mt. Coarse grain (barley, oats, sorghum) plantings in 1982-83 are projected at 4.5 million ha, producing 5.8 Mt. Domestic utilization of wheat and coarse grains is projected to rise due to some expected expansion in feed wheat used for livestock. Wheat available for export is projected at 9.6 Mt, 30% above the average shipments of 1970-71 to 1974-75.

In the decade to 1977-78, Australian wheat exports have averaged around 13% of global world trade with a range of approximately 8-17%. This variability, reflecting the sensitivity of production to both economic and seasonal factors, makes prediction of grain exports extremely difficult. If one or more of the assumptions do not hold, and if recent cost increases and unstable market conditions continue, then total Australian exports could be as low as 8 Mt by 1982-83.

An International Wheat Agreement (IWA) conceptually provides a means of improving world food security, stabilizing world prices and supplies of grain and improving dialogue between exporting and importing countries. In the present negotiations for an IWA, Australia is required eventually to hold reserve stocks of wheat to be held/released under specific trigger price conditions. In principle this is fine. However, Australia has expressed some concern about the absence of relief arrangements from these stockholding obligations, for smaller exporting countries.

Because of climatic variability, Australian production might fall in years when addition to stocks is indicated by the global formula.

Thus, the mechanism could exacerbate instability of supplies from Australia and other smaller exporters. Australia would lose traditional markets to larger exporters for whom the global formula more reliably indicates retention/release of stocks.

A further problem concerns the harmonization of IWA trigger prices and those set domestically in the U.S. There is a strong possibility that the price indicator will only trigger the reserves release mechanism if Russia, China, and India, either individually or collectively, increase their imports. If the indicator scale for the U.S. domestic support programme is set below the IWA scale, then the U.S. will have a competitive advantage in meeting this increased demand by releasing stocks held under the producer storage program, while Australia is still committed to holding reserve stocks. To the extent that U.S. nonreserve stocks are sufficient to accommodate an increase in demand, Australian stocks held under the IWA will tend to be redundant for stabilization purposes. They will be held at high cost for world food security purposes only.

2.—*Supply situation in perspective*

I would now like to place these projections in perspective by briefly reviewing the pressures facing the agricultural sector in countries like Australia. I will then outline the major measures taken by producers to offset these pressures. Despite measures taken, and some prospect of improved incomes in the short term, a substantial number of Australian farmers will continue to earn relatively low incomes. Hence, in concluding, I will question whether anything can be done in the area of international stabilization to alleviate this situation.

Part 1 has given indications of a return to trend in terms of trade for Australian agriculture. However, this is a short-run feature. My judgment is that while short-run factors will continue to generate depression periodically, as in the last 4 years, and prosperity as hopefully for 1978-79, over the longer term farmers' input prices will continue to rise faster than the prices they receive for their products. There is little prospect of this trend being halted or reversed since this is related to both *internal* pressures concerned with development of the Australian economy and *external* pressures arising from characteristics of export markets.

In Australia, the agricultural sector is effectively declining in relative importance in the economy. Agricultural exports are now less crucial in determining the balance of payments. What is good for agriculture is now not necessarily coincident with what is good for other sectors of the economy. When objectives are in conflict, the reduced political influence of farmers means that governments are now less likely to implement policies which favour agriculture to the detriment of growth in the overall economy. Survival of agriculture therefore depends increasingly on its capacity to attract and compete for national resources—this is the internal pressure facing the rural sector.

2.1. *Export markets.* External pressures arise through the export orientation of agriculture and, given the above internal pressures, the necessity to operate only on remunerative markets without government support. What this means is that increasing world food needs are going to have to be expressed in terms of purchasing power to justify the committal of resources by Australian primary producers.

National commitments for aid and assistance to other countries aside, only if producers are able to generate sufficiently high returns from their investments can they complete for national resources. Export orientation implies an agricultural policy aimed at facilitating development of rural resource base consistent with profitable markets.

Export oriented countries like Australia face significant problems in operating on world agricultural commodity markets. Australian agricultural exports generally constitute only a small proportion of world trade and accompanying this Australia is a price taker on world agricultural markets. As such, trading problems facing Australian agriculture are no different from those facing a large number of small trading nations, and particularly underdeveloped countries. Countries such as these face agricultural markets characterized by periodic surpluses and deficits caused essentially by domestic food self sufficiency policies in developed countries. They are also characterized by institutional restrictions which make the residual free market highly volatile. Accommodation of economic fluctuations caused by these surpluses or deficits is increasingly left to countries operating in a diminishing free world market.

I recognize that differences between policies of individual countries do exist. However, the inequity is that, while aiming for some increase in food security (self sufficiency) may be valid for a particular country, such countries, responsible for abrupt shifts in demand and supply on world markets, pay no price (other than affecting their own consumers and taxpayers) for the costs imposed on other countries. Suppliers of agricultural products are highly vulnerable and have tended to receive little premium for regularity of supplies. In fact, residual world markets for agricultural products are a prime example of market failure.

2.2. Positive reactions to adverse economic conditions. It is not useful to dwell too much on the negative side. Instead I would like to outline the positive moves which are being made in areas such as increasing productivity and changing trading patterns to accommodate current market pressures.

Productivity increases. Table 6 shows the marked change in the level and distribution of incomes that have taken place in the Australian grazing industry (beef, sheep, crops). Some 120,000 of Australia's 170,000 producers are included in these industries. Bearing in mind that large fluctuations within individual industries have been averaged in this table, the figures illustrate that a large proportion of farmers have in fact been able to improve their economic situation in the face of adversity. This has been achieved through rationalization of production systems.

This rationalization has manifested itself in impressive increases in productivity (table 1). Productivity increases in turn, have been achieved by a slowing in the growth of aggregate output in association with a much sharper reduction in the volume of inputs used (table 1). The latter has been characterized by substantial cost-cutting across inputs, a slow down in capital expenditure, a reduction in the number of high-cost farms together with restructuring of farms, and continued reduction in hired labour and the labour input of sole ownership farms through use of strategies such as off-farm work.

TABLE 6.—DISTRIBUTION OF AUSTRALIAN GRAZING INDUSTRY PROPERTIES: BY NET CASH INCOME:¹ 1974-75 TO 1977-78

	Under zero	Zero and under \$5,000	\$5,000 and under \$10,000	\$10,000 and under \$20,000	\$20,000 and over
1973-74	3.6	62.1	8.1	12.2	14.0
1974-75	10.1	61.4	8.2	9.6	10.7
1975-76	22.4	21.7	16.6	18.7	20.7
1976-77 ²	18.6	20.1	11.9	19.5	29.8
1977-78 ³	20.1	20.3	17.8	19.7	22.1

¹ Net cash income is defined as total cash receipts from farm producer and services minus total cash (onfarm) production costs including labour, materials and services, rent, interest and livestock purchases.

² Estimated from 1975-76 AGIS.

³ Projected, using 1975-76 BAE Survey data, and more recent Australian Bureau of Statistics data.

The result of this is that a degree of polarity has developed in terms of both profitability (table 6) and efficiency, meaning that a sub-set of profitable farming operations has emerged on which productivity improvements are more than sufficient to offset the adverse economic conditions. Equally there is now a sizeable core of low income producers in Australian agriculture. Many of these producers stand little chance of long-term economic survival.

It is my judgement that conditions on international agricultural markets have contributed significantly to this low income situation. Increased uncertainty facing these producers is largely due to both abrupt limitations on access to previously reliable markets and relatedly, to increased fluctuations in agricultural prices. Resulting low incomes and attendant losses on investment are an unnecessary drain on producers—a drain which could be eliminated with rationalization of world trade policy.

Changes in trading pattern. The second positive reaction on the part of countries like Australia to a disruptive world trade is to make substantial adjustments in trading patterns, involving diversification to a large number of new and inevitably smaller markets. While this diversification has some stabilizing effect, individual markets tend to be less well known and consequently more uncertain.

For Australia both the U.K. and E.E.C. markets which absorbed about 30% of Australian exports annually in the late 1950's accounted for less than 10% by 1975. At the same time increases in export flows have occurred to Japan, U.S., and centrally planned and Third World countries. Japan, Australia's single most important customer, now accounts for 25% of rural exports, with North America and other countries taking around 20% and 45%, respectively. The dollar value of Australia's rural exports to centrally planned and developing countries has increased some 50% over the last decade.

The problem facing countries like Australia with an export-oriented rural sector and comparative advantage in agricultural trade is that any major effort to plan agriculture is fraught with difficulty. Despite attempts at diversification, problems still persist in the areas of, for example:

Changes in intervention and subvention in the E.E.C. and Japanese and to a lesser extent North American markets.

Stop/go purchasing policies of the centrally planned economies.

The degree of political interference in trade with many Third World countries.

Until issues of this nature are seriously addressed, agricultural booms and busts now being experienced on a world scale are likely to increase, not diminish, in severity.

2.3. *International stabilization.* I have talked about the upheavals in domestic agriculture as a result of protective agricultural policies in developed countries. I have mentioned the positive attempts made to counter these influences. However, despite the efforts which have gone into negotiating a better deal for agriculture, and the massive productivity increases in the farm sector in recent years, low incomes in agriculture still persist. The question therefore arises whether *anything* additional can be done in the area of international stabilization to improve decisionmaking in agriculture—the answer is yes.

The ingrained philosophy that costs imposed by market fluctuations in agricultural prices and production are severe and should be eliminated or reduced pervades the agricultural policies of most developed countries. This has led to a preoccupation with domestic price stabilization schemes in some form, intervention being with the express purpose of altering price or quantity movements from those which would otherwise occur. These schemes have inevitably shaded into price support accompanied by supply controls.

Price support has been one of several methods whereby a high degree of protection has been afforded agriculture in developed countries. However, despite the fact that high farm prices do not represent the solution to the farm problem, almost no serious consideration is being given to the gradual reduction of the present levels of protection in agriculture.

Domestic stabilization has involved price support and domestic market insulation. International stabilization policies have largely involved attempts at overlaying these domestic policies with further price stabilization schemes using buffer stock and pricing arrangements. It would be fair to say that distortions caused by domestic policies have simply been compounded internationally with this approach.

For international stabilization to be effective, attention must first be focused on rationalization of *domestic* agricultures. Domestic policies have inevitably taken precedence over general commitments to liberalization in international trade. Comparative advantage has yielded to other considerations as a major determinant of the volume, composition, and allocation of agricultural production. The situation now is that modification of these (protective) institutions to correct distortions in the agricultural sector can only come about through concentration on domestic policies aimed at facilitating structural change.

Because the deleterious effects or costs of instability in agricultural commodity markets are borne by producers and consumers in individual countries, and are most marked at the individual producer and consumer level, domestic policies aimed directly at stabilizing the economic position of these producers/consumers as opposed to stabilizing through market intervention, are likely to be the most successful. Such policies can be undertaken within any country but because social welfare preferences are likely to differ between countries, blanket international policies (to achieve domestic objectives) are unlikely to be appropriate.

Despite this, there is a role for international stabilization in the above context. Rationalization of *domestic* agricultural policies could be enhanced by a much more rigorous approach to *international* policy development—an institutional framework within which

Prices can be more easily established with sufficient reliability to encourage longer term investment.

Appropriate stocks and trade volumes can be more easily determined and regulated without abrupt changes in access.

Agreements can be more automatically achieved.

Levels of protection can be more automatically rationalized.

International negotiations to achieve the above are still crucial to ensure continued access to markets—stabilization in this context really becomes a *euphemism for orderly marketing*, not the restricted concept of price stabilization.

Similarly international cooperation or political good will is necessary for the progressive removal of trade inhibiting barriers. However it should be stressed that attempts to achieve this objective through equalization of effective rates of protection between countries, or approaches based on “joint disciplines” are conceptually unsound.

3.—*Summary*

I have briefly reviewed features of the Australian rural outlook for 1978–79, described as somewhat optimistic after a successive number of years during which terms of trade facing agriculture were well below estimated trend. I then discussed likely changes in output of Australian rural industries in the next 5 years or so. Results of the Bureau’s 5-year projections to 1982–83 indicate that apart from dairy products, agricultural production and exports are likely to continue at high levels. Cautiously optimistic projections were presented for beef, sheep meat, grains, and wool.

This situation was then interpreted against the background of economic change in which the rural sector was seen as dynamically adjusting to both short-run market fluctuations, the effects of restrictive world trade policies and to longer term underlying forces of economic development. There have been substantial increases in productivity in Australian agriculture in recent years. However, despite these increases, diversification of market outlets and international efforts to improve the reliability of world agricultural commodity markets, a substantial number of Australian producers are continuing to earn low farm incomes.

An important question is whether international stabilization policy can in fact reduce the unnecessarily high degree of uncertainty facing producers in exporting countries. My conclusion is that a more rigorous approach to international policy formulation can help significantly if directed primarily at first, rationalization of *domestic* agriculture in individual countries with progressive dismantling of protective barriers to trade, and second, developing more automatic and reliable *international* mechanisms/procedures for negotiating agreements and establishing prices to encourage longer term investment.