For those who believe in the beneficial nature of the capitalist system of production and distribution, "crisis" is a scare-word which, if used at all, is applied in a cautious and considered manner. Yet in regard to Australian agriculture most industry commentators apply it frequently and with little hesitation. We hear of the "beef crisis", the "wool crisis", the "environmental crisis", or more generally, "the crisis on the land".

Farmers suffer when prices for agricultural commodities fall on international markets and when domestic policy decisions favour the interests of mining and manufacturing corporations over those of the rural industry. They suffer when agribusiness firms manipulate the prices of farm inputs; when speculative capital inflow allows land values to inflate beyond their production abilities; and when revaluation of the dollar reduces the export potential of rural products.

The rural community suffers as the agricultural economy progresses through its characteristic booms and busts. Small towns begin to disappear, rural facilities decline, rural employment opportunities are eroded, and those with jobs remain in a precarious position. Some rural dwellers are able to migrate to the cities but others, with little mobility, may remain trapped in semi-poverty.

The rural environment suffers as farmers looking to increase their returns in an
uncertain market over-graze, over-irrigate, over-fertilise, and over-plough, each year applying more toxic chemicals in an attempt to control insects, weeds and diseases.

In this paper it is argued that existing trends in Australian agriculture are causing severe problems for the farming industry and for rural Australia.

The anarchy of the marketplace

On the surface, Australian agriculture appears to be a productive, efficient and adaptable system. Existing estimates indicate that the Australian farmer can feed an average of 70 people per year compared with 59 for his US, and 19 for his West German, counterparts. Introduction of new technology and management practices has doubled the volume of output in the past 30 years and Australia has been able to export the bulk of the wheat, beef, wool and sugar produced each year.

While orthodox economic analyses point to the great benefits to be derived from exporting the products in which we have a "comparative advantage", they usually fail to acknowledge that it is the structure of the capitalist market which gives rise to the present difficulties experienced by the rural industries.

Australian farmers produce for the domestic and international markets. Demand in the domestic market is usually predictable since the size of the population and the degree of wealth does not change dramatically from year to year. But our internationally traded commodities face different conditions. Farmers producing for the export market are "price-takers" and must be content to accept and accommodate, price fluctuations. The international market is notoriously unstable and is becoming more unstable over time. If there is a worldwide shortage of food and fibre our producers may be in a good position to make short-term gains, but in periods of world over-production, prices, and therefore farmers' incomes, may fall dramatically.

Australian farmers have realised that they can be afforded some degree of protection through the operation of marketing boards and stabilisation schemes, through the granting by governments of subsidies and concessions, and through the development of bilateral and multilateral trade agreements.

Despite these measures, which act at best to ameliorate the problems associated with producing for an unknown market, Australian agriculture has lurched from one crisis to another. As the Bureau of Agricultural Economics (BAE) noted in its submission to the Industries Assistance Commission:

Farmers will always be faced with an uncertain and unstable environment .... it is concluded that there is only limited scope for introducing measures which will directly and unambiguously reduce fluctuations in incomes at the farm level.

The welfare problem associated with income instability is concentrated among the smaller farmers whose possibilities for belt-tightening are limited. Working in an industry which provides little opportunity for long-term planning, the small farmer is in a vulnerable position, particularly if conditions remain depressed for long periods.

A glance at the state of some of our major industries indicates the difficulties faced by the small farmer and the problems associated with producing for the world market.

International competitiveness

Australia's international competitiveness in wool is being eroded as a result of the upward pressure on the Australian dollar. Wool is now estimated to be 50 percent dearer for European buyers than it was last year resulting in the loss of $150m to Australian farmers. When wool prices fall, farmers make on-farm adjustments and trust that the Australian Wool Corporation can secure higher prices through careful operation of its reserve price scheme; when world prices rise the industry lives in fear that synthetic fibre manufacturers may compete away possible gains and threaten the long term prospects for further sales. Sheep farmers have responded to rising input costs and fluctuating incomes...
by increasing the size of their flocks, and wherever possible, the size of their properties. From the early 1950s to the mid-1960s average flock size in the pastoral zone increased by 22 percent, in the wheat/sheep zone by 48 percent and in the high rainfall zone by 56 percent. Despite these adjustments the problems in the wool industry have reached alarming proportions. By the mid-1970s it was revealed that over 30 percent of wheat/sheep properties will have become economically unviable in the eight years to 1985.7

The wheat industry has prospered in recent times as a result of buoyant conditions in the international market and many wool growers have moved into wheat production in response to rising prices. However, a wheat glut is being predicted for the 1981/82 season brought about by favourable growing conditions in the northern hemisphere. In times of over-production some nations, eager to find customers for their products, begin to undercut competitors. The European Economic Community (EEC) is well known for its “dumping” practices and only this year has been reprimanded by the Australian wheat lobby for discounting its wheat prices by up to $60 per tonne to attract buyers.8 The BAE is currently forecasting the end of the three year upturn in conditions in the industry and has indicated the likelihood of a return to the cost/price problems of the mid-1970s. Wheat prices fluctuated sharply during the 1970s and although attempts were made through the United Nations Conference on Trade and Development to draw up a new International Wheat Agreement little has been achieved.9

The beef industry entered a period of crisis during the mid-1970s when world over-production and political decisions in the USA and Japan led to the collapse of world prices and to the bankruptcy of thousands of Australian producers. Australian beef production has become totally dependent upon the political whims of its major importers. The USA has advised Australian farmers to phase beef expansion in such a way as to counter US production cycles, something which appears to be virtually impossible under conditions of non-regulated production and the desire by Australian growers for maximum individual profit. We are bound, therefore, to be involved in another over-production crisis during the late 1980s. The EEC is already issuing a challenge to Australian exporters by discounting beef by up to $1500 per tonne,10 and although it has yet to be determined what effect the kangaroo/horse meat scandal will have on our trade with the USA, demand for Australian beef has already fallen dramatically and it is estimated that losses may be in the order of hundreds of millions of dollars.11

The problems with the beef industry pass well beyond the farm gate. Producers have chosen to rebuild their herds and in the past two years 20 domestic abattoirs have closed and another eight or so have forfeited their export licences. A medium-sized regional abattoir can inject in the vicinity of $100,000 per week into the local community. In one NSW country centre alone the closure of the abattoir resulted in the loss of 380 jobs and the withdrawal of some $200,000 per week from circulation.12 Leaving aside the difficulties faced by the displaced workers and their families, small rural centres, often dependent upon one or two industries, find it difficult to recover from such an enormous decline in economic activity. Abattoirs need to operate at about 60 percent of available capacity to remain viable, but present estimates indicate that slaughter capacity has dropped from 84 percent in 1977 to 51 percent in 1981.13 The cause of the problem is the anarchy of the market. Australian producers respond to US demand by developing an export surplus only to find that US growers have over-produced and their government has legislated for quotas on imports. Our farmers “breed up” their herds leaving regional abattoirs and meatworks to flounder. Once, the abattoirs could have depended upon increases in sheep slaughter to offset beef losses and so maintain viability. However, with live sheep exports increasing at a rate of some 13 percent per annum, there has been an associated decline in the rate of
domestic slaughter. Clearly, there is little opportunity for rational planning and coordination in industries where individual producers, eager to maximise profits, are dictated to by overseas market forces.

Australian dairy farmers have faced hard times ever since Britain joined the EEC. Our exports of cheese and butter fell dramatically and with few new markets available, the industry has remained in a severely depressed state. In the ten year period to 1974 there was what the BAE described as a "massive exit of farm families from the dairy industry" as the number of operators dropped from 62,000 to 29,000.14

The Henderson Poverty Inquiry found that there was a very high incidence of chronic poverty among the dairy farmers who had produced for the export market. The survey revealed they had the lowest income level of any rural producers and remained in severe economic distress.15 Cheese processors have been similarly affected. One of the country's oldest cheese manufacturers which recently terminated production indicated the only way it could reopen would be to process and package foreign cheeses — a rather clear indication of our competitive ability in dairy products!16

Canning industry

The canning industry is yet another example of the vulnerability associated with dependency upon overseas markets. Once an efficient, productive industry, fruit canning suffered directly from Britain's decision to join the EEC. Closures, takeovers of canning facilities and the contraction of orchard size has resulted. Farmers were paid during the 1970s to pull out their trees in an effort to reduce oversupply and force up fruit prices to aid those remaining in the industry. Adjustment is still occurring. The most recent example of the difficulties presently faced by the industry is that of the Riverland Cannery in South Australia. Taxpayers are being asked to provide some $10 million over the next five years to subsidise the cannery's operations, and recommendations have been made for the provision of compensation for those growers who are forced to remove their
trees, and themselves, from the industry. A final example of the effects on the domestic agricultural economy of the problems of global oversupply is that of the egg industry. Producers who adopted the modern intensive methods of egg production were able to prosper during the 1960s. However, the same methods used by Australian producers were being adopted in those developed and underdeveloped nations which Australian had begun to supply. The result was that during the 1970s our surpluses "could not even be given away as food aid." Sales to Europe alone dropped from 7,800 tonnes in 1960 to 207 tonnes in 1979. Industry and government have recognised the desirability of national management of egg supply, yet because of the structure of egg production — pursuit by individual producers of private profit, and the influence of agribusiness — attempts have proved futile. Indeed, the chief of the NSW Egg Board has acknowledged that the only feasible way of controlling egg production and maintaining viability in the industry is by the introduction of a world quota system. He has said "in our society the free market is a myth .... the market (is no longer) an effective economic instrument" for determining viable production levels.

While Australian producers remain dependent upon certain overseas markets we will continue to have "crises" in agriculture. Production for exchange value leads to major industrial dislocation if buyers cannot be found. While dumping goods is a short-term means of dealing with oversupply, it is basically irrational and penalises home consumers who must pay inflated prices for food. It reaches its worst form when the excess is pushed on underdeveloped nations for reasons of internal political expediency. The USA is well known for its practice of solving the oversupply problems of its own farmers by volunteering food aid to those countries which desire its arms and aid.

There is little that can be done to control agricultural production when producers are prepared to risk the likelihood of economic ruin for the possibility of windfall gains. And, after all, that is the behaviour which the capitalist system promotes. Australian farmers, and the rural community which depends upon them, will continue to suffer as world agricultural prices continue their rollercoaster ride.

The contradictory nature of state policy

The capitalist state in Australia has assisted those groups which have lobbied successfully for support. Farmers have, at times when agriculture assumed major importance in our international trade, received state assistance through subsidies, taxation concessions, and regulatory and legislative provisions. The primary aim of state involvement in agriculture is to encourage the development of an efficient system of agriculture. It is assumed this will ensure social and economic equity between those within rural areas, and between those in rural areas and the wider community. Some agricultural analysts have argued that farmers receive excessive state support which must be paid for by the wage earner, while others have justified state expenditure on the basis of agriculture's status as one of our main income-earning industries. What is essential to note, however, is that agriculture is declining in importance in the Australian economy, and that the rural lobby, while more vocal than ever, does not have the degree of clout it once had. We have therefore seen a significant and purposive movement of support away from agriculture to other sectors of the economy.

The economic rationale of the present federal government is one based upon the need to reduce inflation. Inflation, it claims, eats away profit and creates an unstable economic climate for investment planning. Yet, because of its mineral policy, the operation of tariffs and the dominating presence in the market of transnational corporations, farm inflation (inflation relating to those input items purchased by farmers) has been running at a level approximately 60 percent higher than the national inflation rate. During 1980 fertiliser prices increased by 35 percent, fuel by 31 percent, chemicals by 22 percent and new machinery and spare parts by 17 percent.
The federal government's decision to return to so-called "free" market conditions — a position advocated by organisations representing the larger more viable farmers — has further disadvantaged the smaller rural producer. Under the operations of the Prices Justification Tribunal (PJT) farmers gained some degree of protection from rising input prices. It is estimated that during its years of operation it has saved the farming community well over $80 million and one industry leader commented: "it looks as though the Lynch Gang's razor, while slicing the throat of the PJT, might accidentally have opened an artery in the neck of agriculture."  

Farmers can no longer expect tariff relief. The tariff issue has always been an emotive one for farmers. They have continually argued tariffs are unfair and that upward movement of the Australian dollar should be matched by tariff cuts (something, incidentally, which was carried out by the Whitlam Labor government in 1974). Today, Australian manufacturing industry is under constant threat. Transnationals threaten plant closures unless "acceptable" and "realistic" profits can be made. Removal of tariffs would lead to a dramatic increase in unemployment, something which may prove to be politically unsavoury. So while a substantial cut in tariffs would assist rural producers it would be at the expense of the manufacturing sector.

However, what both sectors are having to cope with at present are Australia's mineral development and exchange rate policies. Together they have allowed uncontrolled inflow of capital reserves resulting in upward pressure on the Australian dollar. A dearer Australian dollar means our export industries must ask international customers to pay higher prices for our products. The result is a loss of sales. Yet the federal government in opting for a "mineral-led" recovery has allowed the dollar to appreciate with farmers, manufacturers and wage-earners alike being asked to carry the burden. As a result of government policy the movement in the dollar market during 1980 is estimated to have decreased wool returns by 10 percent and removed $13 per tonne from wheat earnings. The net capital inflow of $5 billion, six times that of the previous year, has removed about $2,300 from the pocket of the average farmer, and up to $5,000 if the farmer produced for the export market. In 1980, some $400 million in agricultural export earnings was forfeited because of the influence of capital inflow on the value of the Australian dollar.  

Farmers are also beginning to find it increasingly difficult to borrow funds for farm improvement. Higher interest rates, brought about by federal government monetary policy have, as the National Farmers' Federation has been quick to note, placed credit "beyond the reach of most farmers, especially those — such as drought affected or newly established farmers — who have significant existing debts".  

The small farmer is also disadvantaged by the inflated value of agricultural land resulting from the high level of capital inflow. Foreign money has sought to take advantage of relatively inexpensive Australian farmlands. The NSW Minister for Agriculture recently warned of the potential growth of a peasant class of farmers as land values soar beyond the ability of Australian farmers to pay. The trend has been apparent overseas. In Europe and the US where farmers are caught in a credit squeeze and land values have inflated beyond their productive ability it has become a common practice for the farmer to sell his farm to a bank or insurance company and then lease it back. Traditional ownership changes hands, and as one writer has indicated "once agriculture becomes the pawn of the real estate or currency speculator then rational land use planning is no longer possible".  

Foreign ownership  

In Australia where the foreign speculator need pay no tax on capital gain from the sale of agricultural land, West German, American, Italian, English and Malaysian buyers have purchased land and have fostered lease-back arrangements. Purchasers provide a cash settlement to the Australian farmer and
lease back the properties to them at a reported rate of 4 1/2 percent of cost per annum. At least half of the recent sales of Australian properties to foreigners appear to be of this lease-back type. It is, of course, a form of absentee landlordism. While the Australian manager does have cash on hand to upgrade plant he has forfeited ultimate control of the land and assumes a caretaker/employee status. Importantly, he has a great incentive to work the land for all it is worth in an effort to improve short term profits before the land is sold for capital gain to another investor. Environmental damage is only one of the likely outcomes in a situation where agriculture becomes the refuse tip for capital "dumped" in Australia for the purpose of short-term speculative gain. Another effect is the declining economic viability of rural towns and hamlets. Rural towns have a direct and crucial dependency upon the surrounding agriculture, and when the farming community suffers, flow-on effects can destabilise the entire regional economy.

The state has four main options in mediating the inflow of capital — to allow the Australian dollar to appreciate, to cut tariffs, to allow inflation to rise, or to impose embargoes or restrictions on entry of money by introducing such measures as variable deposit ratios. While farmer groups have consistently argued for tariff decreases, the National Farmers' Federation has recently supported the use of variable deposit ratios, a position enunciated as well by the Australian Labor Party (ALP).

It is apparent that the farm lobby is becoming increasingly cynical about the federal government's favoured treatment of the mining industry. Most of the suggestions for economic relief put forward by the National Farmers' Federation were ignored by the federal government in its most recent budget. If the inflow of capital continues at its present level (and it is already anticipated that the currency will inflate by 10 percent with an expected $8-12 billion inflow of foreign capital in 1981-82), the farming industry, and in particular the small farmer, will be progressively disadvantaged.

The small farmers have also been victimised with respect to other areas of state activity. Unlike their larger and more viable compatriots the small farmers have not been in a position to take advantage of the taxation, development, and machinery concessions offered by the state. And they are finding that research and extension activities are becoming less appropriate to their needs.

State-employed extension officers have, in many cases, become little more than salesmen for agribusiness firms. If farmers cannot afford the latest technologies and methods they are often dismissed as "failures" and are told to adjust out of farming. When they find themselves unable to borrow capital and cannot purchase the most up-to-date agribusiness products, they are seen to be responsible for their own downfall. That their economic demise is construed as being self-induced is a rather interesting example of a state-promoted con-trick: a classic case of blaming the victim. For it is unlikely that farmers who have worked most of their lives in agriculture have fallen victims to a sudden bout of economic ineptitude. Rather, the cause of the problem must be recognised as the deterioration of agricultural profitability brought about by the collapse of markets, overpricing of farm inputs and the policies of the state.

The state and research

State-funded research is another example of the movement of support from the small farmer to the large farmer and corporation. Research into the genetic manipulation of plants and animals, the computerisation of machinery, and the development of sophisticated agri-chemicals favours the larger farmers who will be able to purchase the products of research. The small farmer has traditionally relied upon the state to provide the most productive seeds, to undertake field trials, and to ensure that farmers were aware of the most recent developments. These activities are increasingly being taken over by agribusiness firms. The Plant Variety Rights Bill allowing the large seed/chemical conglomerates sole
proprietary rights over new varieties is viewed by some as potentially destructive of our family farm agriculture. Our agricultural future will be in the hands of private industries seeking maximum private profits. Only those with large capital reserves may be able to survive. At present the costs to the state of maintaining one seed breeder for one year is estimated to be about $100,000.\textsuperscript{31} When agribusiness firms have a monopoly over some seed varieties it is considered inevitable that substantial costs (representing research investment) must be passed on to the farmer and to the food consumer.

Concurrent with the upsurge in private enterprise's role in agriculture has been the decline in state-funded research activities. There has been a more than 30 percent decline, in real terms, in federal government funding for rural research since the mid-1970s.\textsuperscript{32}

Despite the claims of Liberal (Lib) and National Country Party (NCP) politicians, it is apparent that the activities of the state are both directly and indirectly aimed at the removal of small farmers from agriculture. State support of the larger farmers and corporations heralds the move from "agriculture to agribusiness" where the state withdraws its assistance from the small farm sector and where only those linked in with the large corporations are able to survive and prosper.

The crisis of the state in relation to agriculture is likely to be a mirror of that in the wider economy: how to expand capital accumulation yet succeed in maintaining the legitimacy of this process. But rather than being a crisis arising from the fundamental antagonism between bourgeoisie and proletariat there is evidence that it will be one based upon the growing tension between the agricultural bourgeoisie (employer farmers and corporations) and the petty bourgeoisie (small, independent farmers). If small farmers come to understand that their economic demise is brought about by the policies of the Lib-NCP coalition there is increased likelihood of factional divisions among the farming fraternity and the possibility of...
The Rural Crisis

small-farmer alliance with the ALP.

The concentration and centralisation of capital in Australian agriculture

One important function of the capitalist state has been the promotion of the concentration and centralisation of capital in agriculture and in the wider economy. Concentration refers to the volume of capital controlled by each of the units operating in an industry, while centralisation is a measure of the actual number of operators. There has been an historical trend towards an increase in the volume of capital controlled by individual units and a decrease in the number of operating units. This is reflected in agriculture by the demise of the small farmer and the expansion of the middle-to-large scale farmer; in the growth of large agribusiness corporations supplying the farming industry with inputs; and in the development of food conglomerates. Each will be considered, in turn.

Under conditions where effective demand for farm products has grown slowly and where prices for farm inputs have increased at a faster rate than returns for agricultural products, farmers have faced constant pressure to expand their holdings and to adopt the most productive input mix. In the 20-year period to the mid-1970s the area under sown pasture tripled, the area of crops and pasture fertilised doubled, the volume of superphosphate applied to agricultural lands tripled, and there was a six-fold increase in other fertiliser applications. There has been an historical trend towards an increase in the volume of capital controlled by individual units and a decrease in the number of operating units. This is reflected in agriculture by the demise of the small farmer and the expansion of the middle-to-large scale farmer; in the growth of large agribusiness corporations supplying the farming industry with inputs; and in the development of food conglomerates. Each will be considered, in turn.

Many service towns have suffered markedly as a result of population movement out of agriculture. For every person who leaves farming there is a potential loss of at least one other from the towns surrounding the farm.

Government policies

It is clear that federal and state government initiatives to aid decentralisation have failed. Clearly, the state is reluctant to impose its will upon the decision-making activities of private enterprise. The drain of population from the countryside to the city has resulted from unbalanced capital location. People follow jobs, and jobs have been located where industries can maximise profits. While the Whitlam government, through policies of the Department of Urban and Regional Development, did provide some measure of...
assistance for rural development, the Fraser government policies have led to economic stagnation in many rural towns and regions. The Decentralisation Advisory Board has been abolished, land acquisition and urban renewal schemes were axed in 1977-78, expenditure on environmental protection has been cut in real terms, funds for Albury-Wodonga have been sliced, and spending on urban and regional development has dropped to a level of 0.11 percent of this year's budget allocation (about fourteen times less than the proportional allocation in the Whitlam years).

Just as large corporations have been the impetus behind the growth of cities they have intruded into, and changed the direction of, agriculture. The ratio of self employed to employer farmers which stood at 4:1 in 1947 dropped to 3:1 by 1971 indicating the trend away from the family farm towards that of large farms operating with wage labour. There was also a significant change in ownership patterns in the 20 years up to 1971. The number of farm partnerships doubled during this period and farm companies, while remaining relatively small in actual numbers, more than quadrupled. In the latter case, wealthy owners sought to take advantage of income tax, development, and death duty provisions and concessions.

The small independent operator, pressured by the cost/price squeeze and suffering as a result of governmental policy, is in no position to alter his circumstances. Nor can he be seen to gain by supporting the conservative parties since it is they who are furthering the trends which are promoting the crisis in agriculture. The writing is on the wall for the family farmer. One researcher, looking at the structure of US agriculture, has noted that by the end of this decade some 92 percent of farm production will take place on only 10 percent of holdings. He predicts "the degree of concentration approaching this is also conceivable in Britain and other technologically advanced agricultural nations". These sentiments were more fully explained in an article in the American Journal of Agricultural Economics:

Large farm units can ... afford many services that smaller production units cannot. Large farm units separate management and labour into their logical arrangements. Industry has known for decades that more efficient production results when management and labour are supplied by different people. Looking to the future I expect large scale farming to become as matter-of-fact as chain retailing is now — the only question is how soon. The economic forces are weighted so heavily in favour of increasing sizes of agricultural production and marketing that any social pressures and traditions to the contrary are not likely to stand.

The second main example of the concentration and centralisation of capital in agriculture is that of the agribusiness supply industries which provide the farmers with tractors, fertilisers, pesticides and insecticides. Many are Australian branches of transnational corporations. Through collusion, price manipulation and other practices these firms are in a position to set prices above those levels which would normally operate. The farm inflation previously described is one outcome. If farmers want the new chemicals and equipment they must pay the prices being asked.

A recent example of price manipulation by a transnational corporation involves the closure of the Duchess Rock Phosphate mine near Mt. Isa. The mine, owned by an international consortium, has the potential to meet Australia's phosphate needs well into future decades, but it was closed because the foreign interests stood to gain from operation of the superphosphate bounty. Now Australia must import phosphate and sulphur, furthering our dependence upon overseas sources. While Food and Agricultural Organisation statistics have indicated a drop in international phosphate prices of some 10 percent in the last year, Australian fertiliser costs have risen by 20 percent in the same period.

Farm fuel supply provides an example of the arrogance shown by the corporations to the farming community. Leaving aside the issues of substantial prices rises, the farming
industry has found the diesel fuels produced in Australia are of inferior quality to those produced overseas. The oil companies are seeking, as one writer noted, "to squeeze the last drop of profit from a barrel of crude" and are not removing the "wax" in dieseline. The presence of this substance causes the breakdown of fuel injection parts in tractors, increases replacement rates of fuel-line components, and may lead, in some cases, to total engine failure. Despite protests from the farmers, the oil industry has refused to adopt better refining practices, arguing that it would be too costly to alter existing methods.

The economic, environmental and social costs of harmful corporate practices have not been adequately assessed in Australia. But farmers, acting as independent operators in competition with each other and desperate to improve output, are in no position to choose alternatives. The direction of agriculture is very much in the hands of input industries whose prime concern is to maximise returns to capital. The farmers, and community, suffer accordingly.

It is the food industry which provides the most interesting case of the effects of the concentration and centralisation of capital in agriculture. Through horizontal and vertical integration some companies have managed to tie up markets for particular goods, and are in a strong position to dictate to producers. They are able to reap rewards from processing, packaging and selling those goods to consumers.

The degree of concentration in some food lines has reached alarming proportions. More than 70 percent of meat processing in Australia is under the control of 12 companies, 6 of which have transnational links. In the poultry industry, 3 companies control over 90 percent of the chicken-meat output in Australia. Egg producers are linked in with the large feed mill companies which dictate the production practices to the growers they supply. One researcher has said that under these conditions the farmer "is thus reduced from a semi-independent primary producer to .... a de facto wage labourer". Moreover, government policy "actually facilitates increasing monopoly capital control and increasing centralisation" through licencing and quota arrangements.

In relation to cereal manufacture, three large transnationals control 95 percent of Australia's total production. Three companies control 98 percent of our biscuit output. Transfer pricing arrangements have allowed the food corporations to remove large sums of money to overseas headquarters and subsidiaries, and there is little evidence that the Australian government is prepared to halt such practices or to break the industrial stranglehold of the existing conglomerates.

Australian consumers are the losers. They must pay for the costs associated with processing, packaging, and advertising. They have been disadvantaged by chemical manipulation aimed at improving the look of foods or prolonging shelf life. Food quality has deteriorated despite the gloss coating and attractive packaging, sweetening and flavouring. The industry is now developing products which suit the needs of the supermarkets — that is, for easy transport, for little loss and damage in handling, and for controlled ripening. Australia has recently seen the introduction of the "floridale" tomato developed in the USA to withstand the metal teeth of mechanical harvesters. That consumers find it tasteless, of poor colour and thick skinned does not appear to have worried the food processors and supermarkets. It is being grown over increasingly large areas to service the needs of the food industry in Australia.

As food producers expand and tie up market outlets they are in a strong position to tell growers what will be produced, when, and under what conditions. Farmers are left with little choice but to become involved in the process, as evidenced by the growing importance in some industries of contract farming. Farmers lose their autonomy and Australian agriculture is further dominated by large corporations, many foreign owned, which week to achieve maximum profits from the processing, packaging and retailing of farm goods.

Agribusiness supply industries sell a
"package" of seeds, chemicals, machinery and knowledge which, if used in the recommended manner, is expected to provide farmers with increased output. The choice of "package" depends on the farmer's geographical location, on-farm improvements, crop and livestock systems, capital, and overall management strategy. Farmers have been keen to adopt the latest products of agribusiness. However, it is becoming increasingly apparent that the fossil-fuel based agriculture developed in western industrial nations is causing major environmental damage.

Fertilisers are soluble salts which are easily leached from the soil. In combination with irrigation systems they have been found in some soils to rise with the water table and, in sufficient concentrations, to poison the roots of trees and crops. In other cases they enter streams and waterways promoting weed growth and eutrophication. One of the worst outcomes in Australia of the mismanagement of irrigation and fertiliser applications is the pollution of the Murray River system. Millions of dollars are being spent by the New South Wales and South Australian governments in an effort to clean the river. However, a solution does not appear to be in sight. The problem is that farmers are individually practising the most rational form of capitalist agriculture — applying the new chemicals and practices in an effort to secure the maximum profit. It is only when viewed on a larger scale that we begin to see the irrationality of the system — profits may be being made, but the public must pick up the tab for the desalination and purification of water, for long term declines in soil productivity, for destruction of river-choking weeds, and for the overall environmental degradation. When a proposal was recently put forward for the formation of an Institute of Freshwater Studies and the establishment of a national authority to control and monitor activities affecting the Murray-Darling system, it was panned by the present leader of the NCP. He pointed to interstate rivalry and parochialism as forces which would militate against any long term proposals for adoption of more beneficial practices along the river system. Importantly, he was not prepared to commit the Australian government to any such proposal.

There is increasing public concern about the dangers associated with the use of chemicals in farming. It is well known that our system of monocultural cropping stimulates the proliferation of pests and weeds in plague proportions. The problem that results is that large doses of chemicals must be applied to control the weeds, diseases and insects. In the latter case resistance builds up, and farmers must apply in subsequent seasons, more toxic and potent doses. The effects of these chemicals on human tissue is not fully understood but foetal abnormalities, burns, nausea and dizziness are among the symptoms which have been reported. Not surprisingly, resident action groups have lobbied for tighter control of some substances. In the Namoi Valley of NSW, the use of DDT in cotton crops was banned during 1981, and more rigid monitoring of aerial spraying of pesticides and weedicides has been imposed throughout NSW. The debate about Agent Orange and the suspicions about the possible dangers of 245-T have led to the banning of some chemicals in particular locations. In Mackay, Queensland, canegrowers were "asked" by local residents to stop aerial spraying — or face the retaliatory action of having the crops burnt.

It is becoming obvious that many of the larger farmers care little about environmental preservation or about the consequences of their farming techniques and practices upon local populations. In parts of the cotton growing area of NSW land is being allotted a 20 year productive life-span. Corporations must, in that time, draw as much money from the operation as possible. Chemicals are poured on to improve yields, and, after 20 years of intensive farming when yields begin to drop, the company withdraws its capital and locates in a more productive area. The "poisoned" land is rendered useless for further agricultural production. These sentiments, part of the new "agribusiness" imposed by corporations, were shared by the chairman of
one of the largest irrigation projects in America who stated: "on a discounted cash-flow basis, the earth is simply not worth saving."53

While Australian farmers would like to escape the blame for environmental degradation, current practices are adding to, rather than alleviating, ecological problems. Overstocking and poor agronomic practices have led to serious soil erosion problems in Australia. Some 50 percent of Australian farmlands are affected and the cost of conservation techniques required to redress the problem has been put at $1 billion.54 In Queensland and New South Wales soil loss is often as high as 12.5 tonnes per hectare per annum, but this has regularly reached 60 tonnes per hectare per annum in some regions.

One "solution" being discussed is consistent with the interests of chemical corporations. Rather than attempting to reduce the degree of exploitation of the soil and improve structure, farmers are adopting chemical ploughing or "zero tillage" methods. Herbicides are used to kill weeds and the new season's seeds are sown directly into the previous year's stubble. While this does reduce the need for cultivation, harrowing, scarifying and other seedbed preparations it increases the farmer's dependency upon large corporations and their chemical strategy.

It is not yet fully understood what overall effects chemical manipulation will have on the soil and the soil ecosystem. One problem with fertilisers has recently become known. It seems that improved pastures — the saviour of many marginal farmers during the past 30 years — may eventually lead to the loss of soil fertility. The mixture of subterranean clover and superphosphate has been found to acidify the soil leading to the release of aluminium and manganese ions in toxic amounts. Less tolerant plant species are stunted and the acid soil promotes the growth of fungi, weeds and insect pests, requiring the application of further chemicals to aid in their control. Up to two million hectares in NSW alone are thought to have lost productivity and may now be unable to grow lucerne, barley, rapeseed and other commercial crops. 55

There is also the recently acknowledged problem of eucalyptus "die-back" in farming areas caused, it is thought, through the combined effects of clear-felling, fertilisation of paddocks, and fungi and insect attack. Aerial photographic studies in Western Victoria have indicated a one percent per annum loss of mature eucalypt trees over the past three decades. As one writer has noted:

The frightening reality is that the gradual decline and eventual death of trees has reached alarming proportions right across the country .... Within a generation or two the familiar and unique eucalypt-dotted landscape could have largely disappeared leaving nothing but fence lines to break the monotony.56

Finally, it must be recognised that it is not only capitalist agriculture, but also mining activities, which are responsible for environmental damage in rural Australia.

In the Hunter Valley of NSW, one area to respond to the inflow of foreign capital, mining, smelting and other industrial activities are environmentally suspect. Open cut mining is destructive of the natural environment and causes river pollution. Dust from the mines is a major problem for agriculturalists and urban dwellers alike. Coal burning power stations emit sulphur dioxide and nitrogen oxide into the atmosphere. Contact with moisture results in the formation of "acid rains" affecting vegetation and animal life. The proposed aluminium smelters, which will emit fluoride compounds are certain to cause major problems in the horticultural, pig, poultry and dairying industries. According to one researcher: "it seems unlikely that any primary industry other than grazing will be able to coexist with the mining industry in the Upper Hunter Valley."57

The quality of the environment will be one of the most important issues of the 1980s. Capitalist farming and mining is aimed at maximum exploitation of existing resources. There is a fundamental contradiction emerging between the desires of individual
farmers for private profit and the needs of the public for clean air, fresh water, and a sound agricultural base. Instead of a socially beneficial agriculture we are seeing the polluting of land, the poisoning of rivers, and the destruction of the environment.

Conclusion

Although the volume of Australian agricultural output has doubled over the past thirty years, productivity increases have been won at the expense of small farmers, the consumers of food, and the environment.

The existing trends in Australian agriculture are for our continued dependence upon overseas markets, for the fostering by the state of a capitalist-oriented less regulated agricultural sector, for the further concentration and centralisation of capital in agriculture and the food industry, and for the continued destruction of the rural environment. These trends appear to be directly linked to the capital accumulation process promoted by the federal Liberal-National Country Party coalition.

Mining developments have attracted greater amounts of foreign capital and Australian farmers have been disadvantaged. Their products have become more expensive to international purchasers, farm inflation has risen at a rate well in excess of the national inflation rate causing a more intense cost/price squeeze in agriculture, farm credit is more expensive and more difficult to obtain, and there is an increasing trend towards foreign ownership of Australian farmlands.

The small independent farmer, rather than the larger farmer and corporation, is the one suffering most. Yet the response of the small farmer to deteriorating economic conditions is in itself the cause of another set of problems. In working his land more intensively the small farmer contributes to the oversupply problem in agriculture and to the further destruction of the environment.

The crisis in rural Australia can be blamed, therefore, upon the economic structure of the farming industry. It is a system reliant upon the pursuit of private profits by individual producers in an unplanned and uncoordinated manner. It is a system dependent upon the whims of an unknown market.

REFERENCES

1. National Farmers' Federation, Farm Focus: The '80's, National Farmers' Federation, Canberra, January 1981, p.3.
The Rural Crisis

19. ibid.
20. ibid.
23. See Longworth, op cit.
25. ibid.
26. ibid, p.20.
27. ibid.
34. ibid, p.17.
36. Bureau of Agricultural Economics, Rural Industry in Australia, op cit, p.11.
41. Bureau of Agricultural Economics, Rural Industry in Australia, op cit, p.23.
45. ibid.
48. ibid, pp.161-164.
51. ibid.