Who controls our future?

Geoffrey Lawrence

Institute for Sustainable Regional Development, Central Queensland University

Abstract

Three of the main challenges facing Australia are to continue to be economically productive, to ensure social viability, and to produce in an ecologically sustainable manner. The problem for rural and regional Australia - which is the focus of this paper - is that in a globalising world economy, pressures are being exerted which 'force' regions to exploit their people and natural resources. If productivity and efficiency gains are privileged over societal benefits and environmental security, the form of development which is likely to occur cannot provide a balanced or viable future. Yet, in a deregulated economy Australian governments have been unable or unwilling to intervene to challenge those forces. At best, they ameliorate them. Australia's future is viewed by our governments as being intimately tied to the global economy and its corporate players and they do not want to challenge such authority through increased interventions. Depite the rhetoric of governments about 'empowerment' of rural people and the provision of funding for ecologically sustainable development, the free market policies which prevail are impacting to diminish social capital, and to limit the capacity of regions to move to more ecologically-sustainable forms of production. When new options - such as the applications of genetic engineering - are considered, they form part of the same technological thrust which has been responsible for past rounds of environmental degradation. It is doubtful that they conform to what consumers think of as 'clean and green' agriculture. As such, their applications may not form part of the answer a sustainable future for rural Australia. It is argued in this paper that there is a growing tension between the control of our future by global entities and the desires of rural populations, and for consumers generally, for a secure and healthy lifestyle and environment.

Key words

Agriculture, rural restructuring, transnational capital, globalisation.

Given Australia's and particularly Australian agriculture's intimate connection with the international marketplace, it could be reasonably argued that Australia's economic focus has been 'global' for at least two centuries! This is correct to the extent that we have exported our products to other nations. What the notion of 'globalisation' seeks to capture, though, is the worldwide coordination of production by Transnational Corporations (TNCs) in a deregulating world economy. It is posited that where regulation occurs to stabilise such a system, this too occurs at the global, rather than the national, level. The formation, in January 1995, of the World Trade Organisation (WTO) is viewed as an indication that the era of 'global governance' has arrived, and that the nation state must now seek to conform to the rulings of a body charged with promoting free trade and investment (28).

It is no surprise, therefore, that proponents of globalisation talk of the negative impacts of anything which would limit free trade. They lambast tariffs and protection, view as futile organised labour's attempts to 'protect' wage levels, see an inevitability in the spread of the technologies and products of TNCs, and believe that government interventions which act counter to global processes will damage our trading future (57). For those who see globalisation as an inevitable process in the progressive development of capitalism anything blocking such progress is considered to place limits on competition, job creation and economic development. For Kanter (19):

Communities must open their connections to the world ... success for locals in the global economy will derive from their ability to become more cosmopolitan ... The clearest danger to the viability of communities is not globalisation, but a retreat into isolation and protectionism.

We have seen arguments of the latter type emerge in Australia from the political Right (8, 47) and the political Left (41) - driven largely by the realisation that Australia is being deindustrialised and that manufacturing industry (the backbone of many suburbs in the capital cities) is currently in a state of collapse. The general argument from both sides is to expose the extent of inequality in Australia (where the top 5% of people own half the nation's total wealth (41), to suggest this mirrors overseas trends (in the US the top 1 percent of society controls 40% of the nation's wealth - 47) and to indicate that such polarisation, which is viewed as neither socially desirable nor economically sensible, is a direct outcome of the government's blind obedience to international capital. For the Right the aim is to return to a Menzies/McEwen style 1960s Australia where the nation state protects local capital and controls the finance sector (48). For the Left the aim is to restore a sort of benign corporatism where the state intervenes to reskill workers through higher levels of investment in education and training, and to restore community services through public sector expenditure. It would restrict imports, limit the activities of TNCs, create a wealth tax, and stipulate that superannuation funds are invested in Australian-based companies (41, 52). Both Left and Right combine elements of import substitution industrialisation with export oriented industrialisation. Both 'put the market in its place' by reasserting the importance of interventionist policies by the nation state (41, 47).

The point, it would seem to me, is not to deny or to prevent the influence of global forces, but to ensure that development occurs in a manner which provides new, skilled, work opportunities, builds local community structures, enhances life chances and secures ecological sustainability. The point is: how might this be achieved? Most commentators acknowledge that TNCs owe loyalty to no country and are expected, as part of their responsibility to global shareholders, to maximise profits. It is such an imperative which drives them to find low cost production regions, to use (where appropriate) low cost labour, and to avoid paying the environmental price of their activities (28, 32). They seek a compliant state and regional areas grateful for development. In such circumstances, there is the distinct likelihood that 'global' investment at the local (regional) level has no longer term beneficial outcomes. Indeed, it is viewed as creating widespread job losses, the exploitation of natural resources, the creation of toxic wastelands, and an immense assault on biodiversity (16). We should be quick to acknowledge, however, that many of these same problems arose within the 'protected' environment of the Keynesian capitalism of the 1940s to 1970s. Globalisation might, in this regard, be best understood as an intensification or acceleration of tendencies linked to capitalist development as a whole (39).

These criticisms aside, the past Labor and present Coalition Australian governments have not veered from a course of opening up the economy to increased international competition via deregulation, privatisation, and the lowering of protection (12). The promise is supposed to be greater exports - particularly of efficiently-produced agricultural products and minerals - more jobs, a more prosperous economy, new industries, and a more market-oriented (consumer-driven) production system. Importantly, the promise is that freer trade regimes allow local (regional) economies to capture transnational investments in ways circumscribed by more tightly regulated national systems of production and control (21). This accords with Naisbitt's (35) paradox - the bigger the world economy, the more powerful are its smaller players. In this scenario, rural and regional Australia have a lot to gain via globalisation.

Rural and Regional Australia

It is difficult accurately to judge the economic state of Australia's regions. To treat them as an homogeneous 'whole' is to overlook the variations in industrial mix, the extent and impact of internal and out migration, the proximity to capital cities or areas of tourist expansion, whether they are inland or coastal, their natural resource base, and a multiplicity of other factors. What can be said with some degree of certitude is that, in comparison with the capitals, they have:

- relatively higher levels of unemployment and underemployment;
- lower levels of income;
- a lower level of women's participation in paid labour;
- a higher proportion of families with dependent children;
- a limited range of employment opportunities;
- poorer levels of health;

• a poorer range of services, cultural events and educational facilities; and,

• a link to agricultural or extractive industries which are facing terms-of-trade decline (3, 9, 23). Some regional communities are striving to escape from this straightjacket of relative social deprivation through novel and quite successful self-help programs (see discussions in 20, 29, 34). Others, yet to experience the full brunt of economic restructuring, do not appear prepared. For Beer *et al.* (3) the combination of factors listed above emphasises the importance of ensuring the provision of 'adequate social services and an attractive social environment' if population is to be retained and investment activity enhanced. What has tended to occur, in contrast to this, has been the removal of services as a consequence of the adoption of policies of economic rationalism (9, 23, 52). These are the very policies which underpin globalisation and lead to the downsizing of the welfare state (51, 53).

While it is no longer appropriate (if it ever was) to equate 'rural' with 'agriculture', the changes occurring in the latter are no doubt symptomatic of many of the changes in wider rural and regional society. So, what is happening in agriculture? Robertson (44) has reported that approximately 80 percent of broadacre agriculture has been unprofitable during the past decade. The trend toward intensification of agriculture is increasing, with beef, pigs and poultry - and cropping - undergoing continued change (14). An expansion in the size of holdings, and changing ownership patters (favouring larger family farms and corporate forms) is evident (14). Together with the intensification of agriculture and the cost-price pressures under which farmers and graziers operate quite severe environmental degradation continues to occur on Australian farmlands. Over 60% of broadacre and dairy farmers have reported 'significant' land degradation on the properties. Widespread problems on land and in waterways include: wind erosion, dryland salinity, uncontrollable weed growth, soil acidification, rising water tables, and algal blooms (14, 54). The annual cost of salinity, soil erosion, acidification, loss of nutrients, and treatment of polluted water is estimated to be \$1.7 billion. It is true that these problems are being addressed both on farm and off farm. But there is general recognition that much current agricultural practice is unsustainable in the longer term (55). Doubts have also been raised as to whether the current support by government via Landcare, Bushcare, National Heritage Trust funding, and other schemes will be sufficient to overcome the complexity of problems which have developed over generations of farming (27, 54).

Agricultural/rural restructuring is the term used by sociologists to capture the forces of change in the countryside. It is impossible, however, to see 'local' change outside the context of wider, international, forces. As part of the process of agricultural/rural change, it is clear that, among other things:

- while the 'globalisation of agriculture' is one of the identifiable trends of our time, there is increased volatility in global markets;
- there is increasing international competition but, rather than gaining from that, Australia's rural producers continuing to face 'unfair' trading practices from other nations;
- with falling income, many producers are working off the land in an effort to support the farm and a farming lifestyle. While increased income is achieved - this occurs at the expense of family and community interaction, and health of the farmer and often health of the farm;
- there is a withdrawal of support of the state both in the support of farming, and in the provision
 of services to rural regions;
- while the majority of Australian producers continue to produce bulk, undifferentiated commodities for largely unknown markets, such production is becoming increasingly linked to the TNCs and their global trading activities;
- the greatest impetus for change continues to be efficiency and productivity driven, leading to larger properties, and fewer owners and a 'productionist' approach to profit-making in agriculture;
- domestic and international consumers are demanding 'clean' foods, produced in environmentallysustainable ways - leading to changes in production practices;
- some producers have managed to capture 'niche' markets, particularly in Asia, by providing fresh and 'Asian-style' foods directly into Asian cities;
- new communication technologies have allowed farms and rural communities to be linked directly to global culture, and to the global marketplace;
- new opportunities (such as in eco-tourism, farm tourism, value adding to farm products, cultural events for country towns) are helping to create new identities for rural regions; and,

such developments are not happening evenly, but have been concentrated in particular areas (14, 24, 33, 36, 45, 50).

Controlling the Future

What is clear from the above is that a multiplicity of forces are at work in moulding the responses of farmers and rural and regional people more generally to global economic tendencies. But who controls what is occurring? In the following analysis I have identified five broad categories of actors on the local, national and world stages. They do not have the same degree of economic power, however, as will be demonstrated below. I have limited the discussion below to rural and regional Australia - but it is obvious that a more complete picture would need to include the metropoles, where the vast majority of Australians live and where most economic and political power resides.

Local stakeholders

It is fashionable these days to speak of 'stakeholders' - groups of citizens whose interests relate to their position in the economy (and differ across time and space), and whose concerns, values and ideas for change will tend to differ from other stakeholder groups. Rural producers have become just one group of stakeholders in regional Australia. Other important groups are environmental and women's lobby groups, health advocates, gun owners, those pursuing recreation, retirees, and a plethora of other local, visible, groups. Many will differ in their attitudes to natural resource management. The non-agricultural stakeholders, through political activity, involvement in catchment management, in their ability to influence the media, and possessing higher levels of formal education, are exerting pressures to alter the ways water and land are used in their local area. Indeed, the successful combining of stakeholder positions into new 'community-based' decisions within regional areas is the intention of Landcare and many other National Heritage Trust programs (27). Farmers may own the land, but their exclusive right to do what they believe they want will be circumscribed by 'communities of concern' in the local area. It is highly likely that practices at the farm level which are deemed to lead to environmental degradation or pollution will be deemed unacceptable. That is, the 'costs' of continued degradation will not be borne by the wider community, even if the farmer decides that land clearing or other on-farm practices are essential for short term economic gain.

Will the 'local' region be in a better position than in the past to determine its future? Yes, and no. If regions are losing population (and with that, leadership potential), if they do not mobilise to achieve certain economic and social goals, if they lack political clout, and if they are not seen by larger global entities as areas for investment, then their futures will be limited. If, in contrast, they are capable of articulating with local, national and global capital in a manner which brings in investment dollars while achieving social and environmental sustainability, then their future might be might much more secure. Regional citizens must not be viewed as 'victims' of large-scale movements of capital. They are active players whose efforts can mould local conditions and circumstances in ways which might enhance development. But neither are they well endowed with educational or technical skills or currently empowered to take control of their own destinies. They remain vulnerable because of the narrow economic base of production, the continued threat of service rationalisation, the outmigration (and non-replacement) of young and/or talented leaders, and the lack of an integrated rural development policy in Australia (see discussions in 30).

Consumers

It is a truism in agricultural economics that 'the market is king ... farm produce must be sold at a price which will cover the costs and leave some profits' (31). Consumer demand is calculated, graphed, modelled, interpolated - studied in great detail by Australia's agricultural economists, and the 'signs' of the future are subsequently reported to eager farmers whose future may be determined by growing the right crop or animal (and at the right time for the right market) - that is, investing their capital and labour. Studies have shown that what consumers of agricultural produce are demanding is increasingly based upon nutrition, food 'safety' and convenience (26, 36). They do not want pesticides in their meat, they are very concerned about bacterial and other contamination, and they evince a preference for foods which are produced hygenically and with minimal animal suffering. More recently, and particularly in relation to

overseas consumers, it has been apparent that they also want products to be produced in sustainable ways - which impact in minimal ways on farm (and wider natural) environments.

Australian farmers continue to produce bulk products destined for largely unknown markets. With very poor margins being obtained on undifferentiated commodities (36), farmers have been advised to seek 'niche' markets for their products, with specific interest in Asian markets (45). Dollars are supposedly to be found in such things as bush tucker, 'ethnic' foods, processed foods and vegetables, and so on. But such options are limited. Producers continue with a technologically-based agriculture, one which is expected to harness biotechnologies as the latest approach to profit-making.

Biotechnologies are lauded as the most appropriate technologies to, inter alia: improve the quality (nutritional value, flavour *etc.*) of the products of crops and animals; allow the early detection of and/or prevent disease in food products; reduce, through 'self protective' genes, the need for chemical pesticides in cropping and livestock systems; improve food processing and fermentation; and open up new markets for products (see discussion in 18). In contrast, the level of support they received among consumers ought to be of great concern to those living in rural and regional Australia. Overseas studies have shown that people have major concerns about what some oppositional groups are labelling 'mutant foods'. Over half of the respondents to an Australian survey were concerned about genetically-engineered foods - notably the health effects which they might cause, and the impact of the release of novel genes into the environment (38). In Australia, consumers and consumer organisations are demanding that all genetically-engineered foods be labelled as such (38) - something argued against by the corporate-dominated Australian Food Council (1).

The issue is much deeper than the labelling of foods, however. Given that some overseas countries have been shown to use food 'pollution' as a form of non-trade barrier, it might not be long before Australian agricultural commodities are banned because they contain novel genes. This would place much of Australia's trade in traditional (but genetically-manipulated) crops and animals in jeopardy. That Australia is attempting to promote a 'clean and green' image, yet is prepared to allow genetically-engineered products into the food chain will continue to be viewed with great suspicion by consumers - despite the food industry's attempts to 'educate' the public into accepting the virtues of genetically-altered products (1).

We should think of 'consumers' as people who also 'consume' rurality - define it for their own use, and imbue it with symbolic values. Those with the greatest social power to have their definitions and images 'stick' are the urban (and urbane) professionals and others with influence but whose general understanding or appreciation of regional life and its vicissitudes is quite limited. They rely on their television and movie screens for their images of the bush, and what they see does not accord at all with what they want for themselves or their families. For Salt (46):

"In many quarters, the view is that urban is chic; provincial is passe. Country 'style' is restricted to weekenders at Bowral and Mount Macedon. Sophistication is measured by whether the waiter stares blankly when a long macchiatto is ordered. The bush is now perceived as remote, depleted, depressed ... as the target for charity via Farm Aid, or as being stricken by drought, or infested with rabbits or mice ... "

Rural Australia appears to have become again, if indeed it ever stopped being, Dad and Dave country. Once, in an era where ideologies and policies of regionalisation and decentralisation induced governments to support and reward talented and skilled people who might venture to the regions, economic rationalism acts to prevent such an outcome. Some of the images of the region are about economic opportunity, lifestyle and adventure. Cultural capital is gained from residing in locations away from pollution and which provide for climatic and lifestyle preferences. Here, we can think of Byron Bay, Hervey Bay, the Sunshine Coast, Ballina, and Port Macquarie which are among Australia's fastest growing regional areas (46). Yet all of course are coastal, not traditionally 'rural'. Some believe globalisation may be a process which better links the regional to the global, giving the former opportunities for economic development which were hamstrung by the 'heavy hand' of the nation state. But, unless more positive images of the regions are conveyed by the media, real economic opportunities exist beyond the capitals, and the level of services can be increased (3), the likelihood of any movement beyond the 'boomerang' of settlement (26) from Brisbane to Adelaide is highly unlikely. As a final point, while tourists-as-consumers (and especially overseas tourists) are believed to provide some hope for rural Australia, they tend to hug the coast in pursuit of pleasure.

Scientists

Scientists have had a significant input into the development of Australian agriculture. Their productivityand efficiency- boosting technologies have been widely adopted by farmers who must innovate to stay competitive and who rely upon new seeds, animal types and management regimes to overcome disease, reduce input expenditures, and to increase profits.

However, much of the research into agriculture has been publicly funded, and in an era of fiscal rectitude and 'user pays' there has been a deliberate move by the state to either privatise services or to ensure private funding matches public funding in the area of research. In this situation the public-sector scientist with limited budgets and with increasing demands for 'performance' may be driven to more commerciallybased research, rather than -as in the past - public good science (5). That is, if the scientist is employed in an area of agriculture -as most agronomists are - and that area of agriculture is about animal and plant production, the government (State and Federal) is expecting that private (including industry) support will be forthcoming to underpin that research. The extent to which this might compromise the scientific endeavour is open to debate. What is not in doubt is the diminution of influence of the public sector scientist in the context of wider research (5).

When, in the early 1990s, the Hawke government commissioned the Australian Science and Technology Council (ASTEC) to undertake a study of future directions for research, it identified the need for strategic planning - including identification of areas into which to place scarce dollars (2). In its report - the basic thrust of which remains today - ASTEC recommended closer links of science with industry and greater monitoring of research performance. In relation to agricultural research it reported that the accelerating costs associated with the pursuit of increasingly more sophisticated research, combined with budgetary problems of State governments, highlighted a 'pressing need to rationalise resources' (2), a process which has continued since that time (37).

What has happened on the ground is that while funding for 'strategic' areas (ecologically sustainable development and biotechnology, for example) has increased, funding for 'traditional' areas has diminished relative to total expenditure. Thus, the status and influence of agronomists, plant breeders, soil scientists and a host of others on the payroll of State governments and whose role was to provide public knowledge for agriculture, has altered. In fact, it has declined significantly. Once the key to rural prosperity, science tends to be viewed as a 'cost' for government: something very much the case in relation to extension (54). Unless they are to move to one of the glamour areas of research - or to obtain substantial external income - they are likely to find that their influence in the public arena will continue to wane. With it will go the likelihood of providing alternatives to developments such as biotechnology, a technological thrust which, as suggested above, may be something of a two edged sword for Australia's agri-food industries.

Business

As Napier (36) has correctly reported, production-driven agriculture is becoming market-driven agriculture, with firms in the marketing side becoming increasingly influential in decisions about what is grown on the farm and what regions will produce. There is concentration in the food processing industries especially among TNCs, and there is a growing tendency for a 'shortening' of the food chain (such as forward selling to processors and retailers by larger growers under contract)(40, 43). The growing industrialisation of agriculture (36) is linked directly to vertical integration, yet the subordination of farming to agri-food interests has important consequences. According to Friedmann (13) these include:

- increasing specialisation, and with it the separation of cropping and animal production;
- the growth of corporate agri-food entities which act on a global, rather than a national, scale;
- continued reliance in farming and the food industries on the latest technologies including genetic engineering - to increase output and speed up production;

- increased competition in the sales of foodstuffs in the international arena brought about, in part, by the need for foreign-debt ridden countries to sell agricultural products in the hope of reducing that debt; and,
- Unacceptable ecological impacts, and the subsequent formation of oppositional 'green/sustainability' groups (and approaches) to help overcome them.

The transnational corporate sector will continue to dominate in the agri-food industries, having even greater control over Australia's on-farm food and fibre production than in the past. It will achieve this in a number of ways. First, TNCs will demand greater quality control on the farm. Under contracts, producers will be issued with specific guidelines for food production removing, in the process, some of the autonomy of the farmer. Second, contract relations will lead to new corporate-linked on-farm surveillance of the production process, with officials visiting farms to check the correct fertiliser and pesticide applications have been adhered to, and giving the farmer technical advice about the crop or animal. Third, before lending money, finance capital - largely the banking sector - will look at the capacity of the farm to produce efficiently for the larger market-linked firms. The monitoring of farmers individual paddocks via satellite technology and the use of data to determine the farmer's ability to use the land productively and (hopefully) sustainably - will give a good deal of external control to off-farm entities (6). Present evidence suggests that environmental sustainability is not the main thrust of the corporations, however, and that farmers under contract must often 'exploit' their soils to achieve the sorts of output levels required by the corporations (43). Thus, while such corporate connections may lead farmers away from the 'dead end' of producing bulk commodities (and therefore towards greater economic security) it may not necessarily fix the problems of the environment. They might, instead, be exacerbated.

What the above implies is the further demise of the family-farm sector, as those unable to compete 'adjust out' of agriculture (15). Given that larger farmers tend to bypass local towns in obtaining supplies, an increase in farm size and a reduction in the number of producers is likely to impact on those smaller towns whose *raison d'etre* is that of supplying the rural hinterland. But, in terms of other rural communities the situation may be different. One of the main findings has been that population has drifted from the smaller towns to the provincial centres which can provide a variety of services (including entertainment, recreation and education) (46). According to Stayner and Reeve (50) there has been an 'uncoupling' of rural towns from agriculture. That is, the futures of rural settlements are now tied to different economic forces/activities from those of yesteryear. However, there is still a vulnerability in the bush: that comes from decisions by governments and business to withdraw services from those towns, centralising their administration in the cities. According to Reynolds (42) and Williams (56) services in some of the larger regional centres have now been reduced to 'skeleton' status, with the introduced 'competition policies' in the human services leading to service failure through fracture and fragmentation. Here, the state is removing social capital as well as services, profoundly reducing the well-being and social viability of rural communities (25).

We should also recognise the role of private enterprise in regional Australia. Much of the work of the Kelty committee (20) which investigated the future of regional Australia focused on the future importance of private capital - and local entrepreneurship - in the development of the regions. Might it be that capital will find the regions better places to locate their businesses? Might it be that global capital can invest in the regions in mutually-beneficial ways, and produce outcomes which were unimagined in a previously highly regulated (tariff protected) marketplace? Many writers have commented that while both democracy and devolution appear to be enhanced in such a vision, in reality global capital is highly mobile and seeks out cheap labour locations and/or those with limited state regulation (where exploitation of labour can go hand in hand with environmental pollution)(10). The much vaunted 'global future' for rural and regional Australia might be one in which the regions are 'played off' one another in an international race to find the least cost, least oppositional, location for production. If this were to occur, Australia would simply be part of a 'race to the bottom' (4) with its regional citizens the likely victims of corporate profit-maximising policies and whose lifestyles will eventually come to be compared to those of the Third World peoples with whom they are competing. If, as we might readily conclude, we live in a global economy where global TNCs are the main players, the future will - for obvious reasons - be greatly influenced by the corporate sector.

The regulators

Capitalism as an economic system is inherently unstable. Interventions by the nation state have been forthcoming to ensure that capital accumulation proceeds apace without system failure. The decisions by the state to build highways, dams, fund schools, increase immigration, give foreign aid and so on come out of a combination of two major (and some argue contradictory) tasks. One is to provide voters with some or most of what they have voted for: delivery of social provision leads citizens to believe the economy and its rules are worth preserving, as being legitimate. Another is to underwrite profit making by supporting the economic activities of firms and allowing a stable economic climate for investment: the state supports capital accumulation (22).

Under principles of economic rationalism, however, much of the interventionist thrust of government is viewed as being a fetter on economic growth, and leading to a distortion of the marketplace (57). Indeed, the large, globally-based, TNCs are coming to view anything which government does which impedes its development as highly undesirable. What they value is a secure world trade regime where they are free to move their capital, where they are taxed at ever lower levels, where they can purchase labour cheaply and without the interference of unions. In place of nationally-organised economic development, they demand globally-organised economic development (28). They desire tariff removal, and a compliant nation state and labour force. Driving down the costs of production becomes one of the most important priorities of the globally-integrated firm (11). Indeed, four new 'classes' implicated in the furthering of the interests of the TNCs have been identified by Sklair (49) as TNC executives, globalising bureaucrats, politicians and professionals, and consumerist elites. Together, they act to foster neo-liberalism, promote the ideology of consumerism and to ensure that the 'fundamentals' of global economic activity are understood by those who reside within, or who want to join, the capitalist economic system (49).

The nation-state will remain a very important regulator, but we can expect to see the emergence of global regulators - such as the World Trade Organisation - which seek to overrule, via international agreements signed by those nations wanting continued economic development, the policies of those countries who are ignoring the needs of the corporations. There is no conspiracy here. In a very Adam Smith manner, TNCs are acting out of self -interest, and seeking to ensure that profits are returned to shareholders. One of the new 'rules' is that global firms must be allowed to trade across national boundaries as one entity (to trade with its own geographically dispersed affiliates), and not suffer tax or other financial penalties. The role of the nation state and of the global regulators will be to foster global integration within TNCs. While taxes might have once been gained from trading on a world scale between affiliated companies, this is now viewed as inappropriate. As Buttel (7) has noted ' the role of the state is [no longer] to mitigate market forces, but to augment them'. Hamilton (17) has summed up the situation:

"Globalisation has severely limited the ability of national governments to manage their economies in the interests of their citizens. It has done so by increasing economic instability and by undermining national sovereignty over domestic economic policy."

The extent to which regulation becomes the province of some international body is yet to be fully determined. Evidence would suggest that so long as the nation state enacts legislation which supports the activities of the corporate sector, the less likely any international body will need to 'police' the economic integration of the world. What should be remembered, however, is that unlike earlier GATT decisions - which could be overruled by individual nations - the WTO's 117 voting members are obliged to follow the rulings of that body. The WTO is, in this sense, the first institution to have powers of global governance and, importantly, has the capacity to overrule individual states in areas such as food safety, and the environment (28, 53).

Conclusion

Who controls the future? The future will be, as it has always been, a result of the outcome of struggles between those who act to achieve certain outcomes, in line with certain defined interests. Yet, while groups may 'act', not all can achieve the outcomes they desire. The reason is differential access to economic power and to the political clout that accompanies it. Those who are now acting on a global scale are beginning to dictate the terms for economic growth into the future. While the TNCs are a clear example of large-scale entities whose operations are globally coordinated and whose profits are based on

performances beyond any one country, the nation state retains its considerable powers of sanction. That it is becoming less interventionist in the late Twentieth Century is consistent with the realities of the marketplace and of the neo-liberal ideologies which dominate the socio-political climate. It is a moot point to consider whether the 'local' will have increasing power to determine its own fate in a globalising world economy. Some say yes, others no. What can be said is that consumers at the national and global levels will continue to influence demand. That they are wanting 'clean and green' foods should be music to the ears of Australian farmers. But the music has many notes of discord: consumers are becoming more discerning and are suspicious of products - such as some genetically-engineered products being developed in Australia - which have perceived health risks, which are not 'natural', which may not be properly labelled, and which affect in unacceptable ways the environment.

Agronomists, like other 'traditional' scientists working in public research laboratories are having a difficult time in their attempts to have their research funded at appropriate levels. They may gain strength by lobbying with other scientists for public support, may seek private funds to supplement their work, or may move into the 'latest', fashionable, areas of research. But science is under scrutiny throughout the western world, and it is unlikely that they will regain the status they had in earlier decades.

Finally, while the articulation of the local with the global is seen to provide, through information and telecommunication technologies, new and exciting opportunities for regional communities, not all communities are well placed to enter the global arena. Most are economically and socially disadvantaged when compared with the metropoles, and the people are not well educated in approaches to 'global' business.

The point then, is that future economic development in the regions is likely to be characterised by an unevenness as the state continues to withdraw its services, and as communities respond in different ways according to the economic and intellectual wherewithal of their members. Globalisation is enhancing the prospects for transnational entities, but is also providing opportunities for regionally-based groups which are prepared to accept the conditions of interaction. Whether the outcome is beneficial to the local population will be based as much on the ability of the region to identify its needs and act to coordinate the activities of its members, as it will on the desires of the TNCs to maximise their profit-making opportunities. The latter, of course, have the power to move activities quickly, in response to 'unfavourable' circumstances: the former is 'fixed' spatially. The one unknown in the equation is the degree to which role of the nation state will be subsumed by global regulators. If the nation state continues to withdraw its support for regional communities, one likely outcome is the emergence of oppositional movements aimed at restoring economic activity. This may mean moving 'beyond' the state. At the local level the fostering of growth in self-help organisations aimed at securing globally-linked production and other activities may be such as strategy. This self-help approach to community development is certainly on the agenda in an increasingly deregulated Australia - even if, at the present time, there is little evidence of any real devolution of power to local and regional communities.

References

1. Australian Food Council. 1996. "Food Biotechnology in Australia: Issues Relating to the Application of Gene Technology". *Australian Food Council*, Canberra.

2. Australian Science and Technology Council. 1991. "Research and Technology: Future Directions". *Australian Government Publishing Service*, Canberra.

3. Beer, A., Bolam, A. and Maude, A. 1994. "Beyond the Capitals: Urban Growth in Regional Australia". *Australian Government Publishing Service*, Canberra.

4. Brecher, J. and Costello, T. 1994. "Global Village or Global Pillage: Economic Reconstruction from the Bottom Up". *South End Press*, Boston.

5. Bridgstock, M. 1998. In "Science, Technology and Society: an Introduction". Edited by M. Bridgstock, D. Burch, J. Forge, J. Laurent and I. Lowe. *Cambridge University Press*, Cambridge. pp. 15-39.

6. Burch, D., Rickson, R. and Lawrence, G. (eds). 1996. "Globalization and Agri-food Restructuring: Perspectives from the Australasia Region". *Avebury*, Aldershot.

7. Buttel, F. 1993. In "The Greening of Rural Policy". Edited by S. Harper. *Belhaven Press*, London: pp. 12-26.

8. Carroll, J. and Manne, R. 1992. "Shutdown: the Failure of Economic Rationalism and How to Rescue Australia". *Text Publishing Company*, Melbourne.

9. Cheers, B. 1994. Social Development as a Facet of Regional Development, paper presented to the First National Regional Australia Conference, Whyalla, South Australia (n.d.)

10. Chew, S. 1995. In "The New Era of Global Competition: State Policy and Market Power". Edited by D. Drache and M. Gertler. *McGill University Press*, Montreal: 335-349.

11. Drache, D. and Gertler, M. (eds). 1991."The New Era of Global Competition: State Policy and Market Power". *McGill-Queens University Press*, Montreal.

12. Eckersley, R. 1993. In "Beyond the Market: Alternatives to Economic Rationalism". Edited by S. Rees, G. Rodley and F. Stilwell. *Pluto*, Australia. pp. 237-250.

13. Friedmann, H. 1993. "Food for the Future: Conditions and Contradictions of Sustainability". Edited by P. Allen. *John Wiley and Sons*, New York. pp. 213-233.

14. Gleeson, T. and Topp, V. 1997. Proc. Nat. Agric. & Resour. Outlook Conf., ABARE, Canberra: pp. 53-66.

15. Godden, D. 1997. "Agricultural and Resource Policy: Principles and Practice". *Oxford University Press*, Melbourne.

16. Goldsmith, E. 1996. In "The Case Against the Global Economy: And for a Turn Toward the Local". Edited by J. Mander and E. Goldsmith. *Sierra Books*, San Francisco. pp. 78-91.

17. Hamilton, C. 1996. "Globalisation and the Working People: the End of Post-War Concensus", Paper Delivered at the ANZAAS Conference, Canberra, October.

18. Hindmarsh, R., Lawrence, G. and Norton, J. (eds). (forthcoming 1998). "Altered Genes: Reconstructing Nature Downunder". *Allen and Unwin*, Sydney.

19. Kanter, R. 1995. "World Class: Thriving Locally in the Global Economy". *Simon and Schuster*, New York.

20. Kelty, B. 1993. "Developing Australia: a Regional Perspective". *Australian Government Publishing Service*, Canberra.

21. Lash, S. and Urry, J. 1994. "Economies of Signs and Space". Sage, London.

22. Lawrence, G. 1987. "Capitalism and the Countryside: the Rural Crisis in Australia". Pluto, Sydney.

23. Lawrence, G. 1996. In "Social Change in Rural Australia". Edited by G. Lawrence, K. Lyons and S. Momtaz. *Rural Social and Economic Research Centre, Central Queensland University*, Rockhampton. pp. 332-349.

24. Lawrence, G., Lyons, K. and Momtaz, S. (eds). 1996. "Social Change in Rural Australia". *Rural Social and Economic Research Centre*, Central Queensland University, Rockhampton.

25. Lawrence, G., Gray, I. and Stehlik, D. 1997. "Changing Spaces: the Effects of Macro-social Forces on Rural Australia". Paper Presented at the XVII Congress of the European Society for Rural Sociology, Mediterranean Agronomic Institute at Chania, Crete, Greece, 25-29 August.

26. Lester, I. 1994. "Australia's Food and Nutrition". *Australian Government Publishing Service*, Canberra.

27. Lockie, S. and Vanclay, F. (eds).? 1997. "Critical Landcare", Key Papers Series, Number 5, *Centre for Rural Social Research, Charles Sturt University*, Wagga Wagga.

28. McMichael, P. 1996. "Development and Social Change: a Global Perspective". *Pine Forge*, California.

29. McMillen, D. 1997. "Globalisation and Regional Communities: Geoeconomic, Sociocultural and Security Implications for Australia". *USQ Press*, Toowoomba.

30. McSwan, D. and McShane, R. (eds).1994. "Issues Affecting Rural Communities". *Rural Education Research and Development Centre, James Cook University*, Townsville.

31. Malcolm, B., Sale, P. and Egan, A. 1996 "Agriculture in Australia: an Introduction". *Oxford University Press*, Melbourne.

32. Mander, J. and Goldsmith, E. (eds). 1996. "The Case Against the Global Economy: And for a Turn Toward the Local". *Sierra Club Books*, San Francisco.

33. Marsden, T., Murdoch, J., Lowe, P., Munton, R. and Flynn, A. 1993. "Constructing the Countryside". *UCL Press*, London.

34. Mules, W. and Miller, H. (eds). 1997. "Mapping Regional Cultures: Discourses in Social Contexts". *RSERC, Central Queensland University*, Rockhampton.

35. Naisbitt, J. 1994. "Global Paradox: the Bigger the World Economy, the More Powerful its Smallest Players". *Allen and Unwin*, Sydney.

36. Napier, R. 1997. *Proc. Nat. Agric. & Resour. Outlook Conf.*, Canberra 4-6 February, ABARE, Canberra. pp. 83-92.

37. National Farmers' Federation. 1993." New Horizons: A Strategy for Australia's Agri-food Industries". *National Farmers' Federation*, Canberra.

38. Norton, J. (forthcoming 1998). In "Altered Genes: Reconstructing Nature". Edited by R. Hindmarsh, G. Lawrence and J. Norton. *Allen and Unwin*, Sydney.

39. O'Connor, M. (ed.) 1994. "Is Capitalism Sustainable? Political Economy and the Politics of Ecology". *Guilford Press*, New York.

40. Parsons, H. 1996. In "Globalization and Agri-food Restructuring: Perspectives from the Australasia Region". Edited by D. Burch, R. Rickson and G. Lawrence *Avebury*, Aldershot. pp. 251-268.

41. Rees, S. Rodley, G. and Stilwell, F. 1993. "Beyond the Market: Alternatives to Economic Rationalism". *Pluto*, Australia.

42. Reynolds, M. 1997. Northern Radius 4 (3), 3.

43. Rickson, R. and Burch, D. 1996. In "Globalization and Agri-food Restructuring: Perspectives from the Australasia Region". Edited by D. Burch, R. Rickson and G. Lawrence *Avebury*, Aldershot. pp.173-202.

44. Robertson, G. 1997. *Proc. Nat. Agric. & Resour. Outlook Conf.*, Canberra 4-6 February, ABARE, Canberra: pp. 75-79.

45. Rogers, M. 1997.? *Proc. Nat. Agric. & Resour. Outlook Conf.*, Canberra 4-6 February, ABARE, Canberra: pp.27-37.

46. Salt, B. 1997. *Proc. Nat. Agric. & Resour. Outlook Conf.*, Canberra 4-6 February, ABARE, Canberra: pp. 119-121.

47. Santamaria, B. 1997a. Market Must be Put in its Place, Weekend Australian, 12-13 July: 22.

48. Santamaria, B. 1997b. Globalisation's Camouflage, Weekend Australian, 20-21 September: 27.

49. Sklair, L. 1996. ANZJS 32, 2: 1-19.

50. Stayner, R. and Reeve, I. 1990. "Uncoupling: Relationships Between Agriculture and the Local Economics of Areas of New South Wales" *The Rural Development Centre, University of New England*, Armidale.

51. Stewart, J. 1994. "The Lie of the Level Playing Field: Industry Policy and Australia's Future". *The Text Publishing Company*, Melbourne.

52. Stilwell, F. 1993. "Economic Inequality: Who Gets What in Australia". Pluto, Australia.

53. Teeple, G. 1995. "Globalization and the Decline of Social Reform". *Humanities Press*, New Jersey.

54. Vanclay, F. and Lawrence, G. 1995. "The Environmental Imperative: Eco-social Concerns for Australian Agriculture". *CQU Press*, Rockhampton.

55. Watson, C. 1992. In "Agriculture, Environment and Society: Contemporary Issues for Australia". Edited by G. Lawrence, F. Vanclay and B. Furze. *Macmillan*, Melbourne. pp. 19-32.

56. Williams, C. 1997. Northern Radius 4, 3: 4-6.

57. Wood, A. 1997. The Wrong Stuff, Weekend Australian, 22-23 November: 31.

Glossary

Consumerism: the view that western capitalism's economic security is based on the ever increasing production and consumption of goods - something which tends to be perpetuate high levels of consumption, and is accompanied by an ideology which supports the increasing purchase of goods and services as highly desirable for the individual and society.

Globalisation: is an economic and social process in which transnational linkages between people, organisations, regions and nations render geographical location relatively unimportant for participation in capitalist economic and cultural relations.

Neo-liberalism: an ideology - one guiding current economic policy - which views government intervention as distorting market mechanisms, and which endorses free markets, and freedom for the individual, over collective arrangements.

Productionism: the system of agriculture in which efficiency and productivity goals are privileged over environmental and community-based desires and concerns. It justifies the use of 'high tech' solutions to problems, and tends to place farmers on a technological treadmill.

Nation state: such as Australia, the US or Great Britain: a modern form of social organisation in which government has sovereign power within a specific territory, and citizens have rights within those borders.

Social capital: the 'common wealth' of social and economic influence and power which provides communities with the capacity to bring about desired outcomes.