

The global agro-food complex, neoliberalism and small farmers in Chile

Lessons for the Pacific Islands?

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Abstract *The agricultural sector is evolving into a highly 'globalised' complex linking the world's regions through flows of trade and investment. One major result is a rise in largely non-processed agricultural exports from peripheral to 'developed' countries. This has been underpinned by the 'going abroad' strategy of multinational agribusiness, facilitated by a widespread shift to 'neoliberal' economic policy in Southern countries. Within such countries, smallholders are often encouraged to shift to monocultural production of high value commercial crops with export potential. Social and economic consequences of this for individual growers and the localities they inhabit include increased vulnerability to market fluctuations, technological dependency, and indebtedness. A combination of these factors has, in a number of cases, led to sale of land and proletarianisation. To draw possible lessons for Pacific Island Countries (PICs), this paper investigates the fate of fruit-growing smallholders in Chile, where in general the 'new economic model' has had a regressive distributional impact: most of those who have converted to monocultural fruit production have found it difficult to survive. Smallholders' problems are exacerbated by a 'tightening' of export company activity as global markets become increasingly competitive. Given highly asymmetric firm/farmer power relations, this is 'squeezing' the smallholder sector. Noting the trend towards the adoption of neoliberalism in PICs, the paper suggests some implications for small-farm sectors in countries currently, or potentially, pursuing 'neoliberal' export-led agricultural policy. A framework for research on the impact of the expansion of the global agro-food complex on island economy, society and environment is outlined.*

Introduction

In this paper an attempt is made to trace out some of the possible implications of the globalisation of agriculture and neoliberal restructuring for small-scale growers in so-called Southern countries.¹ To do this, evidence is drawn from recent research in the Chilean countryside. It is argued that the findings of this Pacific Rim case study may be of relevance to Pacific Island countries (PICs), where a notable shift towards the export-oriented development paradigm is taking place. In particular, the paper focuses on the increasing level of failure observed among export-oriented small-scale fruit growers in Chile. It is argued that there are a number of areas where market intervention/regulation could help reduce this level of failure, thereby improving both rural equity and the 'sustainability' of the small-holder sector. Such ideas may be of relevance to PICs, where concern over these issues is increasing.

The paper is divided into four sections: First, it looks briefly at the process of the globalisation of agriculture, focusing in particular on the globalisation of the fresh fruit and vegetable complex and the possible implications of this for small-scale farmers. Second, it investigates the response of the Chilean fruit sector to the 'window' provided by globalisation and discusses the nature and role of neoliberal reform within this process. In particular, this section discusses the 'boom' years of 1973–1990 and comments upon recent problems threatening the broad sustainability of the sector. Third, the role of small-scale growers in the Chilean fruit export economy is investigated. Particular emphasis is placed on the evolving relationship between small-scale growers and large private export companies. The failure of small-scale fruit growers is explained in terms of the highly asymmetric distribution of power afforded, partly, by the absence of regulatory policy, which has allowed firms to 'squeeze' small-scale farmers significantly during the current difficult period. Fourth, attention is given to the rise of neoliberalism in rural development policies in the Pacific Islands. In the hope of stimulating further research into the evolving situation in the Pacific Islands, a framework for future investigation is suggested. Finally, some possible implications of the Chilean case study, in terms of the crucial question of sustaining the small farm sector within a neoliberal economic policy context, are discussed.

The globalisation of agriculture and the fresh fruit and vegetable complex

Until recently, questions of agricultural resource allocation and food production were solved largely at the scale of local and regional productive spaces. During the postwar period, however, agriculture has rapidly changed and the traditional family-farm based model of production has declined notably (Le Heron 1993; Whatmore 1995). The industrialisation of agriculture, associated with the rise in agribusiness and its search for profits, has led to a 'New International Division of Labour in Agriculture' (NIDLA). Increasingly, different parts of the food-production complex are embedded in different locations across the globe (Goodman & Watts 1997). A central characteristic of this restructuring has been the location of primary agricultural production in Southern countries, where comparative advantages, such as cheap labour costs and counterseasonality, exist. Central to this process has been the 'going abroad' strategy of multinational agribusiness companies (MNACs), who have searched for low-cost source locations in order to supply cheap products to expanding 'developed' world markets. The globalisation of agriculture has been facilitated by the widespread adoption of neoliberal development policies in Southern countries beginning in the 1970s, and accelerating in the 1980s. Such policies have, among other things, had the effect of opening Southern economies to foreign investment, and helped sustain low labour costs through deregulation. The centre-pin of neoliberal reforms, however, has been the shift to export-orientation.

The fresh fruit and vegetable complex (FFVC) represents one of the most interesting and prominent examples of agricultural globalisation (Murray 1998a). Products in the complex are now being moved extensively between 'countries, regions and continents, involving almost every major geographical region on earth' (Friedland 1994: 212). A number of factors of particular relevance to the FFVC have underpinned this phenomenon. By the 1980s, various social, economic and technological developments had stimulated the rise of global fruit and vegetable complexes based on the year-round provision of produce to high-income markets (Cook 1990). 'Social' factors include the postwar evolution of the middle class, which has involved, among other things, increased exposure to 'exotic' diets through travel and the importance ascribed to healthy eating. The ageing of the

population has also tended to increase the incidence of fruit consumption. 'Economic' factors include rising disposable incomes (the demand for fruit is usually income elastic) and the increased mobility of multinational capital. 'Technological' factors include the development of 'cool chain' long-distance distribution systems and the international diffusion of fruit production technology.

Growing trade and the North–South divide

The increasing globalisation of the FFVC is evidenced by growing levels of trade (illustrated in table 1) and the widening spatial reach of the complex. Over the 32-year shown in table 1 the total nominal value of world trade in fruits increased significantly; from just over US\$1.5 billion to approximately US\$13.1 billion. Rising global trade in fruits is further exemplified by an increase in volumes exported. In 1969, the export volume of the ten most important species totalled 14.49 million metric tonnes. By 1993, this had approximately doubled to 29.1 million metric tonnes (calculated from FAO [various years]). Given the proliferation of small export volumes of a wide range of 'exotics', these data most probably underestimate the true extent of the volume increase in world fruit trade.

Table 1 Global fresh fruit nominal export values, selected three-yearly averages 1961–93

Three-year period	Three-year average export value (US\$000s)
1961–63	1,565,290
1970–72	2,833,285
1975–77	5,778,681
1983–85	8,424,558
1991–93*	13,167,333

Source Adapted and expanded from Friedland (1994) and FAO (1994)

Note *based on export value of ten most important fruits only

There is a relatively clear international division of function within the FFVC. An overriding proportion of traded fruit and vegetables is consumed in Western Europe, Japan and North America. Large relative increases in fruit imports in 'developing' East Asia, the Middle East and Latin America are yet to offset the dominance of such markets. In contrast the range of countries exporting fresh fruit is relatively wide and increasing. Although 'developed' countries such as New Zealand, the USA, Italy, France and Spain play an important role in the provision of fruit and vegetables, the complex has been characterised by large increases in exports from lower income countries, especially in the southern hemisphere. Countries such as Chile, Argentina and South Africa play the most important role. Further to this, a number of 'new' fruit exporting countries in Latin America, Africa, Asia and the South Pacific are evolving. Given the shift to neoliberal development models in Southern countries it is likely that growth in supply will outpace demand over the coming years. This implies increasingly intense levels of competition, which may result in lower prices and raised levels of protectionism in Northern markets (Murray 1997a).

Agricultural globalisation, Southern economies and small farmers

What is the relevance of the foregoing discussion for Southern economies and small-scale growers within such economies? There is a range of positive and negative implications for both national economies and farmers who have become enmeshed in the expanding global complex. Although the nature and net balance of these factors will vary widely according to the case under consideration, it is possible to speculate upon a number of possible outcomes.

On the positive side, the globalisation of agriculture has served as a 'window' of export opportunity for a range of poor economies. This has been especially the case for those able to integrate into the rapidly expanding fresh fruit and vegetable complex. For many countries, the 'window' opened providentially, during the general downturn experienced in the 1980s. For many Southern economies, especially in Latin America, agro-exports played an important 'cushioning' role during the debt-induced recessions of that decade. In others (such as Chile) rising agro-exports have underpinned significant macroeconomic 'success' through structural adjustment. In some 'new' agro-exporting economies the scope for small-

scale grower participation in the dynamic export sector has risen. Given this, government policy in a number of Southern countries has focused on how to induce small-scale farmers to 'convert' production to the agro-export sector. In some cases, this has offered a new lease of life to formerly inwardly-oriented farmers, some of whom have enjoyed returns the like of which have never been experienced.

In contrast, there is a range of potentially negative implications pertaining to participation in the complex. At the national scale of analysis a number of points stand out. First, the complex has been characterised by the location of 'extractive' activities in Southern economies. A great deal of the value-added within the complex is not captured in primary production sites and, instead, flows out to the receiving markets (Gwynne 1998). Second, the replacement of staple food crop production by commodity production for export is leading to increased food insecurity and import dependence (Kay 1997). Third, the Southern economies are becoming involved in a trading system characterised by high levels of protectionism in 'developed' countries. This weighs unfairly, and inefficiently, against them. Fourth, the opportunity afforded by globalisation is leading to a re-allocation of resources towards the primary product sector in Southern economies (Barham et al. 1992). Historically, one of the greatest problems facing peripheral countries has been devising strategies in order to escape the negative implications of relying too heavily on this sector. Finally, although the regulation of the more damaging implications of exposure to global economic forces is possible, in theory, through a combination of state intervention and civil action, the adoption of neoliberal policies means that regulation is minimal and civil society (for example, the formation of small-scale growers' unions) is discouraged. This is leading to a collection of social, environmental and economic problems.

For the small farm sector the conversion to global-oriented export agriculture may result in a number of problems. A full review of the potentially negative implications is not possible here, but the following are worth consideration. First, farmers become vulnerable to market fluctuations over which they have little or no control. This makes management and planning almost impossible. Second, the shift to export agriculture often involves the move to increasingly intense forms of agriculture. The cost of inputs is high and small farmers can quickly become dependent on credit, often from export companies, for technology. Ultimately, this leads to

dependency, involving high levels of debt, which may prove hard to break. Third, farmers are often encouraged to adopt monocultural practice on their holdings in order to maximise economies of scale (Murray 1997b). This increases both economic and environmental vulnerability. Fourth, the replacement of subsistence production may result in an inflation in the cost of living and has been shown, in some cases, to lead to a decrease in nutritional levels (Clarke & Thaman 1993). These and other problems will be exacerbated in neoliberal policy environments, where regulation and support mechanisms are withdrawn. Thus, as the Chilean case study will illustrate, simply ensuring the 'conversion' of small growers to the dynamic export sector may not ensure their economic survival. Rather, within a neoliberal context it is likely that marked differentiation between large- and small-scale growers will occur. In short, under certain conditions, globalisation and neoliberalism can seriously exacerbate rural inequalities, widen class divides and threaten the very existence of the small-scale farm sector.

The Chilean fruit export 'miracle'

The Chilean case is often heralded as the 'model' for Southern countries participating, or intending to participate, in the global agro-food complex. The neoliberal reforms of the 1970s and 1980s unleashed a major boom in fruit exports and Chile is now the leading fruit exporter in the southern hemisphere. Exposure to global economic forces has precipitated fundamental change at the national and local scale of resolution. This change has been largely mediated by multinational fruit companies, whose entrance has fundamentally altered the nature of social and economic relations of production in the Chilean countryside (Murray 1997c). Neoliberal thinkers celebrate the rise of free-market economics and outward orientation in rural areas, arguing that the introduction of competitive imperatives has raised efficiency and precipitated a range of knock-on developments such as increased labour opportunities, infrastructural progress and increased material welfare (Hojman 1993; Universidad Católica 1993). However, this type of analysis plays down a range of social, economic and environmental tensions that have evolved in certain areas and among certain groups. Small farmers, who at first enjoyed lucrative returns, have found survival

extremely difficult within the neoliberal economic environment (Murray 1997d). The sustainability of the small farm sector looks increasingly doubtful as rural differentiation and inequality rapidly deepen. Before investigating the fate of small-scale growers through a locality case study example, it is useful to survey aspects of the recent history and unfolding contemporary situation in the Chilean fruit sector.

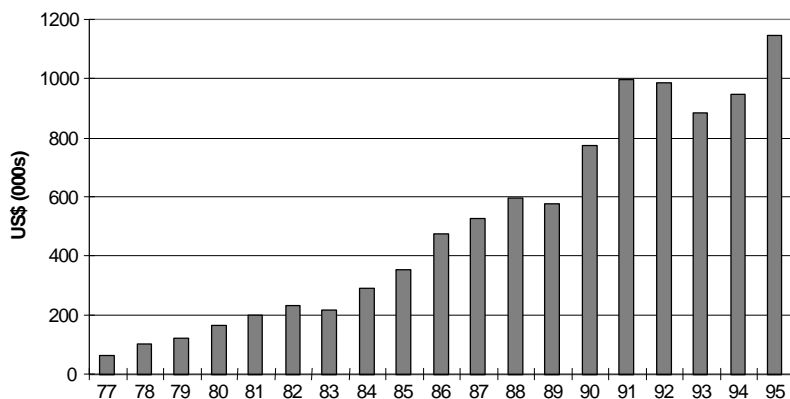
The 'boom' years

Following the military coup of 1973, the Chilean Junta led by General Pinochet undertook a range of neoliberal reforms intended to reverse the structuralist-informed inward-oriented development policy that had dominated since the 1950s. Under the advice of the Milton Friedman-inspired 'Chicago Boys', in a few short years the Chilean economy was transformed from one of the most protected to one of the most open in the world. Among the relevant policy initiatives were: the deregulation of labour markets and dismantling of organised activity, in order to lower wage costs; the reduction of tariffs on imported items; a simplification of export procedures; incentives for foreign investment; and a number of large devaluations of the Chilean currency. The major objective of these reforms was to inject competitive pressures into the economy and allow Chilean comparative advantage to work in global space. This, it was hoped, would raise exports, as indeed it did in the fruit sector.

Between 1977 and 1995, the nominal value of Chilean fruit exports increased from approximately US\$50 million to US\$1,146 million (see figure 1). Volume increases were also remarkable between these two years, rising from approximately 50,000 metric tonnes to over 1.3 million metric tonnes. Growth was most rapid in the 1980s as the global FFVC expanded rapidly and special export incentives and other stimulation packages were put into place as the authorities reversed some of the more 'extreme' elements of neoliberal policy (Gwynne & Kay 1997). By 1994, the sector had grown so impressively that it accounted for 9% of total export earnings. This represented an important diversification away from copper exports, and helped contribute to generally high rates of economic growth in the country over the two decades. Within a relatively broad range of species grapes and apples have dominated, accounting for over 60% of total fruit export earnings since 1974. The major markets for Chilean fruit exports

have traditionally been the USA and Europe, although of late a diversification in export markets has taken place involving increased fruit shipment to regions such as East Asia (especially Japan), the Middle East and, notably, Latin America itself (Murray 1997d).

Figure 1 Value of Chilean fruit exports (US\$), 1977–1995



Source Asociacion de Exportadores and ODEPA (various years)

The source of Chile's considerable comparative advantage in global fruit markets is both 'natural' and 'constructed'. Chile's peculiar geography offers a range of climates suitable for the production of a large variety of fruits, and in relevant areas soil characteristics and water supply are exceptionally favourable (especially in the Central valley region). Moreover, Chile's location in the southern hemisphere means that it can exploit lucrative counter-seasonal markets in the northern hemisphere. In some localities, for example, microclimates permit harvests that are ideally timed for the most-profitable time of year around Christmas. There are also a number of 'constructed' advantages. These include pre-dictatorship state investment in the fruit sector, including, most notably, the fruit development plan of 1966; the establishment in the 1960s of programmes of technology transfer between the Universities of Chile and California; and the development of a competitive market for land precipitated by a number of land-reforms beginning during (the senior) Frei's presidency (1964–1970), continuing through the Allende years (1970–73), and culminating in Pinochet's

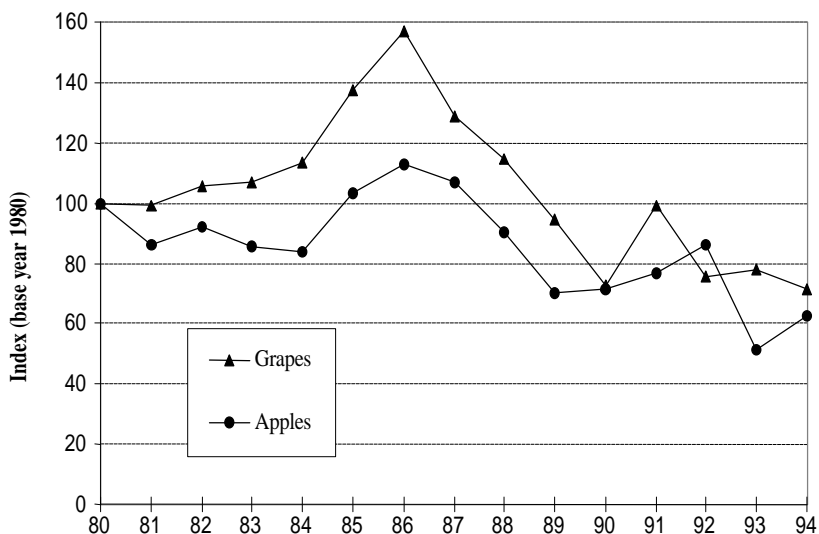
counter-reforms between 1973 and 1977.² Land reform is often placed at the centre of structuralist attempts to explain Chile's performance in export markets as it led to the demise of the highly inefficient *latifundio–minifundio* land-holding system.³ When the economy was deregulated along neoliberal lines these factors combined to allow Chilean comparative advantage in this sector to work at the global scale of resolution.

Recent threats to sustainable economic growth

The continued expansion of Chilean fruit exports and the macroeconomic benefits that this has undoubtedly precipitated have become increasingly threatened during the late 1980s and early 1990s. The 'easy' phase of the boom is, perhaps, over. This is the case for a number of interrelated 'external' and 'internal' factors. In the case of the former, it is argued that global markets are now reaching saturation point given the growth in competition in counterseasonal markets from countries such as New Zealand, South Africa and Argentina (Murray 1998a). This change has led to increased levels of protectionism in receiving markets, especially in fruit-growing northern hemisphere regions (notably the US and the EU). This has had two major impacts. First, it has led to a decline in the real price of the most important Chilean fruits (see figure 2). The real price of grapes and apples on global markets fell by 35% and 40% respectively between 1980 and 1994. Sharp declines in the real price of grapes in 1992, and apples in 1993, were associated with protectionist policies applied by the US and the EU respectively during those years.

Second, the growth in volumes exported has stagnated since 1991 (see figure 3). For all fruits, volumes declined in 1992 and 1993, only managing to equal 1991 levels in 1994.

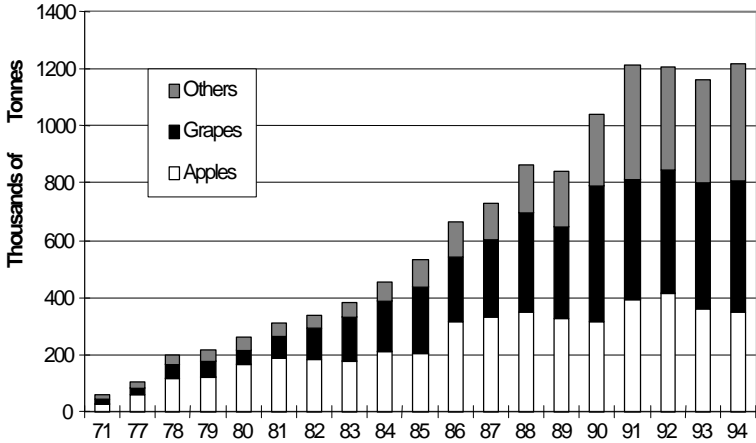
Figure 2 Index of the real price of Chilean grapes and apples, 1980–1994 (base year 1980)



Source Calculated from Banco Central de Chile and Asociacion de Exportadores (various years)

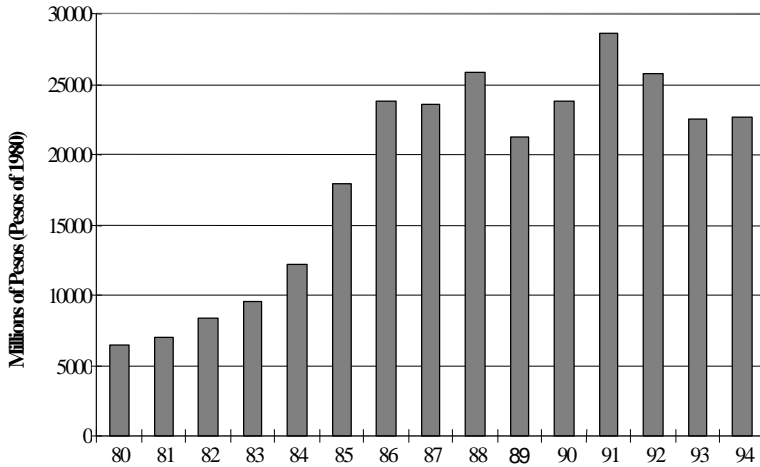
Such trends have been underpinned partially by a number of ‘internal’ problems. First, the ‘Dutch disease’ impacts of a rapidly appreciating currency, given generally rising exports, partly explain the recent real price declines (Hojman 1995). Second, Chile’s continued specialisation (albeit declining) in terms of both export markets and fruit species exported has left the country poorly equipped to exploit evolving ‘niche’ markets in the global FFVC. This has left Chile vulnerable to economic and political change in a few receiving markets and sectors. Finally, and perhaps most importantly, the lack of investment in fruit quality means that Chile’s traditional low cost strategy has become increasingly ineffective. As the Chilean American Chamber of Commerce (1990) argues, counterseasonal fruit *per se* is no longer seen as a luxury in northern hemisphere markets. Rather, consumers are now learning to differentiate in terms of quality (Murray 1998b; Jarvis 1992).

Figure 3 Volume of Chilean fruit exports (000s tonnes), 1971–94



Source Asociacion de Exportadores (various years)

Figure 4 Real value of Chilean fruit exports (pesos of 1980), 1980–1994



Source Calculated from Banco Central de Chile and Asociaci3n de Exportadores (various years)

Overall, the interplay of falling real prices and stagnant export volumes has led to a significant ‘plateauing’ in total real fruit export earnings (see figure 4). In 1994, the real value of fruit exports was lower than the level recorded eight years previously.

These changes have radically altered the economic landscape of the Chilean fruit sector. Most notably, recent problems have led to a significant rationalisation in export company policy. Given that, in the neoliberal policy environment, MNACs are the vessels through which global change is reverberated, this change has implied increasingly difficult operating conditions for small-scale farmers in fruit exporting localities.

The role of the state: continuity of the military’s neoliberal model

There is little a small country such as Chile can do to alter general conditions in the global FFVC. Thus, the ‘external’ problems dogging the sector are largely beyond its control although the ‘internal’ problems faced by the sector can, in theory at least, be regulated in order to maintain economic sustainability. However, the general approach of the two successive democratic governments in Chile since 1990 represents a continuity of the military’s neoliberal policy. State-led investment was the centre pin of the early development of the fruit sector in the 1960s. However, after 1973, the sector was left very much to its own devices. This continues to be the case. Thus, despite the enormous importance of the sector, there has been relatively little government investment in quality management, the development of ‘niche’ products, or the pursuit of new markets. These activities are left almost exclusively in the hands of private companies. Given the increasingly footloose nature of MNACs, there is often little incentive to invest heavily in these areas: they can shift investment to locations where favourable conditions already exist. Where such companies do not act in a way that engenders sustainable national economic development, the state must either offer incentives for them to do so, or attempt to ‘fill the gap’ themselves. At the present time, due to its dogmatic adherence to neoliberal policy, it is failing on both fronts.

The articulation of global–local change: the State, MNACs and small farmers in Chile

The ‘hands-off’ approach characterising Chilean neoliberalism has been felt particularly in the small-farm sector. Following the 1973 coup, a number of key support mechanisms for small farmers, including credit, technology and marketing assistance, were dismantled. During the mid-1970s, many such farmers sold their land and joined the rural proletariat, or left for the city. In this way, the landed elite and urban-‘suitcase’ farmer classes rose to greater importance in the countryside. In the 1980s, a slight reversal in policy saw the authorities offering limited support for certain sectors (especially for export). During this period a number of institutions offering assistance to small farmers were promoted, for example INDAP (National Institute of Agricultural Development) in credit and INIA (National Institute of Agricultural Research) in technology transfer. However, funds were limited and the smallest of the small were often by-passed as these agencies concentrated on ‘viable’ farmers only. During the post-military years assistance has increased marginally. However, the major policy of the government towards the agricultural sector in general has been to encourage growers to convert to fruit production for export. Those who have already converted are seen as relatively favoured as they are operating in a sector that is considered buoyant. In reality this is not the case, as the previous discussion has shown. The state’s ‘hands off’ policy allows MNACs a great deal of power in determining the fate of the small grower sector. In some localities, where small fruit growers dominate, such companies exert a major influence on local development trajectories.

Export companies and the incorporation of small-holders into the export sector

Large export companies have proven the key players in the development of the Chilean fruit export sector in a number of ways. The participation of the small-scale sector in fruit exports has been facilitated almost exclusively by such companies. During the 1970s, the sector was dominated by three or four domestic firms including, for example, David Del Curto (DDC) and Copefrut. During the 1980s, given attractive incentives offered by the government and the rapid expansion of the FFVC, foreign companies entered the sector. Such companies have risen to a position of dominance.

In the same period, many small-scale growers were incorporated into the system as the number of export firms expanded rapidly.

In general, the role of export companies within the sector can be divided into three distinct parts (Murray 1998a). First, firms play the central role in the adoption, adaptation and transfer of fruit growing technology. Crucially, companies have teams of agronomers who work with growers in the field. Also, firms have been solely responsible for the development of post-harvest and storage facilities. Without these facilities small farmers could not operate in the market. Second, firms are the major marketers of Chilean produce. They seek markets, gather produce, pack it and transport it. By themselves small farmers could generate neither the economies of scale nor the bargaining power necessary to operate successfully. Third, and most importantly, firms provide finance for growers. The Chilean firm DDC established this system and the large MNACs began emulating it during the 1980s. Given that many banks are unwilling to lend to small farmers, this factor has been crucial for the incorporation of the group.

In general, the credit facility is tied to provision of fruit through a contract agreement. This document, central to the relationship between companies and growers, has proven the source of much controversy. The most common form of contract is the CCC agreement (credit and consignment contract). In this document, the grower is offered credit at a rate of interest of between 8 and 12%. This advance is intended to cover production costs and a proportion of living costs for the year. Inputs, which are usually exclusively supplied by the firm under contract, should then be applied according to a strict timetable, monitored by an agronomer from the firm. The firm will give the farmer notification of the harvest date for his/her crop, which must be delivered (often on vehicles hired from the firm) conforming to a set quality standard. When packed, the fruit is taken away for storage and shipment. Payment is made through the consignment price system. Thus, the final net price received for the fruit will equal the price received for the grower's fruit in the foreign market minus advanced credit plus interest, the cost of inputs (machinery, agronomers' charges and other services) supplied by the firm and a commission (usually 8–12% of gross return). If a grower is in debt then a further rate of interest on that debt is added. If indebted, the farmer becomes tied to the firm in that he/she will have to supply all produce exclusively until the debt is cleared.

As should be obvious, this extremely demanding form of contract works almost exclusively in the favour of the firms themselves. Through this mechanism the firms gain the ability to pass on costs during difficult times in order to maintain their own profit margins. There are also reported cases of illegal activities linked to such contracts. For example, it is claimed that on occasion firms will under-quote the price received in foreign markets or will add fictitious costs to the final balance sheet. In all of this, small growers are extremely vulnerable, as they lack the financial, technological and legal skills to ensure that contracts are applied fairly. Although this contract dominates the industry, it is the case that larger-scale farmers are often able to negotiate better deals and are much better placed to deal with any illegal activity (Murray 1997d).

The evolution of the export company sector and the 'squeeze' on small-scale growers

The recent problems in the sector have had a profound restructuring impact on the operation of export companies in the 1990s. In general, this restructuring has borne negative implications for the small-scale sector vis-à-vis their larger-scale counterparts. Three shifts are worth noting. First, 'footloose' companies are growing in importance in the sector. These companies act as simple intermediaries, buying the produce and not becoming involved in the CCC system. Clearly, this type of arrangement precludes the participation of small growers as finance is not offered. Second, a number of large growers, annoyed with the increasingly strict conditions attached to the CCC system, have cooperated to form export associations. Small growers, given financial constraints and a general distrust of large cooperative organisations (a dictatorial hangover), have not, in general, attempted this type of arrangement. Third, the highly powerful position the firms operate from has enabled them to tighten-up contracts to an even greater extent over the last few seasons. Commissions, interest rates on advances and debt, and the occurrence of reported illegal activity have risen. Also, new clauses protective of firm interests have been incorporated into the contract. The vast majority of small farmers, if they wish to participate in the system, have no other option but to operate under CCC conditions. Thus, they have little choice but to accept these increasingly tight conditions, which are not monitored or regulated by any third party.

From 'boom to bust': a locality case study of small fruit exporters in the Norte Chico

The Northern semi-arid zone of Chile, known as the Norte Chico, is an ideal location to study the impact of the fruit boom on small-scale growers. Land reform in this area was particularly thorough, creating a large base of *parceleros* (owners of *parcelas* or 'plots' of usually less than 10 hectares in size in this region). Over the last twenty-five years, the area has been transformed almost beyond recognition as the fruit export economy has swept up the valleys of the region. Social and economic restructuring in this area represents perhaps the most profound spatial impact of the fruit boom in all of Chile. Formerly, the agricultural sector was involved primarily in the production of traditional crops for local markets, mixed with subsistence. Today, the area is an almost complete monoculture of grapes for export. The main explanation for the rapid transformation in the region is that the timing of the harvest is almost perfect for US Christmas markets (Gwynne & Meneses 1994). As a consequence of this rapid change the region is no longer among the poorest in Chile; to the contrary, average income, levels of infrastructure and other aggregate indicators of 'development' are now relatively advanced. However, benefits have not been uniform and certain classes have procured a disproportionate amount of the new found wealth: for example large-scale farmers and urban and foreign entrepreneurs have done particularly well. On the other hand, small-scale growers and the rural proletariat have seen a decline in their relative socioeconomic position. In the early days of the boom, during the late 1970s–early 1980s, small farmers enjoyed lucrative returns and prospered. However, over the last five years conditions have become extremely difficult, if not impossible, for this group.

The case study of one of the most important grape exporting rural settlements within the region, El Palqui, was undertaken in 1995. This small town, which comprised in the early 1980s (following land reform in the area in 1977) around 140 growers of mainly less than five hectare plots, has formed the focal point of the transformation in the area. Based on primary information it has been possible to conceptualise the post-reform development and orientation of the small farm sector in this locality into three phases:

Inward-orientation (1977–84). This involved the production of green beans and tomatoes for local, and sometimes national markets.

Outward-oriented boom (1984–90). Approximately 95% of farmers converted to the production of grapes for export, marketed mainly through newly arrived MNACs, who offered CCC contracts in abundance. A local boom was initiated by this process and living standards were almost universally raised through increased production and labour opportunities. Some small farmers sold *parcelas* for quick profit as land prices rose sharply.

Outward-oriented squeeze (1990–?). Given external problems firms have tightened-up their operations considerably. Smaller growers are increasingly squeezed out of production; and large farmers, urban entrepreneurs or firms take control of their land. The period has been marked by an increased differentiation between large- and small-scale growers, urban/rural, and entrepreneur/working classes.

The 'squeeze' period has been characterised by two troubling processes. The first of these is the increasing level of debt observed among the small farm group. In 1994, approximately 85% of small growers were indebted to export companies (of an absolute total of 97 growers). Among this group the average level of debt was US\$50,217 in 1993 (in a country where per capita annual income equals approximately US\$5,000). The highest levels reached over US\$100,000. According to the growers, the modal year of the initiation of this debt was 1989, which corresponds to tightening conditions at that time. However, in some cases debt began much earlier in the mid-1980s. These enormous debts have had the effect of 'locking in' growers with particular export companies who, through the debt clause contained in the contract, gained effective monopsony power. In a rising number of cases, growers have used their land as guarantee for the debt.

Spiralling debt is leading to the second major process that has characterised the first half of the 1990s in this locality, the sale of land. Approximately one-third of the small growers operating in the locality in 1994 had been involved in the sale of land over the previous 10 years. This figure underestimates the true extent of sales as a significant number of growers had already sold their land by the time the survey was carried out. However, among those that remained, significant sales of portions of their

land were taking place in order to serve debts. A number of indebted growers were resigned to the fact that they would have to sell up completely within the next few years. The average value of a five-hectare plot was US\$150,000 in 1995, and many growers are approaching that figure in terms of the debt they hold. A number of growers who had gone out of business were tracked down and interviewed. In all but one case (of six in this sample), the reason for this sale was debt. The modal year for the sale of entire plots was 1992, although the process began some years before that. It is extremely difficult to get accurate information regarding the purchasers of the land. The Chilean land-tenancy lists record individual names only. Often, however, companies or large growers use what is referred to as a *palo blanco* ('white stick' or decoy) and purchase land under the name of a relative or friend for tax-evasion and/or other purposes. In such cases, anecdotal evidence has to be relied upon. According to this evidence, the main purchasers of land in the locality have been export companies (around 50%), who often repossess the plots in form of debt repayment. The remaining plots and parts of plots have been purchased by either medium sized and large local landowners (10–20 ha. and 20–50 ha. respectively), or by urban entrepreneurs, who employ technicians (usually from outside the locality) to manage the plots. During the recent downturn in the market land prices have levelled out a little, so debts fast approach the value of plots. On the other hand, the boom of the 1980s inflated land prices to such an extent that most members of rural society were precluded from purchasing plots. This is leading to a clear differentiation between the small- and large-farmer classes. Furthermore, there is an increasing urban influence being felt in the locality as ownership is transferred to corporations and individuals based in regional cities and Santiago (Gwynne & Ortiz 1997). Overall, this is leading to a significant process of land re-concentration in the locality (a rise in the average size of land-holdings). Figures from the Chilean *Impuestos Internos* (Inland Revenue) suggest that the 10–20 ha. and 20–50 ha. holding groups have gained the most over the last twenty years (see Murray 1997d for full discussion and figures).

The future of the small-scale sector in this locality is seriously threatened. This is aggravated by the fact that companies have often insisted on the practice of monoculture on plots; a situation that has increased both the economic and environmental vulnerability of small farmers. Recent

follow-up research⁴ revealed that the area has been subject to extremely 'unusual' weather conditions over the last three years, associated with the El Niño phenomenon, involving a number of untimely droughts and floods. Drought has had the effect of inflating the already high cost of water in this dam-irrigated area. Rights to water are now almost as expensive as land, a further factor forcing small growers out of the market (Gwynne & Meneses 1994). Conversations with local academics suggest that the small-scale sector in the locality is now on the edge of total failure. This is precipitating regressive social and economic impacts on the locality as whole. In general, the small growers who go out of business fall back on poorly-paid seasonal labour and informal activities. Researchers have noted a rise in social problems, including crime, over the last few years (Gwynne & Ortiz 1997). Also, the processes of wealth concentration and proletarianisation lower economic multipliers in the locality, as much of the value added flows out to urban areas and foreign countries. Eventually, the result may be out-migration, placing extra pressure on the already overcrowded cities in the region and the capital city, Santiago. This type of social and economic change is taking place to a certain extent in all fruit growing regions of Chile. For example, work in the Central Valley among apple growers shows comparable, if less pronounced, processes at work (see Murray 1998c).

***Small-grower failure and the political consequences
in the context of 'democratic transition'***

What underlies the general failure of the small grower sector in this locality and elsewhere in Chile? Some commentators (Universidad Católica 1993) argue that it is only 'natural' that smaller, 'less efficient' growers are 'weeded-out' by the process of productive transformation. If the wider sociopolitical and environmental costs of this transition are taken into account, as discussed above, it becomes clear that this opinion is based on an extremely narrow definition of 'efficiency'. Furthermore, it is unlikely that even narrow efficiency arguments hold much weight; according to the field surveys, although scale advantages in terms of production do exist, they are not especially notable. Rather, the decline of small growers has more to do with the unequal distribution of power between various classes in the sector. For example, in terms of access to finance small-scale growers are particularly disadvantaged, due to a mixture of justifiable concern and prejudice on the part of the banks. Thus, the export firms are

often the only source of capital. This immediately places the group in a position of vulnerability. Poor access to information vis-à-vis their larger-scale counterparts and companies means that growers have been unable to plan ahead effectively and unable to fight cases where they have been unfairly treated. Small growers in this area have low organisational power, firstly, because this requires capital investment and secondly, because collective organisation is still regarded with suspicion by farmers and the authorities alike. This position of vulnerability is compounded by the fact that small growers have little training in either technical or legal issues. Overall, this deeply embedded asymmetric distribution of power in the sector has allowed the firms to establish a contract system that works almost entirely in their favour. Thus, during difficult times the most vulnerable are 'squeezed' first. There is no body that monitors, regulates or documents these contracts and their constituent clauses. This is leading to disastrous consequences for whole localities where small farmers predominate, and is having a host of knock-on negative social consequences in the country as a whole. More generally, these observations demolish the validity of the current policy favoured by government, centred on the creation of the necessary conditions for conversion of traditional farmers to the fruit export sector. Conversion is not a panacea. For many, it has proven a sure route to failure. The state is partly to blame for this, as they have offered little to no post-conversion assistance. Also, they have offered no incentive for small growers to organise collectively, a process that could greatly reduce their problems. Finally, and crucially, they have failed to regulate export companies and their contracts in a way that engenders sustainable and equitable development. In the 'transitional' democratic context of Chilean politics, it is incredible that the government has made no serious effort to come to grips with this problem. A worrying consequence of the process is a swing to the right in rural voting patterns as the population has become increasingly disillusioned with *Concertación* policies and the lack of alternatives (Barton 1998). Ironically, if such a shift in voting patterns is sustained it is likely that problems will worsen for small farmers as state assistance will be further withdrawn as neoliberalism is deepened.

The global agro-food complex, rural development and small farmers in the Pacific Islands

The rise in Pacific Island neoliberalism and export agriculture

Increasingly, Pacific Island Countries (PICs) are turning to outward-oriented neoliberal development policies. The transformation is nowhere near as complete as it is in other parts of the periphery (notably Latin America). Each PIC economy is characterised by a particular combination of policy elements gleaned from a range of 'perspectives' (Fleming & Hardaker 1995). Most notably, many PICs, especially in Polynesia, remain reliant on aid and remittances to sustain national economic development, leading to the well-documented concept of the MIRAB economy (Bertram 1986; Bertram & Watters 1985). Furthermore, in many economies internal structures are far from liberalised and elements of structuralist-informed import substitution industrialisation policies remain. However, the accelerating trend towards liberalisation is undeniable.

At the centre of this paradigmatic shift in development thinking is a drive towards the development of export potential. The specific reasons for this vary in each case, but arise in general due to a combination of external pressure (from both aid donors and lending agencies) and genuine economic need. In virtually all Pacific Island economies, trade balances are negative, and in many they are growing. This is particularly the case in the group of MIRAB economies (Tonga, Samoa, Cook Islands, Kiribati, Niue and Tuvalu). The need for structural transformation in MIRAB economies is underpinned by changes in regional geopolitical and economic conditions. In particular, the possibility of long-run sustainable development based on the MIRAB 'approach' has increasingly been called into question. This is the case for at least two reasons; first, the reduction in aid reflecting the evolving post-cold war world order; and second, recent tightening-up of migration into metropolitan countries in the region, which may affect remittance flows in future years (Fleming & Hardaker 1995; Fraenkel 1997).

In the search for economic sustainability, many PICs are turning to their agricultural sectors to fill trade gaps (Sturton 1992). As previous sections of this paper have made clear, there exist considerable opportunities in the global FFVC that may be exploited. PICs possess certain comparative

and competitive advantages in the production of fruit and vegetables. In the Melanesian countries, for example, a range of climates and soil types, relative proximity to metropolitan markets (Australia and New Zealand) and low labour costs offer reasonable prospects. In Polynesia, 'natural' conditions are perhaps less favourable, but the large number of Polynesians living in metropolitan countries offers potential for the development of markets. This potential advantage has been referred to by some as a 'unique geopolitical comparative advantage' (Fleming & Hardaker 1995). In Micronesia, conditions are perhaps least favourable as poor soils, isolation and climatic vulnerability prejudice agricultural export development. In all cases, however, the Islands possess the advantage of counterseasonality relative to northern hemisphere markets, which is already being exploited to some extent (for example Tongan squash exports to Japan). Whether a combination of the different potential advantages in each case can overcome the considerable constraints to agro-export development including, for example, relatively high freight rates and low technological capacity, remains to be seen. Further to this, considerable debate remains concerning whether sustainable development of export sectors in MIRAB economies is possible given the 'crowding-out' effect of aid and remittances (Knapman 1994; Fisk 1982). Some argue that these factors have to be reduced before export potential can be seriously developed (Fleming & Hardaker 1995). The jury is still very much out on this question.

The globalisation of agriculture in the Pacific Islands: What's new?

Agricultural exports from the Pacific Islands are, of course, nothing new. Copra, for example, formed the backbone of the export economy for at least a century (Wall 1986). There are many examples of long-standing agricultural exports representative of the Islands' links into the global agro-food complex (Overton, Murray & Ali forthcoming). A transition from traditional farming to commodity based production for national and global markets, led by individuals, companies and governments (especially since independence) has been underway for at least a hundred years. This has been accompanied by a number of changes in agriculture including: the intensification of agricultural production; the extension of production; commodification of land, labour and technology; and local, regional and sometimes national specialisation. However, in terms of the contemporary process of globalisation

in the Islands there are two essential differences from globalisation of the past. First, the rapidity of the diffusion of the global complex has increased markedly, drawing a larger array of countries and products into its orbit. The rapidity of change is leading to concerns regarding the sustainability (economic, social, cultural and environmental) of contemporary agricultural systems. Whilst the commodification of agriculture may be seen by some as indicative of development, to others it is replacing systems that in many cases were more suited to their cultural and physical environments (Clarke & Thaman 1993). In the pursuit of quick returns, sustainability is often sacrificed. Second, the nature of the complex itself is very different today. There are two worrying trends in this respect. First, the increased mobility of capital combined with the increased fluidity of shifts in consumer tastes, as illustrated in the section concerning the global agro-food complex, means that countries entering into the system are extremely vulnerable to change. This is particularly the case in small countries such as the PICs, which possess negligible power to offset global trends and influence outcomes. Second, vulnerability is further increased by much greater levels of competition now evident in the complex. Overall, it is highly uncertain whether sustainable development in the Pacific Islands can be attained through participation in this system.

Impacts on small-holders in the Pacific

The land tenure systems characterising the PICs mean that, in general, the small-holder mode of production is dominant (Ward 1992; Crocombe 1987). Increasingly, this sector is being urged to practise monocultural specialisation in products for export. For some, this is seen as a viable alternative for small-holders in the region. Others stress the need for 'balance' in small-holder activities. Fleming and Hardaker, for example, whilst very supportive of the outward-oriented paradigm, suggest that PIC small-holders should maintain a level of subsistence production in order to provide a base 'livelihood' level. Other authors, such as Clarke and Thaman (1993), are much more sceptical about the effect of outward orientation for small-holders. They argue that, in its present form, commodification is leading to development that is unsustainable in the long run from the small-holders' point of view. While opinions differ in terms of the implications of globalisation for small-holders, all commentators seem to concur on the need, for a range of economic, social and environmental reasons, for the

preservation of the small-holder mode of production. For this reason, it is important that a concerted effort to establish research in this area is undertaken.

Towards a research agenda for the Pacific Islands

From a political economy/globalisation perspective there has been little research to date on the effect of the expanding global FFVC complex on rural and national development in the Pacific Islands. Of course, the literature dealing with agricultural change in general in the Islands is voluminous (see Ward 1986; and Overton, Murray & Ali (forthcoming) for an entrance point into this literature). Much of this research has been focused at the national or local scale. This is no bad thing *per se*. However, in some cases and at higher scales of resolution, such an approach loses sight of the broader processes that can partly condition national structure and local agency. It is argued here that a global–local perspective, which attempts to map out the interdependence of change at different scales, is required in order to come to grips with contemporary changes precipitated in PICs by agricultural globalisation. Within this framework, attention should be focused on relationships of power between small growers, MNACs, the state, and regulatory agents along global commodity chains (Gereffi 1994). It is important that this work approach the issue in a critical manner. At the present time, it is alarming how uncritically governments and thinkers in the region are adopting the neoliberal paradigm. In order to flesh out this approach, a good starting point is the identification of case study countries where these processes are becoming visible, and the gleaning of lessons from other countries where the process is established. The following discussion presents two countries (among many other possibilities) where research could be pursued. Then an attempt is made to draw a number of lessons from the Chilean case study that may be of relevance to countries wishing to sustain small-holder sectors that become enmeshed in the global FFVC.

Squash exports from Tonga. Perhaps the most notable example of the trend towards agricultural outward-orientation in the region is the rise of squash exports from Tonga. Between 1987 and 1989, the contribution of this product to overall export earnings rose from zero to 27%. In 1988, the value of squash exports was equal to T\$0.5 million (at the time of

writing one Tongan *pa'anga* (dollar) was equal to approximately US\$1.8). By 1990, this had risen to T\$4.8 million. In 1991, a record crop of 23,000 tonnes fetched a value of over T\$15 million. Virtually all exports are absorbed by Japan, where 'counterseasonality' has been the major source of Tongan comparative advantage. For the Japanese squash market the period from November to early January is one of domestic supply scarcity and high prices. This period coincides with harvests in Tonga. Underlying this 'boom', however, was a government subsidy, which has now been dismantled.

Given the land-holding structure in Tonga, small-holders have been the main participants in this 'boom' and, initially, enjoyed highly lucrative returns. Recently, however, there is increasing evidence that the 'boom' is becoming exhausted (Murray 1998d). There is a range of reasons for this. Firstly, following the Tongan example, other Pacific Island economies (notably Vanuatu) entered the market. This has resulted in a decline in real prices and a consequent downturn in the terms of trade. Secondly, the damaging effects of the shift to monocultural production are being felt. In particular, soil quality has fallen considerably, leading to a decline in yields. Furthermore, the incidence of diseases and pests has risen. Thirdly, the reduction in the state subsidy is threatening the viability of some smaller operations. Within this general stagnation it is the small-holder who stands to lose most, especially where he/she practises export monoculture. Planned research will investigate the effects upon the small-holder sector, in terms of increased vulnerability, of the withdrawal of state subsidies, the role of the state, the increase in 'counterseasonal' competition in the market, and the impact of monoculture.

Fruit and vegetable exports from Fiji. AUSAid (1995) identifies the Fijian fruit and vegetable sector as one that exhibits considerable export potential:

There is excellent potential to supply out of season vegetables to Japan and other northern hemisphere destinations in a similar way to the successful export of squash from Tonga, and to supply processed fruit and vegetables to various export markets. (79)

Quantities of fresh fruit are already being exported to Australia and New Zealand (especially to hotels). It is also suggested that there is

potential in the export of partly processed fruit and vegetable products (such as organic fruit concentrate). There are also possibilities in a range of 'niche' markets (such as avocado mousse, guava jelly and passionfruit products) (AUSAid 1995).

At present much of the production of fruit and vegetables for export (including some squash exports) is taking place in the Sigatoka Valley (Ali 1998). This extensively involves small-holders. If the small-scale fruit and vegetable export sector grows, as is possible, this will form an area in which small-holder research can be centred. Again such research should focus upon the closely interdependent issues of equity and sustainability.

Relevant lessons from Chile in terms of sustaining the outward-oriented small farm sector

The maintenance of the small-holder sector in the Pacific Islands is crucial for equitable and sustainable development. The potential ramifications of small-holder failure (for example, increased urban pressure, increased poverty, loss of subsistence production) should be considered seriously by PIC governments. The land tenure systems of many island nations ensure that loss of tenancy is not as grave a problem as it is elsewhere in the periphery. However, forms of 'disguised' landlessness can evolve, for example the widespread 'illegal' renting of lands for squash production by indebted Tongan farmers to larger-scale counterparts. Clearly, the Chilean situation differs radically from the case in the Pacific Islands, at least to the extent that the situation in the latter is known at the present. It would be foolish to suggest that direct lessons can be gleaned from the Chilean study. However, a number of points may be of relevance in terms of sustaining the small farm sector within a neoliberal environment. The central argument is that it is critical that the state monitors, and attempts to regulate where necessary, the uneven processes unleashed by participation in global markets. Naturally, it is recognised that whether the state chooses to do this or not is contingent upon a range of factors, beyond the scope of this paper.

Diverse sources of credit and technology. One of the major factors leading to high-levels of dependence and eventual debt in Chile has been the legal binding, through the contract system, of credit, provision of technology and payment. This places the growers in an exceptionally vulnerable position, which has been systematically exploited. There is a role for the state in this

context in developing competitive credit and technology markets so that such inputs are available from a range of sources. This does not necessarily imply that the state must supply these things itself. It could offer incentives for potential suppliers within the market.

Provision of information. In many cases in the Chilean case study the firm was also the sole supplier of relevant information to the growers. This leads to the principal-agent problem whereby the dominant party can distribute (or withhold) information to its own advantage. There is a role for the state in the issuing of impartial information upon which growers can base investment, planning and purchasing decisions.

Incentives and assistance to organise collectively. One of the major problems facing the Chilean small-scale export sector is its non-collective behaviour. Although the democratic transition is well underway in Chile there is still a tendency to discourage this type of organisation. There is a role for the state in educating small-holders in general on the potential benefits of such organisation in purchasing, marketing and other forms of negotiation. There is also a role for assistance in terms of supplying basic infrastructure for collective organisation.

Regulation of export-contract systems. It will be clear from the Chilean case study that a highly asymmetric contract system has been allowed to evolve. To a large extent this underpins many of the problems currently faced by the small-scale sector. Where private MNACs establish contract relations in PICs, the state should intervene to ensure that the small-scale growers get a fair deal in contract relations and that they are not excessively 'squeezed' during downturns.

Encouragement to diversify. The problems facing the small-scale export sector in Chile have been greatly aggravated by the practice of monocultural production on many farms. There exists a role for the state in educating growers on the virtues of diversification on their farms. Furthermore, companies should be prevented from obliging growers to specialise entirely in the production of only one crop for export. This point should be of particular concern to PICs, where a high proportion of growers partly satisfy needs from subsistence. In this context, the wholesale 'grubbing-up' of such systems would prove devastating.

Post-conversion assistance. It was generally assumed by the Chilean authorities that securing the conversion of small-scale growers into the export sector would serve as sufficient means of ensuring their survival. This type of argument can be heard in policy quarters in the PICs. This is clearly not the case. To ensure survival, it appears that a balance needs to be struck. The potential benefits of some export production on small farms are large. Conversion should not be discouraged. However, conversion to monoculture should be. Furthermore, it is not sufficient to assume that conversion in itself is a panacea. Support will need to be extended both before and after the process of transition, up to a point where the grower can viably compete and survive within the export sector.

Conclusion

Embracing the globalisation of agriculture, through the adoption of neoliberalism, undoubtedly yields costs and benefits. The Chilean case study warns us of the perils of embracing that ideology too warmly, in terms of the uneven and unsustainable processes it may unleash among certain groups in certain places. There is no theoretical reason why peripheral countries must embrace neoliberalism wholeheartedly; it is not, contrary to what some might insist, the only viable development option still remaining. Of course, in practical terms great pressures to adopt neoliberalism exist. It may be the case that many Southern countries have little choice but to apply such principles. Some aspects of the approach may be suitable to certain countries in certain contexts. On the other hand, in some places, at certain times, a combination of free-market principles and state-regulated development may be more appropriate. At the extreme, in some places, the adoption of neoliberalism is likely to be at best useless, and at worst extremely damaging. The evidence presented in this paper suggests that the strategy, in its pure form, does not favour small-scale farmers in the long run. This will not always be the case in each place, as it is contingent on a range of complex and dynamic factors. However, if there is one lesson that should be borne in mind from the Chilean case it is that globalisation and neoliberalism should not be accepted unquestioningly. This observation underlines the great need for a concerted research effort in the Pacific Islands designed to establish the implications of the expansion of the global agro-food complex for island society, economy and environment.

Notes

1 In this paper, the term Southern countries is used to refer to the group of countries characterised variously in the literature as 'developing', 'less developed' or 'underdeveloped'. 'Peripheral' countries is used interchangeably with this term.

2 The process of land-reform in Chile began in earnest under Eduardo Frei senior. He began the process of breaking-up and re-distributing the enormous private farms, *latifundios*, established during the colonial period. Such farms were seen as both efficiency- and equity-constraining. This process was greatly accelerated under Allende, who began a process of collectivisation in the Chilean countryside. Pinochet brought the latter process to an abrupt end during his counter-reforms. Some collectivised, and other reformed land, was returned to former *patrons*. However, a significant proportion of land was sold as *parcelas* (small plots of between 4 and 10 hectares). Some of this land was sold on the open market, and in some cases, farmers were granted credit in order to purchase these small plots. On this basis, large numbers of small-scale growers were created through the counter-reforms. Whilst it is acknowledged that Pinochet's reforms were efficiency-inducing, there can be little doubt that they were highly equity-constraining—the selection process for credit was dubious and politicised, and many of the smallest 'new' *parceleros* soon lost their land, unable to survive in the neoliberal environment.

3 The *latifundio-minifundio* land-holding system was created under colonial rule through the *encomienda* system, under which soldiers and other persons loyal to the Spanish crown were granted large tracts of land, *latifundios*. As part of the deal, large numbers of indigenous and other marginalised persons were assigned to particular *latifundios* as labourers. Usually, labour did not earn a money wage, and instead earned the right to farm a very small plot, known as a *minifundio*, on the landowner's property in order to provide subsistence. Although conditions for *minifundistas* did improve slightly over time, this feudalistic system persisted until the reforms began (see note 2).

4 Follow up research was carried out by the author in the months of December 1997 and January 1998. This research involved visits to the study site to observe the current situation of the small-scale sector, the collection of secondary materials, and interviews and conversations with academics from the Universidad de Chile and the Ministry of Agriculture.

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