

# Consuming Foods

## Sustaining Environments



EDITED BY

Stewart Lockie & Bill Pritchard

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EDITED BY | Stewart Lockie & Bill Pritchard

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This book is based on the rather simple proposition that the ways in which we produce and consume foods have profound effects on natural and social environments. Recent ‘food controversies’ — over issues as divergent as chemical residues, organic standards, genetically modified foods, ‘mad cow’ disease and the destruction of rainforest to supply the world with cheap hamburger mince — have highlighted both the social and environmental significance of food, and the extreme complexity of relationships involved in its production and consumption. Food is clearly of great importance, but how are we to understand its social life? This book can’t answer all questions related to the social life of food, but it can begin to unravel the threads linking production and consumption activities.

*Consuming Foods, Sustaining Environments* draws on research conducted by members of the Agri-Food Research Network, a loose affiliation of Australian and New Zealand social scientists interested in food, agriculture and social change. Members are drawn to this common interest from a diverse range of disciplinary perspectives including sociology, geography, anthropology, history, agriculture and economics. In addition to the scholarly and professional activities of individual members and the hosting of annual meetings, the Network has published *Globalization and Agri-Food Restructuring* (Avebury, 1996), *Australasian Food and Farming in a Globalised Economy* (Monash University, 1998) and *Restructuring Global and Regional Agricultures* (Ashgate, 1999). Although initially focussed very much on questions related to the production and distribution of food (including their environmental and social effects), Network members have increasingly looked to address questions related to food consumption. The sixth annual meeting of the Network was thus held under the theme *Consuming Foods, Sustaining Environments* in August 1998 in Rockhampton. With the exception of the opening chapter, all chapters included in this collection are based on papers presented at that conference and subsequently double-blind refereed and revised.

A number of people have contributed to this volume in various ways that deserve acknowledgment. In no particular order, thanks are due: to Central Queensland University’s Institute for Sustainable Regional Development and Centre for Social Science Research for their generous



financial support; to the organising collective of the Agri-Food VI meeting, namely Kristen Lyons, Geoffrey Lawrence and Hannah Walker, for providing the forum to discuss the ideas presented in this volume; to Natalie Wyr for providing invaluable administrative and organisational support; to Kerry Buchholz for his assistance in the preparation of this manuscript; and finally, to David Burch, Convenor of the Agri-Food Research Network, for his encouragement in this project.

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# Linking Production, Consumption and Environment in Agri-Food Research

Stewart Lockie and Bill Pritchard

According to Dennis Avery, author of *Saving the Planet with Pesticides and Plastics, the Environmental Triumph of High Yield Agriculture* (1995), the human population of the twenty-first century will demand three times as much food and fibre as farmers currently produce. The only way to do this, he claims, is to triple crop yields through the application of biotechnology and synthetic inputs and to ensure free trade; the alternatives being to either convert 5 billion people to vegan diets — which he considers unlikely — or to face destruction of the world's remaining forests and wildlife to make way for low-input low-yielding agriculture. Not surprisingly, this view is criticised by food activists who accuse industrial agriculture of the creation of poverty and pollution and for the suffering of farm animals (Tansey & D'silva, 1999). Biotechnology will only intensify these processes, they claim, as more small farmers are displaced and ownership of genetic material becomes concentrated increasingly in the hands of transnational agribusinesses. In opposition to this, activists envision a future based on organic (chemical and biotechnology-free) agriculture, free-range livestock, social justice and fair trade.

Our purpose in this book is not to arbitrate in these debates — not directly anyway — but to point out that the social and environmental impacts of food production and consumption are among the most fundamental issues facing contemporary human societies. Concerns about environmental sustainability and food safety have moved into the mainstream of contemporary politics. Newspaper headlines on issues such as “mad cow” disease, genetically modified foods, product labelling and animal welfare attest to this fact. The debates of today are not so much debates about whether or not we need to consider environmental and social issues related to food; they are about defining environmentally and socially



sustainable food systems, and how to communicate and validate claims regarding the environmental and social credentials of food commodities.

### **Consumption and Sustainability in a World of "Global Food"**

Contemporary discussion of consumption and sustainability is meshed within wider debates on the global reach of large food corporations, aided and abetted by new regulatory architectures of world food trade and production. As the spatial dimensions of food production-distribution-consumption chains lengthen and become more complex, they link consumers and environments in ever more intricate fashions. Two recent episodes illustrate these processes.

In October 1999, food activists world-wide organised the first "anti-McDonald's Day". If for no other reason, this event was significant because it illustrates a convergence in debates over food futures. McDonald's provided such a target for food activists because it conflates concerns over consumption (i.e., nutrition, advertising, packaging) and environmental-social sustainability (production techniques, alleged rain-forest destruction, "McJobs") with concerns over corporate power and the supposedly homogenising hazards of globalisation. Thus, the global regulatory architecture that expedites the abilities of companies such as McDonald's to exploit international circuits of food commodity trade, the protection of corporate intellectual property, and the shunting of finance across national borders also encourages reflexivity, including the construction of alternative spaces of protest and resistance.

At a different scale and character, in September 1999, Sydney celebrated "Good Food Month". This event is a recent innovation sponsored by commercial interests in the food, wine, restaurant and media sectors, and can be interpreted as an attempt to authenticate issues of consumption and sustainability within the city's emergent global class elites. Sydney's rise as Australasia's centre of finance and corporate affairs has been accompanied by the mobilisation of specific cultural practices based around food. In particular, the growth of conspicuous food consumption practices — seen in the burgeoning growth of elite restaurants in the city — has occurred hand-in-hand with the circulation of food consumption discourses operating to emphasise different geographical scales. Sydney's "Good Food Month" simultaneously promotes the consumption of quality *locally-produced* food (e.g., in events located in the growers' market at Pyrmont), and the *local consumption* of quality food produced through *global* networks of food production and culture. These "world on a plate" (Cook & Crang, 1996) and "local quality food" discourses implicate consumption and sustainability in contradictory ways.

The re-negotiation of food's consumption and environmental values suggested by these episodes brings to the foreground the significance of recent regulatory changes to the global nature of food production and trade. It is important to note that regulation is understood here, in line with French regulation theory, as the intersection of institutions, institutional assemblages, and cultural habits and norms that serve to intersect with processes of capital accumulation (Amin, 1994, p. 7), rather than as simply the rule of law. In this broader sense, the social regulation of food is undergoing fundamental change, a core element of which is the development of new and more spatially extensive relationships among human and non-human actors involved in food chains. Since the onset of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1986, agriculture and food have been at the centre-stage of global debates on trade. Regulatory changes associated with the World Trade Organisation (WTO) Agreement on Agriculture — the 1994 outcome of these talks — have created new institutional architectures helping to delineate the relationships between food consumers and producers and, thereby, the environmental relations embedded within these systems.

The inclusion of food and agriculture within the multilateral forum of the GATT encouraged the re-evaluation of theoretical accounts of the global food system (Friedmann & McMichael, 1989; McMichael & Myhre, 1991; McMichael, 1992; Friedmann, 1993). To these researchers, inclusion of agriculture within the GATT acted to resolve the alleged contradiction between the predominantly state-bound regulatory apparatus affecting agriculture, and the increasingly internationally flexible regime of global capital accumulation. What was emerging, it seemed, was the construction of a new “food regime” where:

Transnational finance capital is emerging as the anchor of a new globally constructed regime of accumulation. It is an essential component of a new mode of regulation which depreciates the importance of the *nation-state* as the institutional form responsible for maintaining the social relations undergirding capital accumulation. In conjunction with other forms of globalised capital — such as the transnational productive capital in agro-food sectors — it is assuming some of the regulatory functions vis-à-vis the wage relation that formerly were guaranteed by the state (McMichael & Myhre, 1991, p. 99, italics in original).

No-one could doubt that the broad direction of world economic change in the 1990s has involved an empowerment of global financial capital that has impacted upon the role of the state. Writing in the late 1980s and early 1990s, McMichael and his associates rightly emphasised these themes as central elements of incipient restructuring processes in agri-food sectors. Yet, with the benefit of hindsight it is also apparent that the food regimes account pioneered by McMichael treated these develop-

ments mechanistically, encouraging in some scholars an over-generalised search for a supposed “third food regime” (eg. Le Heron, 1993). To be fair, McMichael was always reticent to periodise the contemporary era as a “third food regime”, and has admitted subsequently that the food regime concept was a “child of its time” (McMichael, 1999, p. 4). The point is, however, that understanding and accounting for the dynamics of contemporary change in the global agri-food system requires an approach that goes beyond the mechanistic analyses of food regimes.

These theoretical issues have pressing significance for an understanding of the contemporary eddies of change within the global regulatory architecture of agri-food production and trade. Ratification of the WTO Agreement on Agriculture at Marrakech in 1994 produced a complex and at times contradictory set of regulatory outcomes. The professed primary intention of the Uruguay Round’s deliberations on agriculture was to reduce high rates of agricultural subsidy in Northern industrial countries. However, at the turn of the century — some six years after the signing of the Marrakech Agreement — agriculture in the industrialised North remains deeply wedded to state structures. Relatively modest commitments by the EU and US concerning reductions in support to agriculture have been combined with the deployment of various bureaucratic tactics to further slow the pace of change. Core elements of the Agreement on Agriculture, notably including the conversion of non-tariff barriers to tariffs and the timetable for tariff reductions, provide relatively greater freedoms for Northern nations than they do for developing nations (Lal Das, 1997).

In Europe especially, maintenance of these structures has given contemporary agrarian landuse a “post-productionist” character. With farmers provided with payments to retain the “rural character” of their farms, actual agricultural production is revalued in the landscape financially and environmentally. These themes comprise what the EU labels the “multifunctionality of agriculture”, whereby:

the role of agriculture is not only to produce agricultural goods at lowest possible cost [but] to ensure safe and high quality goods, protect the environment, save finite resources, preserve rural landscapes and contribute to the socio economic development of rural areas including the generation of employment opportunities (cited in Kwa, 1999, p. 8).

Despite the protection offered to many European farmers in the professed interest of social, economic and environmental sustainability, other actors in the global food system have been forced to confront the sharp edge of market regulation. Through the WTO’s dispute settlement process, trade agreements are enforced through points of law. The dispute settlement process is “the central pillar of the multilateral trading system

and the WTO's most individual contribution to the stability of the global economy", according to former WTO chief Renato Ruggieto (1997). The material effect of this regime has been to encourage the creation of what McMichael (1999, p. 14) labels the "import complex", through which developing nations are required increasingly to import surplus production from (often subsidised) Northern producers, and Northern consumers gain access to imported high-value horticultural and other products from developing nations. These transformations are not simply the outcomes of the laws of comparative advantage so beloved by economists, but reflect the political economy of market forces and state structures. A case in point was recent transformations in Philippine agriculture. During the 1990s, there was a dramatic expansion of high value cash cropping in the Philippines and an emergent import dependence on corn — traditionally a staple crop for many Philippine small farmers. These shifts were related intimately to the operations of the WTO in legitimising the export of highly subsidised US corn, while at the same time removing the powers of the Filipino Government to protect domestic corn producers (Greenfield, 1998, p. 3).

The interests of developing nations are problematised within the new regulatory architectures of global agri-food production and consumption. The neo-liberal rhetoric of the WTO offers a promise for reduced agricultural subsidies by Northern nations, which is highly attractive for Southern agri-food exporters (often TNCs) and their supporters in developing nation bureaucracies. Yet the WTO also enshrines trade practices that impinge on developing nations' economic sovereignty and which are deeply favourable to larger, Northern economies. These institutions can give rise to a vicious cycle in which the desperate market access need of developing nations "requires compliance with multilateral trade and investment agreements by national governments and even greater dependency on TNCs which have monopolised control over inputs, markets and increasing control over seed" (Greenfield, 1998, p. 3). Even developing nations that have embraced the neo-liberal vision of the WTO — notably Chile — are suspicious of their vulnerability within this regime:

there is an asymmetry in the bargaining power of countries and the effect on policy making. The effect of a retaliatory tariff imposed by, say, Chile on the United States (or another developed country) is negligible for the US economy, as compared to the effect of standards-based protection by the United States on Chile (Fischer, 1998, p. 37).

A key issue is that although the WTO promises a supposedly "fairer" and "more scientific" basis to resolve trade disputation, some NGOs and developing nations remain deeply suspicious of the institutional arrangements that mediate these processes. The lengthening of consumer-producer

networks internationally brings to centre-stage questions of regulating and/or validating food safety and quality. There is an increasingly important role being played by standard-setting agencies such as the International Standards Office (ISO) and Codex Alimentarius (Codex). The WTO Agreement on Sanitary and Phytosanitary Standards (SPS), which promotes the harmonisation of health, hygiene and import inspection standards, is based largely on existing standards devised by Codex. Many NGOs are extremely critical of the robust participation of transnational agri-food companies in Codex standard-setting procedures. Similarly, the ISO — which is a purely private-sector organisation — is being used increasingly to establish the rules of global trade under the WTO regime. In short, the “fair” and “scientific” basis for global trade rule-setting is being devised through an institutional apparatus that is highly suspect from the standpoint of democratic control and participation.

Global disquiet over these issues lay at the heart of the paralysis of the WTO Ministerial Conference held in Seattle in late 1999. This meeting failed to confirm arrangements for a new round of world trade negotiations, in the process exposing massive gulfs in perceptions and priorities concerning the management of world trade. As meeting host, the United States proposed that a strengthened commitment to free trade in goods and services be implemented alongside stronger enforcement of International Labor Organisation conventions: a position dubbed by President Clinton as “globalisation with a human face”. Delegates from many poor nations and the Cairns Group, however, perceived this stance in terms of a strategic re-positioning of Northern interests so that respect for labour standards became a non-tariff barrier serving to protect developed nation markets. Argentine Trade Minister Guido di Tella labelled this strategy “agricultural apartheid”. For their part, European and Japanese delegations sought to avert the establishment of a new multilateral trade round targeting their agricultural policies. Conflagration inside the WTO meeting halls, however, was just one manifestation of global disquiet over the style and substance of trade talks. During the first two days of the negotiations, protestors delayed the talks and, in a series of pitched battles with riot police, some US\$7 million of damage was caused to downtown Seattle.

The “battle for Seattle” highlights the central importance of the issues covered in this book. All of the key groups in Seattle — protestors, developing nation representatives, the Cairns Group, the WTO bureaucrats, the Clinton administration, the Europeans, the Japanese — possessed alternative versions of how trade reform would affect consumers and environments. The question of “who speaks for the poor and for the environment” was pivotal to the conference’s failure. WTO Secretary-General

Mike Moore made it plain that his organisation saw the neo-liberal model as promoting the interests of the world's poor.

To those who argue that we should stop our work, I say tell that to the poor, to the marginalised around the world who are looking to us to help them (Forbes, 1999).

This view, however, was not shared universally. According to the policy director of the Australian Council for Overseas Aid:

The reality for the poor is that the WTO has done more to sanction the rulers of the jungle than to protect the needs of ordinary workers and the poor globally (ACFOA, 1999).

Despite their support for WTO attempts to reduce Northern agricultural subsidies, developing nations' delegations to Seattle took extreme exception to both the style and substance of the meeting. Speaking on behalf of Caribbean nations, the Dominican Republic's representative told the media that the breakdown of the Seattle talks "will serve as an important lesson in humility for the small group of countries who think this (the WTO) is their club". According to the Organization of African Unity/African Economic Community, the meeting's proceedings:

lack transparency and African countries... are being marginalised and generally excluded on issues of vital importance for our peoples and their future (Pruzin et al., 1999).

Complaints of exclusion were summed up effectively by Zimbabwean delegate Yash Tandon, who told the meeting that "[w]e're [i.e., developing nations] being integrated into globalisation without even being there" (Naidoo, 1999).

At the time of writing it is difficult to predict how the experiences of Seattle will influence the direction of global trade negotiations and, by extension, the regulatory environment governing global food production and consumption. Previous collapses in world trade negotiations (Geneva in 1982 and Brussels in 1990) have delayed, though not derailed, the broad direction of trade reforms. Interpreting the implications of the meeting remains bitterly contested. Anti-corporate globalisation NGOs attest:

Seattle will now be recognised as the graveyard of neoliberal free trade doctrine and the birthplace of long-overdue recognition of fair trade principles based on global equity, transparency, justice and the participation of all affected parties (StopMAI Australia, 1999).

The WTO, on the other hand, remains convinced that:

[notwithstanding the collapse of the Seattle conference, the push for free trade] is doomed to succeed (Forbes, 1999).

## Defining Environmentally and Socially Sustainable Food Systems

There are obvious implications for the environment and for consumers arising from these transformations within the global food system. Large companies are being given relatively greater freedoms to construct seamless production-distribution complexes linking farm to final point of consumption. For managers of these emergent systems, these developments provide the economic infrastructure to deliver “freshness” to consumers. The contradictions advanced through these processes — “fresh” commodities sourced from evermore distant locations — has not gone unnoticed by consumers. Specific campaigns (“food miles”) and the construction of spaces of resistance (“farmers’ markets”) have mushroomed at the same time that (affluent) consumers have been treated with historically unprecedented volumes of fresh and diverse food commodities. Dealing with these contradictions requires consideration of how we define and theorise the concepts of “environment”, “sustainability” and “consumption”.

It seems obvious enough that sustainability has something to do with “the environment” but, as many authors have pointed out, this leaves many questions about what is to be sustained, by whom, and in what condition. Indeed, given that in the absence of human intervention environments are still subject to continual change — both evolutionary and catastrophic — the notion of sustainability may even seem contradictory. Nevertheless, the broad definition of sustainability articulated by the World Commission on Environment and Development (1987), that of meeting the needs of the present without compromising the ability of future generations to meet their needs, has become accepted widely as a basic tenet of government and industry policy.

There are at least two major ways in which social scientists have weighed into debates about sustainability. The first has been by championing the concept’s importance to people. This approach can be described as *materialist*; that is, concerned with the biological reality of the relations between humans, environments and foods. Investigations have ranged from: the social organisation of production through institutions, marketing arrangements etc, and their environmental effects (see Higgins, Chapter 8; Curtis, Chapter 11; Drummond, Chapter 14; Hungerford, Chapter 16); through to the equity of production and consumption arrangements. As Patricia Allen shows in Chapter 1, sustainability is not just about producing food, it is about who gets to consume it. Access to food is not, as many might think, a problem solely for war or drought-ridden Third World countries, it is a problem for many people in otherwise affluent societies. Community food security researchers and activists in the US, in particular, have encouraged an

approach to food security that recognises not only that large numbers of people receive insufficient, or poor quality, food, but that these problems are systemic. They are related to the whole system of food provision, not just the socio-economic circumstances of the individuals affected. An unjust food system, they argue, cannot be a sustainable one.

The second way in which social scientists have weighed into debates about sustainability has been to investigate the different things that sustainability means to different people (Scott & Cocklin, Chapter 6; Wilkinson et al., Chapter 7). This approach may be described as *constructivist*; that is, concerned with the different meanings that people associate with agricultural landscapes, the activities that take place in those landscapes and the products of those landscapes. It is not concerned so much with trying to figure out the “true” meaning of sustainability, but with how actors compete to promote their own understandings of what the general principle of sustainability actually means in practice. In Chapter 10, for example, Lockie explores the ways in which manufacturers of agricultural inputs position their products, and the production systems into which they fit, in terms of the multiple meanings of sustainability.

Importantly, however, the distinction between materialist and constructivist approaches to sustainability is not a rigid one. Most of the chapters in this book acknowledge that environmental issues contain both material and symbolic dimensions. The relative weight placed on these dimensions varies between, for example, the political economy of “unsustainability” in the sugar industry (Drummond, Chapter 14) — which more or less takes it as given that high-input systems degrade their resource base — through to the more spatially specific analysis by Walker and Grasby (Chapter 15) of the ways in which farming cultures and institutional arrangements shape the production landscape of sugar cane. Nevertheless, the various approaches recognise that whereas the production and consumption of food has environmental and physiological effects, the ways in which those effects are understood and evaluated is a necessarily cultural phenomenon. Again, we are confronted with the questions: what are we trying to sustain, in what condition, and for whose benefit?

### **Food Consumption and Sustainability**

The convergence between materialist and constructivist approaches to sustainability is evidence of a growing sophistication in social scientific understanding of the relationships between social and natural environments. However, it is important to note that, to date, most attempts to understand the social and environmental dimensions of food have been focussed on production. Researchers have extended analysis through the food chain to consider the role of agribusiness and retailers in shaping



production decisions — and by implication, environmental management decisions — but the role of those who purchase and/or ingest food has been often either ignored, or treated as a separate object of analysis within the sociology of food (Tovey, 1997). The problems inherent in such a division of labour are strikingly apparent in light of the close relationships that Patricia Allen (Chapter 1) analyses between sustainable agriculture and community food security movements in the US. But it remains the case that much of the agri-food literature treats consumption either as something that is shaped by transnational capital or the state in the interests of capital accumulation (eg. Marsden et al., 1993) or as something that is determined by the aggregation of individual consumer choices (eg. Buttel, 1994; Lawrence, 1996). Thus we are left with a simplistic dichotomy between the “production of consumption” and the “sovereignty of the consumer” (see Miller, 1995; Humphrey, 1998; Lockie & Collie, 1999) that fails to problematise the multifarious and contested relationships between these spheres of activity.

The apparent difficulties in accounting theoretically for consumption beg the question as to how these issues may be incorporated within wider examination of agri-food systems. It is one thing to say that the varied social and spatial constructions of consumption be included in the analysis of agri-food systems; it is another to construct a theoretical framework that gives adequate voice to these concerns. In the 1990s, two approaches came to prominence that, in various ways, attempted to foreground questions of consumption. The first of these, based on the notion of “systems of provision” (Fine, 1994, 1995; Fine and Leopold 1993; Fine et al. 1996) argued that a shift was necessary from “horizontal” analyses of activities believed common across commodities from narrow disciplinary perspectives to “vertical” analyses of particular commodities — or groups of commodities — “in the context of the chain of horizontal factors that give rise to [them] — production, distribution, retailing, consumption and the material culture surrounding [them]” (Fine 1995, p. 142). Although Fine’s approach has been extensively, and justifiably, criticised (Friedmann, 1994; Goodman, 1999; Lockie and Kitto, 2000; Murdoch, 1994; Watts, 1994) for its internal contradictions and failure to acknowledge its similarities with existing approaches such as “commodity systems analysis” (Friedland, 1984), it did contain two elements that are worth keeping in mind. The first of these was the material culture of food and the need to treat activities within “systems of provision” as meaningful rather than simply as functional; while the second was the need to consider the organic content of food and the implications of this for production-consumption.

The second way in which consumption has been foregrounded has been through a variety of adaptations of actor-network theory (Arce and

Marsden, 1993; Busch & Juska, 1997; Goodman, 1999; Lockie & Kitto, 2000; Marsden & Arce, 1995; Murdoch, 1995, 1997; de Sousa & Busch, 1998; Whatmore and Thorne, 1997). Neither actor-network theory, nor its application within agri-food research, represent a single coherent theoretical framework (Latour 1999; Law 1999). But this broad area of research remains of interest due to its attempts to break down dichotomies between macro and micro-levels of analysis and between the social and the natural as either independent or essentially different spheres (Law, 1999). Concepts like *agency* and *power* are no longer seen then as things to be possessed, but as outcomes of relationships within networks that potentially involve both humans and non-humans (Callon 1991; Callon & Law 1995; Law 1991). This suggests a need for research that traces food networks while making no *a priori* assumptions about who or what may shape relationships within that network. Again, whether this actually offers us a new set of conceptual tools with which to move beyond existing approaches such as commodity systems analysis is a question that deserves vigorous debate (Lockie & Kitto, 2000). At the very least, however, the injunction to shift our analytical efforts from the identification of “loci of control” — such as transnational capital, the state or the consumer — to, in a Foucaultian sense, the micro-physics of power (Foucault, 1986) challenges the focus of contemporary agri-food research. As recent events in Seattle and elsewhere have shown, existing patterns of social relationships cannot be taken for granted at any scale. Further, the insights of actor-network theory suggests that unravelling the relationships between production and consumption is not necessarily a task in need of an explanatory theory, but a task in need of investigation at a multitude of sites using already well developed sociological concepts and methods.

## Conclusion

What is clear from the above, at the very least, is that debates over consumption and sustainability are heavily laden with theoretical dispute. Broadening the analysis of agri-food systems to incorporate (downstream) connections with consumers and (upstream and downstream) connections with the environment raises fundamental questions of how these processes should be theorised. Clearly, these issues cannot be treated residually: environment and consumption are embedded within agri-food systems, and the theoretical challenge facing researchers is to construct and utilise frameworks for research that fully acknowledge the processes by which this occurs.

Emergent tendencies within the social regulation of food production, distribution and consumption emphasise the imperative for forthright theoretical consideration of sustainability and consumption. The terrain

of food regulation is bitterly contested at the current time, and issues surrounding this contestation form the basis for a number of chapters to this book. For the moment at least, Australian consumers are generally suspicious of genetically modified foods (GMFs) (see Lawrence et al., Chapter 4) and worried about agricultural chemicals (see Lockie, Chapter 9). There is rapid growth in sales of organic foods, although they remain a small share of the overall food market (see Lyons, Chapter 5). Major supermarket chains such as Tesco and Sainsbury (UK) are distancing themselves from GMFs and using sales of organic food to promote their environmental credentials (see Burch et al., Chapter 2).

Attempts to resolve these questions through reductionist epistemologies necessarily ignore these contingencies. Consumers are not automata responding to market signals; and the environment cannot be explained via recourse to general categories of public goods, markets and externalities. The analysis of sustainability and consumption relates not only to technocratic disciplines such as agricultural and environmental economics and the agricultural sciences, but also to humanistic disciplines concerned with human relationships, politics, culture and history. Consumption and environment are embedded within social relations of food production and distribution, in unique (spatial-temporal) ways. The chapters of this book take on board these arguments. Through the variety of cases and debates presented here, an argument is made that questions of consumption and sustainability are at the core of contemporary debates on food and agriculture.

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