

## Value chain strategies in developing countries

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### 1. Ortmann (2001) argues that

*“Food production and distribution in South Africa, as in most other countries, is undergoing major structural changes caused by changing and diverse consumer demands, new technologies (e.g. bio- and information technologies), new product characteristics, changing firm sizes and more exposure to world markets... the structural realignment in agriculture and the formation of new supply chains are partly a response to increasing concerns by food processors, retailers and food service companies about food safety, health and nutritional issues ... Another major reason for the formation of supply chains is to reduce costs, particularly transaction costs, in order to promote competitiveness. Thus, attempts to satisfy changing consumer demands and to lower costs, including transaction costs, drive efforts to enhance the competitiveness of agri-food supply chains.*

2. Value chain strategies are closely linked with the ‘supermarket revolution’. Reardon *et al* (2007) argue that the ‘supermarket revolution’ in developing countries was due not only to the build-up of demand factors (on the demand side, they highlight factors such as urbanisation, income growth, the diffusion of refrigerators and motor cars, which are in themselves the result of trade liberalisation and manufacturing sector growth in developing countries, and better road and bus infrastructure) but also to:

- Investment liberalisation, which facilitated FDI by foreign retailers, and domestic market deregulation.
- The modernisation of supermarket procurement systems, which increase the competitiveness of supermarkets against traditional retailers and domestic supermarket chains.

3. Importantly, Reardon *et al* (2007) argue that the ‘supermarket revolution’ is almost always triggered by foreign investment, even if supermarkets existed in the domestic market. The entry (or threat of entry) of foreign retailers, they argue, force domestic supermarkets to become more competitive (via management of their supply chains).

4. This description paints a picture of the spread of supermarkets in developing countries as part of the processes of globalisation, and specifically the globalisation of the agri-food system. Morgan *et al*. (2006: 8) argues that this characterises changes in the system as “... production chains ... increasingly orchestrated across long distances by a few large-scale economic actors, usually transnational corporations”, much like the types of change taking place in other sectors of the economy.

5. However, they argue that the globalisation of the food sector differs from that of other sectors because (Morgan *et al*. 2006: 9-14):

- The food sector is based on agriculture; hence the processes of globalisation of the sector are also constrained by nature. In their view, biology mediates social processes of industrialisation and constrains the extraction of profit or value from the food system, despite many efforts to overcome the effects of nature in order to maximise productivity gains (e.g. to overcome problems of seasonality or perishability). Efforts to overcome seasonality often

result in food being transported over ever-longer distances, something made possible by the decline in transportation costs. However, this is not merely a further step towards standardisation of food: nature bites back (e.g. BSE, salmonella, *E. coli* poisoning), pressurising producers and processors to worry about food safety, and consumers to prefer the local as safer than 'industrial' food, because they know local circumstances better. Morgan *et al.* (2006) conclude that 'the result is an increasingly differentiated and fragmented food market' with global products ('Mars Bars, Coca-Cola, McDonalds hamburgers...'), local products ('*lardo di Collonata*, saltmarsh lamb') and products that combine the local and the global ('Parmigiano Reggiano, Parma ham, Aberdeen Angus beef').

- Food cultures across the globe are not homogeneous; hence the processes of globalisation of the sector are constrained by culture. This is partly because of the issue of provenance raised above: people know their local circumstances better; therefore they trust local food more. Yet, Morgan *et al.* (2006) argue that there is also a cultural dimension, as 'local food is likely to be produced in line with long-standing traditions, that is, by artisanal rather than industrial processes.' Furthermore, food consumption and peoples' tastes are culturally embedded. The result has been increased interest in Designations of Origin and Geographic Indicators, not only in the EU (see also Josling, 2006).

Morgan *et al.* (2006) provide an interesting footnote to this argument, namely the uneven distribution of such marks of origin over space: by 2001, there were more than 500 registered in the EU, with 75% coming from southern Europe, i.e. largely from the Mediterranean region.

Following Storper (1997), Morgan *et al.* (2006: 22) conclude that the tension between the global and the local results in four 'productive worlds':

- The Industrial World, combining *standardised* production processes with the dissemination of generic products for a mass market (e.g. Coca Cola, McDonalds);
- A World of Intellectual Resources where *specialised* production processes generate generic goods for the mass market (e.g. GM maize);
- The Market World, combining *standardised* production processes with dedicated consumer markets;
- The Interpersonal World of *specialised* production and dedicated consumer markets (e.g. organic food, Slow Food).

These 'worlds' cannot be mapped on to discrete spatial areas: different nations, regions and localities will be characterised by different combinations.

The conclusion, therefore, is that while there is agreement with Reardon *et al.* (2007) on the important role played by the modernisation of supermarket procurement systems (a process driven by competition between retail systems), this should not be conceptualised as merely another step on the road to the industrialisation of the agro-food system. In other words, changes to these procurement systems are driving changes to the entire retail sector, not only supermarkets, and for a diverse range of goods.

6. The processes of industrialisation of agriculture have resulted in a 'deterritorialisation' of the agro-food system, while the relatively new phenomena identified above result in a 'reterritorialization' (Morgan *et al.*, 2006: 53), defined as 'a process whereby local and regional geographies come back again to play a central role in reshaping food production and consumption systems.' Nevertheless, all the evidence points to the dominance of the industrialisation process, at least over the past decades. This point is also made by Vander Stichele *et al* (2006) with respect to the fresh fruit and vegetable market. Another example is the market for organic products, which started off as a 'loosely coordinated local network of producers and consumers to a globalized

system of formally regulated trade which links socially and spatially distant sites of production and consumption' (Raynolds, 2004: 725).

7. One important impact has been on farm size structure. In the USA, for example, the proportion of farms that accounted for 50% of total output declined from 8.1% in 1969 to 3.6% in 1987 (Buttel, 1997). In 2005, the average size of farms with sales of over \$500 000 was 1070 hectares (2643 acres), compared to the national average of 179 hectares (USDA, 2006). In South African commercial agriculture average farm size was 1881 hectares in 2002, compared to 1414 hectares in 1993. This trend towards concentration of production among larger farms is found globally.

Similar trends can be found throughout Africa. Jayne (2006), for example, shows that the cultivated land per person in agriculture has been declining in a number of Sub Saharan countries (see Figure 1 below), while at the same time the largest share of marketed output comes from the larger farmers (among smallholders) (see Figure 2). Such conclusions should always be taken with a pinch of salt, as they represent samples of farmers in a few selected countries (in the case of Figure 2 one country!).

Jayne (2006) argues from these data that farm sizes in these countries are too small; hence income from the production of staples will not be sufficient to lift households out of poverty. On this basis, he argues that small farmers will have to move to the production of high-value goods, and that the evidence shows that this is already happening. One important question, therefore, is whether the 'new wave' changes of reterritorialization can provide a different path of agricultural development for Africa.

## Cultivated land per agricultural person (hectares)

	1960-69	1970-79	1980-89	1990-99
<b>Ethiopia</b>	0.508	0.450	0.363	0.252
<b>Kenya</b>	0.459	0.350	0.280	0.229
<b>Mozambique</b>	0.389	0.367	0.298	0.249
<b>Rwanda</b>	0.215	0.211	0.197	0.161
<b>Zambia</b>	1.367	1.073	0.896	0.779
<b>Zimbabwe</b>	0.726	0.664	0.583	0.525

Source: FAOStat website: Source: FAO Stat database: [www.faostat.fao.org/](http://www.faostat.fao.org/)

**Figure 1: Cultivated land per agricultural person**

## Characteristics of smallholder farmers, Zambia 1999/00

	N=	Farm size (ha)	Asset values (US\$)	Gr. Rev., maize sales (US\$)	Gr. Rev., crop sales (US\$)	Total hh income (US\$)
Top 50% of maize sales	23,680	6.0	1,558	690	823	2,282
Rest of maize sellers	234,988	3.9	541	74	135	514
Households not selling maize	762,566	2.8	373	0	36	291

**Figure 2: Marketed production by farm size, Zambia**

8. Morgan *et al.* (2006: 71) argue that the conceptualisation of ‘quality’ as a competitive economic and spatial ‘battlefield’ opens the way to an understanding of the rise of alternative agri-food sectors, as explained in Figure 3 below. This view is shared by Ponte and Gibbon (2005), who also emphasise that value-chains are becoming increasingly buyer-driven.

Of course, as Josling (2006: 339) has pointed out in the specific context of Geographic Indicators (GIs):

*“...we know little about the underlying economic impacts of using exclusive geographic labels to identify goods in a global marketplace ... It would be fortunate if GIs provided information to consumers who would then ...[pay] handsomely for quality goods. It would be less desirable if GIs restricted innovation and investment in quality and confused consumers with an overload of information of dubious value ...”*

9. Sylvander (2007) also follows Josling in answering the question ‘what added value do GIs bring?’:

- Consumption: Are the additional transaction costs compensated by the additional information obtained through GIs?
- Competition: Are GI an exception towards competition rules (locked clubs, cartels)? If yes, is this acceptable?
- Externalities: GIs may have positive externalities in terms of economic efficiency, social equity and environmental integrity.

If these questions can be answered in the affirmative, it becomes easier to justify public support. However, as is shown in Figure 3, there is a tendency towards local/regional involvement, which again places developing countries at a disadvantage, given that capacity problems are often greater at lower levels of governance.

<b>Type of spatial</b>	<b>Delocalisation</b>		<b>Relocalisation</b>
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<b>relationships</b>	<b>Conventional agri-food</b>	<b>Alternative agri-food</b>
<b>Producer relations</b>	Intensive production ‘lock-in’; declining farm prices and bulk input suppliers to corporate processors/retailers	Emphasis on ‘quality’; producers finding strategies to capture value-added; new producer associations; new socio-technical spatial niches developing.
<b>Consumer relations</b>	Absence of spatial reference of product; no encouragement to understand food origin; space-less products.	Variable consumer knowledge of place, production, product, and the spatial conditions of production; from face-to-face to at-a-distance purchasing
<b>Processing and retailing</b>	Traceable but privately regulated systems of processing and retailing; not transparent; standardised vs. spatialised products.	Local/regional processing and retailing outlets; highly variable, traceable, and transparent; spatially referenced and designed qualities.
<b>Institutional frameworks</b>	Highly bureaucratized public and private regulation; hygienic model reinforcing standardisation.	Regional development and local authority facilitation in new network and infrastructure building.
<b>Associational frameworks</b>	Highly technocratic – at a distance – relationships; commercial aspatial relationships; lack of trust or local knowledge.	Relational, trust-based, local, and regionally grounded; network rather than linear-based; competitive but sometimes collaborative.

Source: Adapted from Morgan *et al.* (2006: 72)

Note: The ‘porous’ boundary emphasises that this is not a binary choice

### Figure 3: Rural space as competitive space and ‘battleground’ between the conventional and alternative agri-food systems

10. Another important shift has been the rising **power** of supermarkets in the value chain. Morgan *et al.* (2006: 66) ascribe this to three factors, namely their increasing share of retail sales, the rise of store brands in competition with the traditional processors’ brands, and their ability to manage ‘space-time relations’. There are two contradictions between these conclusions and those of Reardon *et al.* (2007):

- Morgan *et al.* (2006: 66) argue that supermarkets hold some 50% of all food retail sales in the EU and the USA, while Reardon *et al.* (2007: 4) put this at 75-80%, also of ‘food retail’;
- As shown above, Reardon *et al.* (2007) ascribe the advance of supermarkets to their superiority in managing supply chain costs (akin to Morgan *et al.*’s concept of space-time relations); however, they do not discuss the market power of the supermarkets.

These conclusions are not necessarily mutually exclusive. However, the greater market power of supermarkets is evident in South Africa (and undoubtedly in other parts of the developing world – see again Vander Stichele, *et al.*, 2006) and has important consequences for farmers and food processors, one of which is decreased transparency of price setting mechanisms in markets, and market access that is increasingly controlled by non-market ‘quality’ criteria (Morgan *et al.* 2006: 70).

11. Reardon (2006: 92-95) identifies the major innovation of supermarkets in supply chain management as central sourcing, based on growing use of specialised/dedicated wholesalers and logistics firms and a shift toward preferred suppliers. Another major emerging trend is the rise in the implementation of private safety and quality standards in the supermarket sector.

Vander Stichele *et al* (2006: 102) argue that the adoption of these standards (ethical trade, EurepGAP, fair trade, which they classify as part of Corporate Social Responsibility, and which usually include human rights, labour rights and environmental issues) has come about as a result of pressure from stakeholders (NGOs, labour unions, consumers). They question the effectiveness of such standards in furthering the goals of sustainable agriculture. Reardon (2006: 79) on the other hand, uses a wider definition of standards, adding product quality and safety standards, actions taken in the production process to produce these, and the process of reporting on such standards. In their view, these **reduce** coordination costs in procurement systems.

However, while there are clear advantages for farmers who are able to become preferred suppliers, buyers a) are looking for consistency in supply and in quality, and b) preferred suppliers have to incur investment costs related to changing production practices (e.g. the introduction of Integrated Pest Management programmes, more sophisticated packaging facilities). In short, supermarkets will favour medium to large scale farmers, and not small farmers (Reardon, 2006: 102).

There are two interesting footnotes to the use of these private standards. First, food processors and supermarkets do act morally when they compete in the supply chain (cf e.g. Bordewijk, 2006, of Unilever and Van Deventer, 2006, of Freshmark). In the words of Morgan *et al.* (2006: 168):

*“We are not of course suggesting that these corporate leviathans recoil from striking the most advantageous deal, but that they do so ... in the context of prevailing moral norms ... multinational retailers clearly have the power, at least in theory, to secure much lower prices from their developing country suppliers than they enjoy at present. The fact that they refrain from doing so in practise is a testament, however, modest, to the tempering (and civilizing) effects of prevailing moral norms that have been established through a messy combination of multilateral political agreements, NGO pressure, and the moral sentiments of affluent consumers at home.”*

Second, recall that verification of compliance with such standards is costly. In South Africa (and no doubt in other developing countries) domestic supermarkets favour farmers who are EurepGAP compliant (i.e. are already active in the export market), as the costs of monitoring have already been covered. Once again, small farmers are not favoured.

## Summary

The rise of ‘Alternative Food Networks’ (Morgan *et al.*, 2006: 187) is important, but the arena still dominated by retailers and the ‘industrialisation’ process.

AFN could help developing countries, but only if there is economic justification (i.e. only if they are competitive), and only if there is the capacity within multiple layers of government to support such initiatives.

Even then, AFN may not help small farmers, whose beneficial involvement is even more dependent on capacity to organise, and arena where they are by definition lacking.

In the traditional supply chain, the adoption of private standards also favours large over small farmers.

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