THE GLOBAL AND THE LOCAL

GLOBAL AND LOCAL DRIVERS IN THE GLOBALIZATION OF FOOD INDUSTRY: THE CASE OF MILK POWDER

Debora Di Dio

This paper aims at presenting a comparative discussion of the interaction between environmental, cultural, economic, social, and political conditions of local and global actors, which are responsible for limiting or encouraging the globalization of milk powder. By contesting the statement made by Morgan et al. (2006) that globalization of the food sector is uniquely constrained by nature and culture, the research evidence presented in this paper will argue that other factors play a role and are equally, if not more important, for the globalization of milk powder.

Two aspects of the supply chain, production and consumption are considered to show that economic development, social issues, international institutions, nation states and eventually NGOs – all have to some extent played a role in the globalization of milk powder. The case study of Arla Foods, one of the largest European MNCs, demonstrates in what way the production, global trade and distribution of milk powder along the EU-developing countries supply chain have been backed up by the EU subsidies to agriculture, and by nation states through specific policies that encourage imports.

Keywords: *food, globalization, culture, milk powder, local drivers, global drivers.*

Introduction

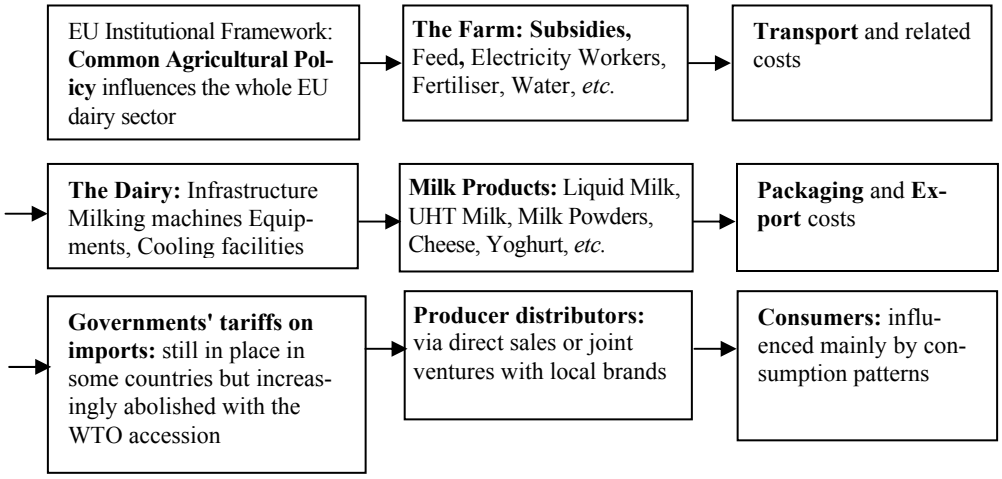
Food has been traded around the world for millennia, so one may ask whether there is something new about food globalization. Today food globalization has gained a new spatial connotation, characterized not only by the international circulation of food products as commodities, but also by global governance of food and food issues (Tsing 2000). Furthermore, today's food globalization is characterized by the transnational expansion of food-based corporations whose growth, not only quantitative in size, but especially qualitative in influence, has led to a real concentration of power by a few actors within the entire food industry (Phillips 2006). By applying an approach that reflects the theory of the Global Commodity Chain developed by Gereffi and Korzeniewicz (1994), this paper will demonstrate that the political framework and the economic apparatuses in which the food commodity chain is embedded, are instrumental to its globalization.

Food corporations have been defined as the driving force of the global food system because they control most of how food is grown, processed, distributed and purchased

(Heffernan and Constance 1994). The dairy sector is of paramount political, economic and social importance to the European Union. The EU is a major player in the world dairy market and is the leading exporter of many dairy products. Milk is produced in all EU Member States and represents a significant proportion (approximately 14%) of the value of the EU agricultural output (Floros 2009). The dairy sector is rigorously administered by the Common Agricultural Policy (CAP): as the EU market price is higher than the world price for dairy products, export subsidies are in place to allow disposal on world markets and act as an incentive to production, especially in the case of milk powder. Roughly 10 % of all the milk produced every year in the EU is used in milk powder (135 million tonnes of raw milk) and its share of world exports in 2009 was 9.1 % (EC 2011), with positive growth forecasts as a consequence of the ongoing market liberalization in emerging economies. The European Union exports milk powder to developing countries in all regions of the world. Exports are mainly directed to ASEAN, ACP and China, while the major importers are Algeria, Thailand, Indonesia, Vietnam, China and Nigeria.

Table 1

EU Framework Dairy Supply Chain of Milk Powder Products



Arla Foods is a European MNC; according to the definition given by Wilkins, a MNC is an 'enterprise which organizes and manages cross-border business activities through the ownership of plants or subsidiaries, but remains in the headquarters country as it spreads to numerous host nations' (Wilkins 1994: 19). Arla Foods produces, trades and distributes milk powder within the EU, and via joint ventures with local brands it sells in developing countries. With sales offices in 27 countries, 12 production sites globally, export to more than 100 countries and presence of 21 subsidiaries in different countries, Arla Foods has a direct presence in its primary export markets such as the Middle East, Europe, Eastern Europe and China. This extensive network indicates that Arla Foods has developed from a domestic-based co-operative to a global player with international growth. The turnover from milk powder products accounts for approximately 14 % of the total profit and the company has invested in several countries in Asia and the Middle East by supporting construction of milk powder processing plants

and pursuing strong marketing campaigns focusing on health and nutrition. Arla can be classified as an investment-constrained firm: its 'integration with the global economy is constrained by production and investments' (Fagan 1997) in the three European countries where its milk is originated (UK, Denmark and Sweden). Its production and investments are also tightly constrained by the dependence on the EU 'export refunds'. For instance, when the EU decided to partially cut subsidies in 2006 the company was forced to increase milk powder sale prices to keep sustaining its production (Arla Foods 2007b).

Culture, Religion and the 'Adverse Nature' Discourse

As stated on the company's website, Arla promotes its exports of milk powder *'to supply markets in those countries where domestic production cannot cope with local demand'* (Arla Foods, www.arlafoods.com). This statement reflects one of the recurrent arguments made by MNCs, especially those engaged in exporting milk powder. Due to unfavorable climatic parameters, dairy production is impossible in certain countries. As a result, local production cannot grow as much or as quickly as national demand requires, and milk powder imports become necessary. The relationship between globalization of the food sector and natural constraints has been broadly discussed by Morgan *et al.* (2006), who stated that agriculture is inevitably constrained by nature; since the food sector relies on agriculture, nature will also constrain the globalization of the agrifood system. While nature may influence the production of other food commodities, there is no evidence that in the specific case of milk products, adverse climatic factors have prevented the development of a flourishing dairy sector. No studies in literature report on failed attempts to develop dairy sector, or certain countries' inability to increase production of milk exclusively due to unfavorable climatic conditions. On the contrary, several studies in India and other areas in the Tropics, traditionally considered inadequate locations for dairy farming, have shown that elements as selection of cattle suited to individual environments, knowledge in genetic upgrading, fodder technology and mechanization of agriculture have allowed production in a wide range of physical environments and belied the argument that dairy development is economically inefficient in tropical countries (Na Phuket 1999; Zerbini and Wold 1999). The main reason why certain developing countries failed to develop a local dairy industry and had consequently to increase their imports from Europe is not related to nature only. Instead, factors such as the country's development stage, the relative level of market protection, low production volumes accompanied with technological backwardness, long-distance distribution costs and lack of infrastructures (e.g. refrigerated vehicles) penalize the production and make it insufficient to satisfy local/national demand (Chantalakhana 1999).

Approaches emphasizing cultural and historical trajectories of food globalization have long been explored, especially in anthropological studies (Freidberg 2003). Markets are embedded in structures of social and cultural relations (Granovetter 1985) and 'scrutiny of cultural logics is essential to food-related corporations marketing practices' (Applbaum 2004). Nonetheless, few studies have been carried out so far on how transnational corporations influence changes in production and consumption and how 'national and regional cultural influences attempt to mediate the wholesale adoption of homogeneous production, marketing and diets' (Thompson and Tadlock 2000).

Deep analyses of cultural contexts can partly explain the reasons behind failure or success of globalization of certain food commodities (Gupta 2003; Hollander 1995). In the case of milk powder, a study conducted on Kenyan dairy development has shown that the high proportion of raw milk sales directly to consumers and through informal markets with a network of dairy co-operatives, milk bars and farmers, is an indication of strong traditional preferences for raw milk and, inexplicitly, of consumers' unwillingness to pay the extra costs of processing and packaging for milk powder (Staal *et al.* 2008).

While food traditions and cultural habits are certainly important aspects in food production and consumption, it is also true that cultures are not static; they change or disappear over the time, and above all do not fully explain the reasons behind the globalization of a specific food commodity. A striking example is the increased consumption of dairy products, and milk powder in particular, among the Chinese people. Traditionally, milk has never been a part of the Chinese diet; numerous scientific studies have linked a low consumption of dairy products to the Chinese people's intolerance to lactose (USDA 2003). Notwithstanding thousand-year cultural patterns, Chinese consumption of dairy products has seen a 90 % increase in consumer spending in the past five years (Frangos 2012). According to the China Dairy Industry Association, the infant formula milk powder market in China has had an average annual increase of 22.9 % since 2000, and is now the second largest in the world. The market reached $6.8 billion in 2011 (An Lu 2012), with China becoming the biggest consumer in the near future, continuing to attract TNCs looking to increase their market share (Diao Ying 2008). The increasing consumption in dairy products, infant formula in particular, is also steadily increasing in the BRIC countries (Brazil, Russia, India, and China) (Brass 2008). This is a result of mixed factors among which culture has surprisingly little space. Instead, raising incomes and the emergence of a new middle class can be associated with a higher demand for imported products, perceived as safe and of high quality. More health-conscious consumers and diverse child-rearing practices demand for safe and nutritious food, and milk powder is usually portrayed as the perfect response (Greenaway *et al.* 2002; Merrett 2007). Growing urbanization in developing countries is often identified with the demand for commercial and non-traditional products. A busier life style and convenience in buying long-life milk products are also other phenomena that have contributed to the change in level of demand for milk powder (Veeck A. and Veeck G. 2000).

An element that certainly deserves a further investigation in the world literature is the connection between religion, food and globalization. There are two interesting examples showing the importance of religion in food globalization, and how religious belief may represent a limit to imports and consumption of European milk powder. A study on dairy development in Ethiopia has linked an extremely slow growth of dairy sector, and an almost inexistent consumption of milk powder in the country to the fact that Orthodox Christians, who comprise about 40 % of population abstain from consuming dairy and other animal products for about 200 days a year (Veeck A. and Veeck G. 2000). The second case had strong and extremely negative consequences on the sales of all Arla Foods products, and milk powder in particular, in Islamic countries at the beginning of 2006. Satirical cartoons on the Islamic prophet Mohammed published in a national newspaper in Denmark led to a massive boycott of all Arla products in several Islamic countries (Arla Foods 2006a, 2006b, 2006c). The boycott or ‘resistance’ to Danish products, and ‘Western culture’ in general, was quickly organized

around the world through internet, which in this case and many others alike has been used as a means to simultaneously contest and construct globalization.

State and Trade: Indicators of Globalization

The exchange of goods, especially food, and services between people and countries has always existed. However, according to the transformationalist perspective trade globalization is new in nature given the 'extensity and intensity of today's trading relations' (Held *et al.* 1999).

The volume of trade is not the only indicator of globalization of milk powder. Regional and global drivers, such as the EU and WTO are behind production and consumption of milk powder on the global scale. The EU agriculture subsidy regime has sustained ever increasing production of milk by lowering its production price, and generated surplus for exports making the EU milk powder easy to access on the global market (Oxfam 2005). The EU economic support to the trade of milk powder is so important that the partial exhaustion of subsidies to the dairy sector in 2006 generated a strong upswing in prices, and trimmed exports of skimmed milk powder by 55 % (European Commission 2006; FAO 2007). Following the 1994 WTO Uruguay Round agreements and the mounting pressure on the EU to reform the CAP, the reliance on export subsidies has been reduced. However, they were temporarily re-introduced for all dairy products in 2009 as a mechanism to support milk prices after the dramatic fall in world market prices in 2008 (MacInnis 2009). Prices of imported milk powder are still far below those for local products, as it happens in Pakistan (Staal *et al.* 2008). In addition to EU subsidies, developing countries are also harmed by the reduction of tariff protection, as a part of the commitment to WTO and IMF agreements. For instance, imports of EU-subsidized milk powder in Jamaica have soared since the country had to reduce import tariffs and abolish subsidy for local dairy farming, as a condition of structural loans. Thailand's accession to the WTO has also made the country loosen its strict import regulations and increase the quota for skim milk powder imports (Knips 2006; Itsaranuwat and Robinson 2003). Notwithstanding the importance of the EU and WTO in governing global trade, these supranational apparatuses are not sufficiently powerful to absorb or bypass nation states, as the regulation theory and Jessop's hollowed-out state would argue (Itsaranuwat and Robinson 2003; Jessop 1994). Nation states, through their targeted interventions in domestic economies actively govern production and trade, thus encouraging and impeding imports of milk powder. A study conducted by FAO on milk powder imports in six countries in different geographic areas has highlighted how different states have responded to supranational scale issues affecting production, trade and consumption of milk powder (Knips 2006). The study shows that the main reasons for importing milk powder are lack of competitiveness with European products and difficulty to cope with local demand, as well as the lack of institutional commitment towards the dairy sector through national markets and network distribution. The case of Jamaica is significant: nearly the entire literature affirms that milk powder imports are the cause for the collapse of the dairy sector in the country (Knips 2006). However, the sector did not profit from the opportunities arisen with more open markets because of lack of interest by the state to improve capacity and equipments of processing plants, and facilitate the creation of niche markets for local products. High imports of milk powder in Vietnam and the Lao People's Democratic Republic are a consequence of the non-intervention of governments to develop a national market for milk products and develop the local dairy sector by providing affordable land to farmers.

Arla Foods could successfully access the Algerian market, the largest in Africa for milk powder imports, only after the government decision to liberalize the milk powder market, and allow distributors to operate their own import businesses (Arla Foods 2007a; Falvey and Chantalakhana 2001). In Senegal, the state government has accomplished to turn imports of the European milk powder into opportunity to develop a vibrant repacking industry (Gning 2004). In Sri Lanka, the government has been subsidizing milk powder imports as a part of social feeding programmes (Bandara 2002). Another study by FAO on dairy in the Indian subcontinent presents examples where state intervention has aimed at impeding imports of milk powder in order to develop and protect dairy sector from external competition (Staal *et al.* 2008). India for example, imposed strict quantitative restrictions and other non-tariff barriers to foreign products, and supported with success the development of domestic market co-operatives (Sharma and Gulati 2003). Pakistan promoted the local private sector through tax exemptions, special import regimes for inputs, machinery and credit availability (Raja 2002). On the other hand, Nepal's backwardness in dairy production is due to lack of capital and resources among smallholder dairy farmers, competition with the Indian milk and lack of transparent policies for private sector investments (Pradhan 2005).

Contesting and Resisting Globalization

Globalization is resisted and contested by states and people (Burbach *et al.* 1997) and globalization of the EU-produced milk powder has been contested widely (Green 2002; Action Aid 2011). Among the arguments brought forward by NGOs, the most frequently heard claims that dairy sectors in developing countries have been harmed by the EU practice of dumping milk powder on the world market. Because high-quality and heavily subsidized European milk powder is sold on the global market at a price up to 50 % below its production cost, it becomes impossible for developing countries to compete (Oxfam 2005). NGOs therefore demand for a complete abolition of the EU subsidies to help developing countries invest and sustain their own dairy sectors, generating income and employment for the landless and poor. Another claim advanced by NGOs states that imported milk powder is more expensive than locally-produced fresh milk and not easily accessible to people in rural areas. As a result, the inaccessibility of such essential item can have serious consequences on child health and nutrition in resource-poor settings. There is no doubt that in the case of global shortage of milk stocks, prices would grow and hit severely those countries that rely mainly on imports. Nonetheless, the argument that imported milk powder is inaccessible to poor people has been refuted by the example of the Sri Lankan government which has used imports for health and food programs in order to make staple food available to the poorest. Finally, a third claim made by advocacy NGOs is that all the EU subsidies should be abolished in order to boost developing countries' agricultural growth and increase access to the European market (Oxfam 2005). Even though production and trade of EU milk powder enjoys extremely generous subsidies, it would be ‘naïve to think of liberalization as bringing universal benefits to the developing world’ (Gibb 2004). The single abolition of all EU subsidies would not overcome home-made obstacles for development such as lack of good infrastructures, distribution networks, capital and know-how, and compliance high quality standards.

Conclusion

Nature and culture are certainly important to limit or encourage globalization. In order to understand to what extent a commodity is globalized, it is essential to take into account the key role that local and global drivers play in the global commodity chain. Globalization of milk powder is due to a wide range of factors, none to be underestimated. Large MNCs, like Arla Foods, with their flows of investments are crucial for the trade and consumption of food commodities in overseas markets.

The protectionist agricultural policy of the EU is essential to sustain production and push global trade of EU products. The severe economic interventions and most times detrimental structural adjustments imposed by international bodies like the WTO have been decisive to open up the doors of developing countries' markets, and eventually nation-states, which are instrumental in shaping national economies.

Several topics deserve deeper and further analysis, such as to what extent the expansion of food-related TNCs into developing countries involves replacing local diets or the connection between food and religion (Lentz 1999; Beardsworth and Keil 1997). Despite numerous studies on the effects of globalization in developing countries and marginalized economies, the dumping of milk powder and its effects on developing countries should be further investigated. The issue so far has received serious attention only in the literature on resistance of NGOs, with reports most times focusing exclusively on international institutions and unfair international trade agreements, and excluding the wider political/economic framework involved in food production, distribution and consumption. Finally, the argument that the states passively accept globalization and are powerless when their economies are exposed to the world market should be rejected. As argued by the transformationalist theory and demonstrated with several examples in this paper, national governments do often rearrange their power, functions and policy of interventions, in accordance to opportunities, constraints and obligations determined by local and global actors, with the aim to engage actively and effectively with an ever more globalized world.

REFERENCES

ActionAid

2011. *Milking the Poor, How EU Subsidies Hurt Dairy Producers in Bangladesh*. London: ActionAid.

An Lu

2012. Imported Milk Powder to See Higher Prices in China. *Biz China Weekly* 51, June 25. URL: http://news.xinhuanet.com/english/china/2012-06/25/c_131673960.htm.

Applbaum, K.

2004. *The Marketing Era: From Professional Practice to Global Provisioning*. New York – London: Routledge.

Arla Foods Press release

2006a. *Middle East Boycott to Cost Arla DKK 400 Million.* March 2. URL: http://www.arlafoods.com/APPL/HJ/HJ202COM/HJ202D01.NSF/O/5C0F5F1A22 E7A621C1257125003AA995

2006b. *Interim Results Affected by Middle East Boycott*. August 15. URL: http://www.arlafoods.com/APPL/HJ/HJ202COM/HJ202D01.NSF/O/523A03A52A386B08 C12571CA004B8B69

2006c. *Boycott Costs Each Co-operative Member DKK 40,000*. December 14. URL: http://www.arlafoods.com/APPL/HJ/HJ202COM/HJ202D01.NSF/O/3215 C8E423C0D06DC125724400417A5F

2007a. Arla has arrived in Algeria. Arla Foods Press release, February 11. URL: http://www.arlafoods.com/APPL/HJ/HJ202COM/HJ202D01.NSF/O/D3171CEF6DB4707D C125727F0033EFD9

2007b. Export Subsidies Cease with Immediate Effect. Arla Foods Press release, June 15. URL: http://www.arlafoods.com/appl/HJ/HJ202COM/HJ202D01.NSF/O/9F7311406A6 B26D1C12572FB00308E26

Bandara, B. H. W. M. U. S.

2002. The Current Status of Smallholder Dairy Systems in Sri Lanka. In Rangnekar, D., and Thorpe, W. (eds.), *Smallholder Dairy Production and Marketing – Opportunities and Constraints* (pp. 22–32). Proceedings of a South-South workshop held at National Dairy Development Board (NDDB) Anand, India, March 13–16, 2001. Gujarat: NDDB.

Beardsworth, A., and Keil, T.

1997. *Sociology on the Menu: An Invitation to the Study of Food and Society.* London – New York. Routledge.

Brass, L.

2008. *Global Demand, Drought, Rising Prices may Change Dairy Industry Forever.* URL: http://www.knoxnews.com/news/2008/jun/22/global-demand-drought-rising-prices-may-change-dai/.

Burbach, R. *et al.*

1997. *Globalization and its Discontents*. London: Pluto Press.

Chantalakhana, C.

1999. Research Priorities for Smallholder Dairying. In Falvey, L., and Chantalakhana, C. (eds.), *Smallholder Milk Production in the Tropics*. Nairobi: International Livestock Research Institute.

Diao Ying

2008. Parents Buy up Milk Powder. *China Daily* March 28. URL: http://www.china.org.cn/business/2008-03/28/content_13750786.htm

European Commission.

2006. *Milk and Milk Products in the European Union*. URL: ec.europa.eu/agriculture/publi/fact/milk/2007_en.pdf

2011. *Agriculture in the EU, Statistical and Economic Information, Report 2010*. Luxembourg: Publications Office of the European Union.

Fagan, R.

1997. Local Food / Global Food: Globalization and Local Restructuring. In Lee, R., and Wills, J. (eds.), *Geographies of Economies* (pp. 197–208). London: Edward Arnold.

Falvey, L., and Chantalakhana, C.

2001. Supporting Smallholder Dairying in Asia. *Asia-Pacific Development Journal* 8(2): 89–99.

FAO

2007. *Food Outlook, Global Market Analysis.* November 2007. URL: http://www.fao.org/docrep/010/ah876e/ah876e09.htm

Floros, C.
2009. Long Memory in Milk Prices: Evidence from EU-15. *International Journal of Applied Economics* 6(2): 10–20.

Frangos A.
2012. China Grows Its Dairy Farms with a Global Cattle Drive. *Wall Street Journal* April 2012. URL: http://online.wsj.com/article/SB10001424052702303863404577281302732745814.html

Freidberg, S. E.
2003. Culture, Conventions and Colonial Constructs of Rurality in South-North Horticultural trades. *Journal of Rural Studies* 19(1): 97–109.

Gereffi, G., and Korzeniewicz, M.
1994. *Commodity Chains and Global Capitalism*. Westport, CT: Praeger Publishers.

Gibb, R.
2004. Developing Countries and Market Access: The Bitter-Sweet Taste of the European Union's Sugar Policy in Southern Africa. *The Journal of Modern African Studies* 42: 563–588.

Gning, M. C.
2004. Trade, Political Influence and Liberalization: Situating the Poor in the Political Economy of Livestock in Senegal. *PPLPI Working Paper No*. 8. Pro-Poor Livestock Policy Initiative (PPLPI).

Granovetter, M.
1985. Economic Action and Social Structure: the Problem of Embeddedness. *American Journal of Sociology* 91(3): 481–510.

Green, D.
2002. The Rough Guide to Globalization. *CAFOD*. URL: http://www.cafod.org.uk/policy_and_analysis/ policy_papers/ rough _guides/

Greenaway, A., Larner W., and Le Heron R.
2002. Reconstituting Motherhood: Milk Powder Marketing in Sri Lanka. *Environment and Planning D: Society and Space* 20(6): 719–736.

Gupta, A.
2003. *Global Movements of Crops since the 'Age of Discovery' and Changing Culinary Cultures'.* Bangkok: Princess Maha Chaki Sirindhorn Anthropology Centre.

Heffernan, W., and Constance, D.
1994. Transnational Corporations and the Globalization of the Food System. In Bonanno, A. *et al.* (eds.), *From Columbus to ConAgra: The Globalization of Agriculture and Food* (pp. 29–51). Lawrence: University Press of Kansas.

Held, D. *et al.*
1999. *Global Transformations, Politics, Economics and Culture*. Stanford University Press.

Hollander, G. M.
1995. Agroenvironmental Conflict and World Food System Theory: Sugarcane in the Everglades Agricultural Area. *Journal of Rural Studies* 11(3): 309–318.

Itsaranuwat, P, and Robinson, R. K.
2003. Production and Use of Dairy products in Thailand. *International Journal of Dairy Technology* 56(1): 6–11.

Jessop, B.
1994. Post-Fordism and the State. In Amin, A. (ed.), *Post-Fordism: A Reader* (chapter 8). Oxford. Blackwell.

Knips, V.
2006. Developing Countries and the Global Dairy Sector. *PPLPI Working Paper* No. 31. Pro-Poor Livestock Policy Initiative (PPLPI).

Lentz, C. (ed.)
1999. *Changing Food Habits: Case Studies from Africa, South America and Europe.* Amsterdam. Harwood Academic.

MacInnis, L.
2009. Australia and Allies Upset over EU Export Subsidies. *Reuters,* January 28. URL: http://uk.reuters.com/article/2009/01/28/uk-trade-wto-subsidies-sb-idUKTRE50R21R20090128

Merrett, N.
2007. Nestle Focuses on China Milk Powder Potential. *Dairy Reporter*, July 2007. URL: http://www.dairyreporter.com/Industry-markets/Nestle-focuses-on-Chinese-milk-powder-potential.

Morgan, K., Marsden, T., and Murdoch, J.
2006. *Worlds of Food: Place, Power, and Provenance in the Food Chain.* Oxford: Oxford University Press.

Na Phuket, S. R.
1999. Prerequisites for Successful Smallholder Dairy Projects. In Falvey, L., and Chantalakhana, C. (eds.), *Smallholder Milk Production in the Tropics*. Nairobi, Kenya: International Livestock Research Institute.

Oxfam
2005. *Truth or Consequences, Why the EU and the USA Must Reform their Subsidies, or Pay the Price.* Oxford: Oxfam Briefing Paper.

Phillips, L.
2006. Food and Globalization. *Annual Review of Anthropology* 35: 37–57.

Pradhan, S. M.
2005. Dairy processing and farming in Nepal. In Pariyar, D., Suttie, J., and Reynolds, S. G. (eds.), *Proceedings of the Workshop on Fodder Oats, Fodder Technology Packages and Small Farm Income Generation, Kathmandu, Nepal 8–11 March, 2005*. Nepal: Nepal Agricultural Research Council.

Raja, R. H.
2002. Pakistan Smallholder Dairy Production and Marketing. In Rangnekar, D., and Thorpe, W. (eds), *Smallholder Dairy Production and Marketing – Opportunities and Constraints.* Proceedings of a South–South workshop held at NDDB, Anand, India, March 13–16, 2001. NDDB (National Dairy Development Board). Nairobi: ILRI (International Livestock Research Institute).

Sharma, V., and Gulati, A.
2003. Trade Liberalization, Market Reforms and Competitiveness of Indian Dairy Sector. *MTID Discussion Paper* No. 61, *Markets, Trade and Institutions Division*. Washington, D.C.: IFPRI.

Staal, S. J., Nin Pratt, A., and Jabbar, M.
2008. *Dairy Development for the Resource Poor*. 3 parts. FAO/PPLPI Working Paper 44. Rome (Italy): FAO

Thompson, S. J., and Cowan, T. J.
2000. Globalizing Agro-Food Systems in Asia: Introduction. *World Development* 28(3): 401–407.

Tsing, A.
2000. The Global Situation. *Cultural Anthropology* 15(3): 327–360.

USDA – Foreign Agricultural Service GAIN Report
2003. *China, Peoples Republic of: Dairy and Products*. China's Dairy industry overview. AGR Number: CH3814, 7 May.

Veeck, A., and Veeck, G.
2000. Consumer Segmentation and Changing Food Purchase Patterns in Nanjing, PRC. *World Development* 28(3): 457–471.

Wilkins, M.
1994. Comparative Hosts. *Business History* 36(1): 18–50.

Zerbini, E., and Wold, A. G.
1999. Feeding Dairy Cows for Draught. In Falvey, L., and Chantalakhana, C. (ed.), *Smallholder Milk Production in the Tropics*. Nairobi: International Livestock Research Institute.