

## [Food safety for whom? Corporate wealth versus people's health](#) [Download PDF](#) [Boîte à outils](#)

# Boîte à outils

Auteur: GRAIN

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*School children in the US were served 200,000 kilos of meat contaminated with a deadly antibiotic-resistant bacteria before the nation's second largest meat packer issued a recall in 2009. A year earlier, six babies died and 300,000 others got horribly sick with kidney problems in China when one of the country's top dairy producers knowingly allowed an industrial chemical into its milk supply. Across the world, people are getting sick and dying from food like never before. Governments and corporations are responding with all kinds of rules and regulations, but few have anything to do with public health. The trade agreements, laws and private standards used to impose their version of "food safety" only entrench corporate food systems that make us sick and devastate those that truly feed and care for people, those based on biodiversity, traditional knowledge, and local markets. People are resisting, whether its movements against GMOs in Benin and "mad cow" beef in Korea or campaigns to defend street hawkers in India and raw milk in Colombia. The question of who defines "food safety" is increasingly central to the struggle over the future of food and agriculture.*

[Read the synopsis of this report here.](#)

### The growing global menace

Food should be a source of health, not harm. But food can maim, cripple, and kill. The leading cause of food poisoning in the United Kingdom today is *Campylobacter*, a tiny bacterium, rife throughout the country's chicken supply, that causes in humans diarrhoea, fever, abdominal pain and cramping, and in some cases chronic, even life-threatening, conditions. People get it from touching raw poultry or eating undercooked birds. Some 85% of the chicken population in the UK may be infected. In the United States, the top culprits these days are *Norovirus*, mostly transmitted from dirty hands, and *Salmonella*, contracted from eating food with faeces on it. *Norovirus* will give you acute vomiting and diarrhoea, while *Salmonella* causes vomiting, fever and cramps.

*Graph: Data compiled by GRAIN from government and UN sources, 2008-2010 (except Australia=2005)*

Among the more notorious food safety incidents in recent years was the melamine scandal in China in 2008. Six babies died and 300,000 others got horribly sick with kidney problems when the industrial chemical melamine got into the commercial milk distribution circuit. There was also a dioxin scandal in Germany in January 2011, where the German authorities shut down more than 4,000 farms after it was discovered that a German company had sold 200,000 tonnes of dioxin-tainted animal feed, which had subsequently entered the food chain. Dioxins are cancer-causing poisons formed in the burning of waste and other industrial processes. [1](#)

How bad is the problem globally? Believe it or not, there are no global statistics or tracking mechanisms on food safety incidents worldwide; reliable data on their frequency and impact are grossly inadequate. Nevertheless, the available data do show that food poisoning is quite common in most countries (see *Graph 1*). [2](#) According to the Singaporean authorities, who run a pretty tight food hygiene system, roughly 1.5 billion people worldwide are affected by food-borne disease outbreaks each year, resulting in 3 million deaths. [3](#)

The price of this food safety mess is huge. The UK puts the annual costs to the British economy at US\$1.92 billion, which its Food Standards Agency bluntly calls "too much". Australia's annual bill is US\$1.23 billion. The World Health Organisation says that the annual cost to Vietnam is US\$210 million. In the US, the Centers for Disease Control (CDC) has long given the figure of US\$35 million per year, but a new study released by the Pew Charitable Trusts at Georgetown University in 2010 puts the figure astronomically higher, at US\$152 billion. [4](#)

### What makes food unsafe?

What constitutes safe or unsafe food is a controversial question. A range of things can make food unsafe: bad practices (poor hygiene, animal abuse, reliance on antibiotics and pesticides), unproven or risky technologies (genetic modification, nanotechnology, irradiation, cloning), deliberate contamination (such as tampering), or just poor supervision. One thing is clear though: the industrial food system is - in and of itself - the biggest source of food safety problems, because of its intensive practices, its sheer size, and the level of concentration and power that it has accumulated.

A small farm that produces some bad meat will have a relatively small impact. Networks of small and mid-sized farms producing food for regional consumption spread risk widely, diluting it. A global system built around geographically concentrated factory-sized farms does the opposite: it accumulates and magnifies risk, subjecting particular areas to industrial-style pollution and consumers globally to poisoned products (see *Box: Superbugs and megafarms*).

Both large- and small-scale systems are capable of producing tainted foods, but the potential impact is inherently different. There is simply bigger risk attached to bigger scale. In addition, the corporate food industry - as opposed to small farms and food operators - is highly integrated. This also generates higher risk, because it relies on combining and handling foods through a range of manufacturing, processing and distribution activities. Of course, people can get food poisoning anywhere, in school canteens or in their own homes. But the industrial food system has itself more and more become the problem, given the type of practices and the issue of scale and concentration (see *Box: Food safety in the fast food nation*).

## Food safety in the Fast Food Nation

Does US-style production represent the future of global food? Possibly. Certainly, elite Western opinion shapers and policymakers – the editors of *The Economist*, the directors of the Bill and Melinda Gates Foundation, certain key elements in the Obama administration – think it should. So it is worthwhile to consider how the US food safety regime has responded to the dilemmas of scale in recent years.

In an industrialised, highly consolidated food system geared to maximising profit by selling vast volumes of cheap food, pressure exists at every phase of the production chain to cut costs by cutting corners, including safe food practices. Moreover, the very scale of modern food production means that seemingly isolated lapses can become quite grave, subjecting millions of people to danger based on the actions of a single production facility.

The case of Peanut Corp. of America demonstrates the perils of scale. Until recently, the company ran two plants: one in Texas, one in Georgia. These two facilities processed 2.5% of the peanuts produced in the United States, and sold "peanut paste" to the entire US processed food industry. By late 2007, the company had evidently given up trying to maintain hygienic conditions at its facilities. In late 2008, people started coming down with salmonella from a dizzying array of products containing Peanut Corp.'s paste, prompting the FDA to initiate a "voluntary recall". By the time all was said and done, the recall affected no fewer than 1,800 supermarket brands. The tainted products killed nine people and officially sickened around 700 – half of them children – in 46 US states. The Centers for Disease Control (CDC) reckons that for every reported case of salmonella, another 38 cases go unreported – so the real number of people made ill from the output of just two facilities may be up to 26,000. In the wake of the fiasco, US journalists showed that the FDA had "outsourced" inspection of the Georgia plant to state authorities, and then ignored the state inspectors' findings of atrocious hygiene practices. Moreover, it turned out that the company's own testing had found salmonella in huge batches of peanut paste, which it proceeded to send out anyway.<sup>[j](#)</sup>

In another incident in 2009, a company called Beef Packers, owned by transnational agribusiness giant Cargill, had to declare two "voluntary recalls" involving over 500 tonnes of ground beef infected with antibiotic-resistant salmonella.<sup>[jj](#)</sup> The USDA announced that consuming the suspect meat could cause "treatment failure"<sup>[jjj](#)</sup> – that is, death – because of its ability to withstand drugs. At least 39 people in 11 states reported getting sick, and more than 200,000 thousand kilos of the tainted meat was served to school children through the National School Lunch program.<sup>[jv](#)</sup>

The official response to such incidents has been minimal. In January 2011, a hotly debated piece of legislation called the Food Safety Modernisation Act was signed into being. The intention of the original Bill was to update and inject some resources into the US food safety system. It basically called for more inspections, gave the government authority to mandate food recalls, and provided some traceability to an otherwise fairly unregulated industrial sector. Who would oppose such a move? The fat cats from the food industry, you might think – the Cargills and the Tysons, who don't want to be controlled. But you would be wrong. The new rules would hardly affect them.

According to an analysis by the US NGO Food & Water Watch, nothing in the Act would have prevented the Peanut Company of America from sending out its tainted paste. Worse, the rules would not even touch the meat sector, the biggest source of food-borne illness in the United States.<sup>[jv](#)</sup> The main opponents of the bill throughout the debate were small family farm activists who, because of the way the bill was framed, saw themselves falling under these controls when they are not the problem. So instead of instigating real food safety reform in a country where one out of four people gets sick and 5,000 people die from eating contaminated food each year, the law might do next to nothing.

In the absence of stricter public action around food safety, corporations have moved to fill the void -- sometimes to tragicomic effect. A case in point: in the mid-2000s, a company called Beef Products Inc. had an ingenious idea: it would buy slaughterhouse scraps – which are extremely likely to be infected by bacterial pathogens – from large-scale beef processors at cut-rate prices. It would purée those parts into a paste, which it would then mix with ammonia to kill bacterial pathogens. It would sell the product back to the beef industry as a cheap filler for ground beef, with the added feature that the ammonia in the paste would sterilise the ground beef it was mixed with. The beef industry had found a "solution" to the problem of bacterial pathogens in ground beef! The product, known in the industry as "pink slime" for its distinctive look, could be found in 70% of hamburgers consumed in the United States by the end of the decade. The USDA's Food Safety Inspection Service, which oversees meat safety, applauded -- it recognised "pink slime" as safe without requiring testing, on the grounds that it had been sterilised by ammonia. But in 2009, a *New York Times* exposé found that pink slime in fact tended to be ridden with pathogens -- and was actively adding to the pathogen load of the ground beef it was mixed with. Beef Products Inc. responded by merely upping the ammonia dose for its mix. To this day, the product remains widely used in the vast US ground beef market, including at fast-food chains nationwide.<sup>[jv](#)</sup>

If the official US response to highly visible manifestations of food poisoning, like Salmonella-tainted meat and peanut butter, has been underwhelming and industry-friendly, then the response to low-level exposure to pathogens that cause cumulative damage has been virtually non-existent. The first kind causes spectacular, impossible-to-ignore symptoms like vomiting and diarrhoea; the second entails subtle, easy-to-ignore ones that can cause significant long-term damage. Corporate-led food safety regimes like the one in the United States have to at least gesture at the first kind; the second kind, not so much.

It turns out that the USDA's Food Safety Inspection Service (FSIS), which oversees the safety of the US meat supply, routinely endorses meat that it knows to be tainted with residues of "veterinary drugs, pesticides, and heavy metals", the USDA Inspector General revealed in a 2010 report.<sup>[jvii](#)</sup> The damning report was met with silence by the US media – probably because small amounts of substances like heavy metals don't cause dramatic immediate symptoms, but rather hard-to-trace, slow-to-develop conditions like cancer. As the report puts it, the "effects of residue are generally chronic as opposed to acute, which means that they will occur over time, as an individual consumes small traces of the residue". In its report, the USDA Inspector General's office expressed confidence that the FSIS would redouble efforts to keep heavy metals and antibiotic traces out of the meat supply going forward. Yet it had expressed the same thing, after exposing the same problem, in its report two years earlier.<sup>[jviii](#)</sup>

Another example is the US Food and Drug Administration's refusal to act on mounting evidence that Bisphenol A, an industrial compound found in many food containers, is an endocrine disrupter. If the food safety regime for spectacular pathogens could be described as porous, that for the second, more subtle, kind barely exists at all.

*Written with contributions from Tom Philpott, senior writer on food and agriculture for Grist magazine.*

<sup>[j](#)</sup> "Peanut Corp. Shipped Product After Finding Salmonella", *Bloomberg News*, 27 January 2009, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aeXwqIMnIYWJQ>; and "Peanut Plant Had History of Health Lapses", *New York Times*, 26 January 2009, [http://www.nytimes.com/2009/01/27/health/27peanuts.html?\\_r=1&ref=health](http://www.nytimes.com/2009/01/27/health/27peanuts.html?_r=1&ref=health)

<sup>[jj](#)</sup> "Antibiotic-resistant salmonella, school lunches, and Cargill's dodgy California beef plant", *Grist*, 10 December 2010, <http://www.grist.org/article/2009-12-10-meat-wagon-cargill-salmonella/>

<sup>[jjj](#)</sup> "California Firm Recalls Ground Beef Products Due to Possible Salmonella Contamination", USDA Food Safety and Inspection Service, 9 December 2009, [http://www.fsis.usda.gov/News\\_&\\_Events/Recall\\_065\\_2009\\_Release/index.asp](http://www.fsis.usda.gov/News_&_Events/Recall_065_2009_Release/index.asp)

<sup>[jv](#)</sup> "Why a recall of tainted beef didn't include school lunches", *USA Today*, 2 December 2009, [http://www.usatoday.com/news/education/2009-12-01-beef-recall-lunches\\_N.htm](http://www.usatoday.com/news/education/2009-12-01-beef-recall-lunches_N.htm)

<sup>[jv](#)</sup> Responsibility for food safety in the US is divided between two agencies. The US Department of Agriculture is responsible for meat, poultry and egg products, which accounts for 20% of the US food supply. The Food and Drug Administration, within the US Department of Health, takes care of the rest. The Food Safety Modernisation Act addresses only the work of the FDA. The top sources of food poisoning in the United States are, however, poultry, beef and leafy vegetables (in that order, 2007). See: "Can Congress make a food-safety omelette without breaking the wrong eggs?", *Grist*, 25 October 2010.

<sup>[jvii](#)</sup> "Safety of Beef Processing Method Is Questioned", *New York Times*, 30 December 2009, [http://www.nytimes.com/2009/12/31/us/31meat.html?\\_r=1&partner=rss&emc=rss&pagewanted=all](http://www.nytimes.com/2009/12/31/us/31meat.html?_r=1&partner=rss&emc=rss&pagewanted=all); See also, "Lessons on the food system from the ammonia-hamburger fiasco", *Grist*, 5 January 2010, <http://www.grist.org/article/2010-01-05-cheap-food-ammonia-burgers>

<sup>[jviii](#)</sup> "FSIS National Residue Program for Cattle", Office of the Inspector General, US Department of Agriculture, <http://www.usda.gov/oig/webdocs/24601-08-KC.pdf>

## This is "food safety"?

Government and industry action on food safety gives little indication that they recognise any fundamental problem with industrial food production. Rarely do their regulations or standards hinder corporate practices in any significant way. On the contrary, they tend to reinforce the power of large industry while undermining, or even criminalising, small-scale production and local food cultures. Colombia, for instance, is in the process of implementing legislation to prevent the sale of raw milk in urban areas. Well over two million farmers and vendors depend for their livelihoods on these sales of raw milk, and around 20 million Colombians, most of them poor, depend on raw milk as an affordable and essential source of nutrition, easily made safe by boiling it at home. Hard pressed to justify its moves on public health grounds, the government says that the legislation is part of its commitment to the WTO, and that it will help to "modernise" the dairy sector, making it better able to compete with imports when a looming free trade agreement with the EU kicks in.<sup>5</sup>

These days, in Colombia and elsewhere, "food safety" policy has little to do with public health or consumers. It has become a battleground among contesting interests, the site of power struggles for control over food and agriculture, with decisions being increasingly taken far from producers and consumers, in the obscure world of trade negotiations and multilateral agencies, where politics and commerce, not science and public health, are what drive things.

Consider the case of bovine spongiform encephalopathy (BSE), the fatal brain-wasting condition popularly known as mad cow disease. People get the human strain of it by eating the meat of cows that have been fed diseased animals as a cheap source of protein – a practice common in industrial feedlots since the 1970s. The US and Canada lost Japan, Korea and several other major export markets for beef when BSE was found in their herds in 2003, and have had a tough time regaining those markets because risks remain from their industries' feeding practices.<sup>6</sup> Indeed, in March 2011, a new case of BSE was identified in a Canadian cow.<sup>7</sup> But through constant pressure, particularly at the trade negotiating table, both countries have secured some concessions to allow certain parts of the cow, or the meat of younger animals, to cross borders freely. Both countries also went to the Organisation for Animal Health (OIE) in Paris, which has a similar role to Codex Alimentarius Commission in Rome but for the animal kingdom, to get their beef declared generally safe for consumption. Where does that leave Japan? Unmoved. It says that its standards are higher than those of the OIE or the US, and have to be given priority.

And then there's the case of ractopamine, a growth promoter added to pig feed. China and the European Union, which together produce 70% of the world's pork, say that it is not safe for humans and have banned its use in meat production. The same is true for more than 150 other countries. In the United States, however, home to Eli Lilly, the pharmaceutical giant that produces ractopamine by way of its subsidiary Elanco, the drug is fed every day to pigs, cows, and turkeys and Washington fights tooth and nail to defend the interests of US corporations and prevent countries from rejecting US pork for containing residues of the stuff. The US and Eli Lilly are working hard to try to convince Codex to declare it safe for human consumption.

Beijing, for its part, has so far refused to budge. But that doesn't mean that Chinese consumers are getting ractopamine-free pork. The same government fighting off ractopamine-laced US pork, is aggressively pushing, in the name of "food safety", a consolidation and modernisation of the country's pig production based on the US factory farm model. China's two largest, vertically-integrated pork producers, Yurun and Shineway, both of whom have been heavily funded by the US bank Goldman Sachs, were implicated in recent food safety incidents involving ractopamine and clenbuterol (another banned drug added to pig feed for the same purposes).<sup>8</sup> In March 2011, Chinese consumers were shocked when a CCTV television report uncovered how ractopamine and clenbuterol are widely used in the farms supplying Shineway in Henan Province.<sup>9</sup> The report found that Shineway was actually offering farmers higher prices for pigs fed ractopamine.<sup>10</sup>

## Superbugs and megafarms

"Superbug" is a term used to describe bacteria that have acquired the ability to resist commonly used antibiotics. One of the most notorious is Methicillin-resistant *Staphylococcus aureus* (MRSA), which emerged in the 1960s in the UK and has since spread around the world, with deadly consequences. In the US alone, 17,000 people died from MRSA infection in 2005.<sup>i</sup>

MRSA is typically associated with hospitals, where the superbug has a tendency to get into open wounds and cause difficult-to-heal infections. But in recent years these superbugs have found another place to thrive: industrial pig farms.<sup>ii</sup>

In 2004, Dutch researchers identified a new strain of MRSA, later labelled ST398 or "pig MRSA", which they found in people in close contact with Dutch pig farms. Within two years ST398 became a leading source of human MRSA infection in the country, accounting for more than one in five human MRSA cases. Studies showed that these cases were closely related with pigs, and further research revealed that ST398 was running rampant in pigs on Dutch farms. A 2007 survey found ST398 in 39% of pigs and 81% of local piggeries.<sup>iii</sup>

New surveys of farms outside of the Netherlands have turned up similar numbers.<sup>iv</sup> The first ever EU-wide survey for MRSA on pig farms in 2009, using a method that "largely underestimates MRSA prevalence", found ST398 in more than two-thirds of EU member states. Spain and Germany had the highest incidence, with over 40% of pig holdings testing positive for MRSA.<sup>v</sup> Not surprisingly, given the European pig industry's heavy exports overseas, ST398 is turning up in pigs beyond Europe's borders, too. A study of pigs in the Canadian province of Ontario, for instance, found ST398 in a quarter of local pigs, as well as in one-fifth of the pig farmers tested.<sup>vi</sup> Only one study has been conducted in the US so far: it was a pilot study of two large hog operations in the midwest that found ST398 in 49% of the pigs and 45% of the workers.<sup>vii</sup>

MRSA has the potential to evolve in very dangerous ways in its new home on pig farms. The density of animals in factory farms allows the bacteria to evolve rapidly and in diverse ways. Also, the use of antibiotics on factory farms is ubiquitous. Pigs are routinely fed antibiotics in their feed and water, often as a preventive measure against disease outbreaks and even simply to increase growth rates.

In the US, 80% of all antibiotics consumed annually are consumed by livestock.<sup>viii</sup> In China, the figure is nearly 50%.<sup>ix</sup> Even in the EU, where the non-therapeutic use of antibiotics for animals is banned and where the types of antibiotics allowed for livestock are controlled, the use of antibiotics for animals still exceeds their use for humans. In Germany, for example, three times as many antibiotics are given to animals as to humans.<sup>x</sup> Such widespread use of antibiotics in factory farms speeds up the development of antibiotic resistance among bacteria. Unlike other strains of MRSA, ST398 can already withstand tetracyclines, a group of antibiotics that is given heavily and regularly to pigs in factory farms. The medical profession is getting increasingly worried about what this will mean for the future of human health care, as antibiotics may become useless. The WHO now calls it "the greatest threat to human health".<sup>xi</sup>

The good news, however, is that ST398 still hasn't shown much virulence in humans, nor is it easily transmitted between people. Not yet, at least.

In 2010, a 14-year-old girl in France, recovering in hospital from pneumonia, was infected with a superbug. She soon began having serious respiratory problems, her lungs started bleeding, and within six days she died. The superbug that killed her was a clone of MRSA ST398 that is known to circulate in humans. The most alarming issue for the French doctors studying the case was that this was the first incident on record in which this strain of MRSA had acquired the capacity to produce a lethal toxin in humans, something that certain other strains of superbugs are able to do. They reasoned that if the clone of MRSA ST398 could do it, then surely "pig MRSA" has the same capacity.<sup>xii</sup>

It is not much of a stretch to imagine a situation where "pig MRSA" passes from a pig to a farm worker carrying another MRSA strain with virulence to humans, mixes with that strain, and acquires its capacity for virulence. The new virulent strain of ST398 could then easily pass back into the pigs, where it would rapidly amplify and spread. ST398 is transmitted to humans not only through contact with live pigs: the bacteria is also present on meat sold in supermarkets and can be carried over large distances by the insects that pass in and out of farms.<sup>xiii</sup>

The EU is slowly starting to take action to defend against such a possibility. It has implemented several measures to restrict the use of antibiotics in livestock production and, at national and at EU level, some surveillance of farms is being carried out. In 2009, a panel of the European Food Safety Authority recommended that the EU move towards "systematic surveillance and monitoring of MRSA in intensively reared animals". South Korea, for its part, banned the use of seven antibiotics in animal feed in 2008, and implemented a national programme to reduce the use of antibiotics on livestock farms. But such restrictions on the use of antibiotics for livestock hardly exist in the US, although proposed legislation restricting the non-therapeutic use of certain antibiotics in feed is currently before Congress. As for surveillance, the US National Antimicrobial Resistance Monitoring System doesn't even test for MRSA.<sup>xiv</sup> Outside the industrialised countries, where the meat industry is expanding most rapidly, there is an almost complete absence of

controls on the use of antibiotics in agriculture and of surveillance for pathogens such as MRSA.

Enhancing surveillance and cutting back on the use of antibiotics in factory farms are important measures. But they aren't enough to deal effectively with the threat posed by MRSA and the myriad other pathogens that thrive in factory farms. A staggering 61% of all human pathogens, and 75% of new human pathogens, are transmitted by animals, with many of the most dangerous – such as bird flu, BSE, swine flu and the Nypah virus – having emerged from intensive livestock farms. [xv](#) It is the way that animals are farmed that is fundamentally at issue. [xvi](#)

[j](#) E. Klein, D.L. Smith, R. Laxminarayan, "Hospitalizations and Deaths Caused by Methicillin-Resistant *Staphylococcus aureus*, United States, 1999–2005", *Emerg. Infect. Dis.* Vol. 13, No. 12, 2007, pp. 1840–46.

[jj](#) Ed Yong, "MRSA in pigs and pig farmers", 23 January 2009, [http://scienceblogs.com/notrocketscience/2009/01/mrsa\\_in\\_pigs\\_and\\_pig\\_farmers.php](http://scienceblogs.com/notrocketscience/2009/01/mrsa_in_pigs_and_pig_farmers.php)

[jjj](#) X.W. Huijsdens *et al.*, "Community-acquired MRSA and pig-farming", *Ann. Clin. Microbiol. Antimicrob.*, Vol. 5, No. 26, 2006; A.J. de Neeling *et al.*, "High prevalence of methicillin resistant *Staphylococcus aureus* in pigs", *Vet. Microbiol.*, Vol. 122, No. 3–4, 21 June 2007, pp. 366–72; I. van Loo *et al.*, "Emergence of methicillin-resistant *Staphylococcus aureus* of animal origin in humans", *Emerg. Infect. Dis.*, Vol. 13, No. 12, 2007, pp. 1834–9.

[iv](#) Danish Integrated Antimicrobial Resistance Monitoring and Research Programme, [http://www.danmap.org/pdfFiles/Danmap\\_2009.pdf](http://www.danmap.org/pdfFiles/Danmap_2009.pdf)

[v](#) "Pig MRSA widespread in Europe", *Ecologist*, 25 November 2009; Broens *et al.*, "Diagnostic validity of pooling environmental samples to determine the status of sow-herds for the presence of methicillin-resistant *Staphylococcus aureus* (MRSA)", Poster presented at the ASM–ESCMID Conference on Methicillin-resistant *Staphylococci*, in *Animals: Veterinary and Public Health Implications*, London, 2009.

[vi](#) "Guelph Researchers Find MRSA in Pigs", University of Guelph, 8 November 2007, [http://www.uoguelph.ca/news/2007/11/post\\_75.html](http://www.uoguelph.ca/news/2007/11/post_75.html).

[vii](#) T.C. Smith, M.J. Male, A.L. Harper, J.S. Kroeger, G.P. Tinkler *et al.*, (2009) "Methicillin-Resistant *Staphylococcus aureus* (MRSA) Strain ST398 Is Present in Midwestern US Swine and Swine Workers", *PLoS ONE*, Vol. 4, No. 1, 2009.

[viii](#) See "New FDA Numbers Reveal Food Animals Consume Lion's Share of Antibiotics", Center for a Liveable Future, Johns Hopkins University, 23 December 2010. <http://www.livablefutureblog.com/2010/12/new-fda-numbers-reveal-food-animals-consume-lion%E2%80%99s-share-of-antibiotics>  
See also Margaret Mellon, Charles Benbrook, Karen Lutz Benbrook, "Hogging it!: Estimates of antimicrobial abuse in Livestock", Union of Concerned Scientists, 2001, <http://www.ucsusa.org>

[ix](#) "Half of China's antibiotics fed to animals: expert", Xinhua, 26 November 2010.

[x](#) Kristen Kerksiek, "Farming out Antibiotics: The fast track to the post-antibiotic era", Infection Research, Germany, 22 March 2010, [http://www.infection-research.de/perspectives/detail/pressrelease/farming\\_out\\_antibiotics\\_the\\_fast\\_track\\_to\\_the\\_post\\_antibiotic\\_era/](http://www.infection-research.de/perspectives/detail/pressrelease/farming_out_antibiotics_the_fast_track_to_the_post_antibiotic_era/)

[xi](#) AAP, "Greatest threat to human health", *Sydney Morning Herald*, 16 February 2011, <http://www.smh.com.au/lifestyle/wellbeing/greatest-threat-to-human-health-20110216-1awai.html>

[xii](#) Frédéric Laurent, "Les souches de *staphylococcus aureus* ST398 sont-elles virulents", *Bull. Acad. Vét. France*, Vol. 163, No. 3, May 2010.

[xiii](#) See Aqeel Ahmad *et al.*, "Insects in confined swine operations carry a large antibiotic resistant and potentially virulent enterococcal community", *BMC Microbiology*, 2011, <http://www.biomedcentral.com/1471-2180/11/23/abstract>

[xiv](#) Maryn McKenna, "Alarm over 'pig MRSA' – but not in the US", *Wired*, 30 October 2010, <http://www.wired.com/wiredscience/2010/10/alarm-over-pig-mrsa-%E2%80%94-but-not-in-the-us/>

[xv](#) John McDermott and Delia Grace, "Agriculture-Associated diseases: Adapting Agriculture to improve Human Health", ILRI, February 2011.

[xvi](#) GRAIN, "[Germ warfare: Livestock disease, public health and the military-industrial complex](#)", *Seedling*, January 2008

## Food safety and global trade: Europe and the US impose their standards

As the two examples above help to show, trade agreements have become the core mechanism to expand and enforce food safety standards around the world. Since the 1980s and the Uruguay Round of GATT negotiations, which gave rise to the World Trade Organisation (WTO), agricultural markets have been profoundly liberalised, with tariffs and quotas coming down, particularly in developing countries. [11](#) This has led to a boom in global food trade, with few countries free to impose tariffs or take similar measures to regulate the flow of imports and exports any more. As a result, governments and corporations have turned to other measures to manipulate market access and control. In agriculture, food safety is the major method.

In essence, as quantitative restrictions no longer exist (as a tool to open and close markets), qualitative ones have been invented to take their place. The WTO has played a direct role in this shift. (See *Annex: Who does what?*) But today, it is mainly through so-called free trade agreements, negotiated at the bilateral or regional level, that governments recalibrate the rules of food safety. Too often, the food safety rules that emerge from trade negotiations become mechanisms to force open markets, or backdoor ways to limit market access; they do little to protect public health, serving only corporate growth imperatives and profit margins.

Take the EU, which has become expert at defending some of the most ridiculous standards. In the late 1990s, the EU banned fishery products from India because of unacceptable sanitation risks supposedly found there. But the EU's definition of "sanitary" can be absurd. It demanded, for instance, that the floors and ceilings of fish landing units be washed with potable water [12](#) – this in a country where a sizeable fraction of the population lacks access to potable water. For Indian fishers and processors, the point of such rules is not to protect the end consumer; it is to discourage access to the EU market for Indian companies, by imposing conditions that only EU companies can comply with.

Experiences in Africa bear this out. According to the United Nations, Tanzanian fishermen dependent on exports to the EU lost 80% of their income under a ban similar to the one placed on India. [13](#) Uganda, in the same situation, lost almost US\$40 million. Did the Europeans stop eating fish? No. In fact, while these bans were conveniently in place, EU firms, such as the Spanish group Pescanova, aggressively expanded their fishing activities in African waters to serve the lucrative European market by buying up quotas and licenses. [14](#) Today, with Brussels pursuing a flurry of new generation trade deals, things are getting worse (see *Box: EU–India FTA*).

Consider peanuts. The EU has long posed problems to the rest of the world with its excessively high standards related to aflatoxins. Aflatoxins are mycotoxins produced from certain kinds of fungus or mould. In humans they can attack or even shut down the liver, as well as cause cancer. While adults have a high tolerance to aflatoxin poisoning, children do not, and can be exposed to it through grains, nuts, fruit, or cheese. With the growing prominence of food safety as a concern for EU authorities, Brussels has set tolerance limits for aflatoxins grossly out of proportion to the risks. [15](#) This has hit Iranian pistachio producers, Gabonese peanut exporters, Bolivian Brazil nut harvesters and Filipino coconut farmers. The World Bank calculates that the exaggerated aflatoxin tolerance level imposed by the EU costs African countries US\$670 million a year in export losses. [16](#) For many observers, it is hard to square those losses against the benefit of preventing the potential death of 0.7 people in a population of 500 million per year. [17](#) In fact, there are cases where the overzealous aflatoxin restrictions have only led to bidding wars to drive peanut prices down – for the benefit of European importers, of course. [18](#)

The United States is slightly different in its demands. To begin with, the US is generally seen to have lower standards than Europe with regard to pesticide and chemical residues. In fact, Brussels seems constantly to be engaged in some spat with Washington DC. For instance, US poultry destined for export is routinely dunked in chlorine just before it is shipped. This is to kill the bacteria that have accumulated in the birds' carcasses through the quintessentially American "factory farming" production process. [19](#) The Europeans do not allow the import of chickens bathed in chlorine, so no US poultry enters the EU market. The US also carries out fewer physical checks on its own food imports. It examines only 2% of all incoming fish shipments, for instance, even though some 80% of fish consumed in the US is imported. This laxity exemplifies a US food safety system which has long relied on self-regulation by the industry, particularly through Hazard Analysis and Critical Control Points (HACCP) checks, rather than public oversight and accountability. [20](#)

At the trade negotiating table, the US government is well known – and feared – for pushing lax standards on genetically modified foods. Indeed, a diplomatic cable uncovered by Wikileaks shows that the George W. Bush administration pressured the French government to ease its stance against GMOs. In a 2007 cable, the US ambassador to France went so far as to suggest that "we calibrate a target retaliation list that causes some pain across the EU since this [acceptance of GMOs] is a collective responsibility, but that also focuses in part on the worst culprits". He added: "The list should be measured rather than vicious and must be sustainable over the long term, since we should not expect an early victory".<sup>21</sup>

Such "diplomacy" is for the clear and direct benefit of Monsanto, DuPont and other agricultural biotechnology corporations that do not like foreign countries banning GM seeds or foods, much less requiring labels that inform consumers of the presence of GM ingredients. US firms, especially the members of the Biotechnology Industry Organisation, religiously use FTA talks by Washington officials as a platform to secure market access for GMOs through aggressive regulatory reforms.<sup>22</sup> Besides GMOs, US trade policy is also seen as destabilising other countries' sovereignty over food safety and health matters, insofar as Washington regularly demands relaxation of rules against the import of US farm products that others deem risky, such as beef (BSE, hormones), veal (hormones), chicken (chlorine) and pork (swine flu).

The US and the EU have much in common, though (*see Box: How EU and US use free trade deals to twist other people's taste buds*). Both are attached to the process of inspecting and accrediting specific farms, fisheries or manufacturers as matching or surpassing US or EU standards for exporting food to them (*see Box: "Falling through the GAP"*). While this might seem extraordinarily protective of EU or US consumers, it also invites corporate takeover and concentration. For example, when the EU lifted a six-year import ban on Chinese poultry in 2008, in reality it gave the nod to only a handful of meat factories in Shandong Province certified to export to the EU, one of which had been taken over just two weeks before by Tyson, the world's second-largest meat company.<sup>23</sup> Both the US and the EU also create bilateral committees with their trade partners to continue the conversation on "harmonisation", in order to develop further not only mutually agreed food safety practices but also standards, including new international standards. The EU is using these mechanisms to pursue its agenda of introducing "animal welfare" into the pool of world food trade norms.

Free Trade Agreements (FTAs) are used to fight food safety battles not only by the US and the EU, of course. Countries like India or Australia or Brazil are not just on the receiving end of US or EU pressures. They have their own sanitary standards, agendas and needs. India, for instance, through a gradually maturing FTA strategy, is fighting an uphill battle to increase foreign inward investment and yet still control agricultural markets. During US President Obama's visit to India in November 2010, Indian Agriculture Minister Sharad Pawar made it clear that the United States can produce all the scientific studies it wants, and they will be respectfully reviewed, but India will not import US dairy products that offend domestic religious sensitivities.<sup>24</sup> The Japanese government, in its zeal to sign FTAs, especially with Australia and the US, also has a difficult tightrope to walk on the issue of GMOs, as it needs to respect its own electorate's preference for GM-free foods. Southern African states such as Namibia have raised serious questions about how to be proactive in pushing their own "development" strategies and needs in trade negotiations with the EU, where Sanitary and Phytosanitary Standards (SPS) requirements – which are very costly to comply with – can undermine local benefits. The difference is that these countries are not out to change others' food safety standards. The US and the EU most clearly are.

### **EU-India FTA: Bad news for small fishers and fishmongers**

An excellent report from Focus on the Global South in collaboration with Intercultural Resources shows how the EU's upcoming free trade agreement with India will affect small-scale fisherfolk and fish vendors, particularly women, in the subcontinent. The findings can be summarised thus:<sup>j</sup>

#### **What the EU will get from the EU-India FTA**

- \* Tariff cuts (for EU fish going to India).
- \* Traceability requirements (fish going to the EU must comply with EU certification – not the FAO's – against illegal fishing), thereby cutting out competition from Indian operators.
- \* The right to sell Indian fish in the Indian market (probably through supermarkets).
- \* General investment protections (the right for EU firms to go to India and set up shop).
- \* National treatment (though it is still to be seen whether India will exempt access to its Exclusive Economic Zone, as Chile did in its EU FTA, or to its coastal lands, both of which are crucial for local fishers).

#### **What India will get**

- \* Slightly greater market access (EU tariffs not being high to begin with) but at the cost of very high food safety standards (barriers to entry), which is of no use to small fishers or traders.

<sup>j</sup> See "Economic liberalisation and gender dynamics in traditional small-scale fisheries: Reflections on the proposed EU-India free trade agreement", Focus on the Global South Occasional Paper 8, New Delhi, August 2010, <http://www.focusweb.org/content/occasional-paper-8-economic-liberalisation-and-gender-dynamics-traditional-small-scale-fishe>

### **New standards open new markets**

Food safety, strictly speaking, is a matter of preventing illness. But the boundaries of what we bundle under this concept can be stretched to include broader issues of food quality. Halal, GM-free, cruelty-free and organic foods are all examples of growing markets that are generally handled, for practical purposes, by the current food safety regime (standards, audits, certification, traceability and dispute mechanisms). Similarly, at the policy level these considerations are regulated by food safety authorities, and in trade talks they form part of sanitary and phytosanitary chapters or agreements.<sup>25</sup> Many of these broader food quality concerns are not necessarily about product standards, but processes. Therefore they tend to get defined and controlled through schemes rather than standards per se. And if care is not taken, they can be quite arbitrarily defined to suit the needs of transnationals like Cargill or Carrefour, rather than the needs of local communities or of public health generally.

While demands for GM labelling and organic foods are relatively more integrated into food safety or food marketing regimes, a shake-out is needed soon with regard to halal foods and animal welfare issues.<sup>26</sup>

The halal food market, currently valued at around US\$600 billion, or 16% of the global food retail market, is expanding fast, and will continue to grow in the coming years.<sup>27</sup> But what constitutes halal food is a highly contested issue. There is no global standard, and within any given country there may be different or even competing standards.<sup>28</sup> At the international level, the Organisation of the Islamic Conference is the forum that needs to come to terms with this. In 2008, Malaysia and Turkey agreed to develop jointly some harmonised or common standards, for adoption by the OIC at large, but this is unlikely to pass uncontested (*see Box: Religion as a racket*).

### **Religion as a racket<sup>j</sup>**

For some, the very idea of formalising norms and standards for halal food production reeks of a racket to make money out of people's spiritual sensitivities. In a Muslim country like Algeria, why would there be any need to legislate on what constitutes halal food when the food produced in Algeria is halal? The push to define, and communicate to consumers, official halal food is really aimed at denting the pockets of Muslim consumers in Christian and other non-Muslim countries.

Even in the Philippines, if you listen to media reports of what the political class is up to, you could hardly be blamed for understanding that the momentum to develop domestic halal standards and guarantees is primarily aimed at facilitating the export of Philippine mangoes and other such foods to Saudi Arabia and neighbouring Gulf states. Any benefit for the Philippines' Muslim population would seem secondary. If Islamic states and organisations now push for harmonisation of halal food standards, it is to serve purely commercial interests.

*Isla Délice poster, France ("Proudly Halal")*

<sup>j</sup> This commentary is based on an interview with Meriem Louanchi of AREA-ED in Algeria.

Animal welfare is another issue altogether. It seems to be a predominantly European regulatory concern, but this alone means that it is fast becoming a responsibility for the rest of the world. By 2013, the EU will implement new standards on animal slaughter, including stunning, and these new norms will have to be followed by anyone planning to export meat to the EU. As already noted, the EU increasingly includes animal welfare in its bilateral trade

agreements, making explicit demands on partners to work with the EU to draw up international standards in this area. So far, Chile, Korea, Colombia, Peru, and Central America have accepted the EU's demands, particularly working with the Europeans to draw up global legal standards. [29](#)

Internationally, the OIE is expected to adopt, very soon, some recommended set of principles for animal welfare in international trade. [30](#) But who defines these principles, and who enforces them as international norms? There are no international legal standards for animal welfare. At OIE, the debate is divided along North-South lines. The major complaint from the South is that OIE's proposed animal welfare framework is based on private standards. Developing countries already have had experience with private standards on animal health and expect more of this if the task of drawing up animal welfare norms falls to non-public entities. [31](#)

In these emerging fields, the question truly is: whose norms are we talking about -- and for whose benefit?

#### **Recap: How EU and US use free trade deals to twist other people's taste buds**

- \* Get GMOs accepted (US).
- \* West space for GM policy-making outside the United Nations system (US).
- \* Impose high standards to keep competition down (EU).
- \* Require market openings for banned or unwanted foods (US).
- \* Create bilateral committees to continue shaping policy, away from public scrutiny (both).
- \* Impose farm-based accreditation systems, creating vulnerability to corporate takeover (both).
- \* Require bilateral cooperation on international standard setting, including the development of new standards (both).

#### **Food safety, now on offer at Walmart**

It would be wrong to take diplomatic or legislative wrangling as evidence that governments are getting serious about food safety. While they spare no expense in ensuring that regulations do not harm export markets for their food companies, when it comes to managing the risks generated by the industrial food system, deregulation and hands-off attitudes are very much the order of the day. Governments may define and administer the legal framework of food safety and similar standards, but the action and the agenda are very much left in the hands of the private sector. One could even say that food safety is hardly a matter of public policy at all any more, as so much revolves around private standards, voluntary controls and obscure industry bodies, all under the thumb of the largest food corporations.

Consider beef. The US government insists that US beef is the safest in the world, but buyers know better. "If you look at food recalls over the past two years, there's been a significant increase", says Frank Yianna, vice-president for food safety at Walmart, one of the country's largest beef retailers. The US government's response to this alarming rise in meat recalls: no new measures. Walmart's response: a set of its own new standards to which its US beef suppliers will have to conform by June 2012. Walmart says that its standards will provide its customers with an "additional layer" of protection beyond the tests for *Escherichia coli* and other pathogens that the meat industry already conducts. "This is really a response to long-term trends in beef recalls", says Yianna. [32](#)

#### *Supermarkets: Setting their own standards*

US beef regulations, and even the regulations that the Japanese government imposes on US beef imports, aren't good enough for Japan's food service sector. Although Tokyo lifted, in 2006, its ban on US cattle aged 20 months or younger, Zensho, Japan's largest food service company, wants US beef suppliers to provide it with special safeguards, particularly concerning BSE. In December 2010, Zensho announced that it had struck a deal with JBS, a Brazilian company that is one of the largest beef producers in the US, to provide Zensho with beef from cattle certified to have been raised without feed containing "BSE-responsible material". Under the terms of the agreement, JBS must segregate "Zensho cattle" during the transportation, finishing and processing stages. JBS must also ensure that "Zensho cattle" are processed only at the beginning of a production shift and only after the equipment and facilities have been specially sanitised. Zensho inspectors will be physically present to monitor the process, and the final product will be marketed in Japan as "Zensho SFC beef". [33](#)

Along the same lines, French supermarket behemoth Carrefour announced in November 2010 that it will start labelling 300 of its own-brand, animal-based products sold in its stores as "Fed GM-free" ("*Nourri sans OGM*").

The customers of these companies may appreciate such measures. But what about everyone else? The only accountability in such a system is to shareholders, not the public; private standards are all about the bottom line. To give one example of how this can play out, poultry companies in South Africa regularly take frozen chicken that is past its best-before date from supermarkets in wealthy neighbourhoods, recycle it by thawing, washing and injecting it with flavouring, and then sell it to shops in black townships. The poultry companies deny that the practice is racist, and claim that they are actually following standards higher than those required by the Department of Health. [34](#)

#### **Walmart in Central America**

Traditional markets are disappearing fast in Central America. Already at least one in four quetzales spent by Guatemalans on food is spent in a Walmart-owned supermarket, while Costa Ricans spend 1 in 3 colones there. And yet, nearly all the horticultural products sourced from the region by Walmart's Central American operations come from its own subsidiary, Hortifruti, which sources from a mere 1,800 growers. In Honduras, Hortifruti accepts supplies from 395 horticultural growers out of a total of 18,000 in the country, with most of the produce coming from a core of 45 preferred producers, who have at least 4 ha under drip irrigation and their own trucks --all trained by Bayer in "good agricultural practices". [j](#) Moreover, half of the produce sold by Walmart stores in Central America is imported, much of it from big farms in Chile. [j](#)

[j](#) For more on Hortifruti, see Madelon Meijer, Ivan Rodriguez, Mark Lundy and Jon Hellin, "Supermarkets and small farmers: the case of Fresh Vegetables in Honduras", in E.B. McCullough *et al.*, *The Transformation of Agri-Food Systems*, Earthscan, 2008; Alvarado and Charmel, "The Rapid Rise of Supermarkets in Costa Rica", 2002; Berdegué *et al.*, "The Rise of Supermarkets in Central America", 2003.

[jj](#) Thomas Reardon, Spencer Hensen and Julio Berdegué, "'Proactive fast-tracking' diffusion of supermarkets in developing countries: Implications for market institutions and trade", *Journal of Economic Geography*, Vol. 7, No. 4, 2007.

#### **Small farmers at the losing end**

More and more of the food that people buy is delivered to them through the supply chains of transnational supermarkets and food service corporations (see *Box Supermarket tsunami*). These companies now wield enormous power in deciding where food is produced and where it is sold, and they increasingly want to dictate exactly how it is produced and handled. Food standards have become a central way for them to organise global markets.

#### **Supermarket tsunami**

Thomas Reardon and fellow economists Spencer Henson and Julio Berdegué have tracked the rise of supermarkets in the South. They find that supermarket development moved along very slowly outside industrialised countries between the 1950s and the 1980s. During those years, supermarkets remained confined to small pockets of wealthy consumers in large cities, who could afford the higher prices. But things changed "abruptly and spectacularly" in the 1990s.

Reardon and his colleagues divide this supermarket take-off in the South into three waves.

The first wave occurred in the early 1990s in much of South America, East Asia (outside China and Japan), northern Central Europe and South Africa. In

these countries, supermarkets quickly moved from a 10% share of the overall retail food market to a 50-60% share. In Brazil the current figure is 70%, and in Argentina Carrefour alone has 25%.

The second wave began in the mid-1990s, in Central America, Mexico, much of South-east Asia and southern Central Europe. In these countries, the supermarkets' share of overall food retail moved from 5-10% in 1990 to 30-50% by the early 2000s. Today, one out of three pesos spent on food in Mexico goes to Walmart.

The third wave started in the late 1990s and early 2000s in some countries in Africa, such as Kenya, in Latin America, such as Peru and Bolivia, and in Asia, such as Vietnam, China, India and Russia. This third wave is now in full swing, with multinationals pouring into these countries alongside domestic competitors. Even in Africa, supermarket expansion is taking off, led by African-based companies like Nakumatt and Shoprite. TNCs are now also moving in. In December 2010, Walmart put forward an offer to buy 51% of South African retailer Massmart, one of the largest distributors of consumer goods in the region, with some 290 outlets across 13 countries in Africa. The deal is being hotly contested by South African unions and still needs to be approved by the country's regulatory authorities.

Overall, supermarket expansion is happening five times as fast in developing countries as it did in the US or the UK. What accounts for this sudden take-off? Reardon and his colleagues say the main factor was the liberalisation of foreign investment policy during the 1990s, which opened the door to investment from large foreign retailers. They also point to the "proactive fast-tracking" strategy of supermarkets to create the "enabling conditions" for their expansion, mainly by setting up direct, standardised procurement systems, which can keep costs down. They say that municipal policies favouring supermarkets also played an important role.<sup>35</sup>

<sup>35</sup> Thomas Reardon, Spencer Hensen and Julio Berdegué, "Proactive fast-tracking" diffusion of supermarkets in developing countries: Implications for market institutions and trade", *Journal of Economic Geography*, Vol. 7, No. 4, 2007.

Supermarket standards for fresh fruit and vegetables reveal much about who wins and loses within the corporate regulatory apparatus. Fresh fruit and vegetables are extremely important to retailers because they bring shoppers into their stores on a more regular basis, keeping overall sales up. Supermarkets have tried to capture this market by offering low costs and quality assurances. Their main strategy in this regard has been to source from "preferred suppliers" that can provide large volumes from low-cost production areas, assure traceability of the produce all the way back to the farm, and ensure that it was grown according to the standards stipulated by the supermarkets.

Today, big food retailers such as Tesco, Walmart, Carrefour and Lotte are focusing on expanding their operations in the South, where markets are growing. India, China, Brazil and Indonesia are among the prime targets. In these and other developing countries, however, produce markets are still dominated by informal supply chains, from peasants and small co-operatives to local wholesalers and street vendors. So the supermarkets impose their own procurement models, using a common set of standards as a basis for restructuring. They also have to deal with the competition from local and regional elites, such as the Matahari chain in Indonesia, or Big C in Thailand.

The basic picture of these global supply chains is arranged as follows. At the top stand the big retailers – the word "big" here being an understatement. Walmart, the globe's largest food retailer, rings up annual food sales of US\$405 billion – more than the annual GDP of Austria, Norway, Saudi Arabia, Iran, Greece, Venezuela, Denmark, or Argentina. The four largest global food retailers – Walmart, Carrefour, Metro, and Tesco – have combined annual food sales of US\$705 billion. That's more turnover than the annual output of Turkey or Switzerland. Their sheer size and buying power gives them tremendous leverage over the entire global food system: they are able to dictate terms to all their suppliers, from farmers to food processors.<sup>35</sup>

They work together, with input from the biggest food companies and agribusiness firms, to develop common standards for foods (from farming to packaging) that their suppliers have to follow. An example is GlobalGAP. In the context of a largely *laissez-faire* – or at least industry-friendly – global food safety policy regime, these standards are emerging as *the* shadow food safety structure for much of the world (See Annex: *Who does what?*). And to emphasise a key point, these gigantic companies are accountable to their shareholders – and to a small extent their customers – but to no one else.

Below the supermarket giants are the suppliers. These are large companies that source and ship from around the globe, and increasingly from their own farms or from contract production schemes that they manage. Then there are the producers. More and more, production is centralised in "hubs" or "zones" where production of specific fruits or vegetables is cheap and organised according to the standards dictated by the supermarkets. Some well-known examples are grapes in Chile, green beans in Kenya, and apples in China.

Much has been said about how countries can position themselves to benefit from this global supermarket expansion. To gain access to supermarket shelves, local governments and donors devote huge resources to trying to build production capacity in poor countries. Supermarket growth is even portrayed as an "opportunity" for small growers. The reality is quite different (see Box: *Walmart in Central America*).

First, foreign retailers moving into southern countries compete directly with local and traditional markets. As they expand, they capture space from small vendors, traders and farmers' markets, which are served primarily by small-scale growers and vendors. Developing countries are not merely sites for export production to Western supermarket supply chains. They are increasingly becoming the consumers of these markets as well (see Box: *The supermarket tsunami*).

Second, supermarkets have access to global procurement networks through which they can access cheap produce and force down prices. If local oranges are too costly for its Indonesian stores, Carrefour can bring in oranges from its suppliers in Pakistan or China. A whopping 70-80% of the fruits sold in supermarkets in Indonesia are imported, mostly from regional supermarket supply hubs in Thailand and China.<sup>36</sup>

Third, the suppliers that serve supermarkets, and the standards that they are obliged to follow, leave no room for traditional farming (see Box: *Falling through the GAP*). The only window of opportunity for a small-scale grower who wants to sell to supermarkets is tightly controlled contract production, where the company dictates everything, from the seeds to the pesticides used. Such contract farming schemes erode biodiversity and local food systems and cultures. But even this option is usually not possible, as compliance is generally too costly and impractical for small-scale growers. So more and more of the actual farming is being carried out and managed by the "preferred suppliers" themselves, with heavy involvement from the supermarkets (see Box: *Cold shoulder for Ugandan farmers*).

Of course, many domestic supermarkets and supply chains – from ShopRite of South Africa to DMA of Brazil – are implementing this model as well. And while some will surely grow and become regional giants, they are easy prey for buyout by Northern cousins.

US-based Fresh Del Monte Produce is one such "preferred supplier" of fresh fruit and vegetables to global supermarket chains. According to the company's CEO, Mohammad Abu-Ghazaleh, "Retailers today are more inclined to work with someone who can assure them that his product has come from his own farm, has been packed under his own packing plant, with shipping under his control and delivering it to his customer, also under his control". His company produces 39% of its bananas, 84% of its pineapples, and 81% of its melons on its own plantations, mainly in Central America, and runs a vertically integrated poultry business in Jordan that supplies retailers and transnational corporations (TNCs) in the Middle East. In 2009, 13% of its total sales were to Walmart.

Peru is described as a success in penetrating supermarket supply channels. It was prodded into the business under Washington's so-called "war on drugs" 20 years ago. Since then, exports of asparagus to the EU and North America have taken off. But this has dramatically transformed local agriculture. Asparagus used to be produced by small-scale farmers, but today they account for less than 10% of the country's production, which is now dominated by large-scale export-oriented firms. Just two companies – Del Monte and Green Giant, both of the US – today control a quarter of Peru's asparagus exports.<sup>37</sup>

In 2000, Ghana tried a similar programme, but with a focus on the production of pineapples for European supermarkets. In the first four years, exports of pineapples to Europe surged, from around 20,000 tonnes to around 50,000 tonnes, and much of it was supplied by small Ghanaian farmers and mid-sized traders.<sup>38</sup> But in 2005, Ghana's market crumbled. Without warning, European retailers, lobbied by Del Monte, unilaterally decided to begin purchasing only the MD2 variety of pineapple, and no longer to accept the Sweet Cayenne variety produced in Ghana. They also began requiring the EurepGAP certification from their suppliers, especially on pesticide residues. The sudden shift was too much for Ghana's pineapple farmers and exporters. Both EurepGAP certification and the MD2 variety, due to the high costs of plantlets and the extra logistics required, were beyond their reach. They were forced to shut down, and TNCs moved in. In 2004 there were 65 pineapple exporters in Ghana. Today, just two companies control nearly 100% of Ghana's pineapple exports: Dole of the US, which sources mainly from its own farms, and HPW Services of Switzerland, which sources from three large growers.<sup>39</sup>

In Vietnam, small fish breeders and businesses trying to ride the wave of popularity of Tra –or catfish, as it is now being marketed (as a cheap family food) in Europe and North America – have had to jump a number of hurdles. In the US, a massive campaign run by domestic catfish producers, who cannot compete with the low priced Tra, tries to paint Vietnamese fish as "filthy". In Europe, the World Wide Fund for Nature (WWF) put Tra on its "red list" of products that conscientious consumers should avoid. The boom in intensive Tra farming for these lucrative new export markets has indeed attracted the worst of practices and people. But to be fair, a number of businesses have been trying to meet the global standards. The problem is, precisely, these standards. One Tra fish farmer, Nguyen Huu Nghia, bitterly called it a "labyrinth".<sup>40</sup> He and other small fish breeders were told first to follow the Safe Quality Food (SQF) standards, run by a private certification outfit in the US. Then they were told to follow something called SQF-1000. Then it was recommended that they adopt GlobalGAP standards. And now, in order to shake off the bad name given to Vietnamese fish by WWF, they are told to comply with the WWF's criteria through the Aquatic Stewardship Council (ASC). If all Tra producers followed, say, the GlobalGAP and the ASC standards for a squeaky clean product that is safe for international consumption, it would cost the Vietnamese no less than US\$22 million per year!<sup>41</sup> Apart from the bewildering array of private standards that no one can really vouch for, who can afford this and what is the point? (See Box: "Falling through the GAP".)

Bigger players will pay the extra costs for the GlobalGAP "stamp" because, for them, privileged access to the expanding empires that supermarkets are building is worth the price. As one Kenyan exporter puts it, "I tend to be particularly positive about this [certification]. It might sound a bit cynical, but it's an entry barrier to the business. The more standards there are, the less competition we are going to have".<sup>42</sup> Tough luck for Kenyan small outgrowers, more than half of whom were dropped immediately once supermarkets began demanding adherence to their GAP norms.<sup>43</sup>

It needs to be emphasised that it is not just in exports that this concentration is happening. As supermarkets take over larger shares of the food markets in the South, the distinction between export markets and domestic markets is disappearing, with the same standards being applied for both. This leaves small farmers, and the biodiversity they maintain, with a dwindling space in which to survive.

### Falling through the GAP

In 2002, the US closed its border to imports of cantaloupe melons from Mexico after several *Salmonella* outbreaks were traced back to Mexican fruits.<sup>i</sup> A year later, under an agreement worked out between US and Mexican authorities, the ban was lifted for cantaloupes that showed compliance with the Mexican government's new "Programme of federal recognition requirements for production, harvest, packaging, processing and transport of cantaloupe". But with the enforcement of this GAP programme, modelled on standards set by US retailers, few Mexican growers could re-enter the market.

Under the GAP requirements, farms have to have portable toilets for use during planting and harvest. A survey of small growers in one of the important cantaloupe producing states found that 94% did not have toilet facilities in the vicinity; they were most often more than half an hour away. The GAP norms also require periodic analyses of water that take into account microbial counts. But 88% of the surveyed growers said they used water from rivers, where it is difficult to maintain water quality.

In the end, only two large farms in the state where the survey was carried out regained market access to the US. Now, like other Mexican growers, they have to comply with extensive GAP standards, such as regular soil and water tests, keeping registers on land use, fencing plantation areas and using water from a well that is tested every month during production for microbial contamination. They have also invested in osmosis plants to guarantee water quality, and have toilet facilities on-farm with running water, wash stations and soap and paper. Plus, they have to pay a third-party certification, which averages US\$3,000 per farm.

The US imposes no such obligations on its own cantaloupe growers. But in any case, the effectiveness of the Mexican programme is questionable. From late 2006 to early 2007, the US FDA issued six recalls of cantaloupes, four of which involved Mexican melons grown on FDA-approved farms.<sup>ii</sup> At that point, only nine growers in Mexico had managed to get approval to export to the US.<sup>iii</sup>

Similar stories can be found around the world. One recent FAO/WHO paper points to data showing that the true cost per farm of small-farmer certification for GlobalGAP is over €1,200, leading the authors to conclude, "The 'bottom line' from the small farmer perspective is that GlobalGAP does not make economic sense".<sup>iv</sup>

<sup>i</sup> This case from Mexico is found in Clare Narrod, Devesh Roy, Belem Avendano and Julius Okello, "Impact of International Food Safety Standards on Smallholders: Evidence from Three Cases", in E.B. McCullough *et al.*, *The Transformation of Agri-Food Systems*, Earthscan, 2008.

<sup>ii</sup> Julie Schmit, "US food imports outrun FDA resources", *USA Today*, 18 March 2007, [http://www.usatoday.com/money/industries/food/2007-03-18-food-safety-usat\\_N.htm](http://www.usatoday.com/money/industries/food/2007-03-18-food-safety-usat_N.htm)

<sup>iii</sup> "Timco issues voluntary cantaloupe recall", *The Packer*, 20 November 2006, <http://thepacker.com/Timco-issues-voluntary-cantaloupe-recall/Article.aspx?oid=268606&fid=PACKER-TOP-STORIES>

<sup>iv</sup> Spencer Henson and John Humphrey, "The Impacts of Private Food Safety Standards on the Food Chain and on Public Standard-Setting Processes", paper prepared for FAO/WHO, May 2009.

### Privatised Food Safety in the Global South

In China, where supermarkets are expanding at a furious pace, these trends are biting hard. The major supermarket chains, both foreign and domestic, are working hand-in-glove with suppliers and local governments to develop farms to supply fruit and vegetables. As part of a drive to improve food safety and integrate its 700 million small-scale farmers into "high value food chains" with "scientific methods of farming", the Chinese government has been pursuing the establishment of fruit- and vegetable-growing bases in partnership with the private sector. In each of these designated production zones, local authorities negotiate deals with private companies whereby the company comes in, leases an area of land from the farmers currently occupying it, or acquires their land use rights, and then sets up large-scale production, hiring the displaced farmers as labourers or in contract production arrangements.

Hong Kong Yue Teng Investment is one of these companies. Over the last few years it has emerged as a major vegetable producer in China's Guizhou Province, where it has two large-scale production bases that supply vegetables to Walmart's stores in southern China. Walmart's preferred fruit supplier is the Xingyeyuan Company, which has several thousand hectares of orchards north of Dalian City. For eggs, Walmart deals with Dalian Hongjia, a massive factory farm complex with 470,000 laying hens and an annual production capacity of 7,400 tons of fresh eggs.

Walmart has 56 such "direct purchase bases" with companies in 18 provinces and cities in China, covering a total of at least 33,000 ha of farmland. It calls its network the "Direct Farm Program" and claims that, by 2011, these arrangements will bring benefits to one million farmers. Of course, Walmart does not actually deal directly with farmers, but with companies that hire and manage farmers for their large-scale operations.

Walmart's moves in agriculture are part of its overall strategy to source more directly and reduce costs in its supply chain. The companies supplying Walmart have to ensure that production happens strictly in accordance with Walmart's demands, and the company runs training programmes to show the companies and the farmers working for them exactly how they want farming done. "As a multinational corporation with a strong sense of local social responsibility, we have helped farmers to better adapt to market conditions, encouraged them to choose standardised and scaled production methods, and provided instructions on ways to preserve the environment in production activities via sustainable agriculture programs", says Ed Chan, president and CEO of Walmart China.<sup>44</sup>

Chongqing Cikang Vegetables and Fruits, which manages Walmart's Direct Farm operation in Chongqing Province, says that its production process is fully monitored by third party inspectors approved by Walmart, from variety selection to harvesting and storage. The same goes for companies in China supplying Carrefour, which runs its own direct farm program, called the Carrefour Quality Line, or national retailer Wumart, which has a direct farm programme in the Shandong Province.<sup>45</sup>

What do these companies mean by "sustainable agriculture"? Well, for Walmart, at least with its Direct Farm Programs in India and Honduras, it has handed that task over to one of the world's largest pesticide companies and GMO seed producers, Bayer CropScience of Germany (see Box: "Bye-bye biodiversity"). In Honduras, Bayer, through its Food Chain Partnership programme, trains 700 growers who supply Walmart on "responsible agricultural practices". In India, the company operates 80 of these Food Chain Partnership projects with Walmart and other retailers, covering an area of 28,000 ha.

Participating farmers must use a Bayer "passport" to keep track of their practices. [46](#)

Bayer says that it has 250 Food Chain Partnership projects around the world. In Colombia it works with Carrefour, while in Mexico it directly partners with the national certification authority, Calidad Suprema, a "Civil Association without lucrative ends" that helps the Mexican government with "strengthening the competitiveness of the countryside" and the "promotion of the trademark *México Calidad Suprema*", which is owned by the government. [47](#) Bayer trains *Calidad Suprema* officials on good agricultural practices, using its BAYGAP tool, and the two sides conduct joint farm visits. [48](#) Not to be outdone, Syngenta, the world's second-largest pesticide company, has a food chain programme of its own, called "Fresh Trace", that it is implementing in Thailand, and both companies are active members of GlobalGAP.

With the pesticide industry so intimately involved in developing and implementing supermarket standards, it's hardly surprising that pesticide contamination remains prevalent on supermarket produce. Tests done by Greenpeace in China in 2008 and 2009 on popular vegetables and fruit found far more serious pesticide pollution on those collected from Walmart and the other major supermarkets than on those collected at wet markets. [49](#)

### Bye-bye biodiversity

One of Bayer's Food Chain Partnership projects in India is with Indian supermarket major ABRL for the supply of uniformly sized okra. A Bayer promotional video recounts the experience of one farmer who supposedly participated in the Bayer project:

We used to grow our own food here in small fields. Now, on an area of approximately 2.4 ha, I grow okra. We, the farmers, learn from the professionals about sustainable crop growing in line with good agricultural practice.... This includes the controlled and environmentally friendly use of state-of-the-art crop protection products from Bayer CropSciences' research.... This knowledge is good, not only for my wallet but also for the environment.... I used to grow only local okra varieties. But Food Chain Partnership experts from Bayer CropScience India convinced me to grow the variety Sonal in my fields. This new variety of okra from Nunhems is precisely suited to the regional conditions and the rising standards of domestic food retailers. Every stage of growing and every crop protection measure is recorded in detail in my Bayer passport.... It serves as proof to the food retailers that I have grown my vegetables correctly. [j](#)

*Carrefour representatives visit a farm in India.*

[j](http://www.youtube.com/watch?v=oVRMmYTqsCE) See the video at <http://www.youtube.com/watch?v=oVRMmYTqsCE>

### People's resistance to corporate food safety

In recent years we have seen some amazing social struggles and solid initiatives emerge to counteract this corporate hijack of food safety policy-making and praxis. Some of them have been triggered by the restructuring of international food trade, such as the resistance to US beef waged by citizens' movements in Taiwan, Australia, Japan or South Korea. Others have been reactions to domestic nightmares, such as the social activism in China following the melamine milk tragedy. Occasionally, all countries get rocked by short-lived food poisoning outbreaks. But we are increasingly seeing much more structural and political questioning of the industrial food system, of capitalist development and of who decides what, because people's health and livelihoods are being directly affected.

The struggles around mad-cow beef and GMOs are good examples. Many times, social movements have organised to keep them out of their countries not so much because of the health or food safety implications per se, but because of the broader social and economic directions that these symbols of industrial agriculture, corporate power or Western imperialism represent. The Korean people's resistance to US beef has grown into an expression of profound distrust toward Korea's system of representational democracy, including the state's relationship with the US, not an irrational fear of prions. [50](#) In Australia, the campaign has been more about keeping Australian food within Australian hands, a concern that many peoples across the world share with regard to governance and control of their own country's food supplies. As to anti-GMO struggles, they are as diverse as the anti-US beef campaigns, but they have also been about profound issues of democracy, the survival of local cultures and food systems against the onslaught of Western "solutions", about keeping seeds and knowledge alive in communities' hands and challenging whole models of development.

On a deeper level, people are organising to overcome the health, environmental and social costs of the expanding industrial food system. Movements and campaigns for organic food or to "go local", in other words to buy food produced nearby and boycott products shipped from far away, have been spreading in many countries. The alarming rise in obesity, type 2 diabetes, cancers and other diseases that are directly linked to unhealthy eating is mobilising many people to change their lifestyles and work with others to promote more wholesome food and farming options. Specific campaigns and actions to stop the demonisation and destruction of local alternatives to an over-sanitised food system, such as street hawkers, raw foods and backyard or traditionally raised livestock, are also growing in popularity. The global peasant/smallholder rights group La Vía Campesina has mounted a campaign to establish the concept of food sovereignty: the "right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems". [51](#) Following the lead of Vía Campesina, several townships in the US state of Maine have recently declared their "food independence". [52](#) Food safety and broader aspects of food quality are clearly central to these developments.

Certainly, the defence and development of peasant agriculture and non-industrial food systems, particularly in industrial countries, require their own approaches to food safety. This doesn't mean working outside the mainstream in the sense of breaking laws or creating dangerous underground economies, although some corporate groups try to vilify and eradicate raw foods and other tradition-conscious food cultures. [53](#) The challenge is to ensure that different knowledge systems and criteria can exist outside the monopolistic grip of supermarkets and their supply chains. As French farmer Guy Basitanelli of La Confédération Paysanne, puts it:

For small businesses that have few staff and operate at an artisanal level, the management of food safety risks hinges on training and direct human contact. Managing microbial balances, and protecting and producing specific flora based on a respect for traditional and local practices, are what best guarantees safety. You do not get safety from a "zero tolerance" approach to microorganisms and sterilisation equipment that destroy these balances. [54](#)

Many producer organisations and consumers groups, not to mention large movements like Slow Food, are convinced that biodiversity and ecological complexity – as opposed to extreme hygiene – are the keys to healthy and stable systems. Nature abhors a vacuum, after all. Of course, these sounder approaches to food safety also rely on short distribution circuits, getting food from the farm or the small-scale processing plant into people's homes through less complex, more direct distribution schemes (food clubs, all sorts of community-support agriculture systems, co-ops, and so on).

Another big part of people's resistance to the corporate takeover of food safety and food cultures are the campaigns, investigative work and public education efforts devoted to exposing how supermarkets – and the supply chains that they dictate to if not run – really operate, stopping the spread of big retail and protecting street vendors from annihilation (see Box: "The lobby that dares not put its name on food labels"). Walmart's anti-union culture is well known all over the world, thanks to decades of civic activism which today informs groups trying to resist Walmart's entry in new markets such as India. In fact, India has a vibrant movement of hawkers and street vendors who stand to lose their livelihoods if the central government allows foreign retailers to come in. They have the support of farmers, intellectuals and civil society groups that are part of a growing fabric of resistance against TNCs coming in and taking over India's food supply. Investigative research and political work into other corporate structures, like Carrefour or Tesco, has also been important to help civil society, not to mention legislators, to understand better how big retail works and the exploitative pressures it puts on biodiversity, farmers and food workers. [55](#)

Food industry workers – from seasonal harvesters to the women and men involved in slaughtering or processing – are just as central to what food safety is or should be. After all, they are on the front line of the work, and they are usually paid as little as possible. They often suffer difficult organising conditions, especially migrant workers, children or illegal immigrants. When they do manage to organise and get support from other groups, their capacity to secure changes can be huge. The struggle of migrant farmworkers in Immokalee, Florida, for instance, has been phenomenal. Apart from securing higher wages for tomato pickers, the Coalition of Immokalee Workers has helped demonstrate that the industrial food system, which was set up to provide cheap food, is the problem – socially, environmentally and in terms of safety and health. [56](#) Today, there is a significant momentum across the US to change the way food is produced, including the food safety standards, by reviving the use of anti-trust legislation. It may turn out to be a smart way to break up the industrial food system and return power to smallholders, local processors, regional markets, and other more democratic structures.

## Cold shoulder for Ugandan farmers

In 2000, Icelandic investors set up a company in Uganda called Icemark Africa, to provide logistic operations to the European markets for fresh fish exports, with a complementary side operation in fresh fruit and vegetable exports. Icemark is now the largest exporter of fresh fruits and vegetables from Uganda, with three flights a week delivering products to Europe. Until a few years ago, 90% of Icemark's produce was sourced from its chain of small-scale out-growers. But then the company began to establish its own farms, where GlobalGAP certification is easier to achieve. It now sources 40% of its produce from its own three farms on 270 ha in central Uganda. [j](#)

[j](#) Thomas Pere, "Mashamba: the identity of quality fruits, vegetables", *The New Vision*, [http://www.enteruganda.com/brochures/manifesto\\_7.html](http://www.enteruganda.com/brochures/manifesto_7.html)

## The lobby that dares not put its name on food labels

Corporate agendas can be deceptively hidden from view as governments and legislators haggle over what appears to be public policy. Take the fight over food labelling in the EU: corporate-driven globalisation and changes in lifestyles brought on by urbanisation and new technologies are creating a new set of food-related health problems, especially obesity and adult-onset diabetes. These are not restricted to the affluent West; they are penetrating all regions of the world, including fast-changing China and Africa. These diseases are not only painful and debilitating for the affected families, but they incur huge costs to society.

In the EU's drive to tackle these rising health problems and their causes at home, the challenging task of harmonising food labels to inform consumers of what they are buying has naturally come up. In 2010, a war was pitched between two options: on the one hand a graphic "traffic light" label to show on food packages or restaurant menus how much of the main ingredients to be concerned about – fat, saturated fat, sugar and salt – an item contained; on the other hand, a strictly written list of the ingredients with a calculation of how much of a daily allowance you would consume per serving. The traffic light is used in various EU countries, such as the UK, and is extremely blunt and pro-consumer. The allowances' listing has proved not very intelligible to most consumers (the whole matter of what a serving is can be very deceptive), and for that reason is the industry's preference.

According to sleuth work by civil society group Corporate Europe Observatory, the EU food and drinks industry – the third largest economic sector of the union, after agriculture and chemicals – spent a whopping €1 billion to defeat the "traffic light" label and keep consumers in the dark. This was the single most expensive lobbying exercise in EU history. [j](#)

[j](#) See CEO, "A red light for consumer information", Brussels, 11 June 2010, <http://www.corporateeurope.org/lobbycracy/content/2010/06/red-light-consumer-information>. As the EU is now operating under the Lisbon Treaty, a German group called Foodwatch (<http://www.foodwatch.de>) is proposing to launch a citizen's initiative which, if it gains the required number of signatures, could oblige the European Commission to review the food labelling issue based on grassroots concern from ordinary people. Of course, the obligation on the Commission is only to take note and review, not actually to change anything, but some groups may use the momentum to build greater awareness of corporate control over the European food system and how that directly affects people's health and living standards.

## Conclusion

In most countries around the world, farming sectors are being rapidly restructured to make way for more agribusiness. With food safety standards playing a critical role in justifying new forms of corporate control, it is high time to reassess what food safety means. At present, it translates into "audit culture", involving a transfer of power from people (consumers, small farmers, local food shops, markets, eateries) to the private sector (Cargill, Nestlé, Unilever, Walmarts ... the list goes on). It can instead be about local control and more community-based food and farming systems. In fact, it can be much more aggressively and explicitly integrated into people's food sovereignty campaigns and initiatives. In that process, we may want to stop talking about food safety altogether and assert instead our own demands for food quality, or something similarly more holistic.

Food safety, or food quality in broader terms, is a ground on which big corporate agriculture and supermarket cultures cannot outperform small producers and local markets. The challenge is to ensure that the small and the local can remain alive and turn today's heightened concerns for food safety in our favour.

## Going further

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- Sunita Narain, "Control your food. It's your business", Centre for Science and Environment, New Delhi, 1 October 2010, <http://www.cseindia.org/content/control-your-food-it-your-business>
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## ANNEX: Food safety: Who does what?

### World Trade Organisation (WTO)

In the realm of food safety, the WTO is responsible for implementing the Agreement on Sanitary and Phytosanitary Standards (SPS Agreement) and has an SPS Committee composed of the member states to do this. The SPS Agreement spells out a number of rules that aim to limit the blockage of agricultural trade due to food safety concerns, which it sees as a trade barrier. One of these rules is that countries should use the standards adopted by specialised intergovernmental agencies, such as OIE for animal health and the Codex Alimentarius for food products. But these "standards" are, in many cases, recommendations or guidelines. Countries retain the right to practice "higher" standards of food safety so long as they are justified on "scientific" grounds. They can even follow different standards that produce equivalent results, if they can get away with it. After all, anyone can defend their grounds as scientific. [a](#) What we get, as a result of all this, is a politics of "might makes right" (countries bully and argue their way forward), with the risk that some governments will just follow OIE or Codex guidelines for lack of a better alternative (as wished by the industry).

The WTO's SPS Agreement does have teeth in so far as any disagreement between members can result in a dispute panel and trade sanctions. The US has repeatedly used this method to try to overturn EU policy that bans the entry of hormone beef or GM foods.

One major problem or weakness with the WTO SPS Agreement is the fact that so many food safety standards, which have been exploding in number and complexity, are developed by the private sector, not by governments. And they are voluntary, not mandatory. How do you bring this under the control of trade policy? Developing countries are particularly resistant to the notion of being held responsible for industry standards, especially at a forum like the WTO. Why should the government of Kenya, for instance, work to promote standards developed by Tesco for Tesco's clients? Who is the government accountable to, after all: Kenya's citizens or Tesco's shareholders? This is the pickle that WTO members have driven themselves into.

All told, this means there is something of an SPS deadlock at WTO. The Organisation can advocate certain standards, but it cannot enforce them in a fully predictable or deterring manner. It can serve as a public venue where national policy changes or events are notified for everyone's information, but most policy-making is actually done by and through the weight of the corporate sector in other fora.

### Codex Alimentarius

The Codex Alimentarius (Codex for short) is a commission set up in 1953 by the UN Food and Agriculture Organisation and the World Health Organisation. The Codex debates and adopts guidelines, standards and recommendations related to food safety, such as what is an acceptable level of

pesticide *x* in bananas. As such, its purpose is to come up with common ground in terms of health and safety in food.

The problem is that the Codex does not operate in a democratic, transparent fashion. Its membership is composed of governments, but the private sector participates very actively in its work, whether as part of official government delegations or as observers. Non-profit public interest, public health, or consumer groups, on the other hand, are barely in the room.

We can say that:

- \* Codex wields a lot of power, as it draws up official standards for what can pass as food and enter the commercial food chain with a view to achieving global uniformity.

- \* Apart from civil servants, the main participants at Codex are industry officials.

- \* The WTO gives the role of Codex a veneer of legitimacy that it never had before.

One major issue that Codex is debating right now is the labelling of GM products. A large group of countries wants to define and promote a common approach to GM food labelling. Others consider labelling a discriminatory practice (because it sets a GM tomato apart from a non-GM tomato!) and do not want any international standards on it. In what may be a welcome development at Codex, the pro-label bloc is gaining ground. [b](#)

### World Organisation for Animal Health (OIE)

The OIE has a similar role to Codex but for the animal kingdom. It was set up in Paris in the 1920s to stop a rinderpest outbreak. Today, OIE is a fairly large intergovernmental institution that monitors and assesses animal diseases (including those that affect humans, like bird flu or BSE) and draws up sanitary standards for world trade in animal products. Like Codex, OIE has been given a veneer of authority and legitimacy to shape national and international policy on animal health issues thanks to the WTO. But also like Codex, it is very disconnected from people in so far as few farmers, consumers or grassroots public health advocates seem to know what it is, let alone have any influence over it.

OIE gained some notoriety in recent years because of the way it was used to break a logjam between the US and Korean governments over mad cow disease. [c](#) The victory for the US, which was conveniently declared a "controlled risk" country for beef, was short-lived however. The OIE has never been able to impose its standards on countries whose people resist US beef, such as Taiwan or Japan or Korea. OIE also, surprisingly, had little role to play during the recent bird flu and swine flu outbreaks.

Right now, OIE is trying to develop international norms or standards for animal welfare as a food trade issue. This clearly comes from the EU. Since the early 2000s, the EU has been trying to introduce animal welfare as an SPS issue through its bilateral free trade agreements with foreign trade partners like Chile and Korea, and it also forms part of the EU's current talks with India, ASEAN countries, Canada and Mercosur. This goes beyond what was agreed at the WTO, which does not even mention animal welfare, and appears to be more about restricting trade along the line of EU preferences to favour EU businesses. [d](#) The OIE animal welfare "standards" related to food that are currently emerging will probably amount to the five freedoms: from hunger, thirst and malnutrition; from fear and distress; from physical and thermal discomfort; from pain, injury and disease; and to express normal patterns of behaviour.

### Food and Agriculture Organisation (FAO)/World Health Organisation (WHO)

Apart from housing the Codex Alimentarius, the FAO and the WHO both deal with food safety from their respective standpoints (food production and health), but they seem to do very little in this field. Not even their joint International Food Safety Authorities Network (INFOSAN), has the resources or commitment to produce adequate global information related to food safety (such as a database on food safety alerts). Unsurprisingly, at the UN level, it seems that food safety is treated much more as a trade issue than as a food production or public health issue.

### GlobalGAP and Global Food Safety Initiative (GFSI)

Over the past ten years, the global food industry has probably developed hundreds, if not thousands, of schemes – it is perhaps best to think of them as checklists – to identify products that are "OK" to move through the system, from farm to mouth. These schemes are sets of standards. For example, they may say that a jalapeño pepper should be *x* green, *y* slender and have a heat index of *z*. The complexity of these lists becomes enormous – down to what variety a farmer should sow – but they are central to the industrial food system. The institutions that control these lists wield the hidden power in shaping our food supply. In the 2000s, any country that wanted to participate seriously in the global food trade developed its own national benchmarking and standards systems for food producers under the name of GAP (good agricultural practices). Thailand, for example, developed ThaiGAP as an assurance of quality control for Thai agricultural products. This turned out to be crucial for Thai exporters even to sell products to China under the 2003 China-Thailand free trade agreement. These GAPs are voluntary private standards developed by the industry (originally led by retailers) to regulate itself. A whole battery of firms has sprung up to implement these standards: auditors, controllers, certifiers and companies that process the data.

Two institutions are important to note because of their ambitions to serve as global leaders in this web of private food controllers. In 2007, EurepGAP – a network of European GAPs formed in 1997 – rebirthed itself as GlobalGAP. This move amounted to no less than the European food industry globalising its standards to serve as world standards. As a consequence, other national GAPs (KenyaGAP, ThaiGAP, and so on) had to reorient themselves and work to get accepted by GlobalGAP as national benchmarks of the new system. Today, GlobalGAP holds the global authority over standards for agricultural products. This means that any farm that wants its products to enter the mainstream of global food trade and retail – and end up on Tesco's shelves, for instance, with all the traceability and control assurances that that implies – would have to get GlobalGAP accreditation (via local members). Hence the power of those who define these standards.

GFSI was set up in 2000 by the Food Business Forum (now CIES), a club of the world's most important food industry CEOs. The argument behind GFSI is that Codex, supposed to harmonise national standards, is too slow. GFSI bypasses harmonisation to create a system for the global approval of foods based on benchmarked private-sector schemes. If GAP guarantees a product's quality (the jalapeño pepper that is *x*, *y* and *z*), GFSI accreditation is a mark of adherence to a host of broader food safety measures – including GlobalGAP.

GFSI insists that it is not a standard in itself but a forum that "benchmarks" best practices, almost like a brand. Composed of the top 400 food industry players, who collectively boast an annual turnover of €2.1 trillion (US\$2.9 trillion), GFSI can be expected to have an important influence in reshaping food safety policy in the years to come.

[a](#) For example, on 7 April 2010, Japan's then Agriculture Minister Hirotaka Akamatsu told reporters after meeting US Department of Agriculture head Tom Vilsack in Tokyo, "For us, food safety based on Japan's scientific standards is the priority. The OIE standards are different from the Japanese scientific ones." This was the Japanese government's way of rebuffing US insistence that Tokyo open its market to all forms of US beef. See Jae Hur and Ichiro Suzuki, "Japan, US to Continue Dialogue on Beef Import Curbs", *Bloomberg*, 8 April 2010, <http://www.bloomberg.com/news/2010-04-07/u-s-japan-face-some-distance-as-talks-on-beef-import-curbs-to-continue.html>

[b](#) At its meeting on the issue in Quebec in May 2010, the Codex commission was mostly in favour of GM labelling through the voices of the EU, many individual European countries, Brazil, India, Morocco, Kenya, Mali, Ghana, Cameroon and Korea. Staunchly against GM labelling were the US, Canada, Australia, New Zealand, Costa Rica, Mexico and Argentina. This anti- bloc seems to be cracking, however. The next set of discussions will be held in 2011.

[c](#) See GRAIN, "Food safety: rigging the game", *Seedling*, July 2008, <http://www.grain.org/seedling/?id=555>

[d](#) It is true that animal welfare is a concern among people in the EU, and rightly so. But the argument used by European trade negotiators according to which it is a major societal demand that needs to be imposed upon EU trade partners is negated by the latest Eurobarometer survey among EU consumers who do not even mention animal welfare when asked to spontaneously identify the issues that concern them around food quality and food safety. See European Food Safety Authority, "2010 Eurobarometer survey report on risk perception in the EU", November 2010, <http://www.efsa.europa.eu/en/riskcommunication/riskperception.htm>

### Acronyms

ACP	Africa Caribbean Pacific states	
AREA-AD	Association de Réflexion, d'Echanges et d'Actions pour	l'Environnement et le Développement (Algeria)
ASEAN	Association of South-East Asian Nations	

ASC	Aquatic Stewardship Council (WWF)
BSE	bovine spongiform encephalopathy
CDC	Centres for Disease Control and Prevention (US)
CEO	chief executive officer
CIES	Consumer Goods Forum (formerly Food Business Forum)
FAO	UN Food and Agriculture Organisation
FTA	free trade agreement
GAP	good agricultural practices
GATT	General Agreement on Tariffs and Trade
GFSI	Global Food Safety Initiative
GM(O)	genetically modified (organism)
HACCP	Hazard Analysis and Critical Control Points
INFOSAN	International Food Safety Authorities Network (WHO/FAO)
MRSA	Methicillin-resistant <i>Staphylococcus aureus</i>
NASA	National Aeronautics and Space Agency (US)
OIC	Organisation of the Islamic Conference
OIE	Organisation for Animal Health
ppb	parts per billion
SPS	sanitary and phytosanitary standards
SQF	Safe Food Quality (US)
TNC	transnational corporation
WHO	World Health Organisation
WTO	World Trade Organisation
WWF	World Wide Fund for Nature

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- 3 Agri-Food and Veterinary Authority of Singapore, "Importance of Food Safety", 13 April 2010, <http://www.ava.gov.sg/FoodSector/FoodSafetyEducation/AboutFoodSafetyPublicEduProg/ImptFoodSafety/index.htm>
- 4 The data do not reflect the increasing privatisation of food safety. To give just one example of a private legal cost generated by the failings of the US food system: in April 2010, Cargill settled a lawsuit with Stephanie Smith, a 22-year-old dancer who was paralysed for life after eating an *Escherichia coli*-tainted hamburger made from Cargill beef. The amount of the settlement will never be known, but it is said to provide for Ms Smith's lifelong health costs related to coping with her affliction (and she is committed to walking again.) In the US context, this may climb to millions of dollars.
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- 14 This process has been dubbed the "Senegalisation" of EU fishing vessels, because of where it began. See ActionAid, "Selfish Europe", June 2008, <http://www.actionaid.org/main.aspx?PageID=1114>, and Jean Sébastien Mora, "L'Europe pêche en eaux troubles", *Politis*, 27 May 2010, <http://www.bilaterals.org/spip.php?article17454>.
- 15 For peanuts, the level adopted by the EU in the 1990s was 4 parts per billion (ppb). The level recommended by Codex Alimentarius is 15 ppb. Many countries practise the standard of 15 (Canada, Australia, Peru), 20 (Thailand, US, China) or 30 (India, Brazil). Data from the Almond Board of California, November 2009, <http://californiaalmonds.fr/Handlers/Documents/Intl-Aflatoxin-Limits.pdf>
- 16 Timothy Josling, Donna Roberts and David Orden, "Food regulation and trade: toward a safe and open global system", Institute for International Economics, Washington DC, 2004, p. 113.
- 17 T. Otsuki *et al.*, "Saving two in a billion: quantifying the trade effect of European food safety standards on African exports", *Food Policy*, Vol. 26, No. 5, October 2001, pp. 495-514.
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- 19 It is also to get rid of slime and odour.
- 20 HACCP is a method of controlling risks in a food production process by identifying the key points to monitor, and keeping an eye on them. It was developed by the Pillsbury Corporation to create foods suitable for NASA space flights, so one can imagine the ramifications! It is basically just a system of private checklists.

- 21 "Subject: France and the WTO ag biotech case", Wikileaks cable Reference ID [07PARIS4723](http://213.251.145.96/cable/2007/12/07PARIS4723.html), dated 14 December 2007, <http://213.251.145.96/cable/2007/12/07PARIS4723.html>
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- 23 GRAIN, "Big Meat is growing in the South", *Seedling*, October 2010, <http://www.grain.org/seedling/?type=82>
- 24 This includes milk of cattle fed with feeds produced from internal organs, blood meal and tissues of ruminant origin or products that may contain animal rennet. See Gargi Parsai, "No import of US dairy products for now", *The Hindu*, 15 November 2010, <http://www.bilaterals.org/spip.php?article18483>
- 25 They also fall under the remit of Technical Barriers to Trade (TBT) disciplines, the close cousin of SPS. TBT rules govern labelling, and many food safety and broader food quality issues require proper labelling.
- 26 The same is true for nanomaterials.
- 27 Exact figures of the market size vary, but come to US\$550–630 billion per year. The main reasons why this market is booming are population growth and conversion rates. But practicalities facing the food service industry also weigh in. For instance, the catering firms that supply the airline industry at the world's major hubs (e.g. Heathrow and Frankfurt) are increasingly opting to use only halal meat.
- 28 Whether GMOs – like cloning and other new technologies – are halal or haram has long been an issue of debate, and the answer often depends on the country or the authority giving it.
- 29 Outside the SPS arena, Canada filed a WTO dispute in August 2010 against the EU's seal trade ban. While this conflict is not over food safety, it does challenge how far the EU can go in pushing its animal welfare standards on other countries. This issue will also have to be dealt with in the current EU-Canada FTA negotiations.
- 30 This involves not just food but testing and cosmetics.
- 31 Their main concerns are lack of harmonisation, lack of transparency, lack of scientific basis and no consultation. For OIE's overview of the discussion process, see "Implications of private standards in international trade of animals and animal products", updated 23 June 2010, [http://www.oie.int/eng/normes/en\\_Implications%20of%20private%20standards.htm](http://www.oie.int/eng/normes/en_Implications%20of%20private%20standards.htm). For an account of developing country concerns, see the final report of the OIE questionnaire on private standards, [http://www.oie.int/eng/normes/A\\_AHG\\_PS\\_NOV09\\_2.pdf](http://www.oie.int/eng/normes/A_AHG_PS_NOV09_2.pdf)
- 32 Bruce Blythe, "Walmart will require stricter safety tests for beef suppliers", *Drovers CattleNetwork*, 29 April 2010, <http://www.cattlenetwork.com/cattle-news/latest/wal-mart-will-require-stricter-safety-tests-for-beef-suppliers-114326579.html>
- 33 Zensho statement of 30 November 2010, [http://www.zensho.co.jp/en/ZENSHO\\_SFC\\_20101130.pdf](http://www.zensho.co.jp/en/ZENSHO_SFC_20101130.pdf)
- 34 "South African poultry makers 'racist', politician says", *BBC*, 29 December 2010, <http://www.bbc.co.uk/news/world-africa-12090741>
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- 38 Niels Fold, "Transnational Sourcing Practices in Ghana's Perennial Crop Sectors", *Journal of Agrarian Change*, Vol. 8, No. 1, January 2008, pp. 94–122.
- 39 Peter Jaeger, "Ghana export horticulture cluster strategic profile study", prepared for World Bank, Ghana Ministry of Food and Agriculture and EU ACP Agricultural Commodities Programme, 2008.
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- 41 *Ibid.* WWF's ASC certification alone costs US\$7,500 per 5 hectares per year.
- 42 Spencer Henson and John Humphrey, "The Impacts of Private Food Safety Standards on the Food Chain and on Public Standard-Setting Processes", paper prepared for FAO/WHO, May 2009.
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- 44 Walmart press release, 25 October 2010, <http://en.pnasia.com/pr/2010/10/25/100984911.shtml>
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- 51 See the Via Campesina web site: <http://viacampesina.org>
- 52 David Gumpert, "Maine towns reject one-size-fits-all regulation, declare 'food sovereignty'", *Grist*, 15 March 2011: <http://www.grist.org/article/2011-03-15-maine-towns-reject-one-size-fits-all-regulation-declare-food>
- 53 The armed raid on Rawesome Foods in the US in 2010, which was captured on security camera and circulated over the internet, is one example (see <http://www.youtube.com/watch?v=X2jgpGyyQW8>). In France, two years earlier, industrial dairy processors that want a bigger share of the market tried to dismantle the rule that only raw milk can be used to make Camembert cheese, on the ground that it's not safe. They were quickly defeated, including with regards to the lack of scientific data that there is any meaningful safety problem with raw-milk cheese. This debate has also flared up in Canada, but the government of Quebec has decided to keep the production of raw-milk cheese legal.
- 54 Quoted by Cécile Koehler in "Le risque zéro: du 'sur mesure' pour l'agriculture industrielle", *Campagnes solidaires*, FADEAR, Bagnolet, November 2008. This dossier also points out that no study can show a correlation between heavy investment in industrial and administrative practices and a high level of food safety.

[55](#) Western journalists and academics such as Christian Jacquiau, Marion Nestle, Felicity Lawrence and Michael Pollan have been doing a great job in helping the public to understand how supermarkets and food safety systems really work, and how citizens can retake control of such matters.

[56](#) "Historic breakthrough in Florida's tomato fields", joint press release from Coalition of Immokalee Workers and the Florida Tomato Growers Exchange, 16 November 2010, [http://www.ciw-online.org/FTGE\\_CIW\\_joint\\_release.html](http://www.ciw-online.org/FTGE_CIW_joint_release.html) See also: "The human cost of industrial tomatoes", *Grist*, 6 March 2009, <http://www.grist.org/article/Immokalee-Diary-part-I/>

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