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Introduction: Stock-taking on trade-related food safety

This introduction is being written as the World Trade Organization (WTO) ministerial, the first since 2005, opens in Geneva, Switzerland. The participation of the Institute for Agriculture and Trade Policy in the side events at the ministerial is well documented elsewhere on our website, but in the midst of the “stock-taking” that comprises the official agenda of the trade ministers, we would be remiss not to comment on at least a few food safety matters before WTO committees and agencies. Our own stock-taking outlines what the WTO can do well and what it is not equipped to do at all.

The WTO is not a food safety agency and yet the WTO Agreement on Trade-Related Sanitary and Phytosanitary Measures (SPS Agreement) obliges WTO members to report ("shall notify" in Article 4) all SPS measures, including food safety regulations to the WTO SPS Committee. The purpose of notification is “transparency,” to enable WTO members to determine whether an SPS measure is a disguised barrier to trade and to persuade members to modify or withdraw the offending regulation. The notifications are entered into the WTO’s SPS Information Management System. According to the WTO Secretariat, as of October, WTO members have notified 10,532 measures since 1995, with 1,273 being notified in 2008 alone. The United States, the chief advocate of the SPS Agreement, has reported more than any other member, with 1,949 regulator and emergency notifications. Transparency does not level the SPS playing field since many developing country members complain of not having time or resources to comply with new import SPS rules. Furthermore, insofar as transparency requirements are often a prelude to SPS-related trade disputes, there is a disincentive for less resourced governments to comply with the notification requirement, and there is no WTO-authorized sanction for not notifying.

At the October meeting of the SPS Committee, members reported, above all, on animal health issues, particularly measures taken on avian influenza, mad cow disease (BSE), foot and mouth disease and the H1N1 virus, affecting trade in livestock and meat products. Despite transparency advances regarding specific measures, there are member complaints that not enough information is provided in the notifications to make a preliminary determination about whether or not the reported measure conforms to the SPS Agreement. Some SPS Committee discussions are not triggered by notifications, but by more general issues, such as the displacement of WTO-recognized international food standards by private standards in facilitating food and agricultural trade.

The ordinary work of the SPS Committee is not headline news. Insofar as SPS trade disputes attract media attention, it is because of disputes which cannot be resolved through SPS Committee discussions. Instead these disputes lead to the formation of Dispute Settlement Body panels, long and costly litigation, and sometimes DSB panel rulings—compliance with which is not a foregone conclusion. As is reported below about trade in nanotechnology, sometimes WTO members threaten disputes to try to influence or remove regulations that they believe would impede trade. Sometimes a dispute is filed less because of the immediate cause for the dispute than for the purpose of discouraging other WTO members to adopt the putatively SPS-offending regulation. This appears to be the case in the U.S.-launched dispute against the European Union’s ban on chlorine rinsed poultry imports.
But, as Marcos Orellanos reports in an essay summarized in our resources section, the WTO Appellate Body is slowly reminding dispute panelists that they are not a body that can rule on the scientific merits of the evidence presented. Rather, the panelists are subject to the rules of the Dispute Settlement Understanding. These rules, however well-drafted and observed by panelists, do not improve the food safety aspects of trade disputes. Only learning from foodborne illness data, such as that summarized below by Roberts et al, and reducing the vast amount of under-reporting of foodborne illness by governments concerned about the affect of that data on trade, will start to improve food safety measures to prevent foodborne illness.

Sources: SPS Committee reports, World Trade Organization, October and June 2009.

WTO agrees to hear U.S. dispute about EU poultry ban

As the Monitor reported in 2008 (November 25 and August 4 issues), the United States has long threatened a dispute against a European Union import ban on poultry carcasses rinsed with diluted chlorine to kill pathogens. In October, at the urging of industry lobbyists, the U.S. launched the dispute, in part to discourage other members from banning U.S. poultry and beef products treated with chlorine rinses. The Dispute Settlement Body agreed on November 19 to form a panel to consider the complaint. A DSB ruling hinges, in theory, on whether chlorine, a well-known cancer causing chemical, is present sufficiently in poultry rinse residues to be a public health risk to EU consumers. The public health effects of chlorine rinsing were hotly debated at a Codex Committee on Food Hygiene (CCFH) meeting in mid-November. CCFH is early in the process for setting a WTO-recognized standard for chlorine rinses. Since Codex committees usually meet just once a year it is very unlikely that a new standard can be used as evidence in the dispute, a ruling on which is expected by late in 2010.

What neither Codex nor WTO rules address is why certain SPS measures are used and whether there are alternatives to those measures that would render the cause of the dispute moot. In U.S. poultry and cattle slaughtering plants, chlorine rinses are used to remedy the inability of production workers to prevent pathogen carrying feces from spattering carcasses. In the case of poultry, production line speeds of a 140 carcasses per minute make clean slaughter and poultry inspection impossible, and contribute to a high injury rate among plant workers. A U.S. Department of Agriculture study on the effect of line speeds on the plant worker injury rate is more than six months overdue. The report could be the basis for a line speed rule. The poultry industry has petitioned USDA to allow line speeds of up to 175 carcasses a minute while the food inspectors union has called for a line speed slow down to enable inspection. Union president Stan Painter says that some inspectors have told him USDA supervisors have told inspectors not to stop production if fecal contamination is found. Given the general WTO prohibition against banning imports on the basis of production and processing methods, the poultry dispute panelists will only take the "science-based" rinse evidence, not why the rinse is used.


Threatening a WTO dispute over labeling of products with nanoparticles

The threat of trade disputes to discourage stringent regulation to protect consumers and the environment has become part and parcel of trade facilitation strategy. But when products containing manufactured nanomaterials (measuring between 100 and 300 billionths of a meter) are commercialized not only without regulation but without even a government registry of such products, how effective can such a threat be? The U.S. chemical industry, apparently emboldened by its success in curtailing European Commission chemicals regulation by threatening a WTO dispute, is contemplating a pre-emptive strike against labeling of products incorporating nanomaterials. The EU revision of its Novel Foods and Chemicals directives (EU member country applicable model legislation) will likely require labeling for nanomaterials, following a European Parliament resolution in March to require labeling of all food with nanoparticles. Any dispute that is launched in 2010 is unlikely to concern food as there are no international standards concerning nanotechnology and food.

Notwithstanding the failure of the U.S. government’s voluntary product reporting programs to elicit industry data about products with nanomaterials, the U.S. Food and Drug Administration (FDA) is planning to issue guidance on nanotechnology by the end of 2010. According to FDA's Dr. Annette McCarthy, "For a lot of nanotechnologies
that are being designed at the moment, you would have a hard time today to come to FDA and prove that it's generally recognized as safe [GRAS]. But two years down the line, it could be a slam dunk, it could be very simple [to get GRAS approval].

The United Nations Food and Agriculture Organization (FAO) held its first experts consultation on the subject in June and a report on the consultation has not yet been made public, nor is there any indication that consumers want foods with nanoparticles. FAO is co-organizing, with Brazilian government agencies, an International Conference on Food and Agricultural Applications of Nanotechnologies, to be held from June 20 to 25, 2010 in São Carlos, Brazil. According to a first call for conference papers, among topics to be covered are food packaging and sensors, nano-additives and food design; plant production and animal breeding; nanofiltration systems for water and nanosystems for cleaning soil; nanotoxicology and promoting transparency and public trust in the regulatory framework for nanotechnology and food.

The food industry is working to ensure that foods with nanoparticles could be marketed in all food categories. In early November, the U.S. national organic standards board postponed a vote that would have recommended that the U.S. Department of Agriculture prohibit the inclusion of nanofoods and nanoparticle food packaging from certification as "organic" by the National Organic Standards Board. An NOSB member from General Mills secured the postponement by arguing that a ban now would prohibit the development of future products, such as nanosensors for detecting pathogens in food, which consumers might want.

Organic farmer and consumer groups, having defeated biotechnology industry initiatives to include genetically modified organisms in the NOSB standards, are zealous about defending the product certification that has helped to secure their income in a booming sector of the food industry. Retail sales of organic food in the United States have gone from $3.6 billion in 1997 to $21.1 billion in 2008, according to an October USDA report "Marketing U.S. Organic Foods: Recent Trends from Farms to Consumers." In September, following an interagency fight, USDA withdrew a report from its website by one of its Rome-based employees touting the benefits of genetically modified organisms for organic production.


Resources

Tanya Roberts et al., "The Long-Term Health Outcomes of Selected Foodborne Pathogens," Center for Foodborne Illness Research and Prevention, October 2009.

Happily, for most people affected by food-borne illness, a few days of vomiting and diarrhea may be the only consequences of eating contaminated food. But as this report outlines in detail, in a small percentage of cases, kidney failure, paralysis, seizures, hearing/visual impairments, mental retardation, insulin-dependent diabetes and even death can result from eating contaminated food. The authors summarize the scientific literature on long-term health consequences of major pathogens while acknowledging that there are relatively few follow-up studies on those afflicted by these pathogens. Consequently, there are few guidelines established for long-term medical care of the afflicted, particularly young children, who may have been contaminated as fetuses. About half of all reported cases of foodborne illness in the United States concerns children 15 years or younger.

Although the data reviewed in this study largely come from U.S. sources, the following conclusion has universal applicability: "The vast majority of foodborne illnesses are undiagnosed or misdiagnosed, resulting in a severe lack of information about foodborne diseases." So when you hear a government or food industry official proclaim that "our country has the safest food in the world," the statement has to be judged in terms not just of the huge underreporting of foodborne disease to public health officials, but in terms of the lack of follow-up studies of the long-term public health consequences for that small percentage of reported foodborne illness. Reading about these consequences is less disturbing than contemplating the gap between the public assurances of the safety of our food and the dearth of data upon which such statements are based.

In a detailed examination of World Trade Organization jurisprudence, Marcos Orellana finds that the WTO Appellate Body has evolved a clearer balance between the obligations of WTO members under the Agreement on Trade-Related Sanitary and Phytosanitary Measures (SPS Agreement) with their right to regulate to protect consumers from harm. He analyzes the Appellate Body review of two WTO dispute panel rulings: European Communities—Measures Concerning Meat and Meat Products (EC Hormones) (1998) and United States—Continued Suspension of Obligations in EC-Beef Hormones (U.S. Hormones) (2008). In the former dispute, the panelists judged the EC to have violated the SPS Agreement by banning import of U.S. meat from animals injected with growth hormones. In the latter dispute, the EC sought to terminate U.S. and Canadian tariff retaliation resulting from the former case. The EC argued that since it had carried out a risk assessment (comprising 17 scientific studies), in the sense stipulated by the SPS Agreement, of beef growth hormones at the center of the EC Hormones dispute, tariff retaliation was no longer warranted.

Orellana outlines WTO dispute settlement procedures and the provisions of the SPS Agreement disputed in the two cases, then he parses the rulings in terms of what the roles of the panelists and expert testimony are in these two disputes and other SPS disputes cited in WTO jurisprudence. A particularly thorny issue is how panelists are to interpret cases in which defendants claim that there is insufficient scientific evidence to carry out a risk assessment and that in such cases the SPS Agreement not only allows but implicitly obliges WTO members to take temporary and precautionary members to protect consumers under the "appropriate level of protection" provision.

In U.S. Hormones, the Appellate Body reviewed the role of both international risk assessments and expert testimony used in SPS cases, and specifically in EC Hormones. The Appellate Body concluded that the U.S. appeal in U.S. Hormones to the international risk assessment and expert testimony as authoritative proof of EC violations was invalid because two of the experts in U.S. Hormones had been part of the international risk assessment panel used as evidence in EC Hormones. Because two experts in U.S. Hormones were validating their own past work in EC Hormones, the EC had a particularly heavy burden of proof to show that its new regulation on beef growth hormones complied with the SPS Agreement. In overturning much of the U.S. Hormones panel ruling, the Appellate Body stated that the panel had strayed from the parameters of the WTO Dispute Settlement Understanding (DSU) by judging the new EC risk assessment to be scientifically incorrect, rather than determining if that risk assessment was objectively justifiable in terms of scientific literature coming from "a qualified and respected source." Orellana concludes that because the Appellate Body ruling is based on a DSU standard of evidentiary review, subsequent SPS dispute panels will think twice before they act as scientific judges dismissing the rights of WTO members to protect their consumers.