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A Meticulous Food Safety Plan Today Avoids Handcuffs Tomorrow

Kim Bousquet*

In August 2010, thousands of people across the United States were poisoned by eating eggs unknowingly tainted with Salmonella enteritidis bacteria.1 Following a lengthy investigation, the owners of the facility where the outbreak began were sentenced to three months in prison.2 This is not a one-off case; poor food safety practices are responsible for several outbreaks and often end in incarceration.3 Filthy hen houses, diseased fruit storage, and negligent food processing may be the last thing we want to imagine, but these practices have much to teach today’s food producers.

This article first examines how poor food production practices can lead to an environment ripe for spread of disease and an unacceptable level of contamination. Then, it explores what companies

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can do to prevent such unacceptable conditions, decrease the likelihood and severity of an outbreak and, of course, avoid incarceration.

The Salmonella That Sickened America

A Salmonella infection, or salmonellosis, is a dangerous and potentially fatal disease. Most people with salmonellosis experience diarrhea, stomach cramps, and fever for several days. The diarrhea can be so severe that some people need to be hospitalized. If the infection spreads to the bloodstream — which is more common in people with compromised immune systems — the victim may succumb to the illness and die. According to some reports, as many as 56,000 Americans were sickened during the 2010 tainted egg outbreak.

The Salmonella outbreak was traced back to eggs produced by a single company based in Iowa notorious for its scoff-law tactics: Quality Eggs, LLC. Faced with information tracing the contamination back to its facilities — courtesy of sleuthing regulators — Quality Egg recalled over 500 million eggs, one of the largest egg recalls in U.S. history. Quality Egg pled guilty to: (1) felony bribing of a USDA inspector; (2) felony introduction of misbranded eggs into interstate commerce with intent to defraud and mislead, and; (3) misdemeanor introduction of adulterated eggs into interstate commerce.

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5 Id.
6 Id.
7 Id.
10 *Quality Egg*, 99 F. Supp 3d at 923 (“After the U.S. Food and Drug Administration (FDA) presented epidemiologic information to Quality Egg, the defendants voluntarily recalled millions of dozens of eggs in 2010.”).
The Crimes That Spread the Salmonella

The Quality Egg outbreak story is truly sensational for a number of reasons, but especially for the company’s blatant disregard for cleanliness and the horrid conditions of the egg-laying facilities discovered during the FDA’s inspection. However, the case is often only discussed from the perspective of a corporate officer wondering if they are next to face prosecution for a food safety violation. Those concerns are justified. Jack and Peter DeCoster, the father and son duo who owned and managed Quality Egg, were prosecuted under a provision of the Federal Food, Drug and Cosmetics Act providing strict liability for introducing adulterated food in interstate commerce. 21 U.S.C. §331(a).13 Other corporate officers, though not many, have also been prosecuted under this provision as “responsible corporate officers” of food companies.14

Following a plea deal, the DeCosters paid hefty fines and eventually spent three months in prison.15 They were shocked by their prison sentences (issued by Mark Bennett, District Judge for the Northern District of Iowa) and appealed to the Eighth Circuit for relief. The Eighth Circuit upheld the prison sentences even though the DeCosters did not have personal knowledge that Quality Egg had shipped adulterated eggs.16 The Eighth Circuit held the sentences did not violate Due Process even though there was no intent element of their misdemeanor crimes. As the court explained: “[t]he elimination of a mens rea requirement does not violate the Due Process Clause for a public welfare offense where the penalty is ‘relatively small,’ the conviction does not gravely damage the defendant’s reputation, and congressional intent supports the imposition of the penalty.”17

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13 Quality Egg, 99 F. Supp. 3d at 923 (“Austin “Jack” DeCoster owned and controlled the activities of Quality Egg. Peter DeCoster, Austin DeCoster’s son, was the Chief Operating Officer of Quality Egg.”).
14 See id. at 937 (detailing two instances in which other corporate officers have been prosecuted as “reasonable corporate officers” under 21 U.S.C. § 331(a)).
15 DeCoster, 828 F.3d at 631.
16 Id. at 642.
17 Id. at 633.
Moreover, the defendants were not convicted for the wrongs of their subordinates; they were guilty for allowing FDCA violations when they knew or should have known of the unsanitary conditions that directly led to the violations. Though the DeCosters’ plea agreements claimed they did not know the eggs were contaminated, they admitted they were in positions of sufficient authority to detect, prevent, and correct the sale of contaminated eggs had they known about the contamination. Under the FDCA, this was sufficient to make them guilty of misdemeanor crimes as responsible corporate officers.

The Questions We Should Be Asking to Prevent Criminal FDCA Violations

Given these types of cases, corporate officers have reason to be concerned about the liability risks of running and owning a food business. Criminal strict liability for FDCA violations is a real possibility. However, while criminal liability for c-suite executives and quality control officers is an important concern, preventing death and severe illness from the shipment and sale of adulterated food is a much more important matter. The mental and physical harm incurred from a foodborne illness can be debilitating and impose a sentence much more severe than the three-month prison terms the DeCosters served.

Fortunately, the goals of avoiding criminal liability and preventing foodborne illness go hand in hand. I would suggest, however, instead of focusing on how food executives can avoid prosecution, food companies should ask the following question: How can we create a culture and environment that makes food safety a top

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18 Id. (“Under the FDCA… a Corporate officer is held accountable not for the acts or omissions of others, but rater for his own failure to prevent or remedy ‘the condition which gave rise to the charges against him.’” (quoting United States v. Park, 421 U.S. 658, 675 (1975))).
19 Id. at 631.
20 Id. at 632.
priority and encourages employees to express food safety concerns and follow established food safety protocol?

What Practices Have Led to Outbreaks Resulting in Criminal Liability?

We can examine a handful of cases involving criminal food safety violations in pursuit of creating a better food safety culture. One is the case of Quality Egg LLC, mentioned above. Quality Egg’s massive egg laying system housed upwards of 7 million chickens which produced 5.5 million eggs a day.21 Large facilities containing millions of live animals provide excellent conditions for the introduction and spread of illness.22 Preventing disease calls for extreme care.

Quality Egg engaged in the opposite. The company allowed and created conditions that fostered the growth and spread of disease by: (1) failing to keep live and dead rodents, frogs, and flying insects out of their facilities; (2) failing to remove manure from the egg laying facilities such that it filled entire rooms and burst through facility doors; (3) failing to clean and sanitize equipment; and (4) failing to comply with written food safety plans.23 As a result, the Salmonella contamination spread throughout the company’s entire facilities and pushed the company’s Salmonella presence rate nearly 40 times higher than the national rate.24 Following the criminal investigation, the government discovered Quality Egg had also covered up its food safety problems, thereby prolonging and intensifying the outbreak.25 Quality Egg had falsified food safety records, lied to its customer’s auditors about food safety measures,

24 DeCoster, 828 F.3d at 630.
falsified packing dates on pallets of eggs, and bribed USDA officials so it could sell inferior eggs.\textsuperscript{26}

Another notorious case involves Peanut Corporation of America (PCA). Stewart Parnell, company president, and Michael Parnell, corporate officer, of PCA stood trial in 2014 for multiple federal crimes stemming from shipping adulterated peanut butter and peanut paste into interstate commerce.\textsuperscript{27} Shipping peanut products knowingly tainted with Salmonella typhimurium earned them felony convictions, and two decades each in prison.\textsuperscript{28} At least 714 people were sickened by the Salmonella; at least nine people lost their lives fighting salmonellosis infections caused by the negligent and intentional conduct of the Parnells and PCA.\textsuperscript{29}

What went wrong? Because they are grown on the ground, peanuts are generally more susceptible to encountering pathogenic bacteria than certain other foods.\textsuperscript{30} As such, peanut producers should be acutely aware of the higher potential for contamination and strive to eliminate the risk of contaminated peanuts entering commerce, something PCA ignored. Further, since PCA was a large peanut producer, their products were essentially everywhere. They also supplied large amounts of product to many vulnerable populations, including products used in school lunches, children’s snack products, nursing homes, and hospitals.\textsuperscript{31} PCA’s process also mixed together

\begin{itemize}
  \item \textsuperscript{29} See How Peanuts Grow, NAT’L PEANUT BOARD, http://www.nationalpeanutboard.org/peanut-info/how-peanuts-grow.htm (“Unlike most plants, the peanut plant flowers above the ground, but fruits below ground.”) (last visited Sept. 19, 2018); see also K. Annabelle Smith, Why Peanut Butter is the Perfect Home for Salmonella, SMITHSONIAN, https://www.smithsonianmag.com/arts-culture/why-peanut-butter-is-the-perfect-home-for-salmonella-149834812/ (explaining that because peanuts grow on the ground, they “can be contaminated from a variety of sources: manure, water, wild animals—even the soil.”).
\end{itemize}
many peanuts in its facility, so contamination on one peanut could easily be spread to other peanuts, especially if equipment was not sanitized after each lot of product produced (which, in PCA’s case, it was not).

These facts — which are not in themselves FDCA violations — combined together allowed the following potentially dangerous food safety conditions: (1) initial contamination of the peanuts was possible before harvest because of the peanuts’ contact with soil, water and rodents;\(^{32}\) (2) cross-contamination in the facility was almost assured because the peanuts were mixed together and blended into pastes and butter;\(^{33}\) and (3) because much of the product was sold to entities making product for schools, the sick, and the elderly,\(^{34}\) there was a greater possibility for more severe illnesses. Like the DeCosters, however, the Parnells ignored these heightened risks and did the exact opposite of what they should have done: they created conditions that led to a widespread outbreak of foodborne illness.

Beyond these conditions, the Parnells’ negligence also included: (1) failing to fix leaky roofs that allowed potentially contaminated water to enter production facilities;\(^{35}\) (2) failing to validate roasting conditions to properly conduct the bacteria kill step;\(^{36}\) (3) failing to ensure adequate pest control, allowing for rodents and other pests to enter the facility and spread disease;\(^{37}\) (4) failing to use proper cleaning devices and failing to sanitize equipment;\(^{38}\) and (5) leaving product uncovered in facilities, among other regulatory misconduct.\(^{39}\)

\(^{32}\) Smith, *supra* note 30.


\(^{34}\) Weise, *supra* note 31.


\(^{36}\) *Id.* at 80.

\(^{37}\) *Id.*


\(^{39}\) *Id.* at 3.
PCA and the Parnells also engaged in a cover-up conspiracy that prolonged the outbreak and prevented customers and the government from taking action to halt its spread. The cover-up included: (1) instructing company employees to ship product before the Salmonella test results were received by the company; (2) knowingly shipping Salmonella tainted peanut product to customers; (3) shipping numerous lots of peanut product with falsified certificates of analysis so customers believed they were receiving product that met their microbial specifications when, in fact, they were not; (4) failing to inform customers of positive test results received after the product had shipped; (5) shipping product without conducting any microbial testing at all, yet representing that testing had been completed; (6) re-testing a product that had tested positive for Salmonella until that product tested negative, then shipping the product with only the negative test report; and (7) continuing to produce product in a plant that PCA knew had produced contaminated product every year dating back to 2003. Given this background, it is easy to see how the Parnells earned their prison sentences.

Another cautionary tale involves Jensen Farms. The Jensen Brothers, owners and operators of Jensen Farms, set the record for the deadliest foodborne illness outbreak in the U.S. since the early 1900s. Not an easy feat. All told 33 people died and approximately 150 were sickened from eating cantaloupe tainted with Listeria monocytogenes.
produced and sold by the Jensens in late 2011.\textsuperscript{49} Listeria is one of the most virulent foodborne pathogens and is particularly dangerous for the immune-compromised and developing fetuses.\textsuperscript{50} According to the CDC, the fatality rate for people who develop listeriosis as a result of infection with Listeria is 21%.\textsuperscript{51}

What caused this cantaloupe outbreak? Listeria bacteria is found in soil, water, and some animals.\textsuperscript{52} Cantaloupes are more susceptible to Listeria contamination than fruits growing off the ground because they grow on the ground and have significant contact with soil and water.\textsuperscript{53} Listeria can also live in processing plants, as a resident bacteria.\textsuperscript{54} The Jensens failed to take this heightened risk into account by not properly preparing their packing and storage facilities to address potential contamination. The primary culprit in spreading the Listeria bacteria was one piece of equipment — a used potato washing machine bought immediately before the outbreak.\textsuperscript{55} It was not thoroughly cleaned and thus harbored the Listeria bacteria.\textsuperscript{56} Further, the manner in which the cantaloupes were cooled, stored, and transported after harvest may have contributed to the Listeria growth.\textsuperscript{57} The Jensens were convicted of the same crime as the DeCosters, but


\textsuperscript{50} See generally Listeria (Listeriosis), CTR. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/listeria/(providing information on Listeria and how the illness it causes, listeriosis, affects the United States’ population) (last updated June 29, 2017).


\textsuperscript{54} Listeria—DHHS, supra note 52.


\textsuperscript{56} Id.

\textsuperscript{57} Id.
for clearly less egregious conduct. The Jensens were ordered to pay restitution, perform community service, were sentenced to five years’ probation and six months home detention.

The lessons

What are the lessons corporate officers can learn from these cases? The primary point, according to the foremost expert in food safety litigation, Bill Marler, is: “there was always an opportunity to fix the problem before it blew up.” This is true in all of the outbreaks explored in this article and likely true of every other major foodborne illness outbreak in the United States. The lesson should be to have a food safety system in place for finding and maximizing on those opportunities. On a more microscopic level, the primary lessons from these criminal cases are fairly obvious:

- Don’t engage in fraudulent conduct (e.g., falsifying testing reports or changing production date stamps) and don’t tacitly encourages others to do so.
- Don't knowingly ship or sell contaminated product.
- Don’t bribe or otherwise attempt to manipulate regulators.
- Don’t create conditions that foster spread of disease by, for example, storing product in open containers or allowing rodents and other vermin easy access to your facility.
- Create, and then follow, a FSMA-compliant food safety plan.
- Immediately fix a food safety violation when you uncover it.

58 Compare Plea Agreement for Eric Jensen, United States. v. Jensen, No. 13-mj-01138 (D. Colo. Oct. 22, 2013) (finding Eric and Ryan Jensen knowingly distributed adulterated cantelope in interstate commerce), with United States v. DeCoster, 828 F.3d 626, 631 (8th Cir. 2016) (showing Mr. Decoster plead guilty to: (1) bribing a USDA inspector, (2) intentionally introducing misbranded eggs into interstate commerce, and (3) introducing adulterated eggs into commerce).
60 Bill Marler, Managing Partner, Marler Clark, Lecture in Food Safety Litigation Course at the Univ. of Ark. Sch. of Law (Spring 2017).
However, these measures are no-brainers and things your company is hopefully already doing. So what else can we discern from these cases about foodborne illness prevention that is not immediately obvious and may help create a more meaningful food safety program? Here are some ideas:

1. Create a food safety first culture. A food safety first culture can make all the difference in preventing or lessening the severity of an outbreak. Food safety was not part of PCA’s company culture. Employees were routinely instructed to ship contaminated product and to “just ship” product without receiving test results because the Parnells did not want to lose a customer.61 The Parnells maintained a company-wide culture of indifference and indignation to food safety measures.62 In contrast to the Parnells, food companies should ensure the company culture has a strong, primary focus on food safety which includes ensuring all employees feel comfortable reporting potential food safety violations, no matter how trivial they may appear. Companies should consider incentives and rewards for employees who identify and fix food safety errors. Moreover, company policy should instruct that each employee is responsible for, and must take ownership of, the safety of all food products under his or her control. Management should likewise take responsibility for, and ownership of, food safety products under control of his or her subordinates. Food safety should be a source of company and employee pride.

2. Do not ignore your own internal food safety research. The 1993 Jack-in-the-Box E-coli outbreak could have been prevented if the company had simply followed the advice and research of its own employees.63 In that case, internal studies showed that increasing cooking time by a couple of minutes would have reduced the

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62 Id. at 13.
Ecoli colonies in burgers sufficient to ensure they could be safety consumed. Jack-in-the-Box management ignored one employee’s suggestion to increase cook time and, instead, reminded the employee of the obligation to follow the existing company cooking-time policies. Had they taken up the suggestion instead, the outbreak could have been prevented.

3. Have measurable and meaningful pathogen-reduction goals. In ready-to-eat foods, the goal for positive pathogen testing should, of course, be zero. Likewise, for per-se adulterants (e.g., Ecoli 0157:H7), zero tolerance is the measure. However, where the USDA or FDA has not declared a pathogen a per se adulterant, companies should set strict and challenging microbial level goals. For example, Wal-Mart has undertaken significant efforts to reduce the presence of Salmonella in its raw chicken by placing strict pathogen requirements on its chicken parts suppliers. Wal-Mart has also implemented a testing regime for the raw chicken it purchases. As a result, the company has had a significant decrease in Salmonella presence in its raw chicken.

4. Know where your skeletons are. That is, understand the risks most likely associated with your product and create — then follow — an individual risk mitigation plan for those specific risks. There are some food products that commonly carry pathogens;

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64 Id.
65 See id. (noting the company’s answer to an employee’s concern about undercooked burgers, which stated that “if patties are cooked longer, they become tough.”).
poultry is known to carry Salmonella bacteria,\textsuperscript{69} beef is known to carry E-coli bacteria,\textsuperscript{70} and ready-to-eat deli meat is known to carry Listeria bacteria.\textsuperscript{71} Companies selling these products, therefore, should test for these pathogens and create a pathogen-reduction and control program specific to those risks as a part of FSMA compliance. For example, given the 2017 widespread outbreak of E-coli illness from romaine lettuce grown near Yuma, AZ, food companies planning to source produce from that region should take caution to protect against contamination. The outbreak was traced to an irrigation ditch downstream from a concentrated cattle feeding operation and upstream from the romaine fields; the source of the E-coli, therefore, may still be lingering upstream from the produce fields.\textsuperscript{72}

5. Invest in traceability measures and consider blockchain technology. Food giants like Wal-Mart view blockchain technology as the answer to stopping or slowing down food-related pathogen outbreaks.\textsuperscript{73} Regulations require a one-forward, one-back traceability system, but as we saw in the recent E-coli outbreak, this approach may not be sufficient to initiate a product recall or swiftly trace the source of the pathogen. It took months for the CDC and FDA to

\textsuperscript{69} Chicken and food poisoning, CTR. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/features/salmonellachicken/index.html (noting that “Chicken can be a nutritious choice, but raw chicken is often contaminated with Campylobacter bacteria and sometimes with Salmonella and Clostridium perfringens bacteria") (last updated Sept. 20, 2018).


\textsuperscript{71} Listeria, supra note 51.


trace the tainted romaine lettuce back to a grower.\textsuperscript{74} In the meantime, grocery stores were pulling all romaine products off their shelves and consumers were avoiding consumption of any and all romaine lettuce.\textsuperscript{75} The outbreak could have ended sooner and companies could have wasted fewer resources had the supply chain been better documented through blockchain or other technology. Blockchain technology can assist with more than traceability, it can also help companies identify any weakness in their supply chain since it can be used to automatically track temperatures, shipment dates, delivery dates, currency of safety certificates, and other information critical to maintaining a safe and secure supply chain.\textsuperscript{76} As part of your traceability program, conduct mock recalls and audits to ensure your traceability system will function if necessary.

6. Take immediate action to notify customers of a recall. In other words, don’t wait until the close of markets on a Friday afternoon to notify your retailers of a recall. This common practice is a dead giveaway you are putting profits ahead of food safety and may ruin your relationships with business partners.

7. Overtrain employees on food safety and do it in their native language. Research shows people only retain 20\% of what they hear.\textsuperscript{77} Repetition can significantly increase this number, so employees must be trained and trained again (critically, in their native language) on proper food safety measures.


\textsuperscript{77} Will Thalheimer, \textit{Debunk This: People Remember 10 Percent of What They Read}, Ass’n For Talent Dev. (Mar. 12, 2015), https://www.td.org/insights/debunk-this-people-remember-10-percent-of-what-they-read.
Conclusions

In sum, following a food safety plan is essential to achieve food safety goals, prevent widespread and lingering outbreaks, ensure regulatory compliance, and avoid incarceration. Going one step further and engaging employees, creating a healthy food safety culture, and installing numerous check points can create brand loyalty, customer loyalty, and hopefully prevent any illness from occurring at all. Simply put, if food companies put food safety first, the results will follow.
Super Unleaded Malbec? A Case Study in Flawed International Standard Setting at the Codex Alimentarius

Justin Schwegel*

I. Introduction

The World Trade Organization’s (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) provides rules on the adoption and enforcement of SPS measures. It also presumes that food safety regulations adopted by WTO Members that conform to relevant international standards are consistent with the SPS Agreement.¹ The relevant international standard setting body for food safety is the Codex Alimentarius Commission, which conducts most of its food safety risk management work through subsidiary bodies such as the Codex Committee on Contaminants in Food (CCCF). CCCF establishes maximum limits for food contaminants and codes of practice for reducing food contamination.² These subsidiary bodies in turn delegate risk management work to electronic working groups (EWG that are comprised of relevant food safety authorities of Codex member states ³

One contaminant of concern is lead. Lead exposure from dietary sources is harmful to human health, and especially harmful to children.⁴ In March 2018, the CCCF Electronic Working Group (EWG)

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³Id. at 109–11.

to Revise the Maximum Levels (ML) for Lead proposed to reduce the ML for lead in wine from .2 parts per million (ppm)\(^5\) to .05 ppm.\(^6\) The EWG ostensibly based this proposal on the “ALARA” principle, which dictates that standards for dangerous contaminants should be set at a level “as low as reasonably achievable.”\(^7\) The EWG applies the same methodology when establishing MLs for relatively low-value products often consumed by children, the group most vulnerable to lead exposure.\(^8\) Another EWG is currently charged with prioritizing commodities to establish new lead MLs in the General Standard for Contaminants and Toxins in Food and Feed.\(^9\) Some commodities under consideration include high value, age-restricted products like cognac and absinthe.\(^10\) Establishing MLs for alcoholic beverages using the methodology applied to products marketed for child consumption is inappropriate. It could also distract from the important work of progressively reducing lead in products commonly consumed by those most vulnerable to lead exposure, where reductions in lead provide greater public health benefit for the same economic cost.

II. The GATT, the WTO, and the Internationalization of Sanitary and Phytosanitary Standards

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\(^6\) Codex Alimentarius Comm’n., Proposed Draft and Draft Maximum Levels of Lead in Selected Commodities in the General Standard for Contaminants and Toxins in Food and Feed, CX/CF 18/12/5, at 5 (2018), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%25252Fsites%25252Fcodex%25252FMeetings%25252FCX-735-12%25252FWD%25252Fcf12_05e.pdf [hereinafter Codex Draft].

\(^7\) Id. at 8.

\(^8\) See Codex Alimentarius Comm’n., supra note 6, at 8.


\(^10\) Id. at 29.
A. The Need for International Standard Setting Bodies

The WTO Members negotiated greater trade liberalization at the Uruguay Round, particularly for agricultural commodities. The SPS Agreement was designed to help ensure this trade liberalization was not undermined by unnecessarily restrictive SPS measures. An SPS measure under the terms of the SPS Agreement is any measure adopted to protect human, animal, or plant life or health from disease, or unsafe food and feed. While necessary to protect both human health and the security of the food supply, such measures can also be applied in such a way as to function as nontariff barriers to trade in agricultural products.

Prior to the adoption of the SPS Agreement, sanitary and phytosanitary (SPS) measures were only subject to Article XX(b) of the General Agreement on Tariffs and Trade (GATT). GATT Article XX(b) provides general exceptions for the application of potentially trade-restrictive measures “necessary to protect human, animal or plant life or health.” This proved an ineffective regulatory structure. It neither effectively disciplined protectionist SPS measures nor sufficiently recognized Members’ sovereign right

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12 Id.; see also Marie Denise Prévost, Balancing Trade and Health in the SPS Agreement: The Development Dimension 481–82 (2009) (discussing the purpose behind the Uruguay Round negotiations of the SPS Agreement and trade disputes concerning market access barriers to agricultural products).
14 See Renée Johnson, Cong. Research Serv., 7-5700, Sanitary and Phytosanitary (SPS) and Related Non-Tariff Barriers to Agricultural Trade 22, 33 (2014) (discussing concerns from agricultural exporters and policy makers that SPS measures act as nontariff barriers).
15 While the 1979 GATT “Standards Code” applied among states that ratified it, it was not generally applicable to all GATT members. Additionally, its substantive and procedural deficiencies rendered it ineffective even for states party to the agreement. See Prévost, supra note 12, at 470-481 (discussing numerous shortcomings of the “Standards Code”).
17 See Prévost, supra note 12, at 474 (discussing the lack of enforceability of the art. XX(b) exceptions).
to adopt legitimate SPS measures. Additionally, under GATT Article XX, WTO Members were not obligated to avoid arbitrarily applying different levels of sanitary and phytosanitary protection in comparable situations.

The myriad insufficiencies of the existing framework governing the application of sanitary and phytosanitary measures led GATT negotiators to begin negotiating an agreement that would explicitly articulate contracting parties’ right to adopt legitimate SPS measures and subject such measures to strict disciplines to avoid protectionism. Namely, they must be based on a scientific assessment of risk or the relevant international standard.

The SPS Agreement cites three international standard setting bodies of reference, including the Codex Alimentarius mentioned above. The World Organisation for Animal Health (OIE and the International Plant Protection Convention (IPPC) are the relevant international standard setting bodies for animal health and plant health respectively.

When WTO Members adopt uniform international SPS standards it reduces the cost of regulatory compliance for exporters. This facilitates international trade. Codex, IPPC and OIE are open to membership from WTO Members and were perceived at the time of negotiations to establish standards on a sound scientific basis by the parties negotiating the text of the SPS Agreement. As a result, the negotiating parties supported deference to the standards promulgated

18 Id.
19 Id.; but see SPS Agreement, art. 5(5) (containing such an obligation).
20 SPS Agreement, supra note 1; See also, Rigod, supra note 11, at 507.
21 SPS Agreement, supra note 1, at art. 3, art. 5.
22 Id. at Annex A(3).
23 Id. at Annex A(3)(b), (c).
24 See Prévost, supra note 12, at 317.
25 See e.g., Codex Alimentarius Comm’n., supra note 2, at 21.
26 See e.g., Negotiating Group on Agriculture, Communication from Israel Expressing Views on Certain Elements in the Negotiation on Agriculture, MTN.GNG/NG5/W/153, at 5 (Feb. 13, 1990) (stressing the importance of science based standards and supporting the adoption of standards developed in the international standard setting bodies as guidelines for an effective surveillance and dispute settlement procedure in GATT), https://docs.wto.org/gattdocs/qCUR%5CGNG05%5CW153.PDF; WTO Negotiating Group on Agriculture, Supplementary Communication from the Cairns Group, at ¶19, MTN.GNG/NG5/W/164 (Apr. 18, 1990), https://docs.google.com/document/d/1vYmqLiHdwLU2PLPWr3ZfhfCt9ge48a6zcdsCgpX2PNo/edit.
by these bodies.\textsuperscript{27} This deference creates a presumption that an SPS measure that complies with the relevant international standard also complies with the SPS Agreement and Article XX(b) of the GATT.\textsuperscript{28} Early proposals by negotiating parties such as the United States and the Cairns group suggested that SPS measures conforming to international standards should be “deemed” consistent with WTO obligations rather than deemed necessary and “presumed” consistent.\textsuperscript{29} While a presumption of consistency can be rebutted, it seems unlikely a measure “deemed” consistent with the SPS Agreement could be shown to be nonetheless inconsistent.\textsuperscript{30}

B. The Use of Codex Standards

WTO Members have several incentives to adopt international standards. Because many developing WTO Members lack the capacity to conduct risk assessments of their own they often defer to Codex’s food safety standards.\textsuperscript{31} This is often done through regulations that either explicitly defer to Codex or mirror Codex standards.\textsuperscript{32} Additionally, because the SPS Agreement presumes measures that conform to international standards are consistent with the Agreement there is a safe harbor

\textsuperscript{27} Id.

\textsuperscript{28} See SPS Agreement, supra note 1, at art. 3(2) (“Sanitary or phytosanitary measures which conform to international standards, guidelines or recommendations shall be . . . presumed to be consistent with the relevant provisions of this Agreement and of GATT 1994.”).


\textsuperscript{30} While beyond the scope of this article, the negotiating history eschewing an irrebuttable presumption of WTO consistency in favor of presumed consistency does not provide great clarity as to when a measure adopted by a WTO Member in accordance with an international standard can nonetheless be deemed WTO inconsistent. Likely, the adoption of international standards that fail to comply with the requirement to avoid arbitrary or unjustifiable distinctions in applying an appropriate level of sanitary or phytosanitary protection in different situations under Article 5.5 of the SPS Agreement could be considered arbitrary and unjustifiable under Articles 2.3 and 5.5 of the SPS Agreement and the chapeau of GATT Article XX.


\textsuperscript{32} Id.
for regulations harmonized with the international standard. 33 WTO Members are less likely to challenge SPS measures that are consistent with international standards because of the greater burden of overcoming the presumed consistency. 34 Because of this safe harbor, many WTO Members either defer to the Codex when there is no domestic standard (as Morocco does for veterinary drug residues, for example) 35 or allow imports that comply with international standards notwithstanding a more restrictive domestic standard (as South Africa does for pesticide residues, for example). 36

Due to the widespread adoption of Codex standards and the deference they are given under the SPS Agreement, their importance for international trade is difficult to overstate. Consequently, the potential for negative economic impacts from overly restrictive Codex standards has been a real concern for many agricultural producers in the past. 37 The Codex Alimentarius Committee on Contaminants in Food (CCCF) is the Codex committee responsible for establishing MLs for

33 SPS Agreement, supra note 1, Art. 3(2).
contaminants, such as lead, in food and beverages.\textsuperscript{38}

Several wine producing countries have likewise expressed concern about the low ML for lead in wine proposed by CCCF’s EWG to revise MLs for lead.\textsuperscript{39}

III. The Health Concern over Lead Exposure and the Codex Response

Exposure to lead from food is harmful to everyone, but it is disproportionately harmful to children.\textsuperscript{40} As a result of a 2010 study on lead exposure, a new Codex electronic working group was established to reconsider international standards regarding maximum levels of lead allowed in food products, especially for products consumed by children.\textsuperscript{41} EWGs are subject to the Codex guidelines on risk management recommendations.\textsuperscript{42} These guidelines require risk management recommendations to be based on an approach that weighs the economic cost against the public health benefit.\textsuperscript{43}

A. The Special Vulnerability of Children to Lead Exposure

In 2010, the Joint FAO/WHO Expert Committee on Food Additives (JECFA) held its 73rd meeting to evaluate certain food additives and contaminants.\textsuperscript{44} The JECFA meeting report cited concerns

\textsuperscript{38} Codex Manuel, \textit{supra} note 2, at 192.

\textsuperscript{39} See \textit{Codex Alimentarius Comm’n., Proposed Draft and Draft Maximum Levels of Lead in Selected Commodities in the General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995) (at Steps 7 and 4), CX/CF 18/12/5-Add.1, at 1-7 (March 12–16, 2018), http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodexex%252FMeetings%252FCX-735-12%252FWD%252Fcf12_05_Add1e.pdf} (noting comments from Argentina, Australia, Japan, and Turkey that show such concern).

\textsuperscript{40} Evaluation, \textit{supra} note 4, at 176.


\textsuperscript{42} Codex Manuel, \textit{supra} note 2, at 129.

\textsuperscript{43} See \textit{id.} at 128 (noting that the CCCF shall consider, among other factors, protection of consumer health and the impact on international trade when preparing its priority list of substances for review).

\textsuperscript{44} Evaluation, \textit{supra} note 4.
over lead exposure and noted it was impossible to establish a tolerable weekly intake for lead that would be health protective.\textsuperscript{45} Essentially, JECFA found that no level of lead exposure is safe. JECFA noted, “[b]ecause of the neurodevelopmental effects, fetuses, infants and children are the subgroups that are most sensitive to lead.”\textsuperscript{46} While they are the most vulnerable, children are not the only group at risk of harmful health impacts from dietary exposure to lead. The greatest concern from lead exposure for adults is an associated risk of increased systolic blood pressure, though JECFA has found this concern is not as significant as the concern for the neurodevelopmental impact on children.\textsuperscript{47} JECFA also noted:

impaired neurodevelopment in children is generally associated with lower blood lead concentrations than the other effects, the weight of evidence is greater for neurodevelopmental effects than for other health effects and the results across studies are more consistent than those for other effects.\textsuperscript{48}

JECFA’s case for reducing children’s dietary exposure to lead was strong. As a result of the JECFA report, the Codex Alimentarius Committee on Contaminants in Food (CCCF) established an electronic working group to reconsider the existing lead maximum levels with a focus on reducing dietary exposure to lead, especially for infants and children.\textsuperscript{49}

The discussion paper presented at the following CCCF meeting by the EWG stressed the importance of “whether children were high consumers of the food or had significant lead exposure from the food, since lead is of particular concern for children.”\textsuperscript{50}

\textsuperscript{45} Id. at 176.
\textsuperscript{46} Id. at 481.
\textsuperscript{47} Id. at 480.
\textsuperscript{48} Id.
\textsuperscript{49} Codex Alimentarius Comm’n, Joint FAO/WHO Food Standards Programme, REP12CF, at ¶ 116 (Mar.26-30,2012),http://www.fao.org/input/download/report/776/REP12_CFc.pdf (stating that the EWG was established to “(i) reconsider the existing maximum levels with a focus on foods important for infants and children and also on the canned fruits and vegetables and (ii) reconsider if other existing maximum levels should be addressed”).
\textsuperscript{50} Id. at ¶ 116 (stressing throughout the discussion paper the importance of the rate at which children consume various foods and the relative additional protection a lower ML would provide to children who are particularly vulnerable to lead exposure).
Concerns over the dietary exposure of children and fetuses to lead were a primary reason the EWG was established.\textsuperscript{51} The EWG’s original mandate to “focus on foods important for infants and children” reflects CCCF’s understanding of the relative risks for different population groups.\textsuperscript{52} By committing to prioritize lead MLs for foods consumed by the most vulnerable group in its early reconsideration of MLs in the General Standard, CCCF recognized the greater relative risk to children from dietary lead exposure identified in the JECFA report.

B. Risk Assessment, Risk Management, Codex Guidelines, and the Inherent Need for Proportionality

Under the Codex Alimentarius Working Principles there is a clear distinction between the competences of the body charged with risk assessment, the FAO/WHO joint expert bodies, and the body charged with risk management, the Codex Alimentarius Commission and its subsidiary bodies.\textsuperscript{53} For contaminants it is JECFA’s responsibility to assess risk, while CCCF is the subsidiary Codex risk management body.\textsuperscript{54}

When managing risk through the propagation of international standards, Codex has the dual mandate of “protecting consumers’ health and ensuring fair practices in the food trade.”\textsuperscript{55} The dual mandate reflects the language of the original 1961 FAO resolution calling for the establishment of the Codex Alimentarius Commission, which recognized the importance of international food standards for “protecting consumer[s] and producer[s] in all countries.”\textsuperscript{56} The need to balance the economic costs of disrupted trade with the anticipated public health benefits of

\begin{footnotesize}
\begin{enumerate}
\item See Report of the Fifth Session of the Codex on Contaminants in Foods, REP11/CF, at 15, Joint FAO/WHO (2011) (stating that the EWG was established to “(i) reconsider the existing maximum levels with a focus on foods important for infants and children and also on the canned fruits and vegetables and (ii) reconsider if other existing maximum levels should be addressed.”).
\item Id.
\item See Codex Manual, supra note 2, at 126–29.
\item See id. at 127.
\item Id. at 116.
\item See Codex Alimentarius Comm’n. Res. 12/61 (Nov. 4–24, 1961) (creating the Codex Alimentarius Commission generally, and including reasons for its creation).
\end{enumerate}
\end{footnotesize}
a given food safety standard is not unique to Codex; it is inherent in any food regulatory system.\footnote{See generally Jean C. Buzby, et al., U.S Dep’t. Agric., ERS, International Trade and Food Safety Economic Theory and Case Studies 828, 29 (2003) (discussing the ineluctable necessity to balance economic interests with food safety concerns).}

The relevant Codex risk management body for contaminants in food is CCCF.\footnote{Codex Manual, supra note 2, at 192.} The Codex Alimentarius Commission’s Procedural Manual establishes guidelines for how CCCF is to make its risk management recommendations.\footnote{Id. at 129–30.} There are three guidelines in the Procedural Manual that are especially relevant to the consideration of MLs for lead in different commodities. The recommendations must be based on the JECFA risk assessments, they must take different consumption patterns and dietary exposures into account, and they must be based on principles established in the Codex General Standard for Contaminants and Toxins in Food and Feed.\footnote{See generally Codex Manual, supra note 2, at 132–35 (describing in detail the CCCF policy for conducting exposure assessments of contaminants and toxins in food or food groups).}

With respect to the first guideline, JECFA assessed the risk posed by lead.\footnote{Evaluation, supra note 4, at 162–77.} It recommended that in populations with prolonged dietary exposures the relevant food safety authorities should take measures “to identify major contributing sources and foods and… to identify methods of reducing dietary exposure commensurate with the level of risk reduction [emphasis added].”\footnote{Id. at 177.} The recommendation to pursue means of reducing dietary exposure commensurate with risk reduction reflects the balancing of economic costs and public health benefits inherent in food safety regulation. Put differently, the EWG should ensure the public health benefit of the end justifies the economic cost of the means.\footnote{See generally Buzby, et al., supra note 57 (discussing the balance of food safety and economic concerns in food safety policy making).}

The Codex guideline requiring that different consumption patterns and dietary exposures be taken into account is important for determining the expected health benefit of a food safety standard.\footnote{Id.}
If the most vulnerable populations will not ordinarily be exposed to lead from alcoholic beverages this should be taken into account when assessing the public health benefit of a new ML. Early work of the EWG seems to have taken this into account as many of the commodities reviewed by the committee in its nascent stage reflect a focus on infants and young children, including fruit juices, milk, and infant formula.65

The EWG ostensibly implements the final guideline that new lead ML recommendations be based on principles established in the Codex General Standard for Contaminants and Toxins in Food and Feed. The document proposing new proposed draft MLs for lead in selected commodities prepared for CCCF’s 2018 meeting specifically invoked the principle of establishing MLs based on levels that are as low as reasonably achievable (ALARA).66 ‘The same principle is outlined in the General Standard.67 However, the principle that contaminants in food should be as low as reasonably achievable is itself a balancing test requiring an assessment of the economic cost and the public health benefit of further reducing MLs.68

C. The Appropriate Application of ALARA

The correct application of ALARA means any recommended

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65 Codex Draft, supra note 6 (recommending stricter lead MLs for fruit juices, milk, infant formula, canned fruits and vegetables, and cereal grains).
66 Codex Draft, supra note 6, at 8.
67 Codex Alimentarius, supra note 5, at 3 (stating that “[c]ontaminant levels in food and feed shall be as low as reasonably achievable through best practice such as Good Agricultural Practice . . . and Good Manufacturing Practice . . .”).
68 WHO & FAO, Food Safety Risk Analysis: A guide for national food safety authorities, 87 FAO FOOD AND NUTRITION PAPER, 2006, at 1, 31 (defining ALARA as an approach to risk management that aims for the lowest level of risk “technically possible and/or economically feasible under the circumstances. Some residual risk to consumer typically remains; for example for . . . environmental contaminants in otherwise wholesome foods.”); see also, Frédéric Bouder et al., The Tolerability of Risk A New Framework for Risk Management 120 (Ragnar E. Løfstedt ed., EARTHSCAN 2007) (defining ALARA as a weighing of risk versus cost feasibility criteria); G.H. Eduljee, Trends in Risk Assessment and Risk Management, 249 The Science of the Total Environment 13, 19 (2000) (explaining that what constitutes “reasonableness” in an ALARA approach “necessarily accommodates a range of criteria covering human health, well being of the ecosystem, economic and social factors, as well as the concept of fairness”); COMMISSION REGULATION 2006, O.J. (L 364) P 3–4 (EC) (endorsing both the ALARA principle and the principle of proportionality).
ML should be technically possible and economically feasible and should take into account the health benefit and economic impact.\(^69\) The recommendation that measures should be commensurate with the public health benefit in the JECFA report, the obligation to take into account different consumption patterns in the Codex Procedural Manual, and the correct application of the ALARA principle identified in the General Standard all call for an approach that balances economic cost with public health benefit. For alcoholic beverages, which are age restricted, the public health benefit of stricter standards is weaker. For high value products such as wine and spirits, the economic cost is greater.

1. Expected public health benefit is reduced for lead reductions in alcoholic beverages

The most vulnerable populations are already not exposed to lead from alcoholic beverages because they are age restricted. Consequently, the methodology the EWG uses for proposing draft MLs does not clearly reflect JECFA’s recommendation or the ALARA principle, and does not seem to take into account consumption patterns. The EWG has:

no specific rule to identify the appropriate cut-off value [for MLs], but in general, [its] approach has been to recommend reductions in MLs when the percentage of excluded samples was less than 5 percent.\(^70\)

The EWG is applying the same methodology to the review of the wine ML\(^71\) that it applied to infant formula.\(^72\) It is unclear how a methodology that focuses only on the percentage of trade potentially disrupted without taking into account dietary exposure or the relative economic impact can ensure that steps taken are commensurate with the level of risk reduction.

\(^69\) WHO & FAO, supra note 68, at 31 (defining ALARA as an approach to risk management that aims for the lowest level of risk “technically possible and/or economically feasible under the circumstances. Some residual risk to consumer typically remains; for example for . . . environmental contaminants in otherwise wholesome foods.”); G.H. Eduljee, supra note 68, at 19.

\(^70\) Codex Draft, supra note 6, at 9.

\(^71\) Id.

\(^72\) Codex Draft, supra note 6 (stating the recommendation of the EWG for infant formula, which, one should note, was so lax that 99% of the available samples in the GEMS database would have met it).
Alcohol has different consumption patterns than other food products. Consumption patterns and dietary exposure should be considered when recommending maximum use levels for contaminants. For adults, the greatest risk from lead exposure is elevated systolic blood pressure. JECFA noted that for adults, “dietary exposure corresponding to an increase in systolic blood pressure of 1 mmHg...was estimated to be 80...µg/day, or about 1.3...µg/kg bw [body weight] per day.” For children the greatest risk is neurodevelopmental and happens at much lower exposure levels than the risk for adults. JECFA found that in children, “the chronic dietary exposure corresponding to a decrease of 1 IQ point was estimated to be 12 µg/day...[the] equivalent to 0.6 µg/kg bw per day.” This indicates that children warrant extra protection from dietary lead exposure.

With respect to a similar contamination concern, methylmercury levels in fish, the U.S. and Japanese Codex delegations have consistently opposed maximum limits that would impact international trade flows. The United States and Japan instead favor consumption guidance from national health authorities indicating the excessive consumption of fish of certain species can negatively harm infants, children, and pregnant women. The risk profiles of methylmercury and lead are not identical. However, given the myriad national laws that prohibit the consumption

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75 See Evaluation, supra note 4.

76 Id. at 175.

77 Id. at 176–77.

78 Id. at 175.


of alcoholic beverages by minors, it is unlikely that lead exposure from alcoholic beverages presents a significant source of dietary lead exposure to infants and children.

Adults already limit alcohol consumption under the guidance of national health authorities. National guidelines also advise women who are pregnant or who could become pregnant not to consume alcohol. This guidance also limits dietary exposure of lead from alcoholic beverages to fetuses, which are also vulnerable. Any health benefit from reducing the ML for lead in alcoholic beverages is further reduced because the guidance already plays a significant role in reducing exposure from this source, even for adults. The same guidance warnings the U.S. and Japanese Codex delegations suggest for the most at-risk populations for methylmercury in fish are already more than accomplished with respect to alcohol. As a result, those most vulnerable to lead exposure consume a disproportionately small amount of alcohol, and those least vulnerable already limit their dietary exposure to lead from this source due to the other detrimental health impacts associated with the overconsumption of alcohol.

2. The same cut-off points for MLs would have a disproportionately large economic impact on trade vis-a-vis the relatively minor health benefit for alcoholic beverages

The relatively high unit value of alcoholic beverages, including wine, scotch, or cognac versus other products that are not age-restricted also indicates a need to exercise relatively more caution when

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82 See, e.g., Dietary Guidelines For Americans, supra note 81, at 103 (advising that “women who are or who may be pregnant should not drink”); New Alcohol Guidelines Launched, supra note 81 (stating that “if you are pregnant or planning a pregnancy, the safest approach is not to drink alcohol at all, to keep risks to your baby to a minimum”); Nat’l Health & Med. Research Council, supra note 81.
drafting safety measures that may restrict trade. The ML currently proposed for wine is .05 ppm. This is the same ML that applied to grape juice until July 2018 when the ML was modified to .04 ppm, despite the vastly different consumer profile and consumption patterns for the two products.83

The EWG’s opinion is that following the same methodology for alcoholic beverages, such as wine, (i.e. recommending MLs at a level such that less than 5% of samples in the GEMS database for wine would fail to meet it) as for other products is consistent with the ALARA principle.84 However, it is worth noting that while the percentage of wine in the sample that would fail to meet the hypothetical ML is 3.4%,85 the percentage of GEMS samples of infant formula with a limit of quantification that would have failed to meet the hypothetical ML proposed in 2013 was only .37%, nearly one tenth as restrictive as the proposed ML for wine.86 It is peculiar that a product that will be consumed exclusively by those least vulnerable would be subject to standards more restrictive than those for a product that is consumed exclusively by those most vulnerable. Additionally, the entire global market for infant formula, including infant formula domestically consumed, is estimated at more than $45 billion.87 Meanwhile, the global market for alcoholic beverages is estimated at over $1.2 trillion.88 If the global alcohol market contracted by 3.4%, it would equal roughly $41 billion.

84 Codex Draft, supra note 6, at 13.
85 Id. at 18–19 (313 out of 9342 samples).
86 Id. at 9.
For wine there is an emerging international consensus supporting a forward-looking ML of .15 ppm for wine. In 2015, the European Union adopted an ML of .2 ppm (the current Codex ML) for wine vintages dating 2001 to 2015, and .15 ppm for wines produced in 2016 or later.89 This is the same level the OIV (an intergovernmental wine standard organization with 46 member states) has established, though the OIV’s transition year is 2007 rather than 2015.90 Mercosur has also adopted an ML of .15 ppm, impacting Argentina, Brazil, Paraguay and Uruguay.91 Chile has likewise adopted an ML of .15 ppm.92 Where countries have adopted limits, these tend to be forward looking limits to avoid ex post facto regulation of a class of products with an extremely long shelf life.93 An ML of .15 ppm would still provide some margin of food safety improvement (the maximum level of lead in a wine sample in the GEMS database was .584 ppm) without overly restricting international trade.94

While the only alcoholic beverage currently under consideration for a revised lead ML is wine,95 another EWG is currently prioritizing future work to establish lead MLs.96 This EWG placed significant priority on the consumption patterns of children for some commodities, but ultimately concluded alcoholic beverages (other than wine) were a higher priority (intermediate priority) than non-alcoholic beverages

91 REGLEMENTO TECNICO MERCOSUR SOBRE LIMITES MAXIMOS DE CONTAMINANTES INORGANICOS EN ALIMENTOS 8 (2011).
92 Ministerio de Agricultura de Chile, Decreto N° 78, Art. 26 (1986).
93 See, e.g. Maximum Levels of Lead, supra note 89, at 12. Note the EU Standard has markedly different standards for fruit juices and for wine, presumably based on the divergent risk profile as a result of the disparate consumption profile.
94 Codex Draft, supra note 6, at 18.
96 See Codex Discussion Paper, supra note 9, at 126–131.
This means there will probably be an ML established for cognac sooner than for cola. It is also likely the same methodology that is applied to Welch’s concord grape juice will apply to Rémy Martin Black Pearl Louis XIII.

None of this is to say definitively that a rule based on tolerating a rejection rate of less than 5% is inappropriate for alcoholic beverages. However, there must be proportionality or else standards would be arbitrary. If the economic cost of applying this rule to alcoholic beverages is warranted based on the public health benefits, then CCCF must apply even stricter standards for lead MLs to products marketed for children and largely consumed by children. Tightening such standards would provide a far greater public health benefit for the same economic cost vis-à-vis tightening standards on alcoholic beverages.

IV. Conclusion

Reducing lead exposure from food consumption is a noble goal. It is a goal Codex, CCCF, and the EWG all take seriously. However, it is an intermediate goal. The ultimate goal is to achieve improved public health outcomes while simultaneously minimizing the negative impact on international trade. All public health regulations are designed to create public health benefits. There are also economic costs to some public health regulations, including the adoption of international standards that are often subsumed into national regulations.

It is rational that the EWG would seek to apply a heuristic method for balancing cost and benefit relying on the formulaic less than 5% rule. This approach is faster and cheaper than conducting an assessment that would truly comply with the ALARA approach. Such an assessment would require evaluating the economic impact of each proposed lead ML (due to restricted trade, or the cost to producers of modifying production methodologies to reduce contamination in the final product) weighed against a public health assessment of lead exposure with an age-specific regression analysis to ensure consistent application of a cost-benefit ratio. The former can be done with a calculator and a data set.

97 Id.
The latter would take a team of economists and dietary experts and more rigorous dietary survey data, which in turn would entail a significant cost. However, when the very nature of the product makes it clear the most vulnerable would not be protected by further restriction, a different heuristic is called for.

The SPS Agreement calls for “consistency in the application of the concept of appropriate level of sanitary or phytosanitary protection.” The Codex Procedural Manual states “[u]njustified differences in the level of consumer health protection to address similar risks in different situations should be avoided.” The inherent corollary is that unjustified uniformity in the use of risk management metrics to address different risks posed by different situations should also be avoided. It would otherwise result in inconsistent levels of protection and arbitrary and unjustifiable standards. It is not clear that the less than 5% heuristic is inappropriate when applied to alcoholic beverages. However, if this is the rule Codex will apply to alcohol, it would do well to tighten the limits on products marketed for children.

98 SPS Agreement, supra note 1, at art. 5.5.
100 See WTO, United States Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, at 63–72 (Oct. 12, 1998) (stating that the United States’ application of the same environmental standard to trading partners without considering the different conditions prevalent within those trading partners constituted unjustifiable discrimination under the chapeau of GATT Article XX).
Regulating China’s Food E-commerce: Harmonization of Laws

Pinghui Xiao*

Introduction

Internet commercialization began in China in 1995. Since then, China has seen a digitalization movement, which has become a joint undertaking between industry and government in the age of ubiquitous Internet in China. China’s Premier Li Keqiang announced ‘Internet Plus’ as the national strategy in his Government Work Report presented during the Two Sessions of the year of 2015. Following Premier Li’s vision for the ‘Internet Plus’ Strategy, China is now determined “to integrate mobile Internet, cloud computing, big data, and the Internet of Things with modern manufacturing, to encourage the healthy development of e-commerce, industrial networks, and Internet banking, and to help get Internet-based companies to increase their presence in the international market.” Under the auspices of ‘Internet Plus’, e-commerce became one of the most important priority areas to promote China’s continuing prosperity.

China’s digitalization movement has substantially impacted the food sector, creating the so-called digital food economy and allowing food e-commerce, or online food trading, to become a rising star in China’s ever increasing digital economy. While the internet has connected and shaped China’s industries and businesses, it has also created problems. When new types of businesses proliferate and start to penetrate into conventional sectors, regulations, created based on the traditional sectors, become outdated. Unfortunately, this has been the case with food e-commerce as well.

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As with any new sector, government policies and laws are not without drawbacks, and indeed gaps have arisen. In response, China has already amended its Food Safety Law in 2015 (hereinafter referred to as ‘2015 FLS Amendment’), introducing specific rules related to online food trading. Equally importantly, in August 2018, China’s top legislature, the Standing Committee of the NPC, promulgated its first E-commerce Law, which has greatly impacted food e-commerce.

This paper documents the development of China’s digital food economy in the course of China’s digitalization movement and takes a closer look at China’s legislative approach to regulation of food commerce by paying particular attention to all the major pieces of legislation relating to food e-commerce, particularly the 2015 FLS Amendment and the E-commerce Law. This paper will then examine the challenges China faces in harmonizing its food e-commerce laws.

I. CHINA’S DIGITAL FOOD ECONOMY AND RISING FOOD E-COMMERCE

Food supply chain includes, but is not limited to, stages of production and manufacturing, storage, transport, retailing and the like. In other words, the whole food supply chain consists of agricultural production, food manufacturing, food distribution, catering and food import and export, which can be illustrated in the following figure (Figure 1).

Figure 1: Food Safety Chain
The Internet can be widely used in the above interlinked sectors within the food supply chain, to create a digital food economy.\textsuperscript{1} The actual functionality of the Internet throughout the digital food economy varies. The Internet alone cannot produce foods, but it can be used to increase production efficiency for certain food production lines, like sugar plants.\textsuperscript{2} Hence, the application of the Internet in production and manufacturing exemplifies the Industrial Internet, which sees ‘the deeper meshing of the digital world with the world of machines holds the potential to bring about profound transformation to global industry’.\textsuperscript{3} The Industrial Internet can be an efficient and productive tool to facilitate production and manufacturing.\textsuperscript{4} Furthermore, within sectors in which consumers play a larger role, such as distribution, catering services, and import and export, the Internet even has more to offer. The Internet become a transaction and trading platform for foods. Here in this circumstance, due to the fact that the Internet is used for the purpose of consumers and trading, the use of the Internet creates a Consumption Internet or e-commerce scenario. All the factors combined make China enter the age of the digital food economy, which is comprised of the Industrial Internet and the Consumption Internet, or e-commerce.

To date, there are quite a few government initiatives to promote both the Industrial Internet and e-commerce in China. According to the Action Plan for Industrial Internet Development (2018-2020) enacted by the Ministry of Industry and Information Technology, China will have to tackle the problems arising from the development of the Industrial Internet.\textsuperscript{5} To do this, it will be necessary to carry out research on such legal issues as network security, data protection, as well as information protection and


\textsuperscript{3} Id. at 3

\textsuperscript{4} Id.

\textsuperscript{5} Id.
government data disclosure, and enact laws and rules relating to the Industrial Internet when necessary.\(^5\) As per the Opinions on the Development of E-commerce to Accelerate the Development of New Economy enacted by the State Council, China is committed to introducing laws and rules relating to food e-commerce to speed up e-commerce.\(^6\) To this end, China will introduce measures to regulate food e-commerce and strengthen monitoring mechanisms for food e-commerce.\(^7\)

Simply put, the above government Industrial Internet and e-commerce initiatives create China’s big picture of digital food economy. Because problems arise from both the Industrial Internet and food e-commerce in the age of the digital food economy, regulation is required. At the moment, challenges relating to food e-commerce are more acute and urgent than those relating to the Industrial Internet.\(^8\) Therefore, this paper will pay more attention to food e-commerce regulation.

According to Statista, 9 of the world’s top 20 Internet companies are from China.\(^9\) At least five of these Chinese Internet companies are involved in food e-commerce. These companies are: Alibaba, Baidu, JD.com, Meituan and Tencent.\(^10\) These Internet companies have grown to become China’s most influential food e-commerce platforms, which are “unicorn players involving food e-commerce including but not limited to online food retailing, online catering services and cross-border food e-commerce”\(^11\).

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\(^6\) Id. at 11.


\(^8\) Id.

\(^9\) Pinghui Xiao [肖平辉], 我国网络食品立法进程及相关问题探讨 [A study of legislative development of online food trading and relevant issues in China], 工商行政管理 [ADMINISTRATION FOR INDUSTRY AND COMMERCE] (2018).

China’s food e-commerce creates market failure arising from information asymmetry. Such market failures include: unlicensed food businesses, fake and inferior food products purchased online, false information about foods, and ineffective logistics and delivery. E-commerce lawsuits increased by more than 40% in 2017, far higher than the average lawsuit growth. More than half of these e-commerce lawsuits are food products related, with 83% of food e-commerce disputes involving platforms. Violation of food laws has an issue for platforms selling food. For instance, March 2016 saw many restaurants on Ele.me, one of China’s biggest online food catering platforms, charged for operating without licenses. In addition to fabricating addresses and images of outlets shown in the platform, it was also revealed that the platform helped food business operators fabricate information for non-existing restaurants to create ‘ghost restaurants’, which provided catering services.

II. REGULATING FOOD E-COMMERCE: POLICY AND LAWS

To tackle the challenges arising from food e-commerce, China introduced the 2015 FSL Amendment, which became the country’s first law to regulate food e-commerce. Following the 2015 FSL Amendment, China Food and Drug Administration (hereinafter referred to as ‘CFDA’) also introduced the Measures for Investigation and Punishment of Unlawful Acts Concerning Online

11 Xiao, Legislative Development, supra note 7, at 314–16.
12 Id.
13 Id. at 315.
15 Xiao, Legislative Development, supra note 7, at 313.
16 Id.
18 Xiao, Legislative Development, supra note 7, at 316.
Food Safety (hereinafter referred to as ‘Online Food Measures’) in 2016 and the Measures on Supervision and Administration of Food Safety concerning Online Catering Services (hereinafter referred to as ‘Online Catering Services Measures’) in 2017 to implement the law. The 2015 FSL Amendment, along with the two other specific Measures, constitute the 2015 FSL Amendment cluster, which regulate food e-commerce. Of equal importance is that the Standing Committee of the NPC promulgated China’s first E-commerce Law on August 31st, 2018. This law adopted a new approach to e-commerce regulation, which will have a profound effect on food e-commerce. This E-commerce Law goes hand in hand with the 2015 FSL Amendment cluster to shape food e-commerce. The paper will provide an in-depth discussion of both the 2015 E-Commerce Law and the 2005 FSL Amendment cluster and explore their impacts upon China’s rising food e-commerce regulation.

A. Regulating food e-commerce under the 2015 FSL Amendment cluster

Within the 2015 FSL Amendment cluster, the Online Food Measures and the Online Catering Services Measures are rules enacted by the CFDA. These rules belong to lower level of laws, which are meant to implement the 2015 FSL Amendment. However, in terms of coverage, both the 2015 FSL Amendment and the Online Food Measures are generally applied to all kinds of online food trading, while the Online Catering Services Measures are applied to online catering services providers. Simply put, the 2015 FSL Amendment cluster regulates all aspects of food e-commerce except for online catering services.


20 Xiao, Legislative Development, supra note 7, at 318–19.

21 Pinghui Xiao [肖平辉], 我国网络食品立法进程及相关问题探讨 [A study of legislative development of online food trading and relevant issues in China], 工商行政管理 [ADMINISTRATION FOR INDUSTRY AND COMMERCE] (2018).

Regulating China’s Food E-Commerce

Amendment and the Online Food Measures are framed to provide a general regulatory system for online food trading. However, the Online Catering Services Measures are rules established to specifically regulate the online catering sector rather than general food e-commerce. The 2015 FSL Amendment created a legal term called ‘online third-party food trading platform provider’ to denote the platforms involving foods. Considering the fact that online food platforms play ever-increasing role in online food trading, all the above pieces of legislation treat online food platforms as co-regulators with food authorities to ensure online food safety. To this end, quite a few provisions of the 2015 FSL Amendment cluster compel online platforms to monitor and supervise online food operators. This creates a public-private co-regulation scenario, which reflects the so-called social co-governance principle as established in the 2015 FSL Amendment. In addition, because of the unique nature of the sector, special regulations have been created for online catering.

1. Obligations for online food platforms

The 2015 FSL Amendment laid down the first comprehensive legal obligations requiring platforms to ensure food business operators within the platforms do business in compliance with food safety requirements as laid down in the law. Online food platforms are required to fulfill the following supervisory roles: 1) to conduct real-name registration for food business operators within the platforms and to define food safety management responsibility of the food business operators, 2) to check and inspect licenses obtained by the food business operators, 3) when there is a minor noncompliance from

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24 Id.

25 For the purpose of this paper, ‘online third-party food trading platform provider’ is hereinafter referred to as ‘online food platform provider’ and ‘online third-party food trading platform’ as ‘online food platform’.

26 Xiao, Legislative Development, supra note 7, at 318.

27 Id.

28 Id.
food business operators, to stop the violation and report back to the local food authority, 4) when there is a serious noncompliance from food business operators, to stop providing services to the operators.\textsuperscript{30} The above four tasks can be grouped into two categories of obligations as assumed by the platforms, namely, obligations relating to entry control and obligations relating to process control.

1.1 Entry control obligations

The real-name registration and defining food safety management on the one hand, and license inspection on the other, are both concerned with entry control, which serves as a screening mechanism that keeps unqualified food business operators from entering the platforms and selling food via them.\textsuperscript{31} In addition, the entry control procedures also make it possible to collect relevant identity information from those food business operators, which allow the platforms to better monitor them. The above tasks evolved into more specific sub-tasks under the Online Food Measures.

First, platforms are required to file official records. For those platforms, which are thought of solely as intermediaries, the EU is not poised to make them subject to licenses or any other authorizations, with a few case-by-case exceptions.\textsuperscript{32} However, licensing in China has become a very important mechanism for government regulation, the

\textsuperscript{29} Real-name registration here should not be confused with industrial and commercial registration for the purpose of individual industrial and commercial households and companies. The former is conducted by the online platforms, which are a private stakeholder whereas the latter is done by public authorities. See e.g., 中华人民共和国个体工商户条例 (2016修订) [Regulation on Individual Industrial and Commercial Households (2016 Revision)], 国务院[State Council] 2016; 中华人民共和国公司登记管理条例 (2016修订) [Regulation of the People’s Republic of China on the Administration of Company Registration (2016 Revision)], 国务院[State Council] (Feb. 6, 2016).


legal basis of which can be found in the Administrative License Law. Under this Law, China’s public regulatory authorities grant licenses to citizens, legal persons, or other organization to engage in special activities according to their applications.

Since the introduction of the Administrative License Law, China has created a comprehensive administrative registration and licensing system for all kinds of commercial and industrial activities. The system is comprised of industrial and commercial registration (hereinafter referred to as ‘ICR’) as administered by competent public authorities and other special business licenses as organized by various other public authorities. The legal requirements for the former registration are laid down in the Regulation on the Administration of Company Registration and the Regulation on Individual Industrial and Commercial Households, whereas the latter are specified in quite a few scattered laws depending on specific relevant fields, for instance, the 2015 FSL Amendment.

Nevertheless, it was suggested that China introduce a licensing mechanism to online food platforms prior to the 2015 FSL Amendment. However, at that time, the State Council was in an effort to streamline administration. It announced a reform scheme dedicated to relaxing market access, by which the pre-existing

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32 Communication From the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Region: A European Agenda for the Collaborative Economy, COM (2016) 356 final (Feb. 6, 2016).
34 Id. at art. 1.
35 The industrial and commercial registration should not to be confused with platform registration, which is private by nature. See id. at art. 12.
registration and licensing would continue to be greatly streamlined.\textsuperscript{37} Local governments in China are undergoing deregulation reform, which is made possible through various initiatives, for instance, De-licensing Scheme created by Shaoxing, Zhejiang Province.\textsuperscript{38} Within the Scheme, licensing and other authorization mechanisms are replaced with filing for records, among others, to reduce market access barriers.

Online food platforms are a technology driven phenomenon which can help generate jobs. However, the idea to create a special license as a market access mechanism for these platforms was finally rejected.\textsuperscript{39} Instead, CFDA promulgated the Online Food Measures, and it introduced a recordation mechanism, which is less stringent than a licensing mechanism.\textsuperscript{40} The recordation mechanism is not meant to provide market access for platforms. Local food safety authorities in certain localities, where an online food platform operates, will at least have a record of the platform information, which helps the government to supervise the platforms.

Under the Online Food Measures, the provider of an online food platform shall, within 30 working days upon approval by the competent communications authorities, file for the recordation.
formalities with the provincial food authority at the place where it is located. Upon success, the provider will be issued a recordation number. The information for recordation shall include domain name, IP address, telecommunications business permit, enterprise name, name of the enterprise’s legal representative or person in charge and recordation number, among others. The food authorities at the provincial level and the municipal and county level shall, within 7 working days after the completion of the filing, disclose the relevant recordation information to the public.

Second, platforms are entitled to make rules. The provider of an online food platform is obliged to introduce all kinds of rules to ensure industry compliance from food business operators, which is comparable to rule-making. Here the rule-making obligation actually amounts to rule-making powers delegated from the government, which empowers online food platforms to be legislators. Online food platforms are now officially recognized as rule makers. This enables online food platforms to be more institutionalized to supervise online food operators within the platforms.

These rules were enacted to examine and register online food business operators, to stop and report violations of food safety laws, to stop platform from providing services for severe violators of laws, and to publicly disclose the relevant rules on the online platform.

Third, platforms are required to inspect business licenses and other information of the food business operators. Under the Administrative License Law, ICRs, and specific business licenses constitute the fundamental business licensing institutions in China. As for food business operation, those operating food businesses will have to apply for food business licenses from CFDA. Food business operators include food producers, food retailers and catering services providers, among others in China. Chinese food businesses are generally divided into two types, namely, food production and distribution. Correspondingly, China creates two food business

41 Id. at art. 8.
42 Id.
43 Id. at art. 10.
44 See Zhōnghuá, supra note 46.
licenses for the entire food chain, namely, food production licenses and food distribution licenses.\textsuperscript{45}

The above-mentioned food business licenses are granted by public authorities rather than online food platforms.\textsuperscript{46} However, the provider of an online food platform is obliged to inspect relevant food licenses of production, food additive production, and/or food distribution as obtained by online food business operators, and record and update when needed. In the case of small food business operators, in particular small farm operators selling edible agricultural products over the platform, the provider is obliged to keep a record of the operators’ ICR, ID number, home address, contact information, and update when needed.\textsuperscript{47}

Fourth, platforms are required to conduct profiling and filing of food business operators. China’s food authorities engage in profiling and filing activities for the purposes of food business operators. For instance, local food authorities at and above the county level should create food safety credit files of food producers and distributors to record the information on the issuance of food production licenses, inspection of licensing matters, daily supervision and inspection, and investigation of and punishment against licensing-


\textsuperscript{46} See Shí pǐn shēng chǎn xǔ kě guǎn lǐ bǎn fǎ (2017 xiū zhèng) (食品生产许可管理办法 (2017修正)) [Administrative Measures for Food Production Licensing (2017 Amendment)] (promulgated by the China Food and Drug Administration, Nov. 11, 2017, effective Nov. 17, 2017) 2017 China Law LEXIS 1410 (China) (noting that “local food and drug administrative authorities at or above the county level shall be responsible for the food production licensing administration within their respective administrative areas”); see Shí pǐn jīng yíng xǔ kě guǎn lǐ bǎn fǎ (食品经营许可管理办法) [Administrative Measures for Food Distribution Licensing] (promulgated by the China Food and Drug Administration, Aug. 31, 2015, effective Oct. 1, 2015) Enpkulaw.cn CLI.4.256408 (EN) (China) (noting that “local food and drug administration at and above the county level shall be responsible for administering food distribution licensing within their respective administrative regions”).

\textsuperscript{47} Wǎng luò shí pǐn ān quán wéi fǎ xíng wéi chá chǔ bàn fǎ (网络食品安全违法行为查处办法) [Measures for the Investigation and Handling of Illegaities of Online Food Safety] (promulgated by the China Food and Drug Administration, July 13, 2016, effective Oct. 1, 2016), art. 11, Westlaw China Order No. 27.
related violations, among others.\textsuperscript{48} The filing can be used to increase
the frequency of supervision and inspection of food producers
and distributors in case of poor credit records.\textsuperscript{49} This will be made
public, through which food business operators can be motivated to
abide by the law. Food authorities are also required to create files of
food business operators for their own records.\textsuperscript{50} For instance, a food
authority at or above the county level, shall establish management
rules for food production and distribution licensing archives, and
archive in a timely manner the materials on the above licenses.\textsuperscript{51}

Similarly, as the provider of an online food platform is
considered a co-regulator, it is obliged to create a profile of online
food business operators and file accordingly. In addition, it will have
to keep a record of the basic information of the food business
operators and the food safety management personnel.\textsuperscript{52}

Profiling and filing here is different from filing for an official
record as discussed above. Here the information for profiling and
filing is mainly from the food business operators whereas filing for
an official record is targeted at information of online food platforms.

1.2 Process control obligations

The process control requirements as laid down in the 2015
FSL Amendment, oblige platforms to monitor and supervise food
business operators within the platforms.\textsuperscript{53} The above tasks evolve into
more specific sub-tasks under the Online Food Measures.

\textsuperscript{48} Shi pǐn shēng chǎn xǔ kě guǎn lǐ bàn fǎ (2017 xiū zhèng) (食品生产许可管理办法 (2017
修正)) [Administrative Measures for Food Production Licensing (2017
Amendment)] (promulgated by the China Food and Drug Administration, Nov. 11,
\textsuperscript{49} Id. at art. 40, art. 45.
\textsuperscript{50} Id.
\textsuperscript{51} Id. at art. 48; Shi pǐn jīng yíng xǔ kě guǎn lǐ bàn fǎ (食品经营许可管理办法)
[Administrative Measures for Food Distribution Licensing] (promulgated by the
China Food and Drug Administration, Aug. 31, 2015, effective Oct. 1, 2015), art. 43,
Enpkulaw.cn CLI.4.256408 (EN) (China).
\textsuperscript{52} Wangluo Shípǐn Ēnwá Hángyè Xùkè Guǎnzhè Fǎ (网络食品安全违法行为
查处办法) [Measures for the Supervision and Administration of the Safety of Food
Offered through Online Catering Services] (promulgated by the China Food and Drug
\textsuperscript{53} Food Safety Law of the People’s Republic of China, supra note 43, at art. 78.
First, platforms are obliged to fulfill certain technical requirements. In 2016, China promulgated the Cyber Security Law, the first of its kind in China. The law recognizes the Internet provides a very important infrastructure for economic development and, if not well controlled, could endanger national security. Under the law, even food delivery platforms may be considered critical infrastructure. This means that any entity considered “critical information infrastructure”, some of which hold significant amounts of information on Chinese citizens, will be under scrutiny from cyberspace regulators.

Similarly, an online food platform is required to fulfill technical requirements before they provide services. Technical requirements include, but are not limited to, maintaining data backup and recovery technologies with a view of ensuring the reliability and security of the data and information relating to online food trading.

Second, platforms will have to maintain a record-keeping system to document business transactions of the food business operators. Under 2015 FSL Amendment, record-keeping is a very important mechanism to ensure compliance. Both food producers and distributors are required to keep a record of product and trading information. For instance, a food distributor shall establish a record system for checking the purchased food, honestly record the name, specifications, quantity, date or batch number of production, shelf life, and date of purchase of food and the names, addresses, and

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55 Id. at art. 1.
58 WǍNG LUÒ SHĪ PǏN ĀN QUĀN WĒI FǍ XĪNG WĒI ČHǖ CHǖ BÀN FĀ (网络食品安全违法行为查处办法) [Measures for Investigation and Punishment of Unlawful Acts concerning Online Food Safety] (promulgated by China Food and Drug Administration, July 13, 2016, effective October 1, 2016), art. 9, 2016 Lexis China Law 370 [hereinafter Measures for Investigation].
contact methods of suppliers, and retain the relevant vouchers. The retention period of records and vouchers shall not be less than six months after the expiry of the shelf-life of products; or shall not be less than two years for products without an express shelf life.

Similarly, the provider of an online food platform is obliged to maintain a record of food trading information and record-keeping time shall not be less than 6 months after the expiry date of the food products; in case of food products without any express expiry date, record-keeping time shall not be less than 2 years after the selling.

Third, platforms are required to monitor business operation of the food business operators within the platforms. The provider of an online food platform trading platform is obliged to set up a food safety department or assign a food safety professional to inspect online food business activities and information. If the provider is aware of food safety violations, it shall timely stop and report them to the local food authorities at the county level.

The above obligation requires platforms to detect misconducts and false information from food business operators. As observed by Mr. Chen Xu, former Director-General of CFDA’s Department of Legal Affairs, online catering platforms are required to conduct random inspection and surveillance to detect noncompliance from the catering service providers. This is very challenging to some extent, because platforms are expected to monitor the whole process of online food business running within the platforms. In practice, the platforms only have information of food products and logistics, submitted or generated by food business operators. The platforms are expected to

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60 Id. at art. 51.
61 WĂNG LUÒ SHÍ PǏN ĀN QUĀN WĒI FǍ XĪNG WÉI CHÁ CHǌ BÀN FǍ (网络食品安全违法行为查处办法 [Measures of Investigation of Illegal Conducts Concerning the Safety of Food Sold Online] [promulgated by China Food and Drug Administration, July 13, 2016, effective October 1, 2016] art. 13, 2016 Lexis China Law 370, 5 (China).
62 Id. at art. 14.
63 Id.
64 Id.
65 See id. at arts. 29–37 (providing penalties for platform providers who fail to comply with various obligations pertaining to the monitoring and record-keeping of online food producer/trader business practices).
watch business activities from online food businesses. This is hardly made possible for platforms without assigning their management team for an on-site inspection. However, it is too expensive for online food platforms, in particular those involving food retailing, to create teams like this. Simply put, the platforms involving food retailing don’t think it is feasible for them to do on-site inspection, considering high cost arising from manpower and time. Nevertheless, there is no clarification as to how this obligation should be implemented in practice to date.

Fourth, platforms are required to stop providing services under certain specific circumstances. One the one hand, Online Food Measures specifies scenarios in which the platforms will have to stop providing services to online food operators upon their serious violations. On the other hand, there are scenarios in which authorities will order platform providers to cease operations their failure to fulfill obligations leads to public harm.

The provider of an online food platform trading platform is obligated to timely stop and report food safety violations to the food authorities when a violation is made known to it. In case of serious violation, the provider must stop providing further platform services to the violator. Scenarios of serious violations include, among others, the following circumstances: 1) online food business operators accused of a crime relating to food safety are being investigated by public security departments or prosecuted by procuratorate; 2) online food business operators are convicted of a crime relating to food safety by court; 3) online food business operators are held in detention or punished with other administrative penalties by public security.

See id. at art. 15 (requiring online third-party food trading platforms to cease provision of services to online food traders and producers who are under investigation for or are civilly or criminally liable for violations); see also id. at art. 37 (requiring Food and Drug Administration officials to order third-party platform providers to cease operations when providers’ failures cause serious foodborne illness, death, the infringement of consumers’ rights and interests, or other serious consequences). See also, 肖平辉[Pinghui Xiao], 互联网背景下食品安全治理研究[China’s Food Safety Governance in the Age of the Internet Plus] (知识产权出版社[Intellectual Property Publishing House] 54 (2018).

67 Id. at art. 15.

68 Id.
departments due to violation of food safety laws;\textsuperscript{69} and 4) online food business operators are ordered to cease business operation or their food licenses are revoked by food authorities.\textsuperscript{70}

The provider of an online food platform trading platform shall be ordered to cease operation and the case will be filed to communications departments for investigation when failing to fulfill relevant obligations cause the following serious consequences: 1) death or serious injury, 2) serious food safety incidents, 3) serious foodborne illness, 4) violating consumers’ legal rights and interests and causing serious adverse social impacts.\textsuperscript{71}

2. Special rules for online small food operators

According to the International Labour Organization, small food business operators like street vendors absorb large numbers of surplus labour. But there is a demand side as well. A mass of consumers welcome street vendors because they provide consumers with the accessibility to affordable goods and services. Therefore, it can have positive impacts on poverty reduction, employment, entrepreneurship, and social mobility to ensure the right to run small businesses.\textsuperscript{72} Over the past thirty years, China’s urban population has risen from 22.9\% to 56.8\% of its 1.3 billion people.\textsuperscript{73} China’s urbanization has seen a large migrant population enter large and medium-sized cities. “Currently, many people from the countryside live in cities, but lack access to social services[,]” which means, for instance, they have few jobs. That actually creates a barrier to social stability.\textsuperscript{74} So job creation is of great importance to maintain the social

\textsuperscript{69} Id.

\textsuperscript{70} Id.

\textsuperscript{71} Id. at art. 37.

\textsuperscript{72} K\textsuperscript{y}o\textsuperscript{k}o K\textsuperscript{u}s\textsuperscript{a}k\textsuperscript{a}k\textsuperscript{e}, Int’l Labour Org., Policy Issues on Street Vending: An Overview of Studies in Thailand, Cambodia and Mongolia 3 (2006).


stability. China is now entering the age of the ubiquitous Internet. The Chinese government has considered it a great means to generate prosperity and jobs. In addition, it also treats online platforms as a channel to nurture small businesses under the so-called Mass Entrepreneurship and Innovation Campaign.75

Thus, small food businesses play an important role in China. According to Jiangsu Province, among its 330,000 catering service providers more than 70 percent are small businesses.76 As China experienced rapid economic growth since its open policy, “it also faced an accompanying [ ] widening income gap[,]” and there is a lack of balanced regional development, due to stark differences between coastal areas and rural regions.77 Considering all the above factors, local governments are required to promulgate local rules to administer small food workshops, food vendors, and other small food business operators under the 2015 FSL Amendment.78 That means China introduces a regulatory decentralization strategy to regulation of small food business operation in considering local circumstances. Simply put, rules and policies as applied to small food workshops and food vendors, among other small food business operators, vary from province to province.

Indeed, due to the decentralization approach to small food business regulation, different provinces have introduced different policies to regulate online small food businesses. Some advocate full liberalization, while others totally prohibit small food operators from doing business over the Internet. For instance, Hebei Province

75 关于大力推进大众创业万众创新若干政策措施的意见 [Opinions on Policy Measures Implemented to Promote Mass Entrepreneurship and Innovation], 国务院 [State Council of the People’s Rep. of China] (2015); see China boosts mass entrepreneurship and innovation, STATE COUNCIL OF THE PEOPLE’S REP. OF CHINA (Jun. 16, 2015). http://english.gov.cn/policies/latest_releases/2015/06/16/content_281475128473681.htm (noting the government’s specific intents to promote means to support Internet service providers, start-ups, and “platforms for innovative technologies[.]”).

76 丁冬[Dong Ding]. 小餐饮立法与监管政策评析（上） [Analysis on legislation and policy of small catering services industry (part one)], 中国医药报 [CHINA PHARMACEUTICAL NEWS], (AUG. 22, 2018).


78 Food Safety Law of the People’s Republic of China, supra note 43, at art. 36.
promulgated local rules allowing small food business operators including small workshops, vendors and small restaurants to sell foods and provide catering services via the Internet.\textsuperscript{79} Those small food operators can enter online platforms to do business after real-name registration.\textsuperscript{80} Guangdong Province, however, does not allow small workshops to sell the foods produced thereby over the Internet.\textsuperscript{81} That piecemeal approach creates a challenge for online small food business operators and online food platforms. For instance, foods produced in small workshops in Hebei can be legally sold in this province over the Internet. However, if they are sold to consumers in Guangdong over the Internet, they can be considered illegal according to rules as established in Guangdong.\textsuperscript{82} Taken together, small food businesses, including small workshops and small restaurants, which trade foods over the Internet are encouraged to respect but are not required to abide by the Online Food Measures enacted by CFDA, which is regarded as a national rule applied throughout the entire country.\textsuperscript{83}

B. Regulating food e-commerce under the E-commerce Law cluster

The E-commerce Law created the term ‘e-commerce business operators’, which denotes natural persons, legal persons, or organizations without the status of legal person that engage in the business activities of selling commodities, or providing services, through the Internet or any other information network. Here e-commerce business operators comprise: 1) e-commerce platform business operators, 2) in-platform business operators, and 3) e-commerce business operators that sell commodities or provide

\textsuperscript{79} 河北省食品小作坊小餐饮小摊点管理条例[Regulation of Small Food Workshops, Small Canteens and Food Vendors in Hebei] (Hebei People’s Congress Standing Committee), art. 17 (2016).
\textsuperscript{80} Id.
\textsuperscript{81} China’s food safety governance in the age of the Internet Plus, supra note 27, at 299.
\textsuperscript{82} Id. at 303.
\textsuperscript{83} Measures for Investigation, supra note 71, at art. 46.
services through a self-built website or any other network services.\textsuperscript{84} Of note is that ‘business operators’ are used in a very broad sense here, so platform providers are considered e-commerce business operators. In comparison, the 2015 FSL Amendment, through its provisions relating to online food trading, make it clear that food business operators are intentionally distinguished from platform providers. It further implies that providing platform services is not regarded as a business operation.\textsuperscript{85} In other words, the 2015 FSL Amendment treats food business operators in a narrow sense, and online food platforms are not considered food business operators. Taken together, the term ‘platform providers’ in the 2015 FSL Amendment and that of ‘platform business operators’ in the E-commerce Law both recognize platforms are run as third-party entities to provide services, though the interpretation of ‘business operation’ is treated in a different manner in these two laws. Nevertheless, the E-commerce Law recognizes the special characteristics of platforms. So an ‘e-commerce platform business operator’ is especially defined as a legal person, or an organization without the status of legal person. The platform provides multiple parties with services, such as online places of business, match-making, and releasing information, for them to independently conduct trading activities.\textsuperscript{86} Simply put, e-commerce platform business operators are articulated to be different from other e-commerce business operators, e.g., those directly selling goods and providing services to consumers. The above observation is equivalent to saying that, as far as e-commerce as defined in the E-commerce Law and online food trading as described in the 2015 FSL Amendment are concerned, ‘e-commerce platform business operators’ are similar, if not identical to ‘online platform providers.’

Similarly, the law recognizes the co-governance principle as previously established in the 2015 FSL Amendment. China is


\textsuperscript{85} See Food Safety Law of the People’s Republic of China, supra note 43, at art. 62 (describing the requirements of third-party platforms).

\textsuperscript{86} E-commerce Law of the People’s Republic of China, supra note 97, at art. 9.
dedicated to establishing a collaborative regulatory system in line with the characteristics of e-commerce and promoting the formation of an e-commerce market governance system jointly participated in by relevant authorities, e-commerce industry associations, e-commerce businesses, and consumers, among others, so e-commerce platforms are treated as a co-regulators of e-commerce under the E-commerce Law.\(^\text{87}\) The law creates a collaborative governance scenario, in which e-commerce platform business operators play a key role in regulation of e-commerce. In addition, the E-commerce Law also created the term ‘in-platform business operator’ to denote an e-commerce business which sells commodities or provides services through an e-commerce platform, which is different from an e-commerce operator through self-built websites.\(^\text{88}\) Like in the 2015 FSL Amendment cluster, special rules were created for the purpose of small e-commerce businesses under the E-commerce Law.\(^\text{89}\)

1. Obligations for e-commerce platform business operators

Under the E-commerce Law, similar to the 2015 FSL Amendment, the e-commerce platform business operators are obliged to ensure that in-platform business operators are in conformity with law. To this end, provisions for purposes of both entry control and process control mechanisms are created.

1.1 Entry control obligations

Under the law, the in-platform business operator is obliged to submit information including its identity, address, contact information, and administrative licensing to the platform business operator. In addition, the platform business operator shall establish a register, and make regular updates and inspection of the above information.\(^\text{90}\) For

\(^{87}\) Id. at art 7.
\(^{88}\) Id. at art. 9.
\(^{89}\) Id. at art. 71.
\(^{90}\) Id. at art. 27.
those individuals who are eligible to conduct e-commerce activities and can be exempted from ICRs, e.g., a farmer selling agricultural or sideline products produced by him or herself, the platform will have to at least verify and keep a record of basic information of those individuals, whereas in the case of in-platform business operators operating as legal persons or organizations without the status of legal person, on top of that information, the platform will also have to verify and keep a record of business licenses. Of note is that a co-regulation scenario is applied here, in which both e-commerce regulatory authorities and platform business operators play a role. Simply put, the e-commerce regulatory authorities issue all kinds of business licenses and the platform business operators will have to inspect the above licenses as required by the law so they are complementary to each other in this context.

When an e-commerce platform business operator provides services for non-business users selling commodities or provides services in the platform, the e-commerce platform business operator shall observe the relevant provisions in this Section. Here, ‘non-business users’ largely denotes those second-hand goods or occasional sellers who are not regular business operators and thus exempted from business licenses. For safety and security purposes, platform business operators will have to collect their information before they are allowed to conduct e-commerce activities within the platforms.

The e-commerce platform business operator shall submit the identity information of in-platform business operators to the administrative authorities of market regulation as required and remind any in-platform business operator that has not obtained ICRs to file for application from relevant public authorities as required by the law. In this case, it will cooperate with the administrative authorities of market regulation and offer help to in-platform business operator to file for

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91 Id.
93 E-commerce Law of the People’s Republic of China, supra note 97, at art. 27.
94 赵旭东 [Xudong Zhao], supra note 104, at 157.
ICRs.\textsuperscript{95} E-commerce platform business operators are required to share information collected from those in-platform business operators with public authorities to better regulate e-commerce.\textsuperscript{96} In addition, an e-commerce platform business operator shall submit the identity information and the information related to tax payment of in-platform business operators to the taxation authorities.\textsuperscript{97} In the third reading of the draft E-commerce Law, platform business operators were even required to submit information of e-commerce business activities to the taxation authorities on top of identity information. But the information of e-commerce business activities can be interpreted so loosely that even trade secrets and like information can be included, which is not implementable in practice. So the idea of including information of e-commerce business activities was ultimately discarded.\textsuperscript{98}

1.2 Process control obligations

The E-commerce Law enforces all kinds of process control measures, which require e-commerce platform business operators to serve as a qualified supervisor of in-platform business operators in a relatively all-encompassing struggle against e-commerce industry in compliance. To this end, platform business operators are required to take a few process control measures relating to monitoring, technical requirements, business transaction recordation, platform rule-making and anti-manipulation, among other things.\textsuperscript{99}

First, platform business operators are required to take measures to monitor certain e-commerce activities as conducted by in-platform business operators and take relevant measures when needed. All e-commerce business operators are required by the Law to obtain relevant administrative licensing.\textsuperscript{100} In addition, an e-commerce

\textsuperscript{95} E-commerce Law of the People’s Republic of China, supra note 97, at art. 28.
\textsuperscript{96} 赵旭东[XUDONG ZHAO], supra note 104, at 162.
\textsuperscript{97} E-commerce Law of the People’s Republic of China, supra note 97, at art. 28.
\textsuperscript{98} 赵旭东[XUDONG ZHAO], supra note 104, at 162.
\textsuperscript{99} E-commerce Law of the People’s Republic of China, supra note 97.
\textsuperscript{100} Id. at art. 12.
business operator should not sell commodities or provide services which do not meet the requirements for guaranteeing personal and property safety and for environmental protection and shall not sell or provide commodities or services the trading of which is prohibited by any law or administrative regulation.\(^{101}\) Where an e-commerce platform business operator discovers that any information on commodities or services in its platform fails under any above circumstances, it shall take necessary disposition measures in accordance with the law and report to the relevant competent authorities.\(^{102}\) Necessary disposition measures include, but are not limited to, stopping the violation in a timely manner and ceasing providing online trading platform services. The former is applied in cases of any minor violation and the latter for any serious illegal act. More importantly, the platform has an obligation to report the violation to the authorities and provide relevant information when necessary. Here the information to be provided is so comprehensive that it can include identity, e-commerce business activities, and the like.\(^{103}\) It is of importance to note that an e-commerce platform business operator serving as a private regulator can take measures, such as warning and suspension or termination of services, against an in-platform business in violation of any law or regulation. The platform business operators act this way according to the prior platform service agreement and transaction rules as established between the platform and in-platform business operators, and timely publication shall be made in that scenario.\(^{104}\)

Second, there are certain technical requirements, which platform business operators must meet. An e-commerce platform business shall take technological measures and other necessary measures to ensure its cyber security and stable operation, prevent online illegal and criminal activities, effectively tackle cyber security events, and guarantee e-commerce trading security.\(^{105}\)

\(^{101}\) Id. at art. 13.
\(^{102}\) Id. at art. 29.
\(^{103}\) 赵旭东 [XUDONG ZHAO], supra note 104, at 166.
\(^{104}\) E-commerce Law of the People’s Republic of China, supra note 97, at art. 36.
\(^{105}\) Id. at art. 30.
became a top priority in China, and China’s first Cyber Security Law was promulgated to tackle ever-increasing hacker attacks and cybercrime in 2016.\footnote{Zhonghua Renmin Gong’eguo Wangluo Anquan Fa 中华人民共和国网络安全法 [Cyber Security Law of the People’s Republic of China] (promulgated by the Standing Comm. Nat’l People’s Cong, Nov. 7, 2016, effective June 1, 2017), 2016 CHINA LAW LEXIS 1398.} According to the law, the Internet is regarded as an infrastructure of great importance for economic development. It further contends that cyberspace, if the country loses control of it, can endanger national security.\footnote{Id. at art. 1.} The law creates the term ‘critical information infrastructure’, which is so broad that it encompasses both traditional critical sectors like power and transport as well as other infrastructure which could likely harm the people’s livelihoods. As the Financial Times reported, even online catering platforms could be considered critical infrastructure.\footnote{Mirren Gidda, China’s New Cybersecurity Law Could Cost Foreign Companies Their Ideas, Newsweek (May 31, 2017, 11:35 AM), https://www.newsweek.com/china-cybersecurity-hacking-intellectual-property-multinationals-618345.} The Law requires that any entity considered a critical information infrastructure, together with those companies having significant amounts of information on Chinese citizens, should take responsibility to ensure cyber security.\footnote{Carly Ramsey & Ben Wootliff, China’s Cyber Security Law: The Impossibility of Compliance?, FORBES (May 29, 2017, 3:29 AM), https://www.forbes.com/sites/riskmap/2017/05/29/chinas-cyber-security-law-the-impossibility-of-compliance/#157cb17b471c.} Simply put, e-commerce platforms, including online catering platforms, can be regarded as critical infrastructure, so platform business providers are required to take technical measures to ensure the safe and stable operation of the platforms and prevent illegal criminal activities therein.\footnote{Brian Marterer, China’s New E-commerce Food Safety Measures, PWC, https://www.pwccn.com/en/food-supply/publications/china-new-e-commerce-food-safety-measures/cfda-measures-for-e-commerce-food-safety.pdf (last visited Dec. 14, 2018).}

Third, platform business operators are required to keep a record of information of business transactions. An e-commerce platform business operator shall record and retain information on the commodities and services and transaction information released in the platform and ensure the integrity, confidentiality, and availability of the information. The information on commodities, services, and
transactions shall be retained for at least three years from the day of completion of the transaction, unless otherwise provided by any law or administrative regulation.\textsuperscript{111} Of note is that the information kept here is different from the information required during the entry control in the sense that the former is about business transactions whereas the latter concerns identity. The information of business transactions can be divided into two types, namely information of commodities as sold and services as provided within the platform, first, and trading information, second.\textsuperscript{112}

Fourth, agreements and platform rules, which platform business operators are entitled to introduce will have to meet certain criteria. Online platforms, including e-commerce platforms, are engines for growth and innovation. To create a good environment for platforms to scale up, they are recognized as a private legislator to lay down certain platform rules, which in-platform business operators will have to comply with. Nevertheless, generally speaking, agreements and platform rules from the platforms are considered contractual terms, which have to be negotiated and agreed by both parties to a certain contract. Because platforms can be incredibly powerful, they may have the ability to manipulate their power to lay down unfair terms. To avoid manipulation by the platforms, China created a lifecycle interference mechanism to prevent potential manipulation. In general, there are quite a few principles for platform rule-making.\textsuperscript{113} An e-commerce platform business operator shall abide by the principles of openness, equity, and impartiality; develop a platform service agreement and transaction rules; and specify the rights and obligations in aspects such as joining and leaving the platform, assurance of the quality of commodities and services, protection of consumer rights and interests, and protection of individual information.\textsuperscript{114}

In addition, there are quite a few procedural requirements to be fulfilled by platforms when making platform rules. For instance, an

\textsuperscript{111} E-commerce Law of the People’s Republic of China, \textit{supra} note 97, at art. 31.
\textsuperscript{112} Id. at art. 2.
\textsuperscript{113} Id. at art. 32.
\textsuperscript{114} Id.
e-commerce platform business operator shall continuously publish the information regarding its platform service agreement and transaction rules, or the mark of the link to the aforesaid information, at a conspicuous place of its homepage to ensure the easy and complete reading and download by businesses and consumers. Another good example can be explained in the following circumstances. An e-commerce platform business operator is obliged, when amending its platform service agreement or transaction rules, to ask for public opinion at a conspicuous place of its homepage and take reasonable measures to ensure that each side is able to express opinions in a timely manner. The amendment shall be published at least seven days prior to its entry into force.

Fifth, there is an anti-manipulation mechanism created to prevent abuse of market power from platforms. Market power occurs if a company has a significant share of the market, and many online platforms including e-commerce ones in China are unicorns in certain fields, which then enables them to use their technology and other powerful means to abuse market power, which in a way constitutes a violation of anti-monopoly and anti-unfair competition laws. An e-commerce platform business operator shall not, by means such as service terms, transaction rules, and technology, unreasonably restrict, or additionally set unreasonable conditions against the transactions and trading prices of an in-platform business operator in the platform, or its transactions with other businesses, or collect unreasonable fees from an in-platform business operator.

2. Special rules for small e-commerce businesses

An e-commerce business shall apply for an ICR, but the following are exempt from this obligation: 1) those individuals, selling

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115 Id. at art. 33.
116 Id. at art. 34.
118 E-commerce Law of the People’s Republic of China, supra note 97, at art. 35.
agricultural or sideline products produced by them; 2) those selling products of a cottage industry; 3) those use their own skills to engage in public convenience services; 4) occasional and low-value transactions, for which no license is required by the law; or 5) those specified unless an ICR is not required by laws or administrative regulations.\(^{119}\)

In 2018, China announced the Strategic Plan for Rural Revitalization (2018-2022).\(^{120}\) Rural areas are encouraged to take full advantage of e-commerce and ‘Internet Plus’ to strengthen agricultural product brand marketing. Internet companies are encouraged to establish agricultural service platforms to help better market agricultural products. China is dedicated to promoting e-commerce in rural areas and building extensive infrastructure for the development of e-commerce there.\(^{121}\) All the factors combined indicate that farmers in rural areas can have greater opportunities to sell agricultural products produced by themselves, including fresh produce, fruits and vegetables, and Chinese medical herbs via the Internet.\(^{122}\) At present, the e-commerce market is saturated in cities, whereas there is much room in rural areas.

Social media platforms like Webo and WeChat in China are ubiquitous and widely used in China, which due to their large user body, generate a hybrid type of e-commerce, namely social media e-commerce. Most social media users are individuals, so e-commerce business operators in social media platforms are individuals, and they are labeled as a ‘Micro Business’ in China, which connotes small businesses conducted in an informal way.\(^{123}\)

\(^{119}\) Id. at art. 10.

\(^{120}\) Guo Yiming, Rural Revitalization Highlighted at Two Sessions, CHINA.ORG.CN (Mar. 5, 2018), http://www.china.org.cn/china/NPC_CPPCC_2018/2018-03/05/content_50659387.htm.

\(^{121}\) Id.

\(^{122}\) See Teresa Schroeder, Chinese Regulation of Traditional Chinese Medicine in the Modern World: Can the Chinese Effectively Profit From One of Their Most Valuable Cultural Resources?, 11 PAC. RIM. L. & POL. J. 687, 709 (2002) (discussing China’s regulations for online marketing of medicinal herbs which qualify as Traditional Chinese Medicine, as opposed to medicinal herbs farmers can market as edible agricultural products).

\(^{123}\) Pinghui Xiao, Legislative Development of Feed E-commerce Regulation in China, 13 EUR. FOOD & FEED L. REV. 313, 321-22 (2018) [hereinafter Legislative Development of Feed E-commerce Regulation in China].
III. REGULATING CHINA’S FOOD E-COMMERCE: HARMONIZATION OF LAWS

As observed by Fortin, an administrative agency in the U.S. can serve as the legislator, the prosecutor and the judge, ‘all rolled into one’, which creates open debate on the legality of these powerful agencies. To prevent abuse of power, the U.S., however, limits these agencies to stringent procedural requirements coupled with court review mechanisms. For a long time, online platforms in China also acted like a three-in-one entity with powers of private rule-making, execution, and dispute settlement, and therefore, similarly, questions arise as to whether or not this is acceptable and how the platforms can be better controlled. Interestingly, the Chinese government did not intervene in this Internet economy ecosystem, but actually created a relatively loose and supportive market policy environment during the early stages of Internet development. The Chinese government understands that the concentration of these powers in online platforms in that way could make Chinese platform economy scale up to be competitive in the world. This idea can be seen in policy documents of China’s ‘Internet Plus’ Strategy in the course of China’s digitalization movement. However, there is an issue of harmonization between the 2015 FSL Amendment and the E-commerce Law.

125 Legislative Development of Feed E-commerce Regulation in China, supra note 135, at 320.
126 For instance, the State Council announced a policy document stating that the Chinese government is dedicated to ‘cultivating’ Internet platforms with global influence. To this end, the enterprises will be hoped to play a key role in establishing an “Internet +” industrial innovation network or industrial technology innovation alliance, which is a joint undertaking by enterprises, industries, universities and research institutes. The leading enterprises are the main driver to create innovative platforms. To achieve these goals, the Chinese government is committed to breaking down industry barriers to lay a great foundation for the Internet industry to scale up. See 国务院关于积极推进“互联网+”行动计划的指导意见 [Guiding Opinions of the State Council on Actively Promoting the “Internet Plus” Strategy] (2015), http://www.gov.cn/zhengce/content/2015-07/04/content_10002.htm.
A. Harmonization of definitions and liabilities

For a long time, in practice, food e-commerce and online food trading have been considered two interchangeable notions in China.\textsuperscript{127} However, when the E-commerce Law was enacted in August 2018, the legal interpretation of these two terms faced challenges.

Under the E-commerce Law, e-commerce is defined to contain ‘any business activities of selling commodities or providing services via the Internet or any other information network.’\textsuperscript{128} However, under the 2015 FSL Amendment, the term ‘online trading,’ rather than ‘e-commerce,’ is used, and ‘online trading’ is left undefined.\textsuperscript{129} Horizontally, both the E-commerce Law and the 2015 FSL Amendment belong to the same level of laws enacted by the Standing Committee of the NPC. Simply put, according to the Legislation Law, neither law is subordinate to the other.\textsuperscript{130} In theory then, the E-commerce Law, in defining the term of ‘e-commerce’ seems to produce more legal predictability and certainty than the 2015 FSL Amendment, which does not provide a definition of ‘online trading’. Professor Gao Fuping argued that since China enacted Electronic Signature Law in 2004, for the purpose of not confusing the E-commerce Law with this Law, China should introduce an Internet Commerce Law or an Online Commerce Law rather than the E-commerce Law.\textsuperscript{131} Of note is that according to some scholars, the

\textsuperscript{127}Pinghui Xiao, Legislative Development of Feed E-commerce Regulation in China, 13 EUR. FOOD & FEED L. REV. 313, 313 n.1 (2018).

\textsuperscript{128} E-commerce Law of the People’s Republic of China, supra note 97, at art. 2.

\textsuperscript{129} See generally Food Safety Law of the People’s Republic of China, supra note 43, at art. 62 (mentioning “online trading” but not defining “online trading”).


\textsuperscript{131} 高富平 [Fuping Gao], 从电子商务法到网络商务法—关于我国电子商务立法定位的思考 [From e - commerce law to online commerce law: A study of direction of e-commerce legislation in China], 法学 [LAW SCIENCE] 145–46 (2014).
term of ‘online trading’ can be found in some administrative rules enacted by SAIC. For instance, the Measures for Online Trading was promulgated to regulate goods sold and services provided via the Internet in 2014. In other words, ‘online trading’ has been a pre-existing legal term before the introduction of the 2015 FSL Amendment in 2015 and the E-commerce Law in 2018. Other scholars have implies that China should have introduced an Online Trading Law rather than the E-commerce Law. The E-commerce Law, recognizes the doctrine of lex specialis, which has been endorsed in the Legislation Law by stipulating that “where any other law or administrative regulation provides rules for the sale of commodities or provision of services, such other law or administrative regulation shall apply.” Moreover, some scholars, by pointing out this provision, hold that the 2015 FSL Amendment is a special e-commerce law whereas the E-commerce Law is a general e-commerce law. If that is the case, it actually produces a paradox situation.

As far as online platforms are concerned, things become more complicated. The long-winded legal term, ‘online third-party food trading platform provider’ as mentioned early under the 2015 FSL Amendment
Amendment is undefined. Nevertheless, the term ‘online food platform provider’ is intentionally created with a view to distinguishing responsibilities and liabilities of platform providers from those of food business operators doing businesses within the platforms. That actually delivers a fundamental idea that a platform is a technologically-neutral intermediary, and that essentially “means that the provider of a platform [is treated] as a third-party entity, who should not be responsible for, or only in a limited way responsible for, any wrongdoings from [those] using the platform.”

Online food platforms play a big role in shaping business modes and models of online food trading in China. The 2015 FSL Amendment implies that business models of online food trading can be divided into two main types, namely, self-built models and platform models. Later measures enacted by the CFDA also explicitly confirm the above idea. In the course of China’s introduction of the 2015 FSL Amendment, WeChat, among other social media platforms, raised a compelling argument that social media platforms should not be treated as online food platforms in the sense that social media platforms are meant to be used as a communication tool rather than a trading one. However, the so-called ‘Micro Business’ involving individuals and SMEs selling foods via social media platforms has become a rising phenomenon in China, creating a form of so-called social media e-commerce.

When China introduced the 2015 FSL Amendment it also launched Mass Entrepreneurship and Innovation Campaign, as mentioned earlier, to boost employment, and the Internet is considered a great means to generate prosperity and jobs. Largely due to this,

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136 See Food Safety Law of the People’s Republic of China, supra note 43, at art. 62 (creating obligations for “third-party online food trading platform[s]” but providing no specific definition for the term).


138 Pinghui Xiao, China’s Rising Online Food Trading: Its Implications For the Rest of the World 125–27 (Xinting Jia & Roman Tomasic eds., 2017).


140 Legislative Development of Feed E-commerce Regulation in China, supra note 149, at 318.

141 See e.g., id. at 321–22.

142 Yue Zhang, Nation to boost entrepreneurship, innovation, CHINA DAILY (Sept. 7, 2018,
undefined online platforms can leave more room for employment and better environment for innovation. However, when it comes to the E-commerce Law, because e-commerce is defined, which makes it predictable, the term ‘e-commerce platform’ can be equally predictable. By interpretation, it is safe to say that in this law that e-commerce platforms can be so extensive that the E-commerce Law is applied to social media platforms and mobile applications. Therefore, it further implies that the platform obligations as laid down in the E-commerce Law, are applied to those social media platforms involving food SMEs and ‘Micro Business’, which however, is very much contestable under the 2015 FSL Amendment cluster.

While the harmonization of definitions can produce consistent legal predictability as far as the question of what platforms should take what responsibility is concerned, there is a further issue relating to harmonization of liabilities as laid down in the 2015 FSL Amendment and the E-commerce Law.

Under the 2015 FSL Amendment, where the provider of an online food platform, in violation of this law, fails to assume the supervision tasks required by the law, which results in food business operators’ failure in food safety compliance, food authorities at or above the county level shall order it to take corrective action, confiscate its illegal income, and impose a fine of not less than RMB 50,000 but not more than RMB 200,000 on it. However, under the E-commerce Law, where an e-commerce platform business operator fails to take necessary measures to ensure in-platform business operator conducts e-commerce lawfully, relevant authorities shall order the e-commerce platform business operator to take corrective action within a specified period and may fine it not less than RMB 50,000 not more than RMB 500,000; or if the circumstances are serious, it shall be ordered to suspend business for rectification, in addition to a fine not less than RMB 500,000 but not more than RMB 2,000,000.143 In terms of the fine intervals, the two laws vary greatly, which creates a question of how the administrative penalties should be applied as far as

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143 E-commerce Law of the People’s Republic of China, supra note 97, at art. 83.
online food platforms are concerned.

As far as online food platform liabilities are concerned, all the above factors combined create a few open questions: 1) should a social media platform, when used to trade in foods, be treated as an online food platform in the 2015 FSL Amendment or an e-commerce platform business operator under the E-commerce Law? 2) when an online food platform fails to assume supervision tasks as required by the law, should an administrative fine ranging from RMB 50,000 to RMB 200,000 under 2015 FSL Amendment be imposed upon the platform or should a fine ranging from 50,000 to RMB 2,000,000 be imposed upon it? In other words, there is a need for further harmonization.

B. Harmonization of legislative aims and missions

It is necessary to examine the aims of different pieces of legislation at the outset in the sense that in most Chinese laws, their missions will be clearly articulated at the very beginning, upon which the directions of the laws in question will be largely based. We find varying missions in laws relating to food regulation. For instance, the E-commerce Law has two concurrent missions, namely, 1) to safeguard the lawful rights and interests of all parties to e-commerce, to regulate e-commerce conduct, and to maintain the market order, and 2) to promote the sustainable and sound development of e-commerce. But in the 2015 FSL Amendment, there is only one mission, and that is to ensure food safety and protect the physical health and life safety of the public. Questions arise as to whether there are conflicts between protecting human health on the one hand and promoting economy on the other. Admittedly, there are conflicts between protecting health and safety and promoting industry in the

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144 See id. at art. 1. (drawing similarities to the E-commerce Law, the Law on Agri-product Quality and Safety with the establishment of two concurrent missions, namely, to protect human health on one hand and to promote rural economy on the other); See e.g., Zhong Hua Ren Min Gong He Guo Nong Chan Pin Zhi Liang An Quan Fa (中华人民共和国农产品质量安全法) [Law on Agri-product Quality and Safety of the People’s Republic of China (promulgated by the Standing Comm. Nat’l People’s Cong., Apr. 29, 2006, effective Nov. 1, 2006), art. 1].

sence that we have past lessons and repeated bad examples in this regard, taking the BSE crisis in Europe and Melamine Milk Scandal in China into consideration.146 These two incidents have to do with agri-food production, vividly showing conflicts that can occur when public agencies concurrently play a dual role in both industry promotion and health protection.

The conflicting aims and missions in the food e-commerce related legislation make harmonization of these laws an issue. The needs for harmonization in this regard are two-fold.

First, we have a within-law harmonization scenario. Because the E-commerce Law, simultaneously is aimed at regulation and industry promotion, there is a question of harmonizing those provisions bearing different missions within the same law. For example, the whole Chapter V, containing ten articles, is dedicated to promoting e-commerce through various mechanisms and schemes.147 Numerous provisions relate to food e-commerce promotion as well, which very much involves small businesses and even ‘Micro Business’ as mentioned earlier. However, as far as agri-foods are concerned, “the state shall promote the application of Internet technologies in agricultural production, processing, and circulation[;]” encourage various social resources to strengthen cooperation; and promote the development of rural e-commerce.148 It is hoped that e-commerce can play a role in poverty alleviation.149 Many agri-food operators are small businesses in China. For instance, farmers sell agri-foods produced in their own farms. Farmers in rural areas in China are relatively poor with limited job opportunities, and therefore agriculture becomes their main tools to generate wealth and prosperity. In addition, farmers are exempted from an ICR if they sell agricultural or sideline products produced in their farms over the Internet, for which no licenses are required by the law.150 These provisions relating to

146 See e.g., Pinghui Xiao, China’s Milk Scandals and Its Food Risk Assessment Institutional Framework, 2 EUR’N. J. RISK REG. 397 (2011); Pinghui Xiao, China’s Food Standardization System, Its Reform and Remaining Challenges, 3 EUR’N. J. RISK REG. 507 (2012).
147 See E-commerce Law of the People’s Republic of China, supra note 97.
148 Id. at art. 68.
149 Id.
150 Id.
agri-food e-commerce are created for the purpose of rural development. However, questions arise as to how these provisions will be harmonized with other e-commerce regulatory provisions within the E-commerce Law. There is a question as to which side, industry promotion or regulation, shall prevail when there are conflicts.

Second, there is a between-law scenario harmonization. As for cross-border food e-commerce, it is even trickier. As observed by the OECD, the spread of the digital economy e.g., cross-border e-commerce poses challenges for international taxation. But the ever-increasing cross-border e-commerce is regarded as ‘an engine for growth’. And it is highly recognized by the Chinese government. Hence, the E-commerce Law stipulates that, the state shall promote cross-border e-commerce development; establish and improve administrative systems for customs, taxation, entry and exit inspection, and quarantine, among others, in line with the characteristics of cross-border e-commerce; and streamline procedures to facilitate cross-border e-commerce. Cross-border e-commerce platforms are encouraged to provide storage and logistics, customs declaration, inspection and quarantine declaration, and other services for cross-border e-commerce. The state shall support micro and small-sized enterprises in engaging in cross-border e-commerce. For these product categories through cross-border e-commerce, the most popular among Chinese consumers are baby products, foods and cosmetics. This is largely due to domestic safety scandals and incidents in recent years. Quite a few business models of cross-border e-commerce emerge, among which the model of so-called ‘bonded warehouses’ goes like this: goods produced and marketed in a certain jurisdiction are shipped to Chinese consumers in China through Internet order.

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150 Id. at art. 10.
These bonded warehouses, specifically purposed for storing overseas goods, allow merchants to bulk-ship products to China in private order over the Internet without necessarily being subjected to commercial import duties or strict quality control measures. Under the above provisions as laid down in the E-commerce Law, the model of bonded warehouses should not be a problem, since it is done in the name of cross-border e-commerce. Nevertheless, this act may violate the 2015 FSL Amendment. Because those foods are produced and marketed in other jurisdictions according to food laws thereof, they are not necessarily in compliance with Chinese food safety standards. Hence, according to the 2015 FSL Amendment, the foods in question may violate Chinese food safety requirements, so they should not have been allowed to be shipped to Chinese consumers. The tricky thing is, that to date there have been quite a few cases relating to cross-border food e-commerce through bonded warehouses, in which some court decisions have upheld the 2015 FSL Amendment, but others have been overturned. This makes harmonization of these two laws an open question in the future.

IV. CONCLUSION

China has created a unique regulatory mechanism in which online platforms, considered third-party business entities, are obligated to monitor and supervise food business operators within the platforms. In other words, platforms are treated as co-regulators of food e-commerce. Through the lens of examination of legislative development, we find that online platforms are the key players for food e-commerce regulation, which are required to supervise online food business operators within the platforms. Online food platforms, though, as private players should co-regulate online food safety in close cooperation with government agencies. In case of any food safety non-compliance issues from the online food operators, the online platforms may be jointly punished by government agencies. This approach, though contestable, reflects the principle of co-

155 Id.
governance as adopted in 2015 FSL Amendment cluster and is further recognized as so-called collaborative governance under the E-commerce Law cluster. In other words, it creates a public-private co-regulation scenario, which is a recognized practice in both law clusters.

Nevertheless, there is a challenge for harmonization of laws in terms of food e-commerce regulation, in which there are two facets to be considered. The first is concerning harmonization of definitions and resulting liabilities. While the harmonization of definitions can produce consistent legal predictability as far as the question of what platforms should take which responsibility is concerned, as a result there is a further issue relating to harmonization of liabilities as laid down in the 2015 FSL Amendment and the E-commerce Law. The second harmonization facet is concerning legislative aims and missions. The conflicting aims and missions as appearing in various pieces of legislation relating to food e-commerce make harmonization of these laws an issue.

In March 2018, the Chinese Central Government announced a mega reform scheme, in which CFDA will be merged into SAIC and another Ministry to create a new agency called State Administration for Market Regulation. It will be the implementing agency of the E-commerce Law and the 2015 FSL Amendment to regulate food e-commerce. It remains to be seen what impact this institutional reform will have upon harmonization of laws towards a better regulation of food e-commerce in China.

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[156] Han Shengjiang, State Administration for Market Regulation is established, and Zhang Mao is Minister whereas Bi Jingquan is secretary of the Leading Party Members’ Group], [The Paper] (Mar. 21, 2018), https://www.thepaper.cn/newsDetail_forward_2036753.
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The Global Food Security Act: America’s Strategic Approach to Combatting World Hunger

Michael Adkins

I. Introduction

The world’s farms currently produce enough calories to adequately feed everyone on the planet. From the 1960s through 2008, per capita food availability worldwide has risen from 2220 kilocalories per person per day to 2790. Specifically, developing countries have recorded a rise in available kilocalories per person per day, from 1850 to 2640. Yet, despite overall availability, around 815 million people still suffer from hunger or some form of malnutrition. Approximately one in ten people are undernourished.

Despite this grim reality there is room for hope. The global trend is moving in the right direction. Between 1990 and 2015, the “prevalence of undernourished people in developing countries declined from 23.3 to 12.9 percent.” For the first time in history the end

1 The author would like to thank his wife, daughter, and the rest of his family for their unyielding love and support. He would also like to thank his advisor, Professor Christopher Kelley, for his guidance. Finally, he would like to thank the Journal of Food Law and Policy’s Editorial Board and Staff Editors for all their hard work and suggestions. All errors are the authors and the authors alone. Michael Adkins is a JD candidate, with an expected graduation of May 2019.


3 Id.

4 Id.


7 See generally Sharad Tandon Et Al., Progress and Challenges in Global Food Security, United States Dep’t of Argic. (2017), http://ageconsearch.umn.edu/record/262131/files/eib-175.pdf?subformat=pdfa (finding that “[g]lobal food security has improved over the past 15 years, [though] challenges and opportunities remain.”).

8 Id. at 4.
of hunger is within reach.\textsuperscript{9} But while “the world is [now] closer than ever before to ending global hunger,” United States (U.S.) policymakers still face significant challenges.\textsuperscript{10} “Urbanization, gender inequality, [instability,] conflict, the effects of climate change,” and the inevitable rise in global population are all factors that must be addressed for any decline in world hunger to be sustainable.\textsuperscript{11} Over the last two de-cades, great progress has been made in global food security.\textsuperscript{12} In 2016, however, the number of global undernourished increased.\textsuperscript{13} While it is currently difficult to determine whether the downward trend is actually reversing, many challenges clearly lie ahead in the fight for food security.\textsuperscript{14}

On July 20, 2016, President Barack Obama signed the \textit{Global Food Security Act} of 2016 (the Act) into law.\textsuperscript{15} The Act authorized a “comprehensive strategic approach for United States (U.S.) foreign assistance to developing [nations.]”\textsuperscript{16} It was enacted to “reduce global poverty and hunger, achieve food and nutrition security, [and] promote inclusive, sustainable, agricultural-led economic growth...”\textsuperscript{17} It calls for a “whole-of-government”\textsuperscript{18} strategy, a modern approach that integrates monitoring, evaluation, and learning aimed at strengthening the capacity of all global participants throughout the food and agricultural system.\textsuperscript{19} Humanitarianism, however, was not the sole motivation behind the Act’s passage; it was also enacted for national security purposes.\textsuperscript{20} Expanded strategic engagement in countries rife with food insecurity “will improve [our] ability to anticipate and react to upheaval in regions crucial to U.S. national security.”\textsuperscript{21}

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\textsuperscript{9} \textsc{United States Agency for int’l dev.}, \textit{supra} note 6, at 1.  \\
\textsuperscript{10} \textit{Id.} at 3.  \\
\textsuperscript{11} \textit{Id.}  \\
\textsuperscript{12} \textsc{Tandon Et Al.}, \textit{supra} note 7, at 4.  \\
\textsuperscript{13} \textbf{The State of Food Security and Nutrition} 2017, \textit{supra} note 5, at 1.  \\
\textsuperscript{14} \textit{Id.} at ii.  \\
\textsuperscript{18} \textit{Id.} § 9302(b)(1) (2016).  \\
\textsuperscript{19} \textsc{United States Agency for int’l development}, \textit{supra} note 6, at iv.  \\
\textsuperscript{21} \textsc{Cullen S. Hendrix}, \textit{When Hunger Strikes: How Food Security Abroad}
insight into the cultures and politics of these countries, at their most basic level, is a positive side effect to humanitarian relief.

Various key elements are identified as objectives to help facilitate a successful implementation. The first is evidence based investment targeting – strategically focusing on areas and approaches where the greatest potential for sustainable improvements exists.\(^{22}\) The second is implementing the “comprehensive, multi-faceted whole-of-government approach rooted in lessons learned” and best evidence that reflects emerging global and technological trends.\(^{23}\) Third is recognizing that the targeted countries must take the lead and be responsible for their own progress.\(^{24}\) Fourth is “[partnering with diverse] development actors and groups” to improve the “reach, effectiveness, efficiency, and sustainability” of U.S. investments.\(^{25}\) Fifth is “harnessing the power of science, technology, and innovation to dramatically improve” local capacity and agriculture system practices.\(^{26}\) And sixth is enhanced pro-gram sustainability so that eventually agricultural and developmental assistance to foreign nations is no longer necessary.\(^{27}\)

The Act is not a food aid bill; its scope, goals, and funding mechanisms are strategic. While in certain ways the Act expands upon existing U.S. commitments to provide acute humanitarian relief,\(^{28}\) its main goal is to assist in sustainable, targeted country development.

At the World Food Congress in 1963, President John F. Kennedy articulated a vision to eliminate world hunger: “as members of the human race, we have the means, we have the capacity to eliminate hunger from the face of the earth in our lifetimes. We need only the will.”\(^{29}\) Clearly, the goal he set forth has yet to materialize. Hunger, famine, drought, regional instability, and resource driven military

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\(^{22}\) United States Agency for int’l dev., supra note 6, at iii.

\(^{23}\) Id. at iv.

\(^{24}\) Id.

\(^{25}\) Id.

\(^{26}\) Id.

\(^{27}\) United States Agency for int’l development, supra note 6, at iii.

\(^{28}\) Sharad Tandon Et Al., Progress and Challenges in Global Food Security 3 (2017).

conflict remain pervasive in a world whose population is projected to reach 9 billion by 2050.30 Many questions also remain on how humanity will respond and cope with climate change.31 Yet, modern sophisticated technologies from diverse sectors, coupled with rapid modes of communication and data sharing, are all available now, and the Act mandates they be utilized in the fight against food insecurity.32 Kennedy’s words ring truer today than ever before in modern human history.33

II. Historical Overview of the Act’s Origins

For nearly six decades the U.S. has been a leader in the fight to end food insecurity.34 In the process, it has been the source of “about half of global food aid, as well as provided bilateral and multilateral support for agricultural development and trade.”35 Food aid programs of the 1950s were initially implemented as a means to “discharge food surpluses” while increasing the supply of food to the global poor.36 While these programs were meant to provide assistance, “in reality [they] proved [at times] problematic for many aid recipient countries.”37 For example, as the United States Agency for International Development’s (USAID) Food for Peace program dumped surplus wheat into developing countries’ markets, these countries’ domestic food prices plummeted.38 In turn, local farmers could no longer compete.39 Dependence on U.S. wheat increased, and by 1986, seven out of ten of the leading importers of U.S. farm commodities were Food for Peace recipients.40 Despite our efforts to alleviate global hunger,

30 CULLEN S. HENDRIX, THE CHICAGO COUNCIL ON GLOBAL AFFAIRS, WHEN HUNGER STRIKES: HOW FOOD SECURITY ABROAD MATTERS FOR NATIONAL SECURITY AT HOME (2016).
33 See United States Agency for Int’l Dev., supra note 6, at iii (discussing the ability to feed the world and imperativeness of doing so).
34 SHARAD TANDON ET AL., supra note 7, at 1.
35 Id. at What Is the Issue?
37 Id. at 32–3.
38 Id. at 33.
39 Id.
40 Id.
by 2000, the dawn of the new millennium, an estimated 900 million people still were afflicted by food insecurity.\textsuperscript{41}

A. Food Security

The definition of food security most frequently used today originates from the 1996 World Food Summit of the Food and Agriculture Organizations of the United Nations (FAO): “food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”\textsuperscript{42} Most analysts define three primary attributes of food security.\textsuperscript{43} Some analysts, however, add a fourth.\textsuperscript{44} Availability is the first pillar and simply refers to the overall “supply” of food available, while the second pillar, access, refers to the “range of food choices open to people” based on their socioeconomic status.\textsuperscript{45} The concept of utilization comprises the third pillar and “reflects whether individuals and households make good use of the food” they have access to.\textsuperscript{46} The fourth pillar, stability, encompasses all three of the above and perhaps is the most elusive; it refers to how susceptible individuals and households are to “interruptions in availability, access or utilization.”\textsuperscript{47} The Act has built in mechanisms to address all four of the food security pillars. However, it takes special aim at the fourth.\textsuperscript{48}

B. The 2008 Food Price Crisis and a Modern Approach to Food Security

In 2008, as food prices spiked as they had in the 1970s, the world experienced another food security crisis driven by market volatility.\textsuperscript{49} The World Bank estimated that due to the 2008 crisis,
50 million people were thrust back into poverty.\textsuperscript{50} Indeed, without an organized commitment, and due to the acute nature of the price increases, many actions taken in the wake of this crisis were transient, “[focusing] mainly on distribution of agricultural inputs” and not on a long-term goal of sustainability.\textsuperscript{51} This distribution of resources without “training, or other associated technical assistance,” limited the effect of the resources and did not lead to sustainable solutions.\textsuperscript{52} Sustainability is “particularly [elusive] when underlying structural and management problems are not addressed.”\textsuperscript{53}

After the crisis of 2008, the U.S. increased focus on agricultural development by increased spending and the creation of the Bureau for Food Security within USAID.\textsuperscript{54} But as a result of globalization, policy makers still wrestled with the “transition from the time when national food markets were more self-contained than the present global food system.”\textsuperscript{55} By 2010, food security was a top priority,\textsuperscript{56} and the Obama administration established Feed the Future, the U.S. government’s global hunger and food security initiative.\textsuperscript{57} From the beginning, Feed the Future utilized a “whole of government” approach.\textsuperscript{58} This framework would later be codified in the Act.\textsuperscript{59}

On May 22, 2014, former National Security Advisor, Susan E. Rice, addressed the Chicago Council Global Food Security conference.\textsuperscript{60} She spoke of the quantifiable successes of Feed the Future and suggested four areas of focus necessary for the “[achievement] of

\textsuperscript{50} Id. at 2.
\textsuperscript{51} Id.
\textsuperscript{52} Id.
\textsuperscript{53} Id.
\textsuperscript{56} Id.; see Feed the Future, https://www.feedthefuture.gov (last visited Dec. 13, 2018) (evidencing the commitment and concern food security garnered in U.S. policy).
\textsuperscript{57} Munoz, supra note 54.
\textsuperscript{59} Feed the Future 2017, supra note 32, at 6.
food security on a global scale” for modern times. In fact, Feed the Future became a tremendous success and generated strong bipartisan support. Ultimately, Rice’s suggestions were largely adopted and codified in the Act, and the first comprehensive strategy to address global hunger was born.

The Act easily passed both chambers of Congress and commits the U.S. to continued engagement in the fight to enhance global food security, reduce poverty, and improve nutrition. Pursuant to the Act, USAID published the Global Food Security Strategy to focus on achieving these goals through “three interrelated and interdependent objectives: (1) Inclusive and sustainable agricultural-led economic growth . . . (2) strengthened resilience among people and systems . . . and (3) a well-nourished population.”

However, as of 2017, the U.S. is “one of the few [nations] in the world that [still] oppose the idea of a human right to food.” The right is not treated as a “formal enforceable obligation.” Traditionally, the Bretton Woods institutions and the U.S. government “emphasiz[ed] liberalization, deregulation, privatization, and the compression of domestic budgets.” At the 2002 World Food Summit in Rome, the Bush administration’s final statement articulated America’s approach to food security as premised not on an international human right to food, but on “local governments having the primary responsibility to provide for their citizens.” For purposes of retaining autonomy and flexibility the U.S. has consistently declined to participate in any “in-
ternationally binding agreement to provide food security for the rest of the world.”

By broadly focusing on “partnership[s] with other governments, civil society, multilateral development institutions, research institutions, universities, and the private sector,” the Act largely adheres to this established ideological position; it does not depart from tradition. What follows is a comment on the Act’s framework that aims to demonstrate how and why it should be embraced. Whether the Act can meet its objectives in the existing global order is dependent on a multitude of factors and well beyond the scope of this paper. One thing, however, is certain. The old way of largely providing emergency assistance alone was not working to address the fundamental causes of food insecurity, and in a rapidly changing world, a new approach to combating global hunger is needed. This Act has great promise.

III. Policy, Strategy, and the Whole-of-Government Approach

It is “in the national interest of the [U.S.]” to promote global food security. Accordingly, as a matter of national security and foreign policy, the Act tasks the president with coordinating all relevant federal departments and agencies to implement the Global Food Security Strategy efficiently and effectively.

The relevant federal agencies are to provide “diverse, technical, programmatic, in-kind, and financial contributions” that must be coordinated. The strategy proposed to accomplish this is by “[building] upon platforms and enhanced mechanisms at the global, regional, and country levels to leverage

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71 Id. at 32.
72 See generally, United States Agency for Int’l Dev., supra note 6 (listing broad objectives without required obligations).
73 See generally The State of Food Security and Nutrition 2017, supra note 5 (outlining what is needed to increase global food security and nutrition).
75 Id. at § 9302 (3)(b) (2016). See id. at § 9304(c)(1) (2016) (mandating that all relevant agencies submit to the appropriate congressional committees... an agency specific plan how to for implementing the Act).
76 United States Agency for Int’l Dev., supra note 6, at 38. See 22 U.S.C. § 9301(4)(7) (2016) (defining relevant federal departments and agencies as the “United States Agency for International Development, the Department of Agriculture, the Department of Commerce, the Department of State, the Department of the Treasury, the Millennium Challenge Corporation, the Overseas Private Investment Corporation, the Peace Corps, the Office of the United States Trade Representative, the United States African Development Foundation, and the United States Geological Survey . . . ”).
technical expertise, data, and resources.” Efficient coordination of each agency’s research investments are therefore critical to the successful implementation of this Act. Necessarily, “research themes” were identified to ensure all “stages of the food security [research and development] pipeline,” across all varying agencies and partner countries, are united toward the same ends. In light of all the challenges standing in the way of food security, research and development will prove to be one of, if not the most, crucial components in the fight.

Similarly, for flexibility and fiscal responsibility the strategy makes clear that “regular consultation and collaboration with key stakeholders [and pertinent] congressional committees” will take place, so as to “avoid duplication of [American] investments.” In fact, accountability for results and transparency are central elements of the monitoring, evaluation, and learning approach the Act utilizes to track progress. Built into the structure of the Strategy is the constant pursuit of the efficient and effective use of taxpayer dollars.

IV. Interrelated and Interdependent Objectives of the Act

A. Inclusive and Sustainable Agricultural-led Economic Growth:

77 United States Agency for int’l dev., supra note 6, at 38.  
78 See generally Feed the Future 2017, supra note 32 (discussing the need for cooperation and coordination in addressing global food insecurity).  
79 Id. at 7 (“I. Technologies and practices that advance the productivity frontier to drive income growth, improve diets and promote natural resource conservation; II. Technologies and practices that reduce, manage and mitigate risk to support resilient, prosperous, well-nourished individuals, households, and communities; and III. Improved knowledge on how to achieve human outcomes: generating evidence on how to sustainably and equitably improve economic opportunity, nutrition and resilience).  
80 Id. at 9.  
82 United States Agency for int’l dev., supra note 6, at 38. See 22 U.S.C. § 9303(5) (2016) (defining “key stakeholders” as “actors engaged in efforts to advance global food security programs and objectives, including relevant Federal departments and agencies; national and local governments; other bilateral donors; international and regional organizations; international, regional, and local financial institutions; international, regional, and local private voluntary, nongovernmental, faith-based, and civil society organizations; the private sector, including agribusinesses and relevant commodities groups; agricultural producers, including farmers organizations, cooperatives, small-scale producers, and women; and agricultural research and academic institutions, including land grant universities and extension services”).  
83 Feed the Future 2017, supra note 32, at 13.  
84 Id.
Agricultural led growth builds from the ground up and strives to ensure the “availability of food [while] generating income from production” for those at the greatest risk of food insecurity.\textsuperscript{85} Agricultural led growth also aims to “[create] employment and [entrepreneurial] opportunities throughout the value chain.”\textsuperscript{86} When there is broad, inclusive employment in the agriculture sector, especially for smallholder farms, local partners can decrease their reliance on inputs from development assistance programs.\textsuperscript{87} Smallholder farms are those cultivated on two hectares or under.\textsuperscript{88} Over half the people in poor countries who “[work in the] agriculture sector . . . live in smallholder households.”\textsuperscript{89} In many instances these people are vulnerable to the climate and “markets… and rely substantially on self-provisioning.”\textsuperscript{90} Sustainable output of smallholder agriculture is therefore vital for global food security.\textsuperscript{91}

B. Strengthened Resilience Among People and Systems:

In underdeveloped regions, people caught in the cycle of poverty have more difficulty sustainably emerging from poverty when “shocks and stresses” to the environment and political landscape occur.\textsuperscript{92} Increased resilience among these populations is therefore vital for sustainable food security.\textsuperscript{93} But without reliable markets, civil institutions, or infrastructure to mitigate stressors or food shortages, the cycle of poverty and hunger will persist. Thus, strengthening the resiliency of people will necessarily involve investment in infrastructure.\textsuperscript{94}

\textsuperscript{85} United States Agency for int’l dev., supra note 6, at 28.
\textsuperscript{86} Id.
\textsuperscript{87} Id. at 8.
\textsuperscript{90} Nelson & Coe, supra note 88, at 108.
\textsuperscript{91} Id.
\textsuperscript{92} United States Agency for int’l dev., supra note 6, at iii.
\textsuperscript{93} Id. at 8.
\textsuperscript{94} Id. at 14–15.
With strengthened infrastructure, nations will be able to increase production sustainably, thus mitigating risk and enhancing recovery from environmental and political stressors.\textsuperscript{95} Despite inevitable “shocks and stresses,” improved infrastructure will strengthen resiliency and allow progress in the agricultural sector to take hold. Ultimately it will “[reduce] reliance upon emergency food assistance.”\textsuperscript{96}

C. A Well-nourished Population:

While adequate nutrition is important to men, women, and children of all ages, the Act focuses especially on women and children, from the time of the child’s conception until the child turns two.\textsuperscript{97} Undernutrition during this vulnerable period can produce “lower levels of educational attainment” and limit lifetime productivity.\textsuperscript{98} Further, women on average provide “43 percent of the agricultural labor force of developing countries.”\textsuperscript{99} Women’s continued and increased participation is thus an essential ingredient for sustainability in production systems.\textsuperscript{100} Improved sanitation and clean water is another factor address by the Strategy.\textsuperscript{101} Ultimately, the Strategy’s objective is to “[increase] consumption of nutritious and safe” foods in healthy household and communities.\textsuperscript{102}

V. Key Elements Identified to Strengthen Ability to Achieve Objectives

A. Targeting Investments

Since the release of the Strategy, the “first twelve Feed the Future” target countries were selected.\textsuperscript{103} These countries were deemed to possess the “greatest potential [for] the sustainable [improvement of] food security” for their people.\textsuperscript{104} The U.S. has chosen these countries as partners with the goal of “[harnessing] the

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\textsuperscript{95} Id. at 8. \\
\textsuperscript{96} Feed the Future 2017, supra note 32, at 9. \\
\textsuperscript{97} United States Agency for int’l dev., supra note 6, at iii. \\
\textsuperscript{98} Id. \\
\textsuperscript{99} Smallholder and Family Farmer, supra note 89, at 1. \\
\textsuperscript{100} Id. \\
\textsuperscript{101} United States Agency for int’l dev., supra note 6, at 22. \\
\textsuperscript{102} Id. at 10. \\
\textsuperscript{103} Feed The Future 2017, supra note 32, at 7. \\
\textsuperscript{104} United States Agency for int’l dev., supra note 6, at iii.
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power of agriculture to jumpstart their economies.”

The countries include: Bangladesh, Ethiopia, Ghana, Guatemala, Honduras, Kenya, Mali, Nepal, Niger, Nigeria, Senegal, and Uganda.

The criteria used to select target countries included: (1) the level of need; (2) potential for agricultural-led growth; (3) opportunities for [local] partnership; (4) opportunities for regional economic integration; (5) U.S. Government resource availability; and (6) the targeted government’s commitment to food security investment and policy reform. While specific beneficiaries will be targeted for short term and medium term impact, the overall strategy is to improve in-stitutions, markets, choices, and opportunities at a systemic level. A wide variety of actors from the public sector, private sector, and civil society will be engaged.

B. Developing Countries Must Take the Lead

The Act is structured to respond to the inherent diversity of farming practices and needs of the target countries. The Strategy thus requires target countries to “own and be empowered to lead and guide efforts to drive [their own] progress.” This model is designed to address one of the significant challenges of global food security, namely, that there “is no ‘one size fits all’” approach to improving conditions, markets, and yields for farmers. As reflected in the selection criteria, support will be lent to those countries whose national and local governments actively coordinate and develop institutional capabilities and accountability mechanisms that provide strong

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106 Feed The Future 2017, supra note 32, at 7.
107 United States Agency for int’l dev., supra note 6, at 36.
108 Id. at 37.
109 Id.
110 See Global Food Security Act of 2016, 22 U.S.C. § 9302 (2016) (stating the policy objective of “promoting global food security” and listing the various programs, activities, and initiatives that reinforce national food security investment plans).
111 United States Agency for int’l dev., supra note 6, at 41.
112 Jeffrey D. Sachs, The Age of Sustainable Development 327 (2015) (“Farmers differ incredibly in what they grow; how they grow it; and the challenges of climate, soil, water, topography, pests, biodiversity, and transport costs they face. These variations in turn have an enormous farm systems and strategies.”).
working relationships with both the private sector and civil society.\textsuperscript{113} Active coordination between the private and public sectors, coupled with direct U.S. involvement, will yield localized (particularized) solutions tailored to local conditions leading to food insecurity in the target countries. The aggregate of insights into local solutions to food insecurity are a step developing “solutions for a global sustainable food supply.”\textsuperscript{114}

C. Local Capacity and Partnerships

Of course, there are risks and vulnerabilities inherent in working with local populations; they may include: (1) weak systems and internal controls; (2) limited capacity; and (3) competing [political, social, or cultural] interests.\textsuperscript{115} Ineffective, corrupt, or toxic localized politics may also stifle technological development and productivity.\textsuperscript{116} Yet, partnerships with key stakeholders will allow the U.S. to “leverage the required skill, expertise, technologies, assets, and resources to improve our effectiveness, efficiency, and sustainability of development efforts.”\textsuperscript{117} The goal is to achieve a diverse, transparent, inclusively broad range of partners\textsuperscript{118} that not only include those in the public and private sectors, but also those in research centers, educational organizations,\textsuperscript{119} and multilateral development institutions.\textsuperscript{120}

VI. Science, Technology, Innovation, and the Sustainability of Programs

At the heart of the Act’s objective is to achieve inclusive, sustainable growth that builds resiliency among the people of

\textsuperscript{113} \textit{United States Agency for int’l dev.}, supra note 6, at 41.
\textsuperscript{114} Sachs, supra note 112, at 327–28.
\textsuperscript{115} \textit{United States Agency for int’l dev.}, supra note 6, at 42.
\textsuperscript{116} See \textit{id}. at 111 (stating that “corruption--the abuse of entrusted authority for private gain-- remains a tremendous obstacle to political, social, and economic development” and that “corruption affects food security by widening the gap between rich and poor, deterring investment, and distorting markets”).
\textsuperscript{117} \textit{United States Agency for int’l dev.}, supra note 6, at 43.
\textsuperscript{118} See \textit{id}.
\textsuperscript{119} \textit{Id}. at 44.
\textsuperscript{120} \textit{Id}.
\textsuperscript{121} \textit{Id}. at iii.
participating nations – for the purpose of maintaining a well-nourished population.\textsuperscript{121} The Strategy breaks this objective into three distinct categories, yet they can be read as one, with \textit{sustainability} being the operative word.\textsuperscript{122} As the \textit{Strategy} frames it, sustainability requires that “all development investments should catalyze the economic, political, and social processes within those countries [to] yield ever-improving lives for their citizens.”\textsuperscript{123}

Proponents of the Act understand that sustained investments in science and technology are critical for development and a sustainable reduction in global food insecurity.\textsuperscript{124} Scientific advancement and technological innovation are therefore mandated by the Act;\textsuperscript{125} accordingly, relevant U.S. agencies have identified three overarching research themes for each agency to pursue in the context of their own expertise.\textsuperscript{126} This coordinated effort aims to ensure that diverse agency actions remain in constant pursuit of the Act’s objectives, no matter who, what, when, or where the relevant agency interacts with the partner country’s agricultural sector.\textsuperscript{127} While theme I and II deal with “scalable products and practice that [advance productivity, nutrition, and risk mitigation,]” theme III takes a more anthropological approach and seeks to understand the people of the target countries in a cultural context.\textsuperscript{128}

Research under theme III is arguably the most important. It guides how and where research, program implementation, and technology are to be deployed for the most equitable distribution of food security advancements.\textsuperscript{129} How people benefit is the ultimate test of the Act’s merit: but without understanding the specific needs of the people in target countries or how they interact with their political, cultural, ecological, or global environments - in stable and unstable times - food security will likely prove illusive.\textsuperscript{130} Theme III, through its focus on “human behavior,” is designed to address these concerns.\textsuperscript{131} Theme I is focused on the micro level and works to increase crop yields, production efficiency, quality of nutrition, and

\begin{itemize}
  \item \textsuperscript{122} \textit{See id.}
  \item \textsuperscript{123} \textit{Id.} at 42.
  \item \textsuperscript{124} \textit{Id.} 46.
  \item \textsuperscript{125} \textit{Feed the Future} 2017, \textit{supra} note 32, at 12; \textit{See Global Food Security Act of 2016, 22 U.S.C. \S\ 9302(a)(7) (2016).}
  \item \textsuperscript{126} \textit{Feed the Future} 2017, \textit{supra} note 32, at 7.
  \item \textsuperscript{127} \textit{Id.}
  \item \textsuperscript{128} \textit{Id.}
  \item \textsuperscript{129} \textit{Id.} at 22.
  \item \textsuperscript{130} \textit{Id.} at 22–24.
  \item \textsuperscript{131} \textit{Id.}
the value of agricultural products across the farm to market supply chain. Theme II is concerned with safety, the promotion of resilience, and the mitigation of risk. Many partners throughout the U.S. government, private sector, universities, colleges, civil society, and partner countries are tasked with implementing the research strategy.

In sum, the Act’s pervasive focus on perfected sustainability is a departure from food aid programs of the past, has refined and built upon current approaches to global food security and nutrition, and has set U.S. policy with respect to agricultural assistance on a proactive rather than reactive course. Further, the research themes provide for flexible innovation over time, are aimed at culturally sensitive advancement, and cover all pillars upon which food security rests. They aim to enhance the interplay between all the elements mentioned above with the overarching goal of sustainability.

VI. Can the World Expect a Future Free from Hunger?

A. Climate Change in a Changing World:

Climate change is an artificially controversial topic. There is broad consensus among the scientific community that the climate is in fact changing, temperatures are in fact rising, and that the activities of man are very likely a cause of its acceleration. Therefore, as people struggle with climate change, the continued focus on women and smallholder farms in the fight against global hunger is essential: “well managed smallholder systems invest in building soil biomass and vegetative cover [to improve] water filtration in case of floods, and moisture retention” in the event of drought. Smallholder farms also

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132 Id. 17–19.
133 Feed the Future 2017, supra note 32, at 17–19.
135 See generally United States Agency for Int’l Dev., supra note 6, at 46 (describing methods that provide infrastructure, knowledge, and research for continuing sustainability).
136 Id. at 10 fig. 1.
138 Smallholder and Family Farmer, supra note 89, at 2.
have less dependence on fossil fuels and lower energy requirements.\textsuperscript{139} Further, traditional smallholder practices may also reduce emission and enhance soil carbon sequestration.\textsuperscript{140} The uncertainty of climate change is all the more reason a flexible, sustained, whole-of-government approach is needed. “Continuous learning, adaptation, and communication through monitoring and evaluation” is required to comprehend and respond to the many changing and unknown variables our researchers and policymakers will face.\textsuperscript{141}

B. Conflict, Instability, and the Global Economy:

With an increased global population comes increased competition for resources and thus the potential for continued conflict. It is estimated by 2050, 9 billion people will inhabit this planet.\textsuperscript{142} In 2016, with a global population of only 7.5 billion,\textsuperscript{143} there were 19 countries marred by violence, civil war, or natural disaster.\textsuperscript{144} It is no surprise that countries in the grips of conflict or natural calamity are more susceptible to persistent food insecurity.\textsuperscript{145} In fact, over half of the world’s “chronically undernourished” reside in countries in conflict.\textsuperscript{146} And from those countries, an estimated 100 million face “crisis-level food insecurity.”\textsuperscript{147} While traditional, interstate warfare has decreased, the prevalence of intrastate conflict has risen.\textsuperscript{148} But in the age of globalization many of these internal conflicts are of regional and global concern and have implications well beyond their borders.\textsuperscript{149}

Furthermore, certain aspects of the global economy are “widely associated with ongoing global food insecurity.”\textsuperscript{150} For example, economic policies that traditionally develop in wealthy, industrialized

\textsuperscript{139} Id.
\textsuperscript{140} Id.
\textsuperscript{141} Feed the Future 2017, supra note 32, at 19 (discussing methods for increasing adaptation and recovery from shocks and stress).
\textsuperscript{142} See, e.g., Tandon et al., supra note 7, at iii.
\textsuperscript{143} E.g., U.S. Census Bureau, U.S. and World Population Clock, (Mar. 13, 2018) https://www.census.gov/popclock/.
\textsuperscript{144} The State of Food Security and Nutrition 2017, supra note 5, at 30.
\textsuperscript{145} Id. at 35.
\textsuperscript{146} See id. (calculating the figure at 489 million out of a total of 815 million people).\textsuperscript{147} The State of Food Security and Nutrition 2017, supra note 5, at 30.
\textsuperscript{148} Id. at 33.
\textsuperscript{149} Id.
countries often contribute to “higher... more volatile food prices and uneven distribution of food and agricultural assets.”

Higher food prices and the ensuing volatility can thus lead to, or exacerbate, political instability. Price volatility is especially tough on rural communities because when prices are unstable, smallholder farmers cannot compete. They can lose their incentive to produce and lose their land. While no specific trade policies are provided in the Act, research theme III is designed to provide solutions to these complex political, economic issues. The Act, by using the whole-of-government approach, works to address the problems caused by global conflict and unstable markets. It does so by employing agencies whose personnel are in direct, on the ground contact with the people in the world’s poorest countries where they can provide the change and support from the bottom up.

C. Potential Shortcomings of the Act:

The Feed the Future Report states that no “legal or regulatory impediments to implementation of the [strategy]” were identified. However, as stated above, regions in conflict will remain outside of the Act’s reach due to the degree of cooperation and stability within a target country required by the Act.

VII. Progress and State of the Act Since Passage

What began in 2009 as the Feed the Future initiative, by 2015 had “helped [millions of] farmers gain access to new tools and technologies.” The initiative had therefore helped millions of “farmers and producers [improve] their crop yields.” Millions of children were also affected by the implementation of nutrition programs. In

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151 Id.
152 Hendrix, supra note 21, at 3.
155 United States Agency for Int’l Dev., supra note 6, at 28.
156 See id. at 45.
159 Jenkins, supra note 105.
160 Id.
2016 alone, Feed the Future reached “nearly eleven million small-scale food producers.” In partnership with USAID it “trained more that 3.7 million people in child health and nutrition; it also trained thousands of local health facilities on how to effectively cope with malnutrition.”

By July 19, 2017, approximately one year after the Act’s passage, 118 bipartisan lawmakers and advocates gathered in Washington, D.C., to “celebrate [its] success.” Those congregated “expressed continued dedication to food security initiatives like those implemented under the Act.” Food security was a “great unifier.”

The Act of 2016 was “one of the few bipartisan pieces of legislation to emerge in recent years.” Initially, under the Trump administration, there was a markedly divergent direction in policy priorities. For example, in early November of 2017, the Undersecretary of International Affairs at the Treasury Department announced that “the U.S. is not expecting to make any future contributions to the Global Agriculture and Food Security Program (GAFSP),” a multilateral development institution implicated in the Act. This program, administered by the World Bank, “channels member pledges of assistance to developing countries agriculture projects.”

However, in 2018, again with broad bipartisan support, the Act was reauthorized. But only time will tell if the Act is implemented as Congress intended, or if the Act survives another reautho-

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161 Feed the Future 2017, supra note 32, at 3.
162 Id.
163 Anuj Krishnamurthy, supra note 15.
164 See Avery Friedman, Celebrating a Year of Success for the Global Food Security Act, GLOBAL CITIZEN (July 20, 2017), https://www.globalcitizen.org/en/content/gfssa-year-food-security-event/.
165 Id.
167 Id.
168 See id.
170 Jennifer Clapp, supra note 150.
ization. Regardless, the Act’s modern approach to food security is a model for how best to unify and apply the strengths of our public and private sector alike to a problem that without strong, dedicated, global leadership, will unquestionably remain.

VIII. Conclusion

Sustenance in the form of food and water is behind only oxygen as the most fundamental ingredients essential for human existence. Without it, there is little hope. Not only is the cycle of poverty and malnourishment devastating to those who experience it directly, food insecurity leads to instability in the broader world. It lays fertile ground for extremism and conflict, directly affecting national security. Continued adherence to this Act and the continued focus on improving the lives of the most vulnerable will not only produce a positive return on our investments, but it is the right thing to do. In the long run its approach and built in mechanisms for flexibility allow for continued learning and adaptation to the changing world from the ground up.

The Act is the American government’s current approach to combating food insecurity. One thing, however, is certain: our leaders must maintain the will to implement the Act as designed. It must not be starved of funding. Despite its shortcomings and limitations, the Act is an example of American foreign policy at its best. Taking into account our global reach, tools, and the technologies at our command, we have the power to make a difference in one of the most fundamental, visceral issues of our time. Food insecurity will assuredly not dissolve overnight, but through sustained engagement with the developing world, we can work pragmatically to help break the cycle that leads to perpetual poverty, malnourishment, and starvation. It would be unwise for our leadership to squander such strong bipartisan support, agreement, and momentum. It would be an abdication of global leadership on an issue we are uniquely equipped to solve. This strategy is not zero sum. For if one family starves, or one child dies, whether in our own neighborhood or a world and culture away, we all suffer. One way or another, whether it be refugees fleeing famine, extremists sewing instability in vulnerable lands, volatile commodity

172 *See Five Basic Needs to Survive and Thrive*, Santevia (June 16, 2016), https://www.santevia.com/blog/5-basic-needs-to-survive-and-thrive/.

173 United States Agency for int’l dev., *supra* note 6, at 6.
prices, or personal feelings of guilt, sadness, empathy, or powerlessness – chronic global hunger touches us all.