

**Control, Coordination, and Capacity:
Deficits in China's Frontline Regulatory System for Food Safety**

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Abstract

In this article, authors will evaluate the question: Has the establishment of the China Food and Drug Administration in 2013 and the substantial revision of the Food Safety Law in 2015 addressed earlier implementation deficits in China's food safety policy? Through a comprehensive literature review and series of in-depth interviews with officials from local regulatory offices in Beijing, this study observed improvements in the frontline regulatory system regarding its adherence to regulations, corruption prevention, and citizen responsiveness. However, it also found that the system's professional capacities were vastly insufficient for its expanded regulatory scope. Frequent abuses of the citizen-complaint system added significantly to the already heavy workload. While better agency collaboration was reported at the subdistrict/township level, coordination with other related functional ministries and geographical regions remained inadequate. The findings provide a needed guide for future reforms.

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Introduction

In the last decade, a series of food incidents in China have severely undermined people's confidence in the country's food safety system, posing serious challenges to the ruling party's governing legitimacy¹. As acknowledged by President Xi Jinping in a major official meeting, the performance of food safety regulation has presented a major test to the governing capacity of the Chinese Communist Party.² A quasi-official magazine *xiaokang* (小康) also confirmed the importance of food safety by ranking it the most concerned public issue for four consecutive years, which was based in part on a perception survey the magazine conducted with Tsinghua University³. In response, the Chinese government has swiftly strengthened its regulatory efforts, establishing the country's first formal Food Safety Law (FSL) and heightening its regulatory expectations on food producers and operators.⁴ In 2010, the State Council also established a high-ranking regulatory body, the National Food Safety Commission (NFSC), headed by the first vice-premier to coordinate various related regulatory functions. However, the rapid development of the food industry, consumer's changing food consumption patterns, and increasing demand for a better quality of life quickly necessitated additional reforms. In addition to centralizing various food safety-related regulatory functions beginning in 2013 under the China Food and Drug Administration (CFDA), the central government also passed a major amendment of the FSL in 2015⁵. Both of these represent the Chinese government's increased commitment to policy reform. Authors of this study will examine how these changes have influenced the implementation of China's latest food safety policy.

Earlier analysis of China's food safety policy linked issues in its implementation to factors such as pervasive corruption in the local food regulatory systems (including government-business collusion, bribery in food licensing and certification and fabrication of audit reports), bureaucratic fragmentation and local obstruction of central government authority, weak media oversight and poor support from the legal system, and 'the politics of scale', which sees the implementation deficit as a natural consequence of managing the 'Chinese behemoth'⁶. Yet the recent anti-corruption campaign and law-based governance reform have fundamentally changed the political landscape in which the food safety

¹ Peng Liu, 'Tracing and Periodizing China's Food Safety Regulation: A Study on China's Food Safety Regime Change', *Regulation & Governance* 4(2), (2010), pp. 244–60, <https://doi.org/10.1111/j.1748-5991.2010.01078.x>; John Kojiro Yasuda, 'Why Food Safety Fails in China: The Politics of Scale', *The China Quarterly* 223, (2015), pp. 745–69.

² 中央农村工作会议举行 习近平李克强作重要讲话, [Central Conference on Rural Affairs Held; Xi Jinping and Li Keqiang Made Important Speeches], The Central People's Government of the People's Republic of China, December 24, 2013, accessed April 22, 2019, http://www.gov.cn/ldhd/2013-12/24/content_2553842.htm.

³ 2016 中国饮食小康指数80.4 七成人认为食品安全状况有好转 [China's Food Index: 80.4; 70% of the Respondents Think Food Safety is Getting Better], *Xiaokang* 1, (2016), pp. 60-66.

⁴ The National People's Congress (NPC) of the PRC. "Main features of the FSL." March 19, 2009, accessed October 21, 2016, http://www.npc.gov.cn/npc/xinwen/rldt/fzjs/2009-03/19/content_1494060.htm.

⁵ The NPC of the PRC. "Food Safety Law of the People's Republic of China." <http://www.npc.gov.cn/>, April 25, 2015, accessed October 21, 2016, [npc/cwhhy/12jcw/2015-04/25/content_1934591.htm](http://www.npc.gov.cn/npc/cwhhy/12jcw/2015-04/25/content_1934591.htm).

⁶ Waikung Tam and Dali Yang, 'Food Safety and the Development of Regulatory Institutions in China,' *Asian Perspective* 29(4), (2005), pp. 5–36; Peng Liu, 'Tracing and Periodizing China's Food Safety Regulation: A Study on China's Food Safety Regime Change', *Regulation & Governance* 4(2), (2010), pp. 244–60; John Balzano, 'China's Food Safety Law: Administrative Innovation and Institutional Design in Comparative Perspective', *Asian-Pacific Law & Policy Journal* 13(2), (2012), pp. 23–80; Yasuda, 'Why Food Safety Fails in China: The Politics of Scale'.

regulatory system is embedded. The establishment of a centralized CFDA should also help mitigate the above problems from the inside, unifying fragmented authorities, vertically driving implementation at the local level, and horizontally coordinating regulatory functions along the food production, circulation, and sales industry. To what extent have these changes resolved the CFDA's various implementation issues of the food safety policy?

Apart from government and legislative changes, challenging work still remains on the ground. Local food safety regulatory systems need to not only fulfill high expectations for the government to "do its job" and guarantee the availability of safe food, but also secure a series of relatively complex management reforms and behavioral changes from a large amount of regulatees along various parts of the food chain. Many of the regulatees, however, are small and medium-sized enterprises, endowed with limited resources. They employ a large amount of low-skilled labors, and these workers usually belong to the lower-income and less-educated segment of the population in the community. All these factors complicate the task of policy implementation at the frontline, making food safety a policy area particularly worthy of our investigation.

By examining the food safety regulatory system at the frontline of implementation under Beijing's integrated management arrangement, this study found that the CFDA, despite its independent status, lacked sufficient local implementation capacities for the expanded policy scope of the revised FSL. The frontline regulatory offices suffered greatly from capacity deficits. These regulatory offices lacked sufficient human and financial resources to effectively implement the new policy tasks, including enforcement, adjudication, and information processing. Its effectiveness was also undermined by poor coordination and collaboration with other administrative units.

Below, the study first reviews the literature on China's food safety regulatory reform, with a focus on its evolution and the policy capacity of the regulatory system. It then presents the empirical findings collected from a series of semi-structured interviews with frontline regulatory officials from five subdistricts and townships in Beijing. The interview data not only add specificities and provide updates to the implementation problems diagnosed by the literature but also identify dimensions of capacity deficits, which should be addressed by relevant authorities in the future.

Evolution of China's food safety policy

Food safety has become one of the most concerning public issues in China⁷. A series of food safety incidents, from the Sanlu melamine-milk scandal in 2008 to the frozen meat smuggling scandal in 2015, have severely undermined confidence in the country's food safety system and the issue is posing great challenges to China's governance⁸. In the last decade, the

⁷ FT Confidential Research, 'Brexit Stirs Chinese Household Fears about Global Economy: Survey Shows Food Safety Tops List of Concerns Once More', *Financial Times*, July 20, 2016, pp. 1-5.

⁸ See Liu, 'Tracing and Periodizing China's Food Safety Regulation'; Yasuda, 'Why Food Safety Fails in China'; Wu, Xialong, Dali L. Yang, and Lijun Chen, 'The Politics of Quality-of-Life Issue: Food Safety and Political Trust in China', *Journal of Contemporary China* 26(105), (2017), pp. 601-605. President Xi has, on various occasions, connected it with the legitimacy of the ruling party. In December 2013, he asserted that if the Chinese Communist Party is not able to manage food safety well, most Chinese people would question the party's qualification to rule in the long run. In May 2015, he announced that food safety strategy should be included in the country's national security strategy, stressing that China's food safety governance system should be built on a basic principle of 'four strictest', as follows: strictest safety standards, strictest regulation, strictest penalty, and strictest accountability. Such political commitment has set the tone for the recent amendment of the FSL. See News of the Chinese Communist Party, 'Xi Jinping's Important Instructions on Food Safety Work',

Chinese government has been introducing legislation and stepping up regulatory efforts to promote food safety. China's first food safety-related law, the Food Hygiene Law (trial version), was passed in 1982. After a 13-year trial implementation, the law was revised and eventually enacted in 1995. However, it remained narrowly focused on the food catering sector rather than the food production and circulation process as a whole. Also, the penalties for intentional food contamination were relatively lenient. The outbreak of the Sanlu melamine-milk scandal, however, exposed the law's limitations and brought about a new wave of legislative efforts. Subsequently, a new law (FSL) was passed to replace the original one by the Standing Committee of the National People's Congress in 2009⁹. As the first comprehensive food safety law in contemporary China, its notable features include abandoning the reputation-based approach, which exempted some food products from inspection, and significantly increasing the penalties for food fraud.

Given the rapid development of the food industry and the consumer's heightened demand for a better quality of life, further revisions were soon needed. In 2015, the National People's Congress passed a major amendment of the FSL (taking effect on October 1, 2015). The revision process took over 18 months¹⁰ and the resultant law, which reflects the current administration's commitment to food safety reform, is considered to be the toughest food safety law in Chinese history. The minimum penalty was raised substantially, from 2,000 to 50,000 RMB for most types of food safety misconduct. To guarantee the safety of formula products, a strict registration system was established to evaluate its quality and nutrition. The manufacturing and sale of separately packaged products was strictly prohibited to avoid possible pollution. To fight against excessive pesticide residue, many pesticides that were formally permitted are now prohibited in vegetables and fruits despite the potential to lower agricultural production. Finally, the FSL seeks to regulate newly emerged players and sectors in the food industry. For example, all genetically modified food should be labelled explicitly, a license is required to sell food products online, and third-party online platforms, such as Alibaba and Jingdong Mall are now legally obliged to ensure that participating food manufacturers and sellers possess the required qualifications. If they fail to do so, they will be responsible for any misconduct identified by consumers. Overall, the revised FSL marks a major milestone for China's food safety governance.

Evolution of China's food safety regulatory system

While the food safety laws' increasingly stringent requirements and tough penalties reflect the leadership's commitment to food safety, how these requirements are enforced on the ground remain empirical questions. Much of the literature has sought to answer these questions from a technical standpoint, covering the operations of specific food industries or the whole supply chain of major foods, such as crops, aquaculture, horticulture, and pork and beef¹¹. Meanwhile, many new studies have emerged examining the socio-political dimensions

January 28, 2016, accessed October 21, 2016, <http://cpc.people.com.cn/BIG5/n1/2016/0128/c64094-28093575.html>.

⁹ National People's Congress of the People's Republic of China, 'Main Features of the Food Safety Law', March 19, 2009, accessed October 21, 2016, http://www.npc.gov.cn/npc/xinwen/rldt/fzjs/2009-03/19/content_1494060.htm.

¹⁰ National People's Congress of the People's Republic of China, 'Food Safety Law of the People's Republic of China', April 25, 2015, accessed October 21, 2016, http://www.npc.gov.cn/npc/cwhhy/12jwh/2015-04/25/content_1934591.htm.

¹¹ Edward I. Broughton and Damian G. Walker, 'Policies and Practices for Aquaculture Food Safety in China', *Food Policy* 35(5), (2010), pp. 471–78; Huanan Liu, William A. Kerr and Jill E. Hobbs, 'A Review of Chinese Food Safety Strategies Implemented after Several Food Safety Incidents Involving Export of Chinese Aquatic Products', *British Food Journal* 114(3), (2012), pp. 372–86; Zhigang

of the food safety question and investigating the human causes and implications¹². For example, some studies have investigated individual safety incidents¹³ by mapping the country's evolving food-safety-related laws and corresponding changes in local regulations and subsequent revisions¹⁴, tracing and identifying the root of people's perceptions of the safety of the food system¹⁵, and assessing the government's effectiveness based on official statistics and formal organizational arrangements¹⁶. However, there is still a lack of systematic research examining the actual implementation of these new regulatory requirements¹⁷ (United Nations in China 2008). The literature review below more closely examines the operational aspects of the regulatory system and its adequacies for implementing the revised FSL.

Curbing local collusion

Earlier literature has linked problems in the food safety system chiefly with local protectionism. Local regulators did not want to regulate local businesses, which generated revenue for local bureaucracies directly through business operations and taxation, and indirectly by illegally granting licenses to unqualified enterprises¹⁸. Given the concern about embarrassing some local businesses¹⁹, such fiscal arrangements decreased the incentive for strengthening local regulatory efforts²⁰. As Yan explained,

Wang, Yanna Mao, and Fred Gale, 'Chinese Consumer Demand for Food Safety Attributes in Milk Products', *Food Policy* 33(1), (2008), pp. 27–36; Jiehong Zhou, Jensen H. Helen and Jing Liang, 'Implementation of Food Safety and Quality Standards: A Case Study of Vegetable Processing Industry in Zhejiang, China', *The Social Science Journal* 48, (2011), pp. 543–52. For a comprehensive review, see Tara Garnett and Andreas Wilkes, *Appetite for Change: Social, Economic and Environmental Transformations in China's Food System* (Oxford: Food Climate Research Network, 2014).

¹² Forum on Health, Environment and Development (FORHEAD), Working Group on Food Safety, *Food Safety in China: A Mapping of Problems, Governance and Research* (2014).

¹³ Shumei Chen, 'Sham or Shame: Rethinking the China's Milk Powder Scandal from a Legal Perspective', *Journal of Risk Research* 12(6), (2009), pp. 725–47; Xiaofang Pei, Annuradha Tandon, Anton Alldrick, Liana Giorgi, Wei Huang and Ruijia Yang, 'The China Melamine Milk Scandal and Its Implications for Food Safety Regulation', *Food Policy* 36(3), (2011), pp. 412–20; Changbai Xiu and K. K. Klein, 'Melamine in Milk Products in China: Examining the Factors that Led to Deliberate Use of the Contaminant', *Food Policy* 35(5), (2010), pp. 463–70; Xiangping Jia, Jikun Huang, Hao Luan, Scott Rozelle and Johan Swinnen, 'China's Milk Scandal, Government Policy and Production Decisions of Dairy Farmers: The Case of Greater Beijing', *Food Policy* 37(4), (2012), pp. 390–400.

¹⁴ Liu, 'Tracing and Periodizing China's Food Safety Regulation'.

¹⁵ Peng Liu and Liang Ma, 'Food Scandals, Media Exposure, and Citizens' Safety Concerns: A Multilevel Analysis Across Chinese Cities', *Food Policy* 63, (2016), pp. 102–111; Nicholas Holtkamp, Peng Liu and William McGuire, 'Regional Patterns of Food Safety in China: What Can We Learn from Media Data?', *China Economic Review* 30, (2014), pp. 459–68.

¹⁶ Chenhao Jia and David Jukes, 'The National Food Safety Control System of China – A Systematic Review', *Food Control* 32(1), (2013), pp. 236–45; Hon-Ming Lam, Justin Remais, Ming-Chiu Fung, Liqing Xu and Samuel Sai-Ming Sun, 'Food Supply and Food Safety Issues in China', *Lancet* 381, (2013), pp. 2044–53, esp. pp. 2049–50.

¹⁷ FORHEAD, *Food Safety in China*; United Nations in China, 'Advancing Food Safety in China,' (March 2018). See Peng Liu and William McGuire, 'One Regulatory State, Two Regulatory Regimes: Understanding Dual Regimes in China's Regulatory State Building Through Food Safety', *Journal of Contemporary China* 24(91), (2014), pp. 119–136 for notable exception.

¹⁸ Ellis and Turner, *Sowing the Seeds*; Tam and Yang, 'Food Safety'.

¹⁹ Balzano, 'China's Food Safety Law', p. 75.

²⁰ Ellis and Turner, *Sowing the Seeds*; Liu, 'Tracing and Periodizing China's Food Safety Regulation'; Tam and Yang, 'Food Safety'.

[D]ue to the fragmentation and internal competition among regulatory agencies, the developmental preference for employment and growth over safety and health, and, more importantly, the corruption of government officials and the lack of rule of law, the results of top-down initiatives for food-safety regulation are often ineffective and unsatisfactory... and high-profile food scandals continued to surge²¹.

The 2009 law sought to strengthen the central government's control and resolve the problem of local protectionism by making local government leaders accountable for food scandals in their jurisdiction. Ni and Zeng²² considered the introduction a 'breakthrough', but the division of regulatory work between central and local governments remained to be clarified²³. While the law states that local governments shall take the responsibility to implement the legislation²⁴, the responsibility was in fact shared among national, provincial, and other subnational governments²⁵. In part, this also resulted in the inconsistent allocation of material resources to local food regulatory offices. More resources and better testing equipment were reported as available in more affluent areas (e.g. special measures targeting imports in Shanghai, rapid testing equipment in Beijing), while the less developed and poorer areas remained under-resourced²⁶.

Embedded in the implementation methods supplementing the law, the public sharing of food safety information was also emphasized by the State Council since the 2009 FSL. Local FDAs are mandated to publicly release food safety information by posting it on local and/or national FDA websites. However, as Balzano²⁷ observed, it did not specify the frequency or coverage of these releases. Most provinces have developed their own food safety website, but only incomplete information was found and the availability of information varied greatly across different regions (e.g. weekly reporting in Beijing, monthly in Guangzhou, and less frequently in other regions).

Fostering coordination within the system

More recent literature has focused on the coordination of multiple regulatory authorities.²⁸ Ensuring safety along the whole food chain presents a major challenge to the Chinese government. Before the establishment of the CFDA, the State Administration of Quality Supervision, Inspection and Quarantine (SAQSIQ), State Administration for Industry and Commerce (SAIC) and State Food and Drug Administration (SFDA) shared the regulation of food quality, distribution, and catering. Policy coordination was the responsibility of a high-level Food Safety Committee (FSC) under the State Council. The FSC was in charge of the country's overall regulation, coordination, and oversight of food safety²⁹. This multi-agency

²¹ Yunxiang Yan, 'Food Safety and Social Risk in Contemporary China', *Journal of Asian Studies* 71(3), (2012), pp. 705-29.

²² Ni and Zeng, 'Law Enforcement is Key to China's Food Safety'.

²³ Jia and Jukes, 'The National Food Safety Control System of China'.

²⁴ Jia and Jukes, 'The National Food Safety Control System of China'.

²⁵ Lam et al., 'Food Supply and Food Safety Issues in China'.

²⁶ FORHEAD, *Food Safety in China*, pp. 49-50; General Office of the State Council of the People's Republic of China, 'Twelfth 5-year Plan on the National Food Safety Control System', June 28, 2012, released on July 21, 2012, 国务院办公厅关于印发: 国家食品安全监管体系'十二五'规划的通知. Edited by the General Office of the State Council of the People's Republic of China. People's Republic of China.

²⁷ Balzano, 'China's Food Safety Law'.

²⁸ Yasuda, 'Why Food Safety Fails in China'.

²⁹ Yuhong Li, Rongguang Qi and Haiyun Liu, 'Designing Independent Regulatory System of Food Safety in China', *Agriculture and Agricultural Science Procedia* 1, (2010), pp. 288-95; Jing Wang, 'Change of Regulators for Food Safety in China' *Norton Rose Fulbright*, June 2013, accessed January

system had long been criticized for being ‘fragmented’³⁰. The literature suggested that ambiguous division of responsibilities would create ‘blind spots’ in the inspection process and allow for ‘buck-passing’ among the agencies³¹, especially between SAIC and SFDA over the commercial activities of food caterers³² and the task of communicating with the general public³³. As Tam and Yang³⁴ suggested, the information flow across agencies had been hindered by the fragmentation of regulatory power. A proper institutional infrastructure is needed to induce inter-agency exchange and public sharing of food-related information. Overall, a stronger and more independent regulatory agency was urgently needed³⁵.

In 2013, the State Council conducted a substantial reorganization of the regulatory system, resulting in the creation of the CFDA, which centralized all major food-related inspection tasks while the FSC continued to carry out its high-level coordinative function. The revision in 2015 further mandated inter-agency and interregional sharing of food safety information. Although the centralization of inspection tasks had its merit in theory, research had yet to show how it actually worked *within* the agency. Furthermore, there remained a need for horizontal coordination among other ministries and local governments in the region, which was exacerbated by the rapid growth of the food industry³⁶. For example, the responsibilities for setting safety standards and assessing risks of food within distribution channels remained in the hands of the National Health Family Planning Commission (formerly named Ministry of Health), while those for agricultural products were placed under the Ministry of Agriculture. Detailed division of labor and mechanisms for cooperation and information sharing were yet to be observed between the CFDA and these ministries. In addition, there was not an established system for coordinating the local governments of neighboring provinces³⁷. This issue was exacerbated as the local governments were encouraged to be innovative with their enforcement strategies and administrative arrangements based on their local situations, and local officers might not have been prepared to liaise closely with their counterparts in other regions. In other words, to what extent the CFDA helped resolve coordination problems remains an empirical question.

The regulatory system’s capacity support

Relatively little research has been conducted into the food regulatory system’s capacity support and management. The literature tends to only provide us with an aggregate picture about the human, financial, and physical resources available to the system. A recent study found that a national monitoring network exists (set up by the former Ministry of Health in 2002), with 1,196 monitoring sites covering all provinces (73% in cities and 25% counties, 2012 figure)³⁸; this network established relatively comprehensive information systems on

10, 2015, <http://www.nortonrosefulbright.com/knowledge/publications/99340/change-of-regulators-for-food-safety-in-china>.

³⁰ Li, Qi and Liu, ‘Designing Independent Regulatory System of Food Safety in China’; Pei et al., ‘The China Melamine Milk Scandal’.

³¹ Hong-Gang Ni and Hui Zeng, ‘Law Enforcement is Key to China’s Food Safety’, *Environmental Pollution* 157(7), (2009), pp. 1990–92.

³² Chen, ‘Sham or Shame’; Wang, ‘Change of Regulators for Food Safety in China’.

³³ Balzano, ‘China’s Food Safety Law’.

³⁴ Tam and Yang, ‘Food Safety’.

³⁵ Li, Qi and Liu, ‘Designing Independent Regulatory System of Food Safety in China’.

³⁶ FORHEAD, *Food Safety in China*; Garnett and Wilkes, *Appetite for Change*.

³⁷ Fangqi Lu and Xuli Wu, ‘China Food Safety Hits the “Gutter”’, *Food Control* 41, (2014), pp. 134–38.

³⁸ Shan-shan Chung and Chris K.C. Wong, ‘Regulatory and Policy Control on Food Safety in China’, *Journal of Epidemiology & Community Health* 67(6), (2012), pp. 476–77.

food quality and safety incidents, which is a key element to any effective food safety system³⁹. More resources and better equipment, meanwhile, were likely to be available in more affluent localities⁴⁰, as reported above. Studies found that many cattle slaughtered by households or in smaller or remote abattoirs were not inspected because the process was considered too expensive⁴¹. Limited funding also undermined the purchase of sufficient inspection equipment, the hiring of inspectors, and the number of items inspected⁴². A tight budget for local food safety regulation was alleged to have resulted in the introduction of the Inspection Exemption Certification policy, a reputation-based exemption policy that was repealed after the melamine-milk scandal⁴³.

In terms of human resource support, virtually all studies propose that the system needs to multiply the number of monitoring and quality testing staff many times over. From a demand perspective, for example, Ellis and Turner⁴⁴ argued that the country's huge number of small farms and food producers are the major challenges for regulatory efforts: Among the 448,153 enterprises that were successfully contacted by a national investigation (excluding Tibet), 223,297 (49.8%) were not fully licensed and 164,149 (36.6%) had no license at all. Notably, 352,815 (78.7%) of all the investigated enterprises employed fewer than 10 people (SAQSIQ figure). On the supply side, the State Council reported that, until the end of 2010, there were over 6,300 government offices that had food testing abilities; nearly a thousand of these offices specialized in food testing. These offices belonged to various departments (e.g. agriculture, trade, hygiene, industry and commerce, quality inspection, grain, and food and drug departments), and together they employed more than 64,000 workers⁴⁵. For the most concerning sector, dairy, Pei and colleagues⁴⁶ found 447 accredited laboratories employed a total of 1,000 chemists. For the food and beverage industry, Zhang⁴⁷ estimated the total personnel figure (monitoring and testing) is only about 10,000, falling well short of the estimated 50,000 required employees.

With regard to the supporting training system, researchers observed a structural inadequacy in training institutes⁴⁸, with only 70 vocational colleges offering education in food testing and related fields, many of which did not begin operation until after 2000⁴⁹. Pei and colleagues⁵⁰ considered the lack of trained personnel and corresponding training schemes in chemical and food science as a major shortcoming of the system. Nevertheless, some

³⁹ Ni and Zeng, 'Law Enforcement is Key to China's Food Safety'.

⁴⁰ FORHEAD, *Food Safety in China*, 49–50; General Office of the State Council of the People's Republic of China, 'Twelfth 5-year Plan on the National Food Safety Control System', June 28, 2012, released on July 21, 2012, 国务院办公厅关于印发: 国家食品安全监管体系'十二五'规划的通知. Edited by the General Office of the State Council of the People's Republic of China. People's Republic of China.

⁴¹ Colin G. Brown, John W. Longworth and Scott Waldron, 'Food Safety and Development of the Beef Industry in China', *Food Policy* 27(3), (2002), pp. 269–84.

⁴² Li Bai, Chenglin Ma, Shunlong Gong and Yinsheng Yang, 'Food Safety Assurance Systems in China', *Food Control* 18(5), (2007), pp. 480–84.

⁴³ Chung and Wong, 'Regulatory and Policy Control on Food Safety in China', pp. 1–2.

⁴⁴ Linden J. Ellis and Jennifer L. Turner, *Sowing the Seeds: Opportunities for U.S.–China Cooperation on Food Safety* (Woodrow Wilson International Center for Scholars China Environment Forum, 2008).

⁴⁵ See also Jia and Jukes, 'The National Food Safety Control System of China', p. 242.

⁴⁶ Pei et al., 'The China Melamine Milk Scandal', p. 417.

⁴⁷ Cited in FORHEAD, *Food Safety in China*, p. 42.

⁴⁸ Global Food Safety Forum, 'The China Path to Global Food Safety', August 2011, accessed October 21, 2016, <http://a-capp.msu.edu/sites/default/files/files/GFSFWHITEPAPER.pdf>, 55.

⁴⁹ See also FORHEAD, *Food Safety in China*, p. 42.

⁵⁰ Pei et al., 'The China Melamine Milk Scandal', p. 415.

researchers doubt the necessity for recruiting only food-related specialists. Li, Qi and Liu⁵¹ suggested that experts in law and economics are also instrumental within the regulatory work. Balzano⁵² supported this point and suggested it may not be too difficult to recruit related expertise after all, citing Shanghai as a successful example that recruited staff with university or higher degrees (74.98% undergraduate; 14.98% master's; 1.15% PhD). However, the State Council's FSC reinforced the importance of specialized knowledge in food safety regulation, and established a 'food safety promotion education works program (2011–2015)', which required food workers to undertake 40 hours of compulsory training per year. The feasibility and effectiveness of the scheme remains to be seen⁵³. In general, studies agree that a much larger investment in human resources is needed to better implement the expanded policy⁵⁴.

Much is still unknown about the actual management and operation of the regulatory system under the newer CFDA arrangement, and whether these available resources have been transformed into adequate capacities for the revised FSL. Resources may constitute capacity, but they are not capacity *per se*. As observed in a recent study analyzing the antecedents of public concern for food safety in 30 major municipalities in the country, there is not necessary a significant relation between resources availability (i.e., fiscal and personnel) and public concern about food safety⁵⁵. More in-depth analysis is needed to understand the dynamics and problems faced in the implementation of the latest food safety polices on the ground.

Overall, a major update of our understanding of the food safety regulatory system is needed in view of its recent organizational restructuring and legislative change. Further research is needed to understand the operation of the frontline regulatory system and to assess the system's adequacies for implementing the latest regulatory changes.

Data and method

To better understand the operational aspects of the CFDA, this study conducted a focused case study on Beijing's frontline food safety regulatory system. As China's capital city, Beijing has paid very close attention to food safety. Beijing's highly developed economy means that the municipal government can be expected to possess sufficient financial resources for the law's implementation. More importantly, the regulatory system in Beijing represented a rare, if not unique, combination of both "vertical" and "layered" management arrangements.⁵⁶ "Vertical" management indicates that the directives from CFDA will be implemented directly by local FDAs. The arrangement represents a functional division of labor in both the central and local government. Such an arrangement contrasts with the more common "layered" management arrangement, which refers to a division of labor based more on geography than function. A major strength of the latter arrangement is that it could enhance local adaptability of central policies, making them more suitable to local contexts, whereas the former arrangement is likely to ensure the faithful actualization of central polices in the local government given its undisrupted chain of command.

⁵¹ Li, Qi and Liu, 'Designing Independent Regulatory System of Food Safety in China', p. 294.

⁵² Balzano, 'China's Food Safety Law', p. 71.

⁵³ Xiang Zhang, 'China to Promote Food Safety Knowledge among Public', May 8, 2011, accessed October 21, 2016, http://news.xinhuanet.com/english2010/china/2011-05/08/c_13864645.htm; see also Jia and Jukes, 'The National Food Safety Control System of China', p. 243.

⁵⁴ FORHEAD, *Food Safety in China*, p. 10.

⁵⁵ Ma, Liang and Peng Liu, 'Missing Links between Regulatory Resources and Risk Concerns: Evidence from the case of Food Safety in China', *Regulation & Governance* 13(1), (2017), pp. 35-50.

⁵⁶ As far as the authors know, not many of the local food safety regulatory systems in China had adopted a management arrangement that could be characterised as "vertical". Examples include those in Shanghai, Shenzhen, Hainan, Guangxi, and to a large extent, Beijing, as elaborated below.

Analytically speaking, the Beijing system may be described as “one of the best possible implementation scenarios” for the architecture of the current food safety regulatory regime. As discussed in the findings, BFDA at the sub-district level is under the “duo management” of both Beijing Food and Drug Administration (BFDA) and the local sub-district (or *jiedao* 街道) government. Established in 2013, BFDA was directly in charge of food and drug regulation in all the city’s subdistricts and townships⁵⁷. Meanwhile, it received direct resource support (mostly infrastructural and financial) from the corresponding local governments. Accordingly, it is likely to enjoy the merits of both “vertical” and “layered” arrangements, or the authority to implement central policies, as well as the knowledge and resources for local adaptation and actualization. In fact, with this arrangement Beijing was ranked top in the performance evaluation of food and drug safety regulation in 2013.⁵⁸ Examining problems faced by Beijing’s system allows us to learn about the best *possible* scenario practiced under the latest regulatory regime. Reformers equipped with the findings, the authors hope, would be able to understand the limits of the system design and hence improve it accordingly.

Empirical data of this study was collected (2015–2016) from five subdistricts and townships in Haidian and Tongzhou, two of the 16 districts of the municipality of Beijing. Haidian is an old, urban district with the city’s second largest population, located in the northwest of Beijing. It is one of China’s education and technological innovation centers; it houses major government agencies and reputable academic institutes like Tsinghua, Peking, and Renmin University. Meanwhile, as part of a national development strategy, Tongzhou, a district in the southeast of Beijing, is planned as a new political-administrative center for the fast-expanding city. In October 2015, local officials announced that all municipal authorities in downtown areas would be moved to the Tongzhou District in 2017; the goal of the plan is to develop a new downtown area in Tongzhou within the next decade.

The selected subdistricts and townships represent a variety of potential implementation situations (e.g., varying regulatory targets and levels of urbanization). In Haidian, the Yangfangdian subdistrict (YFD) houses many governmental agencies, such as the Ministry of Science and Technology, Ministry of Water Resources, Navy and Air Force Headquarters of the People’s Liberation Army. The Haidian subdistrict (HD) also contains national universities and innovation centers, such as Zhongguancun Industrial Park. The Shangdi subdistrict (SD) holds many major industrial and commercial enterprises, such as the headquarters of Lenovo and Baidu. In Tongzhou, the Majuqiao township (MJQ), which lies on the outskirts of Beijing is home to many immigrants working in the logistics industry. Finally, the Yongledian township (YLD) represents a typical rural region and is located in a remote area near the Hebei province.

In each of the five subdistricts/townships, a semi-structured group interview was conducted at the local BFDA office with the enforcement team⁵⁹. Questions were asked about their daily enforcement work, as well as their perceptions and opinions of the implementation of the FSL (see Appendix A). Five sets of interviews were conducted in total. The first three sets of interviews were conducted in April 2015, whereas the last two were conducted in June

⁵⁷ Beijing Food and Drug Administration, accessed October 21, 2016, <http://www.bjda.gov.cn/>.

⁵⁸ Beijing Food and Drug Administration, ‘Woshi 2013 nian shipin yaopin anquan gongzou kaohe pingjia quanguo paiming diyi’ [‘Our city ranked number 1 in the national performance evaluation in the work on food and drug safety in 2013’], January 6, 2015, accessed April 4, 2019, http://www.beijing.gov.cn/zfxgk/110089/gzdt53/2015-01/06/content_542630.shtml.

⁵⁹ Except for District C, in which only the team leader was interviewed due to time constraint. The total number of regulatory enforcement officers interviewed in each sub-districts are: A: 3+1 regulatory assistant; B: 2; C: 1; D: 4; and E: 3+1 regulatory assistant.

2016. The authors conducted the interviews themselves. They were both present at the frontline offices. All the interviews lasted for more than two hours, except for the interview with C1, which lasted for about an hour. The interviews were taped and transcribed verbatim. To ensure the data was reliable and trustworthy, the interview transcripts were returned to the respective interviewees who confirmed that the transcripts conveyed what they wanted to express. The interview findings are presented below.

Findings

Management control of the frontline

According to the interviewees, at the subdistrict level, the CFDA in Beijing was under ‘dual management’ (双重管理). The offices were headed by a representative from the respective street office or township government, but in practice, the deputy head appointed by the district-level office of the BFDA was in charge of the daily operations.

Two main types of team members were found in the office: regular enforcement officers who possessed formal law enforcement authority and assistants. The enforcement officers were civil servants sent from the district-level BFDA and fully funded by the city’s municipal government. The assistants were *food and drug regulatory assistants* (食品药品协管员), or simply *assistants*. They were non-civil servants with a different uniform, no law enforcement authority, and were allowed to serve only in supplementary tasks. They were employed on a contractual basis by the respective street office or township government⁶⁰.

Apart from implementing BFDA’s initiatives and instructions, the frontline team was responsible for all the food- and drug-related matters in the subdistrict/township (e.g. ‘permits, bars and restaurants, complaints, regular/special inspection’)⁶¹. In terms of the food distribution network, they were specifically responsible for food circulation and individual entities selling food products⁶². Meanwhile, they also needed to implement instructions from the agency⁶³.

Various measures were reported to guide the enforcement work of the office. Officers were required to conduct their law enforcement work *in pairs*, presumably for corruption-prevention purposes. As an illustration, subdistrict A had a lot of floating street vendors, but the interviewees suggested that even when an *assistant* managed to identify some unlicensed sellers, he was not allowed to issue tickets, but instead had to wait for his law-enforcing teammate to come to do so⁶⁴. The revised FSL raised the minimum penalty for food fraud to 50,000 RMB, which in effect significantly reduced the frontline officers’ discretionary power in deciding the amount of fines based on the seriousness of the violation.⁶⁵

A detailed and comprehensive performance management system was in place⁶⁶ to ensure the frontline officers’ performance. Individual officers were assessed by the district administration, with an equal weight assigned to fulfilling technical regulatory assignments and balancing their regulation with its political implications to local livelihood situations. Ongoing training and stringent assessments throughout the years were reported.

⁶⁰ Interview with frontline food safety enforcers ‘A1’, ‘C1’, ‘D1’ and ‘D4’.

⁶¹ Interview with frontline food safety enforcers ‘A1’ and ‘B1’.

⁶² Interview with frontline food safety enforcers ‘D1’ and ‘E1’.

⁶³ Interview with frontline food safety enforcer ‘A1’.

⁶⁴ Interview with frontline food safety enforcer ‘A3’.

⁶⁵ Interview with frontline food safety enforcer ‘D4’ and ‘E1’.

⁶⁶ Interview with frontline food safety enforcer ‘A1’.

In addition to regular food safety awareness promotions, such as presenting talks and distributing pamphlets to various community groups⁶⁷, frontline officers were also required to respond immediately to public complaints, including following up on complaint calls, establishing cases, carrying out inspections, and publicizing the progress online⁶⁸. Officers who failed to follow up public complaints may be accused of “administrative inaction” (行政不作為), which would in turn affect their performance evaluation.

According to the interviewees, the district and subdistrict/township governments shared the expenditure of individual frontline offices in Beijing. Food safety was one of the criteria for evaluating the local governments, and the district government shouldered recurring expenditures, such as salary and enforcement expenses, whereas the subdistrict level provided office space and contributed to other miscellaneous but necessary expenses⁶⁹. There was not, however, a guarantee of the local governments’ commitments to food safety. For example, a frontline office had to negotiate with its subdistrict government on the cost of hiring each one of the assistants.⁷⁰ Yet, another interviewee recounted that last year his subdistrict government head managed to allocate 1 million RMB to hire 15 assistants (‘paying for their salary, uniform and work-related equipment’)⁷¹, but it was because this head was ‘exceptionally open and flexible’ and ‘politically shrewd and highly supportive of their regulatory work’. The example corroborated earlier reports about inconsistent resources allocation at the local level⁷². Indeed, insufficient physical and financial supports were widely reported. It was common for only one inspection vehicle to be shared by the whole office⁷³, and offices located in urban areas tended to have limited office space⁷⁴. While some rapid-testing equipment was available, its reliability fell short of expectations. Charges were often repealed when food samples were formally tested and returned with inconclusive or exculpatory results, causing frustration to frontline officers⁷⁵. It was also noted that their laboratory lacked sufficient resources (e.g. pure water) and facilities (e.g. better ventilation), although gradual improvements were reported after liaising with the district-level office⁷⁶. On the whole, it seemed that physical and financial supports from subdistrict-level governments varied at different times and places, depending on the commitment of the corresponding local governments.

Coordination on the frontline

The CFDA was established amid criticisms of coordination problems among a number of related regulatory agencies. Since then, the functions of regulating food production, circulation, and catering were all integrated into one agency, the CFDA. This arrangement was ‘much more efficient’⁷⁷ for frontline operations, and the interviewees mentioned no incidents of interagency competition⁷⁸. Despite that, better coordination and information exchange mechanisms have not yet been established among the nearby

⁶⁷ Interview with frontline food safety enforcer ‘D2’.

⁶⁸ Interview with frontline food safety enforcers ‘D1’ and ‘D4’.

⁶⁹ Interview with frontline food safety enforcers ‘A1’, ‘C1’, ‘D2’ and ‘D4’.

⁷⁰ Interview with frontline food safety enforcers ‘B1’.

⁷¹ Interview with frontline food safety enforcer ‘C1’.

⁷² For example, FORHEAD, *Food Safety in China*, pp. 49–50.

⁷³ Interview with frontline food safety enforcers ‘C1’ and ‘D1’.

⁷⁴ Interview with frontline food safety enforcer ‘C1’ and ‘D1’.

⁷⁵ Interview with frontline food safety enforcer ‘B1’.

⁷⁶ Interview with frontline food safety enforcer ‘E3’.

⁷⁷ Interview with frontline food safety enforcer ‘D1’.

⁷⁸ See Yan, ‘Food Safety and Social Risk in Contemporary China’.

provincial governments. This issue was illustrated in an incident in which meat was being imported from another province. An interviewee reported it was difficult to communicate, and thus coordinate, with the municipal government of Tianjin province, meaning he did not know which agency counterpart he should be contacting. This was because Tianjin's food safety was regulated under a 'holistic' regulatory arrangement that combined various 'market-regulating' agencies under one organization, in contrast to Beijing's vertical arrangement⁷⁹. Another example of coordination barriers occurred when officers identified unsafe primary agricultural products from a neighboring province (such as Hebei or Shandong); they would first have to contact that province's *provincial-level* FDA. This organization would then report the case to its provincial Food Safety Commission for coordination purposes. Following this, the commission would convey its decisions and directives to its agriculture-related agency, which would, finally, dispatch officers to investigate the source of the unsafe products. The coordination process was time-consuming, but this could be attributed to the differences in frontline regulatory arrangements of the related provinces⁸⁰.

Moreover, the CFDA still needed to coordinate frequently with other agencies and ministries, including the Ministry of Agriculture (MoA), on the regulation of primary agricultural food products (初级食用农产品)⁸¹ and SAQSIQ on the regulation of exported and imported food. The interviews showed that the division of authorities and responsibilities needed clarification among these agencies. For instance, questions were raised about how an agricultural product was defined. For example, to what extent could an agricultural product be 'artificially processed' (e.g. pork meat injected with growth promotants)? Would it then enter the domain of circulation and become the responsibility of the CFDA? Local officers were unclear about the boundary between the CFDA and MoA. There were also questions about whether the regulation of non-food-related requirements of food caterers should be conducted by or at least shared with other relevant departments. For example, should building requirements such as kitchen size be regulated by the SAIC? Should information about smuggled food products be shared with the General Administration of Customs (GAC)? Generally speaking, further rationalization of the regulatory process and better task/product-based collaboration among related agencies is warranted to improve the functioning of the system.

Capacity support for the frontline

Despite the improvement shown in aspects of control and coordination, serious capacity deficits were observed at the regulatory frontline. Some of the deficits were a direct result of the revised FSL and the strengthened administrative control, while others were more structural and difficult to alleviate.

A majority of the interviewees reported that their offices did not have enough manpower to implement all the FSL's requirements. Many of the local offices had thousands of regulatory targets under their purview, but the numbers of available enforcement officers were highly limited, with usually less than five, and on some occasions, only two or three. Subdistrict A, for instance, had five officers and five assistants⁸²; subdistrict C had four officers and 15 assistants, which, as reported, was 'probably the most in Beijing'⁸³. The smallest subdistrict was E, a typical rural township, with only three officers and six

⁷⁹ Interview with frontline food safety enforcer 'B1'.

⁸⁰ Interview with frontline food safety enforcer 'E1'.

⁸¹ Interview with frontline food safety enforcers 'D4', 'E1' and 'E4'.

⁸² Interview with frontline food safety enforcer 'A1'.

⁸³ Interview with frontline food safety enforcer 'C1'.

assistants⁸⁴. Grudges were often expressed about the abundant resources SAIC enjoyed, as many of the interviewees had worked there previously⁸⁵.

Given that law enforcement work must be conducted *in pairs*, and that only the formal officers have the authority to enforce the law, the workload falling on individual officers was huge⁸⁶. The officers' regulatory authority was generally respected and their orders usually followed. However, for less agreeable regulatees, stricter enforcement gestures, such as 'sterner faces' and 'firmer requests' were already quite effective⁸⁷, although incidents of charge resistance were also reported, mainly involving verbal insults and occasionally, physical attacks⁸⁸. Together with the new initiatives that frontline officers must respond immediately to public complaints, which had already added a tremendous workload⁸⁹, these control measures considerably weakened the enforcement effectiveness of the office⁹⁰.

Further, the enforcement officers often needed to consider multiple internal organizational and performance issues as they sought to enforce the law. On one hand, the officers worried that the accumulation of unpaid fines would reflect poorly on their performance record, especially when the amounts were too small for the court to follow up. On the other hand, charging the regulatees a larger fine, or simply imposing the revised 'minimum penalty' of 50,000 RMB may lead to the permanent closure of many small food operators, causing serious problems of social instability⁹¹. This illustrated that frontline offices and individual officers often had to balance the concerns for economic opportunity, social stability, and public health.

Meanwhile, the floating population in Beijing meant tracking the identity of illegal food vendors was highly challenging. As the authors were told, because operating licenses were only granted to those with a local residential citizenship, or *hukou*, it gave these illegal vendors without a hukou the opportunity to easily evade penalties. They would simply move to a nearby area and continue their operations. (Consumers would continue to purchase from these vendors, as their food was usually more affordable). This was a typical challenge in urban subdistricts⁹².

The growing number of 'professional fake fighters' also caused trouble to the frontline offices, a view shared by many interviewees from all the interviewed offices. These 'fake fighters' were individuals who reported purchasing defective food products, such as food past its expiration date from vendors like supermarkets and convenience stores. These individuals, who were enabled in part by the revised FSL, expected substantial compensation, usually a few thousand RMB, from the vendors. When the two parties failed to settle their dispute, enforcement officers were called in to handle the situation. Usually, it was not hard for officials to distinguish the 'professional' victims from genuine victims. However, they still had to investigate the situation, to avoid being accused of 'administrative inaction' by either party⁹³. Many interviewees complained about the negative influence of 'professional fake fighters' on their daily work. While the fake fighters' reported misconduct (e.g. product

⁸⁴ Interview with frontline food safety enforcer 'E1'.

⁸⁵ Interview with frontline food safety enforcers 'C1' and 'E1'.

⁸⁶ Interview with frontline food safety enforcer 'D4'.

⁸⁷ Interview with frontline food safety enforcers 'C1' and 'E1'.

⁸⁸ Interview with frontline food safety enforcer 'D4'. One female officer in subdistrict A reported the 'need' to carry out inspection assignments in pairs to ensure her personal safety.

⁸⁹ Interview with frontline food safety enforcer 'D1'.

⁹⁰ Interview with frontline food safety enforcer 'D4'.

⁹¹ Interview with frontline food safety enforcers 'A1', 'D1' and 'E1'.

⁹² Interview with frontline food safety enforcers 'A1', 'B1' and 'C1'.

⁹³ Interview with frontline food safety enforcers 'D4' and 'E1'.

mislabelling, the sale of recently expired products) often involved relatively low food safety risk, these cases account for more than half of the officers' time and energy, leaving them with little room for genuine cases and higher risk threats⁹⁴.

More structurally, the multitude of tasks assigned to the frontline offices greatly complicated their work and directed time and manpower away from food safety regulation. Individual officers were assigned numerous regulatory tasks on various matters within the food industry, ranging from regulating food production to consumption of various products and by various target groups. On top of this, they were assigned regulatory tasks in *both* the food and drug domains, such as cosmetics, medical devices, health food, etc.⁹⁵. Consequently, multiple officers reported that much of their energy (some cited 'at least 50%' and some '80%') was spent on food caterers, especially dealing with food vendors operating without licenses, as well as following up on citizen complaints⁹⁶. As reported, there was not enough attention paid to the drug portfolio given the current size of the workforce⁹⁷.

The great *diversity* of regulatory tasks also demanded a very high level of professional knowledge from individual officers. This was especially so for drug-related matters that required specialized knowledge.⁹⁸ Many enforcement officers were transferred from other regulatory agencies, such as SAIC and SAQSIQ⁹⁹, and only a small number of them were university graduates or had a medical background. In subdistrict D, for example, a pharmaceutical manufacturing company had been 'visited without talking about more specialized details' because of the officers' limited professional knowledge about its production process¹⁰⁰. Moreover, many enforcement officials expressed strong opinions about the poor remuneration and career prospects. Many with higher graduate degrees were reported to have left the offices. The salary was not competitive compared with similar private-sector jobs. One interviewee described that the salary may be adequate for younger female officers but definitely not enough for male ones when they had to raise a family¹⁰¹.

Finally, an interesting observation from the frontline regulatory offices, probably as a result of the capacity deficits discussed above, was that various subdistricts had collaborated with other local governmental units to conduct regular or intermittent joint-enforcement exercises¹⁰². Coordinated by the head of the subdistrict-level government, multiple local departments, such as 'public security, fire, environment protection, and industry and commerce' would join forces to conduct their inspection work¹⁰³. During the exercise, the officers would wear their uniforms¹⁰⁴ and file charges for any regulatory violations¹⁰⁵. As reported, the *de facto* territory-based measure, as opposed to the supposedly function-based vertical specialization significantly increased the effectiveness of their inspection work¹⁰⁶.

⁹⁴ Interview with frontline food safety enforcer 'D4'.

⁹⁵ Interview with frontline food safety enforcer 'D4'.

⁹⁶ Interview with frontline food safety enforcer 'D3'.

⁹⁷ Interview with frontline food safety enforcer 'E2'.

⁹⁸ Interview with frontline food safety enforcer 'B1'.

⁹⁹ Interview with frontline food safety enforcer 'D4'.

¹⁰⁰ Interview with frontline food safety enforcers 'D1' and 'D4'.

¹⁰¹ Interview with frontline food safety enforcers 'A1', 'A3', 'B1' and 'E1'.

¹⁰² Interview with frontline food safety enforcers 'A1', 'C1' and 'D4'.

¹⁰³ Interview with frontline food safety enforcer 'D4'.

¹⁰⁴ Interview with frontline food safety enforcers 'A1' and 'D2'.

¹⁰⁵ Interview with frontline food safety enforcer 'D4'.

¹⁰⁶ In some regions outside Beijing (e.g. Anhui and Zhejiang), where a holistic regulatory office has been established, SAIC, SAQSIQ and CFDA were grouped under the same office at the township level.

In hindsight, some of the deficits could have been observed easily. Yet, poor communication between the frontline offices and senior levels of CFDA, specifically about the officers' workload prevented it. The interviewees expressed that they did not have much say in regard to the latest revision of the FSL¹⁰⁷, and lamented that their level was not high enough to be heard in the revision process¹⁰⁸. This systematic underrepresentation of street-level bureaucrats in the revision of FSL showed another structural deficiency in the operation of the CFDA in Beijing.

Overall, the comprehensive personnel management system successfully incentivized individual staff to implement central technical instructions on food and drug regulation and balance them with local considerations. However, a major unexpected consequence was that a very high level of work volume and task complexity was now falling on a small amount of staff in the frontline office. To complete assignments, officers needed to memorize the requirements of both the food and drug domains, master procedures and skills required in the enforcement process, handle a large number of regulatees and citizen complaints, and respond immediately to unexpected food incidents. Together with their less-than-satisfactory remuneration package and career prospects, all these expectations placed unreasonable amounts of pressure on the frontline officers, hindering the implementation of the FSL and its latest revision.

Discussion and conclusion

This case study provides an important update of earlier analyses and suggests a major shift in our understanding of China's food safety policy implementation deficits. In line with the recent anti-corruption campaign and emphasis on law-based governance, the study observed administrative measures that mitigate the abuse of frontline regulatory power. Strict administrative requirements, which dictated that only civil service officers possess enforcement power and enforcement work must be conducted in pairs provided effective assurance to the policy targets. The regulatory officials also appeared to diligently carry out their responsibilities; this is likely a result of the severe consequences for poor performance evaluations¹⁰⁹. Requirements to improve the responsiveness to citizens' complaints were also observed, including publicly updating the progress of cases online. All of the above indicate a major improvement in China's food safety regulation.

The study also showed how the frontline food safety regulatory system, even for such better ones as Beijing, would face significant capacity deficits when implementing the latest FSL. The frontline system in Beijing lacked adequate human resources to support the widening scope and increasing complexity of the FSL, especially given the broad and complex structure of food circulation and consumption, such as the number and diversity of food operators. Physical capacities, such as inspection equipment and vehicles needed to be drastically expanded and upgraded¹¹⁰. The availability of financial resources, which varied

¹⁰⁷ Interview with frontline food safety enforcers 'D2', 'D4' and 'E2'.

¹⁰⁸ Interview with frontline food safety enforcer 'D1'.

¹⁰⁹ Major provinces such as Hebei and Guangdong have also adopted food safety as a factor for assessing performance of local governments and regulatory officials since 2015, echoing the revised FSL that "local authority takes all responsibilities in food safety regulation". See 'Hebei: Food and Drug Safety Has Been Contained by Local Performance Assessment System', *Chinanews*, May 27, 2014, accessed December 27, 2017, <http://www.chinanews.com/gn/2014/05-27/6217869.shtml>; 'Food Safety Has Been Included in Local Performance Assessment System in Guangdong,' *Yangcheng Wanbao*, August 25, 2015, accessed December 27, 2017, http://aq.ycwb.com/2015-08/25/content_20588786.htm.

¹¹⁰ Similar situations of inadequate capacity were observed in other regions. In Linyi, Shandong province, it was reported that ten township offices had to share only five inspection vehicles; in Bobai

across different local subdistricts and townships needed to be formalized and stabilized. More importantly, the abovementioned corruption prevention measures, such as enforcement in pairs and increased responsiveness to the general public added extra tasks to the already understaffed frontline, to the extent that regular work was heavily affected. Although better intra-agency coordination was reported, coordination with other functionally specialized ministries (e.g. SAQSIQ, SAIC, MoA and GAC) and geographically specialized regions did not improve. These findings not only corroborate general observations of resources deficit in the literature, but suggest further that an analysis of the internal operation of the local regulatory system is essential for understanding of the performance of the regulatory regime.

Based on the authors' reading of existing literature, many of these capacity deficits are in fact long-standing though latent problems inherent in the design of the regulatory *regime*. These problems emerged as the Chinese government demonstrated stronger commitment to law-based governance and food safety issues. The amendments of the FSL in 2015 worsened the situation as wider policy scope and more stringent expectations were introduced. As expressed by the interviewees from sub-district D and E, there were prominent concerns about the issue of “professional fake fighters” and the significantly-increased minimum penalty. These new emphases pose major implementation difficulties to the already stressed regulatory system at the frontline.

Finally, the findings shed light on the recent disbandment of the CFDA, and its further integration with SAQSIQ and SAIC to form an even more powerful State Administration for Market Regulation (SAMR). The formal reason for the establishment of SAMR stated in the ‘Plan for Deeping Party and State Organizational Reform’ (*shenhua dang he guojia jigou gaige fangan* 深化党和国家机构改革方案) is that the Chinese Communist Party is seeking to establish a unified market regulatory system (*tongyi shichang jianguan tixi* 统一市场监管体系) that promotes a ‘unified–open’ and ‘orderly–competitive’ modern market system. The organizational reform will promote the ‘holistic enforcement of market regulation’ and the ‘strengthening of product quality and safety regulation’. While these may be the pull factors, there are still many questions about why an independent CFDA failed to serve its purpose. After all, it is not uncommon to have an independent agency regulating these matters, such as the United States, and in fact, China’s drug safety regulator has been renamed as National Medical Products Administration (NMPA) and continued to function as a standalone agency, albeit also under the supervision of the new SAMR.

This study showed that a likely reason behind the organizational restructuring was that the former agency’s frontline food safety regulatory capacities needed to be significantly strengthened. The implementation of each new commitment written in the revised FSL could not be done without an immediate increase in equipment and professional human resources at the frontline. The integration, or the resultant unified market regulatory system, could potentially provide strong manpower and financial support, as well as the equipment and information needed to effectively manage the frontline system. This system strengthens the regulatory capacity to perform direct and indirect food-system-related regulatory tasks, such as restaurant and product licensing, and inspections for building requirements. Quite

county, Guangxi, rapid-testing technology could only be applied limitedly to a few simple pesticide residues. These reports corroborate the findings of the current study. See ‘An Embarrassed Situation after its Agency Reconstruction: The Lack of Human Resources and Regulatory Facilities’, *Gaoling Jingji Wang*, April, 2016, accessed January 2, 2018 http://www.glxcb.cn/news/guojij/201604/1604E_146089987722667.html; “The Status Quo, Challenges and Solutions on Grass-roots Food and Drug Regulation in Bobai County”, *Guangxi Food and Drug Administration*, August 19, 2015, accessed January 2, 2018, <http://www.gxfda.gov.cn/gxfdanet/lilunyantao/18638.jhtml>.

tellingly, regular joint-enforcement exercises had already been conducted in some subdistricts of both urban and rural areas. The arrangement was effective in strengthening local enforcement, though food-safety concerns were usually given lower priority compared with concerns like environmental protection and fire prevention. All these findings constitute the ‘push’ factors for the establishment of a multi-functional and resource-rich SAMR, while making CFDA one of the most short-lived (five years) regulatory agencies in the history of Chinese government. Of course, further research is warranted to see whether the new arrangement will successfully address the capacity deficits identified in the former system.

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Appendix A. Outline of the Interview Questions#

<p>I. Food safety regulatory enforcement officials at the grassroots level</p>	<ul style="list-style-type: none"> - What do you think are the appropriate angles for analyzing and investigating the situation of frontline food safety? What are some of the indicators that may be used as reference? - What are the problems and difficulties in the food safety regulatory enforcement at the grass-roots level? What are the causes for these problems and difficulties? How should these problems and difficulties be resolved? (For instance, the requirements in law enforcement, and common treatment methods.) - In the process of enforcing food safety regulations at the grass-roots level, how would you balance concerns between “emotion/relation”,
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	<p>“reason”, and the “law”? How would you handle cases of difficulties in enforcing the law?</p> <ul style="list-style-type: none"> - From the perspective of enforcing food safety regulations at the grass-roots level, what would you suggest to improve the Food Safety Law and other related regulations? - After the establishment of the China Food and Drug Administration, are there any improvements in the enforcement of food safety regulations at the grass-roots level? What has changed? What problems still exist (e.g., departmental division of labour, supports of human and material resources)?
<p>II. Regulatory capacity at the grass-roots level[#]</p>	<ul style="list-style-type: none"> - How would you evaluate the regulatory capacity at the grass-roots level? - What do you think are the outstanding issues in the regulatory capacity at the grass-roots level? - How could the regulatory capacity at the grass-roots level be strengthened?

[#] Examples were added in question 2 and 5 in the second round of interviews for illustration. Also added was a specific section on “regulatory capacity at the grass-roots level”.