

Research Article

Study on Analysis and Countermeasure of China's Legal System of Food Safety and Hygiene

^{1,2}Yongyong Zhu

¹Civil and Commercial Law School, Southwest University of Political Science and Law, Chongqing 400031, China

²Department of Economics and Business Administration, Chongqing University of Education, Chongqing 400067, China

Abstract: The aim of study is to solve the food safety problems existing in the real life, ensuring the food health safety, based on the "Food Hygiene Law of the People's Republic of China" promulgated in 1995 by China, starting from the aspects such as production, marketing, regulatory to the integrate the standards of edible farm product quality safety standards, food hygiene standards, food quality standards and relevant food industry mandatory standards, establishing scientific and standardized food safety supervision system, food safety risk assessment system, food safety monitoring system and food safety standards, regulating the food inspection and food production and management responsibility to strengthen safeguard measures of citizens' rights and interests to develop "The Food Safety Law of the People's Republic of China", to look forward to benefit the theoretical research and legislation improvement of the control law of China's food safety.

Keywords: Food hygiene law, food safety law, food safety monitoring system, food safety supervision system

INTRODUCTION

Food safety is directly related to people's health and safety and healthy development of national economy and harmony and stability of social as well. For example, if food production enterprises strictly observe the laws, regulations and the "standards of using food additives", there is no melamine milk scandal. If the companies comply with laws and regulations, find out the problems with food through examination and immediately recall substandard food according to "food recall regulations" based on social responsibility and respect for the law, then the social harm and expanded losses of the companies can be avoided (Lam *et al.*, 2013; Franz *et al.*, 2012; Doug, 2012; Steven and John, 2012). As food production enterprises ignore food safety standards and the legal requirements for market access, the food safety event happened frequently in recent years. In order to secure food safety and protect public health and safety, the government must modify the Food Sanitation Law, establish food safety law, standardize food production and operation, prevent food safety accidents and enhance the normalization, scientificity and effectiveness of food safety supervision (Zhu, 2013; Naomi, 2012).

MATERIALS AND METHODS

The "Food Hygiene Law of the People's Republic of China" promulgated in 1995 has played an important

role in securing food safety and protecting people's health. With the development of social economy, the dietary structure of Chinese urban and rural residents has changed and the less intake of food in the past may increase over time. During the Tenth National People's Congress, more than 3,100 deputies to the National People's Congress proposed bills and proposals on food safety legislation and strengthening supervision. Food safety issues have become increasingly serious, the public lack a sense of safety in food and food safety problems occurred frequently (Jia and David, 2013). The "Food Hygiene Law" established in 1995 is no longer able to meet the requirements of developed social and economy, so it is necessary to modify the law. Recent problems are: the food safety system and supervision system is not perfect, index in food standard is not scientific, standard settings are not unified, evaluation on food safety is not scientific and other issues. It is necessary to design legal institutions and regulations that can guide food production operators to pay more attention to food quality and safety. Laws, regulations and evaluation criteria of food safety should be developed with the times. For example, in addition to animal experiments, we can also refer to exposure assessment in the risk assessment, modify the standards which may pose a hazard to human bodies in existing standards and guarantee food safety (Qiao *et al.*, 2012). Food producers and operators are the first responsibility for food safety. However, their responsibilities are not clear or strict, punishment on producing and operating

unsafe food is inadequate and the release of food safety information is not standardized or unified. These resulted in confusions among consumers and sometimes even caused unnecessary panics. Current issues: food supervision is not in place, failure to abide by laws, lax enforcement, overlaps of obligations and powers between different departments. Thus, under the premise of a comprehensive analysis of status of establishing food safety laws, we should learn the problems of food safety through surveys and researches, modify and improve food hygiene laws accordingly and establish appropriate food safety laws to ensure food safety.

RESULTS

The development of global economic integration brought Chinese food into the global market. Chinese food earned a good reputation for its good quality and inexpensive price. Take Chinese chicken breast as an example, due to manual extractor, it is very clean and deeply loved by dealers in European countries. However, its exportation is often restricted for veterinary drug residues. Chinese vegetables, aquatic products and other products have been restricted by developed countries and cannot export in a large bulk, which is a great loss to Chinese international business (Olson, 2011). Therefore, the establishment of a sound legal system to guarantee food security is not only the needs of the domestic market, but also to overcome technical barriers and enter the international market. With the development of economy, the division to inspection authorities in original "Food Sanitation Law" was indistinct, which resulted in the overlaps of obligations and powers in different departments, the legal system has management leaks, penalty is not adequate and the deterrence of laws and regulations to lawbreakers is weak. To some extent, these factors caused a lot of fake and shoddy products. Some unscrupulous businessmen take risks to seek for profits. Such as eggs contaminated by toxic colorings, milk with melamine, tripe soaked in formalin and drug-tainted pork, artificial toxic food hurts consumers' bodies and feelings and our society also paid a heavy price for this. Therefore, in order to adapt to current food safety management, it is necessary to put the amendments and supplements to food hygiene and safety laws on the agenda.

China has already established national standards and industry standards on food hygiene. We study the common issues of food through the enactment of food safety regulations and the launch of scientific and technological projects and we have initially established a national pollutant monitoring network to control the animal products residues of the areas of export, which has achieved certain results. In order to protect the public health, clean and integrate food safety and solve the outstanding problems faced by food safety, in 2011 the Ministry of Health began soliciting standards on food safety and they received 842 proposals for food safety standards, including 191 suggestions on standards

of food additives, 107 items on food production and nearly 50% of them were food test methods and procedure proposals. After selecting carefully, 82 items were picked out as standard revision plans, including 43 items on food additives and 27 items on test methods. There were only 200 items in food safety standards when it was released in 2010, while today there are more than 4900 items of valid food-related standards. All standards came from different food safety regulators and 15 ministries, including industry standards and national standards and 54% of the standards are test methods. However, Chinese food safety system is still at a low level, food contamination is not clear enough, the existing monitoring and evaluation system lack systematic monitoring and evaluation on pesticides and veterinary drug residues in food, biological toxins and other pollutions, environmental pollution is not clear and short of background information on monitoring and evaluation of food safety systems. For example, no screening was arranged for endocrine disrupting activity in pesticides, no safety assessments were conducted on plant growth regulators which are used in the production, no effective safety evaluation methods were took to analyze the raw materials in health care products, no test or scientific evaluation on fungi which are largely used in traditional fermented food, lack of security evaluation programs on Genetically Modified Foods and out of reach with international food risk assessment and procedures. At present, China lack of information platform on food safety control, lack of education, training and information query system for consumers and producers, lack of large-scale food security early warning mechanism and the coverage rate of test methods and standards is not adequate, despite the establishment of 400 kind of pesticides, veterinary drugs, food additives. Although we have established more than 400 national standards and industry standards on pesticides, veterinary drugs, food additives, environmental pollutants, biological toxins and so on, compared to the covered items in international, we are still far behind (Taylor, 2011). Although many food safety inspection laboratories have been established, the testing equipments are mainly imported from other counties and scattered in different sectors and regions. We have not built a national food safety control system which covers all regions and considers product characteristics. The current monitoring system is mainly for controlling the exports of animal products, so we still need to strength the management of agricultural standards, veterinary standards and veterinary drugs in the control system.

DISCUSSION

In order to meet of the requirements of in-depth study and practice the scientific development, improve the legal system of Chinese food security, improve the quality of legislation, the research and establishment of food safety laws is required to follow the Constitution

and focus on legal seriousness, stability and continuity. Once enacted and implemented, the laws must be strictly enforced and remained relatively unchanged during a given period. Any changes in the laws should be kept with the original content and effectiveness. Consider national conditions and stick to the principle of democratic legislation. The establishment of laws is a process of promoting socialist democracy and food safety laws are closely related to the public interests. In order to improve the quality of legislation and facilitate law enforcement and legal advocacy, the legislation is required to collect different opinions from all aspects, compare and exchange of views repeatedly. Based on the new situation, take in successful experiences and practices of food safety supervision, stick to food safety, pay attention to the leaks in food safety supervision, carry out institutional innovation, system innovation and mechanism innovation in risk monitoring and evaluation, food safety standards, food production and operation, food inspection, handling of food safety incident, food supervision and management, legal responsibilities and other aspects, reform food safety regulatory mechanism, risk assessment system, monitoring system and safety standards and build a new platform for food safety (Nyambok and Kastner, 2012).

"Food Safety Law" is the legal ground for food safety assurance, which includes production regulations, product regulations, penalties for violations, subjects of law enforcement, the entire links of food production and consumption from field to table and the conduct of all relevant participants. In order to enhance the applicability and operability of the law, food safety law grasp the overall design from five aspects: firstly, to establish the scientific management base on food safety risk assessment and keep the results of food safety risk assessment as the scientific evidences for establishing and amending food safety standards and supervising food safety (Nachay, 2011). Secondly, put prevention first, supervise the food production, processing, packing, transportation, storage and sales, determine the system for issues of food additives and means of transport, establish disposal mechanism for production standards, hazard analysis, critical control point, system certification and prevention of accidents and improve emergency response capabilities (Sumio, 2011). Thirdly, strengthen the responsibilities of producers and operators as the first responsible person, adopt food recall system, food labeling system, invoice inspection system and other systems, guide producers and operators to focus on quality, service and reputation and form the long-term mechanism of food safety. Fourthly, make clear the responsibilities of local government to food safety supervision of its administrative area, each competent department exercises its powers in accordance with respective responsibilities, separate the decision-making and implementation appropriately, carry out one-to-one supervision and establish

dimensional safety supervision and management system. Fifthly, build smooth and convenient channels for compensation of consumer interests and fully embody the principles of fairness, emergency and proportionality. Any organization or individual has the right to report and accuse any violations of food safety law, get food safety information from related departments and give advices on regulatory tasks.

Establishing scientific and standardized food safety supervision system:

Food safety supervision shall rely on science and promote food safety regulatory mechanism from regulatory system, regulatory basis, regulatory content, means of supervision, regulatory information and other aspects. Food safety law defines the responsibility of enforcement subjects: related departments under the State Council are responsible for food hygiene within their respective areas; each administrative department under the State Council supervises the food safety separately, establish the Food Safety Commission as a cooperating agency, coordinate and guide the food safety supervision; the health administration departments under the State Council assume the responsibility of comprehensive coordination of food safety and they are responsible for food safety risk assessment, establishment of food safety standards, disclosure of food safety information, identification of qualifications of test standards of food inspection agency and dealt with major food safety accidents; Agricultural department is responsible for the supervision of primary agricultural products; quality supervision, industrial and commercial administration and the State Food and Drug administration under the State Council supervise and manage food production, food distribution and food service activities. Food Safety Law clarifies the responsibility scope of every department, determines accountability system, which is beneficial to perform each department's own duties, avoid overlaps of management and powers, reduce production costs, improve food quality and promote the transformation of food safety supervision department from the management to the management and service. Food Safety Law has improved the stop and prosecution power of regulatory authorities, required that food safety supervision departments have the right to enter production places to implement on-site inspection, inspect food samples, seize foodstuff, ingredients and additives which cannot meet food safety standards; and seal up places which illegally engage in food production and business activities. Food Safety Lay has increased the supervising and managing dynamics on imported foodstuff, required that exporters or agents shall be filed in entry and exit inspection and quarantine department; imported food and food additives shall conform to Chinese national food safety standards, without national standards or the first imported varieties should submit safety assessment materials to Health Administrative

Department; labels and instructions of imported pre-packaged food shall comply with Chinese laws, administrative regulations and the national food safety standards; food for export shall be supervised and inspected by entry and exit inspection and quarantine institutions and the Customs release the food by clearances issued by entry and exit inspection and quarantine institutions.

Establishing food safety risk assessment system:

"Food Safety Law" takes risk assessment as the judgment standard of food safety. Food safety risk assessment is the syntactic result of microorganism, chemistry, physiology, pathology, toxicology and other subjects. Safety risk assessment staff without relevant background will be restricted by knowledge structure and neglect the nature of the problem, or the result of judgment will only stay in the digital level, the outcome of which cannot be properly analyzed and affect the objectiveness of final result (Razman *et al.*, 2013). Article 13 of "Food Safety Law" provides that: China establishes food safety risk assessment system, which provides risk assessment for food and biological, chemical and physical hazards in food additives. Risk assessment provides more scientific judgments to food safety. Many people simply rely on Chinese food hygiene standards or international standards to judge and they do not understand the process and basis of standards development and they do not understand why developed countries set the standards as the technical barriers. False information on food safety will cause panics in consumers and endanger the health of consumers. Forced by public pressure, the government's anticipation judgment on food safety and arrangements for priorities will be inappropriate. In addition to traditional ingested food ingredients, most of the ingredients need to be determined through animal experiments. From the maximum dose which does not have any harmful effects on animals to the safety ADI to human body and calculate the limit standards according to the daily intake of the substance in food. Article 82 in "Food Safety Law" provides that: China establishes a unified food safety information system. Health Administrative Departments under the State Council announce the information. It should be accurate, timely and objective for food safety supervision and management departments to disclose the information. Food safety risk assessment shall be organized by the Health Administrative Department, which can guarantee both the smooth process of the risk assessment and the scientific results of the analysis. The establishment of food safety risk assessment system can avoid the release of false and unscientific information and protect the legitimate operation of the food production enterprises and protect consumers from being influenced by the false information.

Establishing food safety risk assessment system:

Article 5 in "Food Safety Law" provides that: Local people's government above the county level shall be responsible for the leadership, organization and coordination of food safety supervision and management within its administrative area, establish and improve the working mechanism of food safety supervision and management; lead and conduct the response to food safety incidents; improve and implement food safety supervision and management responsibility system and assess and evaluate food safety supervision and management departments. According to Chinese government agencies adjustment, the original vertical management agencies are allocated to local government. This provision will help the local governments to coordinate the work of health, quality inspection, FDA, industry and commerce departments and strengthen the food safety supervision of food production enterprises (Mister and Hathcock, 2012). Article 11 and Article 13 in "Food Safety Law" provide that the State establishes food safety risk monitoring and safety risk assessment system and the results shall be used to establish and amend the food safety standards. The establishment and amendment of food safety standards are necessary steps of risk management. Article 17 requires that a comprehensive analysis of the food security situation shall refer to results of food safety risk assessment and information of food safety supervision and management. Coordinate the food safety management departments, food producers and consumers when necessary. Article 18 provides that: the development of food safety standards shall be scientific, reasonable, safe and reliable and protect public health. It fully elaborates the food safety standards ranges from eight aspects, including the limit provisions of invasive organisms, pesticide residues, veterinary drug residues, heavy metals, pollutants and other substances harmful to human health in food and food-related products. It fully embodies the strict food safety standards. In 2010, according to the institutional setup of international Codex Alimentarius Commission, we established the national committee for the review of food safety, carried out food security review from pollutants, microorganisms, food additives, nutrition and special dietary food, production, specifications, packaging materials testing methods, runoff of pesticides and veterinary drugs and expected the close coordination of national food safety standards with the international standards.

Regulating the food inspection: In order to guarantee the objectivity and fairness of data and conclusions of the food inspection, Food Safety Law provides: the food inspection agency cannot engage in food inspection activities until get national qualification. The accreditation criteria and testing norms of food inspection agency is regulated by the health

administrative departments. Food inspection is in charged by food inspection agency and examiner and it is operated by independent examiner specified by food inspection agency. Examiner should inspect in accordance with relevant laws and regulations and ensure the objectivity and fairness of data and conclusions. False inspection report is forbidden. If food safety supervision department abuse of power, the persons who are directly in charge should be suspended or degraded; person who caused serious consequences will be dismissed or removed from his post. Article 60 of Food Safety Law provides that food safety supervision and management departments shall not implement the exemption for food. When food inspection is required, quality supervision, industrial and commercial administration, food and drug supervision and management departments shall entrust food inspection agency to test and pay related costs. When sample test is required, these departments should pay for the samples and do not charge inspection fees and any other charges. Food Safety Law endows the industry association responsibilities, requires strengthening industry self-regulation, guides food producers and operators to product and manage according to laws, promote the construction of honesty and faithfulness and propagate the knowledge of food safety. Food safety law has enhanced enforcement, required food producers and operators to use food additives in accordance with the regulations of varieties, usable range and dosage; other than food additives, shall not use any other chemical substances or other substances which may be potentially hazardous to human health; the use of food additives is subjected to food safety risk assessment to prove the necessity and reliability of technology.

Regulating the food production and management responsibility: Food Safety Law emphasizes the food producers and operators as the first responsibility and requires them to strengthen the sense of responsibility, establish food safety management system, strengthen the safety training of workers, allocate professional food safety management staff, prepare food inspection and test, observe the laws and improve the overall level of food safety. Food Safety Law strengthens the legal responsibility of production and operation, requires food production and operation to meet food safety standards and food safety management requirements of material handling locations and production and operation equipments; prohibit the use of non-food raw materials or any chemical substances other than food additives to produce food; prohibit producing or selling died or poisoned poultry, livestock, animals or aquatic animal meat products; Prohibit the production and operation the food which contains nutritional ingredients that cannot do not meet the food safety standards specifically for infants and other specific groups. Food Safety Law provides food labeling system. The pre-packaged food

should be marked the compositions, list of ingredients, shelf life, the used food additives, the labels and instructions shall state suitable crowds, unsuitable crowds, content, functional components or symbolic ingredients. Food Safety Law has improved invoice system. Food producers should check the license of the suppliers and qualified documents when purchasing food ingredients, food additives, etc. It is required to establish the record system of purchase inspection and delivery inspection for food ingredients, food additives and other related products. Food Safety Law refers to international common practice and determines food recall system from the production, operation and supervision. If food producers find the food production cannot meet food safety standards, they should stop production, inform the operators and consumers and recall the products that have been in the market. If food producers and sellers do not recall or cease operation the food that cannot meet food safety standards, the food safety supervision departments can require them to recall or cease the sales.

Strengthen safeguard measures of citizens' rights: Food safety relates to life safety and physical health. Food safety law protects civil rights through increasing the punishments. Using non-food raw materials to produce food or using any chemical substances and other substances which may potentially be harmful to human health other than additives; producing or selling the food which contains nutritional ingredients that cannot do not meet the food safety standards specifically for infants and other specific groups; selling dead or poisoned poultry, livestock, animals, aquatic animal meat and meat products; using new food ingredients without security evaluation. These will be fined up to 10 times as much as the total value of products and the license will be revoked. Any entity which was revoked the license of food production, distribution or food service, the persons in charge shall not engage in food production and operation within five years since the day the penalty decision was made. Producing or selling food when knowing the food cannot meet safety standards, consumers have the right to claim for damages and can also require a compensation as much as 10 times of the cost. Food Safety Law provides that the State to establish a unified food safety information disclosure system, announce the overall information of national food security, food safety risk assessment information, food safety risk warning information, serious food safety incidents information and other important food safety information, which can get rid of the current irregular and disagreed information. In order to reflect the civil liability between consumers and operators, Food Safety Law guarantees the prior compensation of consumers. Article 54 provides: food safety supervision and management departments or food inspection agencies, food industry associations and consumer association shall not recommend food to

consumers in advertisements or other forms; social groups or other organizations, individuals recommend food which does not meet food safety standards and damage the legitimate interests of consumers, shall bear the joint liability with food producers and sellers; shall bear civil liability and pay the fines and penalties. When its property is insufficient to pay the fines, bear the civil liability first.

CONCLUSION

At present, there are about 450,000 food producers and 280,000 food business operators in China. The industry's barrier to entry to food production is low and most of the food operators' legal sense and moral consciousness are uneven. It causes huge problem in supervision. In addition, food security standards in China are various and each standard might be in crossing and repetition, which makes food security problems impossible to be prevented effectively. Food Safety Law is an important statute that guarantees food security and safeguards life security and health of the public. It plays an important role in preventing and controlling food borne illness, eliminating and decreasing the harm of the unsafe factors in food and safeguarding people's body health. The State Council food safety committee determined to establish restrict food and drug safety supervision system and refine food and drug quality standards and security access system in 2013. Law Department took the decision that solicits advice focusing on the content of Food Safety Law revision from the society. Legislation review of Food Safety Law comes first. The revision of Food Safety Law refers to perfect food security standard system, establish effective information diffusion system food security and the most restrict food security supervision system, build up composite food safety law system via a blend of department of laws including criminal law, administrative law, civil and commercial law, economic law and procedural law. It controls and prevents food security crime more effectively and efficiently.

ACKNOWLEDGMENT

This study is supported by the Chongqing science of education plan and the key Research Foundation of Chongqing University of Education.

REFERENCES

Doug, F., 2012. Taste of home: Lawmakers are balancing strict food safety laws with policies to encourage small food entrepreneurs. States, feds see food safety roles differently. *State Legis.*, 38(5): 28-29.

- Franz, V., S. Erwin and E. Ibrahim, 2012. The origins of a global standard for food quality and safety: Codex alimentarius austriacus and FAO/WHO codex alimentarius. *Int. J. Vitam. Nutr. Res.*, 82(3): 223-227.
- Jia, C.H. and J. David, 2013. The national food safety control system of China-A systematic review. *Food Control*, 32(1): 236-245.
- Lam, H.M., R. Justin, M.C. Fung, L.Q. Xu and S.M. Sun, 2013. Food supply and food safety issues in China. *Lancet.*, 381(9882): 2044-2053.
- Mister, S. and J. Hathcock, 2012. Under the law, FDA must grant different standards for new dietary ingredients and food additives. *Regul. Toxicol. Pharm.*, 62(3): 456-458.
- Nachay, K., 2011. New food safety law addresses product traceability. *Food Technol.*, 65(2): 44-45.
- Naomi, M.N., 2012. The food safety modernization act: A barrier to trade? Only if the science says so. *Food Drug Law J.*, 67(2): 177.
- Nyambok, E.O. and J. Kastner, 2012. United States import safety, environmental health and food safety regulation in China. *J. Environ. Health*, 74(6): 28-34.
- Olson, E.D., 2011. Protecting food safety: More needs to be done to keep pace with scientific advances and the changing food supply. *Health Affair.*, 30(5): 915-923.
- Qiao, G.H., T. Guo and K.K. Klein, 2012. Melamine and other food safety and health scares in China: Comparing households with and without young children. *Food Control*, 26(2): 378-386.
- Razman, M.R., N.A. Ramli, A. Azlan and M.S.Y.C. Ngah, 2013. Packaged food safety in urban area: An observation from the Malaysian law of tort on negligence. *J. Food Agric. Environ.*, 11(1): 132-135.
- Steven, M. and H. John, 2012. Under the law, FDA must grant different standards for new dietary ingredients and food additives. *Regul. Toxicol. Pharm.*, 62(3): 456-458.
- Sumio, I., 2011. Safety of food additives in Japan. *J. Pharm. Soc. Jpn.*, 131(7): 1027-1035.
- Taylor, D.A., 2011. New food safety law brings opportunities amid hurdles. *Environ. Health Persp.*, 119(3): 119-119.
- Zhu, Y.Y., 2013. Strategies on accelerating agricultural modernization-taking Qijiang district as an example. *Adv. J. Food Sci. Technol.*, 5(8): 1015-1021.