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Application of responsive regulation in the food safety regulations of Bangladesh

Abstract

Bangladesh, a developing country of the South Asian region, has been suffering from rampant food adulteration for the last few decades. Recent studies revealed that numerous deaths along with countless physical illnesses are occurring as the consequences of this ongoing food adulteration. Several attempts have been made through to change the food safety regulations [FSR] of Bangladesh to combat this alarming issue. Unfortunately, the situation has hardly been changed. Rather it is getting worse day by day. However, Bangladesh has never changed the regulatory enforcement philosophy of its FSR to tackle this severe food safety concern. The current study is an endeavour to apply the responsive regulation theory [RRT] in the enforcement framework of the FSR of Bangladesh as an attempt to make it more effective and updated.

Keywords

bangladesh, responsive, food, application, regulations, safety, regulation

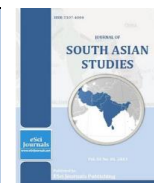
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APPLICATION OF RESPONSIVE REGULATION IN THE FOOD SAFETY REGULATIONS OF BANGLADESH

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ABSTRACT

Bangladesh, a developing country of the South Asian region, has been suffering from rampant food adulteration for the last few decades. Recent studies revealed that numerous deaths along with countless physical illnesses are occurring as the consequences of this ongoing food adulteration. Several attempts have been made through to change the food safety regulations [FSR] of Bangladesh to combat this alarming issue. Unfortunately, the situation has hardly been changed. Rather it is getting worse day by day. However, Bangladesh has never changed the regulatory enforcement philosophy of its FSR to tackle this severe food safety concern. The current study is an endeavour to apply the responsive regulation theory [RRT] in the enforcement framework of the FSR of Bangladesh as an attempt to make it more effective and updated.

Keywords: Food Safety, Bangladesh, Responsive Regulation, Regulatory Regime, Enforcement Mechanism, Network Governance.

FOOD SAFETY PROBLEMS AND ITS GENERAL CAUSES IN BANGLADESH

The current situation of food safetyⁱ in Bangladesh is quite alarming (Ali, 2013a; Hussain, 2008; Sapan, 2012). Everyday numerous food manufacturers and processors are producing, and processing food products in serious unhygienic environments ("2 Fast Food", 2010; "Food Adulteration", 2012). These unhealthy germ-infested foodstuffs are creating severe communal diseases like diarrhoea, typhoid and so on. The World Health Organisation referred the report of International Centre for Diarrhoeal Disease Research, Bangladesh [ICDDR,B] that everyday more than 500 people visit hospitals in Bangladesh for diarrhoeal disease caused by unsafe foods ("Sustainable Development", 2012). This long diarrhoeal disease problem, related to food safety, persists and it has been a significant cause of malnutrition in Bangladesh for the last couple of decades (Motarjemi *et al.*, 1993; Markle, Fisher, and Smego, 2007; DGHS, 2012). Different food processors use formalin to process fishes, dry fishes [locally called as *sutki*] ("Trader Fined", 2009; Amin *et al.*, 2004). Formalin is a dangerous chemical liable for

various types of cancers (Wooster, Martinez & Bowser, 2005). The food processors also use DDT [Dichloro Diphenyl Trichloroethane] powder in *sutki* which can cause cancer (Bhuiyan *et al.*, 2008) along with various other reproductive problems (Rahman & Alam, 1997). Foods are prepared with various toxic colours that are generally used as textile dyes (Khan, July 2012; Munim, 2012). Consumption of these toxic textile colours can form indigestions, allergies, asthmas, cancer and so forth (Radomski, 1974). Manufacturers use urea fertilizer to adulterate the *moori* [puffed rice] (Khan, August 2012), a famous cereal type food in Bangladesh; sick, infected and poisonous dead chickens are used in soup preparation ("Two Collectors", 2012; "2 Jailed", 2012); suppliers and retailers sell date expired energy drinks, biscuits randomly ("Date Expired", 2011). Numerous examples can be given like this regarding the food adulteration and unsafety of foods in Bangladesh.

Various socio-economic, cultural, and regulatory reasons may be liable for these aforesaid food safety problems in Bangladesh, such as lack of consumer education (Huda, Muzaffar & Ahmed, 2009), product price (Hossain, Heinonen & Islam, 2008), multiplicity of laws (Ismail, 2004), lack of coordination (Ali, 1984), lack of adequate punishmentsⁱⁱ, judicial restraint (Andaleeb & Ali, 2009),

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and the like. However, it is argued that the lack of proper and effective enforcement of the food safety regulations [FSR] is a significant reason for the ongoing food adulteration problem in Bangladesh. The present study intends to critically examine the regulatory enforcement strategy of FSR and its shortcomings to challenge food safety concerns in Bangladesh, leaving the other reasons for future endeavours.

PRESENT REGULATORY ENFORCEMENT FRAMEWORK OF FSR IN BANGLADESH: ABSENCE OF PERSUASIVE POLICIES AND CIVIL PENALTY

The existing enforcement framework of the FSR of Bangladesh is not well-structured or systematically designed which could bring out the best from the application of enforcement mechanisms (Ali, 2013a). The regulators impose continuous deterrent sanctions upon the food manufacturers to ensure the regulatory compliance without having any prior persuasion, training, warning letter or caution/improvement notice. However, particularly in the food manufacturing industry, as a part of the corporate sector, imposition of consistent punishments for regulatory non-compliance can have relatively poor outcomes while persuasion can bring positive consequences, especially 'when there is reason to suspect that cooperation with attempting to secure compliance will be forthcoming' (Braithwaite, 2001). It is worth mentioning that the notions of motivation and persuasion in the corporate sector have been seen in various examples of early legal scholarship. For example, Simpson favoured administrative sanctions and suggested that inspectors should be authorised power to issue an improvement notice so that a regulated party [regulatee] had time to correct his mistakes while a prohibition notice could be served where the situation was worse (Simpson, 1973). However, a mere persuasive measure can overindulge the regulatees that were violating regulations, while a completely deterrent approach could discourage them in regard to regulatory compliance as well as lead to a deterioration in the relationship between the regulators and the regulatees (Mascini & Wijk, 2009). Therefore, a persuasive approach heading to the deterrent steps may be the better approach in an enforcement regime.

Further, a manufacturer is directly penalised with criminal penalties without imposing any preceding civil penalty, which is considered as a hybrid of the both civil and criminal laws (Head, 2008). The civil penalties are imposed by the regulatory authorities and they do not

include any imprisonments (Head, 2008). In practice, civil penalties are offered to the corporate regulatees in order to sidestep criminal liability for the regulatory non-compliances (Frank, 1982). Therefore, it is hardly practicable to expect that the application of repeated criminal penalty will be able to increase the regulatory compliances in the food safety regulatory regime of Bangladesh. Rather, the current situation and the occurrences of the food safety offences in Bangladesh prove that deterrence of direct criminal penalties has failed (Packer, 1968; Metzger, 1984; Cartwright, 2007). Criminal penalties in the initial stages of regulatory enforcement are expensive and when it is applied at corporate level, it removes the individual's sense of responsibility as well as undermines the good will of persons (Ayres & Braithwaite, 1992). Hence, the civil penalties are advocated as highly effective in the corporate area since they help to enhance the probability of imposing sanctions on corporate offenders by using the 'lower standard of proof and procedural protections available in a civil action as opposed to the higher standard applicable in a criminal prosecution' (Bird, 1996). At present, the monetary fines which the executive magistrates enforce by mobile courts upon the food manufacturers in Bangladesh are clearly criminal in nature. This may in fact mystify the readers because in all the cases, these monetary penalties are popularly known as 'fine' the media (Mobile Court Fine, 2012). The current research finds out that these 'fines' are not characterised as civil penalty. Two reasons are given behind this submission. Firstly, the laws that deal with food safety issues in Bangladesh are criminal enactments in nature. Secondly, the executive magistrates who impose these fines use the criminal procedure while penalising the culprits (Mobile Court Act 2009 [Bangladesh]).

Given the prevailing shortcomings in the food safety enforcement regime in Bangladesh, it can be said that this country has long been due for an improved and effective enforcement framework in its food safety regulatory regime. The current study intends to apply the responsive regulations theory [RRT] in the enforcement regime of the FSR of Bangladesh. The RRT is originated by two famous legal scholars, Ian Ayres and John Braithwaite in their noteworthy book entitled, "the Responsive Regulation: Transcending the Deregulation Debate", published by from Oxford University Press in 1992. The following few sections of this study will attempt to conceptualise the RRT and will address the application of

this theory in the enforcement framework of the FSR of Bangladesh.

CONCEPT OF RESPONSIVE REGULATION AND ITS APPLICATION IN FOOD SAFETY REGULATIONS

The RRT suggests a regulatory enforcement pyramid of sanctions [REPS] which targets the achievement of the maximum levels of regulatory compliance by persuasion (Gilligan, Bird, & Ramsay, 1999; Welsh, 2009). The REPS starts with persuasion, motivation, education, advice, training and so forth at the base of the pyramid. If persuasion does not work, the regulators may consider an escalation in the pyramid and proceed to a warning letter.

In case the warning letter also fails to secure compliance, then the regulators may impose a civil monetary penalty in an attempt to prompt compliance. The next step is the criminal penalty in the event that the civil penalty fails. When all the prior steps fail, regulators can move to plant shutdown or temporary suspension of the licence in the case of a corporation. Finally, if the temporary suspension of licence does not work, regulators escalate to the last step of the pyramid and revoke the licence of the respective offenders (Ayres & Braithwaite, 1992; Morgan & Yeung, 2007; Scott, 2004; Braithwaite, 1991 Haines, 1997). The following figure demonstrates the REPS under the RRT.

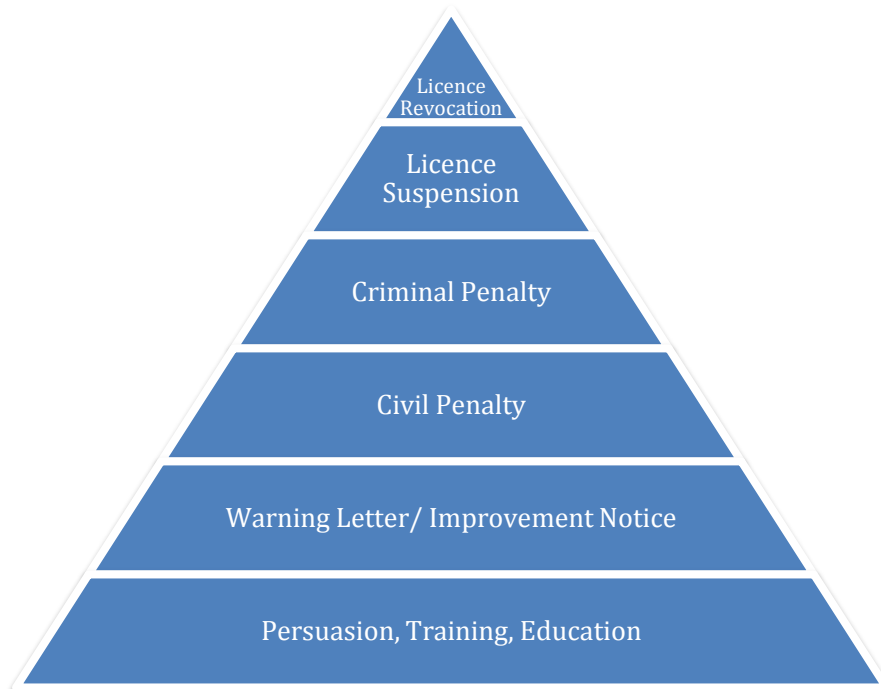


Figure 1: (Ayres and Braithwaite, 1992: 35)

The theory of responsive regulation is adopted by several countries, such as Australia, Denmark and the Netherlands, and in different regulatory regimes, for instance, those applying to income tax, occupational health and safety, labour management, environmental inspection areas and so forth (Mascini & Wijk, 2010). The RRT is currently applied in the food safety regulatory framework of New South Wales [NSW], Australia (Productivity Commission, 2009). More specifically, the enforcement of FSR of NSW is governed by the Australia New Zealand Food Regulation Enforcement Guideline, which has been built entirely

following original philosophy of the RRT (Australian & New Zealand Food Regulation Enforcement Guideline, 2009).

CHALLENGES OF THE APPLICATION OF RESPONSIVE REGULATION THEORY IN THE FOOD SAFETY REGULATORY FRAMEWORK OF A BANGLADESH

Bangladesh is a developing country (IMF, 2011). Therefore, it is a challenge whether or not the RRT can be applicable in a developing country like Bangladesh. Braithwaite, one of the originators of the RRT, acknowledges that RRT is fundamentally designed for the developed countries and it may face few restrictions

while applying in a developing nation. Firstly, the regulatory bodies, their infrastructures, functions, powers of a developing country may not be as good as those in the developed one (Braithwaite, 2006). Secondly, a developing country may lack a society with a strong state, markets, civil society where responsiveness generally works smoothly (Braithwaite, 2006). Thirdly, corruption is a common phenomenon among regulatory bureaucrats in most developing countries and the NGOs are not strong enough to act as overseers (Braithwaite, 2006). For these reasons, many developing countries hardly do possess the adequate regulatory capacity to get the best results that are predicted from RRT (Scott, 2004).

Braithwaite suggests that the above mentioned shortcomings can be solved with the introduction of network governance [NG], modifying the basic RRT. He accepts the idea of Drahoš and admits that RRT can be better enforced by escalation in terms of the REPS by getting involved in networking with domestic and foreign actors (Drahoš, 2004). The idea of NG and its positive aspects are discussed below.

Firstly, Braithwaite has been persuaded by the concept that people now live in the era of NG and thus it is better for developing nations to move directly to the regulatory society era of NG from their current state regulatory system. He believes that NG will help such nations to let the 'responsive regulation work by escalating less in terms of state intervention and more in terms of escalating state networking with non-state regulators' (Braithwaite, 2006). After mentioning this, Braithwaite introduced a regulatory figure of pyramid (Braithwaite, 2006; Drahoš, 2004) specifically designed for developing countries where he portrays that various state and non-state actors can be included as network partners [NPs] to increase the expected effectiveness of the RRT. Braithwaite proposes the participation of the NGOs, industry associates, professionals, international organisations as non-state actors (Braithwaite, 2006).

Secondly, the NG has been very positively advocated by Freiberg. He mentions that a regulation that involves non-state actors can be more effective than only state-centred regulation. This is because the former involves more concerned parties which help to bring more of the desired outcomes (Freiberg, 2010). It is argued that in an era of NG, weaker actors can engage with stronger ones in their projects to overcome their inadequacies. Basically, this is the main reason for the introduction of

NG for developing countries, though the same reason may be true even in the case of developed countries. As an example of NG, Braithwaite cites that a health regulator of a developing country can enrol the United States Food and Drug Administration [FDA]'s aid and share that body's expertise while developing food or drug safety or standards and so on (Braithwaite, 2006). This example signifies that Braithwaite suggests that foreign state or non-state actors may help to increase the performance of a regulatory regime as well as ensuring and upgrading safety or standards. Besides this In addition to this, he also advocates the engagement of domestic NGOs of developing countries, aimed at overcoming the incapacities of state regulators (Braithwaite, 2006). Especially, the introduction of NG [when networking with developed countries] in the food safety regulatory mechanisms of a developing nation can be a good idea because most of the developed countries are very similar in regard to food standards (Braithwaite, 1994).

Thirdly, Braithwaite expresses his concern that RRT is sometimes hard to implement in a developing country as it puts more discretion in the hands of regulatory bureaucrats, a move which may lead to corruption (Braithwaite, 2006). Thus, he thinks that the networking regulatory partnerships with the NPs will structurally reduce corruption in those counties (Braithwaite, 2006). Fourthly, regulatory NG has been suggested by much international literature. The 2004 *Canadian Regulatory Review* emphasised that the Canadian federal government needed to seek cooperation and work with its United States and Mexican counterparts so that they could build mutual trust and confidence in each other's regulatory processes (Smart Regulation, 2004), in different areas [including food] in order to achieve a high level of consumer protection (Smart Regulation, 2004). The Review stated that 'Canada should also move toward accepting the approvals and reviews of products by its US and EU trading partners in sectors where there are well-established, internationally recognized conformity assessment procedures already in place' (Smart Regulation, 2004).

This proposition significantly suggests the introduction of NG in Canadian regulatory regime. It is worth mentioning that the NG in the current study does not intend to compromise the sovereignty of any of the participants nor does imply any kind of foreign intervention in the national government's operations or

decision making, it may rather help to redefine the relationships and roles with the aforesaid state and non-state actors in the regulatory process (Metcalf, 1994). In fact, living in the 21st century, there is hardly any reason not to be connected with the international network as many voluntary standard bodies, international organisations and NGOs are ready to contribute as non-state actors (Charlesworth & Chinkin, 2004). For example, the food certification program under the American Heart Association [AHA] is totally voluntary (Robertson, 2007), and thus, Bangladesh may take this opportunity in order to upgrade or authenticate the food standards by adding the AHA in its regulatory network.

It is significant to note that, some international regulatory networks are already in operation. Under the auspices of FAO-WHO Codex Alimentarius Commission, regulators from 144 countries gathered in Rome to make recommendations on food standards (Jacobs, 1994). The current regulatory framework of food safety laws in Bangladesh is already involved in a type of NG to some extent. For example, the Bangladesh Standard Testing Institute [BSTI], the main food standard making authority in Bangladesh, has been linking with the International Standardisation Organisation [ISO], Codex and some other international organisations for upgrading the food standards (National Taskforce on Food Safety, 2004).

Finally, the above discussion of this study suggests that introduction of NG is can be beneficial for the Bangladesh with a view to the internationalisation of its food safety regulatory regime. The discussion of this section also signifies that, RRT can be applied in a developing country like Bangladesh by engaging the NP in its regulatory mechanisms (Ali, 2013b).

ENGAGEMENT OF NETWORK PARTNERS IN THE FOOD SAFETY REGULATORY FRAMEWORK OF BANGLADESH

The current section of the paper will focus on the issues to involve the NPs in the enforcement framework of the FSR in Bangladesh.

A food manufacturer will have to be certified by its respective NPs in regard to its food standards, manufacturing processes, environment, cleanliness and all other relevant particulars before it [manufacturer] starts a food business in Bangladesh. The present study suggests that at least one domestic food safety related NGO, for example, the Consumers Association of

Bangladesh [CAB], and at least one foreign food safety authority of a developed country [for example, the FDA, or NSW Food Authority of Australia and so on] should be engaged as NP for each regulatee. It is important to note that, NP should be chosen very carefully. In this situation, recognition from the food standard authority of a developed country as recognised by the United Nations Development Program [UNDP] is wiser because their standards are already accepted across the world. This would be preferable to the involvement of more domestic NGOs or other developing country food safety authorities, such as the Food Safety and Standard Authority of India [FASSI] and the like. However, if it is costly or otherwise tough to engage a developed country food safety authority as NP, at least a developing country should be engaged.

Once the particular regulatee achieves certification by their NPs and applies to the respective food safety authority in Bangladesh for entering the market for starting business, the authority should consider and verify the certifications. Then the authority may allow the respective food manufacturer for selling to sell the food products in the market. There should be a seal affixed beside the indication of approval of the particular NP. Every year the particular regulatee would need to renew their certification from NPs. For example, if the Food and Drug Administration of USA certifies a specific food manufacture of Bangladesh in 2013 as maintaining all food standards of USA, this certificate will be valid for one year. The manufacturer would have to renew it in 2014. In the interim, the inspector or any other consumer can challenge the standard of the food. In that case the manufacturer would have to prove the quality of the product to the relevant authority. Practically, maintaining all these certifications each and every year may add to the cost of manufacture; however, if the particular manufacturer is recognised by one or more foreign NPs, it could export its food products to all over the world and earn greater profits than it could otherwise expect.

It is worth mentioning that in every case of the escalation by the enforcement authorities in accordance with the REPS, the report of the NPs should be given a serious consideration. Firstly, the NPs would have the power to give their recognition or withdraw such recognition in regard to a particular regulatee based on their standards after the NPs' inspection of every possible area. Secondly, whenever an inspector inspects

the particular food manufacturer and finds any violation of any standard, the inspector will first collect the particular food sample or any other evidence, such as a video record on cleanliness, environment, temperature recordings and so on. After collecting the evidence, he or she will send a copy or portion of such evidence to the NPs [either to all or to selected partners] for their comments to be submitted within a short span of time, for example, within two weeks. It will be done so that the inspector can rapidly and on the basis of the best advice make a considered decision, before escalating to impose any sanctions upon the food manufacturer available in the REPS. At this stage, the NPs have the opportunity to provide their opinion after testing the food sample in the laboratory or testing the evidence record, for example, videos as to whether or not the regulatee is maintaining the standard as earlier certified by the NPs. Once the inspector receives the feedback from the NP(s), he or she can decide on the basis of his findings whether to escalate to the enforcement pyramid or not.

Finally, as described above in this paper regarding the application of REPS, in all case court should have the power to intervene in every step including the civil penalty, criminal penalty, licence suspension or licence cancellation. An aggrieved regulatee may wish to challenge any sanction under the REPS issued by the inspectors or any enforcement authority in an authorised court. In that case the court will take the ultimate decision.

CONCLUSION

Food safety is a sensitive area which may affect every human being directly and indirectly. Therefore, the regulatory philosophy, framework and, above all, its effectiveness in a specific country is a major concern both for the regulators and the regulatees. The application of the RRT in the food safety regulatory framework of Bangladesh as discussed above indicates that completely deterrent enforcement strategy is seldom useful rather persuasion can multiply the compliance of the regulations in a significant way (Mascini & Wijk, 2009). In fact, for the last two decades, RRT and its applications have been discussed and empirically investigated in a significant amount of legal research (Wood *et al.*, 2010). In 2005, the renowned Hampton Review of UK also suggested persuasion instead of random inspection and mentions that by eliminating unnecessary inspection, more resources could be directed to advice. This can reduce

administrative burdens by reducing the time taken to comprehend regulations. Also this can increase the probability of compliance, and hence regulatory outcomes. More broadly, better advice eases businesses concerns about the requirements of regulation, and helps for complying regulations (Hampton, 2005). Many countries do emphasise penalties for violation of the regulations rather than emphasising compliance. It becomes a general belief that increasing sanctions will motivate corporation to comply with regulations (Hampton, 2005); but actually any consideration of increasing or decreasing the penalty should take into account the impact of a wrongdoing, its risk of repetition and so on (Hampton, 2005). Finally, it is argued in this study that if the above mentioned changes and modification can be done, RRT can be successfully applied in the food safety regulatory framework of Bangladesh. However, it can be argued that the above modification can be subject to further change or modification, especially in regard to the numbers of NPs so as to make it more flexible and effective enough to ensure safe food for every consumer in Bangladesh (Ali, 2013b).

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REFERENCES

- "2 Fast Food Shops Fined." *The Daily Star*, February 24, 2010. Accessed November 15, 2012. <http://www.thedailystar.net/newDesign/news-details.php?nid=127700>.
- "2 Illegal Lube Factories Sealed Off in Chittagong." *The Daily Star*, August 31, 2005. Last accessed August 10, 2012. <http://thedailystar.net/2005/08/31/d50831060355.htm>.
- "2 Jailed for Selling Dead Chicken." *The Daily Star*, April 19, 2012. Accessed 16 November, 2012. <http://www.thedailystar.net/newDesign/newsdetails.php?nid=230783>.
- Ali, Abu Noman Mohammad Atahar. 'Food Safety and Public Health Issues in Bangladesh: A Regulatory Concern' (2013a) 8(1) *European Food and Feed Law Review* 31-40.
- Ali, Abu Noman Mohammad Atahar. "Responsive Regulation and Application of Grading Systems in the Food Safety Regulatory Regimes of Developing

- Countries," *Food Studies: An Interdisciplinary Journal* 2, no. 1 (2013b): 31-43.
- Ali, Quazi Mohammad. "Some Aspects of Consumer Protection in Bangladesh." *The Dhaka University Studies* Part-C (1984): 111-119.
- Amin, Aasha Mehreen et al. "Eating Away Our Health." *The Daily Star, Weekend Magazine*, November 5, 2004. Last accessed November 16, 2012. <http://www.thedailystar.net/magazine/2004/11/01/cover.html>.
- Andaleeb, Zafrin and Abu Noman Mohammad Atahar Ali. "The Development of Consumer Protection law in Bangladesh: A Critical Comparative Study," *Independent Business Review* 2(2009) 131-143.
- Australian & New Zealand Food Regulation Enforcement Guideline*
- Australian Law Reform Commission. *Principled Regulation: Federal Civil and Administrative Penalties in Australia*, Report Number 95 (2002).
- Ayres, Ian and John Braithwaite. *Responsive Regulation: Transcending the Deregulation Debate*. Oxford University Press, 1992.
- Bhuiyan, Md Nurul Huda et al. "Organochlorine Insecticides (DDT and Heptachlor) in Dry Fish: Traditional Washing and Cooking Effect on Dietary Intake." *Bangladesh Journal of Pharmacology* 4 (2009): 46-50.
- Bhuiyan, Md Nurul Huda et al. "Screening of Organochlorine Insecticides (DDT and Heptachlor) in Dry Fish Available in Bangladesh," *Bangladesh Journal of Pharmacology* 3 (2008): 114-120.
- Bird, H. "The Problematic Nature of Civil Penalties in the Corporations Law." *Company and Securities Law Journal* 14 (1996) 405-427.
- Braithwaite, John. "Prospects for Win-win International Rapprochement of Regulation." in *Regulatory Cooperation for an Interdependent World* (OECD Publishing, Paris, 1994) 201-222.
- Braithwaite, John. "Responsive Regulation and Developing Economies," *World Development* 34, no. 5(2006): 884-898.
- Braithwaite, John. "Policies for an Era of Regulatory Flux" in Brian Head and Elaine McCoy (eds), *Deregulation or Better Regulation? Issues for the Public Sector*, South Melbourne: Macmillan, 1991.
- Braithwaite, John. *Restorative Justice and Responsive Regulation*. New York, Oxford University Press 2001, 30.
- Cartwright, Peter. "Crime, Punishment, and Consumer Protection." *Journal of Consumer Policy* 30 (2007): 1-20.
- Charlesworth, Hilary and Christine Chinkin. "Regulatory Framework in International Law," in Christine Parker et al (eds), *Regulating Law*. Oxford University Press, 2004: 246
- "Date Expired Energy Drinks Seized." *The Daily Star*, June 20, 2011. Accessed November 17, 2012. <http://www.thedailystar.net/newDesign/newsdetails.php?nid=190753>.
- Directorate General of Health Services (DGHS). "Communicable Diseases." Government of Bangladesh. Last accessed November 15, 2012. http://nasmis.dghs.gov.bd/dghs_new/dmdocuments/Communicable%20diseases%20in%20Bangladesh.pdf.
- Drahos, Peter. 'Towards an International Framework for the Protection of Traditional Group Knowledge and Practice' (Paper presented at the UNCTAD-Commonwealth Secretariat Workshop on Elements of National *Sui Generis* Systems for the Preservation, Protection and Promotion of Traditional Knowledge, Innovations and Practices and Options for an International Framework, Geneva, 4-6 February 2004)
- "Food Adulteration: Mobile Court Faces Obstruction in Ctg." *The Daily Star*, August 12, 2005. Accessed November 10, 2012. <http://www.thedailystar.net/2005/08/12/d5081201033.html>.
- Frank, Nancy. "From Criminal to Civil Penalties in the History of Health and Safety Laws." *Social Problems* 30, no. 5 (1982): 532.
- Freiberg, Arie. *The Tools of Regulation*. Federation Press, 2010.
- Gilligan, George, Helen Bird, and Ian Ramsay. "Civil Penalties and the Enforcement of Directors' Duties." *University of New South Wales Law Journal* 22 (1999) 417.
- Haines, Fiona. *Corporate Regulation: Beyond Punish or Persuade*. Clarendon Press, Oxford, 1997.
- Hampton, Philip. "Reducing Administrative Burdens: Effective Inspection and Enforcement." HM Treasury, London, United Kingdom, 2005.
- Head, Richard. "Company Secretary- The Rise and Rise of Civil Penalties in Australia." *Keeping Good*

- Companies* 9 (2008): 518
- Hossain, Md Motaher, Visa Heinonen and K M Zahidul Islam. "Consumption of Foods and Foodstuffs Processed with Hazardous Chemicals: A Case Study of Bangladesh." *International Journal of Consumer Studies* 32, no. 6 (2008): 588-595.
- Huda, S S M Sadrul, Ahmed Taneem Muzaffar and Jashim Uddin Ahmed. "An Enquiry into the Perception on Food Quality among Urban People: A case of Bangladesh." *African Journal of Business Management* 3, no.5 (2009): 227-232.
- Hussain, Sarwar. "Adulteration of Foods." *The Daily Star*, December 26, 2008. Accessed May24, 2013. <http://www.thedailystar.net/newDesign/newsdetails.php?nid=68695>.
- International Monetary Fund (IMF), *World Economic Outlook*. IMF, 2011.
- Jacobs, Scott H. "Regulatory Co-operation for an Interdependent World: Issues for Government." in *Regulatory Co-operation for an Interdependent World*. OECD Publishing, Paris, 1994: 15-46.
- Khan, Md Asadullah. "Bitter Truth: Rampant Adulteration Plays Havoc." *The Daily Star* August 4, 2012. Accessed August 5, 2012. <http://www.thedailystar.net/newDesign/newsdetails.php?nid=244692>.
- Khan, S. M. Masum. "Toxin-Mixed Iftar Poses Serious Threat to Health." *Daily Sun*, July 23, 2012. Accessed November 13, 2012, http://www.dailysun.com/print_news.php?path=data_files/2012/07/23/212&cat_id=1&menu_id=2&news_type_id=1&news_id=43468.
- Mascini, Peter and Eelco Van Wijk. "Responsive Regulation at the Dutch Food and Consumer Product Safety Authority: An Empirical Assessment of Assumptions Underlying the Theory." *Regulation & Governance* 3 (2009): 27-47.
- Metcalfe, Les. "The Weakest Links: Building Organisational Networks for Multilevel Regulation," in *Regulatory Co-operation for an Interdependent World* (OECD Publishing, Paris, 1994) 49
- Metzger, Michael B. "Corporate Criminal Liability for Defective Products: Policies, Problems, and Prospects." *Georgetown Law Journal* 73 (1984): 1-88.
- Mobile Court Act 2009 (Bangladesh): 6(3), 7, 13.
- "Mobile Court Fine Ice Cream Factory." *The Daily Star*, Accessed 4 October, 2012. <http://www.thedailystar.net/newDesign/newsdetails.php?nid=252412>.
- Morgan, Bronwen and Karen Yeung. *An Introduction to Law and Regulation: Text and Materials*. Cambridge University Press, 2007.
- Motarjemi, Yasmine et al, "Contaminated Weaning Food: A Major Risk Factor for Diarrhoea and Associated Malnutrition." *Bulletin of the World Health Organization* 71, no. 1 (1993): 79-92.
- Munim, Rifat. "Camouflaging Adulterants." *The Daily Star*, August 19, 2011. Accessed July 12, 2012. <http://www.thedailystar.net/magazine/2011/08/03/cover.html>.
- National Taskforce on Food Safety. "Bangladesh Country Paper." (Paper presented at the FAO / WHO Regional Conference on Food Safety for Asia and Pacific, Seremban, Malaysia, May 2004): 24-27.
- Nestle, Marion. *Safe Food: The Politics of Food Safety*. California: University of California Press, 2010.
- Packer, Herbert L. *The Limits of the Criminal Sanction*. Stanford University Press, 1968.
- Parvez, Anwar. "The Chikan Shemai of Bogura Manufactured in Dirty Environment." *Prothom Alo*, August 5, 2012. Accessed April 20, 2013. <http://www.prothomalo.com/detail/news/279367>. [author's translation].
- Powell, Clydette. "Nutrition." in *Understanding Global Health*, ed. William H. Markle, Melanie A. Fisher, and Raymond A. Smego. McGraw-Hill Companies, 2007.
- Productivity Commission. "Performance Benchmarking of Australian and New Zealand Business Regulation: Food Safety." Commonwealth of Australia, 2009.
- Radomski, Jack L. "Toxicology of Food Colors." *Annual Review of Pharmacology* 14 (1974): 127-137.
- Rahman, M. H. and M. J. B. Alam. "Risk Assessment of Pesticides used in Bangladesh." *Journal of Civil Engineering* 25 (1997) 97-106.
- Rahman, Shah Mahfuzur and A. T. M. Ismail. "Strengthening Official Food Safety Control Services." (paper presented at the FAO/WHO Second Global Forum for Food Safety Regulators, Bangkok, Thailand, 12-14 October 2004).
- Robertson, Rose Marie. *Food and Drug Administration*

- Public Hearing: Food Labelling: Use of Symbols to Communicate Nutrition Information.* American Heart Association, 2007.
- Sapan, Habibur Rahman. "Everyday 4 Thousands Kilogram Adulterated Ghee is Manufactured in Greater Pabna: These Ghee are Marketed with the Seal of Reputed Manufacturers." *Sangbad*, October 25, 2012. [Author's translation]
- Scott, Colin. "Regulation in the Age of Governance: The Rise of the Post- Regulatory State." in Jacint Jordana and David Levi-Faur (eds.), *The Politics of Regulation: Institutions and Regulatory Reforms for the Age of Governance*. Edward Elgar, 2004, 145-174.
- Simpson, R C. "Safety and Health at Work: Report of the Robens Committee 1970-72." *The Modern Law Review* 36, no. 2(1973): 192-198.
- "Smart Regulation: A Regulatory Strategy for Canada." (Government of Canada, 2004):138.
- "Sustainable Development and Healthy Environment: Food Safety." World Health Organization: Country Office for Bangladesh. Accessed November 8, 2012.
<http://www.ban.searo.who.int/en/Section3/Section40/Section104.html>.
- "Trader Fined for Selling Fish Treated with Formalin." *Bangladesh2day*, September 1, 2009. Accessed November 16, 2012.
<http://www.bangladesh2day.com/newsfinance/2009/September/1/Trader-fined-for-selling-fish-treated-with-formalin.php>.
- "Traders Fined for Selling Toxic Chemicals as Food Colour." *The Daily Star*, January 30, 2007. Accessed March 3, 2012.
<http://www.thedailystar.net/2007/01/30/d70130013625.html>.
- "Two Collectors of Dead Chicken Jailed." *The Daily Star*, April 10, 2012. Accessed November 21, 2012.
<http://www.thedailystar.net/newDesign/newsdetails.php?nid=229647>.
- Two Puffed Rice Factories Fined Tk 1 Lakh." *The Daily Star* July 28, 2011. Accessed March 12, 2012.
<http://www.thedailystar.net/newDesign/newsdetails.php?nid=196107>.
- Welsh, Michelle. "Civil Penalties and Responsive Regulation: The Gap between Theory and Practice." *Melbourne University Law Review* 33 (2009): 908.
- Wood, Charlotte et al. "Application of Responsive Regulatory Theory in Australia and Overseas." (Occasional Paper 15, June 2010, Australian National University).
- Wooster, Greg A, Casandra M. Martinez, and Paul R. Bowser. "Human Health Risks Associated with Formalin Treatments Used in Aquaculture: Initial Study." *North American Journal of Aquaculture* 67 (2005): 111-113.

ⁱ 'Safety' is a relative term (Nestle, 2010). The meaning of the term 'safety' can vary based on person, religion, culture, geographical locations and so on. However, this study will mean the word 'safety' from scientific point of view only. Adulterations by different harmful, inferior substances and additives in foodstuffs by human being as well as unhygienic practices to foodstuffs that cause various chronic and non-chronic, infectious and non-infectious diseases will be considered as safety concerns in this study.

ⁱⁱ For example, the penalty as set in s 272 of the Penal Code 1860 (Bangladesh) for the adulteration of food or drink is a maximum term of six months of imprisonment or up to a maximum fine of BDT (Bangladesh taka) 1000 (equivalent to USD 12). Section 284 of the Penal Code 1860 prescribes the same penalties for negligent conduct in regard to having any kind of poisonous substances in food.