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# FOOD SAFETY: A STUDY ON POLICY FRAMEWORK OF PROTECTING FOOD ADULTERATION IN BANGLADESH

Jannatul Islam,<sup>1</sup> F. I. M. Muktadir Boksh<sup>2</sup> and Ashraful Begum <sup>3</sup>

1. Lecturer, World University of Bangladesh (On leave); Research Assistant, Memorial University

of Newfoundland, Canada

jislam@grenfell.mun.ca

2. Research Assistant, Canadian Forest Service, Department of Natural Resources Canada,

fjm@grenfell.mun.ca

3. Lecturer, World University of Bangladesh

<u>ashrafulbegum@gmail.com</u>

## Abstract

Food adulteration refers to the mixture of additives or substitution of inferior substances of food, reducing food quality and making it impure and unsafe. Food security is recognized as a fundamental human right in Bangladesh Constitutional Act-15. Nonetheless, food adulteration in Bangladesh is so rigorous such that it affects consumer perception about food, leading to protests and demonstrations criticizing the government. It benefits the research community to understand the policy making phases of food security and the efficiency and effectiveness the policy mechanism in this area. One would discover that the policy formulation in Bangladesh was based on poorly measured implementation efforts and decision-making clear of stakeholder participation. The government revised the food safety regulations but the policy framework has not succeeded due to lack of proper policy making conceptualization.

**Keywords:** food adulteration; basic necessities; Bangladesh constitution; deleterious substance; ICDDRB; ACS.

#### 1. Introduction

Food adulteration is an intentional act of debasing the quality of food offered for sale either by the mixture or substitution of inferior substances or by the removal of some valuable ingredient. Adulterated food is impure, unsafe, unhealthy or unwholesome food. Adulteration usually refers to noncompliance with health or safety standards as determined by relevant authorities. The Federal Food, Drug, and Cosmetic (FD&C) Act provides that food is "adulterated" if it meets any one of the following criteria:



(1) it bears or contains any "poisonous or deleterious substance" which may render it injurious to health;
(2) it bears or contains any *added* poisonous or *added* deleterious substance that is unsafe;
(3) its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health; or (4) it bears or contains a pesticide chemical residue that is unsafe.

In the constitution of Bangladesh, article-15 provides the basis for the right to food under the title "Provision of basic necessities" (Bangladesh Constitution, 1972). But the current situation of food safety in Bangladesh is quite alarming (Hussain, 2008). The International Centre for Diarrheal Disease Research, Bangladesh ICDDRB identified that everyday more than 500 people visit hospitals in Bangladesh for diarrhea disease caused by unsafe foods. The issue needs crucial attention of academics due to its rigorous effects on food security and health system.

# 2. Objectives of the Study

This is a review based study to discuss the policy phases of food adulteration protection policy in Bangladesh. The study has the broader objectives of eliminating food adulteration causing harm to the public health. Its specific objectives are to critically analyze the food adulteration issues in a structured framework of policy making process, and find out the gap needing further action.

The study will be helpful to decision makers to determine the proper directions of actions, and to the stakeholders by increasing their knowledge about the situation and the policy making process involved.

## 3. Methodology

The article analyses policy phases, showing how the problem has been addressed in its policy framework. Whether or not the policies succeed mostly depend on the operationalization of policy phases. For this reason, problem solving processes should go through an efficient and effective policy making cycle. The study has collected all its data from secondary sources.



## 4. Analysis of the Problem in Policy Making Phases

The policy phases that this paper discusses include agenda setting, policy formulation, decisionmaking, policy implementation, and policy evaluation. It attempts to create a logical framework that presents the best medium for understanding the policy cycle.

#### A. Agenda Setting

Unsafe food is a significant reason for the considerable number of diseases in the entire world. Consumption of unsafe food is a serious threat to public health in Bangladesh in the last couple of decades. In 1980s, a survey conducted by the Institute of Nutrition and Food Science, Dhaka University revealed that inadequate diets and intake of adulterated foods are responsible for the malnutrition of 60% of the people of Bangladesh (Cited by Ali, 2013. P-1). He also cited that the Institute of Public Health (IPH) in Dhaka and the World Health Organization (WHO) in their joint study in 1994 on food adulteration tested 52 street vendors and found that, all of the vendors' food samples were contaminated with different types of disease breeding micro-organisms. The issues came to the scene broadly when the European Union banned importing shrimp from Bangladesh in 1997 due to the poor hygiene standards in the shrimp processing plants in Bangladesh (ibid, quoted by Ali, 2013). According to the FAO/WHO research in 2004, diarrheal diseases cost 5.7 million in Bangladesh only from one international project named 'Disabilities Adjusted Life Years'. The ICDDRB provides treatment to about 300,000 diarrhea patients annually through its nine clinics across the country (aid.gov.au). The American Chemical Society (ACS) has identified the presence of up to 0.3 parts per million (ppm) of cadmium per kilogram in Bangladeshi rice where the maximum permissible level is 0.22 ppm (Faruque, 2013). Rahman (2013) claimed that every year, three lac people die of cancer, 50 thousand of diabetics and two lac people are attacked by kidney diseases due to intake of adulterated food.

The news of the effects of Food Adulteration creates a reverse impact to the society. The middle class society including professionals, teachers, parents and students organized several protests and criticized the government for not having effective regulations. The media played a vital role to create public attention about food adulteration. The political parties, especially left-wings,' organized several protests



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and raised the issue as a state crisis. The opposition party tried to make it a tool against the government, addressing it as a failure of government to secure public health, meanwhile public health is a constitutional right in Bangladesh.

The World Health Organization has expressed its anxiety about the impact of food safety in Bangladesh. The government agencies in the country and research institutions also represent their concern about food safety issues in their reports. Both the domestic pressure and international pressure made it necessary to the country's regulatory body to strengthen the Food Safety Act which had become obsolete.

#### **B.** Policy Formulation

Many people have stopped eating fruits in fear, resulting in huge losses to growers and traders (M. S. Siddiqui, 2014). Policy formulation became very essential for the government as the voice against food adulteration which had become a strong political issue. The previous laws regulating food safety in Bangladesh include Penal Code, 1860; Control of Essential Commodities Act, 1956; Food Act, 1956; Pure Food Ordinance, 1971; Special Powers Act, 1974; Fish and Fish Products Ordinance, 1983; The Breast-Milk Substitutes Ordinance, 1984; BSTI Ordinance, 1985; Iodine Deficiency Disorders Prevention Act, 1989; CRPA, 1989 (Ali, 2013). Most of them became obsolete and unable to deal with the current food adulteration challenges because of the limitation in covering the new phenomenon of food adulteration, very low provision of punishment, lack of co-ordination among the regulatory and executive bodies, absence of consumer right protection act etc. (Ali, 2013).

The policy formulation and advancement process cuts across several government departments (showed in Figure-1 in below). The concerned department drafted the policy and proposed it to parliament, with the parliament giving its final approval. The stakeholders on the instant issue include but are not limited to the enforcement agency (BSTI), enforcer (civil servant and police), low earner consumers (who could not afford expensive quality food), small food businessmen (who do not have enough efforts to retain the food quality), media, NGO, opposition party, civil society and relevant government departments. In formulating the policy, the stakeholders were not coordinated and considered properly (M. S. Siddiqui, 2014; The Daily Star, 2014).



#### C. Decision Making

There are several regulatory bodies under different ministries (Figure-1) responsible for food security and public health. The Food Act (Amended) 2005 was been passed in the parliament on 19 September 2005 including the provisions of punishment for food adulteration. The High Court issued an order on 29 February 2012 under Clause 75 of the Special Power Act for prosecuting offenders for artificial ripening of fruits using chemicals and for marketing the artificial ripened fruits. The Court also ordered that there must be frequent visits at the wholesale and retail food markets to check artificial ripening of fruits using chemicals. The High Court issued another order to the Chairman of the National Board of Revenue to examine the import points whether the imported fruits contain any chemicals and only after confirmation to give clearance for the lot.

With the relentless effort of the Cabinet of Bangladesh CAB since 1992, the Government lastly formulated "The Consumers Right Protection Law" in 2009 under the clause of 4A of The Pure Food Ordinance 1959, to help prevent food adulteration in the country. The "National Food Safety Advisory Council" has been established. The objectives of such council is to promote and protect the rights of the consumers such as the right to be protected against the marketing of goods and services which are hazardous to life and property. The Minister of Commerce is the chairman of the Council composing 29 members.

In addition to the abovementioned council, there government also established one District Consumer Court in each district of Bangladesh and one National Consumer Court for the whole of Bangladesh to deal with Consumer disputes. The Department of Consumers Right Protection Affairs has been established with 233 posts. However, the recruitment policy for Principal, Divisional and districts level positions has yet to be finalized(slideshare.net).

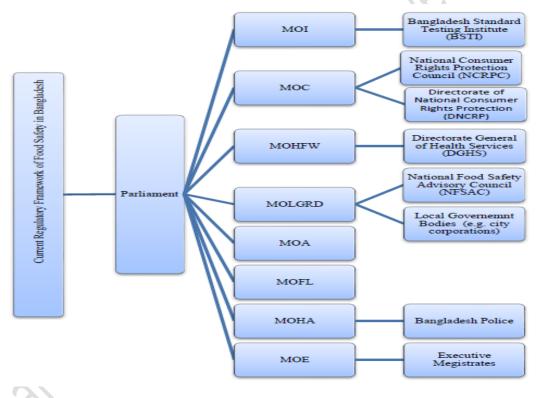
Last year, the Safe Food Act, 2013 was enacted; it categorizes 23 offences for which criminals will face maximum five years in jail term or Tk. 1, 000,000 fines. Of these offences, 13 are non-bailable. The maximum punishment for adding radioactive ingredients or heavy metals to food is four years in jail or the Tk. 800, 000 fine or both. The highest punishment for adding insecticides, hormones, antibiotics and

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other chemicals above permissible limits is three years in jail or a fine of Tk. 600, 000 or both. Owners of restaurants and hotels, causing health hazards to consumers, would face maximum three years of jail or a fine of Tk. 600,000 or both(The Dhaka Tribune, 2013).

#### **D.** Policy Implementation:

The mix of regulatory and economic instruments was used in implanting the process to eliminate the food adulteration. Several laws were passed with the provision of fine or jail or both if caught in food adulteration. The current regulatory body of food safety is as follows:



#### Figure-1

The Bangladesh Standard Testing Institute under the Ministry of Information is responsible for setting up specifications and standard of food products, regulating, monitoring and enforcing the law concerning food quality control and adulteration. The Bangladesh police and executive magistrates (mobile court) are the enforcers of law, translating the law at the field level.



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Some measures are being taken under the Pure Food Act. The actions taken against the offenders during the last fiscal year, the Mobile Food Court has fined mango traders worth Tk. 13 lac and punished with one month-imprisonment. The court also seized and destroyed 75 kg of grapes and 12 tons of mango treated with calcium carbide by the traders in the Dhaka City, seized 12,000 spoiled eggs from a trader who used to supply these eggs to different bakeries in Chittagong and punished with 6-month imprisonment. Recently they seized huge amounts of textile dyes from food processing industries. One mobile court seized 11 different kinds'textile colors from single confectionery. The manufacturer of artificially prepared cow's milk with cutting oil and detrimental ingredients was punished with 6- month imprisonment in Jessore. In another drive, they seized 20 liter adulterated milk in Shahzadpur of Sirajgonj district and fined Tk.35,000.00. During 2008-2011, about 2000 cases have been settled in the Pure Food Court and imposed penalties of more than Tk more 1.5 crore. However, before 2007, the executive magistrates imposed penalties only Taka 1.72 lakh through 68 cases filed against the food adulterators (Solaiman& Ali, 2014).

"The Pure Food Court" has been established in Dhaka district and is only one such type in the country. Despite the order from the High Court, no such court has been established in other districts. The Pure Food Court played significant roles in detection/identifying adulterated foods and lodging cases against the unscrupulous traders/manufacturers during the period of 2007-2010. However, a spokesman has said that these drives became drastically slow or ineffective due to activities of a vicious circle within the Dhaka City Corporation (DCC). Lack of widespread publicity also hinders the effective implementation of the law. Safe Food Act- 2013 has been enacted and a process is under way to formulate rules for implementation of the law at the field level (BD News, June 2014).

## E. Policy evaluation:

BSTI is responsible for setting up specifications and standards of food products, regulating, monitoring and enforcing the law concerning food quality control and adulteration. The limitations of the BSTI, in addition to others, is that it has only 30 officers for monitoring and controlling, and also lacks modern analytical laboratories and trained manpower. There are 650 inspectors at district and



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municipal levels while the Dhaka City Corporation (DCC) has only 28 inspectors to monitor food adulterations (www.bsti.gov.bd).

The drives against food adulteration are provision of penalties or punishment for food adulteration. The various regulatory bodies and departments responsible for monitoring the issue create a complex environment for policy implementation. According to M. S. Siddiqui (2014), food control in Bangladesh is a multi-sectorial responsibility. He stated that no persuasive measures like training, caution notice, improvement notice are involved in the enforcement mechanism. He claimed that the administrative enforcement mechanism of Bangladesh is not organized (Siddiqui, 2014). He further claimed that the inspection strategies have not been designed, and there is no clear method of detecting non-compliance with the regulations. Director at the Centre for Nutrition and Food Safety of ICDDRB, Dr.Ahmed (2013), said "There is talk about food adulteration, but we see little action". A popular newspaper wrote that the concerned agencies are aware of the illegal and harmful techniques of food adulteration by traders or manufacturers; however they are quick to shift blame on one another for failing to curb the malpractices (Daily Star, April 2014). So far, the policy taken by the government of Bangladesh and the legal authority bodies has some measure for implementation but lack evaluation mechanisms.

Prime Minister Sheikh Hasina in 2014 told the Parliament that "Activities including adulteration of the food items that go against the consumers' interest have been declining gradually due to strict measures already taken by the government while the consumers started to get its benefit" (ProthomAlo, 2014). However, a different scenario was obvious when the High Court, in April 2014, ordered the authorities to inform it within 20 days about the measures taken to stop use of hazardous chemicals and preservatives in food items by a section of unscrupulous businessmen and farmers. The directive followed a recent government laboratory test that found as high as 40 percent of the food samples containing excessive toxic substances. The High Court also reminded all concerned that the court had earlier issued orders against food adulteration but the criminal act has not stopped due to lack of strict monitoring by the government and slack enforcement of relevant laws (Daily Star, April 2014). The ruling also comes six months after the government passed a stringent food safety law, replacing the Pure Food Ordinance of 1958.



## 5. Conclusions

This article has identified some issues regarding the effectiveness and efficiency of the existing policy framework. They include:

- 1. Lack of civil society involvement in policy formulation
- 2. Lack of manpower and modern equipment
- 3. Lack of co-ordination among the departments
- 4. Lack of methodological approach (including training, caution notice, improvement notice) in policy implementation
- 5. Lack of trust and understanding among the stakeholders

The paper found that the policy maker has not followed proper structural methods in their policy making phases in terms of addressing the issues of public awareness, implementing limitations and evaluative measures. This point is very essential for solving the problems currently facing Bangladesh because food safety is a basic human need recognized by the constitution of Bangladesh in article-15.

Bangladesh's Food standard policy was formulated without proper consultation and inclusion of stakeholders such as the citizens, NGOs', media and the researcher sector. As a result, we found different opinion, miss-communication and distrust among different groups about the initiative and intention of the government in solving the food adulteration problem. Even the court and large research institutions (quoted above) have stated their distrust about the process. Policy decisions were taken without considering the implementing power of the relevant regulators' (BSTI) manpower and technology.

There are many departments related to the policy process in Bangladesh. For this reason, the government should properly coordinate these departments alongside other stakeholders. It appears that attempts were made to address the issue without developing the operationalization concept and process; as such the outcome of the policy has not lived up to expectations and the process appears slow and needs revision to ensure efficient and effective success.

In conclusion, there are other issues that have recently emerged in Bangladesh's food policy scope. The most pressing, perhaps, relates to genetically modified organisms. There are many stakeholders that

express concern that this poses a threat greater than what the currently face. While this has not been the concern of the instant paper, we propose that future research look into this area.

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