

## **ADULTERATED FOOD INDUCED FEMALE INFERTILITY IN BANGLADESH: A HINDRANCE TOWARDS ACHIEVING SUSTAINABLE DEVELOPMENT GOAL (SDGS)**

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### **ABSTRACT**

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#### **Keywords:**

*Food; Adulteration; Infertility; Sustainable; Development; Bangladesh;*

Goal three (ensure healthy lives and promote wellbeing for all at all ages) of the Sustainable Development Goals includes the reduction of the global maternal mortality ration. We also believe that, this target will be fulfilled not instantly, but gradually as there will be no more children in our near future. The extensive use of numerous pesticides, formalin and chemicals in the food industry has great adversarial impact which is silently pushing the human race towards death. Adulterated food and pesticides has numerous harmful effects on reproductive issues containing infertility, decline of semen, birth defects and low birth weight. Though this is a worldwide problem, but in our paper we are going to focus on only Bangladesh. We will discuss about the responsibility of the food adulteration in terms of female infertility only. Article 18 of The Constitution of the People's Republic of Bangladesh has enumerated regarding the protection of public. Apart this, there are more or less fourteen different Act(s) are available in Bangladesh to protect and maintain the quality of food to ensure public health. But unfortunately, with all this efforts the fertility rate is not soring high rather decreasing. According to the statistics of the

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World Bank, in 1960 the fertility rates in Bangladesh among women were 6.7 whereas in 2014 the rates come down in 2.2 percentage. This is a clear indication that the infertility problem is not succumbing anyway. If such continues Bangladesh will not be able to fulfill the target of sustainable development goal. The proper implementation of the existing laws in Bangladesh can be an effective way out to fight this problem.

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## INTRODUCTION

Motherhood is the most beautiful feeling women can ever have. A mother not only gives birth of a child rather she also attach a whole family with this new born. A new born gradually becomes the leader of the nation. So from one perspective we can say that women are contributing to the society directly and which is very noteworthy in nature. State has recognized the rights and protection of the women as well. But with all due caution gradually the rate of infertility is increasing in an alarming number. Generally at the time of pregnancy a mother needs more nutritious food. But this is a matter of regret that in our country we are utterly failing to give them the proper essential nutritious food rather we are providing them poison in the way of adulterated foods. While a new born is entitled to have a healthy life ahead, it is seeing the light of life with poison which has been transferred to its placenta from its mother body as the mother is consuming the adulterated foods. After the birth of a child the first breast milk of mother is being associated with DDT which has been already proved in many research. DDT is also responsible for waning the male reproductive vigor, particularly it weakens the semen quality. As a result many embryos are not getting the chance to see the light of life and we are calling such unfortunate mother as infertile one. Infertility has been categorized as primary and secondary infertility in the "Textbook book of gynecology, including contraception." On 30th June 2014, one online daily reported that Bangladesh has highest number of food safety laws in world. Bangladesh has around fifteen parliament enacted laws to regulate the food safety. Despite all the laws and regulations the number of food adulteration is not decreasing in any manner. The good news is that Bangladesh is developing in a speedy pace lagging behind all this problems. At the time of millennium development

goals (MDG'S) Bangladesh has fulfilled most of the goals amongst the eight goals. MDGs Bangladesh Progress Report 2015 provided that, even though having resource limitations, Bangladesh achieved most of the MDG targets with notable attainments in poverty mitigation, food safety, gender equality, checking infant death, lowering maternal mortality and reining in HIV spread and tuberculosis. For a developing country which is highly appreciable. Now the time has come for sustainable development goal and Bangladesh has committed to achieve the goals of SDG'S. The worrying scenario is that without proper way out of the existing adulterated food problem Bangladesh will not be able to fulfill the target of the SDG's. As a sick person cannot win a race in Olympic, likewise a nation with loopholes of existing laws cannot go further.

The authors will follow both qualitative and quantitative approach to justify this paper and for that purpose data were collected from various primary and secondary sources, i.e. various legislations, newspaper articles, journal articles, internet materials. For establishing the research questions and problem the authors depend mainly on the secondary sources of data. For analyzing the main fact the authors will mainly depend on legislations. The objective of this paper is to analyze the lacuna of the existing food safety regulation which is accrediting the food adulteration. In addition to this the causes of infertility will be discussed in a short manner and how infertility may impact the goals of sustainable development will be analyzed with probable recommendations. At the end of this paper authors will try to give some recommendation for solving this problem.

### **DEFINING THE MAIN IDEA: FOOD ADULTERATION, INFERTILITY,SUSTAINABLE DEVELOPMENT**

#### **Food adulteration**

According to the Cambridge Dictionary, adulteration means to make food or drink weaker or to lower its quality, by adding something else. Food adulteration is the manner in which the quality of food is degraded either by the addition of lower quality substantial or by pulling out of required and essential ingredient. Not only the intended addition or replacement of the ingredients but organic and chemical contamination throughout the time of production, packing, processing, transportation and supply of the food products, is also accountable for the dropping of the quality of the foodstuffs. Elements which are responsible to make the food risky and perilous for human consumption are known as adulterants.

According to the Section 2(1) of the Cantonments Pure Food Act, 1966

Adulterated food” means an article of food-

- (i) which is not of the nature, substance or quality which it purports or is represented to be, or
- (ii) which contains any such extraneous substance as may affect injuriously the nature, substance or quality thereof, or

- (iii) which is processed, mixed, colored, powdered or coated with any other substance in contravention of the rules, or
- (iv) any constituent of which has been wholly or in part abstracted so as to affect injuriously its nature, substance or quality, or
- (v) which contains any poisonous or other ingredient which may render it injurious to health, or
- (vi) the quality or purity of which does not conform to the prescribed standards, or
- (vii) which, having been prepared, packed or kept under insanitary conditions, has been contaminated or become injurious to health and “adulteration” in relation to food, shall be construed accordingly.

Numerous ways are available to adulterate foodstuffs. Mixing various detrimental chemicals, toxic artificial, colors etc. are most practicing means of food adulteration. In Bangladesh the dishonest businessmen are carrying out the dirty practice without paying heed to the danger of human life from this adulterated food. The adulterated food stuffs is nothing but silent killer. According to the Statistical Yearbook of Bangladesh 2010 food borne illness has activate contribution towards death. Disease such as liver failure, jaundice, diarrhea, dysentery, TB, peptic ulcer, malnutrition, skin diseases, leprosy, arsenic, kidney, appendicitis, worm and other are contribute about twenty three percent of mortality rate and heart disease, stroke, blood pressure, diabetes, paralysis, tumor, cancer and miscarriage these are the result of indirect food related diseases as well.

### **Infertility**

No undisputed definition of female infertility is available. A definition of infertility has been given by the WHO and ICMART as “a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after twelve months or more of regular unprotected sexual intercourse.” Infertility has further been defined under two heads namely primary and secondary infertility in the book of gynecology. Primary infertility means when a woman never conceives and secondary infertility means the woman was previously pregnant but failing to conceive subsequently. Secondary infertility denotes to couples who are incapable to conceive subsequently one year of unprotected intercourse after a prior pregnancy still they are in their reproductive age. Worldwide, roughly, 10-15% of couples are infertile. Over and above 80 million people worldwide is being affected through this problem. Unfortunately Secondary infertility outstrips the problem of primary infertility. And the unfortunate women who are unable to give birth of child, subsequently get out of the house with humiliation. The scenario is quite common in Bangladesh and the even worse in the rural areas.

### **Sustainable Development**

The concept of sustainable development dated back to 1960s. Ever since then, diverse definitions of sustainable development have been place forward, but the utmost extensively embraced one was published in the report, "Our Common Future" which is more broadly known as the Brundtland Report. This report has been published by the World Commission on Environment and Development in 1987, which defined sustainable development as follows:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." On the 70<sup>th</sup> anniversary of the United Nation, 17 Sustainable Development Goals and 169 targets has been announced at United Nations Headquarters in New York at 25<sup>th</sup> September 2015. Goals which has not been achieved by the Millennium Development Goals will be covered by "Transforming our world: the 2030 Agenda for Sustainable Development". The 17 goals are as follows:

### **SUSTAINABLE DEVELOPMENT GOALS**

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts\*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Sustainable development requires combined energies to edifice a wide-ranging, sustainable and spirited prospect for populaces and earth. To attain sustainable development, it is vital to synchronize three principal essentials: financial progress, communal enclosure and environmental protection. These components are interlocked and are all vital for thriving of humanities.

**How adulterated food induced female infertility and this is a hindrance towards achieving sustainable development Goal**

Infertility is an ignored issue in Bangladesh's reproductive health policy. On the other hand the importance has always been given on the issue of overpopulation. As a consequence controlling fertility and the execution of Family Planning programmes has become a triumph story for the country. Though no noteworthy study has been piloted in countrywide to know the dominance rate of infertility in Bangladesh. World Fertility Survey has stated that infertility rate is 4% in Bangladesh. The infertility rate is roughly 15% in Bangladesh which is the uppermost amongst entire South Asian countries. There is indication that possible underlying aspects of infertility are also extensively existing in Bangladesh. Reproductive tract infections (RTI), unhygienic delivery, sexually transmitted diseases (STD), urinary tract infections (UTI), postpartum infection and unsafe obstetric and abortion procedures are interconnected with pelvic infections, which may lead to infertility. The South Asian region is struggling with above mentioned reproductive health complications and Bangladesh is not an exception in this regards.

Apart from all this, there is another vital factor which is responsible for infertility. The factor is adulterated food. Now a day's food is being adulterated with the mixture of heavy metal. Heavy metals are poisonous ingredients even if it is present in food in a very insignificant amounts. They come into our foodstuff and water source through industrial left-over or even via acid rain by breaking down topsoil and discharging heavy metals into watercourses and groundwater. Products like medicines, food, household essentials are being contaminated with this dangerous heavy metals.

Generally the heavy metals interrupt the metabolic function in following ways. Viz-

- (i) They distress the vital organs and glands of the body such as the heart, brain, kidneys, bone, liver, etc. by being accumulated into the body.
- (ii) Then they displace the vigorous and vital nutritional minerals and disrupt the biological function over all.

Heavy metals are not easily absorbed. Furthermore, they tend to gather trigger the metabolic disturbances which may be responsible of infertility, poor sperm productions and miscarriages. Heavy metals have also been accompanied to malformation and abnormalities in the fetus as well as evolving concerns including autism in children whose mother had

high amount of heavy metal loads during her period her pregnancy. Arsenic, cadmium, lead, mercury, aluminum, and uranium, Barium, lithium, nickel and strontium are highly toxic in nature and every care should be taken to avoid them. The Center for Hazardous Substance Research of the Kansas State University has published “Human Health Effects of Heavy Metals” on March, 2009. In their paper Dr. Sabine Martin and Dr. Wendy Griswold has established that “Lead is one of the deadly metal capable enough to disturb every single body organ and can shake the whole body system. High levels of exposure of lead may cause miscarriage of pregnant women. High level exposure in males may impair the tissues which are accountable for semen production.” Mercury is responsible for developing fetuses.

We are going to categorize the foods which contain heavy metals:

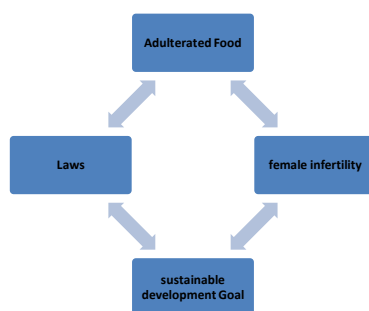
Heavy Metal	Food sources
Aluminum	Baking powder, beer, bleached flour, colour additives, drinking water, hard cheese, milk products, salt, seasonings, tap water, treated water, vanilla powder
Arsenic	Chicken, seafood from coastal waters (especially mussels, oysters and shrimp), water (drinking, seawater and well), wine (if arsenic in pesticides used).
Beryllium and Cadmium	Candy, colas, drinking water, food from contaminated soil, evaporated milk, instant coffee, kidney, liver, oysters, processed foods, processed meat, refined grains/flours/cereals, seafood (cod, haddock, tuna), vending machine soft drinks, water (city, softened, well).
Copper	Avocado, beer, bluefish, bone meal, chocolate, corn oil, crabs, gelatin, grains, lamb, liver, lobster, margarine, milk, nuts, mushrooms, organ meats, oysters, perch, seeds, shellfish, soybeans, tofu, wheat germ, yeast, water (city/well). Iron cookware, iron pipes, welding. Blackstrap molasses, bone meal, bran, chives, clams, drinking water, heart, kidney, leafy vegetables, legumes, liver, meat, molasses, nuts, organ meats, oysters, parsley, red wine, refined foods, shellfish, soybeans,

	wheat germ, whole grains.
Lead	Bone meal, canned fruit and juice, liver, milk, organ meats, wine.
Mercury	Cereals, grains, seafood (especially tuna and swordfish), water (contaminated).
Nickel	Butter, cereals, hydrogenated fats and oils, imitation whipped cream, margarine, oysters, tea, unrefined grains, vegetable shortening.

*Table source: Natural Fertility Breakthrough*

This table gives a clear idea that foods are not safe now a day for our consumption. And which is leading towards the nation to be an infertile one. But the SDG's goal is quite different than this. A number of authors point out that, adulterate food may one of the major cusses of women infertility, Professor Dr. Mahabub-Ul-Karim-Khan, Professor, Department of Paediatrics, and Director Community Based Medical College Hospital Bangladesh states that "Poisons residues in food items leave the worst impact on children's mental and physical growth and women's fertility."

The doctors at Bumrungrad have proven an adjacent relationship between the increasing quantities of such patients with their consumption of various adulterated foods in Bangladesh. According to them, a large number of Bangladeshi was seen coming for treatment to this hospital with liver and kidney diseases and related complications. Many were coming with fertility problems. Thus it is almost clear that adulterate food is one of the major causes of women infertility in Bangladesh, now-a-days. Infertility is related to the Goal No. 3 of SDGs which is a certainly hindrance towards Achieving Sustainable Development Goal (SDGs). This is how; there is a close relationship between the three concepts, adulterated food, women infertility and Sustainable Development Goal(s) (SDG). The problem is addressed by different dimensions. But, having a law background we want to solve this problem by law and legal instruments. We can stop food adulteration by law and legal system, which will indirectly help to achieve the SDG(s).





## **LAWS AND LEGAL SYSTEM RELATION TO PROTECTION AND PREVENTION OF ADULTERATED FOOD**

The food safety legal regime of Bangladesh is administered by plentiful enactments and governmental bodies. In addition to the provision of common law, nearly fifteen laws are dealing the issue of food safety of Bangladesh directly or indirectly. According to Article 15 of Bangladesh Constitution, “It shall be a fundamental responsibility of the State to attain, through planned economic growth, a constant increase of productive forces and a steady improvement in the material and cultural standard of living of the people, with a view to securing to its citizens – the provision of the basic necessities of life, including food, clothing, shelter, education and medical care.”

According to Article 18 of Bangladesh Constitution, “The State shall regard the raising of the level of nutrition and the improvement of public health as among its primary duties, and in particular shall adopt effective measures to prevent the consumption, except for medical purposes or for such other purposes as may be prescribed by law, of alcoholic and other intoxicating drinks and of drugs which are injurious to health and State shall adopt effective measures to prevent prostitution and gambling.”

### **Existing Legal Framework of Food Safety in Bangladesh**

1. Food Safety Act, 2013, 2. Penal Code, 1860, 3. Control of Essential Commodities Act, 1956, 4. Food (Special Courts) Act, 1956, 5. Cantonments Pure Food Act, 1966, 6. Pesticide Ordinance, 1971, 7. Special Powers Act, 1974, 8. Fish and Fish Products (Inspection and Control) Ordinance, 1983, 9. Bangladesh Standards and Testing Institution Ordinance 1985, 10. Iodine Deficiency Disorders Prevention Act 1989, 11. The Consumers’ Right Protection Act, 2009, 12. Stanio Sarkar (City Corporation) Ain, 2009, 13. Stanio Sarkar (Paurashava) Ain, 2009, 14. Mobile Court Ain, 2009

❖ The preamble of the Food Safety Act started with assuring the right of getting safe food. Chapter v has talked about the does and don’t regarding the management of the safe food. This Act has prohibited about the use of toxic ingredients such as Calcium Carbide, formalin, DDT, pesticides, added colors whether detrimental to human health directly or indirectly. This Act has also imposed restriction on manufacturing, importing, packaging or selling of food containing heavy metals, radiated materials, the adulterated foods or adulterants for the purpose of, low graded foods, storage of the oil, wastages and adulterants in any industry for the purpose of mixing with food, date expired food, genetically modified, novel and irradiated food without prior permission of the authority prescribed by the existing laws of the land, without proper leveling and identification and packaging, false labeling, food which is detrimental to the human health, infected fishes, meat and eggs from animals directly or indirectly through agent or business owner.

But in our country genetically modified foods are very available such as eggplants, tomatoes, beans, broccoli, cauliflower and what not. Rotten, artificial products are being sold in the shops. Section 41 and 42 has prohibited on the making and advertising of the advertisement which describes false on confuse statement of the products which may cause injury to the consumers. Section 68 has given the time frame on the investigation. 1<sup>st</sup> the investigation time is 90 days and if the investigation officer fails to do to within the prescribed time extra 30 days will be given and still if they fail to complete the investigation he will have 24 more hours just to inform the Food Court why he has failed to do so. This type of unnecessary delays allows the criminals to misuse the provisions of the laws. The unnecessary delays should be curtail down and there should be provision for the punishment of the investigation officers who fails to complete investigation. In other words we can say that the responsible office must submit the investigation report in 10 working days and extra 5 days may be provided for further investigation. Failing to do so he must endure punishment such as suspension or curtail of salary.

Section 73 stated about the time frame of submitting investigation report upon the order of Food Court. To be sure about the value of the food the Court may order to examine it through laboratory and for this the Act has given 1 month to submit the report. And further 2 more weeks has been given upon the failure of report submission. But this process is time consuming as well. The duration of time frame should be minimized.

- ❖ Section 272 of the Penal Code, 1860 has prescribed punishment for adulteration of food or drink. The penalty is imprisonment maximum term of six months or fine up to a maximum amount of 1000 taka. We need to consider here that the law we are talking about is almost 157 years old. Undoubtedly the gravity of the offences has increased and the punishment should be increased as well. This section of the penal code should be amended.
- ❖ The Cantonments Pure Food Act, 1966 has imposed prohibition on false warranty, mixing, coloring, staining or powdering of food, preparation, manufacture, sale, etc., of adulterated and other foods, manufacture, import and sale of unwholesome food which is injurious to health, food poisoning.
- ❖ Section 29 of The Consumers' Right Protection Act, 2009 has imposed Prohibition on manufacturing, selling etc. of goods which is injurious to human health. Section 41 and 42 has imposed punishment for selling adulterated goods or medicine and mixing prohibited materials in foodstuff. This both offence is punishable with imprisonment for a term not exceeding 3 (three) years, or with fine not exceeding Taka two lacs, or with both under this Act. This Act also prescribed that, if any goods are proved to be particularly harmful to human health, the Government, on recommendation of the Director General, may, by notification in the official Gazette, issue direction for stopping the production, import, marketing, sale, display for sale,

distribution, transportation for commercial purpose or commercial use of those goods completely all over the country or in any specific area, or for regulating or conducting those activities on such terms and conditions as may be specified in the notification. Why the Director General needs to recommend this to the Government and after being recommended the Government needs to take action? Then the Director General is mere watch dog here and nothing more than that. But we need our authority to be more powerful and swift to take proper action to protect our rights as well as our lives from the clutches of such degraded, heinous so called businessmen who are gambling with our lives through adding poisonous stuffs in our food.

### **LOOPHOLES OF OUR LAWS AND LEGAL SYSTEM**

At least 14 laws are governing our existing legal framework of food safety in Bangladesh. Bangladesh has the highest number of laws for food safety amongst the world. So it may be concluded as such, whether the food safety is highly prejudice in Bangladesh or the authority of Bangladesh is utterly failing to ensure the safety of foods under one concrete Act. As a result being somewhat confused they have enacted Acts one after another.

- ✓ The prescribed punishment for adulteration of food or drink by the Penal Code, 1860 is not sufficient. We need to consider here that the law we are talking about is almost 157 years old. Undoubtedly the gravity of the offences has increased and the punishment should be increased as well. This section of the penal code should be amended.
- ✓ On the other hand, Section 23 of The Cantonments Pure Food Act, 1966 has prescribed penalty for the offences regarding food adulteration and food poisoning which has been discussed on point 4.1 in this paper. It says the first time offenders will be punished with rigorous imprisonment for a term which may extend to six months and with fine which shall not be less than one hundred Taka or more than two thousand Taka and also with whipping. And the second time offenders punishment will be rigorous imprisonment for a term not less than three months and not more than two years and with fine which shall not be less than five hundred Taka or more than ten thousand Taka and also with whipping and for repeated offences or for offences of large scale adulteration or adulteration with injurious substances even in the first instance, with rigorous imprisonment for a term which shall not be less than three years or more than five years and with fine which shall not be less than five thousand Taka or more than one lakh Taka and also with whipping.

We can clearly see the inconsistent between this two laws. How can the minimum fine be one hundred taka for such type of heinous offence under The Cantonments Pure Food Act, 1966?

Food adulteration has further been encompassed afterwards in 1974 in Special Powers Act, 1974.

- ✓ Section 25C has specified penalty for the offences of selling, manufacturing and importing adulterated food, drink, noxious and unfit food stuffs, adulterated drugs and skin and daily uses products. The responsible person shall be punishable with rigorous imprisonment for a term which may extend to five years, and shall also be liable to fine.

Now if any person become liable of adulteration which law will be applicable for him? If we consider to apply The Special Powers Act, 1974 by considering the punishment gravity, the accused may pray for being tried under The Penal Code, 1860 considering the less severity of the punishment as well. The law still remains vague and the legal system has clearly failed to simplify the ambiguity. This variety of laws generate confusion amidst the manufacturers, traders, sellers or even to the executive authorities to understand which law regulate this specific food security protection dispute.

- ✓ Section 5 and 6 of the Fish and Fish Products (Inspection and Control) Ordinance, 1983 has imposed prohibition on selling and exporting of decomposed, unwholesome or contaminated with pathogenic organisms. It has further prohibited individuals who is suffering from contagious disease to catch, handle, carry etc.

Person contravening the provisions of section 5 or 6 shall be punishable with imprisonment for a term which may extend to six months or with fine which may extend to Taka five thousand, or with both. Consecutive offenders shall be punished with imprisonment for a term which may extend to six months, or with fine which may extend to Taka ten thousand, or with both. Government may seize and forfeiture the fish processing and fish packing plant and cancel the license of such processing and fish packing plant or establishment.

- ✓ Initiation of Mobile Court at November, 2007 at the tenure of Caretaker Government the common people thought they have found finally found the light at the end of the tunnel as mobile court investigated and fined many restaurants for violating the provision of laws.

- ✓ Furthermore, no operative harmonization amongst the governing authorities regulating food safety is available. A number of authorities carry out anti-adulteration drives in Bangladesh. Several ministry and authority run such anti-adulteration drives. Implementation of the laws are practiced in our country as a manner of penalties for the offence of food adulteration and such other food related offences. Nonetheless, credible approaches resembling to spot food test on the market, buyer awareness, extensive advertisement in the media is not present in a wide manner. Authorities become more active at the fight against the food adulteration problem at the time of Ramadan which can be

found by various daily newspaper. This is very praiseworthy approach. But the other months should have get same attention from the authority. Though we see a number of authority of dealing with food safety actively and inactively. The Bangladesh Standards and Testing Institution (BSTI) take active part in it. But yet again, if we look from the different range towards this problem we cannot say that Bangladesh Standards and Testing Institution is working enough and carrying out their duties and responsibilities properly. If they would have carried out their duties extensively, then the acute problem of food adulteration must have been minimized which is not happening clearly.

Moreover, the administrative application of Bangladesh is not well organized. It has not planned scrutiny approaches and there is no strong technique of identifying violation of the regulations. It is vital for an improved management to sketched flawless implementation tactics so that all occurrences of non-compliance can be recognized easily and steps can be taken quickly with appropriate authority.

- ✓ Presently a number laboratories both public and private are engaged with food investigation undertakings. These laboratories are operated by different ministries, government agencies and private companies. The main laboratories from the public sector are the Bangladesh Standards and Testing Institute (BSTI), Central Disease Investigation Laboratory, Central Food Laboratory, Bangladesh Council of Scientific and Industrial Research (BCSIR), Armed Forces Food & Drugs Laboratory, Bangladesh Agricultural Research Institute (BARI), Plant Protection Wing, Atomic Energy Commission, Fish Inspection & Quality Control, Ministry of Food & Disaster Management Laboratory. The Nestle BD Ltd, ACME Laboratories, SGS BD Ltd, PRAN-RFL Group, ICDDR,B and Advanced Chemical Industries etc. are in the private sector. But according to Mohammed Abbas Alam, the former National Consultant of Food and Agriculture Organization of the United Nations (FAO) “Most of the laboratories were facing problem of power supply, back-up electricity, emergency safety shower, emergency eye wash and emergency exit.”

If the laboratories are struggling to settle down themselves of their own, we cannot hope that they can provide instant remedy to the consumers. On the other hand, we can see that a huge number of laboratory is available for food testing and government laboratories are highest in number. But we cannot see any campaign where free food testing is being offered for the common buyers.

- ✓ On July 29, 2012, the popular English daily of Bangladesh reported that BSTI fines 7 restaurants Tk 5.95 lakh. Another report says mobile court trial often violate human rights. It seems

we cannot rely on the mobile court as well. The same restaurant are being fined again and again. It clearly means after being fined the restaurant try to repay their loss with more prohibited tasks. It's kind of friendly fire where the action turned into a disadvantage rather than an advantage. No permanent solution has been found yet of this heinous act. It can be correctly said that, for a single issue such as food safety the large quantity of laws is quite infrequent and it clearly reveals the inefficiency of our legal system.

### **RECOMMENDATIONS AND CONCLUSION**

With all this problems we are still hoping to achieve the sustainable development goals which is definitely an ambitious goal for a country like ours. Nevertheless this goal is not impossible rather attainable. But we need to accept the true fact of our country first and work accordingly. Only after that we will be able to achieve the sustainable development goals maybe in extensive manner than we did at the time of Millennium Development Goals. Our country will get rid of the threat of increase number of barren mothers. This is our common responsibility to achieve Sustainable Development Goals (SDGs) by 2030. For achieving Goal No. 03 this is prerequisite to ensure healthy lives and promote wellbeing for all at all ages.

In this respect, we should take care women infertility problem. In this paper we have addressed that food adulteration is one of the major causes for women infertility in Bangladesh now-a-days.

In this regards the Government of Bangladesh may take following steps:

- a) Almost all the food related Act has defined food adulteration in different manner which is somewhat unusual as because it is commonly expected that one single thing should have been defined in a common manner. There should be one singular definition of food adulteration and one singular remedy of this problem not different remedies under different Acts. There should be one singular legal framework which will override the vagueness and confusion existing regarding food laws
- b) Government of Bangladesh may introduce strict Food safety policies and strategies for protecting and preventing food adulteration
- c) Existing food safety laws should be amended and the implementation of the existing laws should be ensured
- d) The highest possible penalty should be enlarged for food adulteration with
- e) Separate tribunals should be established to give penalty for food adulteration
- f) awareness-building movement amongst customers and Public awareness should be increased

- g) dynamic participation of the business leaders is required to safeguard the moral practices among the trade and commerce community as well as Participation in all spare should be ensured

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