

Concept of Halal, Is It Truly Safe & Hygiene or Is It only an Islamic Belief: Insights from Bangladesh

Md Arifur Rahman¹

Abstract

The objective of this study is to explore the prevailed concept of consumers about Halal food and justify the safety and wholesomeness of foodstuffs in Bangladesh. This research has revealed that customers consume foods without halal certification though Bangladesh is a Muslim-dominated country where food adulteration is a regular vogue of food processors and manufacturers. Moreover, superstitions towards religious belief, vague concept about halal, availability of toxic chemicals and extensive use of these chemicals, lack of standard methods for food safety, and above all disinclination of food sellers are the main obstacles towards implementation of true concept of Halal food.

Key word: Halal, Safety and hygiene, Food adulteration, Islamic law, Value chain

1. Introduction

1.1: Background of the Study

Halal is a term entirely used in Islam but latterly it has become an axiomatic concept over the world which has emerged as a potential brand in global business value chain. Halal is an Arabic word which means lawful, legitimate, wholesome, approved, or legal. The term “Halal” is also applied in the sense of holy, sacred, and pure. In context of Islam, those things are Halal in the *Shariah* (Islamic Law) which are distinctly proved by Al – Qur’an and Hadith as lawful. Moreover, the wholesomeness concept of Halal, which covers not only the *Shariah* requirement, but also the sustainability concept of hygiene, sanitation, and safety aspect, makes Halal food readily acceptable by consumers who are concerned about food safety and healthy lifestyle (Baharuddin et. al., 2015).

However, Bangladesh is fourth largest Islamic country in the World which is constituted by 90.4% Muslim of total population. So, Halal food and products are inevitably demand of

¹ Associate Professor, Department of Business Administration in Management Studies, Faculty of Business Studies, Bangladesh University of Professionals. Email: reach2arif99@gmail.com, Mobile: +8801979038565

consumers to keep and uphold Islamic ethics as well as ensuring entire food safety, sound health and greenery environment. But unfortunately, it is true that adulteration of foods has become a national issue in Bangladesh. In Bangladesh, most foodstuffs, either manufactured or processed, are adulterated in various degrees which is indeed unsafe for consumption (Ali, 2013). Moreover, daily newspapers in Bangladesh consistently publish that various hazardous chemicals (e.g. calcium carbide, sodium cyclamate, cyanide and formalin, etc.) are mixed with foods and foodstuffs. In addition, restaurants of both Urban and rural area in Bangladesh frequently serve ruined and perished foods to customers. Nonetheless, food adulteration and dishing up perished foods in restaurant are not entitled by the Islamic law which is authentically proved non-Halal food and products. So, the main purpose of this study is to explore the prevailed concept of consumers about Halal food in Bangladesh. In addition, this research intends to examine the following questions:

- a. Do consumers rely on recognized *Shariah* (Islamic law) board to identify Halal foodstuffs?
- b. Are safety and hygiene aspects of foods prime concerns to customers?
- c. Do consumers consume Halal certified (with Halal logo) foods?
- d. Is Halal only a conventional belief in Bangladesh?

1.2: Motivation of the Study

The author has noticed that Muslims are firmly concerned about Halal in abroad. Even though Bangladeshi Muslims are used to buy and consume mostly impurified and without Halal certified foods within the country, but most of them are seriously concerned about Halal food and stuffs in overseas. Majority of them try to avoid pork, alcohol, animal fat and non-slaughtered meat or any by-products of these ingredients. But Halal is mandatory term in *Shariah* and it refers some broad-spectrum issues apart from aforesaid ingredients of foods. In addition, adulteration of food, lack of *Shariah* knowledge, deception of food manufactures, inefficient butchers for Halal slaughtering, absence of Halal butchery and misconception of people about Halal lead authors to examine the existing concept of Halal among consumers in Bangladesh. Above all, there is no research studies yet on Halal food or Halal business value chain in Bangladesh. Therefore, authors are eagerly desired to conduct research study on prospective value chain of Halal foods in Bangladesh which can be useful for food marketers in Bangladesh to connect their business with global food value chain.

2. Literature Review

2.1: Concept of Halal

Halal is a *Quranic* (the holy book of Muslim) term that is described as permitted, allowed, lawful or legal. The reverse of Halal is Haram (non-Halal) which is unlawful, illegal

or forbidden (Aziz et. al., 2015). Such expression shall have an indication that neither is such thing consists of or contains any part or matter of an animal that a Muslim is prohibited by *Shariah* to consume. Ambali and Baker (2014) also cited that if it an animal, it would indicate that it has been slaughtered in accordance of *Hukm Shariah* (the divine law). There are many verses in the holy Quran about Halal and Haram. For example –

“Forbidden unto you (for good) are carrion and blood and flesh of the swine, and that over which is invoked the name of other than Allah, and the strangled, and the dead through beating, and the dead through falling from a height, and that which has been killed by (the goring of) horns, and the devoured of wild beasts, unless you have cleansed (by slaughtering) it in the proper, lawful way, while yet there is life in it, and that which has been immolated unto idols. And (forbidden is it) that ye swear by the divine arrows. This is an abomination.” - (Qur’an 5:3)

However, any food stuffs must be processed, prepared, or manufactured using such instruments or ingredients that are absolutely free from anything impure according to *Shariah*. Moreover, Halal foods or products must not be prepared, processed or stored in contact with or close proximity to anything that are considered as unpurified in accordance of *Shariah*. Thus, this research aims to investigate the consumers’ understanding in Bangladesh about Halal since there is no previous studies in this regard.

2.2: Importance and Benefit of Halal food

Halal is an important element that influences consumer purchase and consumption behavior (Alam and Sayuti, 2011). In addition, the emergence of Halal concept within the international food market has been warmly welcomed in global businesses and trades, and it is recognized as an international brand of food quality and safety in modern societies (Lada et. al., 2009). In accordance of *Shariah*, food or drinks must be safe for consumption and must not contain any element that harms the human body and health. Since one of the main objectives of the *Shariah* is the protection of human beings, any food or drink which may cause harm to the human body and health is forbidden even if there is no prohibiting legal evidence (Said et. al., 2014). Almighty Allah has also ordered to avoid those things which are harmful for human being:

“O ye Messengers! Eat of the good things, and do right. Lo! I am aware of what ye do” -- (Quran 23:51).

Halal doesn’t permit pork and its by-products; animals improperly slaughtered or dead before slaughtering; animals killed in the name of anyone other than ALLAH (God) and drinks such as alcohol and intoxicants. Pigs are susceptible to *Toxoplasma gondii* infection

and tissue cysts can be harbored in all edible portions of a pig (Guo et al., 2015). Recent safety incidents in China and negative media coverage have left Chinese consumers with a high level of uncertainty and mistrust regarding the safety of pork. The contamination of fresh pork with clenbuterol was a major food safety incident in China (Zhou, Zhang, & Xu, 2012). Humans may become infected by ingesting as few as one bradyzoite (i.e., released from tissue cysts in the human gastrointestinal tract) in raw or undercooked meat (Guo et al., 2017). However, many previous studies proved the levels of alcohol consumption and negative effect on health status (Ormond and Murphy 2017; Bau et al., 2007; Berger et al., 1999; Klatsky et al., 2001). In addition, addiction to alcohol and level of aggression of human being is proved by the study of Parrott and Eckhardt (2018). Therefore, foodstuffs which are forbidden or unlawful in Islam have proven negative impacts on human well-being and Halal food products are authentically beneficial for sound health for human being. This research wants to examine whether these benefits are remained in Bangladesh or not as a Muslim country.

2.3: Safety and Hygiene Issues of Halal

Halal covers not only the *Shariah* requirement, but also the sustainability concept of hygiene, sanitation and safety aspect, makes Halal food readily acceptable by consumers who are concerned about food safety and healthy life style (Baharuddin et al., 2015). Halal products released with aspect of quality that is seriously concerned with cleanliness emphasizing on perfect halal requirements. However, not only religious motives determine Halal consumption, but also health, hygiene, friendliness to environment, respect for animal welfare and social issues, such as religious identity and degree of acculturation (Bonne & Verbeke, 2007). The scientific scrutiny of religious diets is relevant to nutritionists, because it helps optimize nutrition for those who choose to follow such diets and improves overall understanding of diet and health. In this context, Ambali and Baker (2014) affirmed that halal, hygienic food, drinks and products can be defined as free from *Najis* or contamination and harmful germs. So, it obviously shows that halal is very particular in food matters especially in the practice of keeping ourselves and the things around us clean in order to prevent diseases. Hence, a safe food, drink or product is one that does not cause harm to the consumers be Muslim or non-Muslim when it is prepared and/or eaten or in accordance to its intended usage.

Moreover, Hayati, et al., (2008) firmly mentioned that food must not alone be of good quality, safety and hygienic to the Muslims but also be halal. Rahman et al., (2014) concluded that Halal products are fast gaining worldwide recognition as a new benchmark for safety and quality assurance. Products that are produced with Halal certification are readily acceptable by Muslim consumers as well as consumers from other religions. This acceptance is due to the wholesomeness concept of halal, which covers not only the *Shariah* requirement,

but also the hygiene, sanitation and safety aspects. So, this research aims to justify the safety and hygiene issue of food products in Bangladesh and its acceptability to the consumers as a Muslim majority country.

3. Food adulteration in Bangladesh

Daily newspapers consistently show that various hazardous chemicals (e.g. calcium carbide, sodium cyclamate, cyanide and formalin, etc.) are mixed with or added to foods and foodstuffs in Bangladesh (Hossain, 2008). Adulteration of food with toxic chemicals and substances has reached an alarming high in Bangladesh, especially in low priced hotels, shops, and restaurants. Carbide in fruits, formalin in fish, textile colors in sweetmeat and bakery items, pesticides in raw vegetables, and so on are used to increase the shelf-life of food items and earn higher profits while cheating consumers (Huq, 2017). However, Ali (2013) found that foods in Bangladesh are adulterated by using various harmful chemicals and toxic artificial colours, on the one hand, and rotten perishables turned to poisonous foods are stored, sold and served to consumers in an unhygienic atmosphere, on the other. The unhygienic and unsafe treatment of food is seriously impacting public health by causing numerous chronic and non-chronic diseases. Besides, food items that are commonly adulterated include fruits, vegetables, milk, fishes, sweetmeats, rice, wheat, meat, oil, ghee, spices, egg, soft drink, juice powder, baby foods and so on (Mahfuz, 2014).

In addition, a mobile court of the Dhaka Metropolitan Police (DMP) fined (BDT) 100,000 each from three branches of popular eateries KFC, Pizza Hut, Boomers at Baily Road in Dhaka city (the Independent, June 15, 2015). Packaged and bottled drinks and fruit juices are manufactured with harmful chemicals and ingredients. Cakes, biscuits, sweetmeats, etc. are made with rotten flour, rotten eggs, burnt oil, dirty water, date-expired imported powder milk, textile dyes, chemicals and essence at unhygienic places (Khan, 2014). Recently, it has been reported that there has been bumper production of pineapple in Bangladesh this year (The Independent, 19 Aug 2014) but it is very unfortunate that some growers were seen to spray formalin and other chemicals to their products (The Daily Star, 22 March 2014). In this context, Rahman et. al., (2015) mentioned that Our future generation will be seriously affected with vulnerable physical and mental growth inflicted by food adulteration. Therefore, it is authentically proved that food adulteration is a national featured issue which is truly contradictory with the principles of Halal. This study intends to have empirical evidence from consumer to justify the above-mentioned literatures.

4. Prevalled perception of Halal in Bangladesh

Bangladesh is a Muslim-inhabited country where people keenly desire to consume foodstuffs which are permitted in *Shariah*. But, it is undeniable that Halal certified food

products are rarely found in Bangladesh. Some organizations in Bangladesh are working recently to make the concept of Halal certification popular and attractive to food importers of developed country. BSS reported that Islamic Foundation is the only recognized state-owned body to certify the country's "halal" products (Halal Focus, November 26, 2015). Nonetheless, halal-Bangladesh, a new organization, is working to develop and create awareness of Halal which is not properly approved by the government of Bangladesh. In addition, Khan (2010) reported that the government has moved to form a high-profile committee to recommend ways to establish a board for certification for halal foods after repeated appeals from processed food exporters.

5. Importance of Halal certified food in Bangladesh

Halal certification and halal awareness in Bangladesh can restore the consumer trust towards restaurants, food retailers and food manufacturers since majority people are Muslim and most of them want to abide by Islamic law. Halal certification can create extensive prospective market for food exporters of Bangladesh to Middle east, Europe and other developed countries, especially, which countries have tourism potentiality. Certified Halal food refers to the examination of food processes in its preparation, slaughtering, cleaning, processing, handling, disinfecting, storing, transportation and management practices. The application of halal should apply to all stages of processing "from farm to table" (Rahman et al., (2014). Halal certification in Bangladesh can work as the yardstick for consumer confidence towards foodstuffs. It can also build competitive advantage for food industry in Bangladesh to grab the huge opportunity of global food value chain which is suitable for both Muslim and non-Muslims of the world. Halal certified products fulfills not only halal requirements, but also ensures strict hygiene practices.

6. Methodology

To achieve the objectives, this study mainly focused on primary data that had been collected through a semi-structured open-ended questionnaire. All the items in the questionnaire primarily focused on understanding the real perception of Muslim consumers towards foodstuffs in Bangladesh since food adulteration is an axiomatic and everlasting event in this country which is absolutely not permissible in Islamic law. A convenience sampling approach was used to reach the respondents. Authors first correspond with respondents through E-mail to inform them about the purpose of study and seeking interview time from interested respondents. In accordance of respondents given convenient time, authors conducted video calling interview using "Skype". Primarily, authors sent mail to 50 consumers who are working in different organizations and who are used to have restaurant foods and processed foodstuffs regularly. Also, some meat sellers are interviewed to

understand the authenticity of Halal slaughtering. Among them 41 respondents positively reply to participate in the interview survey but 4 interview sessions were eliminated due to interruption in internet network. However, feedback of respondents was encoded under four core variables, such as – knowledge about Halal, adulteration of food, quality of Halal food and skills on hala-slaughtering. Hereafter, strong-weak and potential variables are categorized to propose recommendations for food traders of Bangladesh. All the relevant information regarding Halal perceptions was coded avoiding losing any relevant information linked to Halal perceptions. This systematic categorization of data helped in identifying dimensions of the emerging themes and their interpretation.

7. Data Analysis and Discussion

Four core variables are identified after analyzing contents of in-depth interview which include knowledge about halal, adulteration of food, quality of halal food and skills of butchers about halal slaughtering. Major themes of collected data are discussed briefly as follows:

7.1 Knowledge about Halal

The evolved theme has identified that food consumers in Bangladesh desire halal foodstuffs devoutly though most of the respondents of this study don't have authentic concept about Halal. Many respondents replied that they were not aware about the real meaning of Halal and the quality of halal and most of them opined that all products supposed to be Halal since Bangladesh is a Muslim-centric country. For instance, Mrs. Salina responded

“...all foodstuffs in our country is Halal since our food processors and manufacturers don't use any pork, alcohol, and animal fat. However, we read and watch some news about food contamination in restaurant and food manufacturing plants. But as a Muslim, we should start eating anything saying “*Bismillah*” (in the name of Allah).”

Mustafizur mentioned that “*which food we eat, everything is Halal since we are living in an Islamic country and we never justify the Shariah requirement of our country's food and the knowledge of food suppliers regarding the halal requirements of foodstuffs*” and Mr. Rony noted that “*all food are Halal except dog, swine, frog, snake, etc....*”

However, Mr. Bulbul commented that “*Halal food is very good for our health. We should follow Islamic rule while consuming food even in abroad. The concept of Halal is more concerned with one's income*”. Miss Farhana affirmed that “*things that have been accepted by Islam is called Halal, but most of our food stuffs don't fulfill the requirement of Islamic law and she also opined that most of our food suppliers don't have proper idea about Halal while some of them have basic concept of Halal. And, above all, food suppliers in our country don't care about ensuring acute concept of Halal in their processed and manufactured food products*”. Moreover, Mrs. Shamima affirmed that “*every legal thing is*

Halal and Shariah requirements are not followed always to prepare foods in our country since our food processors don't have authentic concept of Halal.

It is shown from the field study that most of respondents have almost transparent idea about Halal but they are not satisfied with the *Shariah* requirements of foodstuffs and most of respondents think that food manufacturers and suppliers are not aware to ensure Halal requirement for processing and producing food products. 91% consumers of this study opined that foodstuffs in our country don't keep the requirement of Halal and, they believe that food suppliers don't care about the *Shariah* requirement for preparing food either they have or haven't knowledge about Halal. So, this study wants to propose that adequate institutional knowledge about Halal can create consciousness among consumers and it can develop awareness among food processors to render Halal foods all over the country.

7.2 Adulteration of Food

Food adulteration is a coincidental burning issue in Bangladesh which is entirely contradictory with Islamic law regarding food preparation. Many scholars already have worked on the scenario of contemporary food adulteration and negative impacts of it on peoples' daily life (see e.g. Nasreen and Ahmed, 2014; Ali, 2013; Khairuzzaman et. al., 2014; Hossain et. al., 2008;). Some respondents became so emotional and even infuriate to disclose their opinion regarding food adulteration in Bangladesh and they put their opinion how entire food supply chain is contaminated in Bangladesh. Mrs Sangida affirmed that *"food adulteration is very common scenario now in our country and it is the prime reason for malnutrition of our children"*.

Mr. Nahid mentioned that *".... impurity of food has become a routine work for food manufacturers....it is such an event that food impurification means the authentic purification of foods in our country. So, we are bound to have this contaminated food and we are surviving only by the blessings of Almighty despite of having such unhygienic food."*

Moreover, Tehgib said *"fabrication of food has become a fashion to food sellers in our country. They cannot make something attractive to customers except mixing artificial colors, pesticides and chemicals. Formalin has turned into a regular weapon for meat, vegetable, fruit and fish sellers to preserve stuffs for long time"*.

Shataul said that *"almost every day we read news about financial punishment or judiciary punishment in newspapers and watch these events even in different news channels. Surprisingly, situation in this regard is not improving upto the desired level of consumers"*.

About 98 percent respondents of this study reply positively regarding reading and watching food adulteration news regularly. In addition, majority respondents of this study positively opined about having news regarding serving dead chicken (before proper slaughtering), stale and rotten foods. Because of the aforementioned situations, many

customers are now looking for organic foods and reluctant to consume processed and restaurant foods.

7.3 Quality of Halal Food

Consumers of Bangladesh are seriously concerned about quality of foods, but several constraints have despoiled the human rights regarding food consumption. People of Bangladesh have almost clear concept of the quality of Halal food, but they are not aware about the consumption of quality food for the obstacles of surroundings.

Mr. Liton said *“we know what is Halal or how about the quality of Halal food. But the overall quality of food has degraded over the period. Excessive use of formalin & chemicals, unhygienic cooking practice in restaurants, scarcity of fresh vegetables & fruits, irrational price of products, poor transportation system, unhealthy & germ-infested packing system and using low quality raw materials are the key reasons for degrading the quality of food products in Bangladesh over the period”*. Moreover, Dr. Shataul mentioned *“we know that Halal foods are safer and cleaner than any kind of conventional foods, but matter is that only few manufacturers and restaurants are purveying quality food though these foods are not recognized by any accredited body of Shariah and these foods are also so expensive which are not affordable by the all class of people”*.

In addition, Miss Nabila affirmed that *“uncleaned kitchens and drossy environment, contaminated water, and unwholesome cooking dishes & other stuffs are the main reasons of poor quality foods”*. However, Mrs. Marufa noted that *dishonesty and immorality of food manufacturers, unconsciousness of restaurant owners and ignorance of government administrative authorities are the causes to reduce the quality grades of food products”*. Mr. Habibur stated that *“people are becoming reluctant towards consumption of foodstuffs because of food adulteration by pesticides, chemicals and overpriced of foods. Besides, low quality food supply is very familiar issue in the most areas of cities”*.

This study has revealed that 91% of respondents have somewhat transparent idea about the quality of Halal food but they are not satisfied about the food quality of entire country and they firmly mentioned some rational reasons of deterioration of food quality in Bangladesh. In addition, 97% respondents opined that majority foods in Bangladesh are not certified by the recognized *Shariah* board. And, 87% interviewees are optimistic to make Bangladesh as an prospective Halal food exporting country.

7.4 Skill about Halal Slaughtering

Proper slaughtering of lawful animals is also a premier requirement for Halal food. This research tries to justify the expertise knowledge about Halal slaughtering of animals. Authors requested some food suppliers and butchers to put their worthy comments about Halal slaughtering.

Slaughterer Hanif said “I don’t know the literal meaning of Halal slaughtering, but always I say Bismillah (in the name of God) in the time of slaughtering”. Butcher Sharif said “.... obviously, we follow the proper way of Halal slaughtering” though he could not explain the meaning of Halal slaughtering. Moreover, meat processor Sabbir mentioned that “Halal slaughtering means sacrificing animals in the name of Almighty Allah” and also he could not clarify the Shariah meaning of Halal slaughtering”. Alif (Butcher of Meena shopping mall) said “we don’t know anything about Halal slaughtering. Company has only given us responsibility to sell the meat... halal or non – halal slaughtering is not our concern”.

However, most of food seller were not interested to talk about the Halal-concern of their products and they refused to give any reply regarding our survey interview. Only one food seller, Karim, replied “I don’t know whether there is any organization to certify our products as Halal food, but we try to keep cleanliness, safety and wholesomeness of our products though I cannot explain it properly”. This study identified that about 93% meat sellers don’t have acute concept about slaughtering and authors could not grab the replies of food processors since they were reluctant to talk about the purification of their products. So, this study can summarize the findings of field study in the following framework:

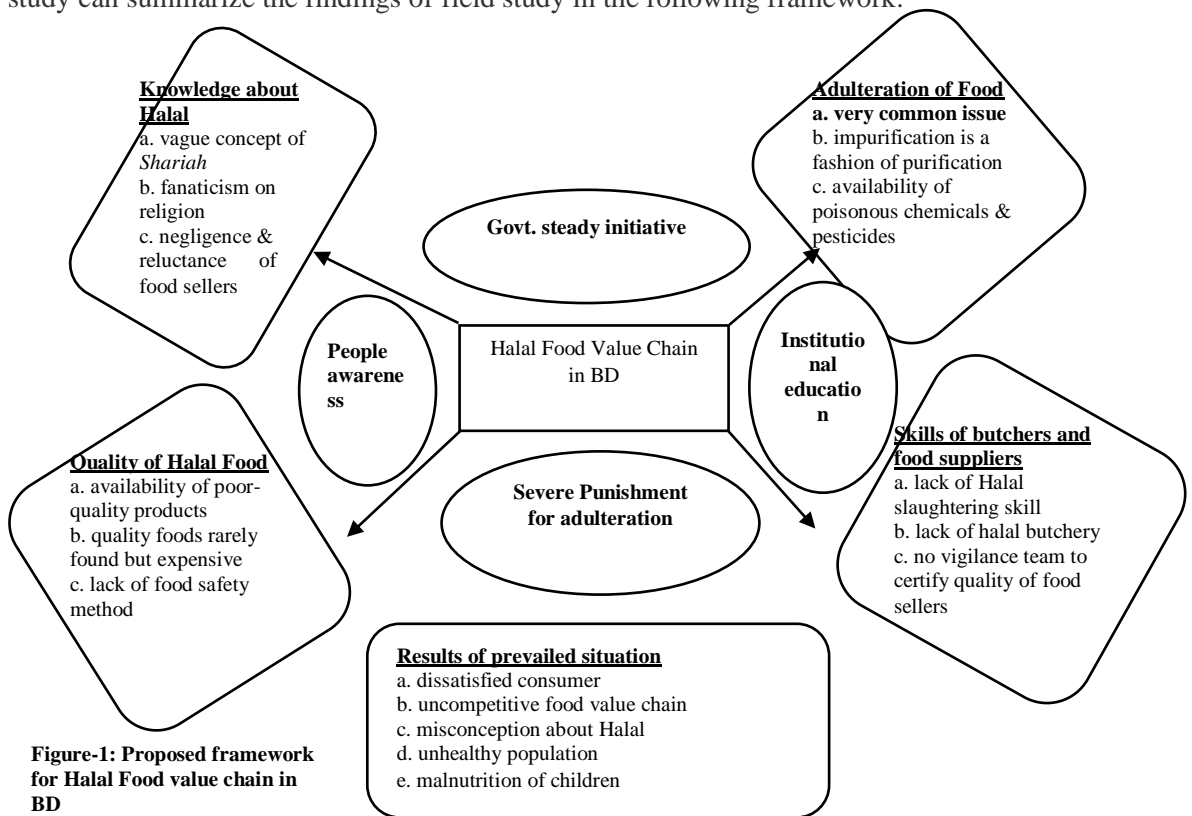


Figure-1: Proposed framework for Halal Food value chain in BD

The **figure-1** has identified the four core themes after analyzing the contents of interview survey which also include the key statements under each theme. This research has marked some major outcomes of existing food value chain in Bangladesh. Therefore, this research proposes primarily four remedies to overcome the identified constraints which are creating awareness among local people about pure concept of Halal, taking government tough instances, promoting institutional education about *Shariah*, and implementing severe punishment for food adulteration.

8. Conclusion and implications

The study was persuaded to grasp the understanding of consumers of Bangladesh about Halal and its wholesomeness. This research has revealed that everyday consumers are having foods without halal certification though Bangladesh is a Muslim-dominated country. Adulteration of food is a regular vogue of food processors and manufacturers which forces customers to buy poor quality product in high price. Moreover, this study has identified that superstitions towards religious belief, vague concept about halal, availability of toxic chemicals and extensive use of these in food processing, lack of standard methods for food quality measurement, and above all disinclination of food sellers are the main obstacles towards implementation of true concept of Halal food and maintaining standard quality of foodstuffs in Bangladesh. Besides, Bangladesh government should have an individual cell under the ministry of Religion, like – JAKIM, Malaysia, to supervise and certify Halal foods. In addition, Bangladesh government primarily can work collaboratively with the government of Malaysia to promote authentication of Halal certified foods. Nonetheless, Bangladesh can easily make effective value chain for Halal food business by constant government initiatives, effective implementation of existing laws, inception of formal lessons about Halal awareness and enactment of severe punishment for food adulteration. In addition, we also need more effective awareness campaigns regarding consumer rights, as well as promotion of ethical practices among the business community by business leaders, and capacity development of public health labs by training more staff to properly test food items for adulteration on the spot.

However, this study can be useful for both food marketers in Bangladesh to conceptualize and promote Halal food within the country and abroad. It can be also supportive to investors in Bangladesh to export Halal products in some prospective countries who want to develop effective value chain for Halal food which can further contribute competently in the value chain of world tourism business. This study also can encourage concerned authority to introduce world-recognized method for food safety measurement. Furthermore, availability of food ingredients, cheap labor and land, and keen interest of consumers towards Halal food can make Bangladesh next destination of Halal Hub after

Malaysia which can enlighten the prospects of Halal foodstuffs to developed countries, specially to tourism countries. Above all, inception of halal certification can restore the consumer faith on food processors and sellers in Bangladesh which can revamp the entire food business within the country as well as beyond the country.

9. Limitations and Future study

Although the study's findings can extend the knowledge of policymakers of government and food marketers in Bangladesh, there are some notable limitations. This is an exploratory research where non-probability sampling method was followed. Also, the sample size was quite small due to limited resources and time constraints. Further research can be expanded selecting wide range of sample size allocating more resources and time. Besides, the sample size was selected from corporate jobholders of Bangladesh which may not reflect the population breakdown of the Muslim consumers in Bangladesh. Hence, different class of people can be involved to present rationale population of further research. This study is confined to perceptualizing the understanding of customers of one country. Thus, comparative study between Muslim and non-Muslim country, such- Bangladesh and Japan, can be conducted in future. In addition, specific themes have been identified for this study because of their relevance to consumer perception. It is possible that other factors would reflect different results (Karajin and Iris, 2007; Said et. al., 2014). And emphasizing on religiosity is sensitive and private in nature thus may subject to reduce validity and reliability (King & Crowther, 2004). Thus, further studies should be conducted to scrutinize the different Muslim consumers' ethnicity, culture and nationality, which could be vital in designing Halal food products that can satisfy the need of Muslim and non-Muslim consumer across the world.

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Concept of Halal, Is It Truly Safe & Hygiene or Is It only an Islamic Belief..... 43

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