

## Halal Food Chains-Concepts and Opportunities in Pakistan

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**Abstract:** Halal in terms of food commodities, refers to food material, ingredients and the production process which is permissible for muslims for consumption. With increasing awareness about food and its quality, safety and origins, consumers are becoming more and more informed if they are buying the same product for which they are paying. In the case of Halal food there are certifying bodies to warrant that Halal food materials are prepared and processed for consumption through Halal procedures. Pakistan is the world's second largest Muslim country. However, the implementation of Halal certification for food in Pakistan is neither standardized nor compulsory. This study reviews the possibility of standardization of Halal food chains in Pakistan. Review of literature clarifies the concept of Halal and its scope in the world. Malaysian Halal food industry is reported as an example and the article is concluded at the possibility of application of the concept of Halal in the food chains of Pakistan. Ideally, Halal certification systems in Pakistan should incorporate issues of standardization, infrastructure, traceability and auditing while ensuring the trust of consumers in both the certified system and its stakeholders along the producer-to-consumer chain.

## INTRODUCTION

**The concept of Halal:** The concept of Halal comes from Islam, a religion followed by about 23% of the world's population. Those who follow and practice islam are called Muslims. Muslims take guidance on every matter relating to living a productive life in a society from a divine book, the Quran and the practice of Prophet Muhammad PBUH, the Sunnah (Hussain *et al.*, 2007). According to the Quran, anything permissible for consumption or to practice in everyday life is referred

to as Halal. This study deals only with food practices, hence, general Halal practices and the way of life are not discussed. The Quran clearly mentions food as either permissible, Halal or forbidden, Haram (Riaz and Chaudry, 2003). An English translation of some of the relevant verses by Pickthall (1992) states:

“O you who have believed, eat from the good things which we have provided for you and be grateful to Allah if it is [indeed] Him that you worship. Quran 2:172”

“Prohibited to you are dead animals, blood, the flesh of swine and that which has been dedicated to other than Allah and [those animals] killed by strangling or by a violent blow or by a head-long fall or by the goring of horns and those from which a wild animal has eaten, except what you [are able to] slaughter [before its death] and those which are sacrificed on stone altars and [prohibited is] that you seek decision through divining arrows. That is grave disobedience. This day those who disbelieve have despaired of [defeating] your religion; so fear them not but fear Me. This day I have perfected for you your religion and completed My favour upon you and have approved for you Islam as religion. But whoever is forced by severe hunger with no inclination to sin-then indeed, Allah is Forgiving and Merciful. Quran 5:3”

“O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah] and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful. Quran 5:90”

Examples of the food products which are forbidden (Haram) in Islam are carrion, pork, alcohol and blood (N. Hussain *et al.*, 2007; Regenstein *et al.*, 2003). Issues associated with Haram food are beyond the scope of this study.

A Halal food chain is one where all the input supplies, materials, production, processing, logistics, handling and trade in a food product from the point of origin until the food reaches consumers follow the permissible guidelines of Islamic law (Riaz and Chaudry, 2003).

## THE GLOBAL MARKET FOR HALAL FOOD

Demand for Halal certified food in the world market which is currently valued at approximately USD 700 billion is gradually increasing. Leading exporters of Halal food include Argentina, Australia, Brazil, Canada, France, India, Indonesia, Malaysia, New Zealand, Philippines, Russia, Thailand and United States of America. The Middle East and Gulf countries are the largest import markets for Halal certified food. Interestingly there is no Muslim country in the top 10 exporters of Halal certified food to Middle Eastern countries to which the largest exporters of beef are America and Australia and the largest suppliers of chicken meat are Brazil and France (Alam, 2016).

**A model of Halal food chains: Malaysia:** Malaysia has the most developed Halal food industry in the Muslim world (Bohari *et al.*, 2013; Zailani *et al.*, 2010), though the need for Halal certification as a basis for food industry

development was realised only relatively recently (Shafie and Othman, 2006). For example, Talib *et al.* (2008) reported on the adoption of Halal-based quality assurance in food manufacturing and Tieman (2011) discussed the concept of Halal in food chain management. Tieman *et al.* (2012) documented the principles of managing Halal food supply chains. The concept of Halal logistics, including operations at warehouses, during transportation and at terminals was first described in Malaysia by Jaafar *et al.* (2011), followed by research on Halal logistics reported by Tieman (2013). Mohamad and Backhouse (2014) developed a framework for sustainable Halal food industry development in Malaysia, while the concepts for enhancement of the integrity of Halal food supply chains were introduced by Zulfakar *et al.* (2014). Ngah *et al.* (2014) identified and reported on the barriers to adoption of Halal practices in food supply chains by Malaysian food manufacturers. Each of these researchers acknowledged that a food product delivered to a consumer cannot be certified Halal if all the operations in the supply chain for that product do not follow Halal guidelines. At the same time, most researchers also mentioned that achieving through the supply chain certification means overcoming a range of barriers in complying with certification requirements. Central to the development of any successful Halal certified system is an understanding of the preferences and intentions of consumers as highlighted by Yusoff *et al.* (2015). Most recently, beside the enforcement of a relatively strong Halal food supply chain system, monitoring of the process and continuous consumer feedback is implemented.

Halal food certification in Malaysia is governed and implemented solely by the Department of Standards Malaysia. This department initially developed Halal standards in consultation with representatives of all the industry stakeholders including producers, manufacturers, processors, allied services providers, consumers and regulatory bodies. Since, then at one end it has been engaged in continuous review, monitoring and implementation of its certification standards (Halim and Salleh, 2012) and at other end consumer awareness programs have been launched and actively conducted to increase the demand of Halal certified food products. Muslim consumers in Malaysia now are not only concerned about Halal certification of the products they buy but they are also concerned to acquire a deeper knowledge of the food ingredients and procedures used in the production and preparation of food. They also expect continuous monitoring of the application of Halal certification standards (Abdul *et al.*, 2009). Interestingly, non-Muslim consumers of Halal food in Malaysia also acknowledge the socioeconomic, health and food safety benefits of consuming Halal food (Rezai *et al.*, 2010).

**Halal food chains in Pakistan:** Pakistan is the world's second largest country, after Indonesia whose official religion is Islam (Haqqani, 2004; Peach, 2010). According to unofficial sources, the population of Pakistan is almost 200 million and growing at 1.6% per year (Coale and Hoover, 2015). About 97% of the population of Pakistan follows Islam (Zia, 2003). It is predominantly believed that all food commodities marketed in Pakistan are Halal (Salman and Siddiqui, 2011) and there was very little consumer awareness of certified Halal food in Pakistan until the Federal Ministry of Science and Technology recently discovered the marketing of twenty three Haram food commodities. As it was found that these Haram food products had been imported from other countries, the Government of Pakistan passed a resolution requiring Halal certification of all food commodities entering Pakistan from elsewhere in the world. This event also alarmed the responsible authorities to start thinking about establishment of a system of Halal food production and marketing in Pakistan.

Currently, there are >50 Halal certifying agencies in Pakistan (Awan *et al.*, 2015) but only a few of these agencies are accredited by the relevant institute of the Government of Pakistan. Most certifying agencies operate autonomously in affiliation with international food quality and safety certification agencies. The relevant agency of Government of Pakistan responsible for the accreditation of certifying bodies is the Pakistan National Accreditation Council (PNAC) which is administratively controlled by the federal ministry of science and technology. Presently only four Halal certifying bodies in Pakistan are accredited by PNAC. An example is the Punjab Halal Development Agency (PHDA) which operates under the Punjab provincial government and is responsible for Halal certification, capacity building and advisory services. Some of the private sector Halal certifying bodies include the Islamic Food and Nutrition Council of America (IFANCA), South African National Halaal Authority (SANHA) Pakistan, Halal Research Council, Direct Assessment Services (DAS) Certification, Halaal Foundation, SGS Agriculture and Food and the Halal Industry Research Centre of Pakistan. Generally these bodies follow their own varying guidelines for the certification of Halal food ingredients and production and handling practices. As a result of this diversity, a range of Halal brands certified by different agencies are available on the retail shelves of major supermarkets of Pakistan (Awan *et al.*, 2015). There remains a need to unify the standards of Halal food production and handling practices even though the certification may be offered through any number of certifying bodies. An unpublished pilot study conducted to explore the status of Halal food chains in Pakistan found that the proportion of Halal certified

products is not more than 20% of the total number of food commodities available on the retail shelves of major supermarkets in Pakistan. The pilot study also identified that some of the well-known brands of food commodities such as confectionary, dairy and dairy products, biscuits, tea, coffee, cooking oils, juices and soft drinks were sold in supermarkets without Halal certification labels. Formal studies have shown that consumer awareness of certified Halal food is also very low (Salman and Siddiqui, 2011). This is possibly because the consumers in Pakistan assume that all the food material available on retail shelves in Pakistan is Halal. According to Salman and Siddiqui (2011), food should not be considered Halal if it is not endorsed by a Halal certification body. Staff in one large supermarket reported that the majority of shoppers do not demand Halal certified products nor do the manufacturers, producers or suppliers attempt to market food as Halal certified (personal comm. Mr Shahid Ali, Floor Manager, Metro Cash and Carry Islamabad). Never the less there is not a single Halal certified food chain known in Pakistan (personal comm. Mr A. Ghafoor, Floor Manager, Metro Cash and Carry Islamabad). Salman and Siddiqui (2011) refer to this as a gap in the area of consumer awareness and other researchers have seen it as a potential opportunity for food certifying bodies (Awan *et al.*, 2015), especially as all existing Halal certifying bodies in Pakistan claim the capacity to certify that food material and the process of preparation and handling of food material is Halal. The Government of Pakistan needs to embark on the footsteps of Malaysian Government to standardize the "through the chain" Halal certification protocols, implementation through certification bodies in open market and a well-structured and robust monitoring and enforcement system.

Adulteration of food commodities is reported from time to time in Pakistan (Khan *et al.*, 2013). A Halal food product does not remain Halal if it comes in contact with a Haram food product or is adulterated with a non-Halal product. Modernisation of Halal food processing presents particular problems. For example, shortcomings of the mechanised processing of cattle for meat have been reported (Qureshi *et al.*, 2012) when an animal may die before proper slaughtering in the mechanized environment (Riaz and Chaudry, 2003). As suggested by Ayyub *et al.* (2013), the Pakistan meat industry should ascertain the authenticity of its slaughtering procedures if it is to be competitive in international high end Halal meat markets. Also, the processors use enzymes and chemicals in food production. In dairy, confectionery and bakery products for example, the use of enzymes, gelatin and emulsifiers is common. In this context, input suppliers and processors need to ascertain that such additives are derived from Halal sources (Riaz and Chaudry, 2003). Otherwise, they may find media campaigns used

(Moiz and Khan, 2014) to notify consumers whether foods produced under commonly understood Halal conditions may be contaminated with additives that are Haram (Tieman, 2013) or may be processed in a way that becomes Makrooh (the food or an action which is disliked according to the Islamic law). Clearly there is a need for the whole food chain system to be certified as opposed to only the food commodity being declared Halal.

**The scope for Halal food chains in Pakistan:** Pakistan is an agriculture based country (Hoek van der *et al.*, 2002). After meeting its domestic food needs it exports fresh, raw and processed food to regional and international markets and contributes to feed the growing world population Hussain *et al.*, 2007).

With increasing consumer awareness of food quality, safety and origins, the demand for Halal certified food is increasing world wide. However, sustainably increasing the trade in Halal food depends on ensuring consumer confidence. Consumers demand more than just food manufactured and processed under Halal conditions. In addition they require that food is handled, transported, stored and marketed through Halal certified, well organised, robust, effective and efficient value chains.

In the world Halal food market valued at around USD 700 billion, Pakistan contributes only USD 28 million or about 0.5% of world Halal food needs.

Opportunities lie beyond muslim markets as the demand for Halal certified food is also increasing among non-muslim consumers who seek Halal certified food for its food safety and health benefits (Rezai *et al.*, 2012). The concept of Halal food chain management is now emerging in Pakistan with policy makers, industry stakeholders and consumer groups involved in discussions and negotiations. Motivating these consultation processes are clear opportunities for existing food chains to benefit from standardisation to deliver Halal food to consumers in both domestic and international markets. Pakistan is geographically located to cater to the wealthy and demanding Halal markets of Middle East and Gulf countries. Additionally, if the food chains of Pakistan are certified to cater Halal food to international markets, muslim consumers living in developed countries may prefer to buy food products from a muslim country of origin.

#### **STRATEGY FOR STRENGTHENING HALAL FOOD CHAINS IN PAKISTAN**

There is a clear scope and rationale for Pakistan to develop Halal food chains for each food item so as to meet its own consumer demands as well as capturing a greater share of the world market for Halal food. Besides the traditional Halal certified meat chains, examples include confectionery, dairy products, bakery items, fresh cut fruit and vegetables, dried and value added products and raw material for processing and preparation of food.

Local and customized case studies are suggested to test known concepts of through the supply chain collaboration and value chain principles to identify solutions for certified Halal food value chains. Based on the results of previous studies and customised case studies (Tieman, 2014), government and industry stakeholders are recommended to collaborate both vertically and horizontally. Vertical collaboration occurs between subsequent levels in a chain such as between producers and processors, processors and retailers and so on. Horizontal collaboration occurs among stakeholders at the same level such as among producers, processors or retailers. In both cases there is a role for government involvement to negotiate, codify, implement, monitor and enforce certification standards and systems.

Other suggestions include shopper awareness programs to raise awareness of Halal certified food products (Salman and Siddiqui, 2011) and standardisation of mechanized slaughtering methods to meet international Halal specifications (Ayyub *et al.*, 2013). Across all examples, continuous auditing and monitoring of Halal certification is crucial because if due diligence is not practiced, the confidence of consumers and markets can quickly be compromised. In the case of the chocolate industry in Malaysia for example what started as in full compliance with Halal standards later was found to be compromised by the use of emulsifiers derived from Haram sources (Shariff and Lah, 2014).

Ultimately, food chains are human-managed systems whose performance is as much influenced by relationships among the people managing the businesses that make up a chain as by its technical characteristics. Strong, clearly-focused partnerships can make the development and implementation of certified Halal food chains far more effective, efficient and sustainable. However such changes are difficult or impossible to accomplish without external assistance, yet most government agencies are not qualified or resourced to provide such assistance. Typically businesses and governments rely on specialist providers in this arena.

One example in Pakistan is CAB International (CABI) which has specific strengths in food chain research and development. It has a proven track record in conducting consumer focused research on the demand for and supply of, Halal certified food products; it can develop and conduct consumer awareness programmes aimed at increasing the demand for certified Halal food products and it can build the capacity of food producers and marketers to produce and handle food to comply with Halal requirements.

#### **CONCLUSION**

Achieving genuine commitment from these Halal food chain stakeholders as well as clearly defining the role of government in policing the integrity of Halal food chains is key requirement to establishing an effective and

sustainable Halal system. Such a system would provide a platform for improving consumer confidence and increasing the export of Halal food commodities from Pakistan.

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