

DAKOTA HALAL PROCESSING

A CASE STUDY AND HALAL FOOD MANAGEMENT FRAMEWORK

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PURPOSE

A Muslim's life revolves around the concept of Halal, which is a universal expression providing guidance not only on the types of food and drinks to be consumed, but also on several matters pertaining to daily life¹. These facts spur the demand for Halal products and create new opportunities. The worldwide demand for Halal food alone was estimated to be worth about US\$130 billion².

The Muslim population, which believes in and follows the Islamic faith, is the world's second largest population. It is also said to be the fastest growing globally with a growth rate projected at 2.9% per year as compared to overall population growth rate of 2.3% annually. The estimate of the total Muslim population in the world varies. Most sources have put it at 1.6 billion or between 20% to 25% of the world population³.

The changing needs, preferences, and populations of consumers pose enormous challenges to food processors and marketers. While companies have initiated substantial efforts for formulating effective strategies to gain competitive advantage, tremendous opportunities lie for businesses to capture by targeting the market requiring Halal products. As a case in point the efforts of Dakota Halal Processing, a small North Dakota-based company, are examined. In addition, a Halal food management framework is discussed.

Food Industry Overview

A number of major trends including the globalization of the food industry, interest in authentic foods, and the recognition of distinctive market niches are shaping the food industry⁴. These new developments in food processing must be placed in perspective with the ongoing demand for convenience foods and the industrial nature of our modern food supply.

Recently concerns in the area of food processing have centered on food safety. In the light of mad cow disease outbreaks in England and Europe⁵ and meat-borne E-coli other pathogen outbreaks in the US⁶, consumers no longer implicitly assume that the foods they purchase are safe⁷. Thus, companies need to re-think their food management routines.

Disintermediation, shortening of the food supply chain between producers and consumers, has already occurred in the food processing industry. With the efforts of mega-processors and large retail outlets, middlemen/intermediaries have been eliminated from the production process. Thus, another fact of life is that America's food is processed in large central facilities and shipped on average 1,500 miles before being consumed⁸.

Centralization and disintermediation in the meat processing industry is especially pronounced. Today only four meat packers, ConAgra, IBP, Excel, and National Beef, slaughter 84% of US beef cattle⁹.

However, the monolithic nature of the industry is facing challenges. An increasing number of product introductions and a growing demand for specialty food services emphasize the need for flexible manufacturing and a change

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in thinking. To meet these challenges, most large processing companies resort to investing in the latest technology, and depend on quick changeovers from one product type to the next¹⁰. In addition, increased production line speeds are employed often with serious food hygiene¹¹ and worker safety consequences¹².

Halal Foods and Modern Food Processing

Given the growing Muslim market's and its demand for Halal foods, food processors are beginning to take note. In this effort food science researchers and consultants have been engaged and their focus is on measures primarily at the food plant. These include assurances that the product is blessed by a religious official, but also contains the proper ingredients, is manufactured with proper equipment, processed under specified guidelines, and is finally certified by an approved or reputable organization.

Halal Regulatory Framework

Islam has laid down a mandatory code of conduct in relation to food consumption. The Qura'n, the holy book has made it obligatory for the followers of the Islamic faith to eat only what is permissible (Halal), lawful and good. In order to determine whether the food is permissible or not, it is necessary to ascertain a number of factors such as the ingredients used, processing methods, preparation and handling techniques. If all these criteria are met according to Islamic norms, only then the food can be considered Halal.

Choosing Halal food and leaving non-Halal food is an important responsibility of a Muslim. Islam places a very strong emphasis on cleanliness, and this concept is especially relevant in the context of food and drinks. Many verses in the Qura'n have focused on the necessity for food and drink to be Halal. For example, verses 87 to 88 of the Surah al-Maidah state 'O ye who believes! Make not unlawful from the good things, which Allah has made lawful for you. But to commit no excess, for Allah loves not those given to excess. Eat of the things, which Allah has provided for you lawful and good, but fear Allah in whom ye believe'.

A Muslim considers three general principles before purchasing any food product. He/she has to ascertain whether 1) the consumption of the particular foodstuff is forbidden by Allah, 2) the foodstuff is obtained through Halal or Haram (prohibited) means, and 3) the material is harmful to health or not¹³.

It is for these compelling reasons that a regulatory mechanism is needed. Another point worth mentioning is that adequate regulations must be enforced to ensure that only permitted food products are offered to Muslims. The ingredient used in the process of food manufacturing is another area of concern. Ingredients like food additives and emulsifiers constitute a major input in food processing. Some of these ingredients are non-Halal, and there is always a danger of these being used in the manufacturing process¹⁴.

The manufacturing process should not allow Halal food to come in contact with the Haram one. So if the same production line is to be used for a Halal product after it has handled a non-Halal one, the equipment must first be cleaned as required in Islam. To overcome the problem, it is essential to have a religious supervisor as a part of the team, and let the employees have an understanding of the religious requirements¹⁵. In a practical vein, most food manufacturers have found that the best approach was to have the Halal products produced first, and other products produced later in the day. At the end of the day the equipment can then be cleaned, sanitized and after approval by a Muslim official, be used on the next day. This eliminates the wastage of time.

Another area of concern for which there is need to be better regulation pertaining to the delivery process of Halal food from the producer to the retailer¹⁶. Regulations are needed to ensure that the products being transported are free from the contaminants or contact with non-Halal substances.

Regulations are also needed to ensure compliance on the slaughter practices of animals. While there may be variations in practices in different regions, what is essential is to ensure that they are in accordance with the Qura'n and Hadith (Traditions of the Prophet Muhammad, pbh).

Halal Certification

In the early period of Islamic civilization it was quite easy to practice Halal in the predominantly Muslim societies where food was mostly prepared fresh at home. However, with the passage of time, history has witnessed extraordinary movement of the people. In the wake of the modern developments and consequent interaction with different cultures, Muslims have been exposed to non-traditional foods. This has necessitated

the need to abstain from non-permissible food. With the food manufacturing process being less complex initially, the strategy adopted by the manufacturers was to label food products as 'contains no pork/alcohol.' But with increasing complexities in the ingredients used, advanced food-manufacturing technology and growing market for Muslim food, corporate entities have dominated the scene, and businesses have been transcending national and regional boundaries. And most Muslim nations importing food products have been concerned with the permissibility of consumption of such foods. It is for these reasons that certifying agencies have become essential. These certifying agencies are independent entities that ensure adherence and compliance to regulations based on the Muslim religious tenets.

Instances of certifying organizations established, either through government intervention or on the initiatives of the local communities, to look into the needs of Muslim communities exists in most major countries. In North America, IFANCA (Islamic Food and Nutrition Council of America) has put Muslim consumers at ease by undertaking and certifying Halal inspection, investigating Halal food complaints, educating the public on Islamic dietary laws and practices, as well as keeping the Muslim consumers informed with respect to fraudulent practices¹⁷. IFANCA has also been recognized and endorsed by various religious and government organizations in several countries of Europe and Asia, as a reputable Halal certifying agency¹⁸.

In the U. K., with an estimated Muslim population of over one and a half million, who regularly consume Halal food products, and a growing overseas market as well, there has been an increasing demand for the Halal food products. To guarantee the Muslims, that the food products comply with the requirements, the Muslim Food Board has been set up to provide services of consultancy, research and authentication of products for Halal consumption. The Board has issued a number of Halal certificates to many organizations for the local UK market as well as for export purposes¹⁹.

In South Africa, the SANHA (South African National Halal Authority) performs similar operations²⁰. Several Islamic organizations like, Cape Muslim Butchers Association, Central Islamic Trust, Durban Muslim Meat Traders Association to name a few are its members, giving credibility to the agency. This agency has been largely successful in providing Muslim consumers with a greater confidence in regard to consuming food products.

Australia is a major exporter of food products and a large portion of its roughly A\$ 18 billion annual food exports are to the global Muslim consumers²¹. To meet the needs of the growing Muslim population within the country as well as the overseas Halal markets, the Australian Federation of Islamic Councils Inc. (AFIC) has formed a Halal committee comprised of religious scholars, food technologists and industrial experts for product certification. Importers from Muslim markets across the globe have immensely benefited through this certification. For example, the Australian Federation of Islamic Council supervises and promotes Halal food exports from Australia to the world²². Australian producers have successfully employed joint ventures as a strategy in Indonesia, which is the world's largest Halal market despite the difficulties in recent times. Australia has also been successfully using Indonesia as a base for re-exporting Halal beef to other Muslim markets.

New Zealand is also a major exporter of food products to the Muslim world. It has also established a similar certification mechanism under the auspices of the Federation of Islamic Association, New Zealand (FIANZ)²³.

In Malaysia, the Halal certification is regulated by the Jabatan Agama Islam Malaysia (JAKIM) through the result of a long drawn process²⁴. The official certificate is a boon to the majority Muslims in this Islamic State. With the recent thrust of Malaysia to work towards becoming an international Halal food hub and to capitalize on the growing Halal food market worldwide, JAKIM is poised to play a bigger role as an agency for certification of Halal food originating from Malaysia.

Opportunities and Challenges

Globally, the Halal market is widely predicted to grow as more and more Muslims favor food prepared for their own particular religious requirements. For example, many US Muslims have depended on the kosher label for lawful meat products. Recently US Muslims have been rejecting kosher products. One reason concerns the blessing. Muslim consumers were led to believe that each animal received an individual blessing at the time of the slaughter, however, it was later realized that it might not necessarily be true.

The potential for Halal food in the global market is not only restricted to Muslims. Apart from the Muslim majority in Islamic states, the other resident minorities have acculturated to the food-ways of the Muslim

majority. In addition, there is a vast potential for Halal food to be preferred by all in multi-religious societies. This could be achieved by creating awareness that Halal products are manufactured under hygienic conditions and are not harmful to human health. Hygiene encompasses all aspects-personal, clothing, equipment and premise where the food is produced, slaughterhouse practices, transportation, and handling.

Malaysia provides a good case study to gain an understanding of the Halal perception among its consumers. Malaysia although a majority Islamic State (60 percent of its population are Muslim) is a multi-racial and multi-religious society. In Malaysia Halal food is widely marketed and consumed by all. This and the difficulty of segregating Halal from non-Halal meats has encouraged fast food chains like McDonald's, KFC, Pizza Hut, and Burger King to adopt a policy of using only Halal meat across the whole of Malaysia.

The Entry of North Dakota Entrepreneurs into the Global Halal Market

North Dakota entrepreneurs have recently made an entry into the national as well as global Halal meat market. How did it all begin? The size of the Muslim population in North Dakota is not of such size that a local entrepreneur might initiate a big and ambitious project just to cater to the local demand for Halal meat. Dr. Adnan Q. Aldayel, a former naval architect and marine engineer, is the entrepreneur behind this story. Dr. Adnan Q. Aldayel a resident of New Rockford, North Dakota is a native of Saudi Arabia. It's true that he started the company out of his frustration over his inability to get true Halal meat. He shares his personal experience, "If you, as I, have had difficulty finding superior quality meat that you can be sure is strictly Halal, perhaps you can benefit from my experience²⁵."

In 1996, Dr Aldayel and his wife Merita moved to the heart of America's cattle country and Merita's hometown New Rockford. Since then, he involved himself in raising and slaughtering his own livestock in accordance with Islamic food laws as revealed in the Qura'n. He also learned from his neighbors, whose families have been producing premium quality beef for several generations the secret of selective breeding, proper feeding, livestock care and the dry aging of beef to unlock its flavor and tenderness. Within eighteen months after moving to North Dakota, he was ready to work on his business idea, and got excited and said at that time, "Up until now, I have produced only enough strictly Halal meat for my family and a few close friends. But, we will soon be in a position to supply meat to other observant Muslims who want to enjoy the quality and flavor of superior quality meat with the assurance that it is Halal in the strictest sense²⁶."

Dr. Aldayel found partners with members of the Central Dakota Cattle Association, and with them has developed a global vision for the enterprise. Again, he is motivated not by the local demand (there is very little), but the potential for Halal meat products across the globe. Dr. Aldayel believes that motivation for Dakota Halal is consistence with the growing demand in the United States of America, Canada, and across the world for high quality and certified Halal meat and meat products. It is certainly a niche market, which is expanding further into the growth stage of PLC (Product Life Cycle). The feasibility study that was conducted at the time of initiating the Dakota Halal project supported and substantiated that that there is a positive growth potential for quality Halal products²⁷.

Dakota Halal Processing Company

After aligning the efforts of many stakeholders, the Dakota Halal Processing Company (DHPC) was established at Harvey, North Dakota for the purpose of meeting the Halal food needs of observant Muslims and others who want similar food. It must be noted that Harvey, North Dakota is a very small town (population 2,000) in a state with few Muslims. North Dakota ranchers, Dr. Aldayel and his wife, and two other investors own the company. It recently completed construction of the only fully integrated, United States Department of Agriculture (USDA) approved, slaughtering and processing facility in the country, devoted exclusively to the production of Halal meat.

Differentiation Strategy

Halal products from Dakota Halal Processing Company, sold primarily under the Zem Zem brand name, differ from most other "Certified Halal" and "Zabihia Halal" products in two major respects. 1) Only Halal products are produced in the plant and all animals used are slaughtered in accordance with Islamic rules. 2) All the livestock come from selected farms where their diet and humane treatment have been monitored from birth by the Islamic Society of North Dakota. The livestock are raised on an all-vegetarian diet of natural grasses and

grains with absolutely no animal by products or hormones. There is no possibility that the livestock have been fed swine offal or other Haram substances (unlawful for Muslims to consume). The Dakota Halal certification seal on Zem Zem products is the purchaser's assurance that these products are strictly Halal and suitable for the Muslims.

According to Dr. Aldayel, most of the certified Halal meat sold throughout the world comes from livestock that have been purchased at auction and slaughtered in accordance with Islamic traditions. However, the producer generally has no knowledge of the prior feeding and care of the livestock. Zem Zem meat and meat products come from selected farms and ranches that have livestock in strict accordance with a feeding and care program approved and monitored by Dakota Halal Processing Company as well as the Islamic Society of North Dakota. Steaks and roasts are cooler aged to maximize flavor and tenderness. Because of the consistent high quality, vegetarian feeding program, humane treatment of livestock and no hormones, Zem Zem products appeal to many non-Muslims, as well as to the most observant Muslims²⁸.

Live Stock Supplies

Area beef cattle producers in the North Dakota have a long history of working cooperatively. One such organization is the Central Dakota Cattle Association. The Association, noting the distance to a finished market, inquired into the feasibility of developing a local packing plant. Around the same time Dr. Aldayel was independently working on developing a business plan for Dakota Halal. With out knowing of the others' interests both Dr. Aldayel and the Central Dakota Cattle Association called on North Dakota State University's (NDSU) Agricultural Extension Service for expertise.

The folks at NDSU got the two parties together and the rest is history. Both groups came to envision similar goals and a mutually beneficial arrangement was born. The cattle producers arranged to supply a source of beef cattle for the business and substantial equity.

Through the development of Central Dakota Beef, LLC, 50 cattle producers became majority owners and livestock suppliers for Dakota Halal Processing Company. With this arrangement it is possible to trace each animal from the ranch to the table²⁹.

Consequentially the rancher-suppliers have agreed to adhere to certain market specifications, for example not to use feed supplements containing animal products or hormones, and in order to meet Muslim standards, slaughtered by a Muslim who slits the animal's jugular veins while reciting an Islamic prayer in Arabic language. To reiterate, particular market specifications have been incorporated into cattle supply network not unlike those demanded by organic food processors.

Now the Board of Directors of the Central Dakota Cattle Association, Paul Kallenbach, Wendell Grondahl, Jarvis Hedland, Don Ystaas, and Brian Maddock, proudly proclaims, "We the cattlemen of the Sheyenne Valley, raise our cattle from birth to finish and NURTURE our cattle to be healthy and wholesome." The farmers and ranchers of Sheyenne Valley boast of a proud heritage of well-managed cattle and pastures. Built on this heritage, they are writing a new story of global entrepreneurship³⁰.

Establishment and Launching the Business

Backers of the Dakota Halal Processing Plant raised \$870,000, the majority of it from area ranchers through Central Dakota Beef. Central Dakota Beef, an offshoot of the Central Dakota Cattle Association, bought 60% of the shares in Dakota Halal. Dr. Aldayel, who serves as President of Dakota Halal Processing, and two undisclosed investors provided the rest. The City of Harvey (Harvey Building Development Company) built the \$1.5 million plant, and leases it to the company. The Harvey Economic Development Department and the Minot Area Development Corporation (based in Minot, North Dakota) are also investors. Harvey's Economic Development Department has invested \$250,000 in preferred stock shares, and the MAGIC Fund (through the Minot Area Development Corporation) has invested \$50,000 in preferred stock³¹.

Production started with 19 employees at the plant initially. In its first year of operation, Dakota Halal is butchered about 20 cattle a week with plans to expand. The capacity of the plant is 5,000 head per year and can be expanded to accommodate 10,000 head per year. Production of Halal beef and lamb started in March 2001. Prepared meats were introduced in November 2001 and Microwave-able dinners were introduced in January

2002. Plans are under the way for the introduction of poultry products and canned foods. According to Dr. Aldayel, he has a long-range plan for the introduction of baked goods, beverages and other Halal food products³².

Regarding Dakota Halal, Matt Burthhold of the U.S. Department of Agriculture said, “Halal fits right into this community. Locating the plant in Harvey gives the area cattlemen an additional market and keeps the value added dollars at home.” Burthhold further said, “With the continuing depressed farm economy, this gives area producers the opportunity of taking North Dakota products, adding value to them, then shipping them out and bringing capital back to the state.” Another great advantage of locating the plant in a small town like Harvey is that the labor turnover is likely to be low as compared to big cities³³.

The mayor of Harvey, Jason Schneider, expressed great enthusiasm for Dakota Halal utilizing many crops cultivated in North Dakota to supply raw materials for canning. Recruited by Dr. Aldayel, a food canner currently located in San Diego, expects to relocate to Harvey in near future. Tax incentives are currently being negotiated, and given California’s problematic power and water supply, abundant and cheap North Dakota utilities are key motivators for the California canner³⁴.

APUC Grant

Dakota Halal is one of the eight projects that will benefit from grants awarded by the Agricultural Products Utilization Commission (APUC) in May 2001. This commission seeks to promote the use of North Dakota agricultural products and increase the well being of the state’s agribusiness community. The \$75,000 grant has been provided to recommission a poultry-processing plant in Tolna, North Dakota for the purpose of processing Halal poultry.

With this grant Dakota Halal has initiated the efforts to process chicken, turkey, duck and pheasant to add to their Dakota Halal beef line. The funds will assist with legal services, business planning, marketing materials, engineering and design costs, and securing USDA certification³⁵.

USDA Grant

Dakota Halal is one of the five North Dakota value-added agricultural ventures, which have got grant money from the 2001 US Department of Agriculture’s Rural Development Program’s \$1.7 million allocation. From this amount, Dakota Halal obtained \$487,708³⁶. These funds are meant for product market development. It will be used mainly for packaging design, advertising, promotion, and operating expenses. “North Dakota value-added enterprises competed for these grants with some of the most innovative proposals in the country,” said Gov. John Hoeven. “Now they’ll have the capital to start or expand new operations around the state.” Dakota Halal’s market development operations will be conducted from the Business and Technology Center in Maddock, North Dakota³⁷.

Mission, Vision and Philosophy

The mission statement of Dakota Halal is as follows³⁸.

“The mission of Dakota Halal Processing Company (DHPC) is to supply the food needs of Muslims who want high quality, strictly Halal food. The company’s high quality, natural food products from healthy humanely treated livestock fed on a vegetarian diet will also appeal to many non-Muslims.”

“Certified Halal” or “Zabiha Halal” certification by a recognition authority generally means that the slaughtering facility has been inspected and found to be following Islamic norms and procedures for Halal meat. According to Dr. Aldayel, the moving spirit behind the philosophy of Dakota Halal is this. Most Halal meat available to the consumers in the world as well national market comes from livestock that has been purchased at auction, with no record of the animal’s previous history as regards the diet and treatment. As there is no guarantee that the animal has not been fed hormones, animal by products, or even bone meal from swine, prior to purchase, it becomes questionable whether it is truly Halal or not. A well-meaning Halal butcher who slaughters livestock in accordance with Islamic requirements can not be sure whether it is truly Halal or not. Dr. Aldayel saw an opportunity in this dilemma, and came out with a business concept, which he translated, into action. Another distinctive aspect of the business philosophy of Dakota Halal lies in its commitment to ensure that the meat is not only Halal, but also good and safe for human consumption. According to Dr. Aldayel, the worldwide spread of “Mad Cow” disease has proven the wisdom behind the Islamic concept of Halal. This deadly disease comes

from feeding the bones, fat, intestines, and other “offal” to cattle. Feeding any animal by-products to livestock has been contrary to Islamic teaching for over 1400 years³⁹. Feeding cattle parts to cattle has been banned in most western nations in past few years. Hence, it is important to control the genetics as well as the feeding and care of the cattle and sheep to be slaughtered for Halal meat. Dakota Halal’s business philosophy is based on these two concepts, which are actually the two sides of the same coin.

Quality Assurance

In pursuance with its business philosophy, Dakota Halal has come out with a set of strict norms and procedures for quality assurance. Its quality assurance program sounds to be multi-faceted. It adheres to USDA requirements involving the monitoring of the process by a federal inspector, and also abides by the Islamic norms and procedures, as outlined above. It collaborates not only with Central Dakota Cattle Association but also with Islamic Society of North Dakota for monitoring and ensuring that the livestock are raised from birth on a strict vegetarian diet, with no animal by-products of any kind and no hormones. Muslim American Food Council has inspected and certified that Dakota Halal controls all aspects of the product from birth to the finished product⁴⁰.

Guarantee

Dakota Halal products under different brand names including the Sheyenne Valley brand carry an unconditional guarantee of being strictly Halal in pursuance with Islamic norms and of premium quality. If a customer is not completely satisfied with a product of the company for any reason, he/she can get a replacement for his/ her purchases, or can claim a refund⁴¹.

Customer Service

Just like any modern business enterprise, Dakota Halal has been using its website as an effective tool for promotion. Dakota Halal’s website is quite comprehensive, and provides most pertinent information in which customers are likely to be interested⁴². Dakota Halal is committed to provide a high quality of customer service. Besides an interactive website it has also following channels of communication with its customers:

1. A toll free telephone number: 1-866-90-Go Halal (1-866-464-2525)
2. A fax number: 701-324-2478
3. An e-mail address: sales@dakotahalal.com

The company has understood the importance of getting feedback and input directly not only for the existing customers, but also from others who are interested or are likely to be interested in the company’s offerings. Its “**Halal Food Survey**” questionnaire (available online) addresses the issues that pertain to:

1. Distribution Channels (Halal Food Store, Supermarket, Mosque, or others),
2. Quality of meat,
3. Consumer preferences towards different products, and
4. Consumer perspectives towards the concept of ‘Halal’.

It evinces that Dakota Halal is endeavoring to understand consumer behavior for identifying target market segments, and for developing successful marketing strategies. A 10% discount coupon is sent to a person completing the Halal Food Survey on-line. It sounds to be a smart way of sales promotion. The company sells its “**Al-Dayel Gift Certificates**”, which are available in any dollar amount starting at \$35.00. It is a great way to allow anyone to whom it is given to select his/her own Al-Dayel gift. The recipients get a personalized card from the gift-giver, along with their certificate, and an Al-Dayel catalog and special toll free number to make their selection easy. It also guarantees a custom assortment that is just right for a recipient. The company is interested in getting involved in the community work. In this effort it has come out with a “**Masjid Support Program**” through which Dakota Halal customers can provide their mosques and Islamic schools with ongoing financial support, while providing their families with a convenient source of good tasting, high quality, and strictly Halal food⁴³.

The packaging and shipping are critical aspects of marketing process for any enterprise like Dakota Halal, as

the products are of a perishable nature. In case of Dakota Halal, each item is individually wrapped, vacuum-sealed, fresh frozen (to lock in the flavor), and shipped with dry ice in a durable Styrofoam container⁴⁴.

Marketing Channels and Direct Supplies

Dakota Halal is pursuing a multi channel approach for marketing its products in the domestic market. It sells through grocery stores or food marts, sells directly to individual customers, and has embarked upon a strategy to supply to institutional buyers. The company is in the introductory stage of its life cycle, and its channels are not fully developed. It needs to tap the market by developing an appropriate channel strategy. As it grows, it will make its choices whether and to what extent to develop its own channels and/or to depend upon established channels like chain stores. As its existing operations are only on a limited scale, it is not a big issue. Its direct selling system will undergo different changes, and will have to be organized depending upon the demand of the scale on which it operates at any point of time in future. At present, the company accepts orders on-line, via fax, through conventional mail, and also over toll free number. The payment is accepted through check, money order, or credit card B American Express, Via, Master Card, or Discover. The shipment for individual buyers is via UPS with two days delivery across the country. However, the total standard delivery time for the continental USA is within five to seven days from receipt of order. If possible, the company can manage even a faster delivery, or delivery outside the continental USA, upon request⁴⁵.

Ethical Business Practices

Dakota Halal is committed to ethical business practices. It has a comprehensive private policy statement on its website. It has the commitment to abide by and to pursue proactively the guidelines of the Better Business Bureau, Consumer Protection Office, and the Federal Trade Commission⁴⁶.

Product Strategies

Dakota Halal has embarked upon a multi name branding for its products. Its products are marketed under the brand names, “**Zem Zem**” and “**Al-Dayel**” to Muslim markets; and it produces meat aimed at the non-Muslim market under the name “**Sheyenne Valley**”. According to Dr. Adnan, “the company’s high quality, natural food products from healthy humanely treated livestock fed on a vegetarian diet will appeal to non-Muslims, particularly to the health conscious people⁴⁷.”

As a new and growing company, Dakota Halal is expanding its product line. Its plant is equipped to produce everything from carcasses and boxed meat parts to processed items such as sausage and smoked jerky. It will eventually process not only cattle, sheep, lamb, or goat, but also bison, deer, elk, and poultry, which will be marketed in large cities that have large Muslim population, and through direct selling via on-line. “Also, we will do custom processing for people who butcher their own cattle or bison and market under their own name”, Dr. Aldayel said⁴⁸.

Dakota Halal believes in the philosophy of a large and wide product line⁴⁹. At present, its product mix includes the following:

(1) **Dakota Halal Choice Beef:**

- (a) Halal Beef Steaks: Beef Filets, Porterhouse Steak, T-Bone Steak, Strip Loin Steak, Rib Eye, and Sirloin Steak
- (b) Halal Beef Roasts: Rib Roast, Top Round Roast, Sirloin Tip Roast, Arm Roast, Chuck Roast, Beef Brisket, and Striploin Roast
- (c) **Miscellaneous Halal Beef Cuts:** Beef Kabobs, Stew Meat, Lean Ground Beef, Beef Liver, Beef Heart, Beef Tongue, Beef Kidney, Unseasoned Beef Burgers, Gourmet /Seasoned Beef Burgers, and Tenderloin Tips.

(2) **Pre-Cooked Products:**

- (a) **Microwave-able Products:** The company has launched following products with effect from December 1, 2001, under this category:

- (i) Lamb Curry (in gravy with rice and tender peas)
 - (ii) Beef Curry (in gravy with rice and tender peas)
 - (iii) Beef Tenderloin Tips (in gravy with noodles and corn)
 - (iv) Beef Meat Balls (in gravy with noodles and tender peas)
 - (v) Beef Salisbury Steak (in mushroom gravy with noodles and tender peas)
 - (vi) Beef Meat Loaf (in mushroom gravy with noodles and a medley of vegetables)
 - (vii) Roast Beef (in mushroom gravy with mashed potatoes and a medley of vegetables)
- (b) **Meat Loaf:** Meat Loaf, Breakfast Links, Beef Frankfurter, Beef Bologna, Ground and Formed Roast Beef, Beef Tenderloin Tips, Snack Stick, Hit Beef Frankfurters, Smoked Cured Beef, Breakfast Beef, Beef Summer Sausage, Beef Jerky, Cooked Roast Beef, and Regular Summer Sausage.
- (3) **Halal Lamb / Sheep:** Leg of Lamb, Lamb Shank, Lamb Chops Lamb Shoulder Chops, Lamb Stew Meat, Ground Lamb, Lamb Shoulder Roast, Lamb Ribs, Lamb Kidneys, Lamb Liver, and whole or 2 Boxed Lamb.
- (4) **Premium Halal Beef:** The company claims that premium beef is naturally aged to unlock the full flavor, exceptional taste, texture and tenderness. Under this category, it sells Filet Mignon, Strip Sirloins, Rib-Eye Steaks, Gourmet Steak Burgers, Beef Prime Rib Roast, Beef Ribs, Dakota Sirloin Kabobs, and Classic Halal Beef Meat Loaf. The Filet Mignon, and Halal Strip Sirloins of different thickness to suit to a customer's preference. Halal Strip Sirloins have been developed on the pattern of New York Boneless Strip Sirloin, sometimes called Kansas City Strips. Al-Dayel Porter House Steaks of different thickness are big, bold, and juicy, to suit to a customer who wishes to have a whole Filet Mignon and a whole Strip Sirloin at the same time. Halal Rib-Eye Steaks on the pattern of Delmonico Steaks, which are distinguished by the rich marbling that slowly melts and bastes the meat during the cooking process. This gives rib-eyes filet like tenderness along with the full flavor of a New York Strip. Halal Sirloin Kabobs are made of marinated tender beef sirloin combined with mushrooms and green and red peppers on a metal skewer.
- (5) **Al-Dayel Dakota Halal Turkey:** Dakota Halal has come out with an oven-roasted turkey. According to Dakota Halal sources, a turkey is specially fed, hand selected, and pre-basted in an exclusive recipe. Then, it is carefully oven roasted to a golden brown, ready to thaw, heat, and enjoy on any special occasion, like Thanksgiving.

Marching Ahead

Dr. Aldayel said, the company sells its meat in California, Detroit, Minneapolis and Cedar Rapids, Iowa, as well as in hotels and steak houses in Qatar and the Kingdom of Saudi Arabia. "We're looking to cover the U.S., to be the largest processor of Halal food in the US," he said. The company hopes to capture a large segment of market through frozen, ready to eat products that can be heated in just a few minutes⁵⁰.

The eight million US Muslims of are ethnically segmented. And this ethnic and cultural segmentation has got a lot of implications for a company like Dakota Halal. For example the African-American Muslims have their food habits as very distinctive as against the Muslims having Asian heritage. Similarly the American Muslims of Indian or Pakistani heritage has their different preferences for processed meat products. So is the case with those with Arab heritage. Dakota Halal has a consciousness towards addressing the needs of these different market segments. It is estimated that the population of the American Muslims will be 16 million by the end of the year 2010. Dakota Halal is targeting such a growing market. Its market is indeed very big even today, as Halal meat is always a major item of food of Muslims from anywhere in the world. The food budget of eight million people will run into billions of dollars, and if Dakota Halal is able to tap even a small, say 20 or 30 percent of the total potential, it will emerge as a big enterprise, and will have a very positive impact on the economy of the State of North Dakota⁵¹.

How is the competitive environment for Dakota Halal? Within the United States, the current players are scattered, and comprise mostly of small scale, private slaughterhouses⁵². American consumers of Halal meat do experience problems and have been experiencing problems in getting a regular supply of quality Halal meat. In some instances, they are found complaining of inferior quality and also of lack of standardization. Dakota Halal can fill this gap by positioning itself strategically in this market. The most popular and publicized Halal meat corporation that is operating across the whole North America is Al-Safa Halal Independent Grocers, which actually is a Canadian firm, and is endorsed by Islamic Food and Nutritional Council of America. It has a wide range of products, including beef, chicken, fish, pizza, and falafel. Al-Safa Halal is an established player, known to Halal meat consumers across the United States and Canada. Its list of customers includes more than 200 retailers, grocers and restaurants located in California, Connecticut, Columbia, Georgia, Florida, Illinois, Indiana, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Texas, Virginia, Ontario, Quebec, Alberta, Nova Scotia, and Manitoba⁵³. Dakota Halal which is at the introductory stage of its learning curve, will have to decide how far, to what extent, in which, and how fast it would like to compete against an established player like Al-Safa Halal, or against small, scattered Halal slaughterhouses.

Dakota Halal products are perceived as more expensive than supermarket beef, which is available to non-Muslim customers. According to Dr. Adnan, it is so because of added feed and handling costs, higher standards and better quality cuts of meat. With a growing number of consumers becoming health conscious and more aware of Mad Cow disease, the demand for domestic high quality meat (even with expected higher price) will increase.

Dakota Halal will have its own learning curve. To begin with, there is bound to be a struggling time before it reaches a stage when it can break-even, probably after three to five years, and then take off from there. It has the support and blessings of the local as well state leadership. Dakota Halal is targeting to become a big player, not only nationally but also internationally. Dakota Halal has already captured the image of an innovator in the retail meat industry for domestic and international markets. As it climbs the product life cycle, it should continue to excel through diversification, consumer satisfaction, and adapting meat products to suit to the needs of the target market.

Policy Options for North Dakota

According to Ken Rogers of the Bismarck Tribune Newspaper, “When the state (North Dakota) began taking control of its economic future in the late 1980s by investing in value added agriculture, it was understood that not every venture would be successful. It is understood that the State’s farm, ranch, and business communities had to be in it together for the long haul.” Rogers also stated, “Cattle producers, on the other hand, have had the hardest road in finding new value-added venture.” There is a major potential for increasing cattle production in eastern and central North Dakota. There is also a huge amount of low-priced feed that would support a good-sized industry. North Dakota has got all that which contributes to a good cattle market⁵⁴.

Other recently emerging ventures, which have gained attention, in addition to Dakota Halal Processing Company, are North Dakota Barley Feeders Limited and Dakota Heritage Beef. The North Dakota Barley Feeders Limited has plans to acquire 10,000 to 15,000 head of cattle. The Dakota Heritage Beef has been incorporated for the production of frozen beef products. Each of these potential successful ventures has a strong chance both for survival and growth, due to extended research and education. An added benefit for North Dakota ventures, according to Rogers, “...is that North Dakota has become a laboratory for agricultural entrepreneurship (and this has short- and long-term assets⁵⁵.”

North Dakota should have a bright future as an international supplier of specialized meat products. The State of North Dakota has a tremendous potential for meat processing, and can become a major player in this market. North Dakota meat farmers and processors should be able to capture a bigger slice in the national as well as global markets. The community leadership should focus on developing local entrepreneurs, and should also have programs for attracting entrepreneurs from outside the State, as well as from across the globe.

Halal Food Management Framework

Smaller producers such as Dakota Halal are pointing the way by providing a high quality product and instituting a control system that allows observant Muslims to confidently enjoy Halal products that are truly Halal

products. Thus, Dr. Aldayel and his North Dakota cattlemen partners are pioneers of a modern Halal Food Management System. This system suggests a comprehensive quality assurance program with strict controls and audits that could be instituted by others as well. The following captures the essence of this system.

The responsibility of the Halal certification authority normally begins at the slaughterhouse, but the appropriate starting point is at the farm and the feedlot.

In this system monitoring begins with the birth of each animal and the assignment of a unique control number (physically attached to the animal with an electronic ear tag)⁵⁶. All animal health procedures/measures such as castration and vaccinations are recorded. Halal nutrition inputs are specified and recorded for each animal.

In order to sell his/her animals to the Halal meat processor, the farmer/cattle feeder must agree to keep such records, allow spot check and audits, and produce accurate input records prior to the animal's slaughter. At the slaughterhouse the certification procedures normally associated with Halal certification are followed. The next area of concern for potential pollution lies with the transportation and distribution of the product. For protection of the consumer, Halal products should not co-mingle with non-Halal products. Modern volume-specified packaging accomplished with impervious materials such as foil or plastic pouches provide a partial solution. However, logistics tracking technology also must be integrated into the Halal food management system. With UPCs (universal product codes) it is possible to trace the history and progress of any item that is shipped⁵⁷. Such tracking is even possible for individual consumer portions. Thus, these technologies allow monitoring and control of the product's trajectory from the processor to the consumer.

In regard to transportation, and wholesale and retail operations, additional checks are needed. Any system can be foiled and spot checks and audits by the certifying authority are necessary to ensure that Halal compliant products remain so. To implement such a system requires certifying authorities to expand their roles and purview to include all links in the logistics chain.

With a comprehensive system in place the purchase dollars of observant consumers will buy products that are safe, secure, and truly Halal. In addition, with such a system the benefits of Halal products should also win the purchase dollars of non-Muslim consumers who are concerned with food quality and safety.

Summary

The population of Muslim consumers is growing faster than that of other groups. More and more observant Muslims are concerned that the foods they consume are indeed Halal foods in every sense. Most Halal certification agencies only supervise the actual slaughter and processing of the animal. A small North Dakota-based processor, Dakota Halal has pioneered a cooperative system to track and ensure that every animal it processes has not received growth hormones or any forbidden nutritional supplements.

Conclusion

The experience of Dakota Halal can be used to inform and construct a Halal certification system that ensures the product's authenticity and wholeness from the farm to the consumer. In developed countries like the US, modern agro processing is usually not considered to be Halal friendly. However, modern management techniques and technologies can be made to support of a comprehensive Halal certification system.

Recommendation

Halal certifying authorities must broaden their purview to include all phases of the food production and supply chain and provide the service that observant Muslim consumers desire. That is, food products that are truly Halal.

Notes

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