

# Halal Industrialization into Food Production-Global Perspective, Scientific Gaps & Proposed Solutions

R N A Khan\*

M.Sc. (Hons.) Poultry Science, Independent Researcher, Malaysia.

**Note:** This article is independent from any religious affiliations, biasness/un-biasness & are for scientific research and academics study purpose only.

**\*Corresponding author**

R N A Khan, M.Sc. (Hons.) Poultry Science, Independent Researcher, Malaysia. E-mail: rnaservices7@gmail.com.

**Submitted:** 28 June 2017; **Accepted:** 09 July 2017; **Published:** 08 Sep 2017

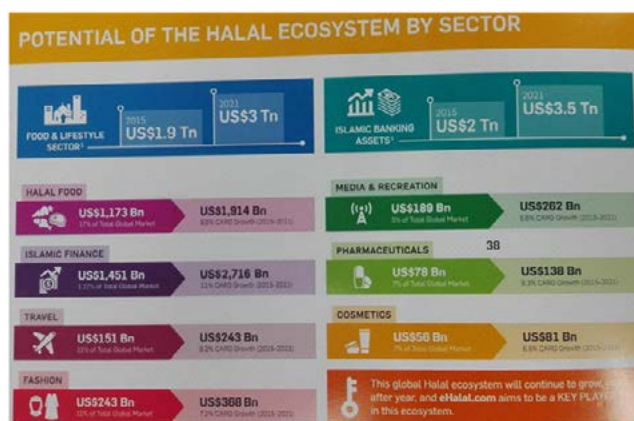
**Abstract**

Halal food is associated with billions of people so it's logically easy to predict that any problem with-in halal food can give birth to serious food-crises with huge losses to economics, market, food-chain and energies along demand of huge shift of funds & food provision camps to cope it and cover up the need of food for halal industry-grade food user. If a food set up have some benefits then the same set up must have some drawbacks as well, especially when it's not under scientific lines. Risk analysis & management as precautionary measuring tool are vital in case of halal industrialization. Moreover the past history response & set of behaviours told that the issues & crises associated to followers of Islamic ideologies, especially religious & sharia related matters usually turn disturbing & violent as well all around the globe, whenever some problem identified & arise with-in them. Wise approach is to see the drawbacks, gaps and their expected solution as crises management relief.

**Introduction**

Halal is getting evolutions and it is turning from an religious order & procedure for meat production by halal way of slaughtering & prohibition of pork, blood, alcohol etc to toward “permissible & not permissible” kind of frame of references in all matters of everyday routine, way of living & lifestyle, norm etc. Now halal is trending toward a scared cultural-principle entity along strongest influential effects over to trading and marketing among Muslim population which is estimated more than 1 billion at globe with high rate of growth per anum. Apart from the religious beliefs & education that usually followers has, this 21st century human beings need an explanation as to why Muslims prefer this way of slaughtering as the best one in the world other than diversity of types of slaughtering & processing methods. What actually behind the halal is as now days halal industrialization is not only restrict to meat but it covers all food & feed types, cloths, pharmaceuticals, cosmetics, water, property, tourism, traveling, banking & finance, trading, music tunes, agriculture, logistics, social environment, way of linings, and overall all possible aspect of Muslim life with concept of “permissible/ not permissible” by sharia aspects of diversity of Islamic ideologies as Islamization of knowledge.

Muslim World existing today is entirely based on the halal methods including slaughtering for consumption of any kind of meat & food products other the ones that are forbidden by religious educations. The thorough understanding of why they prefer or are forced to only consume the halal meat & food products requires the proper understanding of what actually halal means and what are the factors like environmental, social, market, religious educators and stakeholder make influence over to this “choice”.



**Figure 1:** Estimation of Halal Market Volume (source: Malaysia halal industry)

**1. Argument on what is Halal in Basic & Allowed?**

According to the religious definition halal means, an allowed animal is slaughtered by a Muslim ahal-e-kitab person, and animal face facing kabba (the holy Muslim shrine) using only one cut given on the animal’s neck severing its jugular veins and arteries with a very sharp knife. The animal being slaughtered by this method is considered to be halal or clean (PAK) by Muslims and permissible for their consumption. Now the point that really need elaboration here is that why only Muslim people wants a meat that is slaughtered like this and no other person professing some different faith. Do mechanisesget affected by faith? The answer to this question provides by religious scholars are just telling that in a

simple fact that it is ordered by the Quran that is the holy book of Muslims. Some also do claim among Sufism of Islamic ideologies that some metaphysical effects & personal mind satisfactions are among the reasons. Still no clear answers except the apparent trade controlling reasons.

## 2. Arguments on when and how Muslims can Consume Non-Halal Products

This section will explain the beliefs, laws and common perceptions about consumption of non-halal products that will include,

1. Blood, pork / carnivores, alcohol, none halal meat, none halal slaughtering methods are not allowed; but at the same time all is allowed under specific circumstances with in specified minimum quantity for life saving purpose only.
2. Halal Slaughter; Procedure and concepts: natural diet (pre slaughter and pre-mortem), religious prayer to Allah (the name of God in Islamic ideologies), very sharp knife (animal rights), slit the throat (procedural approach), by Muslim or people of the Islamic holy book (processing requirements), blood must be drained out (concept of wholesome finished product).

## 3. Why Halal is on Focus in presence of many other Religious Food types at Globe

Basic reason is that that by followers of Islamic ideologies have its demand & implementation globally in all circumstances regardless of location & surrounding environment & other issues. However such compulsion created many effects which generate different reports like: (Media reports available)

1. **Phase 1:** Followers of Islamic ideologies deny to perform their job duties if to deal with any none halal entity is part of duty, either its bank Interest or None halal Food or None halal aspects of living. Such things bring the impact of sharia laws on everyday life of Islamic followers and other who were not followers but are in surrounding social/working environment .
2. **Phase 2:** Force to choose halal rather than none-halal not even on themselves but on social/work surroundings as well and demand to make it part of law of none Islamic societies as well.
3. **Phase 3:** The matter of provision of halal entities and resistance to none halal entities turned violent as well when faced issues on the name of “food of choice”. The strictness of behavior along none-negotiateable stand by followers of Islamic ideologies marked Halal as issues of Islamic life and denotes Halal as the compulsory code of conduct of living under their faith.
4. **Phase 4:** Compulsory enforcement & legislation via establishing halal standards guide lines & Halal Certifications as compliance with Islamic sharia laws to all those who want to sell products in Muslim majority areas.
5. Halal at present containing following along it:
  - a. Socio-religious demand
  - b. Separate identity symbol
  - c. Risk for diseases due to none clear hygiene and source of food borne diseases (Salmonella outbreak, report 2013, USA)
  - d. Market competition from open to close
  - e. Compelling approaches & violent trends
  - f. Mandatory Halal certifications for every one
  - g. Halal as set of Islamic sharia law into multicultural societies responsible for polarization
  - h. Halal as brand of uneven multidimensional industry spread,

and abnormal market distribution commercial companies at globe who wants to sell their products with in Muslim societies and to the Muslims made the things very much highlighted among people at Earth. Now halal is considered as Trade-Door to get entry into Islamic population and not on scientific research lines but in compliance with Islamic sharia laws by Islamic ideologies stake holders. Halal attained a status of Market Barrier as well (Media report available).

## 6. As Initial Risk Assessment it can be find that Halal industrialization & food have lots of gap areas into:

- a. Conceptual level
- b. Production level
- c. Processing level
- d. Marketing level

None of the other food with any religious processing type at globe has such things as that can affect the world food chain and have trillions of USD of investments other than Halal. So any future problem with-in halal industrialization & food chain can affect approximately 1.5 billion people at globe with severe risk of starvations and downfalls into economic situations as they only want to consume, buy, sell Halal.

## Review of Literature

### Challenges, Objections and Threats to & by Halal Industrialization: Raised by Diversity of People at Globe

This data was collected by analyses of as many as available reports and presentation all around the globe regarding complain, objections about halal. All the data, videos, articles are available at internet, blogs, newspapers, YouTube and websites of such campaigns. It will give a clue that what are the basic works required to make corrections in halal industrialisations upon such challenges.

### Key Trends and Valid Objections Behind Halal Food by Opinion at Globe

People among diversity of social setup along Muslims raised different concerns about halal, and some of their argument deeply requires further investigative research. The following are sets of collected arguments from diversity of literary sources at globe to identify the gap areas in Halal.

1. What actually halal itself is, halal industrialization Bridging, an adoption or an innovation?
2. Further food processing R&D in term of flavor, taste and customized products is not practically considering as required for further studies toward halal sciences?
3. Sharia complains with science have spreading gaps. Is it not possible to divide sharia compliance in to different levels from basic to advance for a step forward toward uniformity
4. Do Halal Threat Points with in itself get checked ever?
5. Halal Monitoring, evaluation, analysis and learning (MEAL) Approach is present?
6. Trend lines ever checked rather than the predicted faith base behavior of buyers?
7. Halal's food quality, safety and wholesomeness is addressed by Islamic religious scholars to implement in shape of laws?
8. Cutting short and minimizing the role of sharia experts and theocratic organizations in halal certifications, developing the Sharia Control Check Points & Lists, and any ordinary Muslim can perform the task along risen of none profit base

- certification; do Halal need all these?
9. Do the combination of Sharia auditor and Food Auditor make sense to implement a religious order which is supposed to be covering all life styles of living? Do Islamic sharia don't have its own rules and regulation to ensure the halal without taking help of ISO and other none religious certifications for quality assurance etc?
  10. Issues of none uniformity in Halal standards & quality control, what practically Halal auditors have to ensure by religious laws and on what basis if science is not needed or secondary sourced & usually developed by none muslims scientists & companies?
  11. Analysis of anti-halal moment and the preparation of logical literary solution are the best approach for branding and sustainable marketing purpose; can it be observe into halal industrializations? Halal awareness and literary answers to opponent of halal on logical basis with effective monitoring of such anti-halal literature and movements for logical and peaceful answer is need and the best answer is based on science and truth by establishing of industry representative Halal Pros and Con Centre. So halal authorities need to admit that like every worldly thing Halal also have pros and cons in light of diversity of frame of references which exists and practiced at globe, more over they need to prove Halal rather than leave behind the facts or hide valid arguments under the umbrella of religious order, which itself is not have clear-cut coverings except than meat and few forbidden entities.
  12. Why prefer less wholesome, doubted and none-consistence halal food over wholesome, safe, and pure none-halal food?
  13. How halal certification is not modern day invention, any references from past eras of Muslim heritage, as living with none Muslims world is from the beginning of Islam?
  14. Manipulation behaviors of Halal certification organization on the name of sharia compliance are one of the widely reported problems regarding halal. What to certifiable and what not is not clearly mentioned now, so people think that lack of focus on proper policies regarding certifications is not good and it seems that it's a big gap area which is encouraging the organizations to get maximum certifications as the seller is adding up the price of halal certification in to buyer's bill. What the answer halal industries have for it?
  15. Halal by chance or halal by choice? For ethical marketing there is need to make public awareness campaigns, seminars in their interest to urge the demand among buyers to ask halal certification from seller rather than to impose that by religious pressures and unannounced social laws. It will drain the energies of industry after some time as halal is getting implement by emotions, tomorrow it will be practice and then habit but still base is emo-tion. A market based on emotions is reliable market for long-term investments?
  16. Must clarify & categories all kind of edibles which require halal certifications; Now even certification is needed for honey, milk, water etc. Now a well-established new trend is that halal certification are required at every step of entire food chain. All kind of permissible food and none food companies which is involved in production till marketing on the name of halal logistic, mean that transportation is free from none halal contaminations. Do they check the air and soil as well where that transport travels in future? is there any end level of halal certifications?
  17. What about if logo of "Halal" issued by some halal certifying organization is replaced by some none Muslim Food Company/ Certifier with the logo of "Permissible" by their own and with true food characteristics behind it, then logically in open market where halal certification will stand? Why the careless behavior of certification organizations and auditors are compelling matrix of market forces to react back?
  18. Halal limiting approach or Halal Maximizing approach is needed? Do less & user friendly laws cover maximum is not need of the time?
    - a. Halal certification free products are vital need of the time to mention, better is to describe the type and categories of those products which need halal certifications and why, creating some real differences in halal certifications and halal labeling of commodities is demand of sustainability.
    - b. Halal Pet Food, Halal speed dating(Kuala Lumpur), Halal Water, Halal Honey, Halal Condemns, Halal sex shop (Uk), Halal tunes and music, does it make sense or its again representation of gap areas into conceptual and implementation levels?
    - c. By such trends in future many landing zones in market will get hot for halal landing into its own Base.
  19. Halal Sustainability and Challenges are very important topic and it's not just to explore the market option, that is one key for it only. There are many other factors as well which seems very little now but when they will get rooted more and more deep by passing time then in future halal industrialization will feel too many troubles to deal with them. So Do not feel need of following at priority basis?
    - a. Halal Threat Control Centre (HTCC)
    - b. Halal Centre of Sustainability & Challenges (HCSC)
  20. Need to calculate that what is behind the division of market, resources, % share and the key reason is absences of unanimous standards among Muslim sharia scholars. Two things will get high light after accessing this gap area for every major stakeholder.a
    - a. Share % in reality because of individuality in market share
    - b. Share % in reality because of none consensus among different school of thought with in Islamic educations.
  21. Who will come & how to establish unanimous sharia standards as the differences of religious scholars are none end able entity from beginning till end. Do still science for standardization is not needed?
  22. To make halal as a testified healthy products; comprehensive fatwas are needed to add value additions in quality parameters; e.g., grading in shape of "Tayyaban", Do these are the areas where sharia scholars and auditors need to get focus now?
  23. If see the trends of development in halal industry then 90 % focus on marketing, 10 % on others like expansion, study and research. Dose carrying on such gap are a wise and advised approach?
  24. Any work done or even in air as well regarding Halal farming SOPs; Do this important and basic gap area need attention?
  25. Any kind of scientific, physiological, pathological, social, physical, medical, ethical etc kind of advantages and disadvantages of halal slaughtering methods and halal food production? Do this gap area is vital too?
  26. Halal certification cost, halal courses costs are actual, factual or it has some percentage for some sort of religious/ religious person tax? Halal certification a none-profit or not? This gap area needs to be addressed?
  27. What are the expected logical branches of halal products,

- covered area of actual halal terminology? Cosmetic, pasture, sea food, travel, pet food, hoteling, life etc? What are and where are the future trend lines with prefix of Halal will lead the halal industrializations with all of factors? Do such gap in balanced and effective forecasting need for consideration or its ok till the time halal is getting sell without extra efforts?
28. Is halal certification serving as a ticket to play in market of 3 Trillion US \$, is halal a pure market entity or halal is as religious order to obey? Does halal have some boundaries and limits? Is this gap area need to be investigated further?
  29. An independent Halal Farm to Fork Standard is needed, if not then why not?
  30. Factor effecting public perception on halal food manufacturing, marketing, consumption till re-demanding; ever feel need to take under mega study plan with its both major types?
    - a. Religious factors
    - b. None-religious factors
  31. Involvement of bribe, none ethics, malfunctioning, politicizing and conspiracies into halal food business ever get enlisted with reasons and appropriate recommendations by any halal related organization, such gap areas in halal scope are vital to look after seriously?
  32. Halal response centers need to create to answer gaps like followings
    - a. Halal is lawful or permissible food or certain food categories only?
    - b. Halal is as super grade or wholesome food by nature?
    - c. Same basics in halal production and addition in co-requirements can be work out for one standard of halal food production?
    - d. What is the relation between halal and food quality
    - e. Do halal food can be “Napak” (spoiled) or none consumable?
  33. Halal food and halal certified food; can both be acceptable at same level, what can be the difference between halal and halal certified and how these terms need to be used in halal production and marketing and what can be the authenticates and confident level along public perception?
  34. Halal as a lawful commodity or as a wholesome product is still under questions due to legislation gaps.
    - a. Halal is a state/ formation of product?
    - b. Halal is a combination of traits under some specific set of rules?
    - c. Or halal is comprised on certain specific ranges of parameters inside the products?
  35. Future social environmental trend line estimation need to be figure out rather than just see the supply and demand of market figures. Such gaps toward deep down scientific approach will get cover ever?
  36. Islamic famous products as Islamic ideological identification marks in front of rest of the world are as;
    - a. Mosque, Eid and festivals, cloths and morphology, Quran and every day Islamic wording, social set of living etc.
    - b. The matters related to Human rights and victimization
    - c. Jihad and concept of ruling the world by every means
    - d. In this situation how can Halal be remain in good books at Globe as a valued product without focusing on research and development. All above mentioned identifications are by religious scholars. Do sharia scholars have ability and some thought to fill such gap in case of halal & scientific standardization is needed?
  37. Any contamination at any level till consumption can change the status of consumable from halal to haram, as presence of halal certification in series shows. It is a very important point in halal sustainability; it means that it can lead toward deep involvement of food science aspects in halal. And when the decision of consumable or none-consumable is toward science, and status of halal need to be decided by science finally then what is the point to get certifications for permissions at a middle step of food production and meat slaughtering from sharia experts? Any logical & satisfactory answer for this gap area?
  38. Here an important concept that needs to be addressed is the difference of choice and education especially with reference to deviation from original education and allowance range toward choice in food and its quality parameters.
  39. A very key gap areas are relationship between Human scenes on halal food;
    - a. Relationship between taste and internal matrix of knowledge and feelings?
    - b. Influence of taste on public perception, intention and choice toward halal and none halal food?, What are halal taste, smell, look, touch and feelings during consumption of halal food?
    - c. Human feeling in halal surroundings (Interiors design, behavior of surrounding people and patterns) and what are the halal surrounding patterns?
    - d. Halal environment and products; their relation and their effects on human scenes?
    - e. Do human thoughts, behavior, and ethics get affected or influenced by halal food?
    - f. What is concept of “Barket” (metaphysical goodness), does it exist physically or in any other shape, does it have any relation with halal food, is there any scientific evidence of “Barket”?
    - g. What is the relation of body make up or body acceptability or body which is well suitable to/ with halal (food)?
  40. How to generate & standardize the healthy halal market competitions, a thunder-gap which can shake the market at any time?
    - a. It is the key behind all difference in halal with in Islamic education?
    - b. It is the key behind the entire future arising situation in battle to acquire maximum % share to provision of food (political power) and its marketing (Money)?
    - c. Formulation based on fixed marketable production capabilities can be an option?
  41. Halal starts from which level, what are the exact codes of references behind it? its just processing of products or from seed till seed & egg till egg, it covers all? After Halal feed for halal food animal, will it continue the trend towards.
    - a. Halal fertilizer for halal vegetables, crops and fruits, & Halal water & irrigation etc?
    - b. What is the status of natural fertilizers made by animal dung and mixing with field waste material), what about the status of natural water cycle etc?
    - c. Will everything become questionable and liable to halal certifications in future?
  42. Do halal crossing the line of distinguishing between concept of metaphysical-holy and physical-halal?
  43. Why not halal address to adopt workable standards with stress to earn money in halal way to buy halal and live peacefully, progressively with assimilation with all others, if its provision in halal and halal is really a global entity?
  44. What is relation of cleanliness with halal in direct divine orders of halal; does halal have some cleanliness control point

- manual and what is cleanliness means here?
45. Do halal starts from the level of slaughtering and processing or from the level of production and farming as according to Islamic education? Which one is the exact Islamic control, check point to get enter for evaluation and implementation of halal procedure as according to Islamic Quran, Sunnah and sharia?
  46. Many Muslim organizations are claiming the none-presence of alcohol and pork and other contamination free product itself is not considered halal without valid certification? This thing clearly shows that halal is now more than a religious-metaphysical need and become hotter place for marketing & finance need?
  47. Halal financial system, halal money is not only cover Interest free practices but also do cover corruption free none ethical earnings etc, do halal finance have some practical manual, control check list of such code of conduct by Islamic education for its Halal & Islamic banking sector and Halal Life Style etc?
  48. Does halal trends will go in future to certify the followers in Islamic religion for index level of halal practices in routine related to halal life style, a halal certified Muslim? As such trend is already in use in sharia base societies but not well documented yet. Is it in the scope of halal products?
  49. Will halal cover different subject of modern education and sciences in future with reference to "Islamization of knowledge" after coving socio-physical environment including food, cloths, jobs, fashion, medicine, property, travel, religious practices, trade, etc?
  50. Review shows that the basic logical argument for halal is to avoid from "unhygienic and unwanted" slaughtering (and farming practices), and consumer do believe by the provided information from sharia scholars that at least halal is much better in farming and slaughtering practices and less contaminated due to strictness of following of halal slaughtering procedure, is that the only valid argument on which halal industry is growing?
  51. There is a remarkable difference between halal code of practices in various fields of life and halal food production, many problems, gaps and conflicts about halal are arising due to none understanding and none presence of distinguishing line between these two?
  52. What are the social, religious and ethical outcomes of adopting a system of halal at globe, what progressive difference such set of practices made yet and what are the future expectations, on which basis?
  53. What is the future of halal at globe, what if all Muslims adopt it and what if all reject it; does it make any difference except on available market stock and investment of market stake holders? Do the investments in to halal industries are strengthening the grip of halal into market?
  54. Except the slaughtering & consumption of halal animals and avoided from blood, alcohol etc, Dose halal is making adoption of such trends easy for the time being benefit in trading which will push back in future by completing their cycle and will not be beneficial for Muslims themselves as well?
  55. Halal Islamic finance has lots of doubts and mal functioning and based of diversity of fatwas given by Islamic scholars. Even on name of halal loans many times planned fraud had been reported. Taxing matter to halal finance is still very complicated. What is its future?
  56. Do the negligence and resistance toward none conduction of research on halal is a key hurdle in none scientific and unorganized developmental trends of halal industrializations?
  57. If halal authorities will not consider the sciences for the solution of gaps then what other substitutes they have to cover such gap areas especially when such gaps are coming under observation & becoming wider day by day? Dose halal only effect Muslim population or its also affecting those who are not Muslims, specifically after getting new trend beyond food into it? How such affecting-gaps will get addressed and will get some solution?
  58. Rather than be fix as a food practice the halal is going toward serving as key of Islamic cultural? Are halal get fix on a production line of generation of new gap trends? What are its reasons? Still no scientific analysis is needed and none scientific sharia expert will remain in authority over halal till gaps collapse the socio-market structure & make serious irreversible issues for social capital (as in past the concept of jihad made in absence of standardization)?
  59. It's also a misconception that halal boost the market or make the market, it's not right. Market of food, cloth and other commodities were always there, people were using them before as well, Halal only did that it get in to market share as a new stake holder. Today if this stake holder will leave then only stocked items will get loss but the producers and other necessary supply chain organs will never be in loss as the people need food, clothes and other commodities even if halal is not available. So actual worth of halal is the stored, produced volume of product in halal supply chains. The only loss is of authority, jobs, investing running money etc, especially to sharia experts, halal facilitation departments who will lose their job and certificate incomes.
  60. A sharia expert for halal certification is not only performing a single task by this work, but his position by this job makes him very influential & powerful to bring other religious matter into strong consideration of followers of Islamic ideologies. Otherwise human needs of market commodities were getting fulfilled and will get fulfill and never will be in lost. So the trends are showing in future it will be:
    - a. Halal is going to be appearing as new Muslim identity serving more powerfully to Islamic ideologies in many aspects.
    - b. Sharia experts are going to replace "imamas" (leaders) of/ with-in Islamic ideologies.
  61. There is might be No scientific differences in between Halal & None-Halal, and it's just a mind satisfaction due to repeatedly provoked emotions based on religious knowledge & educations. Now what will be the scenario as outcome of such acts in which large groups of people at different locations at globe get prepare for acceptability of this food type and related industries only, at the level of brain addition? How the hardest crisis will fall out if such addition will not get fulfilled by any supply chain problems.
  62. Usually market supply are based on demands, and demand are based on:
    - a. Functional base product demand in market
    - b. Structure base product demand in market
    - c. Emotions & Ecstatic sense base product demand in market
    - d. Religious & myth base product demand in market
    - e. Charity base product demand in market
 In case of halal it's purely based on Religious & Myth demand

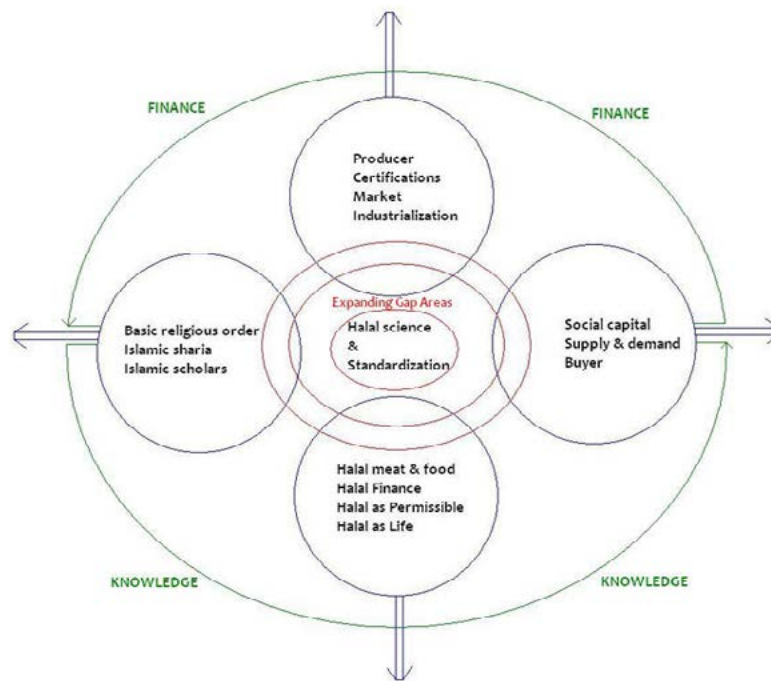
and trying to cover the markets of functional, structural and emotions as well. But the original gap areas which differentiate the product type of different origins are the hurdles in the way. The emotions base bridges looks very strong but they are still based on elevated emotions and can fall down at any time. Halal Trends, Gaps & Proposed Solutions: RNA Khan 14/58

63. Most of the Halal industrialization is focusing toward supply chain management and with new trend of Monitoring & Evaluation system for product along an unexpected sudden segregation that Halal is for muslims and Tayaban is for muslims and none muslims both. However to produce Tayaban products at conceptual level its near to organic farming so how the price will compete in future and what standing is behind the current Tayaban concept which follow the different quality certifications rather than the Islamic SOPs of farming etc. This scenario is showing sudden divert by halal industrialization. It indicates that might be halal industalization is not gradually getting develop but it have some original documents at behind which is coming in front in step by step process and its for marking purpose only.
64. Halal Food Safety Management Systems (HFSMS) along Different Halal Food Standards need to be analyses for
  - a. % of religious orders & % of science
  - b. % of compliance with science
  - c. % of compliance with sharia
65. Global Food Safety Institution and other Standard Compliance

etc just mean the process from certain level of production but not at the beginning from conceptual level. So addition of standards into idle of process make sense for halal production & logical authenticity?

**In 2017 It's been admitted publically that**

1. Halal no longer is confined to the concept as defined in the Quran, but has got a more greater scope as it encompasses the basic ethics of life which are applicable to all human beings.... Such as being correct, transparent, truthful, eat, clean and healthy. (Attiya Nawazish Ali, Asst. Secretary General, Islamic Chamber of Commerce Industry & Agriculture, WIFE Bussiness forum, published on Feb 15, 2017. Panel Discussion-Challenges and Business Strategies for Women Entrepreneurs in the Halal Industry)
2. As according to new amendment by SIRIM (Malaysian standing making body) & BSI (british standard institute) there are two conceptual additions into Halal (MIHAS 2017 conference, 2nd day 3rd session 4th speech, kuala lumpur, malaysia)
  - a. Halal at concept level is Prohibition to do wrong doings.....But with reference to whom and in which fields etc?
  - b. Halal is universal management system..... How & applicable to whom, and why, and what does it mean that in future all kind of social environment will also come under it?



**Figure 2:** Estimated Flow Chart of Halal Trends by Original Halal Industry Driving Factors Basic Structural & Functional Design Probably behind Halal industrialization is as; *Evolution & Integration of Different Fields of Knowledge into Compelled Marketable Circulation of Finance with Grassroot Level of Targeted & Social Acceptability Globally for Stakeholding Conservation*

**Introduction to All Available Halal Industry Related Standards**

At current the Malaysian Halal industrialization has policy planning & trends based on comparative systematic approaches. The government departments & organizations establish few standards in compliance of Islamic sharia base industrializations.

**Table**

Malaysian Standards (MS)	Description
MS 2594:2015, Halal chemicals for use in potable water treatment - General guidelines	This MS specifies requirements for halal chemicals used in the treatment of potable water. Processed chemicals used in treating the raw water during the production of potable water, fulfil the necessary requirements that are in line with the Shariah law and the relevant regulations or law in force in Malaysia.
MS 2610:2015, Muslim friendly hospitality services-Requirements	This MS specifies guidelines and requirements for managing tourism facilities, products and services for Muslim travellers in accommodation premises, tour packages and tourist guides. This standard are generic and are intended to be applicable to all organisations and individuals managing Muslim friendly tourism products and services and not applicable for health and beauty facilities such as spa and massage or any balneotherapy facilities, products and services
MS 2565:2014 - Halal Packaging-General Guideline	This Malaysian standard describes the general guidelines in the manufacturing and handling of halal packaging. It serves as a basic requirement for halal packaging for halal products in Malaysia.
MS 1500:2009, Halal Food -Production, preparation, handling and storage - General guidelines (Second revision)	This MS provides practical guidance for the food industry on the preparation and handling of halal food (including nutrient supplements) and to serve as a basic requirement for Halal food product and food trade or business in Malaysia. Note: This standard also available in Bahasa Malaysia version.
MS 2200: Part 1: 2008, Islamic Consumer Goods - Part 1: Cosmetic and personal care -General guidelines	This MS prescribes practical guidelines for halal cosmetic and personal care industry. It serves as a basic requirement for cosmetic and personal care industry and trade or business in Malaysia. This standard should be used together with the Guidelines for Control of Cosmetic Products in Malaysia and Guidelines on Cosmetic Good Manufacturing Practice, by National Pharmaceutical Control Bureau, Ministry of Health (MOH). Note: This standard also available in Bahasa Malaysia version.
MS 2200-2: 2012, Islamic Applied Goods - Part 2: Usage Bones, Skin and Animal Wool - General Guidelines	This MS contains practical guidelines for the use of bones, skin and animal fur in the relevant industry in accordance with the requirements of Islam.
MS 1900:2005, Quality management systems -Requirements from Islamic perspectives	This MS specifies requirements for a quality management system where an organization 1. needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and 2. aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements.
MS 2300: 2009, Value-based management system – Requirements from an Islamic perspective	This MS consists of a guideline and a certifiable requirements standard which prescribes the framework for an organization to establish a management system based on Islamic values.
MS 2424: 2012 Halal Pharmaceuticals – General Guidelines	This MS prescribes practical guidelines for the pharmaceutical industry on the preparation and handling of halal pharmaceutical products including health supplements and to serve as a basic requirement for pharmaceutical products and pharmaceutical trade or business in Malaysia.
MS 2400 Series on Halalan-Toyyiban Assurance Pipeline	1. MS 2400-1: 2010, Halalan-Toyyiban Assurance Pipeline Management system requirements for transportation of goods and/or cargo chain services This MS prescribes management system requirements for assurance of the halalan-toyyiban integrity of goods and/or cargo being handled through various mode of transportation. 2. MS 2400 - 2:2010, Halalan-Toyyiban Assurance Pipeline - Management System Requirements For Warehousing And Related Activities This MS prescribes management system requirements for assurance of the halalan-toyyiban integrity of products, goods and/or cargo during the warehousing and related activities through the entire process from receiving to delivery 3. MS 2400 - 3:2010, Halalan-Toyyiban Assurance Pipeline - Management System Requirements For Retailing This MS prescribes management system requirements for assurance of the halalan-toyyiban integrity of products and/or goods at the retailing stage of the Halalan-Toyyiban Assurance Pipeline.
MS 2393: 2010 (P), Principles of Islam and Halal-Definition and Explanation Term	This MS outlines the meaning and explanation of the term used in Islamic and halal-related standards especially those derived from the Arabic term. The Malaysian Standard is also intended to illustrate the principles in the Islamic context. It is provided for the purpose of uniform understanding of the use of words included in promotional activities and the use of Islamic and halal standards.

---

## Halal Industries, Markets & Standards Prospective in Future

### Halal Market Volume

Halal Market Volume  $\propto$  Population % + Increasing Rate + Religiously Factors + Social & marketing Effective Trends.

$$HL_V \propto P_P + I_R + R_F + SMT_F$$

In the age of AI, Neuromorphs & conscious mind sciences etc How centuries old religious trade norms can be justified as integral pillar of human living by all aspects?

Is halal capable to fulfil the economics & social rights of free will human? What about food and diet rights of different age groups & genders? etc

The raising trend & directions shows that it can be well expected in future that following will be announce into Halal as further extensions:

### Trends in Halal Core-Standardizations

1. Halal Social Capital & Related Activity Standards
2. Halal Economic Capital & Related Activity Standards
3. Halal Religio-Political & Related Activity Standards
4. Halal Food & Shelter Standards
5. Halal as Universal Managemental System

### Relationship between Halal Food & Industrialization and Extremism

There are Few Possible Aspects by which Halal Food & Industrialization might be linked with Acts of Extremism & Market Manipulation. People usually think that the money earned by halal industrialization & certification can be involved into support of promotional activities, acts of social & military extremism by Islamic ideologies. Perhaps there are many other aspects as well. It's not as simple as all think that halal food & industrialization is just a market entity. This Matrix is very complex at Islamic social levels. If today will not make sciences at top of halal then tomorrow gap area, current trends & shortcomings into halal will bring sciences at foot. Halal is not only food, but it is now a lifestyle and mindset.

Its need to see the impacts of design behind current trends of halal industrialization and its related effects on national safety & security especially at western lands, as;

1. Halal Supply Chain also can act as centralized chain into integrated web for control & command.
2. It is deeply linked with raising expression of cultural segregation along high risk of political use even in daily life as vital & unavoidable issue.
3. The halal food & industrialization matrix line-up the thought & use of physical means among common Muslims with obey-ness of other sharia standards/fatwas/education as well.
4. By halal matrix once again sharia expert get effective positions to address Muslims in more effective ways.
5. Halal matrix has co-relation with rise in extreme following, adoption & implementation demand of religious sharia.
6. Halal food is such a legal cover that any governments cannot interfere and in result on name of halal much more can get happen.
7. Halal industrialization is playing it role to make Islamic ideologies more alive at social resistance level.
8. Homeland Securities & (Social) Counter Terrorism Departments must need to study all possible aspects of halal food & industrialization and the expected combination of its

effects on societies.

### Following areas are affected by it:

1. Social life aspects
2. General life aspects
3. Religious life aspects
4. Political life aspects
5. Academic, educational life aspects
6. Integrated collective life aspects

### Few General effects on Islamic followers:

1. Enhancement of religiously factor
2. Social line up & closed circle approach
3. Brainwashing tool
4. More accommodative space to sharia experts
5. Deep & controlled Segregation tool
6. Market manipulation

There are many such points. Halal food & industrialization is creating such mind sets which are establishing the sharia deep down in mind and provoking common islamic followers toward islamic education implications on everything. You can see in many incidences of clashes between host countries and migrants started from demand of halal food. People at western lands usually consider halal as a food..... No, it's a very successful and effective Key in hand of islamic ideologies, and by this key much worst can happen. All this situation actually, factually & logically demanding for proposal to segregate halal food from all other halal industrialization, halal life style etc and exclude the role of sharia expert by making proper gap free scientific standards along open market approach. Otherwise the uncontrollable abnormal expansion will bring many like following at seen in future.

### Future Trends in Halal Ecosystem Evolution via Sub-Core Standardizations

1. Halal Human Rights
2. Halal Social Works
3. Halal Health standards
4. Halal Trade standards
5. Halal Housing standards
6. Halal "Access to Knowledge" Standards
7. Halal Education Standards
8. Halal Crisis Managements Standards
9. Halal Safe Production Range Standards
10. Halal Safe Investment range Standards
11. Halal Purchase & Selling Standards
12. Halal Peace Standards
13. Halal Hate & Persecution Standards
14. Halal Conflicts & War Standards
15. Halal Tolerance Standards
16. Halal Standards for Sciences
17. Halal Standards for Biotechnology
18. Halal Standards for Arts
19. Halal Standards for Math, Physics, Space Exploration
20. Halal heaven & Hell Standards
21. Halal Standards for Ethics & None Ethics
22. Halal Standards for Managemental Setups
23. Halal Couture Standards
24. Halal Domestic Life Standards
25. Halal medical Standards
26. Halal School Standards
27. Halal Community Standards
28. Halal Border Control, Visa & Immigration Standards



29. Halal Slavery & Colonialism Standards
30. Halal Justice System standards
31. Halal Jail Standards
32. Halal Standards of Conflict Management
33. Halal Standards for Rights of None-Halal
34. Halal Standards for Economics, Social & Cultural Matrix
35. Halal State Standards
36. Halal governing System Standards
37. Halal Standards on Need & Wishes
38. Halal Standards on LGBT
39. Halal Standards on Women
40. Halal International Relation Standards
41. Halal Standards for Policy Planning
42. Halal Cloth & Clothing Standards
43. Halal Wedding & Related Activity Standards
44. Halal Noise Standards
45. Halal Ecosystem Standards
46. Halal Library Standards
47. Halal teaching Standards
48. Halal Student Standards
49. Halal Hostel Standards
50. Halal Complain Standards
51. Halal Book Selection & Reading Standards
52. Halal Film & Making Standards
53. Halal Media Standards
54. Halal Technology Standards
55. Halal Construction Standards
56. Halal Survey Standards
57. Halal Research Standards
58. Halal Thinking & Imagination Standards
59. Halal Sitting, Standing, Walking, Washing Standards
60. Halal Physical Exercise Standards
61. Halal Mental Exercise Standards
62. Halal Computer & Related Standards
63. Halal Software & AI Standards
64. Halal Shopping Standards
65. Halal Fashion Standards
66. Halal Sex & Body Standards
67. Halal Birth & Related Standards
68. Halal Jurisprudence Standards
69. Halal Freedom of Speech Standards
70. Halal Access for information Standards
71. Halal Liberty Standards
72. Halal Free Will standards
73. Halal Freedom of Expression Standards
74. Halal Opposition standards
75. Halal Claims Standards
76. Halal Politics Standards
77. Halal for Halal by Halal

### Halal Market Competition Expected Future Phases

Due to none presence of any competitor and actual competition among hundreds of halal certifiers departments of different islamic countries, the halal producers, sellers and buyers are in harmony with each other. E.g. if demand is of 100 and supply is of 40 then this supply and demand gap is giving edge to seller and narrow the choice of buyer. But as every market takes time to grow and someday the supply will cross the demand, then as according to Muslim social behaviours and set of practices at globe it can be expected & predicted easily that by none standardization of product and none presence of scientific approach along gap areas

the future market competition can adopt following patterns;

**Phase 1:** Demand is 100, supply is 110-120, and loss percentage to producer is low and bearable as well, and the situation is new for further learning and practices.

**Phase 2:** Now the demand is 100, supply is 120-130, and loss percentage is moderate to producer and not easy to bearable. Now the situation is demanding logically a marketing policy based on competition.

**Phase 3:** Now the demand is 120 due to population growth etc, and supply is 150+, and the loss percentage for not getting much profit is high and not bearable. Now the situation is demanding logically to eliminate few market players. Kindly note that this is not a city base market, its countries based markets and countries are the players here & they have to defend their own halal base industries exports etc because it's a very good income source for them, especially for those who are losing oil by lower prices and finishing of oil pools. So in such environment who so ever wins, who ever get loss but the actual loss will come toward halal industrialization sectors and toward halal itself, as there should be perhaps no other option except to turn the competition into sectarian differences with in different Islamic ideologies as according to proven past & prevailing mindset of Muslims at globe. The market of Europe, UK, USA, Canada, Australia etc will get more focus due to high purchasing powers. And in result the social setups there along high polarizing kind of traits will become deeper there by Halal wish of Islamic ideologies. Russia will not get effect due to strong & controlled laws, china will get trouble as it have 220 million muslims and for trading in gulf china need to soften its social & market laws toward Islamic ideologies.

### Materials & Methods

#### Open Questions Regarding Differences among Halal & None Halal and Its Results

After assessing the above mention situation an open question was asked at research gate and invite researchers and scholars from diversity of fields to give their opinion ([https://www.researchgate.net/post/Difference\\_between\\_Halal\\_and\\_None\\_Halal](https://www.researchgate.net/post/Difference_between_Halal_and_None_Halal)). Muslim researchers, scientist and scholars found not interested by their superficial responses. In the meanwhile personal visits to different "scientific" halal authorities of many countries made along attending the halal related international exhibition & conferences from many years etc, and also presented the same idea to identifying of gap areas in halal food production and proposed the solution in term of scientific research & development. In result the warm welcomed discussion happened most of the time but cold practical response came at the end when suggest for some practical work out for solution, with the basic reason that its sensitive and Islamic ideological based sharia matter which seems out of reach from an ordinary Islamic followers, more over its been told that they also have no techniques available for such work. But when offered them techniques & collaborations into further development then they respond diplomatically that it's not in our preference list of projects, scopes along future goals & area of interests. The one key reason behind such response is due to the prevailing mindset base trend that at current halal is getting sell without any efforts and without any remarkable problems and stakeholders feels it a good chance to make max profit till the time problems becomes hurdles in way of profit. Second reason is the mindset of stakeholders that its expansion time, when once halal will get cover max place at globe then they will consider and will do focus on its pros &

---

cons along solution for any gap areas. Anyhow Beside all other industrialization on name of Halal, this article will just focus on the solution for Halal food production and further on halal meat production. Let's start with the discussion which came out in response of Halal gap Area related question at Research gate.

The Muslim priority to consume halal meat is totally based on its teaching in Islamic holy book (Quran). Besides this there is no other fundamental proven mechanism that why other people should also be impressed to adopt this method for meat production & consumption. One very common answer that came by followers of Islamic ideologies in case of meat & slaughtering is that because the animal is given one cut in conscious state on its neck, this causes the animal to bleed very efficiently as its heart pumps fast due to this treatment. In turn, (theoretically) the meat produced by this method is much more hygienic and of good quality because almost all the blood has been drained. Furthermore since at the time of giving a cut to animals neck, a religious prayers are recited, so this makes the meat free from any metaphysical harmful effects with divine help.

Now taking this matter other than involving religion in it, there are multidimensional aspects and many questions that arise at global in social & scientific perspectives,

#### **Problem Statement & Questioner:**

1. Did the world acknowledged Muslim food processing authorities have the Scientific research and proven references needed to describe the any differences between Halal and non-halal food; meat, beverages and bakery products?
2. Does anyone have baseline references based on structural, function and nutritional profiles in determination of difference between Halal and Non-Halal?
3. Any research paper focused on molecular level for the same query?
4. Is there one unanimous baseline standard for Halal existing at globe, one for all?
5. Is halal only circled around the investigation of ingredient, procedure and product?
6. Is prevailing Halal's Science & Technology only meant for detection of non-halal formulation, "Najas" etc in products or its scope is beyond it, if beyond then what it can be?
7. In an open market how Halal can be considered among best food products, what are its proven physical & metaphysical advantages in comparison for an ordinary human?
8. What will be the future of Halal without backend proven scientific facts and absence of references by research trials, specifically in case when supply to halal market will be more than the demand?
9. How many Halal science journal or sections in scientific journals exists?
10. Is halal only confined to a dietary law (s) or it is elaborating itself with other meanings as well from food sector toward covering of all industries in-house & social setup of Muslims?
11. Any comparative research on Halal Production setup/system/ protocols/SOPs, from basic till end etc?
12. If still not sufficient research material is available then what it means and how such material can be created to analyses the facts by covering such gap areas? Why not Muslim researchers, scientist & religious scholars are interested in it till yet, and do outcome be in favor of global halal industry?

#### **Opinions of various Panelists about the current trend in halal agenda:**

**Author:** Halal Products industry with economic volume of 2 Trillion US Dollar is reported so for.....35 % is producing by Muslim countries and companies and rest by international market at Globe and its expanding day by day.....Sooner or later such questions will be in market So your contribution is highly requested for a better solution Thanks.

**Open Panelist:** *yes there are a lot of aspects by which it can be stated that how halal meat necessary for human consumption. one i wanna mention is that is blood is suitable for them if animal is unslaughterd then where the blood goes .*

**Open Panelist:** *Halal Food Industry now stands at an economical value of 2 trillion dollar so believing that it's a taboo is a bit of stretch, As for comparison you can look into the slaughtering method for meat, sources from where the beverage or food is procured and how it's processed and etc. Neutraceutical effects of both foods on the human physiology and etc.*

**Open Panelist:** *"UK Food Standards Agency figures from 2011 suggest 84% of cattle, 81% of sheep and 88% of chickens slaughtered for halal meat were stunned before they died. Supermarkets selling halal products say they stun all animals before they are slaughtered", Does this mean that stunning before Zabhiha is permissible and makes the meat halal, as most of the meat sold labeled as halal is obtained from animals which are stunned prior to slaughtering. This is perhaps more of a religious debate than a scientific one but you can definitely look into the nutritional value of both meat i.e stunned and the one that is slaughtered without stunning.*

**Open Panelist:** *I do not agree with that procedure, because Halal method or Islamic way for slaughtering dose not permit to stun the animal before slaughtering.*

**Author:** Thanks for your contribution, the acceptability or popularity or sudden boom of market of something cant get that thing clear from its scientific identificationas for as halal is concerned then i would like to share a recent popular article about its certification point of view here..and can any one share any research paper or scientific material which enlist and address the Gaps in Halal and any standardization of Halal?

**Author:** At current famous, very well equipped, with plenty of budget and with full autonomous bodies along powerful geopolitical support at least more than 6 research station/ institution on the name of halal science are working at globe with minimum age of 10 years. It's not possible that such questions never arise in any mind. Now the question is that what are the real limitations or fears or taboos etc by which they never dare to get focus on such comparative researches. Otherwise they are publishing many papers on halal assurance, halal supply line, halal marketing etc?

**Author:** Its not only under scientific ethics but also the need for easiness with user friendly approach that every new product under go into standardization first before marketing or during initial phase of marketing to avoid many risks and wastage of energies and future conflicts..but in case of Halal where is standardization so for? A number of universities, research institutes and labs in every Islamic country, even for halal the universities, labs and research institutes of other countries are also working so what is the reason behind that from thousand of researcher, scientist, student etc never try to explore it from so many years?

**Author:** Even not a single unanimous standard definition and complete conceptual explanation of Halal is determined so far it is not true that Halal explanation in Basic Islamic sources (Quran and Hadees) is very less than that explanation which is continuously coming from Fiqa and Fatawa on the collective name of Sharia...?? Halal is dependent on ISO and other industrial standards....?? Where is work of Islamic researchers, scientists, students and scholars in field of Halal Sciences? Can any one explain what is halal science or what is science in halal?

**Open Panelist:** *Having Divine Reference Of Food Is Obligatory For A Peacefull World.*

**Author:** First that halal food is not coming from divine sources directly nor shedding from skies into Earth. its getting grow by hand of human under usual environment with routine production setup, all the surrounding factors and microbes make interaction with it as they do with other food types second point is that it mean that divine references in all other matters are also acceptable without any further research or development of compatibility etc in future for peaceful world ? So such argument not seems to be in compatibility with current social trends at globe especially the scientific research trend. And also the divine proven reference is about slaughtering of meat, and few other things only. For factory production of food a base line unanimously accepted single food standards for Halal is in need, so can't get these without going deep in scientific evaluations and comparisons, either today or tomorrow, halal need science, today market is not saturated but after few years it will be saturated automatically halal will tend to science but with more conflicts so why not today to avoid the wastage of future resources and energies with less conflicts

**Open Panelist:** *from an observer's standpoint, the laws of Halal focuss continously on his responsibility in relation to the Provider.* The awareness of this responsibility should lead to global peace

**Author:** Responsibility is associated with believes, and believes require knowledge and best knowledge is proven one. Here the matter of human consumption, billions of human are getting associated with a certain food type, many aspects of certain food type need to undergo scientific research for cost effectiveness, wholesome, sustainability, social impacts etc.

"Still and Stand" point now need to be Dynamic in search of realty and there is no peace beyond realty. Remarkable evolution in social conscious require further explanation for further satisfactions, its near to law of Nature. Thanks.

**Open Panelist:** *Believe doesn't require knowledge, dear Raja. Believe has its own dynamics,*

**Author:** Believe require believers, and among human believers many want to practice reality Dear Arno. I think if we get focused toward science again for this topic then it will more beneficial for fellow researchers. As at the moment halal have gap areas in its conceptual level, mean not comes in "believing" command as a whole as this word is using every where let its care takers and institutes people talk its strange that they are quite on it plz come forward with you thoughts and research ideas on the halal!!

**Open Panelist:** *Your initiative is remarkable. The significance of the topic is well noted.*

*Of course halal food is very important element of the faith and related economics. The believers prefer to buy halal marked product in non Muslim cultures/societies for example.*

*Although individuals can not validate the authenticity of the operation done and rather they will believe in the mark. I would suggest to learn from Kosher food and mark in practice all over the world.*

**Author:** Thanks for your input...there are many comparative literature available between halal and kosher food. But here particular significance of halal is going to discussed because

1. its user are getting grow and will cross the figure of billions
2. Domestic and international trade based on halal industry is around 2.5 trillion US\$ at globe
3. Halal is not only stick with food now but its covering other industries from cloths, traveling, engineering, real eatate to microbes and condoms etc.
4. as the rising trend with unquestionable acceptability due to any reasons can give a clear trend indication that such spread will cover few more grounds of living aspects of human life including halal living patterns and practices etc
5. The unity and peace in market of halal is mainly due to that that so for market is not saturated yet.

So its need of the time to search the gap areas and see the realities not only to check if it is getting Misuses some where but also to make sure its eligibility and standard strength for human consumption in term of food. And more over that what actually halal is its strange that just put a prefix "halal" before any worldly thing and now that become obligatory or supreme to use over research based products and so sacred that unquestionable as well How this aspect will be justified as current trend is minimising the gap for it;

**Author:** How it will be justifies by placing a halal logo on some commercially available product by slight change in its processing operational procedures that in perception of general public that product is also getting the credit of innovation, research or modification as advantage of halal like made by halal?.

**Author:** Any research paper on intra-halal certification systems comparison for food items as they have differences according to its representative Fiqa e.g., Fiqa-a-Malki, Fiqa-a-Shafi, Fiqa-a-Hanfi, etc. to avoid any such differences in future the halal market need to invest its attentions and energies on standardization of halal food through food sciences. <https://en.m.wikipedia.org/wiki/Fiqh>

## Results & Discussion

It's find that large number of people belongs to diversity of Islamic ideologies regardless of their locations, ages, education, level of critical thinking etc are not very well aware from the gap areas and showed stranger/ignorant eye kind of behaviour in general approach. The responsible research & halal related departments, councils & organizations showed a least interest & feedback toward Gap Areas & any solutions even in far future as well. In such situation it's vital to address this set of issues globally on scientific basis as at the end such halal related gap issues will raise the problem for different local governments & research organizations of those developed countries where people belongs to Islamic ideologies are living and following different halal related trends & industries for halal "Halal food chains". It's vital to learn them that what are the positions of different associated trend lines and in which directions it is leading in future. The results lead us to apply a social principle on the socially raised situation which is deeply linked with food & living of a large number of people

(Wishful) Listening for improvement is first sign & step toward progressive learning.

### Proposed Solutions for the Questions with Detailed Analytical Studies

The basic scientific gaps that need to be discussed & can be solved following a thorough experimental study with mind accepting conclusions. This includes,

1. Development of Halal Sciences as none halal food science & pure sciences exists
2. Halal Standardization Unification through “Halal Health & Science”

#### The objectives of this study will include,

- To see if Halal have some effective science or it only a visionless following of religious order & cultural bindings.
- To establish a baseline reference for authentic further proceedings; “Halal Health”.
- To get estimation of difference between halal & Non-Halal on factual & actual basis.
- To create Halal Unification, One unanimous Standard, & One Logo.
- To establish Halal Grading system.
- To estimate the malfunctioning related to halal productions.

#### All these objectives will be fulfilled by collaborating of,

- Different school of thoughts about concept of Halal Commodity, Procedure & Product
- Producer, traders, buyers, religious regulator regime
- Halal Certifications
- Factual Current situation & actual future trends estimation
- % share of “interest” & trade volume by different category of stake holders at globe
- Special Facts & Figures
- Problems & constraints: their grouping, assessment and the prevailing solutions

#### This proposed study will be conducted as follows,

- Theoretical modulation and integration of Halal measuring tools
- Halal sampling from markets and farms
- Halal sampling by own rearing; +/- control groups and other treatments
- Growth and quality parameters
- Lab testing; microbial, blood analysis, DNA figure printing, etc
- Molecular level analysis, deviation from each other among all samples
- Analytical techniques; cell biology, morphology, tissue structure, comparison of/on cellular level

#### Analytical Techniques

This above mentioned study will include the diversity of combinations of analysis of following characteristics in the food & meat samples obtained by different methods of slaughtering,

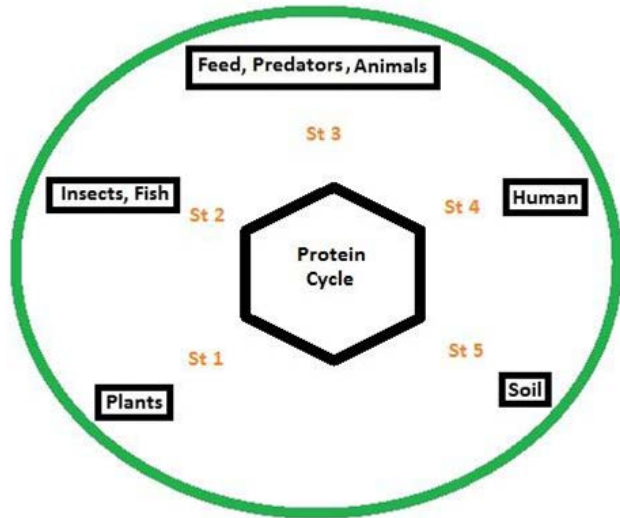
- Protein cycle analysis
- Environment on gene expression
- Nutrition on gene expressions
- Genetic makeup of species, breed,--Master gene or protein design instructor gene concept
- Blood chemistry
- Morphology of muscle / cell
- Functional properties of muscles / cells

- Structural profile of cell / muscles
- Biochemistry of cell / muscles
- Health and hygiene of end products, whole sameness
- Metaphysical effects, supper natural impacts, initial calculation.
- sensory evaluation
- Other comparative analytical techniques
- Brain and heart satisfactory tests and its reasons with on ground arguments--prevailing education, taste matter, body chemistry, age, gender, options, behavior, time factor, thinking patterns, etc
- Diversity in range s of food (selection / choices) from different origin matters and its natural
- Food / meat compatibility differences with certain types of human geographical, religious, social groups
- Bioavailability comparison
- Market Analysis, public perception, people want to consume what and why? Production, demand and supply comparative economic analysis
- Institutional, industry development economic comparison for halal and none halal meat
- Types standards and unification theories’ comparison of halal and none halal
- Shelf life, spoilage rate, microbial count comparison
- Digestion parameters, health effects comparative analysis
- Available protein, energy, required fatty acid analysis for same amount of weight and comparison of same species but with different production setup of halal and none halal food
- Cooking parameters comparison
- Freezing, storing changes comparison
- Outlook and FFP (further food processing), no. of available product comparison
- Phenotypic characterization
- One logo, one standard-comparison chart and gap areas of further workings.

The scientist, researchers and scholars among Muslim population they can get start from very basics for analysis, so in proposal to see deep and take start from protein cycle is recommended.

#### Protein Cycle

- Nitrogen from soil gets converted in to plant protein. (1st stage protein)
- Those plant proteins have specific kind of amino acid sequences, which converted to another specific sequence of amino acid when 1st grazers eat it. (2nd stage protein)
- When those insects, fish and other animals are eaten by poultry, livestock and birds etc. then once again the existing amino acid sequences in protein get assemble in to another type of animal protein with new amino acid sequences (3rd stage protein)
- Now when human consume the meat of these animal then the once again the animal protein get converted in to animal protein with different amino acid sequences. (3rd stage protein)
- When human get dissemble by any mean then again these protein get in to DE structuration and at the end nitrogen get back toward soil for a new plant.
- Basic structures made by amino acids are getting rearrangement under new command every time.....mean its amino acid sequence code which is different for every stage.



**Figure 2:** Proposed Protein Cycle

#### Aftermath of the Detailed Study:

After obtaining the above mentioned data the study will be divided into following 4 steps,

1. Conceptual level
  - a. “Halal” Definition, concepts, literary development, assumptions
  - b. “Najas” Definition, concepts, literary development, assumptions
  - c. History tree with trend lines
2. Production level comparison
  - a. Production levels
  - b. Cellular levels
  - c. Phenotypic levels
3. Consumption level comparison
  - a. Satisfactory tests
4. Absorption and bioavailability tests
  - a. Any After effects
  - b. Medical problems
  - c. Metaphysical problems
  - d. Any other

#### Evaluation of Halal Production by Survey and Interviews

This study will include the following,

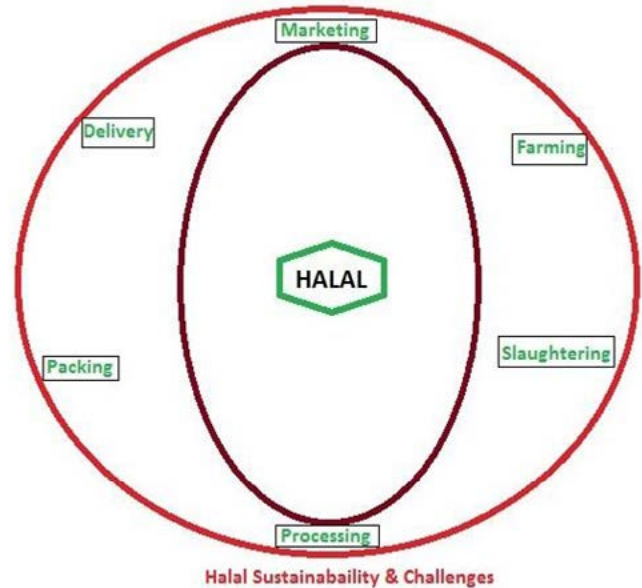
1. Evaluation of Halal Certification organizations
2. Evaluation of Halal production till consumption system
3. Evaluation of behavior of halal market, consumer and seller systems
4. Evaluation of set of services offering by Halal selling points
5. Evaluation of business ethics, user friendly approach and Halal MEAL system
6. Halal MEAL system
7. Any other

#### Conclusions and Recommendations

##### Accept the Challenges for Halal Food Industry Sustainability

Halal food production starts from farming till consumption, so a long term farm to fork approach is needed to adopt rather

than time being pick and choose approach for sustainability of halal industrialization if on scientific line, and it's very vital for sustainable marketing approach. For the purpose the parameters and proposals are suggests to further research work. Halal branding cannot get establish without proven scientific references on ethical, valued and sustainable basis.



**Figure 3:** Major Components of Halal Meat & Food Industry

Here again four different Key Factors matters to know the exact formation & efficiency of the **HALAL MATRIX SYSTEM**

*Evolution & Integration of Different Fields of Knowledge into Compelled Marketable Circulation of Finance with Grassroot Level of Targeted & Social Acceptability Globally for Stakeholding Conservation*

1. Religious Commandments (Sharia till Fatawah)
2. Actual Production Protocols (sharia + worldly gained experience & Knowledge/sciences)
3. Social Acceptability by muslim population & none muslim population
4. Market Acceptability (Demand first than Supply here)

First its need to make exact analysis of confused mixture of sharia & science exactly with help of this Analysis Table. Halal is not all sharia and not all science, and the sharia presence in halal is further sub divided in to 8 different sourced levels. None understandings of levels the confusion get created that why halal is moving from food to plastic and water and every other industry.

**Analytical Table to segregate the exact Source-SOPs based on % of Sharia + % of Sciences**

Basic Reference Level	In Compliance Level	Making Alliance Level	Need of Time level
Basic Direct Orders (Awamer wa Nawahi) (Does & Don'ts)	Not contradiction with science but also not present in direct orders	No direct order for compliance further explanation need with help of sharia tools like Fatwa, iJmah, Kiyas	Neither in compliance nor in Alliance but operational demand create silence on issue to make any written amendment/ fatwa etc
Amendment Level 1 Basic	Amendment Level 2 Moderate	Amendment Level 3 High	Amendment Level ∞ Final
Slightly contradict with Direct orders so need to create new order with in applicable ranges & limits	Slight to moderately contradict & visible new order needed as according to situation & work demand	Moderate to high contradiction with direct orders and fatawas so next generation of new order needed	Do whatever can bring the work done as operational requirement, ignore the sharia at all

Halal Matrix do not ends here but take a new angle after level of Final Amendment, now things again will get base on Food Sciences and Social Sciences but the Key will remain same as Market Science because Halal Matrix is for Halal Industrialization as basic pillar.

**Terminologies Required to be Defined:**

Some research base definitions against following terminologies along material and methods are required to search for implementation purpose to research & development on halal industrialization.

1. Halal Sensory & Chemical Features
2. Halal Standardization (Genetic & Molecular level)
3. Halal Characterization (Phenotypic)
4. One Unanimous Halal definition and procedure
5. Halal Structural profile
6. Halal Nutritional Profile
7. Halal Farming
8. Halal Scientific Research & Development
9. Any Other

**Recommended Series of Projects**

To facilitate the researchers who want to work on gap areas and to find solutions, here are few sample projects for assistance & initiation of critical thinking.

**1. Standardization of Halal Food Products**

The project is comprised on three main tasks regarding the food originated from halal food production.

1. Estimation of Food Characteristics
2. Sensory Traits of Food
3. Food Grading System

**Halal Food Characteristics**

Parameter	Halal Food	None Halal Food	Result	Reference
Phenotypic Estimation				
Amino Acid Profile				
Fatty Acid Profile				
Genotypic evaluation				
Halal Structural profile				
Halal Nutritional Profile				

**Sensory Traits of Halal Food**

Parameter	Halal Food	None Halal Food	Methodology	Result	Reference
Taste					
Smell					
Touch					
Nutrition					
Wholesomeness					
Other					

### Halal Food Grading System

No.	Name	Characteristics	Constants Parameters	Additional Quality Parameters	References
HG1	Halal	Basic Halal Standard (s)	Free from Najas, Mixing & Adulteration	Research Needed	
HG2	Pakiza	Free from Abnormalities Research Needed	Free from Najas, Mixing & Adulteration Research Needed	Research Needed	
HG3	Tayyab	Advanced food standards Free from health hazards Research Needed	Halal Production setup (Basic Level) Research Needed	Research Needed	
HG4	Tayyab Supreme	Supporting for Health Research Needed	Halal Production setup (Advance Level) Research Needed	Research Needed	
HG5	Holy	Supporting physical and metaphysical aspects both at the level of" Nafas-a-Mutmaena	Review of literature , series of experiment and Research needed	Research Needed	

### 2. Gap Areas Identification into Halal Food Setups

This project is comprised on series of investigative task to identify the risk, short comings, in compliances, misconceptions and hazards related to halal food production & sustainable marketing. Following are few topics which can give systematic flow chart with diversity of aspects for halal food farm to fork approach for identification of areas need to improvements.

1. At the level of Definitions
2. Sharia & Science Compliances Level
3. Standards Compliances level
4. Conceptual Level & segregation from other Halal Industrialization

5. Philosophical Level & metaphysical aspects
6. Producer level & systematic approaches
7. Farming & Production Level
8. Processing level
9. Marketing level
10. Consumer level
11. Sustainability & Integration level
12. Halal itself
13. Halal Food Science
14. Halal Health
15. Halal R&D

### Halal Gaps Summary and required future considerations

Level	Gap Areas	Suggestions	References
<b>Definitions</b>	<ol style="list-style-type: none"> <li>1. Word meaning</li> <li>2. Religious definition</li> <li>3. Religious approach</li> <li>4. Institutional approach</li> <li>5. Halal ranges</li> <li>6. Halal covered areas</li> <li>7. Areas expected to be cover by halal</li> <li>8. Scientific approach</li> <li>9. Marketing approach</li> <li>● Supply line approach</li> <li>● Obligatory approach for consumers</li> <li>10. Public approach</li> <li>11. Halal clarity approach</li> </ol>	Research Needed	
<b>Conceptual Level</b>	<ol style="list-style-type: none"> <li>1. What it is, why it is and how it gets proves?</li> <li>2. Islamic education and explanation of Halal system as whole?</li> <li>3. What is actual status of science in halal production in comparison with religious philosophies and philosophers?</li> <li>4. Relation of degrees of cleanliness with halal</li> <li>5. Basic sources of halal legislation?</li> <li>6. Do halal production starts from faming or it get entre into processing?</li> <li>7. Is it "permissible" kind of order what a Muslim need to obey in every field of religion?</li> <li>8. How much step by step new conceptual covers will get added into halal, will this process start ever?</li> </ol>	Research Needed	

<b>Philosophical Level</b>	1. Halal As philosophy of food or philosophy of life? 2. Halal as backend market driving philosophy? 3. Halal as Stakeholding philosophy?	Research Needed	
<b>Producer</b>	1. Certification cost, fee and renewal, 2. Issues in producer's religion and his religious necessities?	Research Needed	
<b>Production / Farming</b>	1. Halal Production Standards, stunning, 2. Halal farming SOPs?	Research Needed	
<b>Processing</b>	Issues in processor's religion and in his/her religious necessities to comply the operation? Original Religious text for following Systems? Halal Food Management System Halal Supply Chain Management Halal Food Production System (Halalan) Halal Food Safety System (Tayaban)	Research Needed	
<b>Marketing</b>	1. Anti halal moments, absence of halal global research response Centre. 2. How to generate & standardize the healthy halal market competitions (the key behind all difference in halal with in Islamic education) 3. Halal Marketing Sops, Ethics & competition scenarios	Research Needed	
<b>Consumer</b>	1. Public perception trend lines 2. Halal food and human senses 3. Authenticity of knowledge provided for halal farm to fork 4. Benefit categories to consumer?	Research Needed	
<b>Sustainability &amp; Integration</b>	1. halal industry driver factors 2. halal industry stakeholder factors	Research Needed	
<b>Halal itself</b>	Order to obey, deviation % for change, confidence level, difference between halal and none halal 5. Basic halal legislation? 6. Halal legislative assembly 7. Do authoritative (public, govt., religious) people have power over people to go in/for compliance with halal?	Research Needed	
<b>Halal Food Science</b>	1. Standard halal sample & its halal food science parameters 2. True food quality parameters including sensory traits like aroma, taste, morphology, internal and external traits and resultant effects on human body 3. Halal Food Standard ranges for A.A & F.A profile 4. Halal Grading System	Research Needed	
<b>Halal Health</b>	1. Physical Aspects 2. Metaphysical Aspects 3. Tools to estimate 4. Allowed ranges 5. Medical Health problems	Research Needed	
<b>Halal R&amp;D</b>	1. Scope & understanding at every level 2. Relation with market sciences 3. Relation with sustainability 4. How to do it development of tools & techniques 5. Any other	Research Needed	

### 3. Evaluation of Halal Food Standards Wiwth Western Standards of Food Production

This project is comprised on understanding of diversity of available halal food related standards in systematic approaches by segregation of sharia and sciences aspects. And then their comparison with other available food related standards in western countries and where ever halal want to get market.



**Analytical Table to segregate the exact Source-SOPs based on % of Sharia + % of Sciences**

Basic Reference Level	In Compliance Level	Making Alliance Level	Need of Time level
Basic Direct Orders (Awamer wa Nawahi) (Does & Don'ts)	Not contradiction with science but also not present in direct orders	No direct order for compliance further explanation need with help of sharia tools like Fatwa, Ijmah, Kiyas	Neither in compliance nor in Alliance but operational demand create silence on issue to make any written amendment/fatwa etc
<b>Amendment Level 1 Basic</b>	<b>Amendment Level 2 Moderate</b>	<b>Amendment Level 3 High</b>	<b>Amendment Level ∞ Final</b>
Slightly contradict with Direct orders so need to create new order with in applicable ranges & limits	Slight to moderately contradict & visible new order needed as according to situation & work demand	Moderate to high contradiction with direct orders and fatawas so next generation of new order needed	Do whatever can bring the work done as operational requirement, ignore the sharia at all

**Comparison Table**

Parameters	Halal Food Standard 1	Halal Food Standard 2	Western Food Standard 1	Western Food Standard 2
Definition of Food Type				
Scope				
Production setup				
MEAL approach				
Marketing standards				
Any other				
Any other				

**4. Halal Food Related Crisis Management System**

A Standard Model related to Halal Food Crisis Management is vital to get establish with defining the tools, techniques along SOPs to identify the crisis area, and how to resolve the situation.

**5. Define Halal As Food Commodity Only On Scientific Basis, Not A Culture**

Define Halal as Food only, makes clear that rest of the halal industrialization is not associated with Halal Food Sciences;

1. However few industries which are facilitation operational matters like packing, farming & processing operations can adopt "Najas" (contamination) free protocols.
2. An extension level must need to be defined that at what extent the halal food need back end halal supportive industries.
3. This approach is not consider wise that halal start from food and for food need sister industries and muslim only and for these two culture, environment, air, water etc need to be halal.

**6. Halal Food Identification & Segregation From other Halal Industrialization**

Halal industrialization has uneven spreading approaches and its scope is going beyond from food toward life style and every available industry as a separate identity of Islamic culture. Under this scenario the risk and opposition involve toward Islamic identities can also affect the halal food as at current it is consider the basics of halal religious orders and base line reference. To secure food of billions of people at globe it's Vital to mark, identify the food separate from other halal industrialization.

**For the purpose need is to create segregation.**

1. Segregate halal food from other halal industrialization
2. Create independent marking approaches by
  - a. Independent & separate Halal Food Logos
  - b. Independent & separate halal food production standards & setup
  - c. Independent & separate halal food related institutions

**7. Substitute Solution Of Sharia Expert (SSSE) For Halal Food Sciences, Production & Marketing**

1. Sharia expert is not necessarily needed to evaluate halal food production set up in presence of scientific halal food standards. The role of sharia expert is very much disturbing in sustainability of halal food production. As;
2. Islamic sharia expert is not open for scientific learning due to ranges & limits of their allowed education to follow.
3. Already a big percentage of science is needed to prepare halal food and in use partially, without it halal have no market standings.
4. The presences of sharia person discourage the free investment into halal food industry due to social doubts & reservations.
5. The presences of sharia expert as halal industry leaders give message of market monopolization & polarization.
6. The role of sharia experts at globe is not considered among encouraging professions and the effects, impression & rumors associated with sharia experts can harm halal food production & market heavily.
7. When a systematic flow of process is available on scientific lines then what is actually & factually the need of any sharia experts in to halal food production, processing & marketing setup?
8. For slaughtering lines only a person of Muslim faith is needed as according to Islamic education, which not needs to be sharia expert necessarily.
9. Other halal industrialization if have any logical space & need sharia experts then it's their own independent choice but food production is pure advance scientific process, and when halal food compliance standards are available then there is no need to destabilize the halal food market by forcing it to must have sharia experts.

On the basis of any such points, this project is design to evaluate the actual & factual need and the points where there is any need of "sharia check/control points" and how the task can get perform in compliance with sharia base food laws but by

controlling authority either from human or machines/ robot, and if human then by any back ground of faith & believes as the believes and faith is his/her personal mind base matter and production of food is his/her professional physical work matter. How the large number of food production & processing can get attain to fulfil the requirement of growing population if sciences need to follow allowed ranges of islamic sharia and many subjects like genetic engineering & modification, GMO, use of synthetic agents etc are still a big question mark in front of sharia experts? The deep technical situations are beyond the limitations of sharia experts, and every advance technology will create tougher situation to resolve, so again

at the end sharia expert will become dependent on sciences or will come in more open conflicts with sciences. Halal industry needs professional experts to sustain rather than sharia expert to drain.

**Two Research Phases are needed in production of Islamic sharia expert free standard.**

1. Assessment of Need of Sharia Expert on Scientific Basis
2. Development of Sharia Expert Free Halal Food Standards

Following is an example in explaining the project:

**Evaluation Table to Access the Exact Need of Sharia Expert on Scientific Basis**

Sharia Control Check Points	Sharia Expert can do? Reason & Ref.	Food Professional can do? Reason & Ref.	Ordinary Muslim can do? Reason & Ref.	Any Human can do? Reason & Ref	Machine/ robot can do? Reason & Ref.
SCC Point 1					
SCC Point 2					
SCC Point 3					
SCC Point 4					
SCC Point 5					
SCC Point 6					
SCC Point 7					
Any other					

**Development of Sharia Expert Free Halal Food Standard**

Standard Parameters Reason & Ref.	Sharia check points Reason & Ref.	Task requirement Reason & Ref.	Task reassigned to Machine/ scientific expert/ other human resource. Reason & Ref.
Halal Standard Sharia expert requirement 1	Standard requirement	Why standard require	Eliminate the task
Halal Standard Sharia expert requirement 2	Religious fatwa	Reasons of fatwa	Other expert can ensure as well
Halal Standard Sharia expert requirement 3	Slaughtering	This process can be done by any Muslim	Machine/any human can do it
Halal Standard Sharia expert requirement 4	Environment inspection	Routine SOPs of production set up can do	Sharia free standard is good as well for it
Halal Standard Sharia expert requirement 5	Any other		
Halal Standard Sharia expert requirement 6	Any other		
Halal Standard Sharia expert requirement 7	Any other		

**8. Development Of Fair & Open Halal Food Marketing Standards**

The development of this new standard is very much vital for sustainable halal food market. At current the trend lines are going toward conservation approaches and halal market is adopting monopolization approaches with closed market behaviour as;

- 1) Only Muslim can produce halal (rising trend)
- 2) Only Muslim can certify halal (developed trend)
- 3) Only Muslim can sell halal (rising trend)

When halal industry can sell its product to all at globe including Muslim & None Muslim than with help of scientific standards any one can produce halal and certify halal and sell halal. The conservation market stake holding approaches will bring halal food

industry on fire soon. So, it is vital need of the time to bring halal food production, certification & marketing out from unfair conservation approaches towards open cultural approaches. The development of Halal Food Marketing Standard is vital for sustainability.

**9. Development Of Halal Food Related Policy Planning & Evaluation Scientific Institution**

Its assumed and estimated that much problems with halal food & industrialization are due to poor & grabbing kind of policy planning approaches. As no independent policy planning institutions is working to evaluation and suggest corrections to halal food related stakeholders regarding their policies and the expected outcomes in response.

Its vital need to establish an independent research groups based on professional researchers & scientists from various fields of study including animal sciences, food sciences, policy studies, social sciences, marketing etc to evaluate the effects of halal food & industrialization related policies and to make suggestion for any amendment needed. This is not necessary only for sustainable halal food industry but for National Security & Safety it is also vital in different aspects as it's a key indicator associated with variety of potential risk factors.

## 10. Differential Points & Segregation of Halal Food Type for other Food Types

Systematic Kosher meat development is much different from halal food & industrialization, just a commonality is processing of meat by religious orders, but Kosher don't hold markets manipulations and huge investments along objectionable motives with gap areas as halal industrialization is blamed. Even at the level of religious order halal is not much clear as kosher is, there is no direct religious command to make sure the hygienic status of product as kosher have etc , Most of modern day halal food & industrialization is based on "fatwas", which are sometimes many levels away from direct religious education of does & don'ts, just pure commercial market product. From few years halal is trying to use cover of kosher meat production in justification of halal food & industrialization at globe. Kosher producers & users need to study & understand it's all possible scenarios & effects. The criticism on halal food & lifestyle related industrialization is due to many genuine reasons, Lots of gap areas are present in it, lots of food security problems are associated with it, much marketing manipulating is happening on name of halal logos. Kosher is not claiming as "kosher life style & industrialization", Kosher is not manipulating the market even 20 % meat in USA is getting prepared by Kosher method from decades. So in all such scenario Kosher is with much different motives & systematic approach from halal. Don't allow to misuse the name of kosher by associating with halal. Both are different, they can't be comparable at same levels, otherwise in future with halal the kosher will also come under problems. As Denmark recently ban Kosher & Halal slaughtering both together by considering them the same.

There is no justified logical points by which kosher can get linked with halal. Kosher is a different meat type and halal is entirely different entity. Jewish communities need to focus on differential comparison rather than to create bridges between two as in many academics & research departments its going like this. Halal might need kosher for its back up cover, kosher do not need halal for any reason, such "marriage" will transfer sterility of halal toward kosher. Let halal food & industrialization defend its claims by their own.

This project is design to access, study and mark the differential points between halal & other food types at every comparable level from concept till production.

## 11. Halal Standardization through Scientific Research & Development: Halal Farming SOPs

“Comparative Effects of Halal Feeds, Halal Farming & Halal Processing among poultry birds on various Economic Traits”

### Introduction

Halal market is estimated around 2.5 trillion USD at now and

will be around 4 trillion USD by 2020, but the available literature shows that Halal itself is not clear on conceptual levels, no proper religious legislation is there to present whole farm to fork approach, no SOPs for halal farming system, none-availability of research and scientific material and experimentation on halal production based on factual and scientific lines in real etc. More than 90 % focus on the name of halal science and research is regarding marketing issues and laboratory identification approach of contamination with non-halal. In such situation such kind of halal industry practices can lead industry toward sudden decline as it get sudden boom based on words regarding religious belief. Not only such market can get collapsed if halal food standardization will not occurs under scientific lines but also by absence of modern science references the none healthy market competition for getting maximum share percentage in global market will get started which will lead toward wastage of energies, resources and production of non-healthy environment for global food security.

Regardless of that what religious authorities and stakeholders are thinking about scientific lines of halal standardization, it's in benefit of producer, consumer, middle man, marketer and member of public that some valuable solution based on modern tools of science and research are searched and evaluated. The edge is that prevailing halal knowledge is not fully derived from Islamic basics (Quran and Hadis), it's mostly derived by Sharia or Fatawah (religious orders by religious person or influencing people with religious education etc). As along halal certification the ISO and other certificates are also required to export and import, and that worldly scientific knowledge is acceptable by religious regime behind halal production.

## Rearing and Production of Poultry Halal Farming Setup

### Scope & Need:

Farming is combination of living and feeding practices with secure and encouraging environment. The best practices are already defined by scientist after continuous research work; hence there is still way out for sustainability via evolution in knowledge. As a growing market of halal food is getting wider, so a standard farming SOPs are needed to be searched developed and checked against those practices which Islamic knowledge said for animal treatment and production to fulfil the complete set of requirements for halal food production once for scientific standardization and comparative evaluation. As per food security need basis it's essential that once scientific evaluation took place on either claims of welfare.

### Research Material Used

Fundamentals for SOPs will be constituted by Basic Ethics Code described in Islamic education, the references of Quran (Holy book of Muslims) and Hadis (wordings of Islamic Prophet) that how to treat animals, the observation from Fiqa (wordings of Islamic scholars in compliance with sharia) and old stories if present, and by help of those farm practices which have no contradiction with Islamic knowledge, or were in use under initial referred Islamic rules at any past times.

### Key Halal Rule

Free from “Najas” (harmful and Non-Halal material) It need to be accessed that either any “Najas” free available commercial Halal chemical have capability to perform effective and up to date function during farms practices.

### Farm Supply Chain

1. Selection of hatching egg

2. Selection of day old
3. Transporting to farm
4. Receiving at farm

#### Farm preparation Practices

1. Biosecurity (cleanliness, disinfection techniques and chemicals etc )
2. Farm equipment
3. Record keeping and economics (halal money, zakat, other Islamic financial matters)
4. Farm staff related matter
5. Feed, feeding, storage
6. Water, Watering and storage
7. Mortality and culling
8. Medication and health
9. Other Farms practices

#### Production Phases

1. Pre brooding
2. Brooding phase
3. Rearing phase
4. Finishing phase

#### Selling, Shifting and Transporting to Market Place

1. Collection of bird from farm
2. Loading to vehicles
3. Transporting to market

#### After Farm Practices

At this point already theoretical and to some extent practical work is already done on name of halal chain management and halal assurance from slaughtering till table.

- Halal Feed
- Halal Management SOPs
- Halal Slaughtering
- Halal end products evaluation

The proposed study is first step toward evaluation and halal standardization and farm to fork approach starts from Farming and Farm Nutrition. This will include,

#### Materials & Methods

##### Treatments and Trials:

##### Comparative trial of deterrent Nutrition / Feed

	T1	T2	T3	T4	Control - ve	Control + ve
R1						
R2						
R3						
R4						
R5						

- T1: Halal Feed with growth promoter  
 T2: Halal Feed with second growth promoter  
 T3: Feed based on locally available ingredients  
 T4: Feed based on pure halal ingredients  
 Control -ve: Feed with non-halal ingredients  
 Control +ve: Control feed without any additive

#### Comparative Trial of Different Production System / Setup/ Protocols & SOPs

	T1	T2	T3	T4	Control - ve	Control + ve
R1						
R2						
R3						
R4						
R5						

- T1: Conventional Farming system  
 T2: Farming system based on Halal SOPs 1  
 T3: Farming system based on Halal SOPs 2  
 T4: Farming system based on Mixture of Both  
 Control -ve: Pure faming system using currently in Halal production  
 Control +ve: Pure latest proven farming system

#### Comparative Trial of Different Processing(S) for End Product Approach

	T1	T2	T3	T4	Control - ve	Control + ve
R1						
R2						
R3						
R4						
R5						

- T1: Halal Slaughtering with factory processing approach  
 T2: Halal Slaughtering with stunning  
 T3: Halal Slaughtering by Non-practicing Muslim  
 T4: Halal Slaughtering by Non-Muslim/ non-believer  
 Control -ve: Pure non-halal slaughtering  
 Control +ve: Pure Halal Slaughtering in manual approach

#### Positive outcomes of this study

##### Fibromyalgia and Chronic

- Growth, FCR, Production Economics
- Health, disease, mortality and immunity evaluation
- Meat & egg quality evaluation
- Sensory evaluation & consumer perceptions
- Hatchability & fertility evaluation
- Structural, functional, nutritional profiles
- Phenotypic & genotypic evaluation

#### Conclusion

The outcome conclusions by such projects will serve as base line pilot study for many other multidisciplinary studies. So for no well acceptable evidence have been reported by which pure halal methodologies get proven to make any significant difference on characteristics of naturally occurring food. As basics of all halal industrializations & products is derived from core order in Quran about Halal meat and all further development is with help of fatawas based on Islamic sharia & fiqa. So if halal food loses the ground by none presence of any significant difference then all other halal industrialization also loses the ground of significance & marketable trust.

Moreover Halal has its roots in limited religious commands, which might be able to come under social sciences but not a full facility over natural sciences especially on food sciences & the gaps start when try to implement the social sciences aspects over natural science based entities. It's really difficult to adjust compatibility & ideal integration. Perhaps in cultures there are foods but foods itself is independent from cultures.

However It will get clearer after multiple & accurate findings of proposed experimentations mentioned in the article that halal methodologies are making any difference on characteristics of natural food or not. Either there is some scientific difference present between Halal & None-Halal food of same origin or not. If yes then further investigation will be needed that what it is, where it is & why it is. If No significant difference is present or pure Halal methodologies are not making any identifiable, remarkable & significant differences on characteristics of natural food, then it can be concluded that halal is a mind, thought & emotion base addition due to prevailing none-investigative cultural norms (as in Islamic ideologies culture and religion both are consider same) and modern-day Halal is pure marketing tool by Islamic sharia experts instead of an independent & real standardize food or entity of choice, and cannot prove any claims about the best compatibility to human body, senses & environment and vice versa for None-Halal. Anyhow, in big picture the question will be that how much such (cultural) addition will cost on various levels to human at Earth in multidimensional ways, and is there any solution for it? [1-9].

## References

1. Johan Fischer (2008) Religion, science and markets: Modern halal production, trade and consumption, EMBO reports 9: 9.
2. Frans Van Waarden, Robin an Dalen (2010) Crisis in the Halal market; intra- and national cooperation for an (international) halal norm, Conference Paper “ Politicologenetmaal 2010”, Leuven. Belgium.
3. R N A Khan (2011) Preference of Poultry Meat for 3Hs: a case study in a Muslim society (LAMBERT academic publication Germany).
4. Zakiah S, A H Ishak, N Himmah (2014) Understanding the Development of Halal Food Standard: Suggestion for Future Research, International Journal of Social Science and Humanity 4: 6.
5. Mian N Riaz (2015) Potential Hazards in Food; Ensuring the Concept of Tayyab in Food, Food Protein R & D Center; Texas A&M University, Texas, USA.
6. Reki W Ashadi (2015) Halal Science. An Introduction, Journal of halal Research. Indonesia 1: 3-5.
7. R N A Khan (2015) Difference between Halal and None Halal, Question Post at Research Gate.
8. Jill J. McCluskey, N. Kalaitzandonakes, and J. Swinnen (2016) Media Coverage, Public Perceptions, and Consumer Behavior: Insights from New Food Technologies. Annual Review of Resource Economics 8:467-486.
9. Raja N A Khan (2017) J Nutr Food Sci 2017, 7:3 (Suppl) <http://dx.doi.org/10.4172/2155-9600-C1-041>.

**Citation:** R N A Khan (2017). Halal Industrialization into Food Production-Global Perspective, Scientific Gaps & Proposed Solutions. *Journal of Medical & Clinical Research* 2(3):1-21.

**Copyright:** ©2017 R N A Khan. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.