HALAL ECONOMY: OPPORTUNITY AND CHALLENGES

August 2015
Presentation outline

Why Halal Economy?
Halal Bio-economy
Challenges in Halal (Bio) Economy
Way Forward & Conclusion
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  - Halal Bio-economy
  - Challenges in Halal (Bio) Economy
  - Way Forward & Conclusion
Key Driver of Halal Economy

1. **Growing population of Muslim**
   - **World population (1990 – 2030): Muslim versus Non-Muslim**
   - Source: PEW Research Centre

   Sizeable and growing Muslim population worldwide – the size of the global Muslim population as at 2010 is 1.6 billion and it is forecasted to grow twice as fast as the non-Muslim population.

2. **Growing purchasing power of Muslim**
   - **Gross Domestic Product (USD) Per Capita**
   - Source: PEW Research Centre

   Economic development in Muslim countries results in a faster growing gross domestic product (GDP) per Muslim capita than its global counterparts. Malaysia’s Muslims rank 4th in terms of purchasing power amongst the global Muslim population.
Huge market potentials

Halal Food and Beverages

The world demand for Halal Food & Beverages is worth **USD 432 billion**, yet, only 17% (worth USD 75 billion) of this is being met, with Malaysian exporters supplying USD 4 billion worth.

Source: HDC analysis
Huge market potentials

- Halal Ingredients

Current world supply of Halal Ingredients is meeting just 37% of the world demand worth **USD 100 billion**. The demand-supply gap is substantial, pegged at USD 63 billion. Global supply is a mere USD 37 billion worth, with Malaysia contributing USD 5 billion worth.

Source: HDC analysis
Huge market potentials

Halal Cosmetics and Personal Care

Currently the world supply of Halal cosmetic and personal care is inadequately meeting world demand, supplying just 18% of the USD 56 billion demand. USD 10 billion is supplied by global exporters, while USD 500 million is supplied by Malaysian exporters. The demand-supply gap is estimated to be USD 46 billion.

Source: HDC analysis
Due to the potentials, the global interest on Halal Economy is getting stronger

Global Islamic Economy Summit (Nov 2013) – Dubai has set a clear measure of success

- Dubai is set to be the capital for Islamic Economy
- Islamic Economy as a new area of excellence for future growth
- OIC intra-trade especially in Halal related sector will be increased via Dubai competitiveness

“The emirate will aim to be the Sharia-compliant centre of the world. Focus will be on Islamic Banking and Halal businesses”.

Sheikh Mohammed bin Rashid, Vice President of the UAE and Ruler of Dubai

February 2013

Japan
- Halal as key source of contributor to Japan’s economy by 2020

China
- Domestic Halal market is increasing by 10% per annum

South Korea
- Visioning to become the main destination of Halal tourism

Brazil
- Largest supplier of Halal poultry to Middle East

Thailand
- Largest producer of Halal processed food – visioning to become the Kitchen of the World

Australia
- Largest supplier of Halal beef to Middle East

Brunei
- Visioning to become the for Halal

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Malaysia’s Halal ecosystem - various halal sectors co-exist and supported by proper certification system, infrastructure and human capital development program

- Advisory centre
- Datawarehouse
- Knowledge dissemination tools
- Business and market intelligence

- Halal food & beverages
- Halal cosmetics & personal care
- Halal Ingredients
- Halal services (logistic, banking, takaful, healthcare & tourism)

- Halal Talent Development Program
- Halal Knowledge Workers
- Halal Executives & Auditors
- Syllabuses in universities & college

- Halal Industrial Parks
- Halal R&D – testing lab
- Traceability system
- Standard & certification

- Reference Centre
- Production and Services
- Human Capital
- Infrastructures
- Government Support

Halal as the new source of economic growth

Source: Economic Planning Unit, Prime Minister’s Department

- Ministry: Ministry of International Trade and Industry
- Industry Development: Halal Industry Development Corporation
- Certification: JAKIM
- Standards Development: Standards Malaysia
- Enforcement: Ministry of Domestic Trade
Presentation outline

Why Halal Economy?

Halal Bio-economy

Challenges in Halal (Bio) Economy

Way Forward & Conclusion
Definition of Bio-economy

Bio-economy encompasses the sustainable production of renewable biological resources and their conversion into value added products in the food, feed, chemicals, energy and healthcare wellness industries, via innovative and efficient technologies.

Source: Bioeconomy Transformation Programme Annual Report 2014
Global overview of Bio-economy

The establishment of Malaysia Bioeconomy programme since 2012 has unleashed potentials in Malaysia’s natural resources e.g. palm oil

Source: BiotechCorp
Definition of Halal Bio-economy

Developing **bio-economy using Islamic injunctions** would help create a halal ecosystem which would foster sustainable growth and higher adherence to the policies based on best industry practices. Halal culture fosters a community-centric approach which is repeatedly recommended in Qur'anic injunctions.

**Halal Bioeconomy leads to sustainable economic and social development within a halal ecosystem** leading to self-reliance.
Key focus area of Halal Bio-economy

(1) Healthcare

- Establish halal cosmeceutical manufacturing facilities
- New and improved vaccines
- Better diagnostics
- Novel therapeutic drugs
- Expand halal nutraceutical and pharmaceutical manufacturing
- Faster methods of drug discovery
- Strengthen clinical research and development
- Gene therapy

Source: WIEF 2014
(2) Food security

- Apply halal & thoyyib
- Reduced pesticide use
- Stress resistant plants (e.g. drought, salinity)
- Plant and animal disease diagnostics

Variety improvements in a wide range of crops leading to yield and quality improvements

Application of new technology

To produce high yields, high value food & ingredients

Manufacturing of proteins in plants (bio-pharming)

More nutritious/healthy food

Source: WIEF 2014
Lack of awareness and imbalance supply chain are the main challenges in developing Halal economy.

Challenge 1: World Demand & Supply

**Awareness**
- Meat?
- Muslim?
- Halal?
- Thoyyib?

**Demand & Supply**
- Food?
- Non-Food?
- Certification?
- Standard?

- Supply chain imbalance / disruption
- Improper Halal ecosystem
**Challenge 2: Preserving Halal integrity throughout the supply chain**

**Farming input**
- Breeders
- Animal feed

**Farming & Processing**
- Livestock
- Poultry
- Abattoirs

**Manufacturing**
- Ingredients, processed foods, cosmetics, personal care, chemicals etc.

**Packaging and distribution**
- Warehousing
- Repackaging
- Cold room

**Retail Food services**
- Supermarkets, groceries, restaurants, hotels

**Halal Logistic**

*Halal Logistics* is the process of managing the procurement, movement, storage and handling of materials, parts, livestock and finished/semi-finished inventory both food and non-food through the organization and the supply chain *in compliance with the general principles of Shariah Law.*
Challenge 3: Towards zero contamination with non-halal materials / ingredients along the supply chain

- **FAT DERIVATIVES**
  - Glycerin
  - Mono & Di-glyceride
  - Emulsifier
  - Creamer
  - Ice Cream
  - Margarine
  - Tooth Paste

- **BROTH**
  - Flavor
  - Soup
  - Seasoning

- **GELATINE**
  - Ice cream
  - Marshmallow
  - Yoghurt
  - Soft candy
  - Jelly
  - Capsules

- **COLLAGEN**
  - Sausage casing

- **TEXTURIZER**
  - Cosmetic

- **SHORTENING**
  - Bakery biscuit

- **MEAT**
  - Flavor
  - Seasoning
  - Powder
  - Bacon
  - Pasta
  - Burger
  - Meat flash

- **BONE**
  - Activated Carbon
  - Refined Oil & Water

- **BLOOD**
  - Fermentation Media
  - Medicine
  - Sausage
  - Microbial Products

- **LEATHER**
  - Cysteine
  - Tooth Brush
  - Brush
  - Bread Improver
  - Flavor

- **SKIN**
  - HAIR
  - INNARDS

- **FAT (LARD)**

**Biotechnology related products**

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More challenges for Halal

- Alternative ingredients?
- Research and Development?
- Innovation?
- Funding?
Gelatin

Global Gelatin Market is Expected to Reach USD 3.18 Billion in 2020

1) The global gelatin market volume was estimated at 373.3 kilo tons in 2013 and growing at a CAGR 3.8% from 2014 to 2020. **Demand for halal gelatin is estimated at 60 kilo tons per annum.**

2) Gelatin demand for **nutraceutical applications** is expected to reach 124.5 kilo tons by 2020, growing at a CAGR of 3.8% from 2014 to 2020.

3) **Less than 2% of global gelatin production is halal.**

Comparative Yields of Gelatin Production (1,000 tonnes)
Challenge 4: Industry is getting more complex

e.g. Halal ingredients, cosmetic and personal care

Ascorbyl Palmitate
Riboflavin
Sodium Selenate
Cyancobalamin

Capacity and capability gap among Halal certification bodies

Highly capable / competent auditors
Supported by science and technology
Benchmarked Standard Operating Procedures
Conclusion

1. 1.8 billion Muslim population. Supply for Halal food and non-food products is not enough to cater the demand.

2. Challenge is to develop a more robust and efficient global Halal value chain benefitting Muslim world.

3. Hence, opportunities are enormous.

Discussion / Q&A