Challenges for the Future: Demand and Supply in an Interdependent World

Shahridan Faiez
Blue Archipelago Berhad
Dr. Shahridan Faiez is CEO of Blue Archipelago Berhad. It was created when Shahridan returned to Malaysia in 2007 after seven years at the World Bank in Washington, D.C., to help the government start up a profitable aquaculture company and catalyze growth of the industry.

As head of Blue Archipelago, Shahridan promotes innovative solutions such as the Integrated Shrimp Aquaculture Park (iSHARP) and CISA, a unique training program targeting rural farmers. He has also been instrumental in Malaysia’s strategy to position itself as a country of origin for safe and quality seafood. In March he was elected to the Global Aquaculture Alliance board of directors.
Tectonic Shifts in the Marketplace
Growing Food Demand
“Head east young man...”

- Asia regains its historic share by 2030
- Asian economy in 20 years about as big as global economy today
- Asia contributes 60% to global growth in the next two decades
3 billion middle class
Food sales to middle class will explode by 2017

- **Larger Middle Class**: In 2007, there were 1,127 millions (85%) in the middle class and above, and 200 millions (15%) below the middle class. By 2017, the numbers are 909 millions (64%) and 518 millions (36%).

- **Middle Class Food Expenditure per Capita Up**: In 2007, the expenditure per capita was $770 million. By 2017, it increased to $1,270 million, showing a CAGR of 5%.

- **Food Sales to Middle Class Explode**: In 2007, food sales to the middle class were $150 billion. By 2017, they are expected to be $650 billion, showing a CAGR of 17%.

By 2017, Chinese middle class will spend $650 billion on food.

Rising Food Safety Concerns

• More than 95% of Chinese consumers rank food safety as very important (A.T. Kearney).

• Food safety is driving shoppers to modern retail formats and premium prices.
FDA chief announces procedural changes to aggressively enforce food safety measures.

Publication: Frozen Food Digest
Date: Thursday, October 1 2009

Margaret Hamburg, commissioner of the Food and Drug Administration, announced procedural changes aimed at enabling the agency to move more swiftly and aggressively on food safety regulations.

Food safety legislation granting the FDA more authority
Percentage of Malaysians living in urban areas.

Trends in Urbanization, by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>1950</th>
<th>2000</th>
<th>2030 (Projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>29</td>
<td>37</td>
<td>47</td>
</tr>
<tr>
<td>Africa</td>
<td>15</td>
<td>37</td>
<td>54</td>
</tr>
<tr>
<td>Asia</td>
<td>17</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>42</td>
<td>76</td>
<td>85</td>
</tr>
<tr>
<td>More Developed Regions</td>
<td>53</td>
<td>74</td>
<td>82</td>
</tr>
</tbody>
</table>

Demographic Change

• Most of the world’s middle class will be in Asia by 2030.
• Most of Asia will be middle class.
• India will add 200 million urban residents between 2005 and 2025.
• Chinese cities will add 350 million people by 2025.
• There will be more than 220 Chinese cities by 2025 with more than a million residents (6X Europe today).
Impact on what, where & how we eat...
More Income = More Animal Protein Consumed

3 billion market

The competition...
This is a Historical Moment...
Are we on the cusp of an inflection point?

- inflection point *n.*
  A moment of dramatic change, especially in the development of a company, industry, or market.
Globalization

Replicating Village ties across Global Distances...
A Global Infrastructure Being Erected...
Stitching together new global supply chains...
Could we purchase seafood meals the way we purchase Dell laptops?
It takes Trust and Integrity
Something’s brewing....

Cauldron of ideas and initiatives...

Where are the new geographies of production?

Note: *M. rosenbergii* is not included.
Genetic selection & Diagnostics
How do we help small farmers?

• Muhammad Yunus and Grameen Bank Won the 2006 Nobel Peace Prize for microcredit to help the poor

• “Every single individual on Earth has the potential and the right to live a decent life”

• How can we assist small farmers to achieve access to international markets?

• New solutions needed. iSHARP is one example. But we need your ideas too.

What is our moral obligation?
The Integrated Shrimp Aquaculture Park (iSHARP): A new approach to industrial scale, fully traceable aquaculture

iSHARP is a large scale modern aquaculture farming concept in rural areas…

The iSHARP concept

▪ An aquaculture park with an average size of 1,000 ha dedicated to the organized production of high quality, fully certified shrimp for the premium market. This concept can be replicated for other types of fish species.

▪ Each iSHARP will be championed by an anchor company; SMEs and smallholders can participate through contract farming/profit sharing arrangement.

▪ Ability to consistently ensure Quality, Safety & Ecology for all products.

▪ More effective environmental controls for premium standards.

Replication of iSHARP and its locations

▪ iSHARP concept is currently being pioneered in Setiu, Terengganu.

▪ 10 sites in rural areas of Johor, Kedah, Pahang, Sabah, Sarawak and Terengganu have been identified for potential replication.

…that is fully integrated and certified to create competitive advantage in the premium market segment.

Key enablers: R&D facility, Diagnostic Lab, breeding programme and skills development centre.

Certification, Accreditation & Verification system on site.
Human Capital

- Are we investing enough in our most important resource – our people?
Talent Drive Cities And The Economy

This book is an output of the “Positioning Penang” study, a collaborative research project between Khazanah Nasional Berhad and The World Bank, identified by the Economic Planning Unit (EPU) as one of the inputs to the 10th Malaysia Plan. This book, which primarily targets policy makers, draws on a strong body of empirical work conducted in a dozen technical background papers contributed by a team of internationally-renowned researchers and field practitioners of the Malaysian economy. These background papers will be published in a separate volume.

The premise of this book is that a regional strategy to develop the “Northern Corridor” of Malaysia is critical in encouraging the emergence of globally-competitive clusters. For the Northern Corridor to succeed, Penang, its largest conurbation, must succeed and vice versa. However, it seems to be caught in the “middle-income trap” and needs to reinvent itself. Penang cannot rely for much longer on cheap labour, subsidised infrastructure and its ability to provide suitable land for low-tech manufacturing. It must focus on developing industries which provide economies of scale, where on-the-job learning provides the base for continuous improvement in productivity. This requires a new growth strategy that positions Penang to take advantage of the new global trends. If the Northern Corridor can escape the middle-income country (MIC) trap, then, so can Malaysia.

The book proposes a multidimensional growth strategy which embraces three elements: cities, talents and the economy.
interdependence

• Life in the Global village

“You have no choice but to operate in a world shaped by globalization and the information revolution. There are two options: adapt or die.”

Andrew S. Grove
Chairman, Intel Corp.
How to make it work?

• The key to collaboration in the commons are: communication, trust, reputation, monitoring and the need for agreed upon and enforceable sanctions.

• We as a community need to recognize that in this increasingly competitive world, where all the incentives gear us toward short term gains, a longer view based on sustainability and collaboration, paradoxically, need to be part of every firm’s strategy and optimization problem.

• We need to collaborate not only because we care about the planet and future generations, but also because it makes perfect business sense.