

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: B ECONOMICS AND COMMERCE Volume 14 Issue 8 Version 1.0 Year 2014 Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc. (USA) Online ISSN: 2249-4588 & Print ISSN: 0975-5853

### A Road-Map for Setting-up Food Business in India

### By Tanu M Goyal & Arpita Mukherjee

Introduction- India, with a large and growing population and a diverse raw material base, plays a pivotal role in global demand and supply of food products (Food and Agriculture Organization (FAO) 2012). India is the second largest producer of fruits and vegetables in the world after China, producing around 180 million tons per year. Despite these advantages, the food processing sector faces several supply-side constraints and regulatory barriers. Only 7 per cent of the total Indian perishable produce is processed, which is extremely low compared to countries such as the United States (US, 65 per cent), Philippines (78 per cent) and China (23 per cent). Official estimates show that about 25-30 per cent of this produce goes waste between harvest and consumption (Chari and Raghavan 2012) due to lack of proper cold storage facilities (Parfitt et. al. 2010). India is not the only country where there is a large wastage. According to an estimate by the FAO roughly one-third of food produced for human consumption is lost or wasted in the supply chain globally, which amounts to about 1.3 billion tons per year (FAO 2011). Considering that by 2050 global population of around nine billion people has to be fed, it is important to minimize food wastages particularly in large food producing nations like India. Existing studies show that investment and technology spillovers in the entire food supply chain (from farm to fork) from foreign firms can help to improve the efficiency and reduce wastage of agriculture commodities (Chari and Raghavan 2012, Mukherjee et. al. 2014). This paper looks at present state of India's food supply chain, applicable regulations in the food sector, the barriers that exist and the scope for foreign investments in the food supply chain with the view of improving it. The barriers, opportunities and the go-to-market strategy highlighted in this paper are based on evidence collected during in-depth interviews with industry and policymakers in the sector.

GJMBR - B Classification : JEL Code: M20



Strictly as per the compliance and regulations of:



© 2014. Tanu M Goyal & Arpita Mukherjee. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## A Road-Map for Setting-up Food Business in India

Tanu M Goyal<sup> a</sup> & Arpita Mukherjee<sup> o</sup>

#### I. INTRODUCTION

ndia, with a large and growing population and a diverse raw material base, plays a pivotal role in global demand and supply of food products (Food and Agriculture Organization (FAO) 2012). India is the second largest producer of fruits and vegetables in the world after China, producing around 180 million tons per year.<sup>1</sup> Despite these advantages, the food processing sector faces several supply-side constraints and regulatory barriers. Only 7 per cent of the total Indian perishable produce is processed, which is extremely low compared to countries such as the United States (US. 65 per cent), Philippines (78 per cent) and China (23 per cent).<sup>2</sup> Official estimates show that about 25-30 per cent of this produce goes waste between harvest and consumption (Chari and Raghavan 2012) due to lack of proper cold storage facilities (Parfitt et. al. 2010). India is not the only country where there is a large wastage. According to an estimate by the FAO roughly one-third of food produced for human consumption is lost or wasted in the supply chain globally, which amounts to about 1.3 billion tons per year (FAO 2011). Considering that by 2050 global population of around nine billion people has to be fed, it is important to minimize food wastages particularly in large food producing nations like India. Existing studies show that investment and technology spillovers in the entire food supply chain (from farm to fork) from foreign firms can help to improve the efficiency and reduce wastage of agriculture commodities (Chari and Raghavan 2012, Mukherjee et. al. 2014). This paper looks at present state of India's food supply chain, applicable regulations in the food sector, the barriers that exist and the scope for foreign investments in the food supply chain with the view of improving it. The barriers, opportunities and the go-to-market strategy highlighted in this paper are based on evidence collected during in-depth interviews with industry and policymakers in the sector.

#### a) Food Sector in India

The Indian food industry is currently valued at \$39.71 billion and is expected to reach \$65.41 billion by

*Author* α σ : e-mails: tgoyal@icrier.res.in, arpita@icrier.res.in

2018, registering a compound annual growth rate (CAGR) of 11 per cent.<sup>3</sup> Food and grocery constitute a substantial part of India's consumption basket accounting for around 31 per cent of the total consumption basket. In contrast, consumers in other countries spend a much lower proportion of their income in food and grocery—9 per cent in the US, 17 per cent in Brazil and 25 per cent in China.<sup>4</sup>

Food and grocery is the largest segment in India's retail sector, with a share of 69 per cent in India's total retail market size in 2013.<sup>5</sup> India ranks third after China and the US in the top ten global grocery retail markets.<sup>6</sup> At present, the bulk of the food and grocery is in traditional corner shops also known as unorganised retail. Even though the share of modern retail or corporate retail<sup>7</sup> in the food and grocery retail market is only three per cent, it has more than doubled since 2008 and is likely to grow further.

The growth of the modern retail sector has led to the evolution of different formats in food retail, including hypermarkets such as Auchan India and Dairy Farm Group, supermarkets such as More Megastore and neighbourhood convenience stores such as Reliance Fresh and Big Apple. According to Technopak's estimate, in 2013 there were over 280 hypermarkets and over 1,850 supermarkets that sold food and groceries.

While there are tremendous opportunities on the demand side, India also provides a strong supply base for companies in food businesses. Its arable land area of 159.7 million hectares (394.6 million acres) is the second largest in the world (after the US).<sup>8</sup> With its vast production base, India has the potential to become one of the largest food suppliers to the world and at the same time serve its own vast population.<sup>9</sup> Over time,

<sup>&</sup>lt;sup>1</sup> Chari and Raghavan, 2012

 $<sup>^{\</sup>rm 2}$  Inputs from the Associated Chambers of Commerce and Industry of India (ASSOCHAM)

<sup>&</sup>lt;sup>3</sup> All Dollar figures are in the United States (US) Dollars. Source: Indian Brand Equity Foundation.

<sup>&</sup>lt;sup>4</sup> The Boston Consulting Group (2012).

<sup>&</sup>lt;sup>5</sup> Technopak Advisors Private Limited.

<sup>&</sup>lt;sup>6</sup> Information provided by British Retail Consortium (BRC).

<sup>&</sup>lt;sup>7</sup> Modern retail is defined as a type of retail that has a corporate management. Generally, these are retail chains (unlike the one-shop family-owned traditional outlets) that are professionally managed with a transparent accounting system, centralised quality control and sourcing. They are also known as organised retail.

<sup>&</sup>lt;sup>8</sup> http://www.ers.usda.gov/topics/international-markets-trade/countries -regions/india/basic-information.aspx (last accessed on March 10, 2014).

<sup>&</sup>lt;sup>9</sup> Annual Report 2012-13, Ministry of Food Processing Industries, Government of India.

there has been a continuous increase in the production of food processing industries. The total value of the Indian food processing industry is expected to touch \$194 billion by 2015 from a value of \$121 billion in 2012, registering a growth of around 20 per cent per annum.<sup>10</sup> This is one of the fastest growing sectors in India.

While India has strong demand and a raw material base, its supply chain for food businesses is still in a nascent stage. However, the food logistics/supply chain business is growing at a rapid pace and has huge untapped potential. The Indian logistics sector accounted for a turnover of \$90 billion in 2011. The sector was growing at around 15 per cent per annum until the slowdown of 2012.<sup>11</sup> In general, food logistics grows at 2.5 times the growth of the economy. The size of the cold storage market is around \$3 billion and is growing at a CAGR of 11 per cent. The perishable product transaction value in India is estimated to be around 230 million metric tonnes. Cold storage facilities are available for only 10 per cent of the produce and of that majority (around 90 per cent) of the facilities are for potatoes. At present, India is able to store only 2 per cent of its farm produce in a temperature-controlled environment compared to 8 per cent in Asia-Pacific and 85 per cent in Europe and North America. This results in heavy post-harvest losses. It is estimated that India requires cold storage facilities for an additional 370 million metric tonnes for perishable commodities.<sup>12</sup> Thus, there is huge potential to invest in this sector.

The unsaturated market, high sector growth and large consumer base have made India an attractive destination for foreign companies in food businesses. The Indian government has initiated policy measures to facilitate the entry of foreign investments in the country. The next section discusses the regulatory structure and regulations for investment in the food business in India.

#### b) Regulatory Framework in the Food Sector

India has a guasi-federal governance structure with the responsibilities divided between the central, state and local governments. The responsibilities between the central government and the state governments and the areas of joint responsibility are listed in the Indian Constitution under three lists – Union List, State List and Concurrent List. Agriculture and the retail sector come under the state government and the central government plays a limited role except in drawing up broad regulations for areas such as allowing foreign direct investment (FDI) in retail. The states play a significant role in decisions on product sourcing, taxes and interstate mobility of agriculture products. They also play a key role in giving licences for retail operations along with the local bodies. Local bodies are responsible for town planning and zoning. Most

regulations apply to both domestic and international food businesses and are non-discriminatory for foreign service providers. However, in some areas there are restrictions that apply only to foreign companies.

A company operating in food business has to comply by over 50 regulations and the total number of regulations depends on its area of operations. Some of the regulations across the food supply chain are discussed below.

#### i. Regulations affecting Food Businesses

Food manufacturers have to comply with regulations such as the Food Safety and Standards Act, 2006 (Ministry of Health and Family Welfare), Legal Metrology Act, 2009 (Ministry of Consumer Affairs) and central government and state specific environmental and labour regulations, among others. Most of these regulations are also applicable to retailers.

#### • Food Safety and Standards Act, 2006

In August 2011, India implemented the Food Safety Standards Act (FSSA), 2006, which is applicable to all stakeholders in the food supply chain, except farmers. This Act is uniformly implemented in all states and has led to the establishment of the Food Safety and Standards Authority of India (FSSAI), which lays down safety and quality standards for food items and regulates their manufacture, storage, distribution, sale and imports. The Act has consolidated several central acts<sup>13</sup> and orders that applied to the food sector, with the objective of effective implementation, transparency and accountability. The FSSA has six key regulations related to food business:

- Licensing and Registration of Food Businesses Regulation
- Packaging and Labelling Regulation
- Food Product Standards and Food Additives Regulation
- Prohibition and Restriction on Sales Regulation
- Contaminants, Toxins and Residues Regulation
- Laboratory and Sampling Analysis Regulation

All food business operators in India, whether domestic or foreign, require an FSSAI licence to conduct business in the country. Although the food safety standards in India are based on the Codex Alimentarius and in 2013 the FSSAI began to harmonise its regulations with Codex Alimentarius, this process is still underway. Since the regulation is evolving importers, exporters and manufacturers of new products which are not listed with FSSAI are facing several issues, some of which are discussed later.

<sup>&</sup>lt;sup>10</sup> Indian Brand Equity Foundation.

<sup>&</sup>lt;sup>11</sup> Deloitte–ICC (2012).

<sup>&</sup>lt;sup>12</sup> PHD Chambers and Yes Bank Limited (2012).

<sup>&</sup>lt;sup>13</sup> These include the Prevention of Food Adulteration Act, 1954; Fruit Product Order, 1955; Solvent Extracted Oil, De-Oiled Meal and Edible Flour (Control) Order, 1967; Meat Food Products Order, 1973; Edible Oils Packing, 1998; Vegetable Oil Products Order, 1988; and Milk and Milk Product Amendment Regulations, 2009.

#### • Environmental Regulations

Companies manufacturing in India have to adhere to the environmental laws in the country. The Central Pollution Control Board under the Ministry of Environment and Forests regulates the use of packaging materials and disposal of packaging waste by the industry. In India the major environment Acts that impact the food processing industry include the Environmental Protection Act, 1986, the Plastics (Manufacture, Usage and Waste Management) Rules, 2009, the Water (Prevention and Control of Pollution) Act, 1974, amended in 1988, the Water (Prevention and Control of Pollution) Cess Act, 1977, amended in 2003 and the Air (Prevention and Control of Pollution) Act, 1981, amended in 1987. Their implementation often varies from state-to-state.

#### • Legal Metrology Act, 2009

The Legal Metrology Act, 2009 establishes uniform standards of weights and measures. According to the Legal Metrology Packaged Commodities Rules, 2011 (which came into force on April 1, 2011), manufacturing, packing, selling or importing any prepackaged commodity is prohibited unless it is in a quantity and carries standard all prescribed declarations. The Legal Metrology Act, 2009 imposes standard pack sizes for certain commodities as a consumer protection measure. This Act requires that the maximum retail price should be mentioned on the product label, which is not required by the EU and many other countries.

#### • Other Standards and Labelling Requirement

Food businesses in products such as milkbased products, baby food and food additives have to comply with the Bureau of Indian Standards (BIS). The BIS is under the Ministry of Consumer Affairs, Food & Public Distribution.

#### • Regulations on Imported Products

A part from those listed above, in case of imported products there are additional regulations. The Export Inspection Council (EIC) along with the Ministry of Commerce and Industries has laid down guidelines, acts and regulations on imported commodities. These international standards—Codex are based on Alimentarius. The EIC monitors imports of food items and checks the condition of the hold in which the goods are being transported, the visual/physical appearance of the goods and the labelling of the products. Customs officials check the consignments of edible/food products imported through ports, inland container depots, air cargo complexes, container freight stations and land customs stations. The port health officer checks the samples of imported food products. In addition, every imported food item at the time of its import is examined to have a valid shelf life of not less

than 60 per cent of its original shelf life;<sup>14</sup> food articles that do not meet this condition cannot be sold in the domestic market. The Ministry also imposes labelling requirements such as the requirement to print information on the month and year when the commodity was manufactured/ packed or imported.

Other acts impacting imports of raw materials include the Livestock Importation Act, 1898 (this Act regulates, restricts or prohibits the import of any livestock that may affect human or animal health) and the Plant Quarantine Order, 2003 (this is an order by the central government to prohibit and regulate the import of agricultural goods).

#### • Consumer Protection Regulations

All stakeholders have to abide by the consumer protection regulations such as the Consumer Protection Act, 1986 and the Consumer Protection (Amendment) Act, 2002. The Ministry of Consumer Affairs provide guidelines for the protection of consumer interests and rights in India.

#### • Regulations on Retail Operations

Retailers are regulated by multiple authorities and regulations, which are largely at the state and local levels. These include Shops and Establishment Trade Licence, police clearance, FSSAI licence and fire clearance, among others.

Foreign companies interested in establishing presence in India are required to meet the FDI regulations which are discussed below:

#### c) FDI Regulations and Restrictions

FDI regulations in India are generally imposed and implemented by the central government.<sup>15</sup> A foreign investor in India falls under the Foreign Exchange Management Act (FEMA), 1999<sup>16</sup> of the Ministry of Finance. The Act is managed by the Reserve Bank of India (RBI), the central bank, and it consolidates and amends laws related to foreign investments in the country and profit repatriation.<sup>17</sup>

Foreign investment regulations are issued by the Department of Industrial Policy and Promotion (DIPP). In India, FDI is allowed through two routes: (a) automatic route and (b) government route. Under the automatic route no prior approval of the government is required, while under the government route proposals for FDI have to be cleared by the Foreign Investment Promotion Board (FIPB), constituted by the Ministry of Finance. The FIPB is an inter-ministerial body that examines and discusses proposals for foreign

<sup>&</sup>lt;sup>14</sup> http://www.sethassociates.com/food-and-drug-industry-in-india.html (last accessed in June 2013).

<sup>&</sup>lt;sup>15</sup> The only exception to this is the multi-brand retail FDI policy where implementation is at the state level.

<sup>&</sup>lt;sup>16</sup> http://finmin.nic.in/the\_ministry/dept\_eco\_affairs/capital\_market\_div/ FEMA\_act\_1999.pdf (accessed on February 12, 2014).

<sup>&</sup>lt;sup>17</sup> At present, necessary changes in the FEMA regulation to allow FDI in multi-brand retail are under review with Parliament.

investments in select sectors. The Minister of Finance considers the recommendations of the FIPB on proposals for foreign investment up to Rs.12 billion (\$193.5 million).<sup>18</sup> Proposals involving foreign investment of more than Rs.12 billion (\$193.5 million) require the approval of the Cabinet Committee on Economic Affairs (CCEA).

Over time, the FDI policy in India has been liberalised. However, there are certain segments within the food supply chain such as retail where there are FDI restrictions<sup>19</sup> as discussed below:

#### Food Processing/Manufacturing

The Indian government encourages foreign investment in manufacturing in the food processing sector and there is no discrimination between foreign and domestic investment in this sector. FDI up to 100 per cent through the automatic route is allowed for all processed food products except for items reserved for micro and small enterprises (MSEs), which include pickles, chutney and bread, among others. For manufacture of items reserved for MSEs, FDI is permissible under the automatic route up to 24 per cent. If the foreign investment is more than 24 per cent, it requires FIPB approval. Such an undertaking requires an industrial licence under the Industries (Development & Regulation) Act, 1951.<sup>20</sup>

#### Food Related Logistics

Foreign investment is encouraged in the food logistics chain and 100 per cent FDI is allowed under the automatic route in storage, warehousing and cold chains. FDI up to 100 per cent is also allowed in IT (information technology) software related to supply chain development, trucking services, etc. The government has allowed foreign investment in dedicated freight corridors more recently allowed FDI in railways. However, there are FDI restrictions in certain segments of logistics such as air transport (FDI up to 49 per cent is allowed in scheduled air transport and 74 per cent in non-scheduled air transport).

#### • Wholesale and Retail

The FDI policy in wholesale and retail trade is complex and it varies across different segments. For example, 100 per cent FDI is allowed in the wholesale cash-and-carry<sup>21</sup> segment through the automatic route.

It is subject to the condition that wholesale trade to group companies taken together should not exceed 25 per cent of the total turnover of the wholesale venture. In addition, a wholesale trader cannot open a retail outlet and sell directly to consumers. Up to 100 per cent FDI is also allowed in test marketing under the government/FIPB route. In August 2013, the Indian government changed the conditions for FDI in test marketing. Previously, investment in test marketing was only allowed for items for which the retailer had approval for manufacturing and the manufacturing facility needed to be set up simultaneously with the commencement of test marketing for the product. Moreover, test marketing was only allowed for a period of two years. In the renewed policy, the government has withdrawn all these conditions.22

India is probably the only country with a brandbased FDI in retail policy. Up to 100 per cent FDI is allowed in single-brand retail and 51 per cent FDI in multi-brand retail, subject to certain conditions. From August 2013, the entry routes for FDI in single-brand retail have been modified. Previously, FIPB approval was required for 100 per cent investment, but now up to 49 per cent investment is allowed under the automatic route; only investments exceeding 49 per cent require FIPB approval.

For e-commerce activities, 100 per cent FDI is permitted in business-to-business (B2B) through the automatic route; however, FDI is prohibited in businessto-consumer (B2C) operations. The government is reviewing the e-commerce policy which is likely to change in the near future.

Overall, a foreign retailer can operate in India through the wholesale cash-and-carry route, franchising (allowed through RBI approval on a case-by-case basis), distribution and commission agents, singlebrand retail and though joint venture with a Indian partner in multi-brand retail. The FDI policy imposes certain conditions that discriminate against foreign retailers *vis-à-vis* domestic retailers. Specifically, in the case of multi-brand retail, there is a minimum capital requirement, a mandatory condition of 30 per cent local sourcing, state governments have the right to not allow FDI and foreign retailers are not allowed to do e-tailing.

The remaining sections of this paper are based on an analysis of in-depth discussions with industry and policymakers. In total 50 interviews were conducted. Evidence was collected for different modes of presence in the Indian market. The companies were further

 $<sup>^{18}</sup>$  Conversions are made using the RBI exchange rate on February 17, 2014.  $1 = \mathrm{Rs.}$  62.27.

<sup>&</sup>lt;sup>19</sup> For details, see the DIPP Consolidated FDI Policy, October 2013 accessible at http://dipp.nic.in/English/Policies/FDI\_Circular\_01\_2013. pdf (accessed on January 8, 2014).

<sup>&</sup>lt;sup>20</sup> Ministry of Food Processing Industries.

<sup>&</sup>lt;sup>21</sup> In India, wholesale trade is defined as sale of goods/merchandise to retailers, industrial, commercial, institutional or other professional business users or to other wholesalers and related subordinated service providers. Wholesale trading would, accordingly, be sales for the purpose of trade, business and profession, as opposed to sales for the purpose of personal consumption. The yardstick to determine whether the sale is wholesale or not would be the type of customers to

whom the sale is made and not the size and volume of sales. Wholesale trading would include resale, processing and thereafter sale, bulk imports with export/ex-bonded warehouse business sales and B2B e-Commerce.

<sup>&</sup>lt;sup>22</sup> 'Consolidated FDI Policy (effective from April 5, 2013)', DIPP, Ministry of Commerce and Industry, Government of India and Press Note 6, DIPP, Ministry of Commerce and Industry, Government of India.

enquired about their experience in India, which was used to derive the barriers faced in the Indian market.

Based on the responses, market opportunities were identified.

#### d) Presence in the Indian Market

Considering the prevalent regulations in India, foreign companies adopt different modes for entry and

operations in the Indian market. During the survey evidence was found for each route of entry in India and the experiences of companies were mapped to derive at the most preferred route of entry in the Indian market. The evidence and experiences are tabulated in Table 1

Table 1 : Evidence fo	r Different Poutee of Fu	ntry in India and thair I	Experience in the Indian Market.
TADIE T. LVIUEIICE IU		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_Aperience in the indian market.

Route	Evidence	Experience
Wholly-owned subsidiary in manufacturing	Hindustan Unilever Limited, PepsiCo and ITC Limited	Companies get same treatment as domestic companies. The agri-business division of ITC Limited is one of the largest exporters of India
Franchising	McDonlads, Subway, Baskin Robbins and Auchan	Most companies have large footprints across the country and have set up pan-India supply chain
Wholesale trade/cash-and-carry operations	Metro Cash & Carry, Carrefour, Wal-Mart and Tesco	Companies have established strong backward linkages but this is not considered the best model of operation in the Indian market
Single-brand retail	No strong evidence	This route has not been used by global players in food business to enter India.
Multi-brand retail	Tesco	Government partially allowed FDI in multi brand retail in 2012 – the policy is still considered restrictive.
Direct sourcing	Cobra beer, Waitrose (John Lewis Partnership) and Aldi Einkauf	Growing preference for Indian products due to rising diaspora – foreign companies have contract with Indian manufacturers or have acquired assets.
Exporting	Waitrose, Walkers, Campina, Kraft Foods and Doritos	Exclusive agreements with Indian buyers and as the market for their products grow, many companies start manufacturing in India. Some companies have faced problems due to import policy in India
Non-store retail	No strong evidence	Globally food businesses have adopted this route but it is yet to take-off in the Indian market, particularly in the case of fast food chains.

Source: Primary survey

Only a few foreign companies operate in the logistics segment of the food supply chain as the supply chain infrastructure in India is still underdeveloped and companies have to make very large investments to set up end-to-end food supply chains. For instance, Maersk India Private Limited has invested in setting up logistics infrastructure in India. It formed a joint venture with the Container Corporation of India (Concor) to set up a cargo terminal at Nhava Sheva port in Mumbai. Companies such as Danfoss (a Danish company) provide specialised services such as cold storage facilities. Snowman Logistics Limited, which is a joint venture between Gateway Distriparks Limited, Mitsubishi Corporation and Nichirei Corporation of Japan and International Finance Corporation in India, is one of the first and the largest cold chain and logistics firm in India with pan-India operations. It provides services to several retailers.23

Foreign governments and funding agencies have partnered with the Indian government and private players to build infrastructure and freight corridors. For instance, the India–Japan partnership in developing the Delhi–Mumbai Freight Corridor and the interest of the UK government and companies in developing the Bangalore–Mumbai Economic Corridor (BMEC) have led to investments in freight corridors.

Overall, the interviews highlight that foreign companies are present in different segments of the food supply chain in India. They have adopted unique business models, customised their products and changed their strategies from time to time. For instance, several fast food chains (including McDonald's and KFC) had to change their products to cater to local tastes. PepsiCo India launched products such as "Nimbooz" (an Indian-style lime-based drink) and "Kurkure" for the Indian market. The interest in the Indian market is largely due to the large and growing number of upper and middle-class consumers and the availability of a low-priced, skilled workforce. Several retailers from EU member countries and other developed countries such as the US are facing a saturated domestic market, while the Indian market is unsaturated and the food supply chain has seen double-digit growth in the past decade. Many companies treat India as an alternative market to China, which enables them to diversify their risks. If the

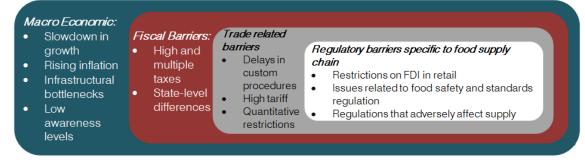
<sup>&</sup>lt;sup>23</sup> Reardon and Minten (2011).

economy grows at around 8 per cent, companies in food business predict a 15-20 per cent growth in the next five years. The next section discusses barriers in the food supply chain.

#### Barrier in Setting up Food Supply Chain in India e)

Discussions with the industry revealed several barriers faced by companies in setting up food supply chain in India. Depending on their impact, barriers can be classified in different categories. There are macroeconomic issues faced in the country that adversely affect all businesses and then there are barriers that are specific to the food business. Figure 1 presents these barriers depending on the nature of their impact on food businesses. Issues highlighted in the peripheral rectangle are faced by all industries irrespective of the segment of operation. As we move towards the center, the barriers are specific to food businesses and have a direct impact on their operations.

*Figure 1 :* Barriers Faced in Setting-up Food Supply Chain in India



#### Source: Primary survey

#### i. Macro-Economic Issues

India's growth rate has slowed in the past few years, which adversely affects consumer demand and purchase behaviour. According to the IMF's World Economic Outlook Update, in 2010 India's GDP grew at 10.3 per cent,<sup>24</sup> but the growth rate fell to 4.6 in 2013–14 and it is projected to be 5.4 per cent in 2014–15.<sup>25</sup> In the past few years, India has been facing high food inflation. Average food inflation was 10.1 per cent between 2011-12 (Gulati and Saini, 2013), which increased the cost of raw materials for manufacturers, while consumers reduce their discretionary consumption.

The lack of quality infrastructure is a major barrier in India. The erratic power supply and the high cost of power have adversely impacted all types of businesses. It is difficult to get land for projects such as mega food parks and the cost of land is high (Mukherjee et al., 2013). The poor quality of roads and lack of connectivity of rural roads with state and national highways is a major barrier for sourcing agriculture products. Survey participations pointed out that on average it takes almost seven days to transport food products from Mumbai to Kolkata, which is a distance of about 1,987 kilometres. The delays and lack of computerisation at check-posts along with the need for informal payments increase transit time and logistics costs. This adversely affects the quality of the raw materials and food products, which are perishable. The

dedicated freight corridor projects are progressing at a slow pace and the Indian Railways charges a high freight rate to cross-subsidise the low passenger fares.<sup>26</sup> The cost of doing business in the country is high due to infrastructure problems and regulatory hurdles. According to the World Bank's Ease of Doing Business Index, India was ranked 134 in 2014 among 189 countries, which is much below other emerging markets such as China (96) and Brazil (116).<sup>27</sup>

Although India is a large market, Indian consumers are price sensitive and not very brand conscious (also see Mukherjee et al., 2012) with distinct food preferences that differ from global tastes. The consumers are heterogeneous and their demands for food items vary across different states of India. The consumption of packaged food and drink is lower in India than in developed countries and other developing countries. For example, per capita consumption of fruit juices in India is only 0.02 litres compared with China that has attained a level of 1.5 litres,<sup>28</sup> and per capita consumption of packaged drinking water in India is only 16.2 litres compared with 250 litres in Mexico.<sup>29</sup>

<sup>&</sup>lt;sup>24</sup> IMF World Economic Outlook Update, January 2011. http://www.imf. org/external/pubs/ft/weo/2011/update/01/pdf/0111.pdf (accessed on February 26, 2014).

<sup>&</sup>lt;sup>25</sup> IMF India 2014 Article IV Consultation accessible at http://www.imf. org/external/pubs/ft/scr/2014/cr1457.pdf (last accessed on February 26, 2014).

<sup>&</sup>lt;sup>26</sup> Passenger fare-to-freight ratio in India stood at 0.25:1 in 2010-11. That is far below the corresponding average of 1.4:1 for Korea, 1.3:1 for France, 1.2:1 for China, 0.9:1 for Malaysia and Indonesia, and 0.7:1 for Thailand. (Source: "Milking freight to please passengers", Business *Line*, February 25, 2011).

World Bank Doing Business Report 2014 accessible at http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/D ocuments/Annual-Reports/English/DB14-Full-Report.pdf(last accessed on February 26, 2014).

<sup>&</sup>lt;sup>28</sup>http://mofpi.nic.in/ContentPage.aspx?CategoryId=547(last accessed in May 2013).

<sup>&</sup>lt;sup>29</sup> http://articles.economictimes.indiatimes.com/2012-07-03/news/3252 4033 1 bottled-water-water-market-capita-consumption (last access ed in May 2013).

#### ii. Fiscal Barriers

The food sector in India faces high and multilayered taxes that vary across states. This makes it difficult to have a uniform pan-India price. Certain products such as whisky, wines and spirits are heavily taxed by the central and state governments. In addition to taxes, some states and even local bodies impose *cess* such as the Octroi in Maharashtra and the Way Bill in West Bengal. Taxes vary by product categories and processed food often faces a higher tax than nonprocessed food. The Indian government has proposed a single Goods and Services Tax (GST) to streamline the tax system. However, the implementation of GST is getting delayed and there are on-going discussions and debate about whether agriculture products will be covered under GST.

#### iii. Trade-related Barriers

Apart from the restrictions that importers face due to regulations, high import tariffs on agro-products and delays in getting clearances from customs and other authorities are major barriers for importers. In India, tariffs on agriculture products are high, primarily to protect domestic producers and farmers (See Table 2). The country has a large negative trade balance in agriculture sector and there is a strong domestic lobby against tariff reduction. India is not keen to liberalise tariffs even bilaterally under its trade agreements. Table 2 shows that the tariff peaks are higher in the EU than in India, but while the EU is pushing for tariff liberalisation in its trade agreements, India is against it (See Table 2). This has adversely impacted the trade negotiations with the EU.

	Average Applied MFN Rate		Percentage of duty-free tariff lines		Maximum applied MFN Tariff	
Products	India (2010)	EU-27 (2011)	India (2010)	EU-27 (2011)	India (2010)	EU-27 (2011)
Dairy products	33.7	55.2	0	0	60	205
Fruit, vegetables, plants	30.3	11.5	1.3	18.8	100	170
Coffee, tea	56.1	6.2	0	27.1	100	25
Cereals & preparations	30.7	16.3	11.9	12.0	150	167
Oilseeds, fats & oils	18.8	7.1	16.9	43.5	100	171
Sugars and confectionery	34.4	29.1	0	0	60	131
Beverages & tobacco	70.8	19.2	0	19.8	150	162
Other agricultural products	21.5	4.8	11.2	65.1	70	131
Textiles	13.3	6.6	0	2.1	106	12
Clothing	15.1	11.5	0	0	315	12

Table 2 : Applied MFN 1	Cariff Rates of India	and ELL by	Product Group
ADIC 2, Applicu IVII IVI	1 ann 1 1 ales Ur Inula		y i louuci Gioup

Source: Compiled from WTO (2012).

India has also kept several agricultural products including whisky, wines and spirits, wheat, maize and dairy products (including milk, milk powder, ghee, butter and whey) in the sensitive/negative/exclusion list under major trade agreements. The country uses quantitative restrictions or quotas for agricultural raw materials such as sugar, dairy products, fruits and vegetables. This implies that only certain quantities of imports are allowed at certain tariff rates.

#### iv. Regulatory Barriers

Survey participants said that in India the central government has a limited role in regulating the food supply chain which leads to multiplicity of regulation across different states. Moreover, there is a lack of coordination between central government policies and the policies of different state governments.

#### • Restrictions on FDI in Retail

Survey participants said that India is the only country that has a brand-based FDI retail policy and the policy is unclear about how brands and sub-brands should be defined. Due to this lack of clarity, a number of retailers including Marks & Spencer did not get approval for food product retail when it applied through the single-brand retail route.

The objective of the FDI in retail policy is not clear. While the government wants FDI in retail, it seems to impose conditions that make the policy unattractive to foreign retailers. The government aims to reach certain goals such as reduction in food inflation by allowing FDI in retail, which is difficult to achieve. Food inflation in India is mainly due to supply-side constraints and foreign retailers can only help to streamline the supply chain if they have the supporting policies and there is an adequate supply of raw materials and food products.

The policy of allowing FDI in retail has been changed several times, which has created an uncertain operating environment. Even when the central government liberalised the FDI policy, it imposed additional requirements. Moreover states reserve the right to counter the policy. The new government at the centre led by the current Prime Minister – Narendra Damodardas Modi - have decided to put the FDI in retail liberalisation on hold for some time.

The mandatory requirement to invest in backend operations is difficult for retailers who only deal with front-end retail and use the services of 3PL and 4PL logistics companies for the back-end. The retailers also had concerns regarding sourcing conditions from the SMEs. Sometimes SMEs do not meet the quality standards. This is especially a concern for specialised and high-end food and beverage retailers. It was also pointed out that the actual sourcing requirement depends on the consumption pattern of the target population and the 30 per cent sourcing requirement would be difficult to meet if the consumption behaviour is tilted towards products from multinational corporations.

The government is yet to change the FEMA regulations to allow FDI in multi-brand retail and, hence, retailers may face problems in repatriating profits.

#### • Issues related to labelling and Standards

Packaging and labelling requirements for processed foods and beverages are governed by several regulations including the FSSA, 2006, Legal Metrology Act, 2009 and standards set by BIS. Some of the regulations are evolving and are being implemented unevenly across different ports in the country. For example, in the second half of 2013, the FSSA 2006 was stringently imposed in Nhava Sheva port in Mumbai, which led to the withholding of several consignments of imported food products due to non-conformity with Indian regulations; at the same time, consignments into Chennai port did not face this problem. Retailers and importers in India face a challenge, since they need to repackage the products to meet the Indian standards. Previously, companies were allowed to do the packaging and labelling in bonded warehouses in India; however, now they are required to package and label the goods abroad. The government has imposed restrictions on the use of stickers on the labels. Since the Indian market for imported products is still small, it is difficult for companies, especially foreign small and medium enterprises to design labels only for India.

There are other issues related to the existing regulations. Under the Legal Metrology (Packaged Commodities) Rules, 2011, food and beverages can only be sold in certain standard sizes that have to be printed on the package in specific units. For instance, while previously companies that produced powder for beverages could print 'number of glasses' to denote the quantity of beverage, under the new Act they need to specify the quantity in grams. Companies observed that converting 'number of glasses' to grams might result in odd package sizes that would affect their promotional activities. The rule also does not account for shrinkages in the weight of food and beverage products due to weather conditions. If the weight is found to be below the printed weight, the company is held responsible.

The FSSA, 2006 lacks supply chain traceability. It does not cover farmers and, therefore, does not cover inspection/regulation of products that are supplied by farmers. Hence, other stakeholders in the supply chain can be held responsible for adulteration due to the presence of insecticides or pesticides at the farm level. Second, the classification and categorisation of food and beverages in India differ from global categorisation. This creates problems of parity and definitional synergy for global companies, especially those involved in imports of food and beverages. The additive approval process is also not aligned at the global level. International companies pointed out that as per Schedule 4 of FSSA, 2006, separate licences are required for the manufacture and distribution of different categories of foods and beverages, including proprietary foods, genetically modified foods, health supplements, functional foods and special dietary foods. Moreover, separate licences are required from the state and central governments, which complicates the licence application and approval process.

The product approval process under the FSSA 2006 is slow for several reasons. As per the FSSA Act. testing of all foods and beverages should be done in accredited laboratories. However, most states do not have adequate funds to set up a laboratory and the central government has not permitted any additional budget to the states for this purpose. There is also a lack of qualified food inspectors. Initially the Act mandated that food inspectors have a background in nutrition and food, but the lack of gualified people and pressure from trade unions led to a change in the requirement, making recruitment more flexible and allowing the recruitment of food inspectors from other science streams (such as physics). The lack of knowledge and experience of the inspectors has created problems. Overall, product approvals can take as long as nine months, which delays the establishment of manufacturing facilities. Importers pointed out that after the implementation of the FSSA 2006, the customs clearance process has become extremely cumbersome and causes delays. This is primarily because there are shortages of testing laboratories and FSSA is yet to adopt the global standards.

#### • Regulations that Adversely Impact Sourcing

The Agricultural Produce Marketing Committee Act (APMC, reformed in 2008) and the Essential Commodities Act, <sup>30</sup> 1955, adversely impact sourcing of raw materials as well as finished products. The APMC Act has not been reformed in several states and, therefore, agriculture products have to be sourced from state-controlled *mandis*. Most *mandis* suffer from poor storage, lack handling and processing facilities and do not have marketing channels. Around 15–25 per cent of the total produce sold *via* the APMC route gets wasted due to multiple intermediaries and poor *mandi* 

2014

<sup>&</sup>lt;sup>30</sup> This Act provides for control over production, supply and distribution and trade and commerce of certain commodities such as foodstuff.

infrastructure. Moreover, an agricultural commodity moving from one state to another attracts a tax or 'mandi fee' every time it enters a new regulated market. Therefore, the cost at which the produce is available to the manufacturer rises by almost 60 to 70 per cent (Pachouri, 2013). Even in states where direct procurement is allowed, private players have to pay mandi cess. In states such as West Bengal contract farming is not allowed and companies have to enter into agreements such as a partnership agreement with farmers for direct sourcing. This leads to uncertain operating environment for the manufacturers and farmers. The Essential Commodities Act, 1955 regulates and controls production, distribution and pricing of certain commodities such as sugar and private players find it difficult to source such products. Additionally, it was pointed out that environment regulations vary from

state to state and implementation varies. This often becomes a problem for companies.

### II. A Five-Point Go-to-Market Strategy

Considering that unexplored opportunities in the Indian market in the food supply chain sector, there is a huge potential for foreign companies to establish presence in India. However, due to the presence of several regulatory and other hurdles, companies have to adopt a customized market entry strategy to establish presence in India. Evidence collected from the companies already present in India reflects that some routes are preferred to enter India over others. A five point go-to-market strategy (see Figure 2) for foreign companies in discussed in this section.

*Figure 2*: A Five-Point Go-to-Market Strategy

Step 1: Identify your nodal government agency, regulator and understand the regulationsStep 2: Select the right mode of entry and area of operation	Step 3: Know	Step 4: Right product	Step 5: Do not
	your	packaging and	expect short-term
	consumers	positioning	profits

#### Source: Primary survey

Step 1: A large part of the policy with respect to the food supply chain is either enacted or implemented at the state level. Therefore, it is important for companies to identify a state government that is receptive to foreign investment. Agricultural raw materials are available in more than one state and, therefore, the company should carefully choose the ideal state for establishing operations. It is important to note that states differ widely in their norms and regulations. For example, for environment clearance, Gujarat, Karnataka and Haryana have categorised beverages under the 'red' category along with highly polluting industries, while states such as Orissa and Himachal Pradesh have placed it under the 'orange' category. Therefore, the company has to understand the state policies, incentives and regulation while selecting the state for establishing presence and select the state that offers the best ease of doing business.

In fact, a company that wants to establish a presence in India should get in touch with the Ministry of Food Processing Industry at the centre and the relevant ministries/departments of the state government. The State Industrial Development Corporations have been proactive in attracting investments; they have access to land and can help with other resources and clearances. They also offer several incentives under the industrial development policies which can be dovetailed with the incentives offered by the central government.

Indian government is focusing on manufacturing. To facilitate investment in manufacturing, the central government has set-up "Make in India" portal (http://www.makeinindia.com/), which is designed to provide information to foreign investors in India.

Several regulations impact the food supply chain and foreign companies should understand these regulations and foreign companies can avoid regulatory hurdles by adopting right strategies. For instance, if companies find the India labelling requirements restrictive, they can repackage the product in India, companies and meet the regulations.

Step 2: Since India is a difficult market, a joint venture with a like-minded local partner can ease the entry process and enable the company to understand the market. Most foreign companies are not aware of the test marketing route. This is one of the most flexible routes to enter the Indian market. The most difficult route to enter the food retail business (apart from fast food chains) is the single-brand retail route. Companies that have both manufacturing and retail operations should ideally enter India by establishing a wholly-owned subsidiary in manufacturing. This will enable them to get all benefits which are extended to an Indian company and the retail FDI restrictions will not be applicable in such cases.

Companies in manufacturing should ideally select an industrial cluster which offer better infrastructure for investment. The central and state governments are promoting agro-processing industrial clusters which offers better infrastructure and in some cases (especially the ones run by the state governments) provide facilities such as single window clearances.

India does not encourage the import of food products. Therefore, companies are likely to face barriers in food imports and there can be sporadic restrictions imposed by FSSAI. Moreover, imported products are costly due to high tariffs and other duties and therefore, their market reach is limited. Local manufacturing will enable a company to have competitive prices and better market reach.

Step 3: Indian consumers are heterogeneous and their tastes and preferences vary across states and even within states (Mukherjee et al., 2012). For example, while tea is preferred in north India, there is a higher preference for coffee in southern states such as Tamil Nadu. Foreign manufacturers and retailers, therefore, should have a clear knowledge about their customers' tastes, religious taboos and shopping habits, among others. Once the products are successfully launched in India, many of them are exported. For example, PepsiCo's product "Kurkure" is now available in Pakistan, Kenya and Canada. During the survey, lowcost volume retailers pointed out that they have to source around 75-80 per cent of the products locally to cater to local tastes. The demand for imported products is growing but imported products are expensive and beyond the reach of the majority of shoppers who are price sensitive and not much brand conscious.

To address price sensitivities, foreign companies have adopted smart pricing strategies. For example, the Coca-Cola India launched "Chhota Coke", a 200 ml bottle at the price of Rs.5 (\$0.08)<sup>31</sup> especially for Indian consumers. This helped the company penetrate the market at a rapid pace. Until recently, a number of foreign companies tried different packaging sizes to penetrate the market, but the government has recently imposed restrictions on package sizes.

The shopping habits in India are different from the developed countries. Indians prefer to shop frequently for food and groceries and they have limited refrigeration facilities. Hence, neighbourhood store formats are more successful than supermarkets or hypermarkets. Modern retail is a new concept in India and modern retailers are offering some of the benefits of traditional retailers such as home delivery to increase their market share. Foreign retailers may face problems in offering the price that local shopkeepers offer due to their higher infrastructure costs. They, therefore, need innovative business practices to attract consumers.

Step 4: Although demand for packaged food is growing, most consumers still prefer to cook at home. Indian consumers are not very brand conscious particularly for food products and they experiment with brands. It is important for foreign companies to enhance their product and brand visibility through proper marketing. Some companies have roped in film personalities for advertisements, while others have designed innovative advertisements. Most retailers use promotions and offers by clubbing products or selling below the maximum retail price to attract consumers. While retailers prefer to use pamphlets and advertise through newspapers and the print media, large manufacturers have used television channels. Some of them also promote events such as cricket or other popular games.

India has a variety of climate conditions and the storage facilities are poor and inadequate. Therefore, proper packaging is important. Several global multinationals with high quality standards have faced issues such as insects being detected inside the packages due to poor storage and packaging. Even if these problems are caused by mishandling at the retail end, manufacturers are often held responsible. The supply chain in India is fragmented and a food manufacturer has to ensure that the products reach the neighbourhood *kirana* stores or traditional retail outlets on time and in the right condition. Therefore, they may have to adopt different packaging technology from what is done in developed countries.

*Step 5:* India is a large but a difficult market for players in the food supply chain. Companies should not expect short-term profits. The survey showed that profits can be reaped only after 3–5 years, and sometimes longer. Companies have to prepare for contingencies and delays. They should also be prepared to invest in the supply chain and distribution network before starting operations.

#### III. CONCLUSION

Despite the notable advantages as a producer and consumer of food products, India still lags behind its global counterparts in the food processing segment. As discussed, very small proportional of food products in India are consumable. Foreign companies have shown interest in the large and growing food and grocery market however, evidence reflect several barriers faced by them in India. The paper suggests that India offers immense potential for companies in food businesses if they can follow the right go-to-market strategy and have a clear understanding of the

 $<sup>^{31}</sup>$  Conversions are made using the RBI exchange rate on February 17, 2014.  $1 = \text{Rs.}\ 62.27$ 

regulatory framework. Precisely, companies have to carefully plan their location, product, have innovative business practices and know their consumers. With a long term investment strategy, a foreign company is likely to succeed and make profits in India as has been the case of major multinationals that are already present in India.

#### References Références Referencias

- 1. Anusha Chari and T.C.A Madhav Raghavan (2012),"Foreign Direct Investment in India's Retail Bazaar: Opportunities and Challenges", *The World Economy*, Vol. 35, Issue 1, 2012.
- 2. Deloitte-ICC (2012). *Logistics Sector: Present Situation and Way Forward*, Deloitte Touche Tohmatsu India Private Limited.
- FAO (2011), "Global Food Losses and Food Waste: Extent, Causes and Prevention", Study conducted for the International Congress by Food and Agriculture Organization (FAO) of the United Nations at Interpack2011, Dusseldorf, Germany accessible at http://www.fao.org/docrep/014/mb06 0e/mb060e00.pdf (last accessed on 10th November 2014).
- 4. FAO (2012),"World Agriculture Towards 2030/2050- The 2012 Revision", ESA Working Paper No. 12-03, Agricultural Development Economics Division. Food and Agriculture Organization of the United Nations, June 2012.
- Julian Parfitt, Mark Barthel and Sarah Macnaughton (2010): 'Food security: Feeding the world in 2050 ', Philosophical Transactions: Biological Sciences, Vol. 365, No. 1554, (27 September 2010), pp. 3065-3081.
- Mukherjee, A., D. Satija, T.M. Goyal, M. K. Mantrala and S. Zou (2012). Are Indian consumers brand conscious? Insights for global retailers, *Asia Pacific Journal of Marketing and Logistics*, 24, 3, pp. 482-499.
- Mukherjee, A., T. M. Goyal, P. Pal and Saubhik Deb (2014), "Food Supply Chain in India: Analysing the Potential for International Businesses, Academic Foundation, New Delhi.
- Pachouri, A. (2013). Poor Farm-Market Linkages in India's Agriculture Value Chains, *Farmers Forum*, 13, 1, pp. 55-56.
- 9. PHD Chambers and Yes Bank Limited (2012). India's Cold Chain Sector: A Diagnostic and Prescriptive Study, Food and Agribusiness Strategic Advisory and Research (FASAR). New Delhi: Yes Bank Limited.
- Reardon, T. and B. Minten (2011). *The Quiet Revolution in India's Food Supply Chain*, IFPRI Discussion Paper 01115. New Delhi: International Food Policy Research Institute.

- 11. The Boston Consulting Group (2012). *The Tiger Roars: An In-depth Analysis of How a Billion Plus People Consume.* The Boston Consulting Group, India.
- 12. WTO (2012). *World Tariff Profiles 2012*, World Trade Organization, Geneva. Accessible at http://www.wto.org/english/res\_e/booksp\_e/tariff\_pr ofiles12\_e.pdf (last accessed on March 10, 2014)

# This page is intentionally left blank