

Exploring the Development of Food Supply Chains in Bangladesh

Trends, Opportunities and Practical Information



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Executive Summary

Economic situation

- Goldman Sachs named Bangladesh one of the 'Next Eleven' countries. The Next Eleven are the eleven countries - Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, the Philippines, Turkey, South Korea and Vietnam, as identified by Goldman Sachs investment banker and economist Jim O'Neill. It is believed that these countries have a high potential of becoming, along with the BRICS, (Brazil, Russia, India, China and South Africa), the world's largest economies in the 21st century.
- In 2013, the population was estimated at 160 million, and forecast to increase to 169 million by 2020. Dhaka is expected to become one of the world's mega cities, with the population increasing to 30 million in 2025 and 50 million by 2050.
- Bangladesh was ranked as the 57th largest economy in 2012 in nominal terms, with a gross domestic product of US\$ 115,6 billion.
- Bangladesh remains one of the poorest countries in the world; 27 of the population was undernourished in 2011, (they are not having access to adequate amounts of safe, nutritious food to sustain a healthy and productive life - according to a definition of the Food and Agricultural Organization [FAO]). In the early 1990s 38 of the population had no access to sufficient food.
- The economy is showing an average annual growth rate of six percent in recent times, but a smaller growth rate is expected for the coming years.
- Main issues and hurdles for economic growth include housing, infrastructure, food production, clean water, power supplies, instable political situation and financial issues.
- More than half of the GDP in 2012 was generated by the service sector, followed by industry with 28.6, (including food industry 17), and agriculture 17.3. Bangladesh was the world's fourth-largest rice producer in 2012.
- Nearly half of the Bangladeshi population is employed in the agriculture sector.
- Important export sectors include (frozen) fish and seafood, food products, textile, software and IT services.
- Due to Bangladesh's low level of development, economic policy of the government is supported by international donors, and is oriented towards poverty alleviation by means of considerable subsidies. Donors have released USD 2,788 million in 2012-13, or 1.8 of the gross domestic product of Bangladesh (BDnews24.com, 2013).

Institutional setting

- Bangladesh developed a comprehensive Country Investment Plan for agriculture, food security and nutrition, (CIP). FAO supported the government of Bangladesh in the formulation of its National Food Policy and a Plan of Action, (PoA), for the period 2008-2015. This policy framework creates a good environment to define a comprehensive investment plan that supports mobilizing additional resources in the context of renewed international commitment to support food security, agriculture and nutrition.
- Fisheries, dairy, poultry and horticulture are the most promising agriculture subsectors in Bangladesh.

Retail and consumption of processed food

- Market share of modern retail in Bangladesh in 2012 is only around 0,5, and therefore one of the smallest market-shares for retail in the world. In developed countries retail has a market share in excess of 80. It is around 50 in Thailand and many far eastern countries, and around 15 in Sri Lanka.
- Market share in the retail sector in Bangladesh is still relatively low. However, turnovers are expected to grow yearly with up to 30 in 2015.
- Infrastructure and transport investments will most probably increase in the coming five years, followed by an upward development of the turnover in the retail sector.
- As a result of economic growth and urbanization, consumer food demand will increase and shift towards more added value products.
- Development of a modern retail sector will eventually, (by 2020), become a catalyst in improving the food supply chains in Bangladesh. The investments in cold rooms, packaging, transport and quality improvement will create a better price for all the players in the value chain. At present, products of modern retail are only affordable for a small part of the population.

Development of food supply chains

General

- The agricultural sector is dominated by small enterprises.
- Significant investments in electricity supply, transport, logistics and good governance are required to develop agro food chains in Bangladesh.

- The technical skills and knowledge required to produce and manage agro-food supply chains need to be improved.
- The availability of clean water is a key issue for the development of agriculture and fisheries in Bangladesh. Water, as a basic resource, is important to create employment opportunities and to contribute to economic development.
- Development of the aquaculture and poultry sectors in Bangladesh look promising.

Dairy

- Per capita milk consumption has not increased as rapidly as consumption of meat, fish and fruit and vegetables.
- Bangladesh is at present a milk deficient country, and continues to depend on dry milk imported in large quantities.
- In Bangladesh, dairy products are distributed via traditional trade channels, independent small grocers and other stores. Expanding companies should tailor their distribution strategies to meet the requirements of a more fragmented retail landscape.
- The processing industry is developing programs to grow the local supply of milk.
- Smallholders produce nearly all milk sold locally; the milk is consumed via the informal milk market, (93), while the formal market, (7), has a small but important and growing market share.
- Dairy producers have to improve productivity to be able to compete with imports.
- Smallholders are well integrated into formal dairy value chains. Currently, 14 dairy companies buy milk from nearly 300,000 smallholders. These companies provide limited value addition for smallholders in terms of livestock development services.
- Condensed milk is produced from imported commodities, which, until very recently, were cheaper than fresh milk or locally produced condensed milk. Market shares of imported milk powder are relatively high. Products produced from local fresh milk will increase market share.
- Domestic milk prices are no longer controlled. The recent increases in the prices of internationally traded dairy commodities and import tariffs, (45), have fostered foreign investment.
- Modern, appropriate milk-processing technologies are now available at the plant level in about 20 districts (out of 64), supported by local production of small-scale equipment.

- The dairy cow insurance scheme and feed mill enterprises play important roles in the development of the supply chain, especially because smallholder dairy producers are prone to increased financial risk.
- Dairying can play an important role for poor rural families, especially for regular nutrition, income and jobs and in integrating farming systems, (crop-fish-livestock), to optimize the use of available resources, including for example feed/fodder, land and water.
- Livestock and dairying enhance the capacity of poor rural people to cope with the annual monsoon floods (floods wash crops and fish away – livestock are kept at home and continue to produce food for home consumption and cash sales).

Poultry

- A considerable proportion of the growing population's demand for protein is met by the local supply of poultry produced at relatively low cost.
- Precautionary public measures to protect against the spread of diseases are important for the further development of the sector.
- Demand for poultry products is expected to keep growing in the near future.
- Large commercial enterprises are not yet well established in Bangladesh. Commercial poultry enterprises have the opportunity to reach the consumer market in the capital city. These entrepreneurs could potentially benefit from better storage and infrastructure.
- Small holders and SME's depend mainly on the local markets to sell their products. The poultry sector employs around 50,000 small holders, (enterprises that raise fewer than 1,000 poultry birds). Development of producer associations, training, improved quality control for all inputs and access to credit could strengthen the position of smallholders and SME's. These enterprises are important for the creation of employment.

Shrimp

- The total production in 2010 supplied 58 of the total national animal protein demand. The present per capita annual fish consumption in Bangladesh stands at about 14 kg/year, compared to a recommended minimum of 18 kg/year (FAO, 2012). Local and export markets offer good opportunities for development of the sector.
- The highest potential for the import of shrimp from Bangladesh relates to the cultured species and not to the wild captured species.
- Bangladeshi exports are traditionally oriented towards the EU market. The main reason that Bangladesh is currently experiencing increased popularity among EU buyers is the

comparatively low price of cultured shrimp, which is due primarily to the 10 export subsidy from the Government of Bangladesh, and the limited supply from other countries. The total value of shrimp exports from Bangladesh increased from US\$ 370m in 2004 to US\$ 423m in 2011.

- To assure future market share in the EU market, Bangladesh should invest in the shrimp sector to ensure a high level of quality in the future.
- To increase the shrimp production volume, post-harvest losses could be reduced and the productivity of shrimp farms increased.
- Profits in aquaculture have thus far been driven solely by low input costs, whereas genetic improvements of fish stocks and training for farmers are important for the development of the sector in the future.

Fruit and vegetables

- Consumption of fruit and vegetables is currently growing but remains 20 below the recommended daily intake.
- The prices of fruits and vegetables are predicted to rise, as it is seems unlikely to match the increase in local production at the same speed that demand will rise at, due to limitations on land, use of modern technology and managerial capacities.
- The production, processing and marketing of fruit and vegetables are underdeveloped; investments in expertise and technology have been insufficient thus far.
- Yield per unit could be use improved by using better varieties and higher quality planting material, introducing new production technologies, better soil management, irrigation, disease management and pest control.
- The salinity of surface water, in combination with foreseen water scarcity, forms another challenge.
- The use of saline resistant seeds could increase the production in Bangladesh. These seeds have been developed but are not yet commonly used by farmers.
- The fruit and vegetable sector could create job opportunities in Bangladesh and improve nutrition standards. However, development of this sector will be a major challenge due to the fact that growers lack essential knowledge, and the current possibilities to invest in smart adaptive technologies are insufficient.
- Less than one percent of total horticultural production is currently processed.
- Investing to reduce post-harvest losses in fruit and vegetables seems profitable and could further develop the supply chain.

- Increased efficiency of surface water irrigation, water harvesting for irrigation and the introduction of treatment and re-use of wastewater for irrigation could also contribute to the development of the sector.

Doing Business in Bangladesh

- According to the World Bank, the 'ease of doing business rank' for Bangladesh in the year 2013 is 129th out of 185 economies. Change in rank in relation to the year 2012 is minus 5, as Bangladesh ranked 124th in 2012.
- The lowest ranks for Bangladesh are 'getting electricity' (185) and 'registering property' (175), which means registering and transferring property. 'Enforcing contracts' (182) also scores low. With regard to 'enforcing contracts' *Doing Business* has measured the efficiency of the judicial system in resolving commercial disputes before local courts.

Market Entry

- Dutch companies see 'lack of market information', 'local partnership' and 'financial constraints' as their main hurdles to entering the market in Bangladesh.
- Dutch companies that indicated interest in the Bangladeshi market pointed to low levels of preparation in the areas of 'information about competitors' and 'local regulations' and to a certain extent 'location choices'.
- Dutch companies perceive to distinguish themselves on quality, innovation and service.
- Dutch companies are not, or are to a lesser extent, distinguishing themselves on their network in Bangladesh as well as on pricing.

Demand for products and expertise of agro-food companies in Bangladesh

- Dutch business partners should realize that competition in Bangladesh cannot be underestimated. It is a tough market for Dutch businesses to enter. The frontrunners in Bangladesh could be interesting partners for Dutch agribusiness companies, but these companies (in general) have already found their partners. The small and medium enterprises in Bangladesh are more often interested in Dutch expertise, but do not have the financial means to buy high tech solutions.
- Aquaculture companies in Bangladesh showed interest in developing logistics, innovation and marketing.
- Milk processing enterprises from Bangladesh can be critical towards establishing new business cooperation with Dutch dairy partners. The frontrunners in the Bangladeshi dairy

sector have often already established international relations, but opportunities may occur in niche markets.

- More advanced dairy companies in Bangladesh showed the most interest in cooperating on logistics and supply chain issues.
- The percentage of Bangladeshi companies in the poultry sector willing to establish new business cooperation with Dutch partners is higher than in other agro-food subsectors.
- Poultry processing companies in Bangladesh are the most interested in cooperating on innovation, purchasing, food safety and relation management.



Picture 1.1

1 Introduction

The Embassy of the Kingdom of the Netherlands, (EKN), in Dhaka, within its scope of economic diplomacy, has partnered with Nyenrode Business Universiteit, (Nyenrode), in order to stimulate economic relations between the Netherlands and Bangladesh. The strategic aim of the Embassy is to strengthen bilateral commercial ties in a responsible manner and support the improvement of the Bangladeshi business environment with a spillover effect that improves the lives of the poor. The great number of victims of the disastrous collapse of the Rana Plaza Building last April reaffirms the urgent need for improved legislation, enforcement and greater responsibility within the private sector. The sustainable development of Bangladesh demands both public and private investments.

Putting theory into practice, Nyenrode will facilitate business-to-business activities in order to link local actors to Dutch parties. The aim of the program is to have a positive impact on the volume of new trade relations, the volume of follow-up investments, employment generated (specifically employment of women), innovation and the provision of widespread general economic information. The foundation of the program lies in the realization that business can contribute to development through its core business, its operations and supply chain, the products and services it produces and through social investment in the communities and regions in which it operates.

Four priority sectors have been identified for the Nyenrode program: agro-food, water, logistics and the IT-sector, with a special focus on outsourcing activities.

The underlying research focuses on the agro-food sector, specifically on the development of a number of agro-food chains in Bangladesh. In order to identify the opportunities for Dutch businesses, the demand of fourteen Bangladeshi entrepreneurs, frontrunners in their line of business, has been identified, as well as barriers for Dutch entrepreneurs to enter this market. These business opportunities can be found in both the public and the private domain. In the public domain two interesting programs have been identified: the Food and Agriculture Organisation, (FAO), improving food safety program, and the SAFAL partnership, for value chain development in aquaculture, livestock and horticulture. This report further provides an insight into the potential contribution of the Dutch agro-food industry to the development of food chains in Bangladesh.

This research focuses on Bangladesh, a growing market of 160 million consumers (World Economic Outlook, 2013). According to the World Bank, to achieve its goal of middle income status by 2021 Bangladesh will require (I) increased investment, (II) faster human capital accumulation, (III) enhanced productivity growth, and (iv) increased outward orientation.

At present, products offered by retail are only accessible and affordable for a small group. Over the last five years the average economic growth in Bangladeshi GDP has been 5-6%. To achieve middle income status, economic growth of 7-8% on the long term is needed (World Bank, 2013). These growth rates will expose families to new lifestyles through, for example, cable TV, and can cause the feeling that their children deserve to be exposed to at least the same experience. Furthermore, the awareness of health and hygiene issues, products, brands and the desire to maintain the right social status will grow. From an economic point of view, modern trade will become a catalyst in improving the supply chain when suppliers as well as supply chain specialists start investing in up-to-date collecting, sorting, storing and transport facilities. The investments in cold/chill rooms, food preservation packaging, plastic crates and chilled transport, for example, could help reduce an estimated 35% of wastage, improving quality which in turn can fetch a better price for all the players in the value chain (The News Today, 2013). Such developments would lead to a more significant role for retail in the Bangladesh of 2021, a country with middle income status.

The Government of Bangladesh, (GoB), has a program for the development of the agro-food chains; policy targets for 2020 are ambitious (FAO, 2011). They aim to encourage the development of domestic food production and restrict the import of foreign food products. The development of infrastructure, logistics and agro supply chains, including retail, should, according to this policy, lead to better foods for local consumers. The development of the food chains may result in an increasing demand for inputs, machinery and technology as well. There is already a demand for technical and managerial training, and the forecast is that public capacity building will also be needed in the coming years. Capacity building is needed to strengthen the skills, competencies and abilities of civil servants so that they can implement the tasks of their organization.

Bangladesh is a developing country, however the competition in this market cannot be underestimated. It is a tough market for Dutch businesses to enter. The frontrunners in Bangladesh could be interesting partners for Dutch agribusiness companies, however these companies in general have already found partners. The small and medium enterprises in Bangladesh are often interested in Dutch expertise but do not have the financial means to buy high tech solutions. There are some interesting niches, for example the import of shrimp/pangasius/tilapia and the export of affordable technologies and seeds. Finally, business opportunities can be found in consultancy services that can be sold via donor programs for the development of the agro-food chains.

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2 Objective, methodology and approach to the study

The objective of the underlying research is to unite Dutch and Bangladeshi commercial interests in light of existing development cooperation initiatives in Bangladesh by the Netherlands Embassy and other donors and international organizations. This approach is in accordance with the basic principles of Private Sector Development Policy: it means that economic interventions must be demand driven from the Bangladeshi side and Dutch supply must be complementary to existing activities in the beneficiary country's economy (Sociaal Economische Raad [SER], 2011).

To develop this report Nyenrode Business University carried out:

- Desk research on agro food supply chains in Bangladesh;
- A survey in Bangladesh on the demand of 14 agro food companies; and
- A survey with Dutch companies on business opportunities related to the development of agro food supply chains in Bangladesh.

Ad 1) Reports and documents relating to agro food supply chains were collected and consulted. A list of the documents is attached in Annex 1. These were found to be useful sources of information.

Ad 2) In order to assess perceptions of the agro-food sector, 14 companies were approached, of which 11 respondents were interested in developing cooperation with the Netherlands. A list of the companies interviewed is also presented in Annex 1. The surveys were carried out with a structured questionnaire and relied on qualitative assessments of the stakeholder's perceptions and opinions. Results of the survey are described in chapter 5.

Ad 3) 16 Dutch companies interested in the Bangladeshi market were contacted via an online survey. The survey was carried out with a structured questionnaire. Results of the survey are described in chapter 6.

Dutch entrepreneurs already provide goods and consultancy services to the agro food sector in Bangladesh, specifically in the livestock, aquaculture, fruit and vegetable chains.

This report identifies market product combinations that indicate feasible and viable opportunities for market development based on business-to-business, (B2B), and business-to-government, (B2G), cooperation and partnerships. A product market combination is indicated as an opportunity in case a Bangladeshi company or public organization has a clear demand and in case there are possibilities to finance this demand.

3 Trade and investment relation with Bangladesh

3.1 Introduction (political and social)

Bangladesh is a country in the south of Asia with a surface area of 144 thousand square kilometers, (about four times bigger than the Netherlands), and a population of 160 million people and growing rapidly. This makes it one of the most densely populated areas in the world. Bangladesh has a young population. Due to its geographical location the country has a tropical climate; the inhabitants have to deal with natural influences such as monsoons, cyclones, droughts and floods. Bengali is the country's main language but English is also commonly used. Bangladesh shares most of its border with India, but in the southeast it borders with Myanmar. It also has a coastal border at the Bay of Bengal. The national currency is the Taka. Most of the population is Muslim (90%); the second biggest religion is Hindu (9%). Since 1972, Bangladesh has maintained a parliamentary democracy. The two main political factions are the center-left Awami League, (AL), and the center-right Bangladesh Nationalist Party, (BNP). The AL is the biggest faction and has held a parliamentary majority since the last elections in 2008.

The next election will be held on January 24th, 2014. For the past two decades, non-partisan caretaker governments have overseen preparations for parliamentary polls. The AL and the BNP previously agreed that the system was necessary to ensure free and fair elections, following a period of military dictatorships in the 1970's and 1980's. However, after a Supreme Court ruling in 2011 that deemed the arrangement invalid, the AL won parliamentary approval for a constitutional amendment abolishing the system. The BNP is opposed to the ending of the caretaker-government arrangement, as it believes that any election overseen by the AL administration will be flawed. Like other past and current opposition parties in Bangladesh, the BNP will continue to use hartals to express its objections to the ending of the caretaker-government system and other aspects of administrative policy. There has already been an intensification of hartals in recent months.

Aside from a likely program of street agitation led by opposition parties, there are other factors that could undermine political stability in 2013-17.

- First is Bangladesh's on-going war crimes tribunal. A number of senior figures in the BNP and its main ally, the Islamist Jamaat-e-Islami party, have been charged with committing atrocities during the 1971 war of secession with West Pakistan (now Pakistan) and thus face possible execution. So far, every guilty verdict has been followed by violent street clashes between supporters of Jamaat and the police.

- The second potential source of instability is campaigns of violence by terrorist groups. Unlike Bangladesh's previous democratically elected government, led by the BNP, the AL administration has admitted that a number of such organizations are active in the country. The government's proactive stance has helped to contain the threat, but violent attacks by such groups in the forecast period cannot be ruled out.
- Finally, social unrest could be sparked by shortages of food, power and/or water.

Foreign policy is crucial for water management issues. Developments in neighboring country India will increasingly have an effect on the availability of water in the country's rivers as most of their catchment areas are outside the territorial limits of Bangladesh. In the process of negotiation with India on water sharing, the Joint Rivers Commission of the Government of Bangladesh is in need of scientifically justified approaches to articulate the flow requirements for ecological protection and human use.

Furthermore, improving economic and diplomatic ties with neighbors is a priority for Bangladesh, namely with India and China. Relations with India have improved in the last couple of years but the Bangladeshi government is careful not to allow improved relations with India to damage its ties with China.

3.2 Economic situation

The economy is showing an average growth of six to seven percent in recent years (World Bank, 2013). The population is still expanding rapidly up to an expected 169 million people in 2020. This demands improvements in a number of problematic areas such as housing, infrastructure, food production, clean water and power supplies. Bangladesh's domestic natural gas production can only meet 80 of the country's energy demand, leading to power outages; petroleum imports have become essential. Although some efforts of improvement have been made in recent years, the country still cannot meet local demand. The main obstacle is the large number of old and inefficient power stations. A number of advances will be made, but electricity supplies are unlikely to improve significantly in the short term. In addition, there is uncertainty about the volume of gas-reserves. Extracting these resources will require significant infrastructural investment. There remains a political preference to retain gas solely for the domestic market, while mismanagement of the gas sector via state-owned companies has contributed to the crippling domestic energy shortage.

Bangladesh remains one of the poorest and most densely populated countries in the world. 53 of its rural population is classified as poor. Bangladesh's weak infrastructure and public institutions, regular power outages and notorious & widespread corruption continue to obstruct stronger

economic growth. At present, the garment industry is the backbone of the country's manufacturing industry. In view of recent tragedies, the development of labor conditions, (both general and worker safety), to meet international standards is necessary to facilitate further growth in the sector. Almost 80 of Bangladesh's population lives in rural areas, with 54 (two-thirds of the total labor force) employed in agriculture, and the remainder in the rural non-farm (RNF) sector. Because the majority of the labor force is employed in agriculture, this sector plays a key role in the overall economic performance. In 2012 the agro-food chain provided 35 of the country's GDP (World Bank, 2013). Due to Bangladesh's low level of development, economic policy is oriented towards poverty alleviation by means of considerable subsidies aimed at the agricultural sector. Bangladesh is the world's fourth-largest rice producer. Aided by favorable weather, output has been steadily growing although natural disasters as floods remain a risk for the agricultural sector.

3.2.1 Trade and investment infrastructure

Bangladesh has three major seaports of which Chittagong is the largest and most important; it handles around 80 of total trade (Dun & Bradstreet country report 2011/2012). The port of Chittagong has significantly improved its competitiveness and efficiency relative to other ports in the region in terms of costs, vessel turn-around time and container handling productivity. Officials are expected to exploit Bangladesh's strategically important location on the Bay of Bengal to extract concessions on trade and aid from both India and China during 2013-17. India has already shown interest in being allowed to use the Chittagong port for its trade.

Bangladesh has 16 airports, including two international airports (Chittagong and Dhaka). Owing to current public infrastructure investments, capital goods imports have become increasingly important.

In terms of lack of energy and urban development, foreign investors look for effective transportation systems to ensure cost efficient supply chains. It is no secret that moving around Dhaka is somewhat difficult. Not only that, the city is congested with buildings that offer little to no parking space. Investors value such details; failing to provide them with these facilities will demotivate any investment considerations. It is fair to say that much needs to be done in this field.

3.2.2 Trade transparency in policy and regulations

One of the main obstacles for trade and investment in Bangladesh is the continued lack of transparency in policy and (trade) regulations. Ongoing policy changes are not improving the conditions for entrepreneurs. Regulations are often unclear, inconsistent and implemented after long delays. As a first step towards establishing a local presence, foreign businesses often enter into contractual agreements with a Bangladeshi company to act as a local distributor, supplier or agent.

This strategy can help in getting to know a partner and establish trust before possibly progressing onto more involved forms of partnership. Most agency agreements have a clause, permitting both parties to give due notice if it is intended to terminate the agreement. The appointment of the right partner/agent is often fundamental to success. Usually, Dhaka-based agents should be in a position to cover the entire territory of Bangladesh.

When appointing a Bangladeshi agent, Dutch companies should consider the following:

- The agent has the authority to act or carry on a business and therefore should do everything lawfully necessary to execute such an act or business. The 1972 Contract Act prescribes the rights and liabilities of an agent and also of the principal. If an agent acts beyond the terms of the agency agreement, the principal will not be liable for these acts;
- Most agency agreements have a clause that permits either party to give due notice if it is intended that the agreement is to be terminated. It is prudent to include a contract clause that agrees to allow an independent arbitrator outside of Bangladesh to settle any disputes between parties. The Bangladesh International Arbitration Centre (BIAC) was launched in 2011 becoming the country's first arbitration center for the settlement of commercial disputes;
- BIAC is an initiative of the International Chamber of Commerce in partnership with the Dhaka Chamber of Commerce and Industry and the Metropolitan Chamber of Commerce and Industry¹.

Current customs procedures leave significant scope for corruption. This not only increases uncertainty and the cost of trading with Bangladesh, but also ensures the inefficient allocation of resources, preventing the country from benefitting fully from trade liberalization. Significant customs modernization is currently under way to facilitate speedy customs clearance and improve transparency through automation. Import and export procedures have been further simplified by reducing the number of signatures needed for clearance of consignments and the frequency of goods inspections.

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Another issue is the scarcity of skilled labor in different industries. The population structure of Bangladesh is noteworthy; most of the people building and sustaining the country are between the age of 25 and 35.

In addition to the apparent challenges that pose short-term problems, there are many hurdles that may seem distant at this moment but can become problematic for the country in years to come. Good governance, macroeconomic stability, strong infrastructure (both physical and technological), social equity and environmental reform are all factors that can be addressed now to positively contribute to ensuring sustainable and responsible growth for Bangladesh.

In addition, the political instability, hartals and violent demonstrations, (which will prevail at least until the election has been held), and recent tragedies in the garment sector will have a negative influence on the perception of the country.

3.2.3 Tariffs

- Bangladeshi exporters can benefit from duty free exports to several markets while the local industry is protected with import duties.
- Since January 2011, clothes and other finished goods made in Bangladesh, (and other least developed countries), have been granted duty-free access to the EU if their imported components do not exceed 70 of the total value, (GSP = Generalized System of Preferences of EU). Least developed countries, (49 including Bangladesh), enjoy the open-ended Everything But Arms (EBA) scheme. They also benefit from the favorable GSP Rules of Origin scheme. For more information on GSP:

http://ec.europa.eu/taxation_customs/customs/customs_duties/rules_origin/preferential/article_781_en.htm. Previously, duty-free access was granted only to goods with a maximum imported content of 30. Textile exporters will continue to benefit from this preferential EU import rules system. For more information, see:

http://esango.un.org/ldcportal/documents/10179/22301/Bangladesh_case20study20summary.pdf. This change has given Bangladesh an advantage over its main competitors, notably China, Pakistan, India and Sri Lanka, as these countries' goods are liable for duty in the EU owing to the fact that they are not classified by the UN as least developed countries.

- Bangladesh also gets GSP benefit in a number of countries like Canada, Japan, Norway, Switzerland, Australia and New Zealand, and is now working with the government to get GSP for the Russian market. GSP, is a formal system of exemption from the more general rules of the World Trade Organization, (WTO), Specifically, it's a system of exemption from the most favored nation principle, (MFN) that obliges WTO member countries to treat the imports of

all other WTO member countries no worse than they treat the imports of their 'most favored' trading partner.

- In addition to this, Bangladesh has a preferential market access in countries like China, India, Malaysia and South Korea. The country's overall exports grew by 2,1 to 6,3 billion dollars during the first three months of the 2013 financial year, despite global weakness, particularly in the European Union and the United States, which are the country's main export markets.
- Bangladesh employs import duties that are designed to strengthen domestic production. They provide new opportunities for industrialization, discourage the consumption of luxury goods and ensure a supply of essential goods for consumers. Duty rates tend to change on an almost annual basis in line with the government's budget; which causes an unpredictable policy environment. Bangladesh also has a system of duty-free, (bonded), imports of certain raw materials to be used for producing finished goods for export. A few items, mostly manufacturing inputs, are subject to rates ranging from 0-3%; basic raw materials are subject to 0-5% as of the 2009/10 fiscal year; intermediate products 12%; and finished products up to a rate of 25%. Ready-made garment manufacturers that are 100% export-oriented can import duty-free through bonded warehouses. Other export oriented industries and indirect exporters can claim a duty-drawback at stated rates. Goods imported by the government for the use of the Defense Services are exempt from import duties.

3.2.4 Investment climate

Bangladesh has one of the most liberal investment regimes in the region. Bilateral investment treaties for the promotion and protection of foreign investment exist with a number of countries, including the Netherlands. There are no distinctions between foreign and domestic private investors regarding investment incentives or export and import policies. The government's eagerness to attract foreign investment is understandable given the low level of capital mobilization in the country. Despite possessing an attractive investment regime, and relatively low labor costs compared to other countries in the region, Bangladesh has had difficulty in attracting foreign investments. The slow pace of reform implementation, endemic corruption, political instability, continual strike action, poor infrastructure, inadequate legal and judicial systems as well as slow government decision-making has hindered this. Notably, six large-scale FDI proposals have been on hold for several years because of government indecision, and the country lacks a policy on coal and suffers from a chronic shortage of gas.

Corruption is often cited as a barrier to the effective development of the private sector, and poses business risks, which require pro-active management in the form of regular due diligence exercises

and up-to-date risk strategies. Procurement practices often lack transparency and are usually coupled with a significant bureaucratic burden.

3.2.5 Bilateral trade between the Netherlands - Bangladesh

Bangladesh is a country with steady economic growth and an impressive decrease in the number of people living below the poverty line. The country offers competitive investment and trade incentives to its foreign partners and has a consumer market of 160 million people. The Netherlands was one of the first European nations to recognize Bangladesh. Since the independence of Bangladesh, the Netherlands has been extending continuous development and economic assistance especially in the field of water resources, sexual and reproductive health & rights and food security.

On political level, Bangladesh is now a priority country for the Netherlands, not only in terms of bilateral development cooperation but also in the field of economic cooperation. The transition of Dutch policy with regard to Bangladesh from 'traditional aid to responsible trade' illustrates the changing nature of the relationship between the two countries.

Concerning the trade relations, almost 85 of the exports to the Netherlands are garments in the textile and textile articles category, followed by the frozen food sector, (specifically shrimp and prawn). A significant portion of Bangladeshi exports in the textiles sector are readymade garments sent to Europe, leaving the country vulnerable to a further slowdown in global growth due to a lack of diversification in its export position. The Netherlands exports to Bangladesh are marginal, and mainly related to agricultural inputs and services (WTO, 2012).

- In 2012 the Netherlands was the 9th export destination for Bangladesh (following: US, Germany, UK, France, Spain, Canada, Italy and Turkey). 2,8 of total Bangladeshi export has the Netherlands as destination (WTO, 2012).
- Bangladesh is at present only a marginal export destination for the Netherlands, in 2012 759 million US dollars, or 0,11 of total Dutch export had Bangladesh as destination (WTO, 2012).

Dutch companies have invested significantly in Bangladesh. According to the WTO figures of 2012, the highest investment in Bangladesh, USD 152,30 million, came from Egypt, USD 117,74 million from the US and USD 116,75 million from the Netherlands, making the Netherlands the third largest investor in Bangladesh. Investments from Dutch companies are mainly in textiles, which make up about 80% of all investments from the Netherlands. Furthermore, some investments have been made in agro-food, shipbuilding, IT, chemical and energy companies.

Considering, however, the relative share of Bangladeshi products and services, (compared to the shares of, for example, India), in Dutch total imports and exports, it is fair to conclude that there is room for growth in the trade relations.

3.3 Dutch business community BD

In 2011, 59 Dutch companies were registered at the EKN, which is strong growth when compared to the 20 companies registered in 2010. According to the Bangladesh Export Promotion Bureau, the largest amounts of exports to the Netherlands, other than RMG exports, (Ready Made Garments), were in the frozen food sector, (specifically shrimp and prawn). This does not differ from the general trade patterns between Bangladesh and the EU, as well as the US. The volume and direction of bilateral trade between the Netherlands and Bangladesh in the future will depend heavily upon how well Bangladesh can position itself to further attract Dutch exports and investments.

3.4 The ease of doing business

A part of how to do business in Bangladesh is related to 'the ease of doing business' as measured by the World Bank in *Doing Business. Measuring Business Regulation* (2013). According to the World Bank, the 'ease of doing business rank' for Bangladesh in the year 2013 is 129th out of 185 economies. This is a decrease of 5 places, as Bangladesh ranked 124th in 2012.

Bangladesh ranks lower than India, 129 against 132 respectively. The regional average in South Asia is 121. Globally, Bangladesh stands at 95th in the ranking of 185 economies on the ease of starting a business.

The lowest ranks for Bangladesh are 'getting electricity' (185) and 'registering property' (175), which means registering and transferring property. 'Enforcing contracts' (182) also scores low. With regard to 'enforcing contracts', *Doing Business* has measured the efficiency of the judicial system in resolving commercial disputes before local courts.

Access to reliable and affordable electricity is vital for businesses. Globally, Bangladesh stands at 185th in the ranking of 185 economies on the ease of getting electricity. In 2011, the GoB decided to stop providing new gas connections to industries due to the shortage of gas in domestic use and electricity generation. This decision is still valid. Bangladesh ranks high, (25th), in the category of 'protecting investors'. India ranks 49th and the regional average in South Asia is 82. Investor protection matters because companies need to raise the capital they need to grow, innovate, diversify and compete. *Doing Business* measures the strength of minority shareholder protections against directors' use of corporate assets for personal gain - or self-dealing.

3.5 Some business etiquette to consider

Part of doing business is related to business etiquette and cultural differences, including knowledge about local circumstances. The success of doing business in Bangladesh partly depends on how well foreign entrepreneurs can adapt to the Bangladeshi business culture. The following aspects can be considered (not exhaustive):

- Adequate personal contact is very important for maintaining business contacts. To realize and maintain this personal contact, meetings outside the office, lunches/dinners, are highly appreciated;
- Hierarchy is important in Bangladeshi society and differences in age and status are observed through language conventions. Individuals with higher status are not addressed by personal name; instead a title or kinship term is used;
- Be on time, even if you have to wait for a while;
- It is common use to shake hands. Men do not shake hands with women, unless the woman takes the initiative. Otherwise it's acceptable to nod;
- Always use the right hand when shaking hands and accepting business cards, as the left hand is considered as unclean. Bring a lot of business cards, as these are commonly exchanged;
- Do use titles wherever possible, such as "Professor" or "Doctor". If your Bangladeshi counterpart does not have a title, use 'Mr.', 'Mrs.', or 'Miss';
- If you are not certain who is in charge, the best advice is to turn to the eldest person within the company;
- Usually, business meetings start off with small talk. Sometimes, in these first meetings, the actual business is not even discussed. It is important to establish a personal relationship before embarking on business related talks;
- Agendas are not set and negotiations can take a long time;
- Bangladeshi do not like to say 'no', instead they use expressions such as 'maybe' or 'that might be difficult' or 'we shall try';
- It is not common to bring personal gifts, however, presents given to business acquaintances are appreciated;
- In same-sex conversation, touching is common and individuals may stand or sit very close. The closer individuals are in terms of status, the closer their spatial interaction is;
- Face and self-esteem are essential parts of Bangladeshi culture, therefore any individual criticism in business situations must be done carefully and with sensitivity;
- When invited to a meal, do not start eating until the oldest person at the table begins; and

- Don't refuse any food or drink offered to you during business meetings as this may cause offence.

3.6 CSR and doing business in Bangladesh

Sustainability and corporate social responsibility, (CSR), policies allow companies to establish and maintain long-term success. As such, CSR should be woven into the DNA of the organization and its management systems. Nyenrode believes that doing business in Bangladesh means taking responsibility for all aspects affecting the community. This refers to improved human well-being and social equity, including occupational health and safety standards and female participation in the workforce, as well as reducing environmental risks and ecological scarcities. Dutch companies should consider preparing a strategy related to corporate social responsibility before entering the market in Bangladesh. Such a strategy can be developed to conform to guidelines developed by the OECD, MVO Nederland and the Netherlands Ministry of Foreign Affairs. Please find enclosed the Nyenrode code of conduct (Annex 2). The sources mentioned in annex 3 can be found at: www.nbbp.nl. Developing such a strategy and working accordingly can avoid involvement with for example corruption issues.

4 Development of food supply chains in Bangladesh

4.1 Institutional setting

Bangladesh developed a comprehensive Country Investment Plan, (CIP), for agriculture, food security and nutrition. The CIP provides a coherent set of priority investment programs, (twelve at this stage), to improve food security and nutrition in an integrated way. It is a comprehensive plan that builds on the existing framework, reflecting the Government's investment priorities to:

- Plan and invest resources in a coordinated way;
- Increase convergence and alignment of budget and external sources of funding; and
- Mobilize additional resources while proposing investments related to strengthening physical, institutional and human capacities in the fields of agriculture, water management, fisheries, livestock, agricultural marketing, food management, safety nets, nutrition and food safety.

FAO supported the government of Bangladesh in the formulation of its National Food Policy and a Plan of Action, (PoA), for 2008-2015. The PoA identifies relevant actors and suggests a set of policy targets and indicators to monitor progress in the implementation of the National Food Policy. Progress has been achieved in increasing rice production, in reducing the prevalence of malnourishment and in lowering the number of underweight children. The monitoring of the PoA identified several areas that require increased attention by the GoB and international donors.

The National Food Policy of the Ministry of Food mentions:

- *Bangladesh still needs to further increase and diversify agricultural output. To improve the availability of food, investments are needed to intensify and to diversify food production and to increase its sustainability. Support is needed for the adaptation to climate change and to develop agricultural marketing and infrastructure;*
- *Specific entry points for action include increasing research and extension capacities. Other priorities are developing programs on crop diversification and increasing funding to livestock and fisheries sectors, facilitating access to agricultural inputs and credit and ensuring that fertilizers and pesticides are used sustainably;*
- *Market entry of enterprises into Bangladesh should be facilitated. With foreign investments food safety can be improved;*
- *Lastly, food security governance needs to be enhanced. This involves increasing human and institutional capacities to implement and coordinate food security interventions and to monitor the National Food Policy and its PoA.*

The National Food Policy and PoA provided the policy frameworks for defining investment plans. Fisheries, dairy, poultry and horticulture are the most promising agriculture subsectors in Bangladesh. These sectors should be able to adapt to major weather fluctuations, and could be integrated into the existing agricultural practices.

4.2 Trends and developments in the retail sector

As a result of economic growth and urbanization, consumer food demand in Bangladesh will increase and shift towards more added value products, (WB, 2007), to be provided by supermarkets. In 2012 Bangladesh counted 102 supermarkets across the country (News Today, 2013). For the majority of the population it is not yet affordable to shop in supermarkets, which keeps the retail industry and supermarkets from booming exponentially.

Bangladesh is a new player in modern food retail; market share is only around 0,5 and is one of the smallest in the world. In developed countries retail has a market share in excess of 80. It is around 50 in Thailand and many far eastern countries and an estimated 15 in Sri Lanka. The food based modern retail outlets in Bangladesh have not grown beyond 10,000 sq. ft. (News Today, 2013).

Dhaka's first supermarket, Agora, opened in 2000. A couple of years later, competitors like Meena Bazar, Nandan and Shopno entered the market. Bangladeshi consumers have learnt to accept fixed prices. Shopping in the supermarket still costs more than common market places.

The middle/higher classes in Bangladesh shop once a week, adopting the lifestyle of people in developed countries (News Today, 2013). Modern trade will also become a catalyst in improving the food supply chains in Bangladesh. The investments in cold storage, packaging, transport and quality improvement will create a more efficient supply chain that delivers better quality products. These investments will result in a better profit margin for the total value chain. As Bangladesh starts to invest in infrastructure and transport, growth of the modern retail sector becomes eminent. At least, this pattern has been common in other countries. It is expected that supermarkets will have a turnover of 2.55 billion US dollar by 2021 with a yearly growth of about 30 (News Today, 2013).

4.3 Trends and developments in the livestock value chain

4.3.1 Introduction

Livestock is an important component of the socio-economic fabric of Bangladesh. This agricultural subsector is integrated into the existing farming system and linked directly to crop production, fuel supply, nutrition, farmer's income and welfare. Livestock contributes an estimate of 3 to the agricultural GDP and provides 15 (Solidaridad, 2012) of total employment in the economy. Besides

commercial livestock, about 75 (Solidaridad, 2012) of people in rural areas rely on livestock (subsistence farming) to some extent for their livelihood, which clearly indicates that the poverty reduction potential of the livestock subsector is high.

Dairy generates regular cash income, provides nutritional security and creates more job opportunities in production, processing and marketing per unit value added than field grown crops. The livestock and poultry population of the country is relatively high and consists mainly of small-scale farmers. Despite large numbers of cattle in Bangladesh, due to low yields the current production of milk, meat and eggs is inadequate and does not meet demand. The GoB has plans to increase livestock related products by two to three times by the year 2020 to feed the growing population in the country. Because of this, the Bangladesh CIP stresses the importance of livestock development, with a focus on poultry and dairy production.

4.3.2 Poultry

A considerable proportion of the growing populations demand for protein is met by the local supply of poultry products delivered at relatively low costs. Small poultry enterprises also contribute to the creation of employment opportunities. It has been observed that even the smaller poultry entrepreneurs have employed at least two people other than one of their own family members, and in some enterprises even more than ten people are employed (Khaleda, 2012). Development of the poultry sector could contribute to the food security of the country's growing population. It could also play an important role in reducing poverty through employment generation. Waste from poultry firms can be recycled to produce biogas and fertilizer. Therefore, poultry enterprises help to maintain the quality of agricultural lands and to promote the environment to some extent. Generally, micro-enterprises in the country depend on the local markets to sell their products, and their products seldom reach the markets of the capital city. However, commercial poultry enterprises have the opportunity to reach the consumer market in the capital city.

If necessary precautionary measures are taken in Bangladesh, the poultry sector has strong potential. Avian Influenza should be controlled by a policy developed and implemented to regulate the industry and ensure food safety (WB, 2007). Figure 4.1 describes the poultry value chain. The figure presents the different organizations in the chain including the middleman, the production flows and the services produced. The poultry industry in Bangladesh is a significant player in the agricultural complex, with up to 80,000 poultry farms, up to 20 poultry feed factories and another 40-50 parent stock farms and hatcheries operating in the country. The industry employs five million people, provides 15 of total employment and contributes to the livelihoods of 75% of the population (Khaleda, 2012). Large commercial enterprises are not yet well established, and the position of the

small and medium enterprises could be improved. Training, improved quality control for all inputs and access to credit are needed to strengthen the poultry SME's (WB, 2007). Poultry production in Bangladesh has experienced very strong growth recently, driven by the increasing demand for meat as a result of better economic conditions in the country, which resulted in higher disposable income. The 2016/17 production forecast is set to rise 17,2% to 232,000 tons (BMI, 2012) as avian flu outbreaks come under control.

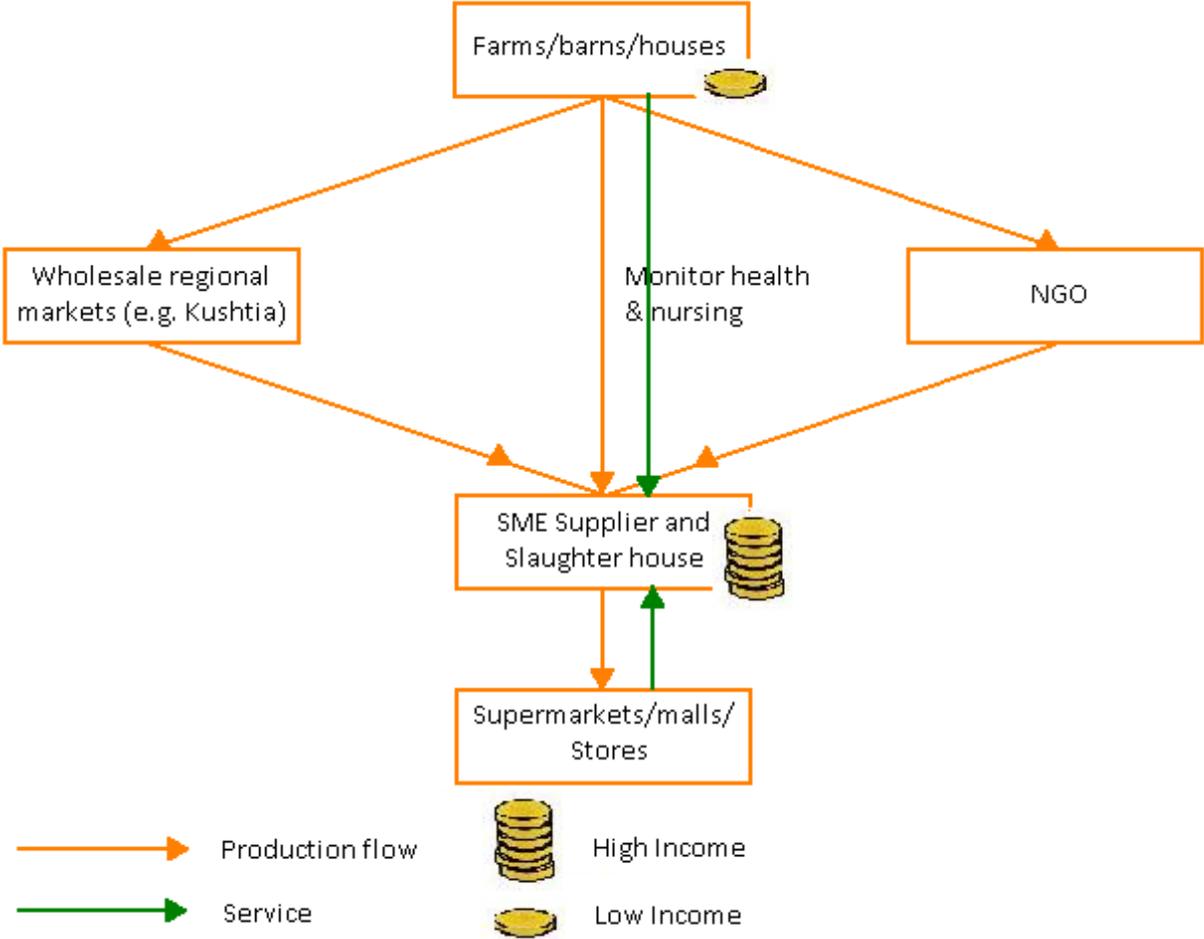


Figure 4.1 Value chain Meat / Poultry

The Breeders' Association of Bangladesh has made repeated calls for a temporary ban on exports of domestically grown corn so as to protect poultry farmers in the country. Meanwhile, industry sources have also claimed that prices of feed have close to doubled recently.

The prices of eggs and poultry in Bangladesh reportedly rose by 20-25% in June 2012 owing to the closure of more than 60% of the country's poultry farms. As part of efforts to contain the spread of the avian influenza epidemic, which re-emerged in early 2011, the government has enforced the closure of up to 100,000 of 150,000 poultry subsistence farms.

4.3.3 Dairy

Per capita milk consumption has not yet increased as rapidly in Bangladesh as consumption of meat, fish and fruit and vegetables (WB, 2007). Bangladesh has a growing modern milk processing industry, however at present the country is still importing dry milk in large quantities.

The dairy industry is supplied by 80,000 dairy farmers and has around 1,200 permanent employees, 2,000 collectors and transporters and 100 distributors (Halder and Barua 2003). The industry is increasingly organizing the supply of milk for commercial dairies to ensure good quality milk in sufficient quantities. These programs could improve local milk supplies and finally replace dairy imports (Daily Star, 2011). In 2010, domestic production of milk in Bangladesh grew to 2,36 million tons, (2,360 million liters), from 1,78 million tons in 2001-02, according to Department of Livestock Services (DLS, 2013).

Currently, most of the dairy cow farms are located in the Northwest of the country, but there is potential in the Kalaroa and the Sadar upazilla to develop dairying. Dairy farming in Bangladesh is practiced as: commercial dairies, market oriented dairies and subsistence dairies (Berdeque & Escobar, 2002).

- Domestic milk prices are no longer controlled. The commercial Bangladeshi dairy farmers have to compete against imported powder (milk). As a result, milk prices can regularly decrease to less than 35 taka, (US\$ 0,51), per liter.
- Currently the market oriented Bangladeshi cow produces two liters/day; this could potentially become 20 liters/day (Sustainable Match 2013). Milk producers in rural areas that are close to cities and towns get a higher price for their milk.
- Subsistence dairies produce nearly all-local milk; the milk is consumed via the informal milk market, (93%), while the formal market, (7%), has a small but important and growing market share. Market oriented and commercial dairies serve the formal markets. About 68% of village families practice dairying as substitute to cropping. A family produces on average 8,3 liter of milk per week. Average daily milk production at subsistence dairies is about one liter per cow. The milk is marketed rurally and consumed at home (Ghani & Rahman, 2004). Dairying plays an important role for poor rural families as it provides regular nutrition and optimizes the use of available resources, including feed/fodder, land and water. Dairying gives the rural people the possibility to cope with the annual monsoon floods, as livestock are kept at home and therefore food production, (for home consumption), and cash sales can be assured. The dairy cow insurance scheme and feed mill enterprises play an important role for the development of smallholder dairy producers (FAO, 2013).

Producer groups have been set up and the industry is developing collection centers in the villages. As a byproduct of this trend, the dominance of middlemen in milk collection has been reduced, allowing producers to get better prices (Daily Star, 2011). Access to extension services related to veterinary care, animal husbandry, dairy housing, quality feed and breed improvement is currently also improving. Dairying plays an important role for poor rural families, especially for regular nutrition, income and jobs and in integrating farming systems, (crop-fish-livestock), to optimize the use of available resources, including for example feed/fodder, land and water. Livestock and dairying enhance the capacity of poor rural people to cope with the annual monsoon floods, (floods wash crops and fish away – livestock are kept at home and continue to produce food for home consumption and cash sales).

The BRAC, (currently does not represent an acronym), is involved in breed management for subsistence dairies and market oriented dairies. The quality of the product, however, cannot be guaranteed by the BRAC. The reason being that semen is not currently offered directly to farmers but via motorcycle transporters. The quality of the insemination can also still be improved (Sustainable Match 2013). Sustainable Match also mentioned the following aspects to strengthen the market oriented dairy sector in Bangladesh:

- The use of high quality feed could improve the productivity of the cows. Feed cost is the main component to the cost of milk production;
- Besides grass, cows do need supplements to become and stay healthy. The smallholder farmers lack the skills to do health monitoring and disease management of the cows themselves. Therefore, health services should be further developed for the farmers; and
- The availability of vaccines is not yet sufficient.

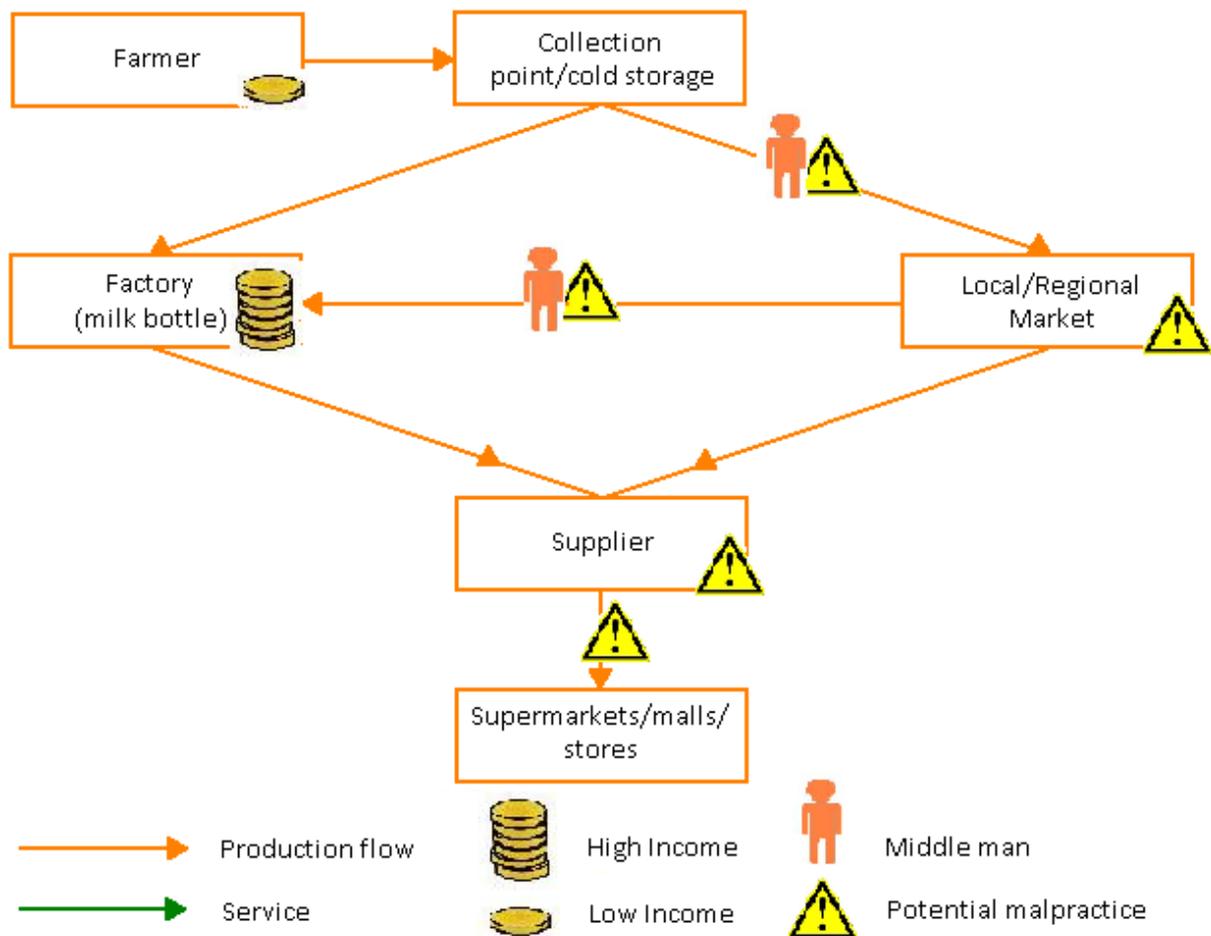


Figure 4.2 Value chain Dairy

Figure 4.2 describes the dairy value chain. The figure presents the different organizations in the chain including the middleman, the production flows and the services produced. The middleman moves the dairy products for a relatively high price from the collection point to the local or regional market and from the market to the milk factory. The role of the middleman makes the dairy supply chain inefficient.

4.4 Trends and developments in fisheries sector

Fisheries provide employment to nine percent of the labor force in Bangladesh, and account for six percent of total GDP. It is the country's second most important earner of foreign exchange (World Bank, 2006).

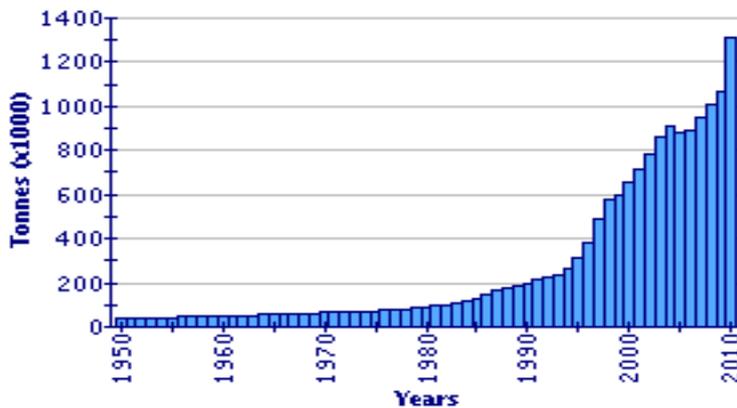
The local chain in Bangladesh often consists of the fisherman, transporter, wholesaler, retailer and finally the consumer.

The total production in 2010 supplied 58% of the total national animal protein demand. The present per capita annual fish consumption in Bangladesh stands at about 14 kg/year against a

recommended minimum requirement of 18 kg/year; hence there is still a need to improve fish consumption in the country (FAO, 2012).

There is strong potential for growth in aquaculture in Bangladesh (WB, 2007). A CBI report mentioned:

*Around 1 million people are employed in the shrimp sector in Bangladesh. It is becoming one of the most dynamic sectors of the economy. The two most important cultured species are Black Tiger shrimp (*Penaeus monodon*) and Giant River prawn (*Macrobrachium rosenbergii*).*



Graph 4.1: Reported aquaculture production in Bangladesh (from 1950) (FAO Fishery Statistic, 2012)

The most important export market for fishery products is the EU. Shrimp accounts for 80% of the total export value. Important to note is that currently all seafood exports receive a ten % export subsidy from the GoB. This has a large positive impact on the competitiveness of Bangladeshi seafood products. Within the EU, the largest markets for Bangladeshi shrimp are Belgium, Germany and Great Britain.

Current quality problems and low productivity have to be solved to develop a sustainable position in the market. Bangladesh could double the productivity of its brackish water shrimp farms by improving management and using disease free seed.

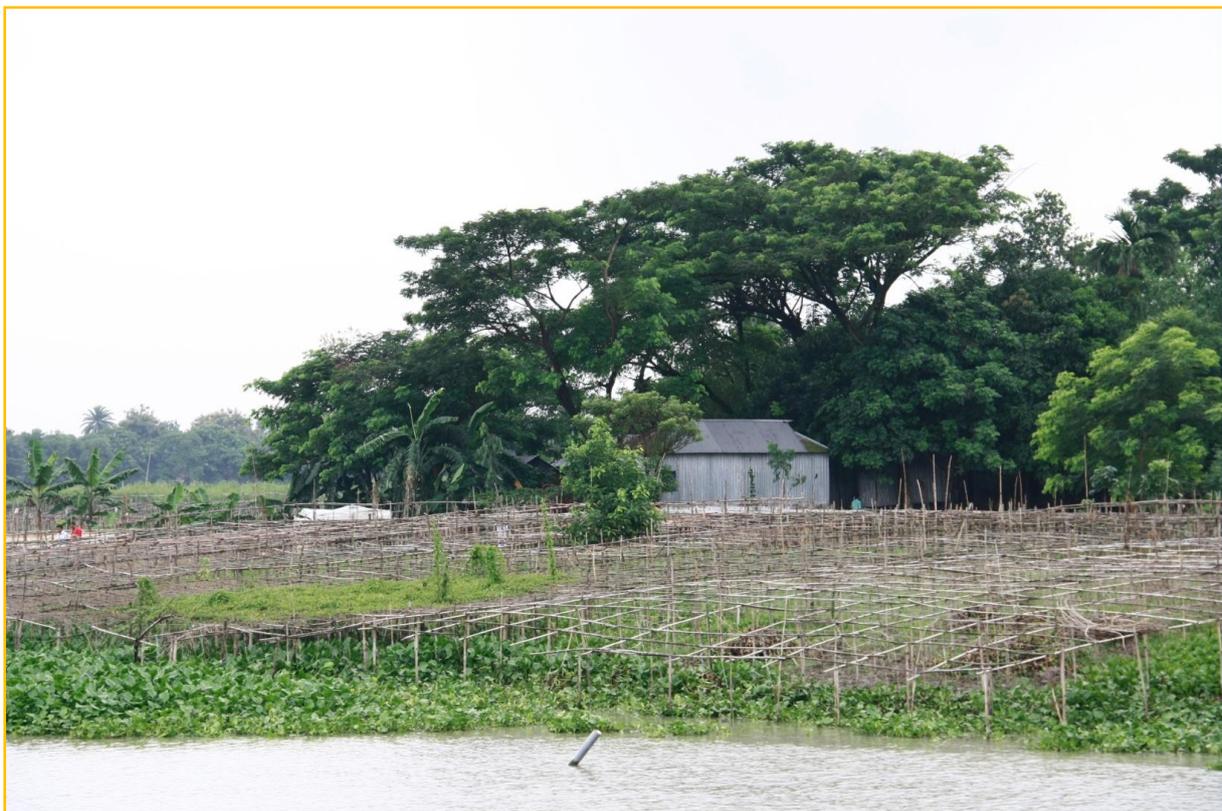
Thailand is producing four to five tons of shrimp per hectare while Bangladesh productivity is at 150 kg (CBI, 2012). CBI mentioned:

Currently farmers are not trained well enough for pond preparation management. Access to technology on how to identify the percentage of water salinity as well as the condition of mud is needed. Another problem is the quality of the fry which the farmers grow into shrimp.

4.5 Trends and developments in the fruit and vegetable value chain

Consumption of fruit and vegetables is currently far below the recommended daily intake. Vegetable production provides only 40g of the recommended daily intake of 200g per person and fruit production provides only 34g toward the daily requirement of 75g per person (Care & Solidaridad, 2012). Only people from a high-income group can afford to consume litchis, oranges, apples, pears and grapes. Furthermore, retail and processing of fruit and vegetables are not yet organized (News Today, 2013).

More than 90 vegetables and 60 fruit varieties can be grown in Bangladesh, but only a few are grown commercially. This is largely due to the fact that growers generally lack essential knowledge and the means to invest in smart adaptive technologies. Production, processing and marketing of fruit and vegetables are under developed; investments in expertise and technology have so far been insufficient.



Picture 4.1

Development of the value chain for fruit and vegetables will be a major challenge. Currently, less than one percent of total horticultural production is processed.

Development of extension services and farmer associations could play an important role in developing the expertise in the sector. The supply chain could be developed by:

- Using better varieties and high quality planting materials;
- Introducing new production technologies;
- Improving soil management;
- Introducing crop rotation;
- Mechanization;
- Improved irrigation;
- Disease management and pest control;
- Supply chain development, reduce post harvest losses;
- Investments in cold storage and logistical concepts;

To realize a more protected horticulture sector, growers first need training, followed by the introduction of affordable technologies. Productivity in this Bangladeshi sector is low compared to countries like India and Pakistan (GMark, 2007). Increasing the fruit and vegetable production could contribute to better nutrition and to development of the rural economy.

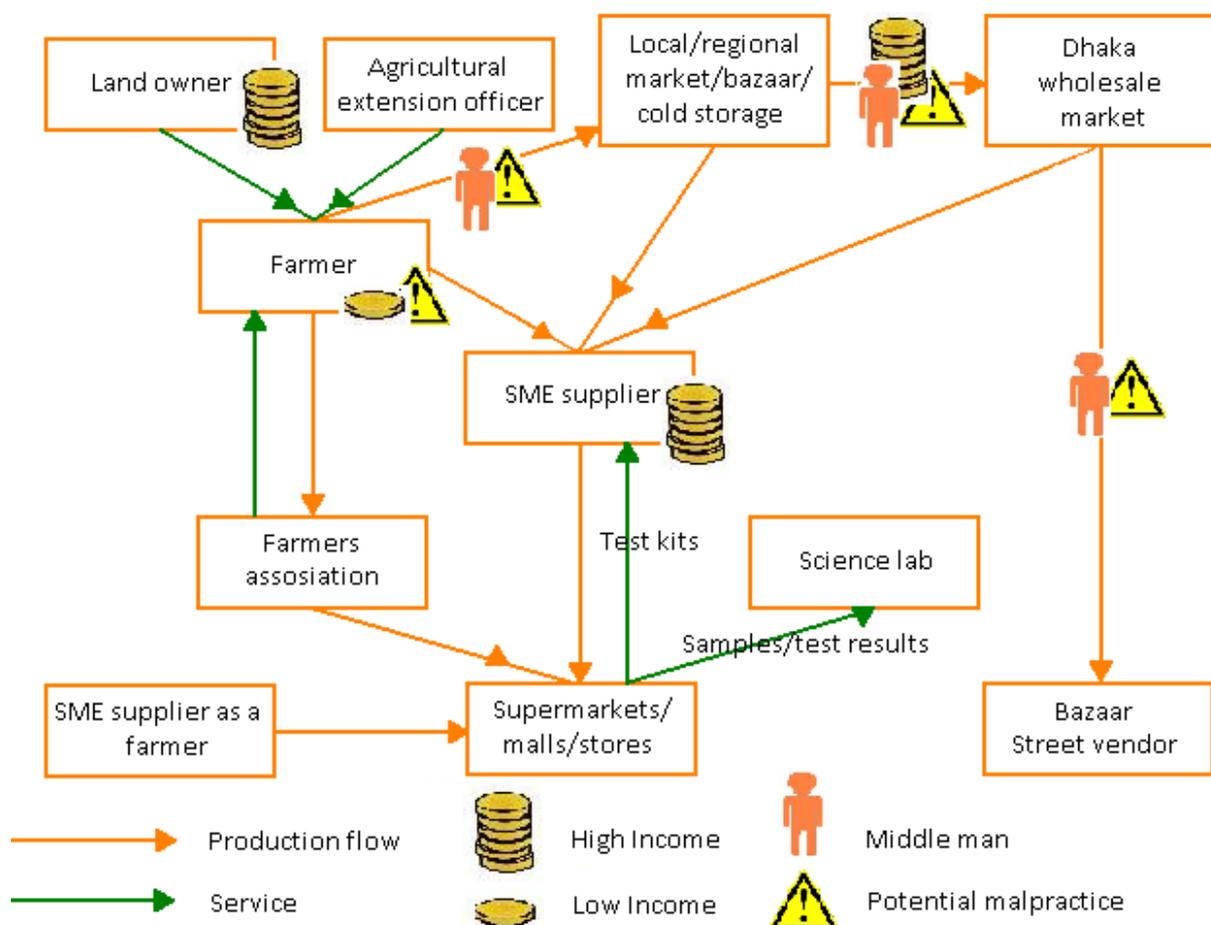


Figure 4.3 describes the fruit and vegetable value chain. The figure presents the different organizations in the chain including the middleman, the production flows and the services produced.

It also gives information on a) profitability of different parts of the supply chain and b) parts of the chain where potential malpractice is probably and where improvements could be realized.



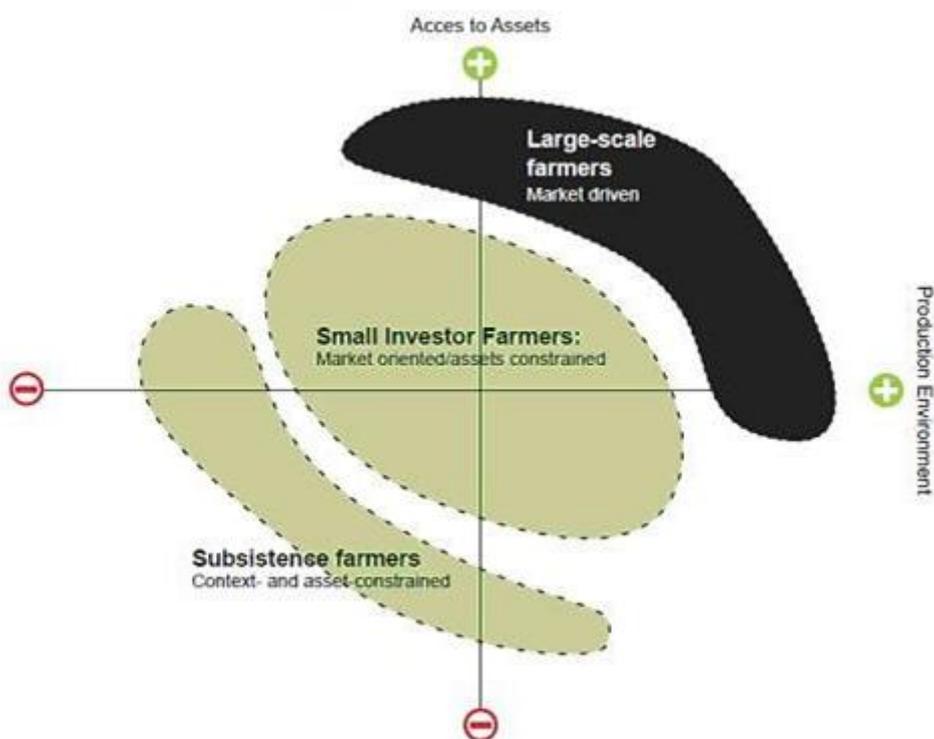
Picture 4.2

5 Survey in Bangladesh

To analyse the agro food value chains in Bangladesh, Nyenrode Business University carried out market research on location in the country. A total of 14 prominent companies have been visited and their representing agents have been interviewed in the framework of this research. These participating companies are frontrunners in their field with regard to their expertise and the technology that they use, and they are active in different parts of the value chain, including producing, manufacturing, logistics and marketing.

5.1 The interviews in Bangladesh

When referring to food security in Bangladesh, the focus of policy makers and NGO's is often on small-holder or subsistence farmers. These are typically farmers that produce the food that is harvested from their small plot of land for their own livelihood. Often no surplus is produced. Therefore, there is little or no connection to local markets. The purpose of this study is to identify the demand for expertise and products of large scale and small investor farmers, the processing and retail industries, as well as to see if these Bangladeshi companies are willing to develop cooperation with Dutch companies. This cooperation could be developed business to business or via a public private partnership. Dutch companies need commercially viable counterparts in Bangladesh in order to further explore these business opportunities.



Source: Berdegue, J.A., G. Escobar (2002)

Figure 5.1 Models of farming systems

5.2 Opportunities to improve the business processes in the agro-food value chain

General

The representatives have been asked to what extent new industry expertise, innovation, methods, practical know how, technology, machines and modern appliances could help their company to improve different essential business processes. They were also asked to indicate their willingness to set up new business contacts with Dutch companies. The respondents expressed significant interest in the aquaculture and poultry sectors and none in the vegetables sector.

Most of the fourteen frontrunner companies already have international business contacts and are only interested in new relationships if they see a clear added value. In paragraph's 5.2 we will further elaborate on additional potential opportunities.

Optimize purchasing

Companies interviewed in the dairy and fruit & vegetables sectors showed no willingness to cooperate with a Dutch partner on the optimization of their purchase process.

Optimize operational logistic processes with suppliers and clients

Companies interviewed in the dairy and fruit & vegetable sectors indicated operational logistics as one of the business processes they manage the worst. Companies interviewed in the fruit and vegetable sector were keen on developing partnerships with Dutch companies regarding their operational logistics.

Optimize supply chain management (incl. quality of distribution)

Companies interviewed in the dairy sector identified supply chain management, (including quality of distribution), as an area of potential cooperation with Dutch companies.

Sustainability: efficient use supplies, water, energy and raw materials

None of the 14 companies were interested in cooperation with a Dutch company on the efficient use of supplies, water, energy and raw materials. Companies interviewed in the fruit and vegetable sectors also indicated that they do not see many opportunities to use supplies, water and energy more efficiently. A possible explanation for this lack of interest could be that the companies interviewed do not give priority to sustainability because enforcement of environmental policy is weak in Bangladesh and they most probably do not see the direct economic benefits of producing more sustainably.

Efficient use of ICT for process management

The companies in Bangladesh indicated that they are capable of using ICT for process management, valuing their use of ICT as the business process they manage the best. They showed no specific interest in cooperating with Dutch companies on ICT related issues.

Innovate product assortment

The companies interviewed indicated innovation as business processes where they could realize major improvements. Product innovation is also the business process with the highest overall score in willingness to cooperate with a Dutch company.

Comply with food safety regulations

The interviewed companies indicated they are very capable of complying with current food safety regulations. This is interesting, as much of the analysis done on value chains in agro food has indicated that this topic must be improved. The companies interviewed showed very low willingness to cooperate with a Dutch partner on, for example, food safety.

Optimize relation management system

Companies active in the dairy sector indicated that their relation management system is not well developed. Companies active in aquaculture are interested in improving their relation management to serve national (and international) markets. This could be a potential business opportunity where Bangladesh and Dutch companies can cooperate.

Optimize marketing strategy

Of all the business processes, the Bangladeshi companies perceive marketing strategy as the one with the highest amount of opportunities. Although developing an adequate marketing strategy is the business process with the highest opportunity rating, it is not one of the main processes where the Bangladeshi companies think they need a Dutch partner. Bangladeshi companies in the dairy and the fruit and vegetable sectors are not interested at all. Companies active in the poultry and the aquaculture showed some interest in cooperation.

Optimize selling on local markets

Companies in the dairy sector indicated that their selling processes on local markets are not well developed, and there are good opportunities to realize improvements here. However, the interviewed companies do not see the added value of Dutch enterprises on this topic.

Optimize selling on international markets

Selling on the international market is the least valued business process. Developing this process seems especially important for the aquaculture sector. However, the interviewed companies do not see the added value of Dutch enterprises on this topic.

Create fair, safe and motivating labor conditions

The Bangladeshi companies involved in the survey do not see any opportunities to improve labor conditions and expressed no specific interest for cooperation with a Dutch partner in this regard.



Picture 5.1

6 Market entry Bangladesh

Nyenrode carried out a market entry survey in the Netherlands. 16 companies interested in the Bangladeshi market were questioned about aspects related to market entry. To understand the needs of Dutch companies and their perceived challenges, the team designed a questionnaire. This questionnaire consisted of 13 multiple choice questions, and to get deeper insights the choices were required to be measured on a scale from 1 to 10.

The companies interviewed delivered products or services to the following supply chains:

- Livestock Poultry 9 companies.
- Livestock Dairy 6 companies.
- Aquaculture 6 companies.
- Fruit and Vegetables 6 companies.



Picture 6.1

Reasons to have an interest in Bangladesh

First the companies were asked if they were interested in doing business in Bangladesh. The main driver for companies looking for private clients in Bangladesh is market expansion, followed by the aim to contribute to the development of Bangladesh. The main driver for companies looking for public assignments in Bangladesh is the aim to contribute to the development of Bangladesh, followed by market expansion

Positioning on the Bangladeshi market?

The Dutch companies looking for public assignments rated quality, innovation and service as their competitive assets. These companies also indicated that they could not really distinguish themselves on the markets via their networks.

Preparedness to enter the Bangladeshi market

At first, the companies were asked if they were interested in entering or further expanding their activities in the Bangladeshi market. Five companies indicated that they were more interested in acquiring public assignments, and eight companies indicated that B2B relations are more important. Three companies are interested in both market segments. They were asked to rate their degree of preparedness in eight different areas.

Companies interested in the public sector rate their knowledge about the donor programs as their best-prepared subject. These companies also indicated that they have less information on their competitors, the market and about local regulations. For the agro-food sector, Nyenrode identified two main public programs that could be of interest for the Netherlands private sector: 1) The FAO improving food safety and 2) the SAFAL partnership on value chain development in aquaculture, livestock and horticulture.

The companies interested in developing business with the private sector rate their marketing strategy as most prepared. Information about competitors seems to be their least prepared area.

Hurdles to enter the Bangladeshi market

We asked the companies interested in Bangladesh what they see as hurdles and risks to enter the Bangladeshi market. For the companies looking for donor projects, a lack of market information, local partnerships and financial constraints have been indicated as the main hurdles. In the private sector, lack of market information is indicated as the main hurdle.



Picture 6.2

7 Conclusions and recommendations

1. The population of Bangladesh is forecast to increase to 169 million by 2020. Urban centers are expected to grow the fastest, and Dhaka is expected to become one of the world's mega cities, with the population increasing to 30 million in 2025 and 50 million by 2050. This population growth combined with economic growth will increase local food demand.
2. Significant investments in electricity supply, transport, logistics and good governance are required to develop agro food chains in Bangladesh.
3. The technical skills and knowledge required to develop and manage agro-food supply chains need to be improved.
4. The availability of clean water is a key issue for the development of agriculture and fisheries in Bangladesh. Water, as a basic resource, is important to create employment opportunities and to contribute to economic development.
5. Development of the Bangladeshi aquaculture and poultry sectors look promising.
6. Bangladeshi respondents from the aquaculture sector are interested in improving their relation management to serve national (and international) markets. This could be a potential business opportunity for Bangladeshi and Dutch companies to cooperate.
7. Bangladeshi respondents from the poultry sector indicated innovation as a business process where they could realize major improvements. This could be a potential business opportunity for Bangladeshi and Dutch companies to cooperate.
8. Dutch companies see lack of market information, local partnerships and financial constraints as their main hurdles to entering the market in Bangladesh.
9. Dutch companies interested in the Bangladeshi market perceive to distinguish themselves on quality, innovation and services.
10. Nyenrode identified the following Business opportunities related to the development of agro-food chains in Bangladesh.

Trade of goods

- Import of shrimp from Bangladesh;
- Import of Pangasius and Tilapia from Bangladesh;
- Export seeds; and
- Export of machinery/technology for poultry and dairy industry.
- Investments in Bangladesh

- Retail sector is expected to gain a higher market share by 2015, this development may create opportunities for investors in food supply chains. In particular, the development of the poultry and the aquaculture sectors look promising;
- Investment in local capacity to test soil and fodder;
- Investment in to produce technology related to water treatment, water harvesting and irrigation; and
- Investment in waste to energy.
- Services
- Water efficiency in agriculture, Government to Business (G2B) & Business to Business (BB);
- Reduction of post harvest losses, G2B & B2B;
- Food safety, public assignments, G2B; and
- Cow breed management and certified insemination system, G2B & B2B.
- Capacity building - public finance
- Government to Government: capacity building related to disease management; and
- Knowledge to Knowledge: development of higher agricultural education.

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LAL Teer Livestock Ltd (Multimode Group): Animal breeding, Production of milk, Production of meat, Animal feed.

Shushima Feed & Hatchery Ltd (SMAH Group): Hatchery DOC, Feed mill for poultry and fish

Paragon Agro LTD (Paragon Group): Hatchery DOC, Breeding broiler and layer chicken, Table eggs, Feed mill for poultry, floating fish, sinking fish, shrimp and cattle beef fattening.

Bengal Meat: Slaughterhouse, Boner room for cattle beef, sheep and goat , Processed chicken, Life stock and fodder.

PRAN Dairy Ltd (PRAN-RFL Group): UHT milk and flavored milk, Fresh milk and flavored milk, Ghee and butter oil, Juices, Dairy hubs.

Kazi Farms Ltd (Kazi Farms Group): Hatching DOC, Breeding broiler grand parent chicken, Feed mill for poultry broiler and layer.

Rangpoor Dairy (Food Products Ltd): UHT milk and flavored milk, Fresh milk and flavored milk, Ghee and butter oil, Candy products.

Akij Food & Beverage (Akij Group): UHT milk, flavored milk , Fresh milk, flavored milk, Butter and Ghee, Juices.

C.P Bangladesh CO (CP Group): Poultry feed production, Poultry feed breeding, Chicken meat processing, Ready to cook and eat chicken.

AFTAB Feed products (AFTAB Group): Processed chicken, Processed chicken products.

Golden Harvest Agro (Golden Harvest Group): Seafood and fish processing and freezing, Vegetables processing and freezing, Processing of ready to cook and eat frozen snacks.

ACME Laboratories LTD (ACME Group): Pharmaceutical products for animal health.

Partex Agro LTD (Partex Group): Seeds, Pesticides, Fertilizers.

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Annex 2: Code of Conduct Nyenrode

Bangladesh Trade and Investment Program

Conduct Guidelines regarding Corruption and Transparency (Code of Conduct)

Introduction

The Embassy of the Kingdom of the Netherlands (EKN) in Dhaka, within its scope of economic diplomacy, has partnered with Nyenrode Business Universiteit in order to stimulate economic relations between the Netherlands and Bangladesh. Strategic aim of the Embassy is to strengthen bilateral commercial ties in a responsible manner and support the improvement of the Bangladeshi business environment with a spill-over effect that improves the lives of the poor. The partnership aims to increase sustainable bilateral trade and investment in four identified sectors: food(safety), logistics, water and the IT-sector, with a special focus on outsourcing activities. The focus of sustainability will be on employment generation (specifically targeted at women) and introducing clean (and where applicable innovative) technology.

Informing Dutch companies, entrepreneurs, stakeholders and cooperation partners about the risks of doing business in Bangladesh, especially with regard to integrity issues and corruption, is an intricate part of stimulating responsible business, and therefore it is an important component of the Bangladesh Trade and Investment Program. Nyenrode Business Universiteit has as such developed Conduct Guidelines to which not only Nyenrode itself must adhere, but is also provided to all cooperation partners of Nyenrode with the request to comply with it in their daily practice. Corruption risks will be considered and dealt with throughout all activities undertaken in the framework of the program.

The Conduct Guidelines

Nyenrode Business Universiteit, within the framework of the Bangladesh Trade and Investment Program, values 'doing what is right' and demands of its cooperation partners, in whatever legal form, to read and voluntarily apply the following guidelines in order to ensure good business practices. The Conduct Guidelines of the Bangladesh Trade and Investment Program are primarily based on the internationally accepted *ICC Rules on Combating Corruption* (2011) published by the International Chamber of Commerce (ICC).

The ICC Rules are intended as a method of self-regulation by business against the background of applicable national law and key international legal instruments. Their voluntary acceptance by Enterprises will promote high standards of integrity in business transactions, whether between

Enterprises and public bodies or between Enterprises themselves. These Rules play an important role in assisting Enterprises to comply with their legal obligations and with the numerous anti-corruption initiatives at the international level. They also provide an appropriate basis for resisting attempts at extortion or solicitation of bribes.

The Conduct Guidelines for the Nyenrode Trade and Investment Program dictate compliance with Part I (the Rules) and Part II (policies to enact in order to support compliance with the rules) of the ICC Rules on Combating Corruption:

Part I: Rules

1. Article 1: with regard to **Prohibited Practices**. Specifically, enterprises will prohibit the following practices at all times and in any form:
 - Bribery.
 - Extortion or Solicitation.
 - Trading in Influence.
 - Laundering the proceeds of the corrupt practices mentioned above.

2. Article 2: with regard to **Third Parties**. Specifically, with respect to third parties enterprises should:
 - instruct them neither to engage nor to tolerate that they engage in any act of corruption;
 - not use them as a conduit for any corrupt practice;
 - hire them only to the extent appropriate for the regular conduct of the Enterprise's business;
and
 - not pay them more than an appropriate remuneration for their legitimate services.:

Part II: Policies

3. Articles 3-9 to be applied/enforced with regard to:
 - Business Partners.
 - Political and Charitable Contributions and Sponsorships.
 - Gifts and Hospitality.
 - Facilitation Payments.
 - Conflicts of Interests.
 - Human Resources.
 - Financial and Accounting.

Please refer to annex: ICC Rules on Combating Corruption, for details on the above rules and policies Nyenrode demands its partners to comply with.

The underlying Conduct Guidelines are in line with the Netherlands Embassy policy regarding integrity and corruption issues. Please refer to the brochure *Eerlijk zakendoen, zonder corruptie. Praktische tips voor ondernemen in het buitenland* published by the Rijksoverheid NL (July 2012) as well as the *Reporting Guidance on The 10th Principle Against Corruption* published by the United Nations Global Compact and Transparency International (2009) for further information. These reports serve as useful guides in favor of ethical business practices omitting corruption and Nyenrode stresses the importance of reading these guides

Appendices:

- International Chamber of Commerce. (2011). ICC Rules on Combating Corruption,
- Rijksoverheid. *Eerlijk zakendoen, zonder corruptie. Praktische tips voor ondernemen in het buitenland*. (July 2012).
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Herewith I declare to:

- 1) Have read the Conduct Guidelines and the appendices referred to in the code;
- 2) Comply with these guidelines in all activities related to the cooperation with Nyenrode Business Universiteit.

Name

Signature

Date

Annex 3 Business and trade relation

Table 3.1 Market Sizes Livestock Bangladesh, total volume '000 tons

	2006	2007	2008	2009	2010	2011
Beef and Veal - modeled	306,4	304,3	311,9	319,7	328	335,5
Poultry - modeled	170,6	177,3	206,7	240,2	277,1	317,3
Lamb, Mutton and Goat - modeled	81,5	81,2	83,7	86,4	89,3	92,1
Pork - modeled	73,5	74,1	75,6	77,2	78,9	80,4

Euromonitor International 2013

Table 3.2.1 Imported Meat, Trade Map (2012)

	Exporters			Trade Indicators					
	Imported value 2011 (USD thousand)	Trade balance 2011 (USD thousand)	Share in Bangladesh's imports (%)	Imported growth in value between 2007-2011 (% p.a.)	Imported growth in value between 2010-2011 (% p.a.)	Ranking of partner countries in world exports	Share of partner countries in world exports (%)	Total export growth in value of partner countries between 2007-2011 (% p.a.)	Tariff (estimated) applied by Bangladesh (%)
Total	1085	-879	100	40	48		100	8	
Australia	451	-451	41.6	26	-13	5	5.7	4	n/a
Japan	442	-442	40.7			52	0	17	n/a
Malaysia	73	-73	6.7		-37	60	0	28	n/a
South Africa	53	-53	4.9		141	49	0.1	-1	n/a
France	24	-23	2.2			8	4.2	3	n/a
USA	20	-20	1.8	29	400	1	13.3	13	n/a
Singapore	18	-18	1.7	-3	29	46	0.1	13	n/a

Table 3.2.2 Poultry production & consumption. BMI forecasts, 2013

(in tons)	2012	2013	2014	2015	2016	2017
Production	198.000	204.000	210.000	218.000	225.000	232.000
Consumption	138.500	144.300	150.400	156.900	163.700	170.800

Table 3.3 Imported Poultry, Trade Map (2012)

	Exporters			Trade Indicators									
	Imported value 2011 (USD thousand)	Trade balance 2011 (USD thousand)	Share in Bangladesh's imports (%)	Imported quantity 2011	Quantity unit	Unit value (USD/unit)	Imported growth in value between 2007-2011 (% , p.a.)	Imported growth in quantity between 2007-2011 (% , p.a.)	Imported growth in value between 2010-2011 (% , p.a.)	Ranking of partner countries in world exports	Share of partner countries in world exports (%)	Total export growth in value of partner countries between 2007-2011 (% , p.a.)	Tariff (estimated) applied by Bangladesh (%)
Total	22	-22	100	5	Tons	4400	23	-8	-4		100	10	
Australia	15	-15	68,2	2	Tons	7500	37	-8	0	32	0,2	10	25
Malaysia	5	-5	22,7	2	Tons	2500			0	52	0	41	25
Singapore	2	-2	9,1	1	Tons	2000	-18	0	-33	41	0,1	-1	25

Table 3.4 Projected demand for vegetables in Bangladesh on the basis of projected population by the year 2030-31

Indices	2006-2007	2010-2011	2020-2021	2030-2031
Population (millions)	142,6	151,41	171,71	191,6
Production of vegetables (thousands of tons)	2047	2047*	2047*	2047*
Demand for vegetables based on nutritional requirements (thousands of tons)**	10408	11051	12533	13985
Production and demand gap for vegetables (thousands of tons)	8361	9004	10486	11938

(Considering the level of production same as of 2006-07; **Considering 220 g/head/day) (Siddique & Azad, 2010).

Table 3.5 Imported Fruit, Trade Map (2012)

	Exporters			Trade Indicators									
	Imported value 2011 (USD thousand)	Trade balance 2011 (USD thousand)	Share in Bangladesh's imports (%)	Imported quantity 2011	Quantity unit	Unit value (USD/unit)	Imported growth in value between 2007-2011 (% , p.a.)	Imported growth in quantity between 2007-2011 (% , p.a.)	Imported growth in value between 2010-2011 (% , p.a.)	Ranking of partner countries in world exports	Share of partner countries in world exports (%)	Total export growth in value of partner countries between 2007-2011 (% , p.a.)	Tariff (estimated) applied by Bangladesh (%)
Total	4887	-3583	100	7828	Tons	624	25	-13	79		100	19	
India	4497	-4497	92	7550	Tons	596	24	-13	75	13	2,1	9	25
Egypt	290	-290	5,9	149	Tons	1946				233	11	2,8	25
Pakistan	59	-59	1,2	98	Tons	602	193	110	11	35	0,2	27	25
Thailand	41	-41	0,8	31	Tons	1323	-11	15	28	2	12,3	24	25

Table 3.6 Imported Vegetables, Trade Map (2012)

	Exporters			Trade Indicators									
	Imported value 2011 (USD thousand)	Trade balance 2011 (USD thousand)	Share in Bangladesh's imports (%)	Imported quantity 2011	Quantity unit	Unit value (USD/unit)	Imported growth in value between 2007-2011 (% , p.a.)	Imported growth in quantity between 2007-2011 (% , p.a.)	Imported growth in value between 2010-2011 (% , p.a.)	Ranking of partner countries in world exports	Share of partner countries in world exports (%)	Total export growth in value of partner countries between 2007-2011 (% , p.a.)	Tariff (estimated) applied by Bangladesh (%)
Total	2365	13261	100	5751	Tons	411	-14	-34	1113		100	4	
India	2330	-2330	98,5	5722	Tons	407	-16	-36	1485	20	0,9	16	23,8
Thailand	29	-29	1,2	26	Tons	1115	-8	-12	-36	21	0,9	-2	25
UK	6	9199	0,3	3	Tons	2000				42	0,2	9	25

Annex 4 Questionnaire used for interviews in Bangladesh

The fourteen surveyed companies in the agro food value chains represent the following four subsectors:

- Livestock Dairy.
- Livestock Poultry.
- Aquaculture.
- Fruit & Vegetables.

These companies received three questions related to the following business processes:

- Purchasing.
- Operational logistics.
- Supply chain management.
- Efficient use supplies.
- Use of water, energy and raw materials.
- Use of ICT.
- Innovation.
- Food safety.
- Relation management.
- Marketing.
- Selling on local markets.
- Selling on international markets.
- Creating fair, safe and motivating labor conditions.

Question 1: With regard to supply chain standards in Bangladesh and available expertise, innovation and technology, to what extent has your company managed to organize the essential business processes. (Scale 1 to 10)

Question 2: To what extent could new industry expertise, innovation, methods, practical know-how, technology, machines and modern appliances help the company to manage the essential business processes. (Scale 1 to 10)

Question 3: Would you be interested to meet Dutch companies which are either specialized agro supply chain consultants, or providers of inputs, machines, technologies or other services that can help the company to improve the management of the business processes. (Yes or No)

Name and contact details Company
Name and position interviewed Company Representative
Short description of Company, supply chain and activities

The answers for question 1 & 2 are a numbers on a scale from 1 to 10 The ANSWER answers for question 3 is Yes or No

QUESTION 1

SCALE

1 - Not Optimal

10 - Optimal

With regards to supply chain standards in Bangladesh and available expertise, innovation and technology, to what extend has your company managed to:

a) optimize the purchasing	a)
b) optimize its operational logistics process with suppliers and clients	b)
c) set up adequate supply chain management - (o.a this concerns the quality of distribution)	c)
d) sustainability: efficient use supplies, water, energy and raw materials	d)
e) efficiently use ICT for process management	e)
f) innovate its product assortment	f)
g) comply with food safety regulations	g)
h) develop an efficient relation management system	h)
i) develop an adequate marketing strategy	i)
j) optimize selling on local markets	j)
k) optimize selling on International markets	k)
l) create fair, safe and motivating labour conditions	i)

QUESTION 2	SCALE
	1 - No Difference
	10 – Significantly Better
To what extent could new industry expertise, innovation, methods, practical know-how, technology, machines and modern appliances help the company to:	
a) optimize the purchasing	a)
b) optimize its operational logistics process with suppliers and clients	b)
c) set up adequate supply chain management - (o.a this concerns the quality of distribution)	c)
d) sustainability: efficient use supplies, water, energy and raw materials	d)
e) efficiently use ICT for process management	e)
f) innovate its product assortment	f)
g) comply with food safety regulations	g)
h) develop an efficient relation management system	h)
i) develop an adequate marketing strategy	i)
j) optimize selling on local markets	j)
k) optimize selling on International markets	k)
l) create fair, safe and motivating labour conditions	i)

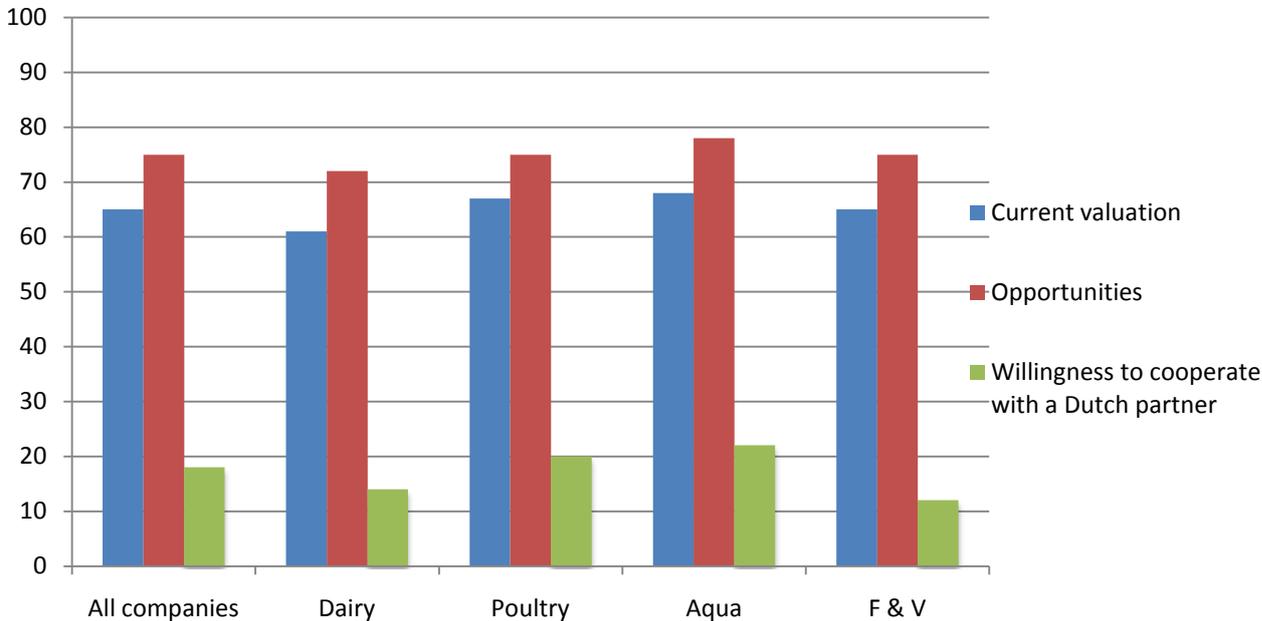
QUESTION 3	YES OR NO
3. Would you be able to invest and interested to meet Dutch companies which are either specialized agro supply chain consultants, or providers of inputs, machines, technologies or other services that can help the company to:	
a) optimize the purchasing	a)
b) optimize its operational logistics process with suppliers and clients	b)
c) set up adequate supply chain management - (o.a this concerns the quality of distribution)	c)
d) sustainability: efficient use supplies, water, energy and raw materials	d)
e) efficiently use ICT for process management	e)
f) innovate its product assortment	f)
g) comply with food safety regulations	g)
h) develop an efficient relation management system	h)
i) develop an adequate marketing strategy	i)
j) optimize selling on local markets	j)
k) optimize selling on International markets	k)
l) create fair, safe and motivating labour conditions	i)

Annex 5 The agro food chain in Bangladesh

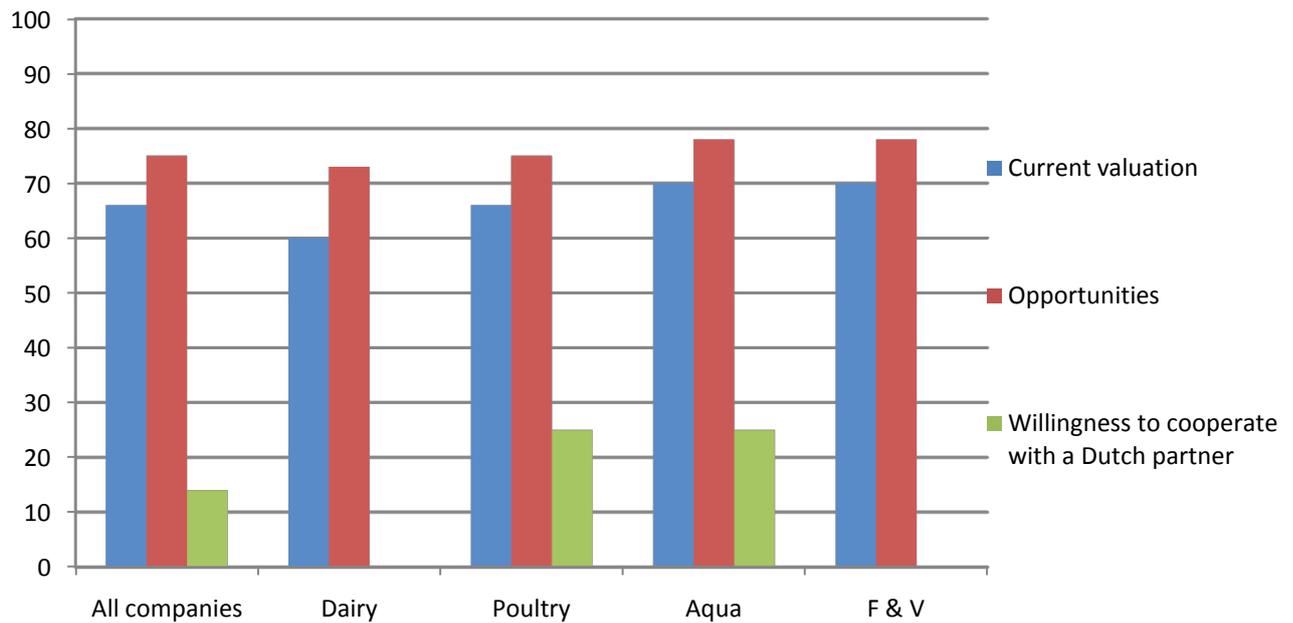
5.1 Results of interviews within the agro-food value chain

The red bars in graph 5.1 indicate the opportunities that the representatives of the companies interviewed see that could improve their business processes. The representatives have been asked to what extent new industry expertise, innovation, methods, practical know-how, technology, machines and modern appliances could help their company to improve different essential business processes.

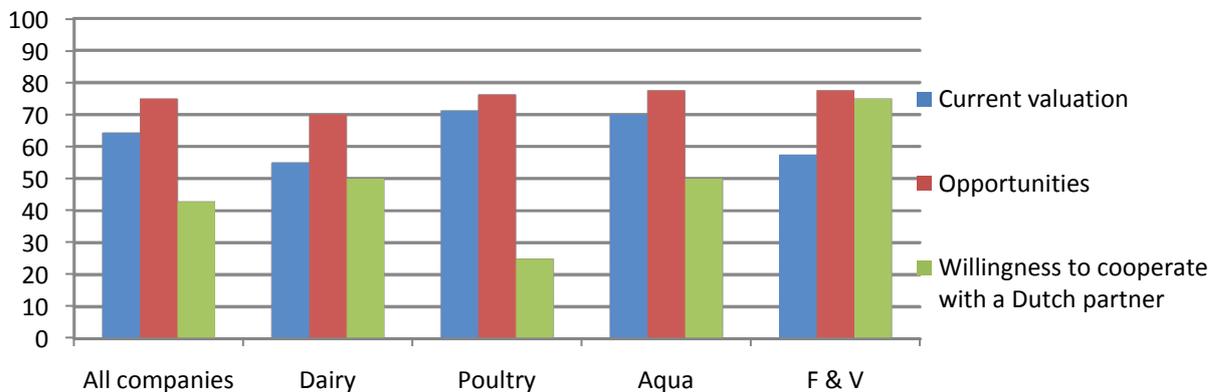
Next, the green bars indicate the willingness to set up new business contacts with Netherlands companies.



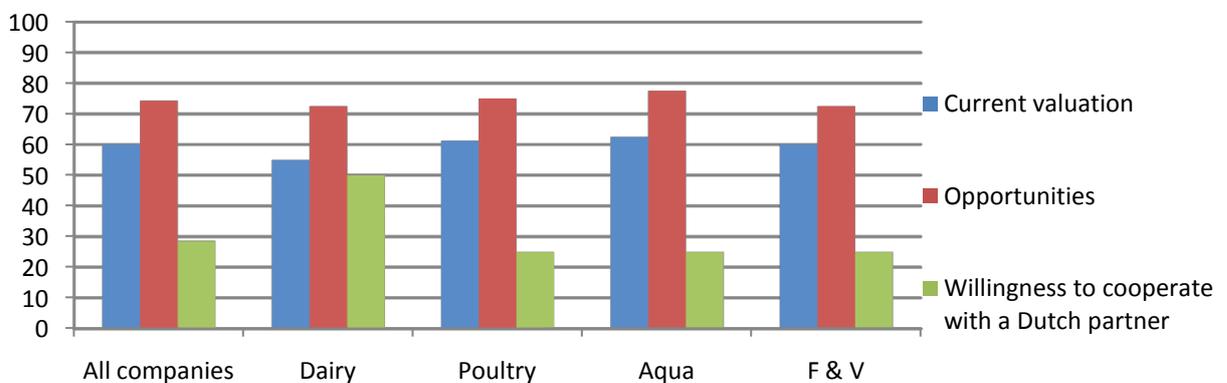
5.2 Optimize purchasing



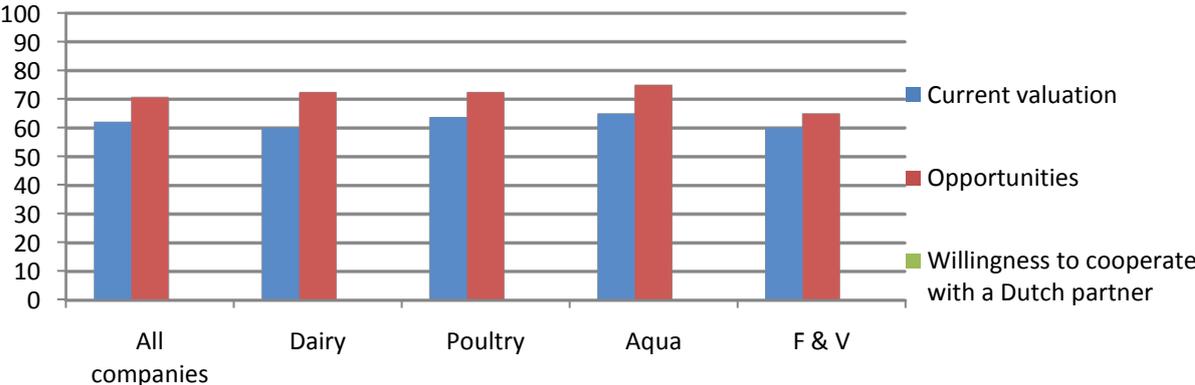
5.3 Optimize operational logistic processes with suppliers and clients



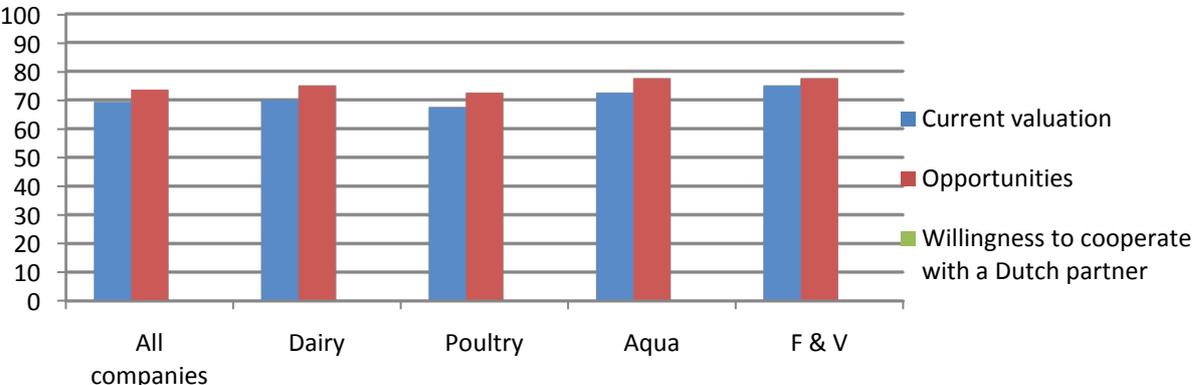
5.4 Optimize supply chain management (incl. quality of distribution)



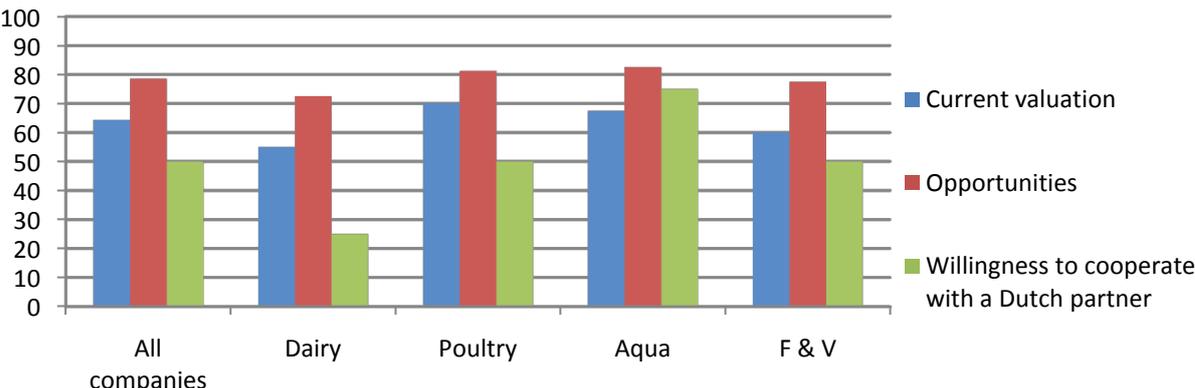
5.5 Sustainability: efficient use of supplies, water, energy and raw materials



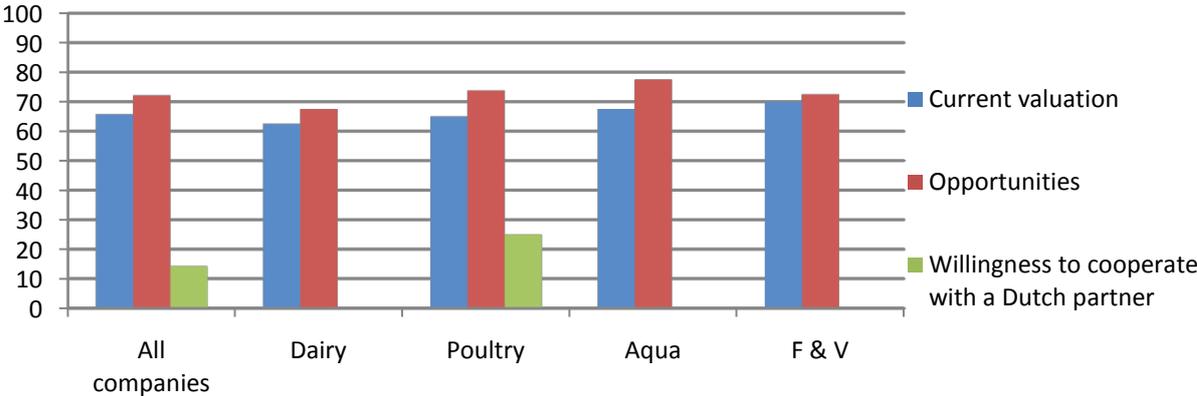
5.6 Efficient use of ICT for process management



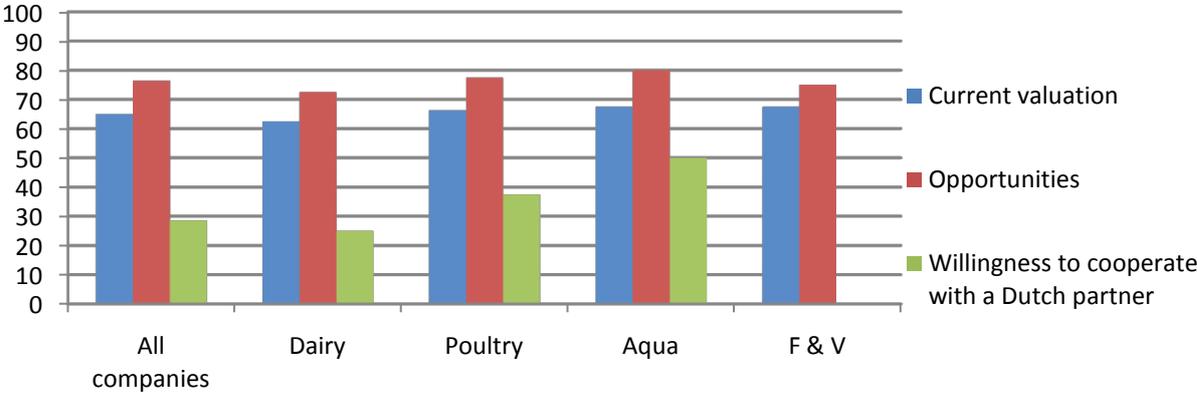
5.7 Innovate product assortment



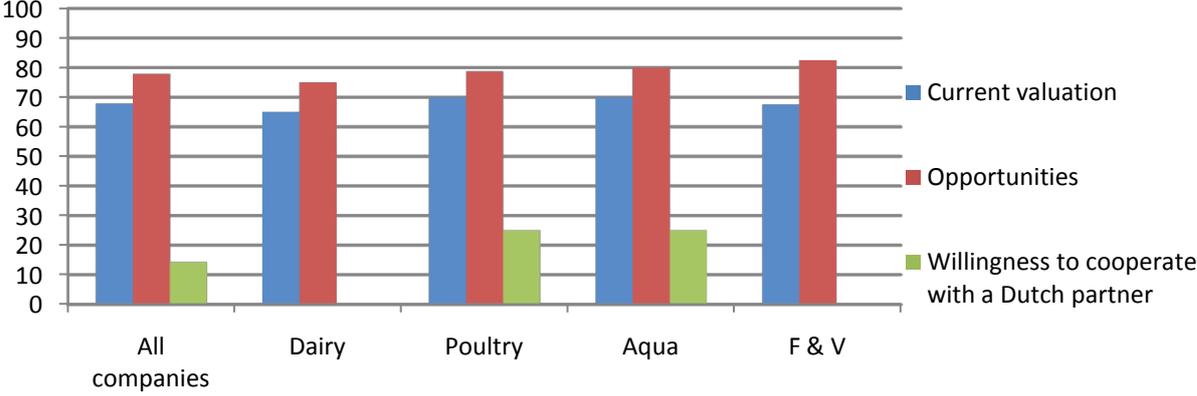
5.8 Comply with food safety regulations



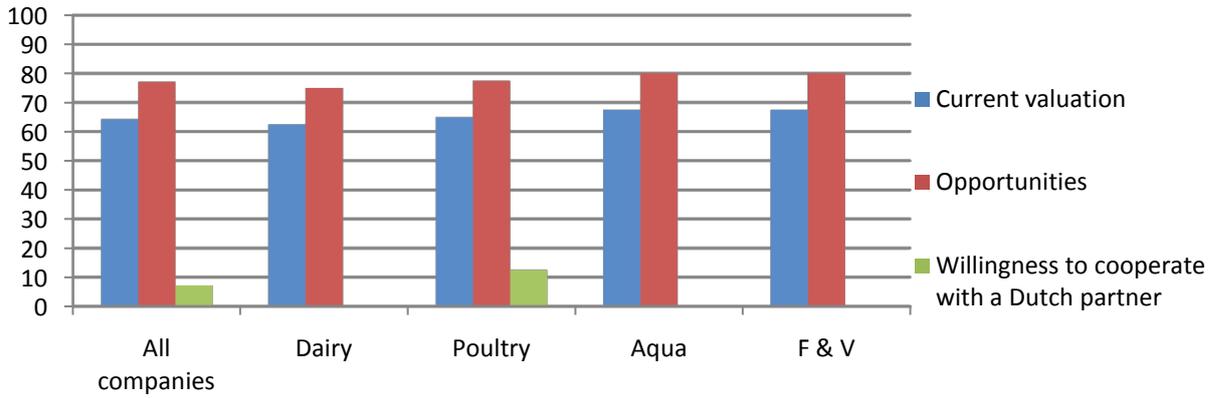
5.9 Optimize relation management system



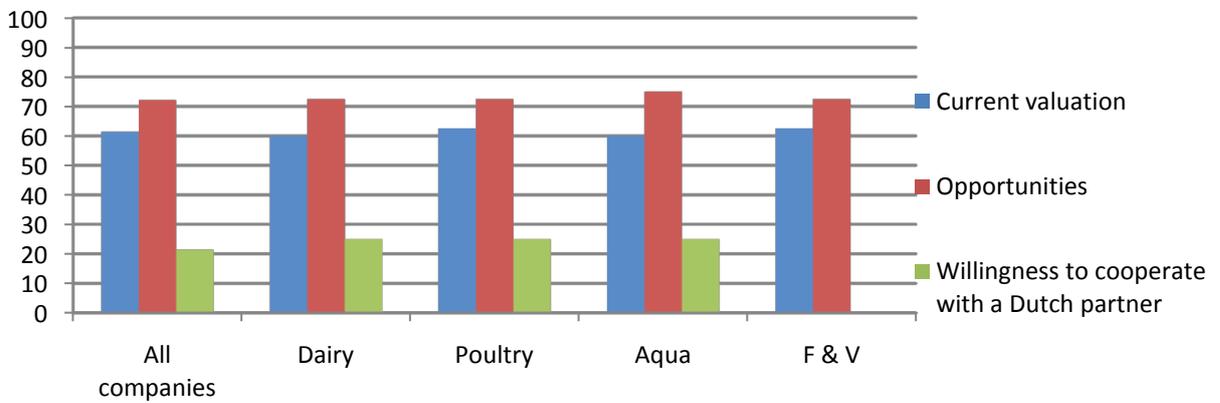
5.10 Optimize marketing strategy



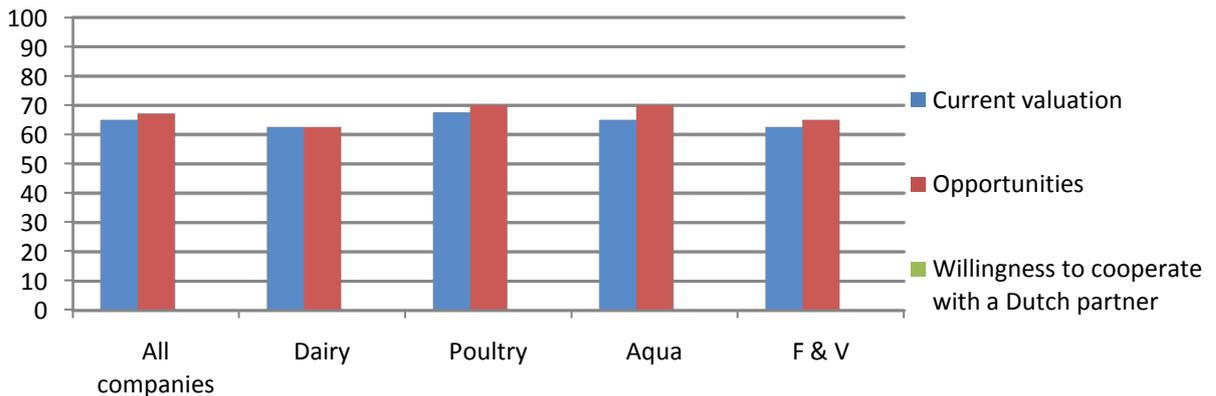
5.11 Optimize selling on local markets



5.12 Optimize selling on international markets



5.13 Create fair, safe and motivating labor conditions



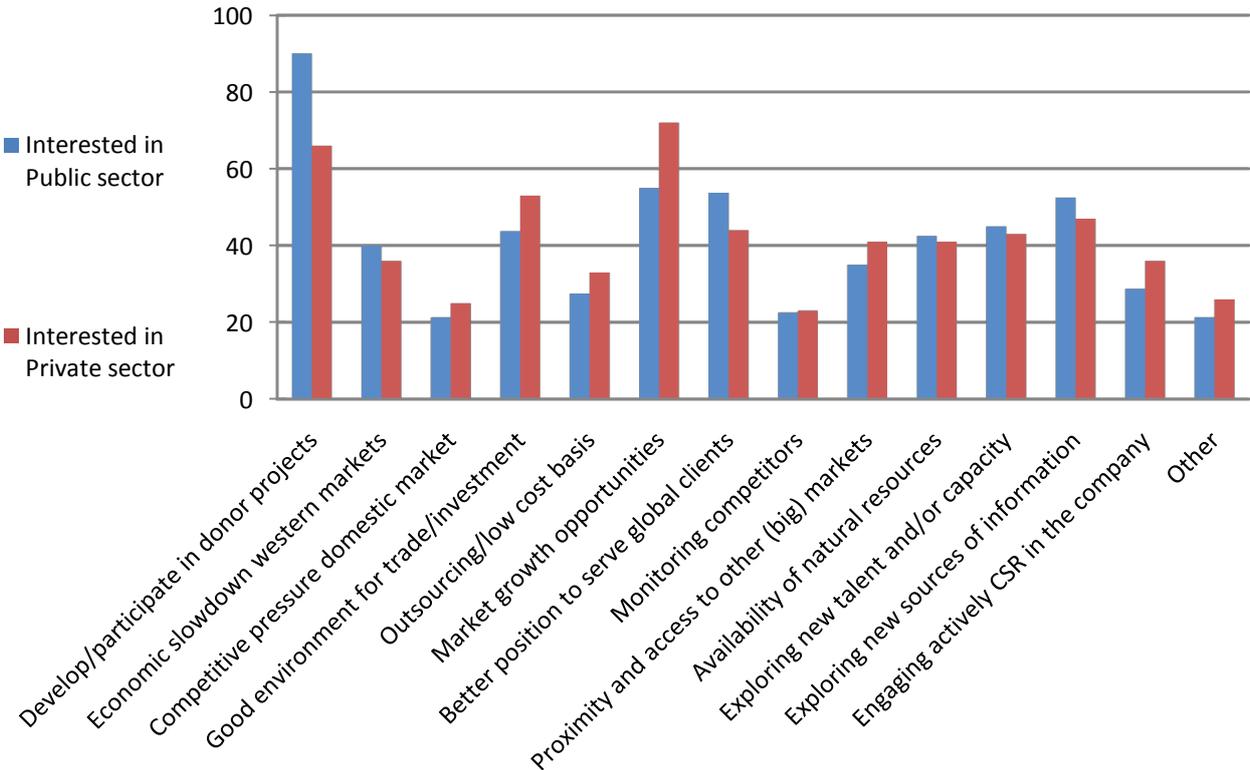
Annex 6 Interviews with Dutch companies – market entry Bangladesh

Nyenrode carried out a market entry survey in the Netherlands. 16 companies interested in the Bangladeshi market were questioned about relevant aspects related to market entry. To understand the needs of the Dutch companies and perceived challenges, the team designed a questionnaire. This questionnaire consisted of 13 multiple choice questions, and to get deeper insights the responses were required to be measured on a scale from 1 to 10.

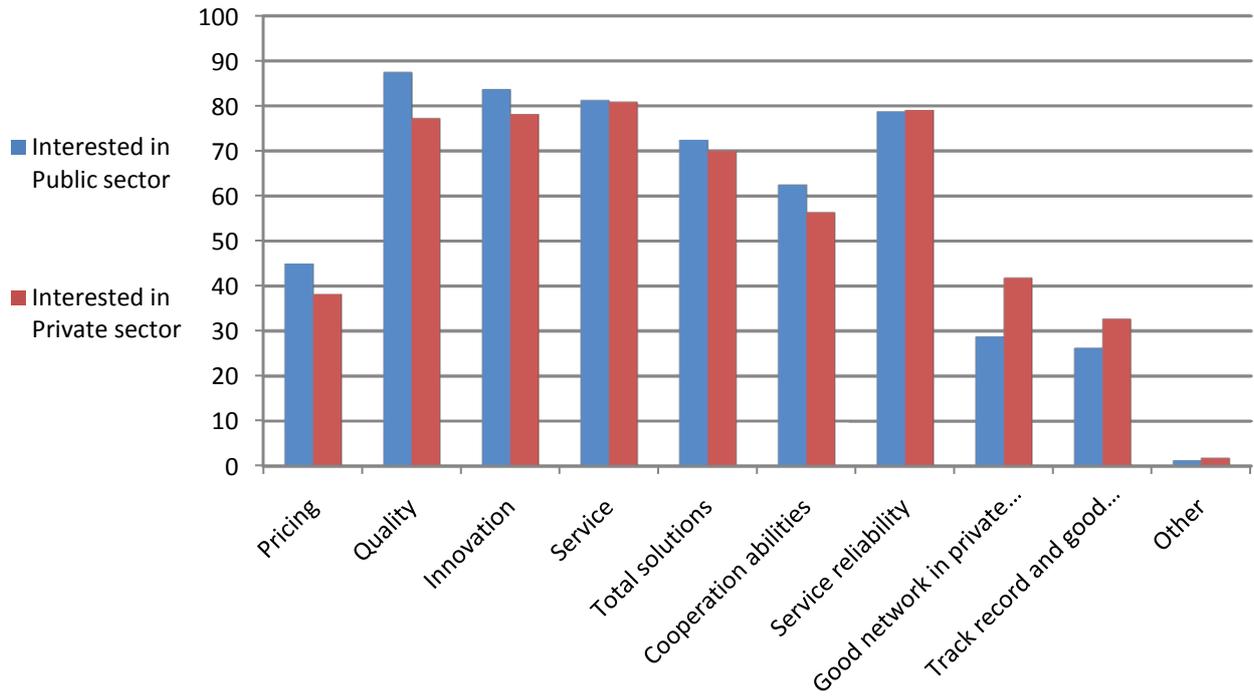
The companies interviewed delivered products or services to the following supply chains:

- Livestock Poultry 9 companies.
- Livestock Dairy 6 companies.
- Aquaculture 6 companies.
- Fruit and Vegetables 6 companies.

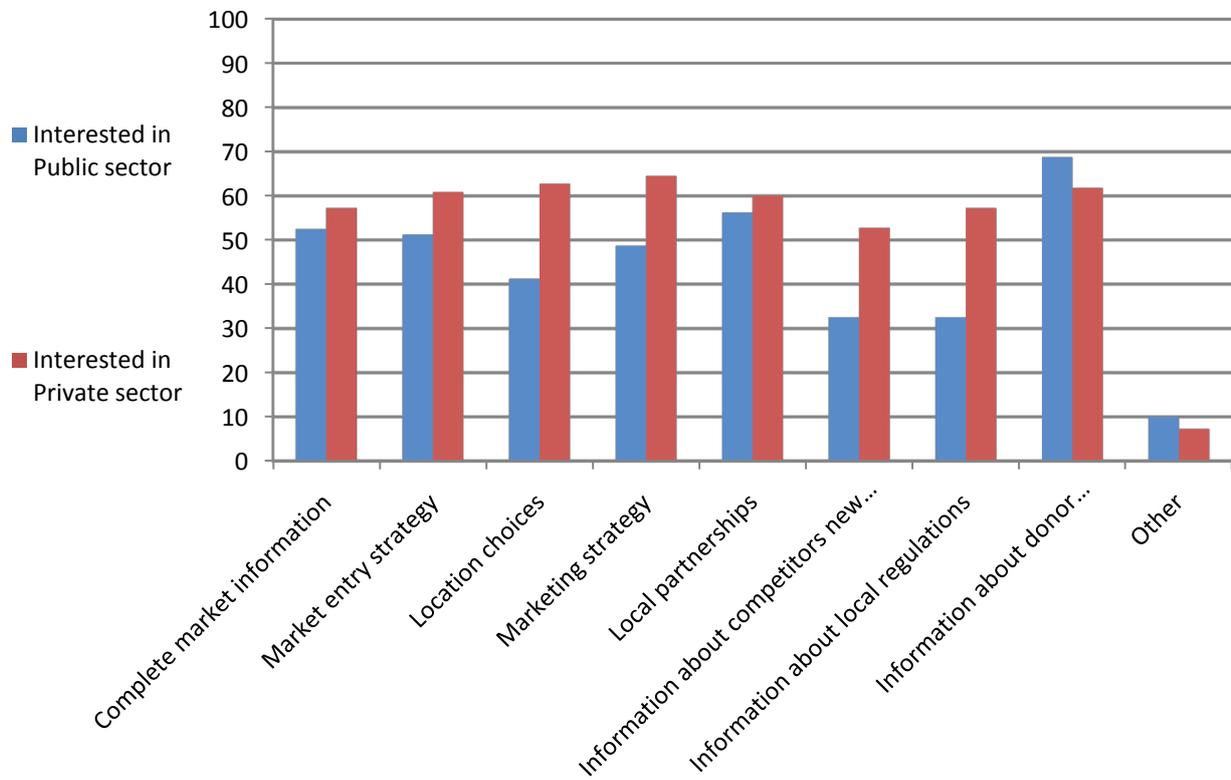
6.1 Reasons to have an interest in Bangladesh



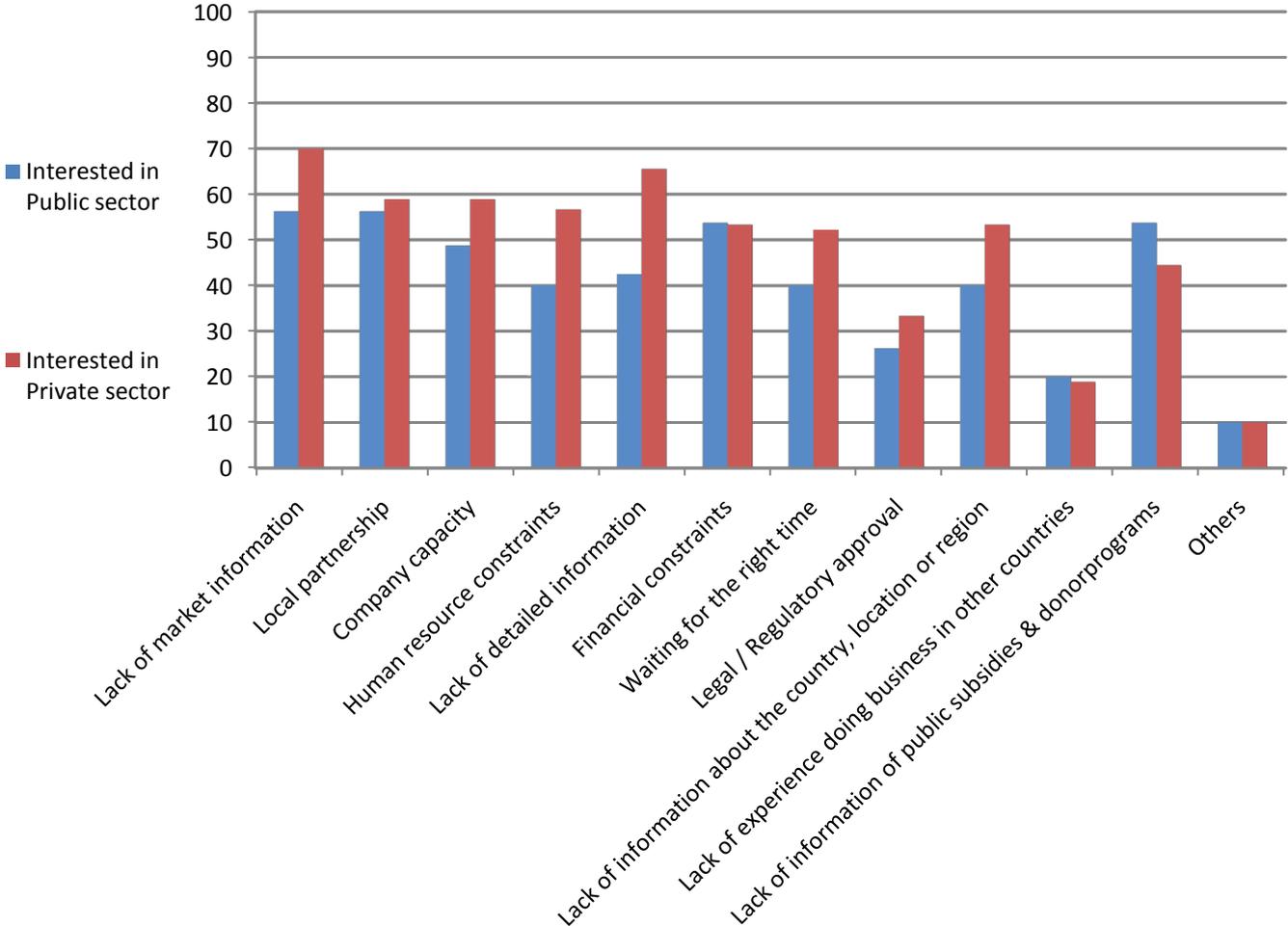
6.2 Positioning on the Bangladeshi market?



6.3 Preparedness to enter the Bangladeshi market



6.4 Hurdles to enter the Bangladeshi market





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