Project viability study for the overseas expansion of quality infrastructure in FY2017

Sri Lanka: Project Viability Study for

Development of Japan Industrial Township in Sri Lanka

Final Report

March, 2018

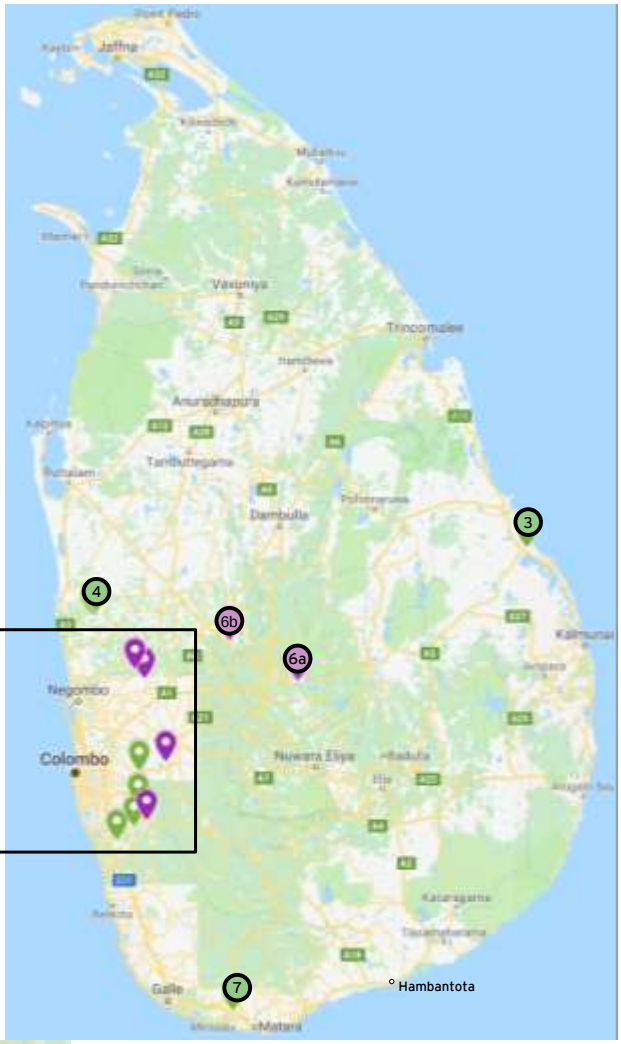
Ernst & Young ShinNihon LLC

Preface

The information used to create this Report was obtained through desk research of documents and webpages, as well as interviews with BOI and private companies. Site visits were also made to several candidate sites.

The observations included in this Report regarding the candidate sites are made by Ernst & Young ShinNihon LLC, the contractor for this study, based on the information collected with the methodology stated above, as well as from related past research.

Map of Sri Lanka



#	Candidate Sites
1a	Seethawaka EPZ
1b	Salawa
2a, 2b, 2c	Horana EPZ, Wagawatta IZ, Wagawatta IP
2d	Millaniya
2e	Millewa Estate
2f	Sorana Estate
3	Eravur
4	Bingiriya
5a, 5b	Mirigama EPZ (incl. Mirigama Block B)
5c	MAS Fabvric Park
6a	Kandy IP
6b	Mawathagama
7	Charlie Mount Estate

(*) Highlighted in purple : Existing EPZs.
(*) Highlighted in green : candidate sites for new development.

Source: EY based on Google Maps

List of Abbreviations

Acronym	Definition
EDB	Export Development Board
BIA	Bandaranaike International Airport
BOI	Board of Investment
BPO	Business Process Outsourcing
EPZ	Export Processing Zone
FTA	Free Trade Agreement
IMF	International Monetary Fund
IP	Industrial Park
IRA	Internal Revenue Act
IZ	Industrial Zone
JICA	Japan International Corporation Agency
KPO	Knowledge Process Outsourcing
LKR	Sri Lankan rupee
LPI	Logistics Performance Index
LRC	Land Reform Commission
LUPD	Land Use Policy Planning Department
METI	Ministry of Economy, Trade and Industry
MODSIT	Ministry of the Development Strategies and International Trade
NLDB	National Livestock Development Board
NWSDB	National Water Supply & Drainage Board
ODA	Official Development Assistance
OECF	Overseas Economic Cooperation Fund of Japan
OSOS	One Start One Stop Investment Centre
PLC	Private Limited Company
PPP	Public Private Partnership
QOL	Quality of Life
SLRD	Sri Lanka Railway Department
UDA	Urban Development Authority
WRMMP	Western Region Megapolis Master Plan
YoY	Year on Year

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1. Study Outline

1.1. Background

The Asian market is crucial for the growth of the Japanese economy, as stated in the *Japan Revitalization Strategy 2015*. Sri Lanka has shown a stable economic growth since the end of the civil war, and the investment from Japanese companies have been growing, including SMEs. On the other hand, numerous issues still remain to be solved, such as uncertain politics as seen in sudden changes of the tax system, rapid rise in labor costs, undeveloped infrastructure (electricity, logistics, and telecommunication), etc.

In July 2016, an Economic Policy Dialogue was held between The Ministry of Economy, Trade and Industry of Japan (hereinafter referred to as METI) and the Ministry of the Development Strategies and International Trade of Sri Lanka (hereinafter referred to as MODSIT), where the formulation of a roadmap was concluded for the promotion of Japanese investment in Sri Lanka. Three working group meetings were held thereinafter, where both sides discussed on specific measures to achieve this goal, and the "Japan-Sri Lanka Investment Promotion Roadmap" (hereinafter referred to as Investment Roadmap) was finalized by METI and MODSIT in April 2017. The Investment Roadmap was welcomed by the leaders of both countries during the Japan-Sri Lanka Summit Meeting on April 12, 2017.

The Investment Roadmap proposes to "Explore the possibility of Japan Industrial Township or Japanese investment friendly industrial areas", and several sites were nominated by the Sri Lankan side as candidate sites.

1.2. Objective of the study

The objective of this study is to collect information on the candidate sites of a "Japan Industrial Township or Japanese investment friendly industrial areas" (hereinafter referred to as Japan Industrial Township) and analyze the possibility of investment incentives in order to furnish a business-friendly environment for Japanese companies, leading to the business growth of Japanese companies in Sri Lanka and new investment from Japanese companies including SMEs.

Additionally, this study aims to analyze the possibility of implementing Japanese technology in future infrastructure development of Sri Lanka by studying the infrastructure necessary to attract investment from Japanese companies.

1.3. Study structure

The following tasks were performed to achieve the study objectives.

(1) Research and analysis on existing industrial parks and candidate sites

The following information was researched and analyzed for the target sites of this study, chosen by the study team based on the candidate sites nominated by Sri Lanka.

1. Geographical information:
   Geographical position within Sri Lanka; physical distance and time necessary to Colombo and major transportation hubs; etc.
2. Present status:
   Owner and developer of the industrial park; acreage; status of the land; number of companies working; costs for joining the park; characteristics of companies already joined; infrastructure availability; logistical accessibility; etc.
3. Information on the neighboring industrial parks:
   Acreage; number of companies; nationality of companies; etc.
4. Information on surrounding environment:
   Residential areas; agricultural areas; tourist attractions; natural resources; other outstanding activities to be negotiated before the development of industrial parks; etc.
5. Contractual situation:
   Owner of the land; contractual period; necessity of land expropriation; etc.
6. Incentives:
   Any given incentive packages to the current operators and/or industrial park developers; any prospective incentives given to the operators in the industrial park; etc.

(2) Development of a matrix table

A matrix table was developed as result of the above mentioned research and narrowing down of candidate sites.

(3) Proposal of infrastructure and incentives to promote Japanese investments and reinvestments.

Interviews were conducted to about 15 Japanese parties on requirements, infrastructure, and incentives necessary for Japanese investment to Sri Lanka.

Based on the opinions obtained from these interviews, proposals on the necessary systems, infrastructure, and incentives to be developed for further benefits to Japanese investors are made, with taking into account the current Sri Lankan national development plans and policies.

(4) Research on possibility of Japanese infrastructure technology implementation

Based on the infrastructure development necessary for promoting Japanese investment analyzed at step (3), the Japanese technology possibly applicable to Sri Lanka is identified, and the positive impact on entities and operators of industrial parks, and its implementation feasibility was analyzed.

1.4. Study method

The following methods were applied for this study.

(1) Research of existing secondary sources and interviews to relevant parties in Japan

Documents provided by the Sri Lankan government were the main sources of industrial park development policies, incentives, and existing industrial parks. Additionally, previous studies on Sri Lanka by METI and Japan International Corporation Agency (hereinafter referred to as JICA) were referred to.

For developers in Japan, their willingness to develop industrial parks in Sri Lanka were interviewed. Companies with infrastructure technologies were interviewed for their opinions on the possibilities for implementing their technology in Sri Lanka. The list of interviewees is shown in Table 1-1.

Table 1-1: Interviewed organizations in Japan

Category	Company
Industrial Park Development	Nippon Steel & Sumikin Bussan Corporation
	Mizuho Bank, Ltd.
	Sojitz Corporation
	Daiwa House Industry Co., Ltd.
Infrastructure technology	Japanese Business Alliance for Smart Energy Worldwide
	Hitachi Zosen Corporation

Several interview requests to developers were refused due to lack of geographical interest and issues with resource managements.

(2) Information collection and analysis through opinion exchange with Sri Lankan officials, experts, and local companies during field research

A total of 2 field researches were conducted during this study, where coming industrial park development plans and situation of incentive regulation were investigated via Sri Lankan officials. BOI was appointed as the counterpart of this study from the Sri Lankan side.

Existing Japanese companies and local companies in Sri Lanka were also interviewed for issues regarding industrial park development, and for necessary incentives needs from a private sector point of view.

Table 1-2: Interviewed organizations in Sri Lanka

Category	Interviewee
Sri Lanka Gov.	BOI (Dept. Investment Promotion, Dept. Technical Services, individual EPZ representatives, etc.)
Japan Gov.	Embassy of Japan in Sri Lanka
	JETRO Colombo office
	JICA Colombo office
Japanese Companies	Lanka Harness Company PVT Ltd.
	Tos Lanka Company PVT Ltd.
	Colombo Dockyard PLC
	YKK Lanka PVT Ltd.
	The Bank of Tokyo-Mitsubishi UFJ Colombo Representative Office (BTMU)
	Taisei Corporation Sri Lanka Office
	Mitsubishi Corporation Colombo Office
	ITOCHU Corporation, Colombo Liaison Office
Other Companies	Variosystems PVT Ltd.
	Candor Group
	Expolanka Freight PVT Ltd.
	Sri Lanka Food Processors Association
	Siam City Cement (Lanka) Ltd.

1.4.1. Study team

The study team of this study is as below.

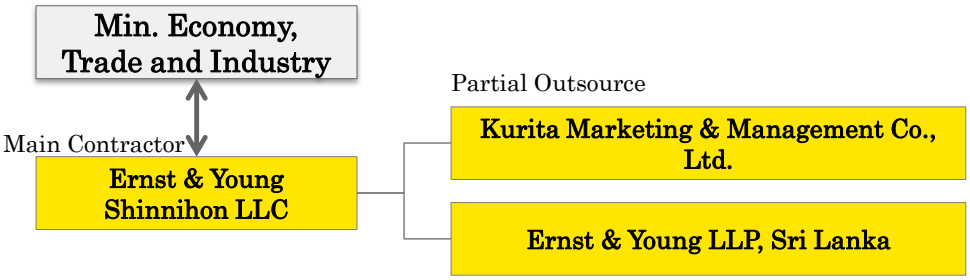


Figure 1-1: Study structure

Source: EY

Role summary of each participant is explained below.

(1) Ernst & Young ShinNihon LLC

Ernst & Young ShinNihon LLC (hereinafter referred to as EY) is a group member firm of the global auditing firm Ernst & Young. EY has previously conducted the *Data Collection Survey on Investment Climate in Sri Lanka* by JICA, and participated in this study as the primary contract.

(2) Kurita Marketing & Management Co., Ltd.

Kurita Marketing & Management Co., Ltd. (hereinafter referred to as KMM) is a marketing consulting company with experience in supporting overseas companies entering Japan, Japanese companies' overseas investment, overseas market research in various areas, specially controlled medical devices sales, recruiting of multi-national workers, investment promotion to industrial parks / free trade zones, and project developments.

KMM has experience in site studies, preparation of development plans, investment promotion, and operating assistance in over 30 industrial parks located in South East Asia, Central Asia, and Middle East. KMM provided advice based on their experiences for this study.

(3) Ernst & Young LLP, Sri Lanka

As an EY network company of Sri Lanka, Ernst & Young LLP, Sri Lanka (hereinafter referred to as EYSLK) has a wide range of network within the public sector of Sri Lankan investment promotion. EYSLK participated through provision of information on industrial park developments, and organization of interviews with Sri Lankan public sector.

1.4.2. Study schedule

This study was conducted in the schedule shown in Table 1-3.

Table 1-3: Schedule of this study

Task	Nov	Dec	Jan	Feb	Mar
1) Secondary source collection					
Information collection of industrial parks					
2) Matrix development					
3) Investment promotion policy, incentives research					
Understanding of current investment promotion policy					
Understanding of Japanese and foreign investor business climate					
Policy review for business climate improvement					
4) Research on possible Japanese infrastructure technology transfer					
Identification of matching technology					
Collection of compatibility evaluation criteria and evaluation					
5) Reporting and submission of report		▲		▲	★
(＊)field study		▲		▲	

Source: EY

2. Overview of Sri Lanka

2.1. Government and policies

2.1.1. Governmental structure

Sri Lanka is governed by a president as head, supported by the cabinet below. President Maithripala Sirisena of the Sri Lankan Freedom Party came to office in January 2015, and nominated Prime Minister Ranil Wickremesinghe from the United National Party, building a coalition government. The Sri Lankan cabinet consists of 51 ministries and 49 ministers (additional 19 minister of states, and 24 vice ministers), subject to change from time to time[1].

2.1.2. Ministerial structure

Industrial park development and investment promotion is mainly the duty of MODSIT and its policy implementation organization BOI. EDB, managing the export of domestic products, is placed under MODSIT.

[1] JETRO Colombo statistics, July 2016

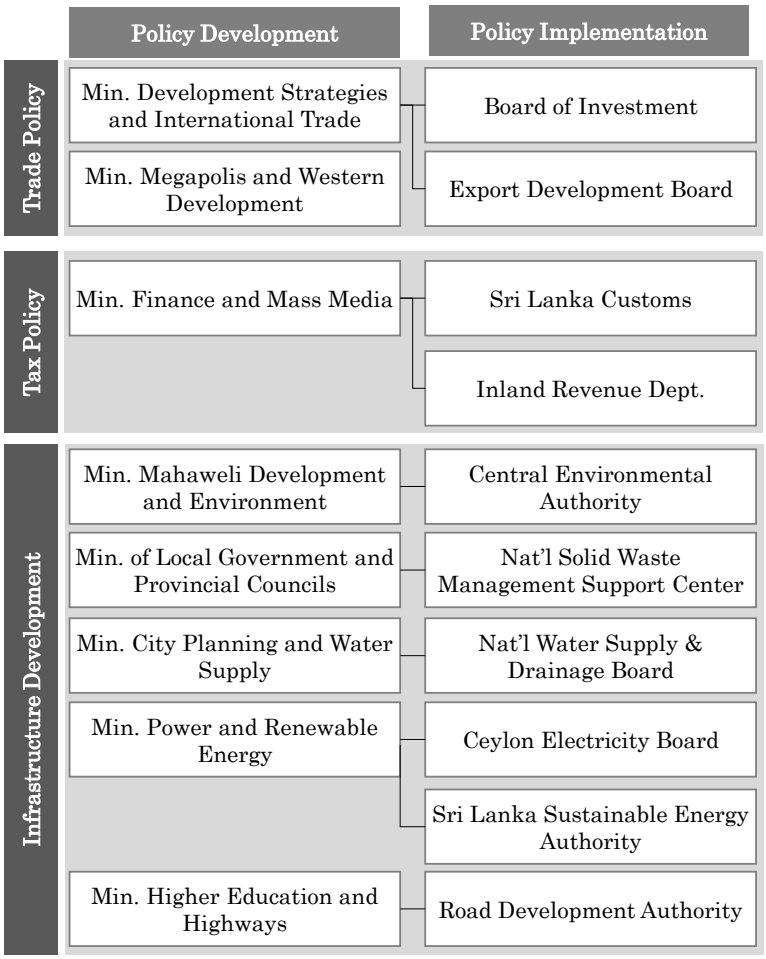


Figure 2-1: Major ministries and organizations related to industrial park development in Sri Lanka

Source: EY based on information provided by BOI

(1) Board of Investment

The Board of Investment (hereinafter referred to as BOI) is the affiliated organization of MODSIT. Its objective is to foster economic development of the country through realization of foreign direct investment, and works as a single window for investment promotion, Export Processing Zones (hereinafter referred to as EPZ) operation, and support to investors, e.g. support to obtain visa, environmental assessment, provide infrastructure (electricity, water, and telecommunication) for companies operating in an EPZ. Its operating revenue is gained from charges for these services (refer to Appendix for details on service charges)

(2) Export Development Board

The Export Development Board is established under MODSIT for export expansion of

Sri Lankan goods. EDB assists Sri Lankan companies to expand opportunities of selling their goods in overseas markets, such as conducting promotional activities to the exported countries. EDB also supports Japanese companies operating in EPZs for their export.

(3) Ministry of Megapolis & Western Development

Setting the achievement of an overall economic development of Sri Lankan through wholesome urban development of the Western region including Colombo as a goal, the ministry is in charge of preparing regional development policies and plans. In 2016, the Western Region Megapolis Master Plan (WRMMP) was published, where the below 7 goals were set. The preparation of free trade zones and development of connecting infrastructure such as ports, are included as part of the actions to achieve these goals.

1. Creating jobs and investment
2. A resilient region
3. Efficiently connected
4. Smart livable places
5. Value added sea resources
6. Reliable and efficient services delivery
7. Better governance & regulated development

(4) Sri Lanka Customs

Sri Lanka Customs, a division of the Ministry of Finance and Mass Media, operate as the window of custom procedure. Sri Lanka Customs cooperate with BOI mainly on customs operations, where for example, BOI provides investor services such as approval of export/import documents and physical verification of cargos within the EPZ.

(5) Inland Revenue Department

As an affiliated organization of the Ministry of Finance and Mass Media, the Inland Revenue Department was in charge of tax incentives formerly provided to investors. Since the law amendment in 2011, no tax incentives are provided to investors at the moment.

(6) Central Environmental Authority

As an affiliation of the Ministry of Mahaweli Development and Environment, the Central Environmental Authority provides environmental clearance to operate in an EPZ. Within the Central Environmental Authority, there is the Environmental

Pollutions Control Unit, where regulations on industrial pollution is prepared, therefore industrial waste management within the EPZ is also under this organization.

(7) National Solid Waste Management Support Center

Affiliation of the Ministry of Local Government and Provincial Council, the National Solid Waste Management Support Center provides support to local governments on waste management, manuals/guidelines, and technical support.

(8) National Water Supply & Drainage Board

An affiliation of the Ministry of City Planning and Water Supply, the National Water Supply & Drainage Board provides water supply and relative clearance to EPZ.

(9) Ceylon Electricity Board

An affiliation of the Ministry of Power and Renewable Energy, the Ceylon Electricity Board will provide electricity supply and relative clearance to EPZ.

(10) Sri Lanka Sustainable Energy Authority

As one of the division of the Ministry of Power and Renewable Energy, the Sri Lanka Sustainable Energy Authority aims to promote more renewable energy generation, and also provides necessary license for generation.

(11) Road Development Authority

An affiliation of the Ministry of Higher Education and Highways, the Road Development Authority is in charge of road development and management. Roads and expressway necessary to EPZ will be developed by the Road Development Authority.

2.1.3. Administrative division

The administrative division of Sri Lanka consist of the central government and 9 local state governments. The 9 States are divided into 25 Districts, and Districts are divided into 256 Divisional Secretaries, which is then divided into 14,008 Grama Niladhari Divisions.

2.2. Economy

2.2.1. Fiscal balance

The fiscal balance of Sri Lanka, where spending is exceeding revenue, has been similar throughout recent years. Since the end of the civil war, the fiscal balance has remained

between -9% to -5%. Due to this continuous imbalance, Sri Lanka is trying to improve financial discipline through a support program from the International Monetary Fund (IMF). With this program, Sri Lanka is trying to expand its financial base and increase tax revenue by strengthening its tax collection system.

This improvement of financial discipline has led to the holding back of tax incentives provision by BOI. The Colombo Port City Project and Hambantota Port Project were appointed as Strategic Development Projects and they were the last two projects to receive tax incentives.

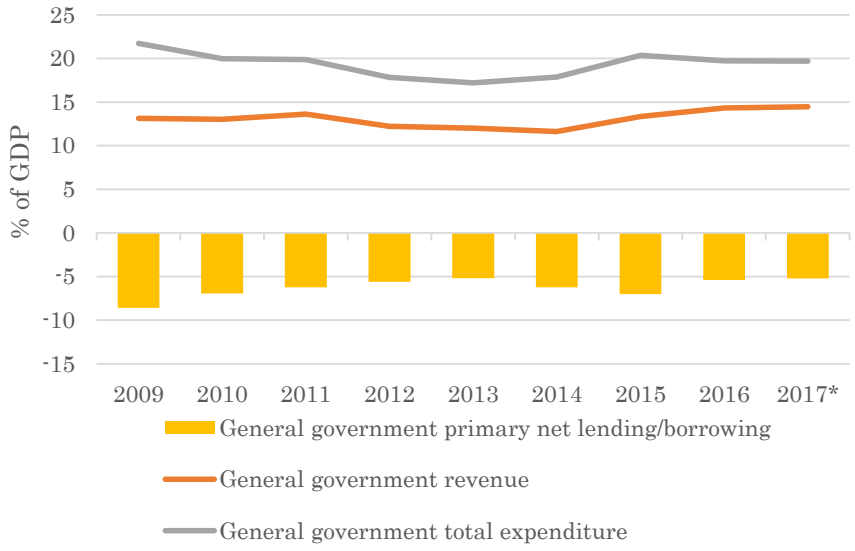


Figure 2-2: Fiscal Balance of Sri Lanka

(* 2017 data is provisional)

Source: IMF "World Economic Outlook Data"[2]

2.2.2. GDP and current account balance

According to IMF analysis, since the end of the civil war in 2009 until 2012, Sri Lanka was showing a real GDP growth of 8% to 9%, which however has slowed down to 3 to 5% after 2013. According to IMF, this is due to the rapid improvement of total factor productivity after the civil war, which slowed down from 2012. This trend is seen in a lot of emerging economies, and therefore an improvement of the total factor productivity is necessary to improve the GDP, specifically by increasing FDI, active trades, and human resource development[3].

[2] IMF, "World Economic Outlook Data: October 2017 Edition" (2017)
(https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx)
[3] IMF, "Country Report No, 17/253:Sri Lanka", August 2017
(https://www.imf.org/en/Publications/CR/Issues/2017/08/10/Sri-Lanka-Second-Review-under-the-

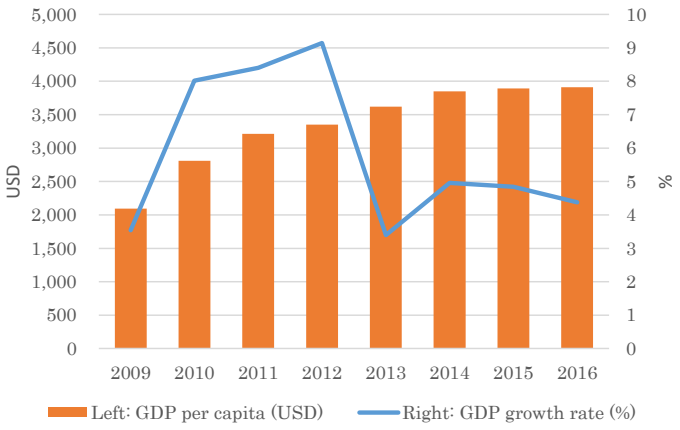


Figure 2-3: GDP Growth Rate and GDP per Capita

Source: The World Bank "World Development Indicators"[4]

With the help of tourism growth and remittances, the current account balance had been improving since 2011. However, according to an IMF analysis, 2016 marked GDP ratio -2.4%, which is predicted to decline further to a GPD ratio of -2.5% in 2017. This is due to the record breaking drought that occurred in 2016 and the flood that followed, raising the necessity of importing additional food and oil[5].

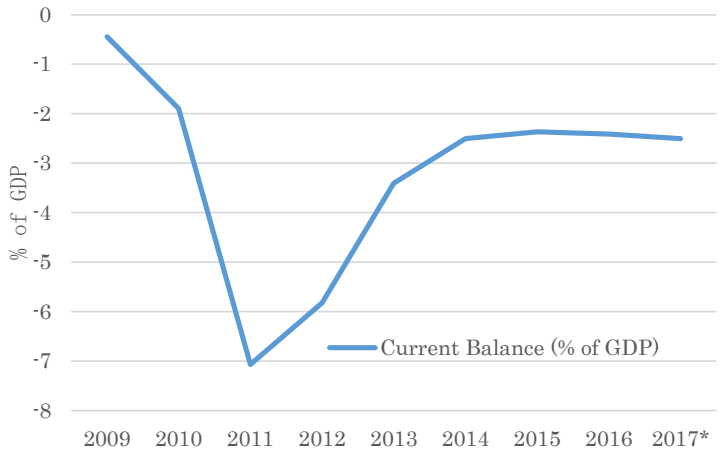


Figure 2-4: Current Balance of Sri Lanka

(* 2017 data is provisional)

Extended-Arrangement-under-the-Extended-Fund-Facility-45178)

[4] The World Bank, "Data Bank World Development Indicators" (2018)
(http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators)

[5] IMF, "IMF Country Report No.17/253 Sri Lanka", August 2017
(https://www.imf.org/en/Publications/CR/Issues/2017/08/10/Sri-Lanka-Second-Review-under-the-Extended-Arrangement-under-the-Extended-Fund-Facility-45178)

Source: The World Bank "World Development Indicators"[6]

2.3. Industrial policies

(1) Vision 2025[7]

Vision 2025 is an 8-year economic development plan published by the Sri Lankan government in September 2017. It aims to achieve economic development as an exporting hub of the Indian Ocean for the younger generation. Specific targets are to increase GDP per capita to 5,000 USD, create 1 million jobs, increase FDI to 5 billion USD per year, and double export to 20 billion USD.

In Vision 2025, targets are set for the following sectors; macro-economic framework, reforms in land, labor and capital markets, economic and social infrastructure, technology and digitalization, social safety nets, agriculture and sustainable development, governance and accountability, coordination and monitoring implementation. Some key projects are mentioned within the economic and social infrastructure target, which include the development of industrial zones at Charlie Mount, Matara, Kalutara, Seethawaka, Hambantota, and Trincomalee.

[6] Same as Note 4
[7] Ministry of National Policies and Economic Affairs "Vision 2025" (2017)
(http://www.pmoffice.gov.lk/download/press/D00000000061_EN.pdf)

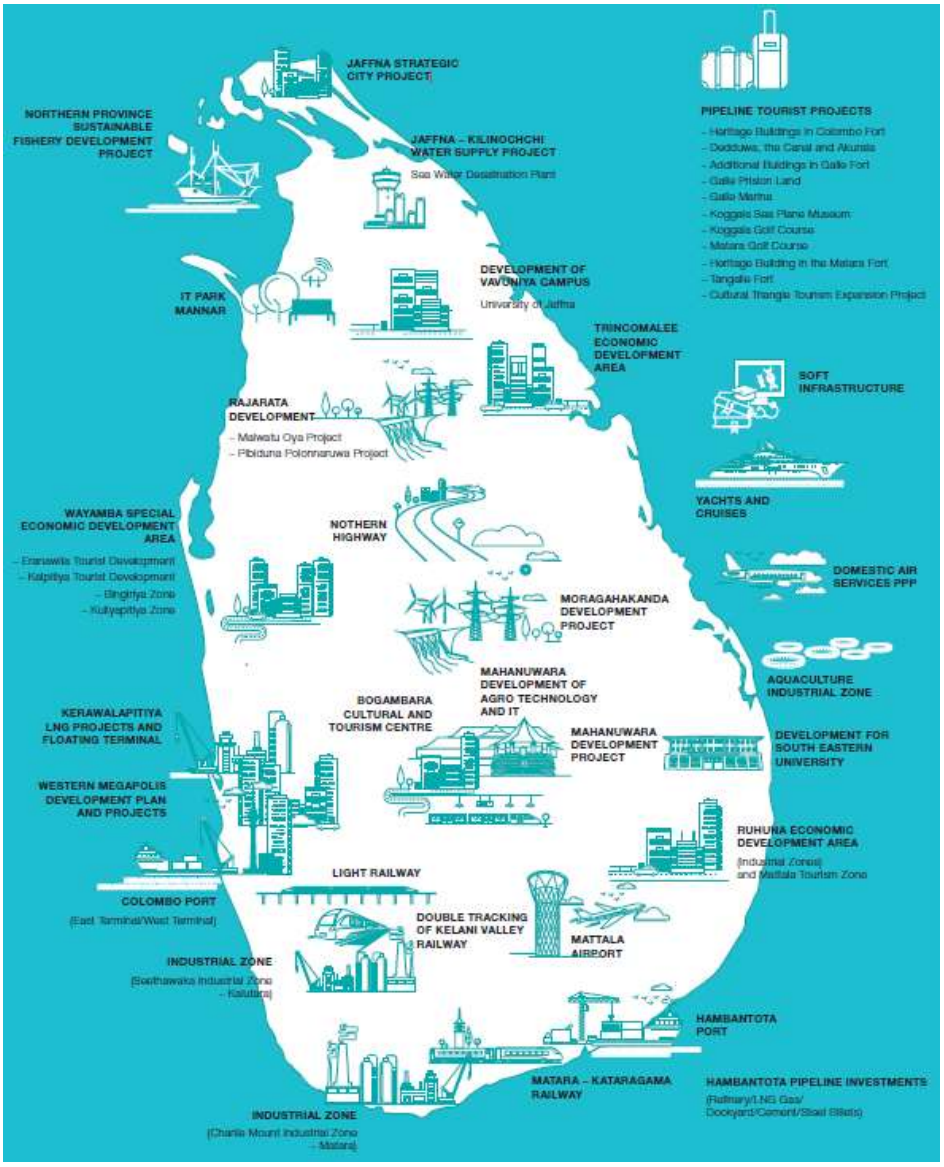


Figure 2-5: Project Overview of Vision 2025

Source: Ministry of National Policies and Economic Affairs "Vision 2025"

(2) Public Investment Programme 2017 – 2020 (PIP)

Published by the Ministry of National Policies and Economic Affairs in 2017, the Public Investment Programme 2017 – 2020 indicates the major investment promotion areas and its fair geographical distribution between the planned period. The programme covers a wide range of issues; human resource development, agriculture, industry/trade/investment and tourism, infrastructure, good governance, environment management, social protection, and regional development; hence is not showing a focused direction of national development.

It touches upon the November 2015 Prime Minister's speech, and lists the below 5 points as the medium term strategy of the programme;

1. Generating one million employment opportunities
2. Enhancing income levels
3. Development of rural economies
4. Ensuring ownership of land to rural and estate sector working class, the middle class, and the public sector
5. Creating a strongly vibrant much wider middle class

(3) Research conducted by other donors on industry development

Industry analysis of Sri Lanka has been conducted by several donors; the World Bank and AusAID in 2016 and the Harvard University research group in 2017. Study by the World Bank and AusAID concluded that the below 8 industries are promising[8]:

1. Automotive components
2. Food processing industry
3. High value added apparel, textile and related services
4. High value added rubber products
5. Information technology enabled services
6. Life science industry
7. Logistics
8. Tourism

BOI further studied the targeted industry/sectors for promotion based on the Harvard group's study and the World Bank's study results, and identified target sectors as shown in Table 2-1. The study results are planned to be reflected into country specific promotional strategies.

Table 2-1: Sectors identified by BOI (Feb. 2017)

Sector	Subsectors	Brief Rationale
Manufacturing	• Electric components • Automobile components • High tech production • sensors etc.	• Highly capable labor at a faction of the cost of economy. • Easily trainable • Ability to use Sri Lanka Port / Logistics

[8] Source: JICA, "Data Collection Survey on Investment Climate in Sri Lanka (2017) (http://libopac.jica.go.jp/images/report/P1000032832.html)

Sector	Subsectors	Brief Rationale
IT-Enables Services	• IT software • BPO • KPO	• Job creation track record and potential • Strong existing cluster and value proposition • Internationally competitive wage and • Real estate costs
Tourism	• Hotels • Recreational activities (theme parks) • Adventure sports & leisure facilities	• Strong market opportunity and economic impact potential for Sri Lanka. • Strong Sri Lankan value proposition Internationally competitive on numerous metrics (natural & cultural assets); • Competitive infrastructure; rapid sector
High value-added apparel	• Lingerie • Smart textiles (wearable technology) • Other potential high value clothing items (especially niche products) • Innovation & research	• Proven track record and compelling value proposition • Internationally competitive on metrics such as skills and education level: efficient and highly competitive port for apparel trade • Growing demand from India (with FTA benefits) and beyond
Food Processing	• Fish / seafood • Fruit and vegetables • Diary	• Strong value proposition (diverse selection of raw products; good domestic infrastructure; attractive local and regional market) • Strong food processing potential compared to competitor markets in the region.
Logistics	• Entrepot trade • Transportation • Warehousing & storage	• Competitive strength of regional location, water depths and shipping routes • Strong potential as a Multi-country Consolidation (MCC) hub • Improving Infrastructure

Source: EY based on information provided by BOI

The target sectors for promotion identified by BOI are not all relevant for Japanese companies to consider investment. However, there are already preceding cases of Japanese investors operating in Sri Lanka that belong to some of these identified sectors, and these cases should be introduced more to potential Japanese investors since they are full of suggestions, and may lead to enhancing their supply chains and improvement in business operability. More specifically, the following sectors already have Japanese business being conducted in Sri Lanka; manufacturing (electronic parts, automotive parts, vessel related mechanical hardware), functional textile for high value apparel and its R&D, and seafood processing. Hence, these preceding cases should be examined along

with the target sectors list (Table 2-1) as a starting point for considering the support that might be possible for Japanese investors in the future.

Some of the Japanese companies that are operating in Sri Lanka already have a list of companies that they would like to bring to Sri Lanka in order to reinforce their industry competitiveness, as also explained in Chapter 4.3, and approaching these companies might also be a start off point.

2.4. Foreign direct investment

2.4.1. Form of authorized business types

There are two ways of registration to incorporate a company in Sri Lanka; if the business will include exporting of products, the company can register as a "BOI approved company", and if not, it could operate without registration, commonly known as a "non-BOI company". A BOI approved company is grouped into two categories; a Section 16 company, or a Section 17 company. Both type of companies will have the permit to operate in an EPZ, receive BOI services provided to EPZ tenants, and receive BOI support through incorporation procedure. The difference between the two types are the number of support provided by BOI during operation, and the amount of required registration fee. A Section 16 company will receive support when obtaining working/residence visa. A Section 17 company will receive additional support on top of that, such as duty free facilitation during both export and import, exemption from the exchange control regulation[9]. Further details on provided services will be explained in Chapter 4.1.

According to the BOI Act, the condition for registration, referred to as the minimum investment requirement for a Section 16 company is 250,000 USD, and the minimum investment requirement for a Section 17 company is decided based on the type of business, number of employee, sales amount, number of trainee, and establishment of a training facility. However, in the current operation, the minimum investment fee is decided case by case[10].

Only BOI approved companies can operate in an EPZ, but it is also possible for BOI approved companies to operate outside of an EPZ, such as Noritake, explained in Chapter 2.5.1.

2.4.2. Foreign Direct Investment trend

In the World Bank *Doing Business 2017* report, Sri Lanka ranked 110 out of 190

[9] Parts of the Exchange Control Regulation is exempted, and enables opening foreign currency banking units without achieving the +90% products export requirement.
[10] JICA, "Data Collection Survey on Investment Climate in Sri Lanka (2017) (http://libopac.jica.go.jp/images/report/P1000032832.html)

countries in ease of doing business. Compared to South Asia average, Sri Lanka scores lower in Enforcing Contracts, Paying Taxes, Getting Credit, and Registering Property. The lack of consistency from frequent changes of regulations and lack of political transparency are commonly heard comments from Japanese investors, which suggests its effect on the ranking in the report.

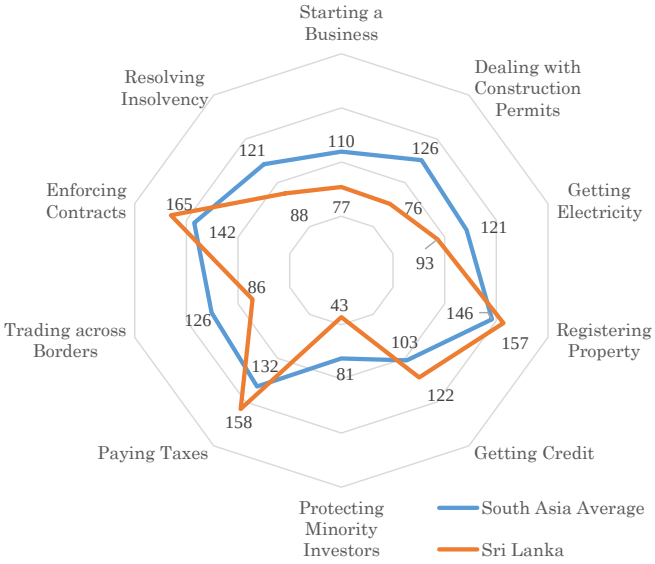


Figure 2-6: Doing Business ranking 2017[11]

Source: World Bank, "Doing Business 2017"[12]

Country wise, China marked as the largest investor in 2017 with 628.50 Mil. USD, followed by Hong Kong's 295.95 Mil. USD, and 173.84 Mil. USD by India.

Table 2-2: Country Wise FDI by BOI Companies – Top 10 countries (Mil. USD)

	2014		2015		2016		2017(Prov)		2016vs2017	
	Country	Amount (Mil USD)	Country	Amount (Mil USD)	Country	Amount (Mil USD)	Country	Amount (Mil USD)	Amount (Mil USD)	YoY(%)
1	China	403.50	Hong Kong	188.01	Netherlands	133.32	China	628.50	575.68	1090%
2	U.K.	382.54	China	150.78	Hong Kong	119.88	Hong Kong	295.95	176.07	147%
3	U.S.	127.91	Mauritius	139.21	India	112.13	India	173.84	61.71	55%
4	Singapore	102.53	Netherlands	90.16	Malaysia	88.38	Malaysia	88.40	0.03	0%
5	Netherlands	98.60	India	67.84	China	52.81	Singapore	80.52	46.84	139%
6	Mauritius	98.08	Malaysia	65.08	Canada	40.24	Netherlands	71.76	(61.56)	-46%
7	Hong Kong	73.70	British virgin Island	36.09	Australia	35.18	U.K.	66.83	38.80	138%
8	India	51.84	Singapore	30.46	Singapore	33.68	Japan	46.00	15.69	52%
9	Canada	41.53	U.K.	29.04	Japan	30.30	Sweden	43.20	42.35	4947%
10	Australia	37.40	Canada	26.99	Belgium	29.92	U.S.	37.75	18.63	97%
	Total	1,616.26	Total	969.66	Total	801.00	Total	1,710.29	909.295	114%

Source: EY based on information provided by BOI

[11] South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
[12] The World Bank, "Doing Business 2017"(2017)
(http://www.doingbusiness.org/~/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Report.pdf)

Total FDI by BOI companies to Sri Lanka until 2014 was growing steadily, but fell to a decrease in 2015 (YoY ▲40%), and 2016 (YoY ▲17%). However in 2017, due to a large amount of investment in the infrastructure sector, the total FDI amount increased again (YoY +114%) (Figure 2-7). This rapid increase is due to the restarting of development projects including the Colombo Port City development project. These projects had been temporary suspended by the Sirisena administration, to reinvestigate lack of proper permits and approvals, but had had restarted with additional land granted for development.

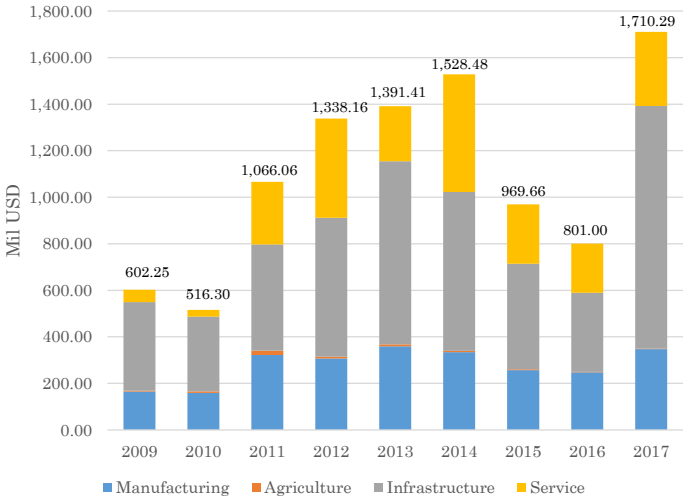


Figure 2-7: Recent FDI to Sri Lanka

Source: EY based on information provided by BOI

As a result, for sector wise FDI in 2017, infrastructure sector covered 61.0%, followed by manufacturing 20.3%, service 18.6%, and agriculture 0.1%. Composition shows decrease in manufacturing and service sector, but monetary wise both sectors increased, manufacturing marking 99.9 Mil. USD, and service 105.9 Mil. USD. Specifically, food, beverage & tobacco (+194%), paper, paper products & printing (+159%), textile, wearing apparel & leather (+58%) increased, whilst wood & wooden products (▲26%), fabricated metal & machinery (▲25%), and non-metallic & mineral (▲10%) decreased.

Table 2-3: Sector wise FDI component (2016-2017)

(Mil. USD)

	2016		2017		2016-2017	
Sector	Amout	Ratio	Amout	Ratio	Amount	YoY
Manufacturing	247.723	30.9%	347.596	20.3%	99.873	40%
Food, Beverages & Tobacco	21.29	8.6%	62.551	18.0%	41.261	194%
Textile, Wearing Apparel & Leather	49.457	20.0%	78.191	22.5%	28.734	58%
Wood & Wooden Products	3.093	1.2%	2.302	0.7%	-0.791	-26%
Paper,Paper Products & Printing	3.058	1.2%	7.918	2.3%	4.860	159%
Chemicals, Petroleum, Coal, Rubber& Plastics	99.549	40.2%	105.013	30.2%	5.464	5%
Non-Metallic & Mineral Products	31.195	12.6%	28.145	8.1%	-3.050	-10%
Fabricated Metal, Machinery	11.915	4.8%	8.954	2.6%	-2.961	-25%
Other Manufactured Products (Not elsewhere Specified)	28.166	11.4%	54.522	15.7%	26.356	94%
Agriculture	1.885	0.2%	1.409	0.1%	-0.476	-25%
Horticulture & Cultivation of Fruits & Vegetables	1.885	100.0%	1.409	100.0%	-0.476	-25%
Infrastructure	339.498	42.4%	1,043.518	61.0%	704.020	207%
Housing, Property Development and Shopping & Office	79.458	23.4%	540.643	51.8%	461.185	580%
Telephone & Telecommunication Network	243.6	71.8%	208.99	20.0%	-34.610	-14%
Power Generation	13.23	3.9%	0.001	0.0%	-13.229	-100%
Fuel, Gas, Petrolium,Others (i.e. Cairn Lanka Project)	1.581	0.5%	1.052	0.1%	-0.529	-33%
Port Container terminal	1.629	0.5%	292.832	28.1%	291.203	17876%
Service	211.891	26.5%	317.769	18.6%	105.878	50%
Hotels & Restaurants	141.299	66.7%	252.643	79.5%	111.344	79%
IT・BPO	22.981	10.8%	25.009	7.9%	2.028	9%
Other Services	47.611	22.5%	40.117	12.6%	-7.494	-16%
Grand Total	800.997		1,710.292		909.295	272%

Source: EY based on data provided by BOI

2.5. Investment motives for Sri Lanka

According to the *2017 JETRO Survey on Business Conditions of Japanese Companies in Asia and Oceania*[13], 63.3% of companies operating in Sri Lanka expect to expand their business in the next 1-2 years, which is an +17.1% increase from the previous year. Other countries that recorded a YoY +5% increase in this criteria were Pakistan (YoY +10.3%), Philippines (YoY +9.0%), China (YoY +8.2%), and Malaysia (YoY +7.2%), of which Sri Lanka is surpassing greatly.

Existing companies in Sri Lanka had mentioned that their purpose of investment to Sri Lanka was its geographical advantage, located in the southern end of India operating as a nodal point of maritime logistics, the high learning speed of human resources compared to India and Bangladesh, and expected quality assurance. A North American apparel brand has developed a garment factory in Sri Lanka, exporting its products to the global market. Similarly, product exporting type companies such as Noritake Lanka Porcelain have developed Sri Lanka as a production base, exporting more to distant markets such as Europe and Africa.

2.5.1. Japanese companies

According to JETRO statistics, there are 130 Japanese companies operating in Sri

[13] JETRO, "Survey on Business Conditions of Japanese Companies in Asia and Oceania" (2017) (https://www.jetro.go.jp/world/reports/2017/01/b817c68e8a26685b.html)

Lanka, of which 60 are JETRO members[14]. Japanese manufacturing companies can be grouped into two categories; a (1) "Processing trade type company" that imports raw material, processes in Sri Lanka, and exports to overseas markets, or a (2) "Domestic consumption type company" that imports raw material, processes is in Sri Lanka, and delivers to local apparel/sewing companies in Sri Lanka.

Most Japanese apparel companies operate within an EPZ, but there are also cases where companies operate in inland areas outside of EPZs, prioritizing the recruitment and stability of workforce more than the services obtainable from becoming an EPZ tenant. Another example of a Japanese company operating outside of an EPZ is Colombo Dockyard PLC, where due to its business as a ship manufacturer, its operation site needs to be by a port. Electronics manufacturer and auto-parts manufacturers are mostly located inside an EPZ, receiving services from BOI.

Findings from interviews show that process trading type companies target Europe and Middle East markets rather than nearby markets such as India. The highly skilled labor in Sri Lanka enable production of high-end products fit for European and Middle Eastern markets. In entering Sri Lanka, companies find a strong local partner to overcome delays caused by BOI procedures. Most of all, the scarcity of companies withdrawing from Sri Lanka shows that the business climate of Sri Lanka is, compared to India, relatively investor friendly.

2.5.2. Foreign companies

Based on the understanding that the improvement of the business climate in Sri Lanka will benefit not only Japanese companies but also foreign countries in general, non-Japanese companies and a food processing related association were also interviewed on the main purposes of foreign companies investing in Sri Lanka.

For European countries, Sri Lanka is a bridgehead to a further eastern market, which is the opposite of Japanese investors targeting markets further west from Sri Lanka. Although India is also considered as a choice for investment, Sri Lanka has superiority with human resources, which can be utilized especially for processing of precision machineries for automobiles.

For Variosystems PVT Ltd., their Sri Lankan factory was established as their first overseas factory in 1998, and has been producing wire harnesses for automobiles in a leading edge facility. Along with the manufacturing plant and office space for 1,050 employees, welfare facilities such as an accommodation for 170 people, cafeteria, and a vegetable garden are also provided by the company to overturn the stereotype of poor

[14] JETRO Colombo statistics, July 2016

working conditions at manufacturing factories. These active redistribution of profits to the local environment are made to raise the satisfaction and retention rate of employees.

Similarities seen from various foreign investment companies are that, except for the food processing sector, companies do not aim for the small Sri Lankan domestic market but rather are looking at either of the following;

- Processing export type: Export of high-end products to countries such as Japan, Europe, and Middle Eastern markets based on high quality and cost competitiveness. (e.g. Automobile parts and electronic parts)
- Domestic consumption type: Provide high quality products and services at a relatively low price with high quality human resources, to already existing apparel global companies locating Sri Lanka as a global production base.

To promote Japanese companies to industrial parks, investment promotion should be done whilst taking into account profiles of the above mentioned successful investors.

BOI has the tendency of aiming for large scale investments, but from a Japanese investment point of view, Sri Lanka's population size and market capacity is insufficient compared to India, leading to Sri Lanka being taken off from the list of their potential investment destinations. In fact, many of the existing investment cases are made by owner-led SMEs, where decision making tends to be made faster than large scale companies. The SMEs already operating in Sri Lanka have succeeded in finding powerful Sri Lankan local partners when investing in Sri Lanka, such as a an automobile parts manufacturer that started business in 2000 partnering with a local personnel and has succeeded as an exporting company. Another good example is an apparel parts manufacturer that build a partnership with a local rubber products manufacturer when entering Sri Lanka in 1953 and has continued its relationship since then, successfully expanding its business.

Although SMEs are considered more as a supplier to large scale companies in Japan, their expertise in processing technology and quality management can be utilized well with the combination of skilled Sri Lankan workers, and SME investors may be able to be base in Sri Lanka as an exporting hub and establish a dynamic sales channel.

2.6. Logistics and infrastructure

(1) Ports and airports

The World Bank published a ranking on logistics convenience as a *Logistics*

Performance Index (LPI)[15], evaluating countries by the following 6 indicators;

- The efficiency of customs and border management clearance ("Customs").
- The quality of trade and transport infrastructure ("Infrastructure").
- The ease of arranging competitively priced shipments ("Ease of arranging shipments").
- The competence and quality of logistics services—trucking, forwarding, and customs brokerage ("Quality of logistics services").
- The ability to track and trace consignments ("Tracking and tracing").
- The frequency with which shipments reach consignees within scheduled or expected delivery times ("Timeliness").

In the 2014 ranking, Sri Lanka ranked 89th whilst neighboring India ranked 54th, the highest among south Asian countries, where speed of logistics operation and amount of international cargo shipment received high evaluations.

Table 2-4: LPI score comparison of Sri Lanka and India

		India	Sri Lanka
Rank		54	89
LPI score		3.08	2.70
Score by topic	Customs	2.72	2.56
	Infrastructure	2.88	2.23
	Ease of arranging shipments	3.20	2.56
	Quality of logistics services	3.03	2.91
	Tracking Tracing	3.11	2.76
	Timeliness	3.51	3.12

Source: The World Bank "Logistics Performance Index 2014"[16]

Although LPI evaluation is conducted based on domestic logistics, Sri Lanka, with its geographical superiority, is collecting attention from an international logistics point of view as could be seen from various ports and airports expansions. Major projects include Bandaranaike International Airport (hereinafter referred to as BIA), Colombo Port, Hambantota Port, Trincomalee Port developments. Table 2-5 shows the predicted cargo handling volume of each port.

[15] The World Bank, "Global Ranking" (N.D.) (https://lpi.worldbank.org/)
[16] The World Bank "Logistics Performance Index 2014" (2014) (https://lpi.worldbank.org/international/global/2014)

Table 2-5: Cargo handling volume prediction of the 3 major ports

	2015	2020	2025	2030	2035	2040
Colombo Port	5,101	6,456	8,757	11,920	16,033	21,688
Transshipment	3,883	4,833	6,581	9,018	12,310	16,895
Local Cargo	1,218	1,623	2,176	2,902	3,723	4,793
Hambantota	0	522	743	1,031	1,403	1,901
Transshipment	0	472	643	881	1,203	1,651
Local Cargo	0	50	100	150	200	250
Trincomalee	0	0	0	0	50	100
Transshipment	0	0	0	0	0	0
Local Cargo	0	0	0	0	50	100
Total	5,101	6,978	9,500	12,951	17,485	23,689
Transshipment	3,883	5,305	7,224	9,899	13,512	18,546
Local Cargo	1,218	1,673	2,276	3,052	3,973	5,143

(Unit; thousand TEU)

Source: JICA, "Data Collection Survey on Logistics Sector in Sri Lanka"[17]

The Japanese government has supported the expansion and development of the cargo terminal of BIA, and an ODA loan up to 45.428 billion yen was agreed on in March 2016 for the BIA Development Project Phase 2 project[18]. Similarly for Colombo Port, there have been numerous Japanese support; since 1980, Japan has provided 11 years of ODA loan projects, supporting Colombo Port to become a hub port of South West Asia[19]. Currently, further development of the northern port is being planned.

(2) Expressways

The expressway network in Sri Lanka is in progress of being developed at the moment. Currently, there are already operating expressways, including the E01 Expressway connecting Colombo with the South including Galle and Matara, and the E03 Expressway connecting the airport and Colombo city. Part of the E02 Expressway,

[17] JICA, "Data Collection Survey on Logistics Sector in Sri Lanka", (October 2017) (http://libopac.jica.go.jp/images/report/P1000032832.html)
[18] JICA, "Signing of Japanese ODA Loan Agreement with Sri Lanka: Improving the passenger handling capacity and promoting economic activities through upgrading an international airport" (2016) (https://www.jica.go.jp/english/news/press/2015/160325_01.html)
[19] Ministry of Foreign Affairs Japan, "ODA public monitor report"(2006) (http://www.mofa.go.jp/mofaj/gaiko/oda/shimin/monitor/18m_hokoku/srilanka/opinion/opinion_10.html)

running east of Colombo, is already in operation, between Kottawa and Kerawalapitiya. In addition to these already operating expressways, there are plans for developing the E04 Expressway, connecting Kadawatha and Katugastota, and the E06 Expressway, connecting Kahathuduwa and Pelmadulla. Once the construction of these expressways are completed, the domestic logistics network will highly improve, changing the industrial geography of the country. Especially for the farming areas surrounding Kurunegala, high value added food processing industry such as dairy processing is to be expected, which will affect the examination and development of industrial parks.

Table 2-6: Expressway network of Sri Lanka

No.	Name	Start	End	Distance(km)	Status
E01	Southern Expressway	Koattawa	Matara	131	Open
E02	Outer Circle Expressway	Kottawa	Kerawalapitiya	31	Open (2 Northern sections still under construction, completion June 2019)
E03	Colombo–Katunayake Expressway	New Kelani Bridge	Katunayake	26	Open
E04	Central Expressway	Kadawatha	Katugastota	100	Plan
E06	Ruwanpura Expressway	Kahathuduwa	Pelmadulla	72	Plan

Source: EY based on Infrastructure Development Institute Japan[20]

[20] Infrastructure Development Institute Japan “Sri Lanka’s Highway Project”, (January 2017) (http://www.idi.or.jp/yoyaku/201701_858.pdf)

3. Candidate Sites for Japan Industrial Township

3.1. Current state of EPZs in Sri Lanka

There are EPZs and Industrial Parks that are operated by BOI. As previously stated in Chapter 2.4.1, only BOI approved companies can operate in EPZs, while both BOI approved companies and non-BOI approved companies may operate in IPs. However, there are no differences in the services and incentives that the companies in EPZs and IPs can receive, and both are essentially "industrial parks". (For this reason, existing industrial parks of Sri Lanka will be referred to as "existing EPZs" hereinafter, unless an individual location (e.g. Kandy IP) is being referred to.[21])

There are currently twelve EPZs operated by BOI as shown in Figure 3-1. There are also two industrial parks operated by private companies; apparel manufacturer MAS Holdings and IT company Orion.

The issue that the current EPZ tenant companies are facing is the difficulty for them to expand their business within EPZs. As shown in Table 3-1, the space left within existing EPZs is limited, making it difficult not only for companies already operating in Sri Lanka to expand their business, but also for attracting new companies from outside the country.

Table 3-1: General information on existing EPZs

#	EPZ/IP	Industrial Area (m^2)	Occupancy Rate (%)	No. of Industries in Operation	Employment (As of 1 Oct. 2016)
1	Katunayake EPZ	1,238,076	97	83	36,942
2	Biyagama EPZ	1,036,545	100	57	26,717
3	Koggala EPZ	788,970	99	22	12,701
4	Kandy IP	329,749	85	24	7,811
5	Seethawaka EPZ	741,632	95	26	21,670
6	Mirigama EPZ	693,849	100	9	3,603
	Mirigama Block B[22]	240,899	26	-	-
7	Malwatta EPZ	106,855	100	6	1,774
8	Wathupitiwala EPZ	268,573	100	18	9,500
9	Horana EPZ	733,135	98	18	2,035
	Wagawatta IP[23]	242,841	-	6	427
	Wagawatta IZ[24]	529,217	93	-	-
10	Polgahawela EPZ	160,424	81	5	4,217
11	Mawathagama EPZ	122,472	67	7	5,543
12	Mirijjawila EPZ	89,030	-	-	1,350
	Total	7,233,237	94	281	132,940

Source: EY based on documents provided by BOI and BOI website

[21] JICA, "Data Collection Survey on Investment Climate in Sri Lanka (2017) (http://libopac.jica.go.jp/images/report/P1000032832.html)

[22] Block B is the Phase 2 land of "Mirigama EPZ" and is currently a plantation.

[23] "Horana EPZ", "Wagawatta IP", and "Wagawatta IZ" are all within Perth Estate.

[24] Same as above. IZ is the abbreviation of "Industrial Zone", and the difference of IZs and IPs is the fact that companies in IPs get to use the land AND receive services from BOI, while IZs only provide land.

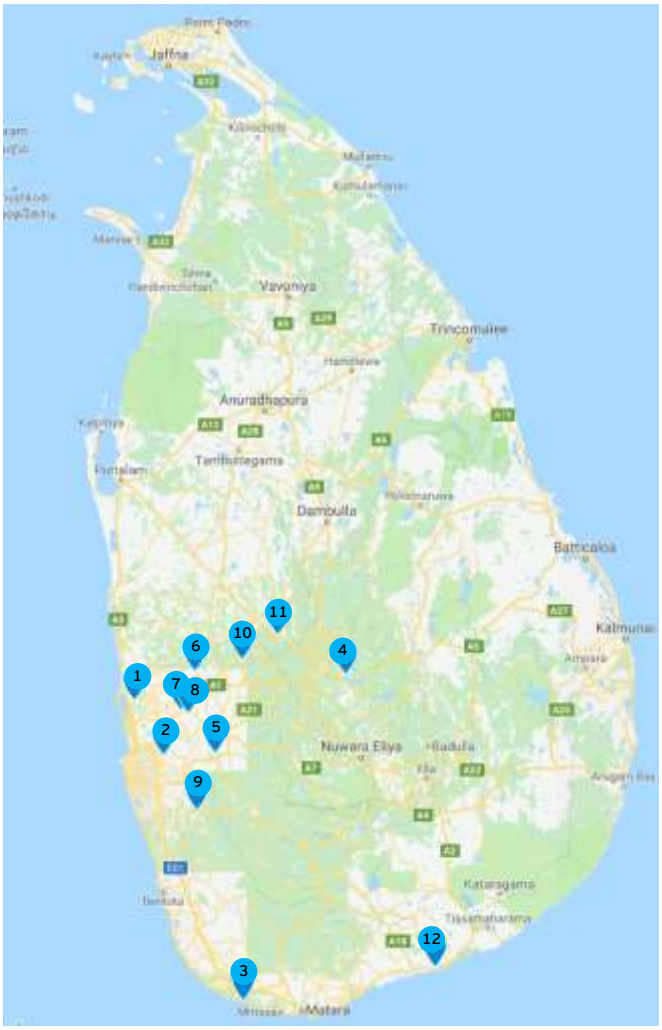


Figure 3-1: Map of existing EPZs

Source: EY based on Google Maps

3.2. Background on selection of candidate sites

3.2.1. Overview of Harvard University Study

BOI has been conducting studies on industrial park development with the help from World Bank, AusAid, and Harvard University in order to strengthen the industrial competitiveness of Sri Lanka. The reports of these studies were submitted to BOI on November 2016 and autumn 2017, but the detailed results of these studies have not been published yet. Out of these studies, the study by Harvard University (hereinafter referred to as Harvard University Study), conducted as a joint research with a team from BOI, analyzed specific locations for industries with high competitiveness by making evaluations from the point of view of Policy, Land, and Industry. The target locations were proposed by the Prime Minister's Office (18 lands), the Land Use Policy Planning

Department (LUPD) (190 lands), BOI Land Bank (20 lands), and by other land owning agencies (LRC, UDA, SLRD), and each location were given points under the criteria for each evaluation point.

The evaluation points were made under the category of "Hard Assets Availability", "Soft Assets Availability", "General Conditions", and "Accessibility". When the study team conducted the first site visit (Dec. 2017), 25 locations were raised as candidate sites for development of industrial parks.

Table 3-2: Candidate sites selected by BOI after the Harvard University Study (25 sites)

Rank	District	Nearest Town	Site	Extent		Ownership
				(Ha)	(Acres)	
1	Colombo	Awissawella	Salawa Estate	609	1,505	LRC/Pussellawa Plantations PLC/Damro Group
2	Kaluthara	Horana, Madurawala	Sorana Estate	271	668	LRC/Kotagala Plantations PLC
3	Kurunegala	Ambanpola	Waragammana	160	395	LRC
4	Kurunegala	Ambanpola	Ihalagama	60	148	LRC
5	Vavuniya	-	Mankulam	20	50	Forest Department
6	Puttalam	Iranawila	Voice of America	164	406	LRC and Mahawewa DSD
7	Kurunegala	-	Mawathagama (adjoining existing EPZ)	50	125	Ministry of Agriculture
8	Colombo	Awissawella	Penrith	647	1597	LRC/Pussellawa Plantations PLC/Damro Group
9	Batticaloa	Valaichchenai	Valaichchenai (former paper mill)	111	273	Ministry of Industries
10	Batticaloa	Eravur	Eravur	151	373	LRC
11	Kurunegala	Kuliyapitiya	-	76	187	LRC/Chilaw Plantations Ltd
12	Vavuniya	-	Sinnadampan	442	1,091	State
13	Puttalam	-	Kallady	101	250	State
14	Kalutara	-	Millewa Estate	215	532	LRC/Kotagala Plantations PLC
15	Vavuniya	-	Manikfarm	417	1,030	State
16	Colombo	-	Elston	804	1,986	LRC/Pussellawa Plantations PLC/Damro Group
17	Kurunegala	Bingiriya	Heemmeliyaagara Watta	197	487	LRC/Chilaw Plantations Ltd
18	Kalutara	-	Millaniya	102	250	Horana Plantations PLC
19	Matara	-	Charlie Mount Estate	99	244	LRC/Namunukula Plantations PLC
20	Kurunegala	Bingiriya	Gorakagasagara Watta	114	282	LRC/NLDB
21	Polonnaruwa	-	Viharagama state Land	100	282	State

Rank	District	Nearest Town	Site	Extent		Ownership
				(Ha)	(Acres)	
22	Vavuniya	-	Puliyankulam	58.82	146	State
23	Kurunegala	Bingiriya	German watta	61	150	LRC/NLDB
24	Kurunegala	Bingiriya	Kowulwewa Watta	53	130	LRC/NLDB
25	Kilinochchi	Paranthan	Kandaweli	60.7	150	LRC

Source: EY using documents provided by BOI

3.2.2. Target sites for this study

The following sites were nominated by the Sri Lankan side as candidate sites for developing a Japan Industrial Township in the Investment Roadmap.

① Seethawaka
② Horana
③ Erravur
④ Bingiriya
⑤ Mirigama

Kandy, although not included in the above list, was also added as a target site for this study. Out of these 6 locations, there are already existing EPZs in ①Seethawaka, ② Horana, ⑤Mirigama, and Kandy, and it was recognized that the reason for these sites to be included in the candidate sites nominated in the Investment Roadmap was that these existing EPZs had potential for growing its area and attracting more companies to operate inside the zone.

However, after having interviews with BOI, it was found out that the candidate sites nominated in the Investment Roadmap are based on the Harvard University Study. In response to this, the sites nominated in the Investment Roadmap were reanalyzed so that they match the sites raised in the Harvard University Study. The results of this process is shown in

Table 3-3: Matching of sites nominated in Investment Roadmap and Harvard University Study

#	Investment Roadmap			Harvard University Study		
	Name	Site	Acres	Name	Rank	Acres
1	Seethawaka		1,500	Salawa Estate	1	1,505
2	Horana	Site I	400	Milleniya	18	250
3		Site II	500	Millewa Estate	14	532
4		Site III	400	Sorana Estate	2	668
5	Eravur		370	Eravur	10	373
6	Bingiriya	Site I	550	Heemmeliyagara Watta	17	487
7		Site II	130	German Watta	23	150
8		Site III	280	Gorakagasagara Watta	20	282
9		Site IV	100	Kowulwewa Watta	24	130
10	Mirigama		200	-	-	-
11	(Kandy)		-	Mawathagama	7	125
12	-		-	Charlie Mount Estate	19	244

Source: EY based on documents provided by BOI

With this, the target sites for this study was focused to (1) sites where EPZ development is anticipated by the Sri Lankan government based on the Harvard University Study results, and (2) sites where actions by Japan are anticipated, based on the Investment Roadmap. Also, “Charlie Mount Estate” was raised by BOI as a site to be considered for the target site of this study, and the final list of target sites of this study was finalized as shown in Table 3-4.

Table 3-4: Target sites of this study

Area	Location	Acres	Land Owner
1. Seethawaka	a. Seethawaka EPZ	431	BOI
	b. Salawa Estate	1505	LRC/Pussellawa Plantations PLC/Damro Group
2. Horana	a. Horana EPZ	395	BOI
	b. Wagawatta IP	76	BOI
	c. Wagawatta IZ	223	BOI
	d. Millaniya	250	Horana Plantations PLC
	e. Millewa Estate	532	LRC/Kotagala Plantations PLC
	f. Sorana Estate	668	LRC/Kotagala Plantations PLC
3. Eravur	Eravur	373	LRC
4. Bingiriya	a. Heemmeliyagara Watta	487	LRC/Chilaw Plantations Ltd
	b. German Watta	150	LRC/NLDB
	c. Gorakagasagara Watta	282	LRC/NLDB
	d. Kowulwewa Watta	130	LRC/NLDB
5. Mirigama	a. Mirigama EPZ	260	BOI
	b. Mirigama EPZ Block B	108	BOI
	c. MAS Fabric Park	165	MAS
6. Kandy	a. Kandy IP	205	BOI
	b. Mawathagama	125	Ministry of Agriculture
7. Matara	Charlie Mount Estate	244	LRC/Namunukula Plantations PLC

(*) Locations highlighted in purple are existing EPZs.
(*) Locations highlighted in green are candidate sites for new development.
Source: EY based on documents provided by BOI

3.3. Matrix table of candidate sites

Information was collected regarding these target sites to compare them based on aspects that are usually considered when planning developments of industrial parks.

According to "Guidance of Economic Zone & Industrial Park" (2016)[25], a guidebook created for government relatives interested in industrial park development, the check points and evaluation points for locating a site for industrial park development are as follows;

[25] Created by KMM, a member of the study team

Table 3-5: Check points and main evaluation points for locating sites suitable for industrial park development (extracted)

Item	Check Points	Evaluation Points
1. Access to Center of City	Transportation availability	To be marked by the grade of convenience
	Distance from City Center	Nearest is best for employee
	Time to location	Shortest is the best for employee (within one hour)
	Other points to be evaluated if any	-
2. Access to Sea Port/dry port Port/Airport	Distance and time to sea/dry port	Nearest/shortest time is best for export/import
	Distance and time to airport	Nearest/shortest time is best for export/import
3. Access to the Main Road	Distance to the main road	Nearest is best (need to access road as offsite)
	Main road condition (congestion etc.)	No congestion is preferable for logistics
4. Natural Disaster	Risk for flood or not	Less risk is best
5. Land Condition	Land Clearance	Easiest & prompt land clearance is best
	Land & Soil Condition	Flatness/soil condition/height diff./stratum etc.
	Land cost	Less land cost including compensation is best
6. Utilities Availability	Main Electricity Line	Length of connection line to IP (offsite)
	Existing Substation near IP	If any substation near to IP is best (offsite)
	Fluctuation of electricity voltage	Within +/- 5% is best
	Frequency of black out	No black-out is best.
	Water supply & Quality	Availability & connect, supply point & quality
	Access to Drainage	If any drainage pit outside of IP & connection
	Access to waste water discharging	If any waste water pipeline or pit outside of IP
	Access to the telecommunication	If tele-system can be connected easier
	Availability of optical fiber line	If optical fiber can be connected to offsite line
7. Utility Cost	Electricity charge or tariff	Cheapest is best.
	Water or waste water charge	Cheapest is best.
8. Labor Force	Availability of worker/engineer/staff	un-skilled and skilled worker/staff/engineer
	Number of college/university	For availability of engineer/staff
	Wage level	Compared with other city
	Quality of employee	Grade
9. Land Lease Cost	Land Lease Cost	-
	Land Leasing Period	If land leasing period is longer(max 50 years)
10. Incentive to the location	Tax or others.	By local province or government incentive
11. Construction cost	Construction cost	Less cost by rough estimation
12. Environment	Solid waste/Hazardous	If any solution of industrial waste or hazardous
	Specific restriction of	If any restriction around IP district

Item	Check Points	Evaluation Points
	environment	
13. Living circumstance	hospital/clinic	If available near IP for emergency
	restaurants surrounding IP	If any restaurant for expatiate or client
	access to the house or apartment	If easier access to the house or apartment
14. Security	political status/security	If IP location is safety place or not
15. Customs	Customs service	If customs office can be inside IP or not
16. Logistic Cost	Logistic cost from IP to port	Cheapest is best.
17. Service of Industrial Park	OSS service system	If industrial park provide good service
18. Access to the client	Distance from client	If convenient to access to the client

Source: Kurita Marketing & Management "Guidance of Economic Zone & Industrial Park" (2016)

For this reason, information was collected for the following items for the following reasons.

A. Location: Information regarding the physical location of the target site, e.g. administrative division, distance to closest station, coordinates, etc.
B. Characteristics of neighborhood: Data for coming up with an estimate of employment, e.g. population of nearest division, distance to main ports, distance to expressways, etc.
C. Land information: Current land owner, land area, industrial area, slant of land (if any)
D. Utility access: Information regarding water supply, electricity supply, etc.
E. Information regarding existing EPZs: Developer, tenants, vacant land area, etc.
F. Utility availability: On top of D. Utility access, information on waste water facilities, power receiving facilities, telecommunication, waste-management, etc.
G. Cost for levelling land and entering EPZ: Information on the cost necessary for becoming a tenant of an EPZ.
H. Cost for each services provided in the zone: Information on the cost necessary for operating inside zones.

Category E and beyond are only for existing EPZs, and these cells are left intentionally blank for candidate sites of new development. As already stated, the occupation rate for existing EPZs are high, and it is understood that the possibility for expansion of the zones are limited, but these sites are included in the matrix table for understanding the surrounding environment of candidate sites and for comparison.

Table 3-6: Items used for candidate site matrix

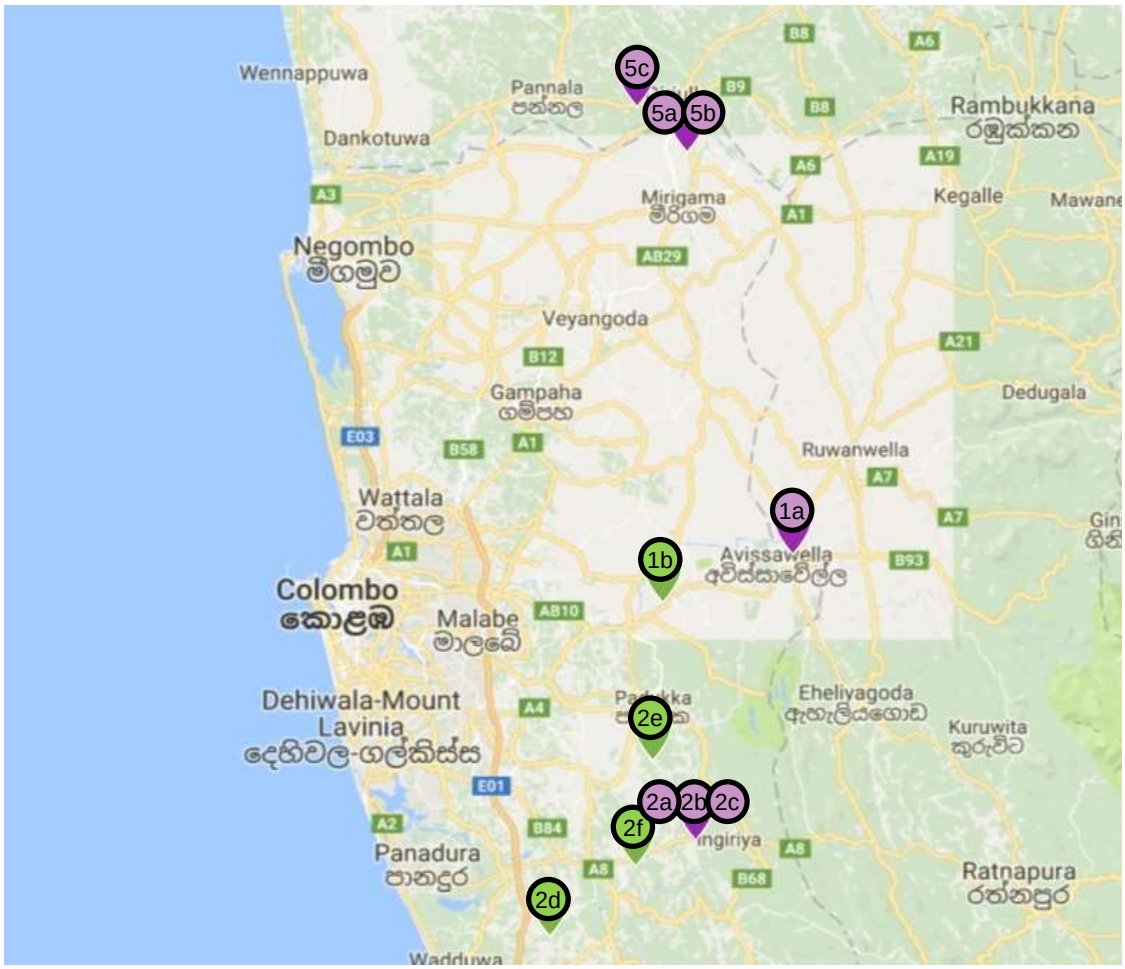
Category	Item
A. Location	Province
	District
	Division
	GN Division
	Road
	Coordinates
B. Characteristics of Location	Population of district
	GRP of Province (LKR Billion, 2015)
	Distance and travel time to Colombo (km, min)
	Distance and travel time to nearest port (km, min)
	Distance and travel time to CMB airport (km, min)
	Distance and travel time to nearest expressway (km, min)
	Distance and travel time to nearest highway (km, min)
C. Land Information	Land owner
	Site area (m^2, acres)
	Industry land area (m^2, acres)
	Levelling of ground (Current status, cost for levelling)
D. Surrounding environment	Nearest water source
	Nearest electricity network
	Other
E. Details of Existing/Operating EPZ	Developer
	Operator
	Start of operation (year)
	Number of entities operating
	Number of employees
	Number of entities that left in past
	Vacancy (m^2)
	Emergency power supply
	Service facilities within EPZ
F. Utility Infrastructure within Zone	Road
	Water source
	Maximum Water Supply Capacity and Consumption (m^3/day)
	Maximum Wastewater Treatment Capacity (m^3/day)

	Capacity of power receiving facility
	Total blackout in past year (min)
	Telecommunication (availability of optical fibre within Zone)
	Waste handling facility (capacity)
	Other infrastructure
G. Cost for Entering EPZ	Ground rent (USD/Acre)
	Lease premium (per year) (USD/Acre)
	Construction cost (USD/m^2)
H. Service Cost	Industrial water cost (USD/m^3)
	Sewage treatment cost (USD/m^3)
	Electricity cost
	Solid waste cost
	Fuel cost (USD/L)
	Transport cost (USD/km)
	Customs Assistance

Source: EY

3.3.1. Map of target sites

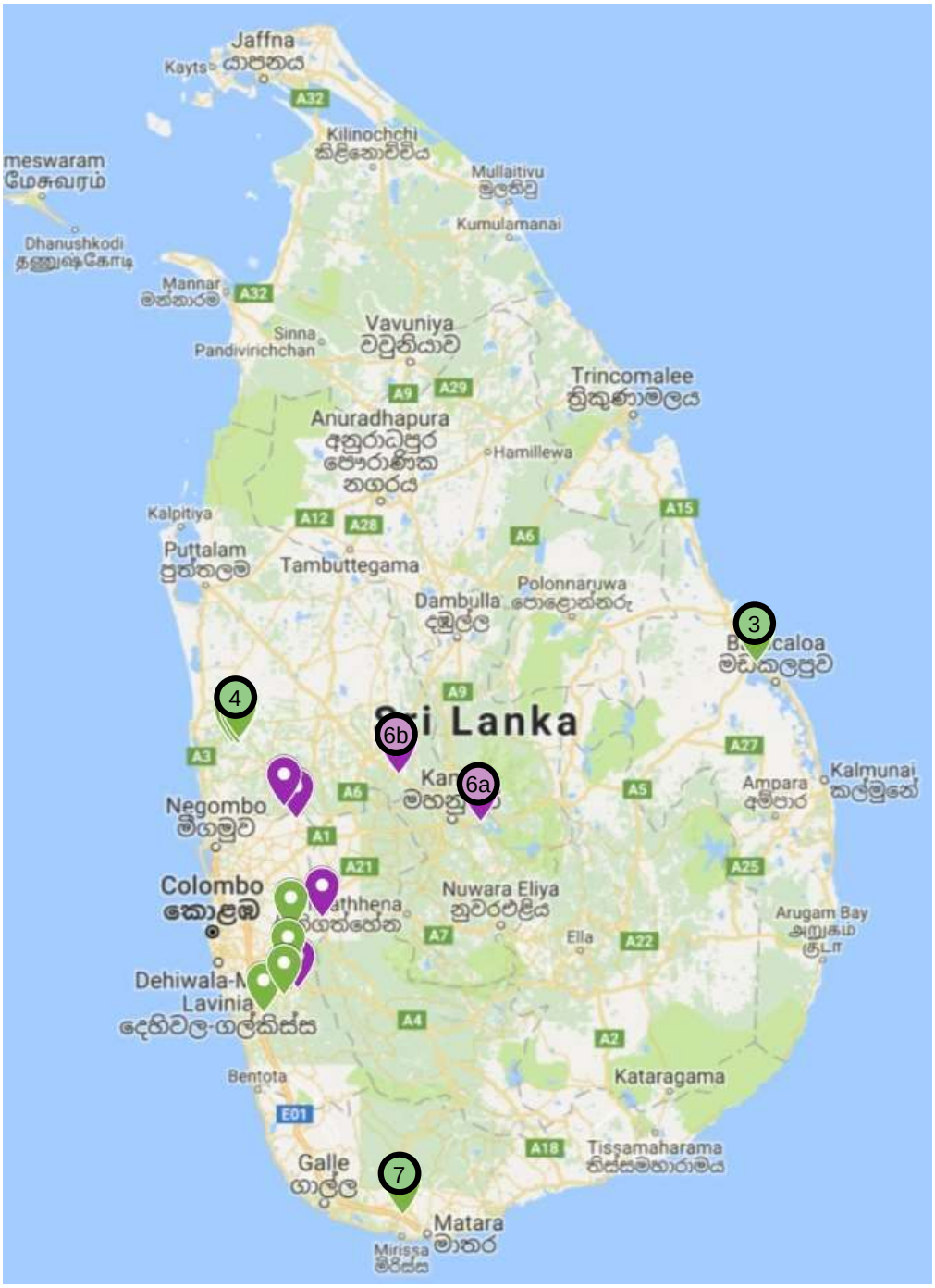
Some target sites are located near Colombo, while some are located inland or on the different side of the country (eastern side and southern side), and some of the sites do not have the infrastructure for connecting with major cities (Colombo). Maps of the target sites are as follows;



#	Name
1a	Seethawaka EPZ
1b	Salawa
2a, 2b, 2c	Horana EPZ, Wagawatta IZ, Wagawatta IP
2d	Millaniya
2e	Millewa Estate
2f	Sorana Estate
5a, 5b	Mirigama EPZ (incl. Mirigama Block B)
5c	MAS Fabvric Park

Figure 3-2: Map of target sites (near Colombo)

Source: EY with documents provided by BOI and Google Maps



#	Name
3	Eravur
4	Bingiriya
6a	Kandy IP
6b	Mawathagama
7	Charlie Mount Estate

Figure 3-3: Map of target sites (outside of Colombo area)

Source: EY with documents provided by BOI and Google Maps

3.3.2. Site visits to target sites

In order to create a matrix table on the target sites, several target sites were visited to collect information on the validity of developing an industrial park. Due to the project schedule, the project team was unable to visit all 12 target sites, and the site visits were focused to the sites located near Colombo.

Table 3-7: Sites visited for this study

Existing EPZs	Candidate Sites
1. Seethawaka EPZ 2. Horana（Horana EPZ, Wagawatta IP, Wagawatta IZ） 3. Kandy IP	4. Millaniya 5. Bingiriya（Heemmeliyagara Watta、German Watta, Gorakagasagara Watta, Kowulwewa Watta）

1. Seethawaka EPZ
   - Created in 1989 with the support from OECF (Overseas Economic Cooperation Fund) of Japan, and was developed with the focus on apparel industry.
   - Two large apparel companies, MAS and Brandix, operate inside the EPZ, with many other companies producing parts for them.
   - YKK operates in the EPZ for zipper manufacturing.
   - Water supply is taken from a close by river, and waste water facility and power receiving facility is placed in the center of the zone.
   - Waste management is not enough, and there is a mountain of waste piled up near the entrance of the zone.

2. Horana (Horana EPZ, Wagawatta IP, Wagawatta IZ)
   - Horana EPZ is the main zone with the two Wagawatta zones located nearby.
   - Unilever operates inside the zone, as well as wood processing, paint manufacturing, and chemical manufacturing companies.
   - There is a female underwear garment factory a few kilometers west from the zone, and companies that produce parts for this factory operate in the zone.
   - INOAC, a Japanese urethane production company, also operates inside the zone.

3. Kandy IP
   - The zone is located east of central Kandy on a slanted land, where 46 companies operate.
   - Industrial zones developed by IDB (Industrial Development Board) are located

nearby, but there is no sharing of utilities being shared between the two zones.

- Companies are dispersed on the slanted land, including food manufacturing companies.
- Waste sorting has recently started, but general waste is being burned inside the zone on an open land.

4. Millaniya
   - 600 acre land that is currently used for rubber plantation.
   - Strong winds attacked the site a few days before the visit by the study team, causing trees to fall down and electrical cables to be disconnected.
   - The land is somewhat undulated (2 – 3m), but is mainly flat.
   - The land is surrounded by paddy fields, and some residents live inside the planned area (approx. 50 total).
   - Electrical network is present northward of the planned area and will not be a problem to extend. However, water is planned to be first obtained from a nearby river, then sent to a nearby city, and then finally taken into the zone, which will probably increase the discharge length.
   - A midscale mattress factory is operating at the middle of the pathway that is planned to become the connection road of the Phase 1 land to the expressway. The road connecting to this factory was unpaved.
   - The Phase 1 land is located away from the Phase 2 land and Phase 3 land, making it difficult for developing an integrally formed industrial park utilizing all of the land.

5. Bingiriya
   - Currently a coconut plantation located 2 hours north from Colombo on general road.
   - Most of the land is flat with a gentle undulation.
   - Transmission towers are present but power cables are not yet extended.
   - Surrounding lands are used as coconut plantation or paddy fields. Several residents are found inside the planned zone area, along with facilities such as schools and temples.
   - The three planned zone areas are adjacent, and the access to each zone will improve after redrawing roads.
   - Water is planned to be taken from northern villages, but no concrete plans for construction is made yet.

With these site visits, the following points were recognized.

(1) Access (distance and road infrastructure)

All target sites took more than 1 hour to get from Colombo. The only sites that had an expressway junction nearby were Horana and Millaniya, and all other locations need to be accessed via narrow general roads. This means that when an industrial park is actually developed, a lot of time might be necessary for importing raw materials and exporting products. Unless the company is focused more at the domestic market, where most of the products and raw materials are dealt within the market, it is not an ideal site for a Japan Industrial Township.

Also, all locations excluding Horana and Millaniya do not have concrete plans for connecting with expressways, and it is difficult for constructing industrial parks in such situations.

(2) Resettlement of residents

Some of the lands proposed by BOI are currently used as coconut plantation and livestock breeding. Several residents were found inside the planned zones of Millaniya and Bingiriya, as well as public facilities like schools, and the development of plans on relocation of them will be necessary first before going into industrial park development.

Figure 3-4: Current state of the planned zone area in Bingiriya

Source: Photo by EY (Taken in Dec. 2017)

3.3.3. Candidate sites matrix table

The completed matrix table is as follows.

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Location	① Seethawaka		② Horana						③ Eravur
Name of site	a. Seethawaka EPZ	b. Salawa Estate	a. Horana EPZ	b. Wagawatta IZ	c. Wagawattha IP	d. Millaniya	e. Millewa Estate	f. Sorana Estate	a. Eravur
A. Location									
1 **Province**	Western Province	Western Province	Western Province	Western Province	Western Province	Western Province	Western Province	Western Province	Eastern Province
2 **District**	Colombo District	Colombo District	Kalutara District	Kalutara District	Kalutara District	Kalutara District	Kalutara District	Kalutara District	Batticaloa District
3 **Divisional Secretary / D.S. Division**	Seethawaka DSD	Seethawaka DSD	Ingiriya DSD	Ingiriya DSD	Ingiriya DSD	Millaniya DSD	Horana DSD	Madurawala DSD	Chenkalady
4 **Grama Niladhari / GN Division**	Avissawella	Kahatapitiya, Akarawita	Poruwadanda	Poruwadanda	Poruwadanda	Borallessa, Deldorawaththa	(Not identified yet)	Kandana South	Thalavi
5 **Road**	Free Trade Zone Rd	A4 road	Ratnapura - Horana - Panadura Hwy	Wagawatta Road	Wagawatta Road	Manana Road, Manana - Galpatha Road, Kaluthara - Horana Road	Millewa Watta Road	Panadura-Ratnapura road (A8)	Eravur-Punnaikudah
6 **Coordinates**	6.96544, 80.21121	6.928002, 80.1108	6.739608, 80.135474	6.717922, 80.119814	6.714966, 80.117344	6.671590, 80.020770	6.801760, 80.103850	6.717705, 80.09008	7.81752, 81.61167
B. Characteristics of Location									
1 **Population of District**	2,357,000 (2014)		1,241,000 (2014)						525,142 (from 2012 census)
2 **GRP of Province (Rs. Billion, 2015)**	4,611		4,611						671
3 **Distance and travel time to Colombo (km, min)**	47 km (road), 57 km (highway) 1h 46min	35km 1h 30min	50 km 1h 30min			50 km 1h 30min	40 km 1h 30min	48km 1h 30min	318 km 6h 37min
4 **Distance and travel time to nearest port (km, min)**	LKCMB (Colombo), 53 km 2h 10min	LKCMB (Colombo), 37.3 km 1h 33 min	LKCMB (Colombo), 61 km 1h 54min			LKCMB (Colombo), 61 km 1h 54min	LKCMB (Colombo), 44 km 1h 30min	LKCMB (Colombo), 52 km 1h 30min	LKTRR (Trincomalee), 130 km 2h 42min
5 **Distance and travel time to CMB airport (km, min)**	57 km 1h 33min	53 km 1h 30min	82 km 1h 40min			75 km 1h 30min	67 km 1h 40min	77 km 1h 40min	280 km 6h
6 **Distance and travel time to nearest expressway (km, min)**	E02 Outer Circular Expressway / Arthur C. Clarke Expressway, 35km 1h 10min	E02 Kothalawala Interchange, 21km 0h 45min	E01 Gelanigama Interchange, 18 km 0h 30min			E02 Gelanigama Interchange,10km 0h 20min	Southern Express way, 20 km (Kottawa), 21 km (Gelanigama) , and 23 km (Kahathuduwa) 0h 40min	E01 Gelanigama Interchange, 10 km 0h 30min	E04 (under construction), 173 km 4h 00min
7 **Distance and travel time to nearest highway (km, min)**	A4 road, 1.6 km 5min	A4 road, 700 m 1min	Adjacent to A8 road			B224 road, 5 km 15min	Colombo-Awissawella Road (A4), 7km 15min	A8 road, 2 km 5min	A15 road, 1.5 km 5min
C. Land Information									
1 **Land owner**	BOI	Damro Group of Companies	BOI	BOI	BOI	Land Reform Commission / Kotagala Plantations PLC	Land Reform Comission / Kotagala Plantations PLC	Land Reform Comission / Kotagala Plantations PLC	Land Reform Commission
2 **Site area (m^2, acres)**	1,744,000 m^2 431 acres	6,090,524 m^2 1,505 acres	1,591,386 m^2 393.24 acres	902,449 m^2 223 acres	308,573 m^2 76.25 acres	Phase 1: 987,434 m2 244 acres Phase 2: 627,263 m^2 155 acres Phase 3: 809,372 m^2 200 acres	2,152,930 m^2 532 acres	2,703,302 m^2 668 acres	1,514,185 m^2 373 acres
3 **Industry land area (m^2, acres)**	728,434 m^2 180 acres	(undecided)	733,135 m^2 181.2 acres	529,217 m^2 130.8 acres	242,841 m^2 62.02 acres	Approximately 60% - 65% of the site area is estimated to be industry land	(undecided)	(undecided)	908,500 m^2 225 acres
4 **Leveling of ground** — **4.1 Current Status**	Most of the land is used for industrial purpose, while some part of the southern area is used for farming.	Flat and less undulating.	The land is fully surrounded by fences. Some part of the land near the substation is left unused.	The land is slightly inclined.	Flat land. Has been fully developed by investors.	Phase 1 - Flat Phase 2 - Slightly inclined Phase 3 - Already allocated for other purposes	Mostly flat land.	Slightly inclined land.	Mainly flat, palmyrah trees.
4.2 Cost for leveling	No levelling cost (All land is already leveled)	(undecided)	No levelling cost (All land is already leveled)	Rs.2 Mn. per Acre (approx..)	No levelling cost (All land is already leveled)	(undetermined)	Acquired by Urban Development Authority.	(undetermined)	Rs.1.0 Mn. per Acre (approx..)
D. Surrounding Environment									
1 **Nearest water source**	Kelani River / Seethawaka River	adjacent to Kelani River, expected to use for water supply within EPZ	Kalu Ganga	Kalu Ganga	Kalu Ganga	Kalu Ganga – 11 km away from site to consider as a water source	Kalu Ganga - 13 km away from site, considered as a discharge point for waste water after treatments.	Kalu Ganga (2km away). considered as a discharge point for waste water after treatments.	water supply available from Batticalloa NWS&DB scheme (40,000 m3/day water supply to Batticaloa, Only 15,000 m3/day consumed currently)
2 **Nearest electricity network**	2 km	Kosgama grid sub, 1 km (Network should be augmented based on the magnitude of the development)	Horana grid sub.	Ingiriya grid sub	Ingiriya grid sub	Horana grid sub, 12 km (Network should be augmented based on the magnitude of the development)	Horana grid sub, 18 km (Network should be augmented based on the magnitude of the development)	Horana grid sub, 6 km (Network should be augmented based on the magnitude of the development)	Valaichchenai power station
3 **Other**	-	-	Power fluctuations & power cut. No fibre optic facility has been provided yet for telecommunication.	Power fluctuations & power cut. Objection from residents for additional power line (10 MW) Wagawatta Junction to WIZ.	Power fluctuations & power cut.	A part of the access road was inundated during recent floods.	-	-	-

(2/4)

Location	① Seethawaka		② Horana						③ Eravur
Name of site	a. Seethawaka EPZ	b. Salawa Estate	a. Horana EPZ	b. Wagawatta IZ	c. Wagawattha IP	d. Millaniya	e. Millewa Estate	f. Sorana Estate	a. Eravur
E. Details of Existing/Operating EPZ									
1 Developer	BOI		BOI	BOI	BOI				
2 Operator	BOI		BOI	BOI	BOI				
3 Start of operation (year)	1999		1999	2018	2004				
4 Entities — **4.1 Number of entities operating**	26 entities, mostly clothing related, including YKK Lanka (Pvt) Ltd.		18 entities. Industries include food processing, paper processing, cosmetics production, etc; including INOAC POLYMER LANKA Pvt Ltd	3 entities (planned); M/s Qiao Zhen Lanka Intl. (Pvt) Ltd., M/s Rigid Tyre Corporation (Pvt) Ltd., M/s Regnise Appliances (Pvt) Ltd. (as of Dec. 2017)	6 entities; M/s. Piramal Glass Ceylon PLC Ltd., M/s. Eco Papers (Pvt) Ltd., Road Development Authority, PRDA, M/s' Global Macro Ltd., M/s. Paranthan Chemical Company (Pvt) Ltd. (as of Dec. 2017)				
4.2 Number of employees	22,037 (as of Jan. 2017)		2,852 (as of Sept. 2017)	0	657 (as of Sept. 2017)				
4.3 Number of entities that left in past	2		1 (Phoenix Industries Ltd is temporarily reenting out to Unilever(Pvt)Ltd.)	0	1				
5 Vacancy (m^2)	34,229 m^2		11,329 m^2	Zero	Zero				
6 Emergency power supply	some companies prepare by themselves (not many)		Generators (to be obtained privately)	(undetermined)	Generators (to be obtained privately)				
7 Service facilities within EPZ	Commercial Banks, ATM Facilities, security service, fire service, ambulance service		Security, ATM Facilities, Waste Handling & Disposal Facility, Postal Services	(undetermined)	-				
F. Utility Infrastructure within Zone									
1 Road	Asphalt concreted internal road network		Asphalt concreted internal road network	Asphalt concreted internal road network	Asphalt concreted internal road network				3.6 km long paved access road
2 Water — **2.1 Water Source**	Kelani River		Potable water up to WHO standards. Provided by the BOI. Water is obtained from the river - Kalu Ganga	Provided by the BOI. Water is obtained from the river - Kalu ganga	Water Board. Water is obtained from the river - kalu Ganga				3000m^3/d of portable water WHO standard
2.2 Maximum Water Supply Capacity and Consumption (m^3/day)	Supply: 10,000 m^3/day Consumption: 9,900 m^3/day		Supply: 2,000 m^3/day Demand: 1,450 m^3/day	Supply: 4,000 m^3/day	-				
2.3 Maximum Wastewater Treatment Capacity (m^3/day)	9,950 m^3/day (Central Effluent Treatment Plant Facility)		1,000 m^3/day	(Not yet determined)	-				Sea outfall to be constructed
3 Electricity — **3.1 Capacity of power receiving facility**	63 MVA (Dedicated Grid Sub-Station)		30 MVA (Dedicated Grid Sub-Station)	3 MVA (at present, 45MVA required)	-				25 MVA
3.2 Total blackout in past year (min)	0		0	0	0				
4 Telecommunication (availability of optical fiber within Zone)	Available		Available	Not yet determined	Available				Available
5 Waste handling facility (capacity)	Solid waste disposal facility, 20 mt per day		Through Horana P/S, Registered recyclers & Insee eco cycle Pvt Ltd ,No dump yard inside the Zone	Land has been allocated with an extent of 8.27 Acres for a dump yard	Through Horana P/S, Insee eco cycle Pvt Ltd, Registered Recyclers				
6 Other infrastructure	-		-	-	-				
G. Cost for Entering EPZ									
1 Ground rent (USD/Acre)	4,235		4,235	500	4,235				
2 Lease premium (per year) (USD/Acre)	60,000		30,000	40,000	10,000				
3 Construction cost (USD/m^2)	Factory: about 260.06 Warehouse: about 234.06		Factory: about 260.06 Warehouse: about 234.06	Factory: about 260.06 Warehouse: about 234.06	Factory: about 260.06 Warehouse: about 234.06				
H. Service Cost									
1 Industrial water cost (USD/m^3)	0.49		0.49						0.49
2 Sewage treatment cost (USD/m^3)	0.11		0.11						0.08
3 Electricity cost	Electricity is obtained privately from the Electricity Board. Therefore, cost would depend on consumption.		6 AM - 6 PM: 11.0 Rs/unit 6 PM - 9 PM: 20.5 Rs/unit 9 PM - 6 AM: 6.85 Rs/unit						0.07 kwh
4 Solid waste cost	Factories dispose of their own solid waste. Therefore there is no charge. For waste water disposal cost is Rs.1 per m^3.		(Not determined yet)						
5 Fuel cost (USD/L)	Gasoline: 0.98 (Rs.150.10) Diesel: 0.72 (Rs.111.10)		Gasoline: 0.98 (Rs.150.00) Diesel: 0.72 (Rs.111.00)						0.85
6 Transport cost (USD/km)	-		20' Container : 1.30 40' Container : 1.63						0.60
7 Customs Assistance	-		Documentation handled by BOI Head Office. Cargo verification handled by HEPZ.						

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Location	④ Bingiriya				⑤ Mirigama			⑥ Kandy		Matara
Name of site	a. German Watta (Phase 1)	b. Gorakagasagara Watta (Phase 2)	c. Heemeliyaagara Watta (Phase 3)	d. Kowulwewa Watta (Phase 3)	a. Mirigama EPZ	b. Mirigama Block B	c. MAS Fabric Park	a. Kandy IP(IZ)	b. Mawathagama EPZ	a. Charlie Mount Estate
A. Location										
1 **Province**	North Western Province	North Western Province	North Western Province	North Western Province	Western Province		Sabaragamuwa Province	Central Province	North Western Province	Southern Province
2 **District**	Kurunegala District	Kurunegala District	Kurunegala District	Kurunegala District	Gampaha District		Kegalle District	Kandy District	Kurunegala	Matara District
3 **Divisional Secretary / D.S. Division**	Ududaddhawa DSD	Ududaddhawa DSD	Bingiriya DSD	Bingiriya DSD, Ududaddhawa DSD	Mirigama DSD		Warakapola Divisional DSD	Pallekele DSD	Mawathagama DSD	Welipitiya DSD
4 **Grama Niladhari / GN Division**	Watu Watta	Habarawewa	Pahala Kadigamuwa	Koulwewa	Kandangamuwa		Thulhiriya	Balagolla	Mawathagamuwa	Walipitiya, Malingoda
5 **Road**	Kurunegala-Madampe Road (B247 Road), 6km from site				AB29 road		Kurunegala Road, Thulhiriya	A26	Mawathagama BOI Road	Weligama - Telijawila road (B466) & Usgoda- Horaketiya road
6 **Coordinates**	7.5264646, 79.92274	7.52557, 79.94085	7.54247, 79.95063	7.54084, 79.94332	7.284326, 80.131361		7.274035, 80.220999	7.275220, 80.72426	7.42913, 80.45837	6.0097110, 80.4712770
B. Characteristics of Location										
1 **Population of District**	1,610,299 (from 2012 census)				2,294,641 (from 2012 census)		837,179 (from 2012 census)	1,369,899 (from 2012 census)	1,610,299 (from 2012 census)	831,000 (2014)
2 **GRP of Province (Rs. Billion, 2015)**	1,224				4,611		781	1,152	1,224	492
3 **Distance and travel time to Colombo (km, min)**	96 km 2h 10min				65 km 1h 35min		72 km 1h 31min	133 km 4h 2min	120 km 3h 30min	144 km 2h 30min
4 **Distance and travel time to nearest port (km, min)**	LKCMB (Colombo), 94 km 2h 37min				LKCMB (Colombo), 64 km 1h 40min		LKCMB (Colombo), 74 km 1h 58min	LKCMB (Colombo), 132 km 4h 29min	LKCMB (Colombo), 120 km 3h 30min	LKCMB (Colombo), 149 km 2h 30min
5 **Distance and travel time to CMB airport (km, min)**	62 km 1h 40min				37 km 1h		40 km 1h	126 km 3h 30min	85 km 2h 30min	172 km 2h 30min
6 **Distance and travel time to nearest expressway (km, min)**	E02, 106 km 2h 30min				E02, 42 km 1h 10m		E02, 49 km 1h 15m	E04 (under construction), 18 km 0h 40min	Katunayake Interchange E03, 90km 2h 30min	Kokmaduwa Interchange, 6km 0h 10min
7 **Distance and travel time to nearest highway (km, min)**	B247, 4 km 5min				Adjacent to AB29 road		Adjacent to B308 road	Adjacent to A26 road	Adjacent to Kurunegala Katugastota main road	Adjacent to B466 road
C. Land Information										
1 **Land owner**	Land Reform Comission / National Livestock Development Board	Land Reform Comission / National Livestock Development Board	Land Reform Comission / Chilaw Plantations Ltd	Land Reform Comission / National Livestock Development Board	BOI	BOI	MAS	BOI	Western Province Agriculture Ministry	Land Reform Comission / Namunukula Plantations PLC
2 **Site area (m^2, acres)**	665,755 m^2 164 acres	1,141,215 m^2 282 acres	1,970,821 m^2 487 acres	526,092 m^2 130 acres	1,054,243 m^2 260.509 acres	437,060 m^2 108.00 acres	667,731 m^2 165 acres	829,606 m^2 205 acres	458,720 m^2 113 acres	2,428,116 m^2 600 acres
3 **Industry land area (m^2, acres)**	400,000 m^2 98 acres	Approximately 60% - 65% of the site area is estimated to be industry land	(undecided)	Approximately 60% - 65% of the site area is estimated to be industry land	693,849 m^2 173.563 acres	250,905 m^2 62 acres	(Whole land is owned by MAS and industry area depends on MAS's decision)	329,749 m^2 85 acres	320,000 m^2 80 acres	(undecided)
4 **Leveling of ground** — **4.1 Current Status**	Slightly undulating coconut plantation.	Flat land	Flat land	Flat land	Block B and Block C, designated for UCLAN, is currently used for coconut and fruit plantation. Mostly flat land.	50% of the proposed industrial area is almost flat land.	The center of the land is used for a paddy field. Most of the industrial space is set above the paddy field. Part of the area below the paddy field is kept as a green field.	All land area other than those designated for enterprises are surrounded by trees. Some of the vacant land is left unleveled.	Slightly undulating	Slightly inclined. Slightly hilly.
4.2 Cost for leveling	Rs.1.0 Mn. per Acre (approx..)	Approximately Rs.0.5 Mn. per acre	Approximately Rs.0.5 Mn. per acre	Approximately Rs.0.5 Mn. per acre	Rs.2.0 Mn. per Acre (approx..)	Rs.2.2 Mn. per Acre (approx..)	(unavailable)	Rs.1.5 Mn. per Acre (approx..)	Rs. 1.0 Mn. per acre	(undetermined)
D. Surrounding Environment										
1 **Nearest water source**	No flowing water body in close proximity to obtain required water. There is a proposal to develop Deduru Oya water supply scheme from which water requirement can be fulfilled in future.				Maha Oya	Maha Oya	Mahga Oya	Adjacent to Mahaweli River	Kospothu River	No
2 **Nearest electricity network**	Electricity is to be given from the existing grid.				Thulhiriya grid, 10 km	Thulhiriya grid, 10 km	Mallawapitiya grid, 10 km	Grid sub is located within the zone	Mallawapitiya grid, 9 km	Available to site boundary
3 **Other**	-				-	-	Litigation regarding labor.	Few power fluctuations	Few labor issues faced by garment factories, but has been managed.	No telecom network; Wastewater Disposal Facility exists 10 km to the Sea

(4/4)

Location		④ Bingiriya				⑤ Mirigama			⑥ Kandy		Matara
Name of site		a. German Watta (Phase 1)	b. Gorakagasagara Watta (Phase 2)	c. Heemeliyaagara Watta (Phase 3)	d. Kowulwewa Watta (Phase 3)	a. Mirigama EPZ	b. Mirigama Block B	c. MAS Fabric Park	a. Kandy IP(IZ)	b. Mawathagama EPZ	a. Charlie Mount Estate
E. Details of Existing/Operating EPZ											
1 Developer						BOI	BOI	MAS	Ministry of Industry and Commerce	BOI	
2 Operator						BOI	BOI	MAS Holdings	BOI	BOI	
3 Start of operation (year)						1998		2006	1994	2000	
4 Entities	4.1 Number of entities operating					9 entities, including Akio Kobayashi International (Pvt) Ltd., etc.		8 entities; MAS Active Linea AITC, MAS Intimates : Thurulie, Textprint, Trischel, Methliya, Logiwiz, BAM Knitting Pvt. Ltd & MAS Fabrics Matrix	24 entities	6 entities; 5 garment factories that are export oriented, 1 packaging factory - for local market distribution	
	4.2 Number of employees					3,603		1,759	7,811	Approximately 6,200	
	4.3 Number of entities that left in past					3		0	1	0	
5 Vacancy (m^2)						Zero		The level of occupation is at 55%. There is a variety of land and buildings available for further investment.	48,562 m^2	320,000 m^2 (80 acres)	
6 Emergency power supply						Generators (to be obtained privately)		Factories to obtain generators privately.	Factories to obtain generators privately.	Factories to obtain generators privately.	
7 Service facilities within EPZ						BOI verification officers for customs purposes		Training facility, firefighting	BOI verification officers for customs purposes and import/ export facilitation services provided throughout the week	Verification process carried out by industrial services officers and security staff. 24hr security coverage provided.	
F. Utility Infrastructure within Zone											
1 Road						Tarred internal road network		Internal roads	Internal roads	Internal roads	
2 Water	2.1 Water Source	NWS & DB has agreed to supply initial demand of 1000 m3/day from Chillaw Water Supply Scheme - proposed to be comisioned in February 2018. 10,000 m3/day proposed to be made available through Ma Oya- Bingiriya- Udabaddawa Water Supply Scheme				Water is available from Maha Oya river (Potable water up to WHO standards.)	2250m^3 per day	Own water purification plant available	Bulk supply obtained from water board	2 water plants within the zone. Hoping to obtain a separate water line from the water board as well.	
	2.2 Maximum Water Supply Capacity and Consumption (m^3/day)					Supply: 2,250 m^3/day Consumption: 400 m^3/day		Supply: 9,000 m^3/day	Capacity: 1,000 m^3/day Consumption: 500 m^3/day	Supply: 500 m^3/day	
	2.3 Maximum Wastewater Treatment Capacity (m^3/day)	Individual septic tanks, flocculation ponds (No flowing water body for waste water disposal)				(not completed yet)	950m^3 per day for biological waste	4,000 m^3/day (Effluent treatment for biological and chemical waste)	2,000 m^3/ day	500 m^3/day	10 km to the sea
3 Electricity	3.1 Capacity of power receiving facility	40 MVA				10 MVA (Dedicated Grid Sub-Station)		10 MVA medium voltage power supply	Capacity: 12 MVA Consumption: 7 MVA	4 MVA	
	3.2 Total blackout in past year (min)					0		0	0	0	
4 Telecommunication (availability of optical fiber within Zone)		Available				Available		Available	Available (4 Mbps Broadband)	Available	
5 Waste handling facility (capacity)						Factories dump their waste in the dump yard available within the zone. The remaining waste is given to HOLCIM. (approx. 1mt per day)		Waste is disposed by factories. The waste is either given to HOLCIM or collected by individuals	Most waste is disposed by individual factories. The remaining waste is given to HOLCIM.	Solid waste is collected by Geocycles arm of INSEE Cement company directly from factories at a fee	
6 Other infrastructure						Transport: Rail facilities, Bus terminals, Dry Port facility for import & export cargo	Parameter fence complete in 2018	plug and play operation, supply chain management solutions, food & beverage with industrial mega kitchen, chalet accommodation	Perimeter Fence	-	
G. Cost for Entering EPZ											
1 Ground rent (USD/Acre)						4,235	4,235	4,235	4,235	4,235	
2 Lease premium (per year) (USD/Acre)						30,000	30,000	30,000	10,000	10,000	
3 Construction cost (USD/m^2)						Factory: about 260.06 Warehouse: about 234.06		Factory: about 260.06 Warehouse: about 234.06	Factory: about 260.06 Warehouse: about 234.06	Factory: about 260.06 Warehouse: about 234.06	
H. Service Cost											
1 Industrial water cost (USD/m^3)		0.49				0.49		0.49	0.49	0.49	
2 Sewage treatment cost (USD/m^3)		0.08				Not yet implemented (?)		0.29	No sewearge treatment plant. Therefore no sewearage cost	0.08	
3 Electricity cost		0.07 kwh				0.07 kwh		0.07 kwh	0.07 kwh	0.07 kwh	
4 Solid waste cost						(Yet to be decided)		64.5 USD per month per plant.	Factories dispose of their own sold waste. Therefore there is no charge.	Factories dispose of their own solid waste. Some of the waste is sent to Siam city Cement Company, Puttalam and some waste is collected by local buyers. The disposal charges at Siam City Cement Company, Puttalam is Rs.4,500 mt.	
5 Fuel cost (USD/L)		0.85				Gasoline: 0.98 (Rs.150.00) Diesel: 0.72 (Rs.111.00)		Gasoline: 0.98 (Rs.150.00) Diesel: 0.72 (Rs.111.00)	Gasoline: 0.98 (Rs.150.00) Diesel: 0.72 (Rs.111.00)	0.85	
6 Transport cost (USD/km)						20' Container : 1.79 40' Container : 2.11		20' Container : 1.30 40' Container : 1.63	20' Container : 1.30 40' Container : 1.63	20' Container : 1.30 40' Container : 1.63	
7 Customs Assistance						BOI verification officers for customs purposes		-	BOI verification officers for customs purposes and import / export facilitation services provided throughout the week	-	

3.4. Primary evaluation on candidate sites

In this subsection, the primary evaluation for the target sites included in the matrix table are explained. An evaluation is made for each site based on the legend below. The "Distance" explained in each state represent the distance to Colombo.

Table 3-8: Evaluation results for each site

#	Name of Site	Evaluation	Reason / Points for Improvement
1.	Seethawaka		
a	Seethawaka EPZ	D	Limited space available for expansion
b	Salawa Estate	B	Water accessibility shall be clarified
2.	Horana		
a	Horana EPZ, Wagawatta IZ/IP	D	Limited space available for expansion
b	Millaniya	A	Under discussion with potential developer
c	Millewa Estate	C	Land development cost is expensive
d	Sorana Estate	B	Install flood mitigation measures are vital
3.	Eravur		
a	Eravur	D	Absence of industry basis, and distance to logistics are critical
4.	Bingiriya		
a	Bingiriya	C	Too distant to Colombo and water accessibility need to be secured
5.	Mirigama		
a	Mirigama EPZ	D	Limited space available for expansion
b	Mirigama Block B	B	Land rights need to be clarified, and additional water resources need to be secured
c	MAS Fabric Park	-	(Operated by private company)
6.	Kandy		
a	Kandy IP	C	Distance to ports are not favorable, hence Knowledge based industry shall be examined.
b	Mawathagama	B	Logistical accessibility need to be furnished for industry development.
7.	Matara		
a	Charlie Mount Estate	C	Inclined land requires development costs & Water resources need to furnish

<Legend>

A: Possible (Has possibility for developing Japan Industrial Township)

B: Possible w/ Conditions (Has issues for development)

C: Unlikely (Several issues exists that may interfere with development of Japan Industrial Township)

D: Not ideal (Difficult to set as location for Japan Industrial Township)

－: Excluded from consideration

3.4.1. Seethawaka

(1) Seethawaka EPZ

D	Name	Seethawaka EPZ
	Status	Developed in 1999 with the support from OECF (Overseas Economic Cooperation Fund of Japan). Currently 26 enterprises operate inside the zone, including Japanese company YKK. **There is limited space available within the zone and is difficult for expansion.**
	Distance	About 1 hour 45 minutes (general road). No plans for expressway development in the near future.
	Issues	Waste treatment and waste water treatment facilities are worn out, causing negative effects on the operation within the zone.
	Special Notes	None

(2) Salawa Estate

C	Name	Salawa Estate
	Status	Rubber plantation (Owner: Private furniture company DAMRO, Area: 614.66 ha). Ranked #1 on Harvard University Study.
	Distance	About 1 hour 45 minutes (general road). No plans for extending to expressway.
	Issues	Water can be taken from Kelani River, but since the maximum amount that can be taken is limited, there needs to be special consideration for industries that use a lot of water (e.g. textile processing, plating processing)
	Special Notes	If the industries to be developed can be related with the enterprises already operating in nearby EPZs (Seethawaka EPZ, Biyagama EPZ), there may be a significance in choosing this location, but the amount of water to be taken from Kelani River needs to be considered.

3.4.2. Horana

(1) Horana EPZ, Wagawatta IZ, Wagawattha IP

D	Name	Horana EPZ, Wagawatta IZ, Wagawatta IP
	Status	All three sites are located inside Perth Estate, with Japanese company INOAC operating in the zone. **There is limited space available within the zone for expansion.**

	Distance	About 1 hour 30 minutes (Using Southern Expressway)
	Issues	No space left for expansion. Waste and waste water processing is not enough.
	Special Notes	Labor cost has risen within the zone due to recruitment competition between large enterprises. However, due to its distance from Colombo, stable and smooth supply of workforce from nearby area is possible.

(2) Millaniya

A	Name	Millaniya
	Status	A green land with a paddy field next to a rubber plantation. (Owner: Horana Plantation PLC, privatized in 1992, Area: 244 ha) Rubber plantations in three fields are individually introduced for industrial park development. Negotiation between BOI and potential industrial park developer is currently in progress.
	Distance	About 1 hour 30 minutes (Southern Expressway). Budget allocation is planned for preparing access road to Southern Expressway.
	Issues	Flood management is necessary for the zone, including the access road (flooding was recorded during heavy rainfall in the past)
	Special Notes	Preparation of utility facilities has already been approved by the Sri Lankan government. About 50 tenant farmer families exist within the site.

(3) Millewa Estate

C	Name	Millewa Estate
	Status	Rubber plantation (Owner: Kotagala Plantation PLC, privatized in 1992, Area: 532 ha) Relatively flat land, but allocated land is not round but distorted, making a unified development difficult.
	Distance	About 1 hour 30 minutes (Southern Expressway)
	Issues	The distance of the access road necessary to connect with the Southern Expressway and the distance necessary for conducting water is long, making the development cost higher than other locations.
	Special Notes	None

(5) Sorana Estate

B	Name	Sorana Estate
	Status	Rubber plantation (Owner: Kotagala Plantation PLC, privatized in 1992, Area: 668 ha). Ranked #2 on Harvard University Study.
	Distance	About 1 hour 30 minutes (Southern Expressway)
	Issues	Rubber and coconut being planted are still young (i.e. still have high productivity) and are being well taken care of, leading to a risk of the owner Kotagala Plantation PLC repelling to an industrial development plan.
	Special Notes	Utility costs are cheaper compared to that of Milleniya and Millewa, both which are in the same Kalutara region, Partial locations within the site have been flooded during the heavy rainfall in May 2017, and installment of flood mitigation measures are vital.

3.4.3. Eravur

D	Name	Eravur
	Status	Current plan is to develop an industrial park in a fishing village facing the east coast. The economy in the region is established mainly by the fishing industry and tourism, and no industrial location has been settled yet.
	Distance	About 7 hours 30 minutes (general road). No plans for expressway development in the near future.
	Issues	The logistics network does not connect to the site, and it is difficult to proceed with an industrial park development plan alone. **Since the site is very far away from Colombo, and also since difficulties are left in logistics and labor force, it is not an ideal site for the development of a Japan Industrial Township.**
	Special Notes	None

3.4.4. Bingiriya

C	Name	1. German Watta (Phase 1 : 150 ha) 2. Gorakagasagara Watta (Phase 2 : 282 ha) 3. Heemeliyaagara Watta (Phase 3 : 487 ha) 4. Kowulwewa Watta (Phase 3 : 130 ha)
	Status	All four locations are nearby or next to each other.

		A coconut plantation or livestock pasturing is being operated. (Site 1, 2, and 4 Owner: NLDB (National Livestock Development Board), Site 3 Owner: Chillaw Plantation Ltd. (privatized in 1992))
	Distance	About 2 to 3 hours (general road). No plans for expressway development in the near future.
	Issues	Water source is far away, and the current plan is to bring in wastewater from a village up north.
	Special Notes	None

3.4.5. Mirigama

(1) Mirigama EPZ

D	Name	Mirigama EPZ
	Status	This EPZ is located near Bandaranaike International Airport. With a rich surrounding environment and high accessibility, the EPZ has both local and foreign enterprises currently operating in the zone. **<u>There is no vacant space left within the zone and is difficult for expanding.</u>**
	Distance	About 1 hour 30 minutes (Colombo – Katunayake Expressway)
	Issues	Similar to other EPZs, issues are hidden in waste and waste water management.
	Special Notes	None

(2) Mirigama Block B

B	Name	Mirigama Block B
	Status	This site is located next to Mirigama EPZ and is currently a plantation owned by BOI (120 ha). UCLAN University had a plan to use this land for a new campus location, but the plan seem to have been cancelled.
	Distance	About 1 hour 30 minutes (Colombo – Katunayake Expressway)
	Issues	Confirmation on the development rights on this land is necessary. The site, being adjacent to AB29 road and 2.5 km away from Maha Oya River, has many advantages in terms of its location, but utility and infrastructure facilities from Mirigama EPZ will probably be used, and an upgrade for such facilities will be required.
	Special	Confirmation on the latest land ownership right needed.

	Notes	

(3) MAS Fabric Park

—	Name	MAS Fabric Park
	Status	This site will be taken out of consideration since it is owned and run by a private company.
	Distance	About 1 hour 30 minutes (Colombo – Katunayake Expressway)
	Issues	None
	Special Notes	None

3.4.6. Kandy

(1) Kandy IP

C	Name	Kandy IP
	Status	An industrial park organized by BOI. The south side of the site is adjacent to an industrial park owned by IDB (Industry Develompent Board) Enterprises from many different categories, including sewing, food processing, and satellite communication, are currently operating in the zone. A construction of a waste water processing facility is currently being considered. Vacant space is available.
	Distance	About 5 hours (general road). Plan for development of Central Expressway underway.
	Issues	Distance to Colombo and ports is far.
	Special Notes	Waste sorting has started from a few months ago. However, the waste is being burned inside the zone and the resources are being landfilled, and appropriate processes are not being undertaken.

(2) Mawathagama

B	Name	Mawathagama
	Status	Undeveloped
	Distance	About 4 hours (general road). Plan for development of Central Expressway underway.
	Issues	Distance to Colombo is far.
	Special	If the construction of the Colombo-Kandy Expressway, scheduled to be

	Notes	finished by 2020, is completed, then workforces can be taken from Kandy and its surrounding villages, but that is difficult with the current transport conditions.

3.4.7. Matara

C	Name	Charlie Mount Estate
	Status	Coconut plantation (Owner: Namunukula Plantations PLC, privatized 1992, Area: 326 ha). BOI has been negotiating with the State of Andra Pradesh, India, regarding industry development in the premises.
	Distance	About 2 hours 15 minutes (Southern Expressway)
	Issues	The land is slightly inclined, causing a high cost for levelling the ground. Also, preparation of roads and water supply facilities will be necessary. These facts have led to a low rank on the Harvard University Study. Since there are no rivers available within close distance, the site is not ideal for industries that have high water demand. BOI has explained that the relationship with India is still at its initial stage, and that Japan can be engaged too.
	Special Notes	The status of discussion between BOI and AP state needs to be clarified.

3.5. Overall evaluation

(1) Lack of industry because of location

With the current situation where most of the candidate sites do not have any industry developing nearby, it will be difficult for Japanese companies to choose such locations for their investment.

- Eravur: Difficult to choose as location for Japan Industrial Township without the development of the east coast, extension of the Southern expressway, and expansion of industries at Matale and Hambantota.
- Kandy IP: Kandy is a tourist city and is not ideal for developing an industrial park targeted at attracting manufacturing companies.

(2) Difficult to enter existing EPZs

Out of the target sites, existing EPZs do not have space left for expansion, and they cannot be chosen as a location for developing a Japan Industrial Township.

- Seethawaka EPZ, Horana EPZ, Wagawatta IP, Wagawattha IZ, and Mirigama

EPZ: All existing EPZs have a high occupation rate and have limited space for new companies.

(3) Access for an industrial location

Most of the candidate sites are located inland, and there are no concrete plans yet for connecting these locations with expressways. The Sri Lankan government anticipates more export-oriented companies to invest in Sri Lanka, but the distance to ports and air ports is crucial for such companies, and several people pointed out that the candidate sites are not ideal from a logistics point of view.

- Millewa Estate: The site is distant from the Southern expressway, making the cost for constructing a connecting road more expensive than others.
- Bingiriya: Located about 2 to 3 hours from Colombo, and no plans for developing expressways that would connect the planned zone with Colombo.

(4) Water source

Water is crucial for the operation of an industrial park. Many of the existing EPZs are located next to or near rivers to make water intake easier, but some of the target sites in this study did not have such advantage.

- Charlie Mount Estate: No inland water nearby, making it difficult to attract industries that have high demand for water.

3.5.1. Candidate sites for the future

With these results, the five locations that were left that had either a “A” evaluation or “B” evaluation were locations that were not too far away from Colombo and didn’t have many disadvantages in terms of securing water and workforces; Millaniya, Salawa, Sorana, Mirigama (Block B), and Mawathagama.

Out of the target sites of this study, these sites are the sites that have the most possibility in terms of developing a Japan Industrial Township. (However, in terms of Mawathagama, the development of the new Expressway that connects Kandy and Colombo is necessary for it to keep its evaluation.)

The plan for Millaniya, located 20km south west from Horana EPZ, is to divide a total 600 acre land that is currently used as coconut plantation and rubber plantation into three phases for developing an industrial park. The site is 50 km (1.5 hours) away from Colombo, and is a new interchange for the Southern expressways is planned to be made 11km from the site. A developer has shown interest in the development of the site, and is already in the process of negotiation with BOI.

4. Incentives for Investment and Re-investment from Japanese Companies

In this chapter, the incentives necessary for attracting investment and re-investment from Japanese companies are analyzed.

4.1. Current state of incentives prepared by the Sri Lankan government

Preparation of tax incentives is not realistic considering the current financial situation of the Sri Lankan government. Also, reduction and exemption of corporation tax for large-scale investment projects are decided not by BOI but instead the Ministry of Finance or the Prime Minister's office. "Strategic Investment Projects" have been receiving this, but no new projects have been awarded since the Colombo Port City Project and the Hambantota Port Project. As a result, instead of incentives that are usually anticipated by overseas investors (i.e. tax incentives), incentives related to land and utility, or cost reduction for operating in Sri Lanka, are provided. When reducing costs of operation, the source of income for BOI also needs to be cared, so that the opportunity of tax revenue for the Sri Lankan government shall not be taken away, as well as to keep a fair balance for Sri Lankan companies.

In the following section, the current state of the incentives prepared by the Sri Lankan government is explained.

Incentives for EPZ tenants are defined in Article 16 and Article 17 of the BOI Act as follows:

Article 16 Without prejudice to the generality of the powers conferred on the Commission by this Law, the Commission shall have the power to

- to do all such acts or taken such steps as may be necessary or conducive to the attainment of the objects of the Commission;
- to acquire, sell or lease land for the purposes of industrial sites, for the use of employees or for general economic development;
- to lay out industrial estates for sale or lease;
- to enter into agreements with enterprises;
- to exercise, perform and discharge all such powers, duties and functions as are by or under this Law vested in or assigned or delegated to the Commission; and
- generally, to do all such other acts and things as are incidental to or consequential upon the exercise, performance and discharge of its powers, duties and functions under this Law

Article 17 The BOI shall have the power to enter into agreements with any enterprise in or outside the area of its authority in order to conduct any business approved by the minister and to grant exemptions from any law referred to in Schedule B.

Source: EY based on BOI website

Laws in Schedule B where applications are to be exempted are listed below.

- The Inland Revenue Act, No. 4 of 1963
- The Customs Ordinance Chapter 235
- The Exchange Control Act, Chapter 423
- The Companies Ordinance, Chapter 145
- Merchant Shipping Act, No. 52 of 1971
- Finance Act, No. 65 of 1961
- Air Navigation Act

In 2011, the amended Inland Revenue Act (IRA) was enforced, giving superiority of tax exemption from the BOI Act to the IRA. Additionally, the Budget Speech 2016 made by the Finance Minister in 2015 suspended the granting of tax exemption under the amended IRA. Similarly, other incentives that were prepared for attracting investment from foreign companies have been stopped due to the financial situation of the government.

In November 2017, the budget plan for fiscal year 2018 was announced, where budgetary policies from before have been followed, and had a low impact on investors. An amended IRA will be implemented from April 2018, but locals see that there wouldn't be much confusion caused either.

4.2. Customs clearance procedure for EPZs

In existing EPZs, procedures related to the import of raw materials and export of products are simplified with the clearance procedures referred to as "Green Channel". With this, the crowded customs clearance process at the Colombo Port can be omitted, and instead an inspection takes place in the specified area within the EPZ zone, reducing the total time necessary. Other than inside Colombo Port, BOI also has customs offices in Katunayake, Koggala, Biyagama, and Kandy.

The digitization of customs clearance procedures is also taking place, where the

ASYCUDA[26] Customs Module has been implemented from May 2017. BOI is also scheduled to install the ASYCUDA Warehouse Module from May 2018. With the use of this new module, the raw material productivity can be figured out, making it easier for BOI to find out the performance of each BOI approved company. A digital signature system is also planned to be implemented from April 2018, making the customs clearance procedure even more efficient for operating companies.

4.3. Efforts made to increase re-investment

Manufacturing companies already operating in Sri Lanka do not have their suppliers in the country, nor can they find local Sri Lankan manufacturers that can supply parts for them. A system to support such SMEs that form the supply chain of already operating companies is important.

For example, a Japanese heavy metal manufacturer is highly evaluated not only from neighboring countries, but also from Japan as well, with their high quality in design and technology. However, most of the materials used for manufacturing are either imported or internally manufactured, and they realize that it is important for Sri Lanka to develop supporting industries to reduce cost. Since this manufacturer is a 100% subsidiary of a Japanese company, they have many transactions with companies in Japan, and they believe that if these companies in Japan can operate in Sri Lanka, there will be business opportunities not only in Sri Lanka but also in neighboring countries too.

When considering the investment of these countries to Sri Lanka, there are two challenges that can be pointed out; one is securing land for these companies, and the other is the rule for the minimum investment requirement.

As explained in Chapter 3, the space for developing industrial parks is limited. If the vacant space within existing EPZs can be divided, there may be a possibility for it to be efficiently used for SMEs. Some of the succeeding Japanese companies in Sri Lanka are SMEs manufacturing car parts and electronic parts, and are not necessarily listed companies. Efforts for preparing land and space that would make it easier for SMEs to start their business would have a positive impact also on the local supply chain.

Also, the BOI website states that the minimum investment requirement is US$ 250,000 for applying as a BOI approved company, but in the current operation, BOI

[26] ASYCUDA (Automated System for Customs Data) A free Electronic Customs Clearance System provided by United Nations Conference on Trade and Development countries that need support in electrification of custom clearance systems. The United Nations Development Programme installed the first package to Sri Lanka in 1994. Source: ASYCUDA「Sri Lanka」(N.D.) (https://www.asycuda.org/dispcountry.asp?name=sri%20lanka)

considers each investment projects individually and sets the minimum investment values on a case by case basis[27]. For SMEs, such a minimum investment requirement becomes a big hurdle, and such criteria shall be revisited to bring in more SME investment, such as specifying industries for applying such rule, which would lead to strengthening the local Sri Lankan industry as well.

[27] JICA "Data Collection Survey of Solid Waste Management in Sri Lanka" (2016) (http://open_jicareport.jica.go.jp/pdf/12250205.pdf)

Column: Examples of industrial park development in South East Asia

In Thailand and Vietnam, some industrial park developments are intended to invite Japanese national investors from the planning stage. In these industrial parks, integrated approval obtaining services (One Stop Services) are offered by the national investment promotion agencies in addition to the hard-infrastructure to support foreign workers working at the industrial park.

(1) One Stop Services

In Thailand, the BOI (Office of Board of Investment) is established for the development of industrial parks, but the operation of the industrial parks are done with the private sector, where companies would develop, construct, market and manage the premises. Some of renowned developers are Rojana and Amatam in addition to Japanese trading firms tagging with local real estate developers. In Thailand, the BOI has been assisting FDI activities by expediting license and approval processes through a function labeled as "One Start One Stop Investment Centre". Services provided by the OSS comprise of 3 forms, as follows[28]:

1. Providing information and recommendations with database system related to business operation in the SEZs (Special Economic Development Zones), both regulation related information, database for carrying out business in the district and contacts of related government agencies.
2. Acceptance of matter, submission to concerned agencies and follow up.
3. Approval and Permission (only where the stationed official has the complete authority)

(2) Ancillary facilities in industrial parks

Vietnam is one of the countries where many Japanese investors are already operating in industrial park designated premises. These industrial parks are furnished with not only basic utilities facilities, but also with various ancillary facilities.

Regarding electricity supply, gas fired power stations are developed for ensuring stable power supply.

Facilities are prepared not only for business but also for supporting the daily lives of workers, and their families, stationed inside the industrial parks. These subordinate infrastructure create a comfortable living atmosphere for stationed foreign staff and a comprehensive business climate.

[28] Source: Thailand Board of Investment "A Guide to Investment in the Special Economic Development Zones" (2015) (http://www.boi.go.th/upload/content/BOI-book%202015_20150818_95385.pdf)

The following tables shows examples of these facilities furnished in industrial zones in several countries.

Table C-1: Examples of facilities in industrial zones in Asian countries

	Philippine	Thailand	Vietnam	India Tamil Nadu
	Laguna	Rojana	Long Duc	SMIP[29]
Rental Factory	○	○	○	○ (Planned for future)
Customs	○	○	○	(Under consideration)
Distribution Warehouse	○	○	○	○ (Planned for future)
Vocational Training Facility	○	○	—	—
Bank	○	○	○	(Under consideration)
Hospital	○	○	—	—
Commercial Facility	○	○	—	(Under consideration)
Residential Facility	○	○	—	(Under consideration)
Japanese School	—	○	—	—

Source: JETRO "Seminar on Japanese Industrial Parks in Asia" hand outs and interviews with individual companies

[29] Sojitz-Motherson Industrial Park

5. Infrastructure Necessary for Promoting FDI from Japanese Investors

5.1. Overview of infrastructure in Sri Lanka

This section discusses the possibilities of infrastructure development for industrial parks in Sri Lanka and assesses how these infrastructure development could accelerate investment by Japanese companies. Sri Lanka is generally regarded as a country that has infrastructure well prepared. "World Competitiveness Report 2017-18" by the World Economic Forum ranks Sri Lanka's infrastructure preparedness 85 among 137 countries. Electrification rate improved from 29% to 98% in the past 25 years. Water and sewage penetration rate reaches at 89.7% in 2013.

However, there is still opportunities for more improvement to be made in Sri Lanka's infrastructure. It is particularly critical in waste management and waste water management due to its topographical features and vulnerability of natural conservation. Above all, MSW (Municipal Solid Waste) management is calling for an immediate engagement in light of casualties due to a mountain of waste collapsed in Colombo. President Sirisena, himself, is concurrently posting to the Minster for Environment for resolving the environmental issues.

5.2. Waste management

(1) Waste management

Table 5-1 shows the amount of waste generated in Sri Lanka. Existing EPZs are paying high attention to waste treatment practices because of the tragic accident that occurred at a MSW treatment facility in Colombo in April 2017.

Table 5-1: General waste, collected waste, collection rate, and treatment sites in Sri Lanka (by province)

#	Province	Generated Waste (ton/day)		Collected Waste (ton/day)		Collection Rate	# of Treatment Sites
1	Northern	566	(5%)	178	(5%)	31%	16
2	Eastern	785	(7%)	347	(10%)	44%	40
3	North Central	616	(6%)	91	(3%)	15%	35
4	North Western	1,134	(11%)	187	(5%)	16%	45
5	Central	1,585	(15%)	304	(9%)	19%	47
6	Sabaragamuwa	835	(8%)	178	(5%)	21%	30
7	Uva	587	(6%)	116	(3%)	20%	24
8	Western	3,502	(33%)	1,793	(52%)	51%	52
9	Southern	1,158	(11%)	264	(8%)	23%	60
	Total	**10,768**	**(100%)**	**3,458**	**(100%)**	**32%**	**349**

Source: JICA "Data Collection Survey of Solid Waste Management in Sri Lanka"[30]

EPZ tenants generate a large proportion of industrial waste in Sri Lanka. Separation of solid waste and industrial waste has started recently, where solid waste is collected and transferred to the collectors, and industrial waste from most EPZs are collected by a cement company. However, current treatment practices are not sufficient to process all of the waste generated in EPZs, hence mountains of solid waste were observed in several EPZs for receiving temporally. Although separation practices are implemented for industrial and recycle waste, separated waste is open-dumped in one place.

Table 5-2 shows the amount and situation of waste treatment in existing EPZs.

[30] JICA "Data Collection Survey of Solid Waste Management in Sri Lanka" (2016) (http://open_jicareport.jica.go.jp/pdf/12250205.pdf)

Table 5-2: Solid and Industrial Waste generated from EPZs

	Seethawaka		Koggalla		Biyagama		Kandy	
Overview	・Developed by OECF(*1) in 1999. Nippon Koei Co., Ltd. and Kumagai Gumi Co., Ltd. was included in the planning and construction. ・Total land area: 1,744,000 m^2 (industrial land 728,434 m^2) ・26 entities, mainly apparrel. ・One Japanese company, YKK (clothing zipper production)		・Established in 1991. ・Total land area: 918,636 m^2 (industrial land 789,137 m^2) ・22 entities, no Japanese company.		・Established in 1986. ・Total land area: 1,821,000 m^2 (industrial land 1,036,000 m^2) ・57 entities. ・Two Japanese companies, LANKA HARNESS (automobile wire harness production), TOS LANKA (LED lighting printing foundation plate manufacturing)		・Established 1994. ・Total land area: 829,606 m^2(industrial land 329,818 m^2) ・24 entities. Vary from apparel, food, satellite communication companies. No Japanese company.	
Solid Waste	10.0t	・Scrap fabrics consume 90%. ・Other 10% from paper, polyethylene, card board, wood, and rubber. ・Disposal by HY Vital and Randunu fabric (Pvt) Ltd.	7.5t	・56% of total waste from scrap fabric. ・44% from polyethyelene, card board, paper, metal scraps, glass, plastic, and cushion material. ・Processed through Solid Waste Transfer Station to villagers. ・Disposal by Green Plant (Pvt) Ltd.	6.0t	・Ishiks (pvt) Ltd, Green keepers (Pvt) Ltd. dispose waste, nearby residue.	30.0t	・Mainly scrap fabric, plastic, polyethylene, paper, card board, metal scrap, glass. ・Licenced trader Material Receiving Centre transfer 15.0t/day to nearby villagers.
Industrial Waste	24.0t	・Collected by Holcim for combustion at their kiln.	2.0t	・2 factories discharge industrial waste in need of special management; Screenline (Pvt) Ltd. とStrentec (Pvt) Ltd.	14.0t	・Mainly adhesive, thinner, solvent.	5.0t	・Collected by Holcim for combustion at their kiln. ・Waste compound, waste oil, inc passed on to licenced trader. ・Flourescent lamps collected by Orange (local flourescent lamp sales distributor) also for processing.
Sludge	24.0t	-	2.0t	-	14.0t	-	5.0t	-

Note: All waste data are daily data.

Source: EY based on information provided by BOI

A typical composition of solid waste is as follows (example taken from Wathupitiwela EPZ);

Rubber	0.1t/Day
Polythene	0.1t/Day
Cardboard	0.1t/Day
Fabric cut offs	1.0t/Day
Regiform	0.04t/Day

Waste management inside EPZ is a responsibility of BOI. BOI charges LKR 17/m^3 for waste treatment (collection and transfer). Some EPZ tenants have self-contracted outside parties for waste management and handling.

(2) Waste Management Practice Improvement

Sri Lanka is an island country and it is impossible for the country to keep on dumping waste forever. The distance between residential space and waste management space is getting closer, and actions shall be taken as soon as possible. Practices such as organic waste's composting and controlled dumping have been examined in the past, but these practices are not economically feasible nor sustainable neither. Waste to Energy (hereinafter referred to as WtE) projects are also being examined, as listed in Table 5-3. Some of the listed projects are seriously being considered after the rubbish dump landslide incident of Colombo in April, 2017.

Table 5-3: List of WtE projects being planned in Sri Lanka

#	Location	Developer
1	Karadiana, Western Province	Octagon Consolidated Bhd.
2	Kelawalapitiya, Muthurajawela	Orizon Renewable Energy (Pvt) Ltd.
3	Korathota, Kaduwela	Renewgen Environment Protection Kotte (Pvt) Ltd
4	Kathurupitiya, Matara	Biogreencycle Ltd
5	Jathikapola	Sri Lanka Sustainable Energy Authority
6	The Kandy Municipal Council	EcoTech Lanka Ltd.

Source: JICA "Data Collection Survey of Solid Waste Management in Sri Lanka"[31]

According to past studies conducted by JICA, Sri Lanka does not have a "Polluter Pays Principle" established, hence tipping fee for waste management is not chargeable.

[31] JICA "Data Collection Survey of Solid Waste Management in Sri Lanka" (2016) (http://open_jicareport.jica.go.jp/pdf/12250205.pdf)

Future WtE projects in Sri Lanka would need come up with an appropriate operational structure to mitigate fiscal burdens to Sri Lankan party on top of legitimating tipping fee collection, affordable/feasible price setting for heat/electricity, and legitimating mix-collection of solid waste and industrial waste.

As shown in Table 5-2, the amount of waste generated from EPZs are not sufficient for the operation of a WtE plant, and therefore the plant would need to receive waste generated outside of EPZs. WtE plant cannot operate within EPZ boundary as waste management and treatment is not a task of BOI. Instead, the possible WtE plant may be built adjacent to the EPZ, receiving solid waste from neighboring municipalities at the same time. According to a WtE plant operating company, an average commercial scale WtE plant requires 500m^3/day of water, and the location for developing a WtE plant would need to be determined for the sake of water intake from water resources.

5.3. Water and sewage

Sri Lanka is relatively high-rainfall country, however, industrial operation rely on river flow for water supply and highly vulnerable to the drought.

Water supply to EPZ is a responsibility of the NWSDB, however, the supply conditions varies with respective EPZs and some EPZ faces difficulty in catering.

For sewage treatment, EPZ's own treatment facilities are worn out due to mechanical lifetime or lowered efficiency. This results in forcing EPZ tenants to withhold their plant operation for the sake of EPZ's waste water treatment facilities' maintenance.

BOI charges EPZ tenants for water related services, which is composed by a basic fee of connecting charge, determined based on the ferrule size, and meter charge, determined based on the amount of water used. The connection charge per ferrule size is shown in Table 5-4.

Table 5-4: Connecting charge per ferrule size

Ferrule Size	Connecting Charge
1/2 inch	$22,000
3/4 inch	$40,000
1 inch	$50,000
1 1/2 inch	$60,000
2 inch	$80,000

Source: EY based on BOI website

5.4. Other utility management

(1) Power supply

Sri Lanka is undertaking power supply reinforcement through power development and grid development which includes Japanese companies' participating gas-fired power station project.

Some industries are concerned with the price level, but the quality of electricity is manageable with the combined use of back-up power facility, operating intermittently once or twice per year. However, it is important to note that there are some industries in which power outages should not occur, or the voltage must be constant, depending on the type of industry.

Sri Lanka imports large amount of fossil fuel in exchange for foreign currency reserve, and alternating fossil fuels to renewable energy is aspired from an environmental point of view as well. However, demand of electricity for plant operation is never suspended, and renewable energy such as wind or solar cannot be the primary supply of industry to avoid fluctuation.

Implementing an energy management system cannot recover the investment cost because saved electricity amount does not match with the large sum of investment. Inter-connecting EPZs for power management is not feasible due to vulnerability of grid-system.

(2) Logistics and cold chain

Accessibility to the major port-hubs have improved recently by the construction of expressways. The distance to Colombo Port and/or Bandaranaike International Airport is critical for considering investment from export oriented manufacturers as well as a location for it. Due to the early development of food processing industry requiring refrigeration or refrigerated logistics, Sri Lanka does not need sophisticated cold chain logistics at the moment. The economy of Sri Lanka tends to be concentrated at the Western part of the island, and other provinces are not ready to afford or request fresh food supported by cold chain logistics.

Based on interviews through the study, food processing industries suggest an investment in the inland area, which is closer to the origin of fresh food. Once these investments are realized, the location and product transportation would require cold chain logistics development, but not so soon.

5.5. Possibility of applying Japanese infrastructure technologies

Assessment results are shown in Table 5-5.

Table 5-5: Assessment results on possibility of applying Japanese infrastructure technologies

	Waste	Waste Water Treatment	Energy	Logistics
Issues	Capacity within existing EPZs needs to be enhanced.	Capacity within existing EPZs needs to be enhanced.	No major interruption identified.	Extension of express ways is being undertaken, but cold chain logistics are not yet developed.
Measures Taken	Solid waste is open-dumped and burnt. Industrial waste is not fully controlled.	Some factories are forced to shut-down depending on the EPZ facility's outage.	Most tenants have back-up generators, though long black-outs have not been experienced. Gov't is promoting renewable energy to reduce fossil fuel import.	Extension of express ways for improvement in logistics is being undertaken.
Applicability of Japanese Technology	Waste to Energy plants and industrial waste treatment process in cement kiln are in need	Upgrade in waste water treatment process, or power generation using sludge may fit. Desalination and reverse osmosis technology are in need.	Solar power generation is uncompetitive in price. Off-shore wind may be applicable. Total energy demand and saving amount is not big enough to invest in energy management system.	Export intended food processing needs cold chain logistics. Local logistics companies are interested in 3rd Party Logistics including food management.
Issues on Application of Japanese Technology	CAPEX. Responsibility demarcation b/w solid waste and industrial waste treatment. Promotion of Polluter Pays Principle.	Price competitiveness Operational entity design	Ensure co-existence with local sightseeing and fishing industry Assessing magnitude of Compensation	Clarify prioritizing food processing industry

Source: EY based on study results

Improvements in waste and waste water treatment are the most sought by Sri Lanka. The largest industrial waste treatment service provider in Sri Lanka, expressed its strong will to support the upgrade and reinforcement of its industrial waste treatment facility through cooperation with the Japanese government and private sector. These offers allow Japanese industries to examine technical effectiveness and feasibility of the application of Japanese technologies.

BOI has announced Request For Proposals (RFP) for desalination process plant in Hambantota and Reverse Osmosis water treatment plant in Biyagama, as shown in Table 5-6.

Table 5-6: Outline of infrastructure related RFPs recently announced by BOI

	Name of Project	Project Outline
1	Desalination Plant (Hambantota)	Design, construct, finance and operate 20,000 m3/day desalination plant with PPP. Notice publicized in October 2017. Proposal due extended from December 12 to February 19, 2018.
2	Reverse Osmosis Waste Water Treatment Plant (Biyagama)	Design, construct and operate Reverse Osmosis plant for portable water in Biyagama EPZ. Notice publicized in January 2018. Proposal due extended from February 22 to April 19.

Source: EY based on BOI website

One of the other aspects that need to be paid attention is operation design, particularly the application of PPP. Given considerations on the primary deficit of Sri Lankan government, infrastructure developments in EPZs are likely to be solicited as PPP projects. Sri Lanka government, chaired by Mistry of Finance, is currently in discussion on operational regulations for PPP projects at the PPP Committee. Apparently, the kind of projects primarily being discussed in the committee are hotel development and other non-vital social infrastructure related projects.

6. Conclusion: Implications for Japan Industrial Township Development

6.1. Geographical strength of Sri Lanka should be reflected for an industry location

Nominations of industrial park development locations shall involve investors' point of views. Potential locations listed in the "Investment Roadmap" are not ideal in this respect, hence the listed locations are not appropriate for further considerations.

The locations of industrial park development originally nominated in the "Investment Roadmap" were selected and evaluated reflecting the present situation of the sites, and considerations on the present usage and terrain are given, but the aspects vital for industrial locations are not fully considered, such as logistical preparedness and utility accessibility. This results in an insufficient list of candidate sites.

Through this study, comments were sought to Japanese investors in Sri Lanka and industrial park developers for their opinions on the candidate sites. A valuable comment was that "the physical distances can be internalized as a part of the production processes, so long as the logistics are flawless and made in a timely manner, while the distances have more of a negative impact on the marketing aspects of the industrial park, for the recruitment of employees and for the commuting of foreign national workers from major cities, i.e. Colombo."

When the study team asked interviewees on an appropriate location for industrial park development in Sri Lanka other than the sites nominated by Sri Lanka, most of the answers pointed at an area near the seaport and airport vicinity of Colombo with little hesitation. The foremost reason is the logistical accessibility, also noting on the long history of Japanese government supports for furnishing ports facilities. Some also mentioned a synergy between planning gas-fired power station in northern Colombo. It is fair to pursue an area in the suburb of Colombo near the airport to maintain the context of the Japanese government's support on the industry development in Sri Lanka. Note that the Western Provinces' area development is the responsibility of the Ministry of Megapolis & Western Development, and not of BOI. In anyways, land selection for Japan Industrial Township shall be made with consideration on logistics, which will enable Sri Lanka to maximize its geographical advantage and lead to an accumulation of industries.

Another point that can be made is the renovation of Seethawaka EPZ. Seethawaka EPZ was originally developed through the assistance of OECF by applying Japanese technologies in utility management. The treatment capacities of these facilities are approaching their limits, particularly waste management. The EPZ is in urgent need of upgrading and renovation for the sustainable plant operation of its tenants. An application of technology shall be examined through collaboration with local parties with

expertise.

6.2. Absence of industry promotion policy

An absence of industry development and promotion policy in Sri Lanka is a concern not only for potential investors' decisions, but also for industrial park developers to envision marketing strategies. The government of Sri Lanka should develop priority industries and announce how such industries would receive preferred treatment, i.e. incentives.

The main industry in Sri Lanka transformed from traditional agro-based food processing to fashion and apparel, and there has not been a future plan made regarding manufacturing industries. The country has continued to focus on the growing the apparel industry, and there has not been action taken for fostering new industries. As a result, the government of Sri Lanka seems to lack a mid/long term plan on export oriented manufacturing sector development in the country. In such condition, the strengths of Sri Lanka becomes vague from an investor's point of view, and investors cannot envision how they can be benefitted through investing in Sri Lanka. This vagueness tends to lead potential investors to invest in a market with a more obvious opportunity, i.e. the Indian market, where the population of the country is much bigger.

Though BOI has already come up with a list of target sectors (as explained in Chapter 2.3), the results are not sufficient enough for individual investors to self-assess their suitability for investing in Sri Lanka. Follow-up actions should be taken immediately to assess individual sectors, and the results should be integrated into the promotional activities of BOI.

6.3. Recommendations for FDI promotions (incentives)

Considering the current fiscal situation of Sri Lanka, investment incentive packages such as large sum of tax holidays cannot be allowed. On top of that situation, incentives programs have to be designed on a rigid industry development policy to determine disperse priorities among projects. Under this situation, the following actions could induce new investment and/or re-investment form exiting enterprise

As noted in Chapter 5, many Japanese investors in Sri Lanka are often operating without proper supply chains in Sri Lanka, and are forced to develop parts and processes for products internally. In light of this situation, it would be beneficial for SME investors if premises for experiencing Sri Lankan business climate can be prepared. Information and communication technologies nowadays make it possible for small capital investment

projects to manufacture high-value addition products without large-scale factories. The mother factory can be located outside of Sri Lanka, sending data to the Sri Lankan facility for the small-lot yet high-value added products manufacturing. Sri Lankan workforces are known for their quick-learning and skilful abilities, and are suitable for these manufacturing processes

In order to realize more investment from SMEs, the government of Sri Lanka should clarify the status of the minimum investment criteria and prepare an environment that is more focused on the acceptance of SME's investment. At the same time, a situation where indefinite inquiries are received by BOI on small-scale investments would need to be avoided, and as an example solution, services to SMEs can be limited to a referenced case from existing investors. This kind of activity would be beneficial for existing investors where their suppliers can be transferred to Sri Lanka, hence leading to fostering an industry cluster in Sri Lanka. However, it should not be forgotten that these measures can only be effective under a tangible and recognized industry development policy, explained in Section 6.2.

6.4. Feasibility of infrastructure technology applications

Waste management and waste water treatment facilities in Sri Lankan EPZs are approaching its mechanical lifetime. BOI is calling for proposals for upgrading which opens for opportunities to Japanese infrastructure vendors.

Specifically speaking, the treatment practices for solid waste management and for industrial waste management are facing difficulties, and the necessity of upgrading the processes is widely recognized by both BOI and EPZ tenants. BOI should initiate the collaborative study with waste treatment service providers to realize appropriate treatment methods for solid and industrial wastes.

It is also important to acknowledge the "polluter's pay principles" in Sri Lanka to ensure the project feasibility by equally sharing waste treatment's ethical and financial burden among municipalities, citizens and industries. The project's returns shall be shared to the community via forms of energy and steams to be used as resources of industry. Given consideration on the fiscal constraints of the Sri Lankan government, the project's feasibility needs further assessment, e.g. the design of the operational entity and application of PPP. The quality of life of the Sri Lankan community has been threatened by the degradation of waste management practices, and the reinforcement of the social infrastructure through the enhancement of EPZ's functions will contribute to the Sri Lankan society as a whole.

References

- ADB. (2016). *ADB Supports Sri Lankan Drive to Deliver Reliable Power to All.* From, https://www.adb.org/news/adb-supports-sri-lankan-drive-deliver-reliable-power-all
- ASYCUDA. (N.D.). *Sri Lanka*. From, https://www.asycuda.org/dispcountry.asp?name=sri%20lanka
- BOI website. (N.D.). *BOI Ads*. From, http://www.investsrilanka.com/ads/ads
- BOI. (N.D.). *BOI Act*. From, http://www.investsrilanka.com/welcome/boi_act
- IMF. (2017). *Country Report No, 17/253: Sri Lanka*. From, https://www.imf.org/en/Publications/CR/Issues/2017/08/10/Sri-Lanka-Second-Review-under-the-Extended-Arrangement-under-the-Extended-Fund-Facility-45178
- IMF. (2017). *World Economic Outlook Data : October 2017 Edition.* From, https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx
- Independent Television Network News. (2017). *Agreement signed for Kalutara Industrial Zone*. From, https://www.itnnews.lk/local-news/agreement-signed-for-kalutara-industrial-zone/
- Infrastructure Development Institute-Japan. (2017). *Sri Lanka no Kuosokudouro Project (Sri Lanka Expressway Project)*. From, http://www.idi.or.jp/yoyaku/201701_858.pdf
- JETRO Colombo Office. (2017). *Sri Lanka no Business Kankyo to Nikkei Kigyou Doukou (Business Climate and Trend of Japanese Companies in Sri Lanka)*, JETRO.
- JETRO. (2015). *Sri Lanka BOP Sou Jittai Chousa Report (Survey on BOP Situation in Sri Lanka)*. From, https://www.jetro.go.jp/ext_images/theme/bop/precedents/pdf/lifestyle_waterworks_201502_lk_rev.pdf
- JETRO. (2017). *2017 Survey on Business Conditions of Japanese Companies in Asia and Oceania*. From, https://www.jetro.go.jp/world/reports/2017/01/b817c68e8a26685b.html
- JICA. (2016). *Data collection survey on solid waste management in Democratic Socialist Republic of Sri Lanka*. From, http://open_jicareport.jica.go.jp/pdf/12250197.pdf
- JICA. (2016). *Signing of Japanese ODA Loan Agreement with Sri Lanka: Improving the passenger handling capacity and promoting economic activities through upgrading an international airport*. From, https://www.jica.go.jp/english/news/press/2015/160325_01.html
- JICA. (2017). *Data Collection Survey on Investment Climate in Sri Lanka*. From, http://libopac.jica.go.jp/images/report/P1000032832.html
- JICA. (2017). *Data collection survey on logistics sector in Sri Lanka*. From, http://open_jicareport.jica.go.jp/pdf/12300018_01.pdf
- Ministry of Foreign Affairs. (N.D.). *ODA Minkan Monitor Houkokusho: Sri Lanka Minshu Shakaishugi Kyouwakoku (ODA Public Monitor Report: Democratic Socialist Republic of Sri*

Lanka). From,
http://www.mofa.go.jp/mofaj/gaiko/oda/shimin/monitor/18m_hokoku/srilanka/opinion/opinion_10.html

- Prime Minister's Office of Sri Lanka. *Vision 2025*. From, http://www.pmoffice.gov.lk/download/press/D00000000061_EN.pdf
- World Bank, The. (2017). *Doing Business 2017*. From, http://www.doingbusiness.org/~/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB17-Report.pdf
- World Bank, The. (2018). *Data Bank, World Development Indicators*. From, http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators
- World Bank, The. (N.D.). *Global Ranking 2014*. From, https://lpi.worldbank.org/
- World Economic Forum. (2017). *The Global Competitiveness Report 2017-2018*. From, http://reports.weforum.org/global-competitiveness-index-2017-2018/

Appendix

BOI Charges:

Charged fees by BOI are as follows.

Table A-1: Application/Agreement Processing Charges

Section 17 company	
Investment application processing	$250
Agreement Processing Fees	
Strategic Development Project	$3,500
For Other Projects	$2,000
Supplementary Agreements	$500
Section 16 company	
Investment application processing fees	$300
Processing Fee for perusal of Articles of Association of Company	$150
Non BOI enterprises	
Lease Agreement Processing Fee for non BOI companies	LKR 10,000

Source: EY based on BOI website

Table A-2: EPZ Annual Fees

Section 17 company	
Annual Fee	
a. Normal Projects	$2,500
b. Hotel, Hospital, Utilities, Tourism sector Project and any other Infrastructure Project	$3,500
During Project Implementation Period	
Project less than USD 3 Million	$6,600
Project between not less than USD 3 Million and not more than USD 10 Million	$8,800
Project more than USD 10 Million	$16,500
Strategic Development Project	$1,000
Thereafter during Tax holidays & Concessionary Tax Period	
Project less than USD 3 Million	$2,300
Project between not less than USD 3 Million and not more than USD 10 Million	$5,500
Project more than USD 10 Million	$7,700

Strategic Development Project	$11,000
Agriculture Projects	$850
Coir based Industries and Handicraft Projects	$1,100
Section 16 company	
Annual License Fee	$350

Source: EY based on BOI website

Table A-3: EPZ Land Premium and Ground Rent

	Export Processing Zones and Industrial Parks	Non Refundable Land Premium Payable Upfront (per acre)US$	Ground Rent (US&, per annum, per acre)
1	Katunayake	60,000	4,660
2	Biyagama	60,000	4,660
3	Malwatta	30,000	4,235
4	Seethawaka	60,000	4,235
5	Horana	30,000	4,235
6	Mirigama	30,000	4,235
7	Wathupitiwala	50,000	4,235
8	Koggala	30,000	4,660
9	Mirijjawila,I.P.	20,000	3,850
10	Kandy I.P.	10,000	4,235
11	Mawathagama	10,000	4,235
12	Polgahawela	20,000	4,235

Source: EY based on BOI website

Table A-4: Building and Factory Rent

Building Rent	
Katunayaka	
Upper Floor	$45
Ground Floor	$50
Biyagama	
Upper Floor	$35
Ground Floor	$45
1st Floor	$40
Koggala	

Ground Floor	$30
1st Floor	$25
Self Building	$5
Factory Rent	
Seethawaka (m^2)	$80
Koggala (ft^2)	$6
Wathupitiwala (ft^2)	$6
All other zones (ft^2)	$6

Source: EY based on BOI website

Table A-5: Main Miscellaneous Charges

1	**Recommendation for VISA**	
	Recommendation for the Entry Visa / Visa extension of Existing resident for the Expatriate Workers - Sec 16 and 17	$110
	Recommendation for the Entry Visa / Extension of existing Resident Visa of the Investors / Shareholders	$50
	Recommendation for the Entry Visa / Extension of existing Resident Visa of the Dependents	$50
2	**BOI service charges for inspection on Environment Protection License (EPL) Issuing/Renewal**	
	a. Prescribed activities specified under PART A	LKR 6,000
	b. Prescribed activities specified under PART B	LKR 5,250
	c. Prescribed activities specified under PART C	LKR 4,500
3	**Issue of certified copy of analytical test report upon request by an Enterprise located within a BOI export processing zones & industrial Park. Upon request by an enterprise**	
	Water Quality	LKR 500
	Noise	LKR 1,100
	Ambient air Quality	LKR 1,100
	Waste water Quality	LKR 600
4	**For making Environmental Recommendation to the Telecommunication Regulation Commission**	LKR 35,000
5	**Charges for Publications/Documents**	
	In Commercial Operation	LKR 2,500
	Under Construction	LKR 1,750

6 Deposit for providing updated information	LKR 6,000

Source: EY based on BOI website