THE ROLE OF INDUSTRIAL PARKS IN MYANMAR’S AGRIBUSINESS SECTOR

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The State of Myanmar Cities and Towns

Establishment of Urban Network System, Study on 56+ Cities Socio-Economic Development Potential
City Size Distribution above 1,000,000 Population and 24 Development Zones (1990-2011)

List of 18 Industrial Zones

<table>
<thead>
<tr>
<th>Zone</th>
<th>Established Year</th>
<th>acre</th>
<th>No. of Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mandalay Industrial Zone</td>
<td>1990, 1997</td>
<td>946.51</td>
<td>994</td>
</tr>
<tr>
<td>2. Myingyan Industrial Zone</td>
<td></td>
<td>163.590</td>
<td>306</td>
</tr>
<tr>
<td>3. Meikhtila Industrial Zone</td>
<td>1997</td>
<td>385.450</td>
<td>81</td>
</tr>
<tr>
<td>4. Monywa Industrial Zone</td>
<td>1992</td>
<td>296.700</td>
<td>490</td>
</tr>
<tr>
<td>5. Yae nan Chaung Industrial Zone</td>
<td>1998</td>
<td>98.810</td>
<td>137</td>
</tr>
<tr>
<td>6. Pakokku Industrial Zone</td>
<td>1999</td>
<td>321.000</td>
<td>448</td>
</tr>
<tr>
<td>7. Pyay Industrial Zone</td>
<td></td>
<td></td>
<td>124</td>
</tr>
<tr>
<td>8. Patein Industrial Zone</td>
<td>1993</td>
<td></td>
<td>326</td>
</tr>
<tr>
<td>9. Myaungmya Industrial Zone</td>
<td>1999</td>
<td>101.650</td>
<td>58</td>
</tr>
<tr>
<td>10. Hinthada Industrial Zone</td>
<td></td>
<td></td>
<td>482</td>
</tr>
<tr>
<td>11. Myeik Industrial Zone</td>
<td></td>
<td></td>
<td>153</td>
</tr>
<tr>
<td>12. Taunggyi Industrial Zone</td>
<td>1999</td>
<td>287.000</td>
<td>342</td>
</tr>
<tr>
<td>13. Mawlamyine Industrial Zone</td>
<td></td>
<td>163.400</td>
<td>326</td>
</tr>
<tr>
<td>14. Bago Industrial Zone</td>
<td></td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>15. Yangon (East)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Yangon (West)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Yangon (North)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Yangon (South)</td>
<td></td>
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</tbody>
</table>
Industrial base in Yangon and Mandalay

- More than 40% of large-scale private factories were located in Yangon, followed by Mandalay (20.7%) in 2009.
- Yangon and Mandalay can function as two engines for Myanmar's industrial development.

Pro-poor industries shall be promoted to absorb abundant labors in their hinterlands.

Conceptual framework of MCDV

**Resource endowment**
- Human resources
- Agricultural resources
- Energy and mineral resources etc.

**Growth strategies**
- Agriculture Plus Plus
- Export-oriented growth
- FDI-driven growth
- SME development
- Rural development and poverty alleviation
- Infrastructure and energy development
- Financial sector development

**Present situation**
Low income, high poverty ratio, less industrialized, policy distortion, lack of infrastructure, poor HRD etc.

**Changing environment**
- Economic integration including AEC
- Emerging China and India
- Economic geography
- International rules and regulations
- Political changes

**Development Gap**

**People-centered Development vision**

I. High-growth & Globally linked
II. Inclusive & Balanced
III. Green & Sustainable

**Macro-econometric model**

Toshihiro Kudo, Institute of Developing Economic, JETRO
Growth strategy for Myanmar

Agriculture Development

(Agriculture Plus Plus)

Industrial Development

Joining EA’s Production Networks

SME Development

HRD

Infrastructure

Energy

Macroeconomic Stability & Financial Deepening

Effective Bureaucracy & Facilitative/Transparent Regulatory Regime

Rural Development & Poverty Reduction

Finance, Technology Market

+ Services Infrastructure

Two-polar Growth Strategy

Border Area Development

• Export-oriented
• FDI-driven

(Source) MCDV Report.
Toshihiro Kudo, Institute of Developing Economic, JETRO
Exporting high-quality agricultural products

- Myanmar is an exporter of food such as rice, beans and pulses, sesame seeds and so forth. Myanmar can export more agricultural produce such as rice. Myanmar exports low-quality agricultural produce. For example, Thai white rice price is nearly twice as high as that of Myanmar rice in the international markets.

- Myanmar is an importer of food, processed one in particular.

- Myanmar exports low-quality and primary agricultural produce, and import processed food.

- Quality seeds, farm management, improvement in post-harvest system, processing and marketing is necessary to provide high-quality agricultural produce.

**Myanmar's Export / Import of Food (2010)**

(Million USD)

(Source) UNCOMTRADE.
COMPREHENSIVE RICE SUPPLY CHAIN – Productivity increases and value adding along supply chain

INPUTS / PRODUCTION / OUTPUT

TIER I
INPUT / PRODUCTION / OUTPUT

TIER II
INTERMEDIATE SUPPLIER & SUPPORT SERVICE

TIER III
FOUNDATION PROVIDERS

CURRENT/FUTURE OPPORTUNITIES

- End uses, End uses enabled by science & technology innovations
- Inputs, Machinery & Equipment, Metal industry
- Industrial Chemicals, Paper industry, Printing
- Logistics, Business Services
- Infrastructure, Finance, HR Development
- Technology, Regulatory Environment

Seeds
- Agrochemicals
- Irrigation
- Machinery & equipment
- Other inputs

Farmer / Producer
- Small farmer / producer
- Group farming / production
- Estates / large scale production

Processor / Value-Adding
- Main product
- Co-products
- By-products
- Wastes

Wholesaler

Retailer

Institutional Buyer

CONSUMERS

IMPORTS

EXPORTS

Bulk / components
Collection
Distribution & Storage
Raw materials / intermediate goods

Stockpile/ Buffer Stock

Local / Overseas

Bulk / Pre-packed
Strategy to Strengthen Agribusiness Activities

Value-added production and agro-based industries

Industrialization on Agribusiness

- Input
  - Pre-Harvesting (Mechanized farming machinery)
- Production
  - Harvesting (farm machine, equipments)
- Processing
  - Post Harvesting (processing, warehouse)
- Value Adding
  - Value-added production and agro-based industries
Maps of hub and node cities along Economic Corridors

North-South Corridors (Yangon-Myitkyina-Mandalay-Kan Pai Ti)

East-West Corridors (Tachileik-Mandalay/Meikhtila, Kalay-Reeh)

Hub of Agribusiness Industry Development (Kalay, Monywa, Meikhtila, Lasho, Kyaukme, Naypyitaw, Bago, Malwamyine, Phaan)

Left-Sash Corridors (Myawaddy-Mandalay, Tamu)

Toshihiro Kudo, Institute of Developing Economic, JETRO
Industrial Zones Development Strategy in Myanmar

Types of Industries Emphasized

1. Large Scale Special Industrial Zone (SIZ)
   (Dawei/ Mawlamyine/ Kyaukphyu/ Thilawa & South Yangon)

2. Small & Medium Enterprises
   (Outskirts of Major Urban Areas)

3. International /Cross Border Trading (FTZ)
   (Thailand: Tachileik, Myawaddy, etc. / China: Muse, etc. / India: Tamu / Bangladesh: Maung Taw, etc.)

4. Tourism Based MEZ
   (Bagan Tourism MEZ/ Inlay Lake Tourism MEZ/ Andaman Marine Tourism MEZ)

5. Resource Based Industrial Zone
   (Fishery Processing IP/ Agro-based IP)

Cities more than 100,000 pop
To make the strategy feasible, spatially targeted investment (including physical and institutional infrastructure) in Yangon, Mandalay and some border areas is required.
Spatial Development Planning System

Economic Planning
(Ministry of National Planning & Economic Development)

Spatial Development Planning
(Ministry of Highway and Urban Development)

Sectoral Planning
(Each and Every Ministry)

Spatial Development Planning Law
(Town & Country Planning Act)

National Spatial Development Plan
State/Regional Structure Plan
Local Plan
Special Plan/Detail Plan

Long/Medium/Short Term Socio-economic Plans / Policies

Cooperation with Regions/States Level Organizations

National Level Policy
Technical Assistance

Sectoral Policies / Plans
Planning Regulations & Development Control Guidelines by the PWUD Ministry

Source: DHSHD.MOC
Myanmar Future Major Urban Network and Special Development Activities

- Tourism Attractive Zone
- Industry Zone
- Densely Populated Area
- Border Trade Area
- International Airport
- International Sea Port
- Forest Area
- Agricultural Area

Source: DHSHD.MOC
1958-1959

**Satellite Town Establishment**
- South Okkalapa (1958) - (132 plots)(35 acres)
- North Okkalapa (1959) - (262 plots)(109.7 acre)
- Thaketa (1959) - (168 plots)(200 acrea)

1995 – 2006 (8 Zones)

**New Town Development & Industrial Zone Established by DHS HD**
- Hlaing Thaya Zone (1,2,3,4,5,6,7)
- Shwe Pyitha Zone (1,2,3,4)
- Shwe Paukkan
- Dagon Seikkan, Dagon East, Dagon South
- Thilawa
- Myaung Ta Ga (Hmaw Bi)

1995 – JV (2 Zones)

**FDI PROMOTION ZONE**
- Mingaladon Industrial Park & Sinmardev

2000 – 2010 (6 Zones)

**Area Development & Industrial Zone Established by Private Developer**
- Yangon Industrial zone
- Shwe Than Lwin
- Mya Sein Yaung Industrial Zone
- Anawyaha Industrial Zone
- Thardukan Industrial Zone
- December Industrial Zone

**PLANNED INDUSTRIAL ZONE**
- (19) no.
  - Total Ind. Plot - 5000 plots
  - Total Ind. Land Area - 10631 acres
Type of Manufacturing in Industrial Zones in Yangon, 2013

- Garment: 32%
- Foodstuff: 7%
- Consumer's Product: 6%
- Construction Materials: 3%
- Electrical Appliance: 3%
- Wood based: 3%
- Chemical: 3%
- Paper & Stationary: 2%
- Machine: 2%
- Fishery Product: 2%

Situation of Industrial Zones Established by DHSHD in Yangon, 2013

<table>
<thead>
<tr>
<th>Industrial Zones</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Dagon (South) (Zone) (1)</td>
<td>1000</td>
</tr>
<tr>
<td>Dagon (South) (Zone) (2)</td>
<td>200</td>
</tr>
<tr>
<td>Dagon (South) (Zone) (3)</td>
<td>300</td>
</tr>
<tr>
<td>Shwe Pyi Thar (Wootayar)</td>
<td>50</td>
</tr>
<tr>
<td>North Okkalapa</td>
<td>10</td>
</tr>
<tr>
<td>South Okkalapa</td>
<td>5</td>
</tr>
<tr>
<td>Dagon (East)</td>
<td>5</td>
</tr>
<tr>
<td>Hlaing Thar Yar Zone (1, 2, 4, 6-7)</td>
<td>50</td>
</tr>
<tr>
<td>Shwe Pyi Thar Zone (1, 2, 3, 4)</td>
<td>50</td>
</tr>
<tr>
<td>Shwe Pyi Thar, Shwe Lin Pan</td>
<td>5</td>
</tr>
<tr>
<td>Hlaing Thar Yar Zone (5)</td>
<td>5</td>
</tr>
</tbody>
</table>
ISSUES ON LOCAL INDUSTRIAL ZONE

Weakness in integration of industrial Process and Chain system
- Infrastructure (energy, land, transport, communication, etc)
- Supporting services (finance, IT, legal services, public services)
- Consumers / market (the distance from market)
- Suppliers / resources ((the distance from suppliers)
- Environmental security

Poor LAND USE Planning and INDUSTRIAL LAYOUT

Weak in Development Control and Law Enforcement

Inadequate provision of INFRASTRUCTURE and Utility Services
- Lack of Proper Drainage System, Power Supply and Water Supply System
- Lack of Waste Water Treatment System
- Insufficient Industrial Waste Disposal & Management System

ENVIRONMENTAL ISSUE
- No Pollution control, without Monitoring System
- Environmental Problems - Water, Air, Noise, Soil and Visual Pollution & Ground water contamination

LAND ISSUES
- Very High Land Price and Land Speculation
- Unused industrial Land and low productivity
- Farm Land – Farmers & Squatter Problems
VISIONS & A STRUCTURE PLAN, JICA

INDUSTRIAL FUNCTION

- In Yangon 24 industrial zones are currently under operating with a total area of 5,105 ha, which include some unused lands inside them. (Red)
- Beside Thialwa SEZ, 700 ha of additional **new industrial zones** will be necessary.
- New IZ will be located mainly along the **outer ring road**.

It is needed to consider on regional planning and development aspects for future Industrial Park Development
THILAWA SEZ

- Total Area ~ 2400 ha
- Phase 1 “396 ha” (Class A)

Implementation started on 30th Nov, 2013
Commercial Operation end of 2015

Class A- Priority for Advanced Technology Manufacturing
( Vehicle , Electric,..)

Mingalardon Airport - 38 km distance from Thilawa
Yangon Port - 18 km distance from Thilawa
Waterway transport - 20 km distance to Martaban Sea
Proposed Conceptual Plan for Regional Development
(Kyaikphyu Region)

**S&M INDUSTRIES & NEW SETTLEMENT FOR LOCAL PEOPLE**

**INDUSTRIES FOR LOCAL PRODUCTS & NEW TOWN SETTLEMENT**

**ECO-TOURISM SEZ**

**HCI SEZ**

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**Kyaukphyu SEZ Concept**

1. Fish-Processing Industry
2. Plus Garment and other Light Industry
3. Already 50 MW Power plant is starting from 2013 and expected to complete by 2015
4. Port, Access Road, Water Supply & Treatment Plant will be needed next step.
5. Phase 1 will be about 200 hecto by 2020
6. Final SEZ may be 400 hecto by 2030.

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22 Million ton/y Oil tanks

500 MMCF Natural Gas Processing
DAWEI SEZ

Liquid Bulk Terminal for Petroleum & Petrochemical
LNG
Dry Bulk Terminals for Coal Fired Power Plants
Steel Mill
Fertilizer
Container Terminal
Shipyard
Light and Medium Industries – Gen. Cargo
Agricultural products
Automobiles and related parts
Machinery, electrical goods, ceramics
Wood products
Garments, medical supplies
Food and fishery processing
Integration of Industrial Park in Urban and Regional Development Plan

GREATER YANGON URBAN DEVELOPMENT MASTER PLAN, JICA

LAND USE PLAN FOR 2025 & 2040

Legend
- CBD
- Secondary CBD & Sub Center
- New Town Core
- Existing Built-up
- New Built-up in 2025
- New Built-up in 2040
- Industrial Use
- Green and Conservation Use
- Public Facilities Use
- Waterbody
- Other Use
- Railway
- Outer Ring Road
- Road
- Study Area

2025

2040
DEVELOPMENT TRENDS IN THE YANGON REGIONAL DEVELOPMENT CONTEXT

Yangon City Development Trends North & North Eastern Direction between Yangon and Bago Corridor

Connection of Yangon International Airport – Thilawa Port - Hanthawaddy-Bago – Express way

Development Potential & Linkages between Thilawa SEZ and Hanthawaddy New Airport

Development Potential on New CBD in Yangon Southwestern Region
Area (2011) - 45.70 sq-mile (118.36 sq-km)
Area (2013) - 121.5 sq.mile
Population (2010) - 1.034 million
Population (2040) - 1.6 - 2.0 million
Sagaing Region Shwe Bo-Kyauk Myaung Regional Special Industrial Zone

Sagaing Region Distribution of Urban Areas and Economic Activities

Legend

- Border Trade Area
- Industrial Area
- Intensive Agricultural Area
- Tourism Sites
- Cities over 50,000 Population
- Major City over 1 million Population
PROPOSED LANDUSE & ZONING

Existing Town Upgrading Area
New Residential Area
Proposed Industrial Zones
Proposed Services and Hotel Zone
Mixed Development Zone
Green Buffer Zone
(Development Control Area)
Proposed Commercial Zone
Bus Terminal
Industrial Complex and Port Development in Ayarwaddy Division

Special Industrial Complex (Pathein and Ngaputaw)

Deep Sea Port (Ngaputaw Tsp)

Population
- 0.14 million (2013),
- 0.17-0.2 million (2033)

Industrial Livelihood
- 1794 no (2013),
- (1.3% of total pop)

Existing Industrial Area - 259 acre + Extension Area