



# Avoiding the Middle Income Trap:

## Renovating Industrial Policy Formulation in Vietnam

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**Revised June 2010**

### Contents

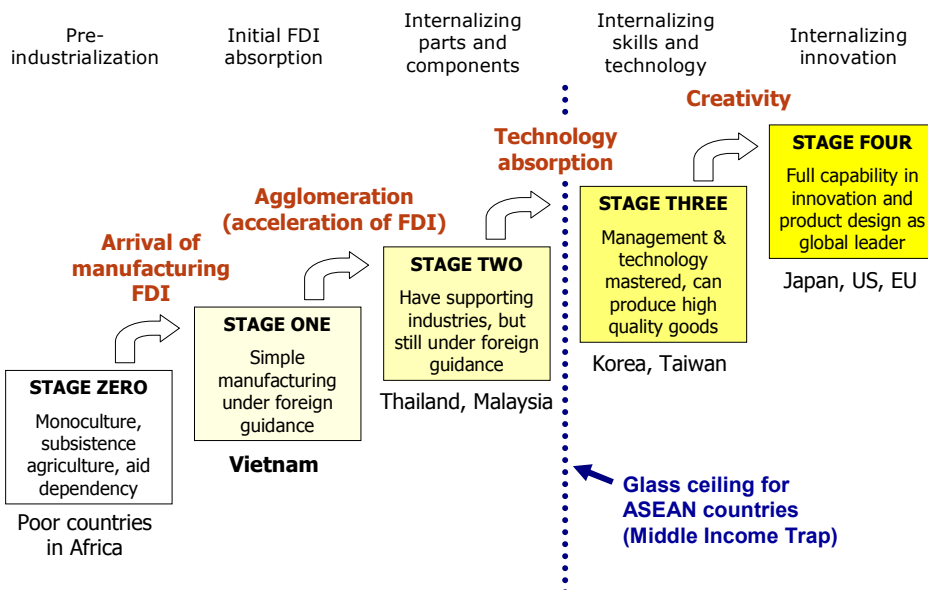
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- Middle income trap and proactive industrial policy
- Policy menu for enhancing industrial capability
- Strategic issues for upgrading Vietnam's industrial policy

## Vietnam: Middle Income Trap and Proactive Industrial Policy

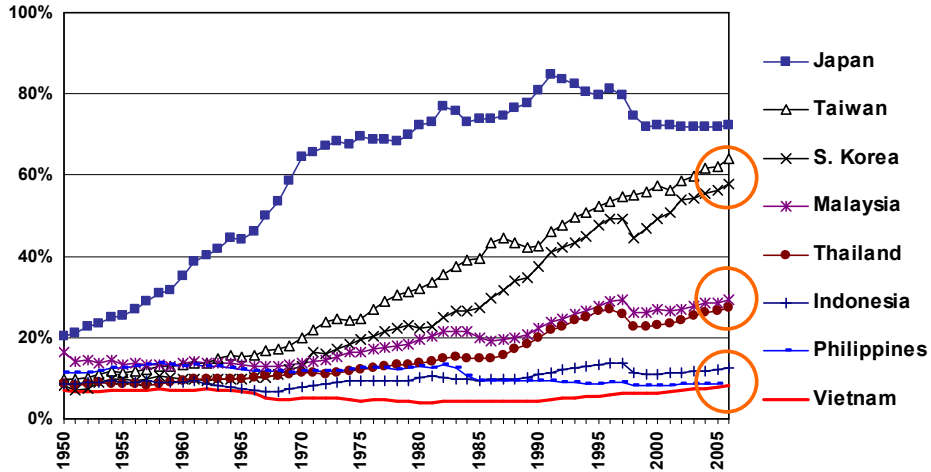
- Latecomer countries can reach middle income by liberalization and integration, but reaching higher income requires more positive policies to strengthen private dynamism.
- Growth based on natural resources, locational advantage, or FDI will eventually end. The true source of development is value creation by human capital (skills, technology). Policies and institutions must promote human capital accumulation.
- Such policies are possible even under globalization. But they are different from past policies. I call it “proactive industrial policy.”

### Stages of Catching-up Industrialization



## Different Speeds of Catching Up

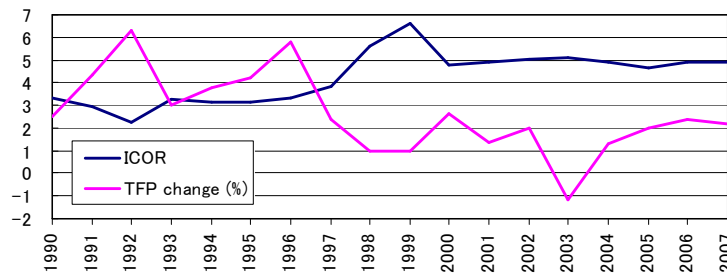
**Per capita real income relative to US**  
(Measured by the 1990 international Geary-Khamis dollars)



Sources: Angus Maddison, *The World Economy: A Millennium Perspective*, OECD Development Centre, 2001; the Central Bank of the Republic of China; and IMF *International Financial Statistics* (for updating 1998-2006).

## Vietnam's Challenge

- Thanks to Doi Moi and large inflows of FDI and ODA, Vietnam has reached lower middle income (pc GDP of \$1,200 in 2010). But policies to upgrade human capital are not yet established.
- Vietnam does simple assembly with unskilled labor. FDI will leave and de-industrialization will occur as wages rise and integration deepens. Without domestic value creation, Vietnam will surely face a middle income trap.





## **Proactive Industrial Policy: Seven Required Features**

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1. Strong commitment to global integration and private sector driven growth
2. A wise and strong government guiding private sector
3. Securing sufficient policy tools for latecomer industrialization
4. Constant policy learning through concrete projects and programs
5. Internalization of skills and technology as a national goal
6. Effective public private partnership
7. Collection and sharing of sufficient industrial information between government and businesses



## **Information Collection and Policy Learning**

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- Proactive industrial policy is practiced widely, especially in East Asia.
- Policy menu for enhancing industrial capability is common. But selectivity and adjustments are needed to fit unique features of each country.
- Detailed information should be collected on industrial policies of other countries.
- Policy scope should be expanded in steps as policy capability is increased.

## Adopting Standard Policy Sequence

### Vietnam should:

- Establish a technocrat team under PM
- Select a few strategic issues for policy enhancement
- Assign teams or agencies
- Collect detailed policy information from neighboring countries
- Draft master plans with stakeholders
- Allocate sufficient staff and budget
- Monitor progress and make adjustments

## Common Policy Menu for Industrial Capability Enhancement

### Policy content & policy organization

Vision-Plan-Action

Ministries & agencies

### Enhancing industrial human and enterprise capability

Policy framework

Human capital

Enterprise support

Finance

FDI/cluster policy

Business linkage

Infrastructure (power & transport)

Comprehensive regional development

## Strategic Issues for Upgrading Vietnam's Industrial Policy

### Frameworks:

- Legal and policy framework
- Policy documents
- Policy making organizations

### Contents:

- Management & technical education and training
- Quality, productivity, *kaizen*
- *Shindan* and *shindanshi*
- SME finance
- Priority sectors and investment incentives
- Industrial parks and rental factories
- FDI-local linkage

**SME or SI policy can cover most of these issues**

## Thailand: Supporting Industry Master Plan 1995

Proposed program	Outcome
<b>1. Policy &amp; legislation</b> 1.1. Basic law of SME development 1.2. Law of subcontracting promotion 1.3. Restructuring of DIP for SME & SI promotion 1.4. Preparation of industrial statistics (SI database)	<b>1.</b> 1.1. SME Promotion Act 2000 1.2. (no action) 1.3. Establishment of DSIP & OSMEP 1.4. n.a.
<b>2. Market development (Linkage)</b> 2.1. Expansion of BUILD activities 2.2. Subcontracting assistance program	<b>2.</b> 2.1. BUILD (1993-1997) 2.2. NSDP (1994)
<b>3. Technology upgrading</b> 3.1. Technology extension service program (shindanshi sys.) 3.2. Expansion of occupational skill standard system 3.3. Public technical center activation program 3.4. Joint industry-university training schools	<b>3.</b> 3.1. (no action) 3.2. (no action) 3.3. TAI, TGI, etc. 3.4. TNI, TGI, etc.
<b>4. Financial support</b> 4.1. Improvement of SME financing schemes 4.2. Assistance for SME in machinery leasing	<b>4.</b> 4.1. SME Bank, loan agent network 4.2. Credit guarantee, machine fund
<b>5. Upgrading of management</b> 5.1. Entrepreneur re-education program 5.2. Continuation of technopreneur development project	<b>5.</b> 5.1. TNI, TGI, etc. 5.2. n.a.
<b>6. Investment promotion</b> 6.1. Grouped investors attraction program 6.2. Entrepreneur incubation program 6.3. Assistance for new comers penetration	<b>6.</b> 6.1. Amata Industrial Estate 6.2. OSMEP 6.3. OSMEP

## Vietnam's Supporting Industry Action Plan Proposed by Japan (June 2009)

- Vietnam's action and Japan's support are specified in parallel.
- Short-term (mid 2010), medium-term (end 2011), long-term (end 2015).

Policy framework	Definitions of SI, award system, inter-ministerial mechanism, SME laws, etc.
Human resource	Pilot TVET projects for engineers & managers, skill certification system, monozukuri university, etc.
Finance	Low-interest loans, subsidies, tax exemption, shindan system, etc.
FDI marketing	Investment seminars, SI industrial parks, linkage between FDI and locals, etc.
Business linkage	SI database, trade fairs, industry associations, etc.

## Policy Hierarchy

	Description	Examples
<b>Vision</b>	-Slogan -Short and Vague	-Vision 2020 (Malaysia) -Detroit of Asia (Thailand) -Industrialization & Modernization by 2020 (Vietnam)
<b>Strategy</b>	-Document specifying goals, roadmaps, policy measures -Scope & detail depend on each case	-Industrial Master Plan (Malaysia) -Automotive Master Plan Main Text (Thailand) -e-Japan Strategy -Industrial Cluster Plan (Japan)
<b>Action plan</b>	-Document, action matrix, formal/informal mechanism, or ongoing process	-Automotive Master Plan Action Tables (Thailand) -Vietnam-Japan Joint Initiative -Triangle of Hope Project (Zambia)
<b>Review &amp; Adjustment</b>	-Numerical monitoring, document report, organizational review, or no formal review	-Interim & final review by joint committee (VJJI, ToH Zambia) -Industry specific committees (Thailand)

## Typical Structure of an Industrial Master Plan

<b>Vision</b>	Importance, role, orientation, and positioning of industry in national development
<b>Targets</b>	Long- and medium-term numerical and/or qualitative targets
<b>Situation analysis</b>	Current status, potentials and obstacles of the domestic industry in the national, regional and global context; tables and graphics for data, surveys, international comparisons, etc.
<b>Policy issues</b>	A small number of selected issues should be identified, prioritized, and analyzed in preparation for designing policy action
<b>Action plan or action mechanism</b>	<p>A large matrix that pre-specifies actions, sub-actions, expected output, success criteria, deadlines, and responsible organizations; procedure for monitoring and reporting should also be specified.</p> <p>Alternatively, a monthly high-level committee chaired by top leader, or a well-focused and well-coordinated budgeting and project approval process may substitute the action plan matrix.</p>

### <Malaysia>

Vision 2020 → IMP → OPP/Malaysia Plan → Budget  
 “Become fully (15 yrs) (5-10 yrs) (annual)  
 developed” 1991

### <Thailand under Thaksin> (2001-06)

PM’s vision → Auto Master Plan → Action Plan Matrix  
 Become Business-MOI-experts agree on  
 “Detroit of Asia” targets for car/motorcycle production & export

### <Ethiopia>

ADLI → Ind.Dev.Strategy → M/Ps → Exp.St.Committee  
 1994 2002:policy principles Leather/garment/flower/  
 food processing

### <Vietnam>

Goal 2020 → Overall industrial M/P? → Action Plan?  
 SEDP/SEDS (Does not exist) (Does not exist)



### Action Plan Matrix: Thai Automotive Master Plan

Strategy	Action Plan	Output	Key success indicator	Main resp. org.	Cooperative org.
1.2 Automotive Human Resource Development	3. Automotive training center project	Standardized automotive training center	1. Number of trained persons	TAI	OIB/TAIA/TAPMA/F TI
	3.1 Provide Systematic training to the industry from workers to management level		2. Number of companies sending employees for training		
	3.2 Skill training		3. Increased income of trained persons		
	3.3 Provide training to engineers in the field of advanced engineering and specialized technology		4. Cost reduction and profitability		

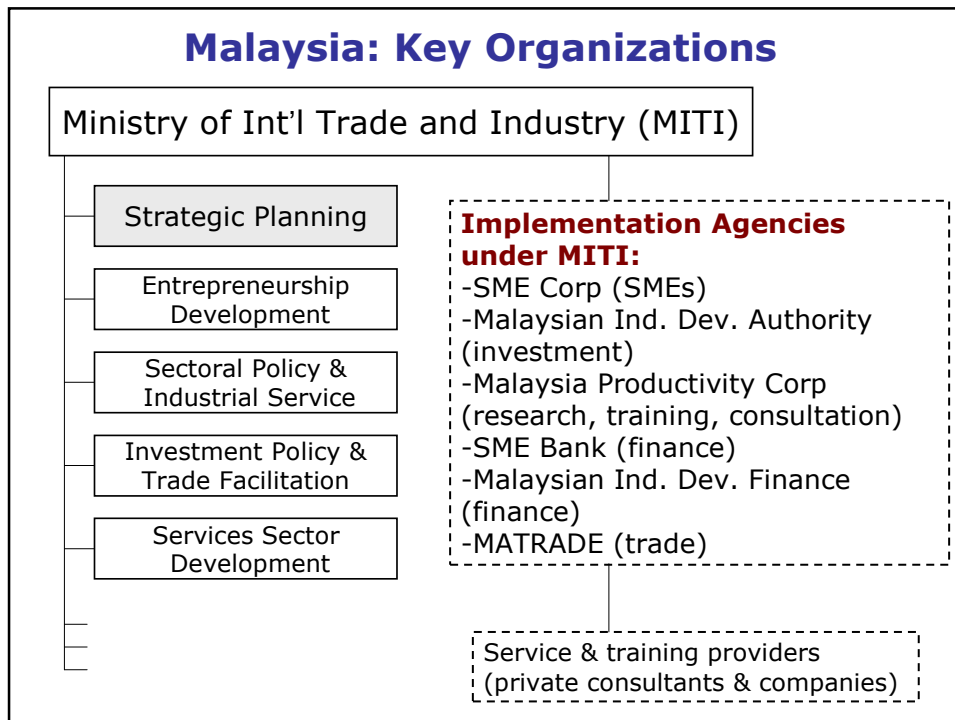
Source: Executive Summary (English), Master Plan for Thai Automotive Industry 2002-2006, page 10.

### Action Plan Matrix: Zambia Investment Promotion

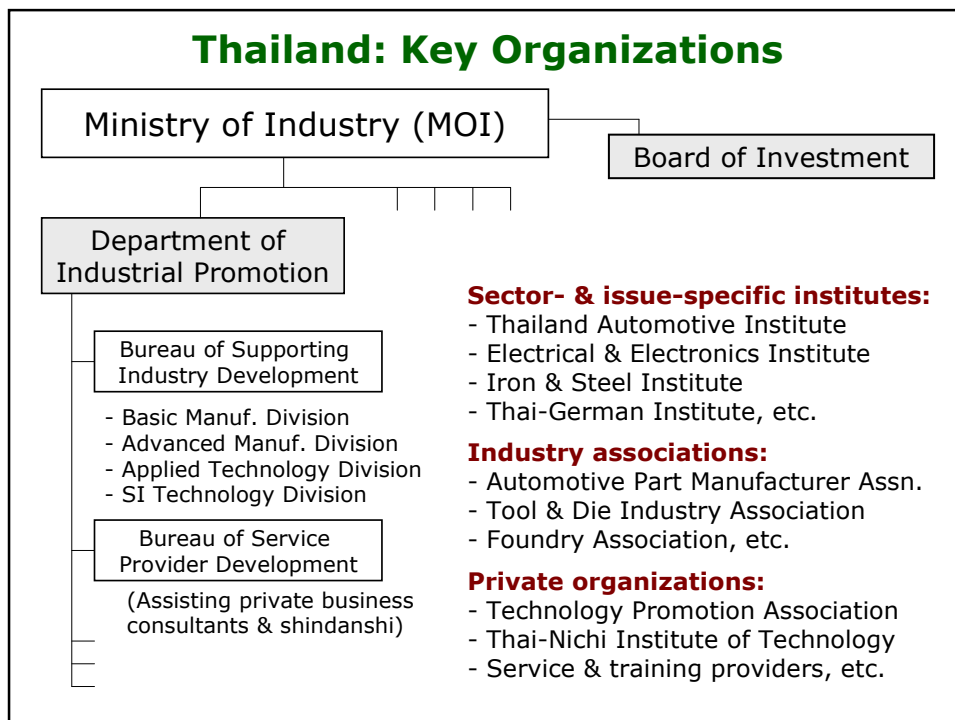
Recommendation (action)	Activities (sub-action)	Status	Expected output	Status	Activity period	Responsibility	Monitoring indicator
Promote investment in cotton production by allocating land to appropriate producers	1. Identify land to be held in MACO trust	Little progress	Land for cotton production identified and secured	Not yet started	Jun. 2007	MACO (main), MoL (sub)	Monthly report
	2. Write to MoL for title deed	Not yet started					
	3. Develop adm mechanism for farm blocks	Done					

Triangle of Hope Project, Zambia, 2007 (excerpts)

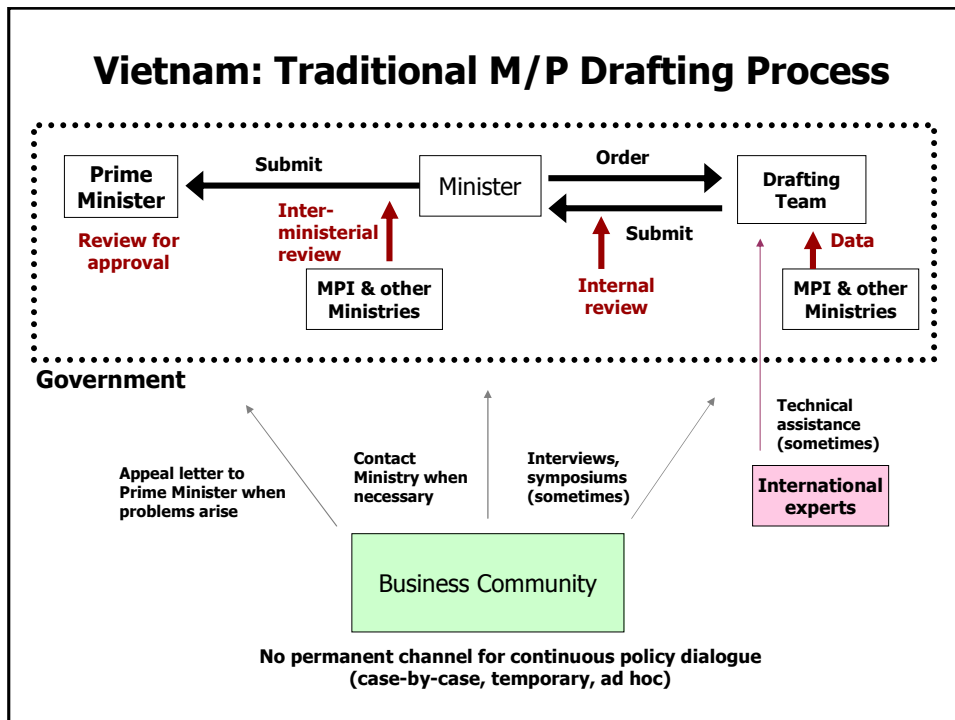
## Malaysia: Key Organizations



## Thailand: Key Organizations



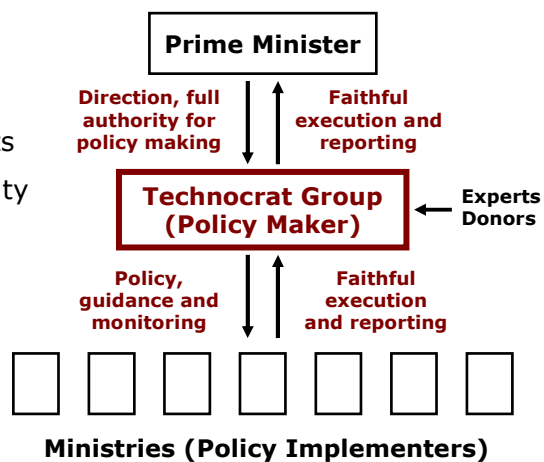
## Vietnam: Traditional M/P Drafting Process



## My Recommendation for Vietnam

- Elite technocrat group under strong leadership of Prime Minister
- Choose young, well educated officials & experts
- Streamline policy authority and procedure

Korea – Econ. Planning Board  
 Malaysia – Econ. Planning Unit  
 Thailand – NESDB  
 Taiwan – Kuomintang Elites  
 Indonesia – “Berkeley Mafia”  
 Chile – “Chicago Boys”  
**So why not Vietnam also?**



## Recommendations for MOIT

- MOIT's main industrial responsibilities should shift from sectoral management to cross-sectoral issues such as TVET, SMEs, supporting industries, enterprise support, quality & productivity, marketing, IPR, competition, and standards & testing.
- SME policy should be under MOIT, not MPI (ASMED/EDA).
- Supporting industry department/agency should be created within MOIT (not in IPSI).
- Master plan drafting capability must be enhanced.  
 → To achieve these, MOIT's capability must be greatly strengthened.

## Capacity Building and TVET (Thailand)

Organization	Period	Remark
King Mongkut's Institute of Technology	1961-	Top-level university in engineering, esp. ICT
Technology Promotion Association (TPA)	1973-	Training, consultation, publication, language
<i>Shindanshi</i> (business consultant) program	1999-2004	450 SME consultants produced
Automotive Human Resource Development Program	2006-2010	Various assistance by Denso, Honda, Nissan and Toyota
Thai-German Institute	1999-	Technical training in CNC, CAD/CAM, mould & die, etc.
Thai-Nichi Institute of Technology (TNI)	2007-	Private university to teach Japanese style production in theory & practice

## Investment Incentives (Malaysia)

- Malaysian Industrial Dev. Authority (MIDA) centrally approves investment licenses and incentives (no delegation of authority to local level).
- Incentives have two basic forms:
  - { Pioneer Status (corporate income tax exemption)
  - { Investment Tax Allowance
- Incentive approval:
  - Activity or product must be in the priority list
  - Review by relevant industry division followed by MIDA Weekly Action Committee
  - Criteria: value creation, innovation, linkage

## MIDA: Structure of Incentives

1. Manufacturing
2. Agriculture
3. Biotechnology
4. Tourism
5. Environment
6. R&D
7. Medical device
- ...
18. Other

- 1. Main**
2. Relocation
3. High-tech companies
4. Strategic projects
5. SMEs
6. Industrial linkages
7. Machinery & equipment
8. Auto component modules & systems
9. Oil palm biomass
10. Other (7)

## Eligible Items (Manufacturing Main)

<p>I. Agricultural production (20)</p> <p>II. Processing of agricultural produce (15)</p> <p>III. Forestry &amp; forestry products (3)</p> <p>IV. Manufacture of rubber products (7)</p> <p>V. Manufacture of oil palm products &amp; their derivatives (10)</p> <p>VI. Manufacture of chemicals &amp; petrochemicals (16)</p> <p>VII. Manufacture of pharmaceutical &amp; related products (6)</p> <p>VIII. Manufacture of wood &amp; wood products (6)</p> <p>IX. Manufacture of pulp, paper &amp; paperboard (11)</p> <p>X. Manufacture of textiles and textile products (10)</p>	<p>XI. Manufacture of clay-based, sand-based &amp; other non-metallic products (34)</p> <p>XII. Manufacture of iron &amp; steel (12)</p> <p>XIII. Manufacture of non-ferrous metals &amp; their products (10)</p> <p><b>XIV. Manufacture of machinery &amp; machinery components (10)</b></p> <p><b>XV. Manufacture of transport equipment, components &amp; accessories (29)</b></p> <p><b>XVI. Supporting products/activities (17)</b></p> <p><b>XVII. Manufacture of electrical and electronic products &amp; components and parts thereof (19)</b></p>	<p><b>XVIII. Manufacture of professional, medical, scientific &amp; measuring devices /parts (6)</b></p> <p><b>XIX. Manufacture of photographic, cinematographic, video &amp; optical goods (4)</b></p> <p><b>XX. Manufacture of plastic products (7)</b></p> <p>XXI. Miscellaneous (25)</p> <p>XXII. Hotel business &amp; tourist industry (6)</p> <p>XXIII. Film industry (2)</p> <p>XXIV. Manufacturing related services (9)</p> <p>XXV. Manufacture of kenaf based products (1)</p> <p>XXVI. Protective equipment &amp; devices (3)</p>
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## Eligible Items - Detail (XVI. Supporting Products/Activities)

### XVI. Supporting products/activities

- |   |   |
|---|---|
| <p>1. Metal casting</p> <p>2. Metal forgings</p> <p>3. Metal surface treatment/finishing</p> <p>4. Machining</p> <p>5. Moulds, tools and dies</p> <p>6. Powder metallurgical parts (sintering of metal parts)</p> <p>7. Heat treatment</p> <p>8. Mould texturing</p> <p>9. Irradiation service</p> <p>10. Gas sterilization service</p> <p>11. Overhaul, repair, reconditioning, modification or servicing and testing of turbine engines</p> | <p>12. Advanced composite materials</p> <p>13. Mould designing</p> <p>14. Advanced surface treatment or finishing for precision engineering plastic parts</p> <p>15. High purity gas piping system system &amp; parts thereof</p> <p>16. Metal stamping (*)</p> <p>17. Galvanizing, shearing or slitting of metal sheets or other related engineering services (*)</p> <p>(*) -- Incentives provided in promoted areas only (Sabah, Sarawak, Perlis, Kelantan, Terengganu, Pahang &amp; the district of Mersing in Johor)</p> |
|---|---|

## Business Matching and Linkage

Malaysia	Thailand
<p>Vendor Development Program (1988-1996)</p> <p style="text-align: center;">↓</p> <p style="color: red;">Industrial Linkage Program (1996-)</p> <ul style="list-style-type: none"> <li>1. Financial incentives</li> <li>2. Business matching</li> <li>3. Support package (R&amp;D, technology, marketing, etc.)</li> <li>4. Allowances for anchor firms (assemblers) providing training &amp; TA for SMEs</li> </ul> <p>Eligibility – SMEs with 60% or more Malay capital</p>	<p style="color: red;">BOI Unit for Industrial Linkage Development (BUILD, 1992-)</p> <ul style="list-style-type: none"> <li>1. Vendor-meet-customers (BOI intermediates anchor firms &amp; vendors)</li> <li>2. Marketplace (monthly meetings of anchor firms &amp; vendors)</li> <li>3. Sourcing (MNCs present their component needs)</li> <li>4. ASEAN Supporting Industry Database</li> </ul>

## Malaysia: SME Bank Factory Scheme

Location	Factory Scheme	Number of plots	Type					Plot area (sq ft)
			1 floor	1.5 floors	2 floors	Semi-detached	Bangalow	
Kota Bharu	Pengkalan Chepa 1, Kelantan	23	17	6				1,000-1,800
	Pengkalan Chepa 2, Kelantan	20		16		4		4,400-6,500
Kuantan	Bandar Pusat Jengka, Pahang	20	20					900-4,500
	Gebeng II Kuantan, Pahang	20		16		4		4,960-7,300
K. Terengganu	Chndering, Kuala Terengganu	26		26				1,800
	Kampung Raja, Besut, Terengganu	15	15					1,800-2,700
	Mergong Barrage, Alor Star, Kedah	17	17					1,800
Alor Setar	Sungai Petani, Kedah	18				16	2	3,500
Johor Bahru	Tampoi, Johor Bahru, Johor	22	22					1,800
	Sri Gading II, Batu Pahat, Johor	20		16		4		4,200-6,250
Ipoh	Menglembu, Perak	29				29		1,750
Seremban	Seremban, Negeri Sembilan	22				22		1,690
Bandar Bayan Baru	Seberang Prai, Pulau Pinang	17		17				1,800-3,200
	Simpang Ampat, Pulau Pinang	12				12		3,000
	Bayan Lepas, Pulau Penang	4		4				2,303
Kangar	Kuala Perlis, Perlis	15		11		4		1,800-3,200
Bandar Melaka	Telok Mas, Melaka	18		18				1,800-3,200
Shah Alam	Shah Alam, Selangor	38		38				2,000-5,040
	Sungai Buloh, Selangor	3			3			4,500
	Sunway Damansara, Selangor	14				14		3,700-4,800
Kuala Lumpur	Batu Caves, Selangor	23		23				3,336-4,410
Kota Kinabalu	Lak Kawi, Sabah	15		15				2,500
Kuching	Kota Padawan, Kuching, Sarawak	6				6		2,275
	Muara Tabuwan, Sarawak	5				5		3,200-3,800
TOTAL		422	91	206	3	120	2	