

# East Asian Experiences of FDI-Local Firm Linkage Development

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Ethiopia

Malaysia

AMATA Nakorn Industrial Park, Thailand

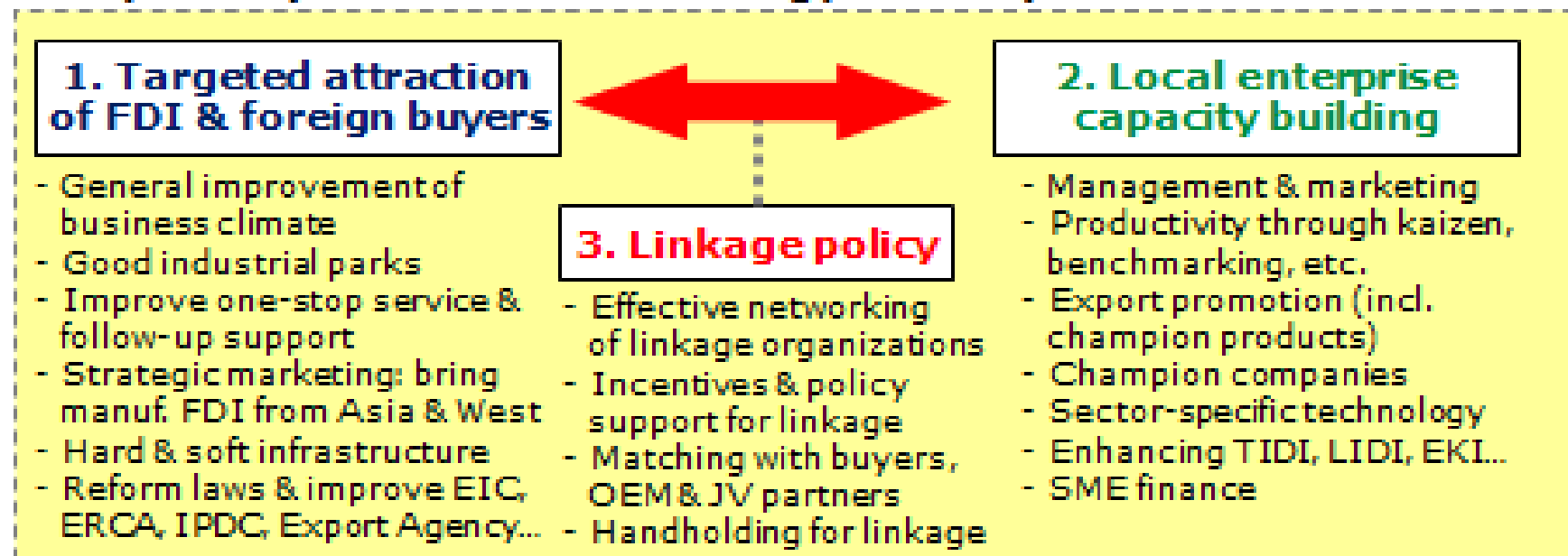
# Five-part Industrialization Strategy for Ethiopia during GTP II

**Manufacturing vision**      Becoming a leader in light manufacturing in Africa and one of the leaders in overall manufacturing globally

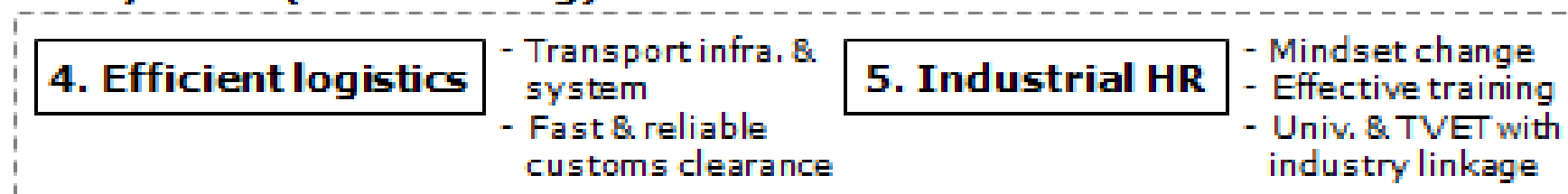
**Manufacturing targets for 2019/20**

- GDP share of 8%
- Export share of 25.6%
- One or two industrial champion products with high VA
- Employment of 758,000
- Quality industrial HR

## Policy areas (for FDI-linked technology transfer):



## Policy areas (cross-cutting):



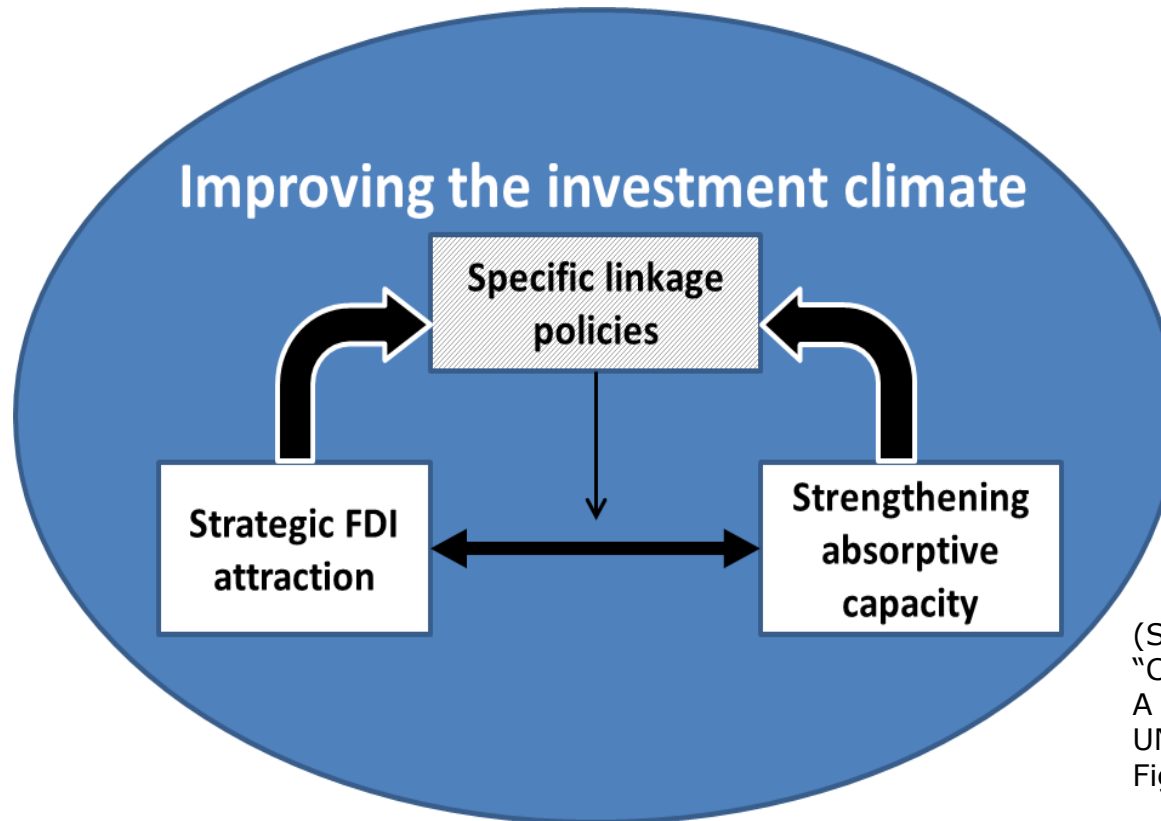
# Topics

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1. Policy framework and core elements of linkage programs
2. East Asian experiences of FDI-local firm linkage development (linkage with manufacturing FDI)
  - Malaysia—systematic approach
  - Thailand—network-based approach
  - Private sector initiatives
3. Other example (linkage with extractive FDI)
  - Mozambique—donor & FDI supported programs
4. Lessons and recommendations for Ethiopia
  - A proposal for a pilot handholding program for linkage development

# 1. Policy Framework and Core Elements of Linkage Programs

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(Source) UNCTAD (2010),  
"Creating Business Linkages:  
A Policy Perspective."  
UNCTAD/DIAE/ED/2009/1.  
Figure 1, p.14

Two types of linkage policy: (i) linkage promotion itself; and (ii) building local capability (so that local firms can participate in the linkage). These two components are often integrated.

# Core Elements of Linkage Programs

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- ❑ **Strategic FDI attraction**
  - Inviting a critical mass of targeted FDI to form an industrial cluster which can create real opportunities for local suppliers.
- ❑ **Local enterprise capacity building**
  - Putting in place supporting mechanism to help potential local firms overcome supply-side constraints and achieve the standards required to become suppliers to FDI and/or large companies (quality, performance, delivery, compliance, etc.).
  - Creating a pool of qualified local firms capable of supplying the goods and services that meet FDI requirements.
- ❑ **Linkage development**
  - Building an effective selection and matching mechanism to link potential FDI and local firms.

## 2. East Asian Perspectives: Forging Linkage for Competitiveness

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- Linkage policy differs greatly between countries receiving large amounts of manufacturing FDI (East Asia) and countries receiving mainly extractive, construction or service FDI (resource-rich countries in Africa & others).
- In East Asia, linkage is normally defined as input-output (upstream-downstream) relationship in the **manufacturing** process on a **commercial, competitive basis**. Linkage policy mainly target this.
- Spillover and learning from FDI do not occur spontaneously; it must be generated **by serious management effort** (by the local private sector) and **appropriate policy** (by the host-country government).
- Forging linkage for competitiveness and local capability is a standard way to learn technology and skills. It is a good entry point which can cover many policy areas.

## 2-1. Malaysia: Systematic Approach to FDI-Local SME Linkage Development

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- The Malaysian govt. implemented two major linkage programs from late 1980s to early 2000s.
- A lead agency was assigned for both business matching and SME capacity development. [cf. FDI attraction has been handled by MIDA, affiliated with MITI].
  1. **Vender Development Program** (VDP: 1988-97), implemented by MITI
  2. **Industrial Linkage Program** (ILP: 1997-early 2000s), implemented by the **Small and Medium Industry Development Corporation (SMIDEC)**, established in 1996) affiliated with MITI
- Today, Malaysia no longer gives policy attention to FDI-local SME linkage development (more emphasis on creation of innovative SMEs).

# Malaysia: Vendor Development Program (VDP)

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- **VDP** was introduced in 1988 to strengthen business linkage between PROTON (national car company, as "anchor firm") and local Malay component suppliers ("vendors").
- The anchor firm was required to do the following:
  - Purchase as many components as possible from eligible vendors
  - Provide technical assistance to vendors
  - Intermediate government loans to vendors
- **MITI** acted as the coordinator btw. anchor firms and vendors.
- In 1992, the scope of VDP was expanded to include two electrical and electronics (E&E) firms as anchors, and subsequently more sectors were added.
- VDP achieved certain results; but, some FDI firms were reluctant to participate due to low technical capability of local firms.



# Malaysia: Industry Linkage Program (ILP)

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- **ILP** was introduced in 1997, replacing VDP, to implement cluster-based industrial development (IMP2: 1996-2005) and encourage FDI firms to deepen sourcing from local firms. [Unlike VDP, ILP extended support to non-Malay SMEs.]
- **SMIDEC** administered and coordinated the program:
  - Targeted at E&E, transport equipment machinery and engineering, and resource-based manufacturing SMEs.
  - SMEs must manufacture items in the “Promoted List” and supply to lead companies.
  - Lead companies can claim expenses incurred in developing SMEs, including training, factory auditing, and TA to ensure the quality of vendors’ products.

# Malaysia: Industry Linkage Program (ILP)

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- Assistance provided under the ILP:
  - Fiscal incentives (for lead companies) – Pioneer Status with 100% tax exemption for 5 years, or Investment Tax Allowance of 60% on qualifying capital expenditures incurred within a period of 5 years
  - Business matching
  - Various support package (for local SMEs) – technology development, skills upgrading, export & market development, provision of SME industrial sites, etc.
- SMIDEC launched a series of programs for local SME capacity development:
  - Global Supplier Program (GSP) (→see next slide)
  - Factory Audit Scheme
  - Annual Showcase
  - The Enterprise 50 Program
  - SME Expert Advisory Panel, etc.



# Global Supplier Program (GSP)

<b>Goal</b>	Proactive approach by government to further enhance the capacity and capability of SMEs to provide world-class service and products to large corporations in their operations worldwide. Focus on reducing cost and cycle time.
<b>Assistance</b>	The GSP involves: <ul style="list-style-type: none"><li>– Training in critical skills</li><li>– Linkages with large companies/MNCs</li><li>– Certification of product</li></ul>
<b>Delivery</b>	Example: Tesco as a Customer <ul style="list-style-type: none"><li>– SMIDEC actively promotes links between Tesco and SME by providing funding for certification of product and technology to link to Tesco's supplier systems.</li><li>– Grant for Productivity and Quality Improvement and Certification (Matching grant max. RM 250,000)</li><li>– Grant for Product and Process Improvement (Matching grant max. RM 500,000)</li><li>– Factory Auditing Scheme (Diagnostic audit for SMEs with potential to be linked to MNCs under ILP)</li></ul>

Source: UNCTAD (2010), Table 8 in Chapter IV, p.87.

Note: RM stands for Malaysian Ringgit. 1 RM is equivalent to 28 Japanese Yen (as of Dec. 23, 2015).

# Private Sector: Penang Skills Development Centre (PSDC)

<http://www.psdc.org.my>



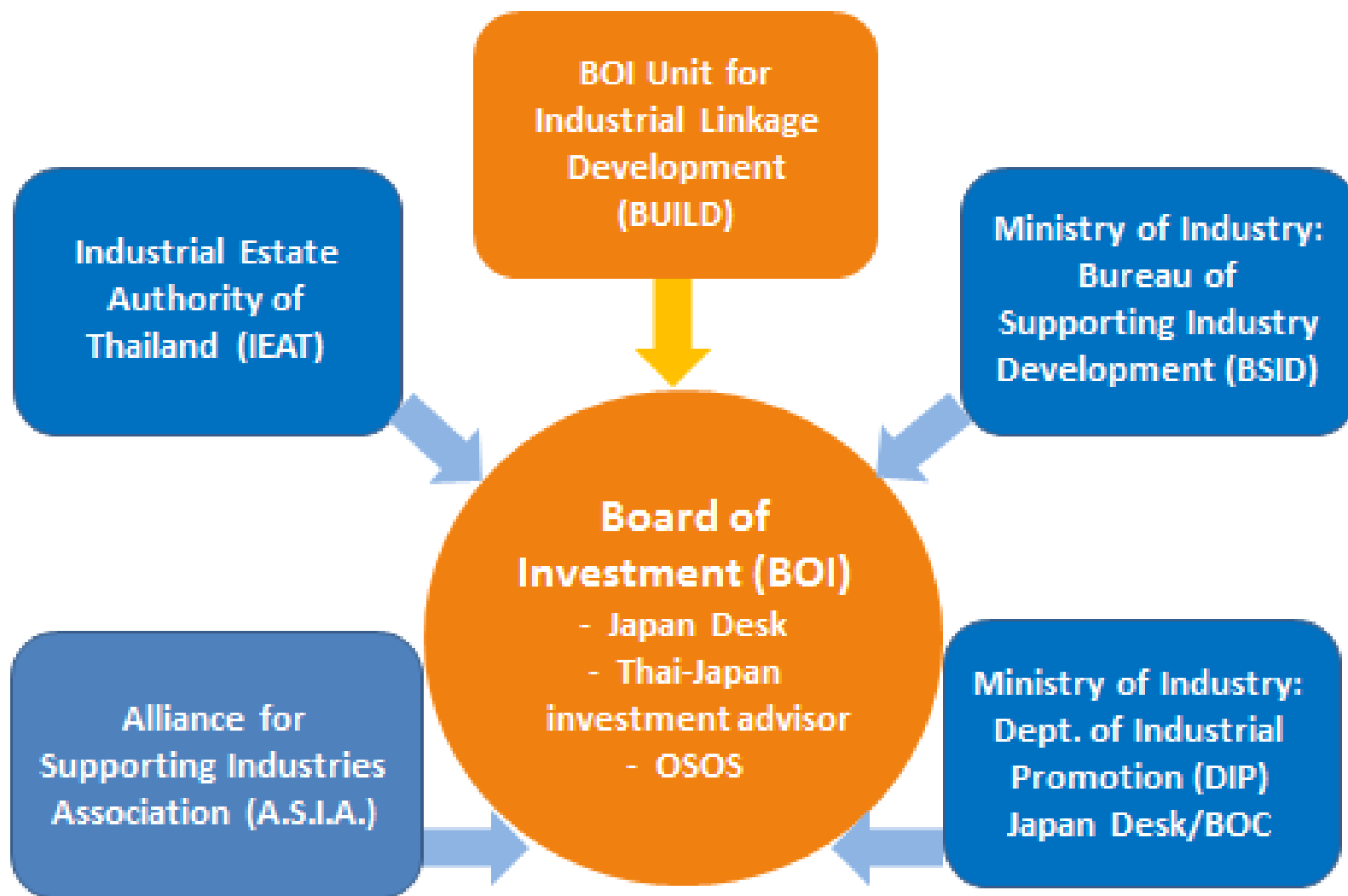
- Penang Skills Development Centre (PSDC) is a NPO established in 1989, with strong involvement of FDI firms (esp. American manufacturers).
  - Management Council, consisting mainly of FDI representatives; day-to-day operations are fully localized
  - Two types of training: (i) ad hoc training programs; (ii) targeted business deals with FDI firms to upgrade a selected group of local suppliers
  - Content of training programs designed by FDI representatives
  - Training participants selected by the criteria decided by FDI firms
- Tripartite partnership model: industry, govt. & academia
  - Federal govt. provided the initial set-up and equipment grants, while State govt. subsidized land and infrastructure.
- Currently, PSDC pools resources of 4 FTZs and 4 Industrial Estates in Penang
  - 775 factories, employing more than 170,000 workers
  - Providing up-to-date training and educational programs

## 2-2. Thailand: Network-based Linkage Promotion System

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- In Thailand, two agencies coordinate investment promotion and linkage network:
  1. BOI (Board of Investment) under PMO—**BUILD (BOI Unit for Industrial Linkage Development)**
  2. MOI (esp. Dept. of Industrial Promotion)—promoting “supporting industries (SI)” through **BSID (Bureau of Supporting Industries Development)**, sector-specific technical institutions, and industrial associations.
- In addition, there are NPOs engaged in local skills development and FDI-Thai firms matching.
- Unlike Malaysia, the Thai govt. continues to attach high priority to FDI-linked SI development.

# Thailand: Linkage Policy Network



Source: BOI presentation (May 2013)

Note: This network was created when the BOI was placed under the MOI at the time of former Prime Minister Yingluck Shinawatra.

# BOI-BUILD

<http://build.boi.go.th>



- ❑ As an investment promotion agency, BOI (under PM's Office) is the first contact point for foreign investors.
- ❑ **BUILD** was established in 1992 within BOI. It receives inquiries from FDI and finds local firms.
- ❑ BUILD has one director and ten BOI staff, with each staff assigned to a number of inquiries.
- ❑ BUILD activities include:
  - Sourcing services, free of charge (→see next slide)
  - SUBCON Thailand (large annual SI trade fair)
  - ASEAN Supporting Industry Database
  - Vendor-Meet-Customers Roadshow (subsidizing Thai firms to attend overseas trade exhibitions)
- ❑ Partner search (JV, OEM, etc.) is more difficult than local procurement. It may take more than a year.

# BUILD: Sourcing Services

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- BUILD provides free services to both Thai and foreign buyers source parts and components in Thailand.
  - When an inquiry is received from a buyer, BUILD identifies potential local suppliers that meet the buyer's requirements.
  - Normally, BUILD announces the specification and volume requirements of foreign buyers in the website and solicits expression of interest from Thai suppliers.
  - One-on-one meetings can also be arranged for a buyer to discuss individually with each potential buyer.
  - There are various channels through which BUILD receives inquiries from foreign buyers (including the One Start One Stop Investment Center, overseas offices of BOI).





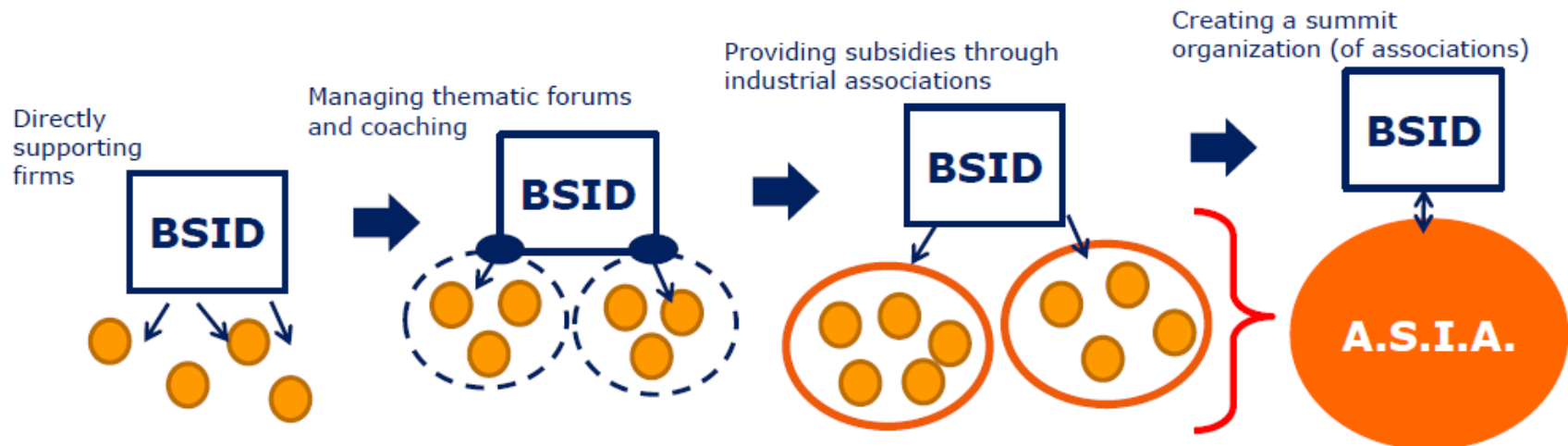
# MOI-BSID

## Step by Step Approach to SI Development

- ❑ **BSID**, under **Dept. of Industrial Promotion (DIP) of MOI**, is responsible for SI development.
- ❑ BSID was established in 1996, by upgrading the Metal-working and Machinery Industries Development Institute (MIDI). JICA supported MIDI capacity building.
- ❑ When the number of SI firms was limited, BSID directly provided technical & managerial support to individual companies. Private consultants (Kaizen, Shindan experts, etc.) were also nurtured with Japanese JICA & others' support.
- ❑ When the number of SI firms grew (to approx. 1,000), BSID established and managed **thematic forums** of SI (design, metal, machinery, foundry, etc.), serving as their coach and secretariat.
- ❑ Gradually, these forums have gained experience and developed into truly privately-run **industrial associations**.

# BSID: Step by Step Approach to SI Development (cont.)

- ❑ As Thai industry grew and private consultants increased, BSID's role shifted from direct support to **partial subsidization** of seminars, training, consultancy, projects, etc.
- ❑ Currently, there are 12 industrial associations fostered by BSID. BSID provides subsidies to firms through these associations & federations.
- ❑ Shindan (SME diagnosis & advice) is required before applying for BSID's technical support.
- ❑ Recently, BSID created the **Alliance for SI Associations (A.S.I.A.)** as a summit organization.



# Thailand Automotive Institute (TAI)

[www.thaiauto.or.th](http://www.thaiauto.or.th)

- ❑ TAI was established in 1998, an NPO with both private & gov't funding initially. It now receives no gov't money (except occasional projects). It has about 120 staff.
- ❑ It is a hub of policy design and implementation linking local and FDI firms, MOI (esp. BSID) and related ministries, and universities. It drafts an automotive master plan every five years synchronized with the five-year plan.
- ❑ TAI also provides training and testing services.
- ❑ TAI is located in Kongtoey, Bangkok where many other institutes (affiliated with BSID) are also located.

## Presidents

Vallop Tiasiri  
(1999-2012)



Patima Jeerapaet  
(2012-2015)



Vichai Jirathiyut  
(2015-)



# Private Sector: TPA & TNI

- ❑ **Technology Promotion Association** (TPA) is a Thai NPO established in 1973 by Thai people who studied engineering in Japan. TPA has conducted courses in Japanese management, technology & language for 43 years.
- ❑ It also offers consultation & calibration services; and recently, started business matching btw. Thai & Japanese SMEs.
- ❑ In 2007, TPA created **Thai-Nichi Institute of Technology** (TNI), a private Thai university dedicated to Japanese-style manufacturing. TNI works closely with Japanese FDI (recruitment, internship, scholarship, training, instructor dispatch, etc.)

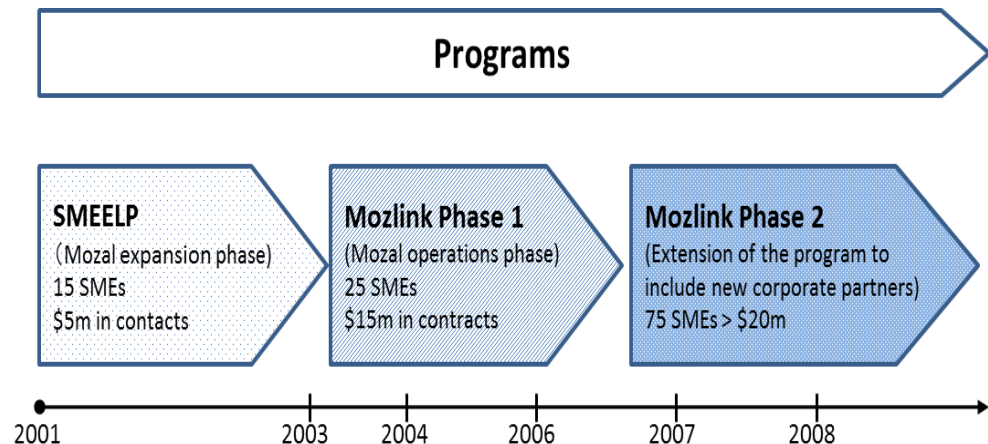


# Thailand: FDI-Local Firm Linkage Promotion

Organization	Status	Functions
<b>BUILD</b> (BOI Unit for Industrial Linkage Development)	One unit of the Board of Investment (central FDI agency); estab.1992.	FDI-Thai firm matching (e.g., sourcing services, Vendors Meet Customers program, supplier database, annual subcontracting exhibitions)
<b>DIP</b> (Dept. of Industrial Promotion), MOI	Ministry of Industry	Design policies; monitor implementation and analyze performance
<b>BSID</b> (Bureau of Supporting Industries Development), DIP/MOI	Ministry of Industry; one technical bureau of DIP; estab.1996	Provide technical support & training to Thai supporting industries; develop prototype products; promote subcontracting, shindan, and industry associations
<b>TAI</b> (Thailand Automotive Institute)	NPO; estab.1998 by MOI; but now self-financing	Automotive policy research and master plan drafting; promote supporting industry clustering; export promotion; automotive testing center
<b>A.S.I.A.</b> (Alliance for Supporting Industries Association)	Private; a collection of 12 Thai industrial associations	Information exchange, technology learning, and receiving policy support for member associations and firms, coached by BSID/MOI
<b>TPA</b> (Technology Promotion Association)	Private NPO; estab.1973 by Thai alumni who studied engineering in Japan.	Offer technical & management courses; conduct business consultation; publish & translate books; teach Japanese language (all fee basis)
<b>TNI</b> (Thai-Nichi Institute of Technology)	Private university; estab. 2007 by TPA	Teach Japanese style manufacturing in both theory & practice; active cooperation with Japanese FDI
<b>Japan Desks</b> (two desks at BOI and DIP/MOI)	BOI and MOI; staffed by Japanese experts	Appointments, events, and logistic support for Japanese SMEs and local govts' visiting Thailand for business partnership

# 3. Mozambique: Donor & FDI-Supported Linkage Programs

- A pilot linkage project (1998- )—the construction phase of the Mozal Aluminum Smelter Project, jointly by the Moz govt., IFC & Mozal (→ mixed result due to weak local SMEs).
- **The SME Empowerment and Linkages Program (SMEELP) & the Mozambique SME Linkage Program (Mozlink I)**—the expansion and operational phases of the Mozal project, supported by IFC, WB & Mozal.
- **Mozlink II**—more corporate partners (Sasol, Coca-Cola, SAB Miller/CDM), supported by IFC & the Dutch govt.



Source: BHP Billion (n.d.)

# Mozambique: Donor & FDI-Supported Linkage Programs

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- **Investment Promotion Centre (CPI)** under the Ministry of Planning and Development was charged with these linkage programs.
- Key components of **SMEELP** (2001-03):
  - Reserving 30 tenders exclusively for local firms
  - Pre-assessment of local SME capabilities
  - Training programs before and after tenders for local suppliers
- **Mozlink I** (2003-07): largely the replication of SMEELP, focusing on the Mozal project.
- **Mozlink II** (2007-10): aimed to integrate linkage processes among 4 corporate partners and facilitate critical information flows btw. SMEs, industry, govt., and new markets.

# Challenges Faced with Mozambican Linkage Programs (from USAID report 2012)

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- ❑ Linkage program is not yet internalized or systematized within the Moz govt. (-- largely relying on external advisers for enterprise diagnosis & technical support)
- ❑ Regarding Mozlink II, each linkage program was implemented separately by FDI project with different external funding sources. The govt. needs to develop a common platform to work with foreign investors.
- ❑ There is a sign of declining commitment by the FDI side —as the number of FDI partners increased and the industry sectors became diversified.
- ❑ The linkage program managed by **CPI** needs to be coordinated and complemented by the govt's SME program, which started recently with the creation of **the Institute for Promotion of SME (IPEME)** under the Ministry of Industry and Commerce.

(Source) USAID (2012) "Mozambique Business Review: An Overview of Key Experience, Issues, and Lessons" (by DAI and Nathan Associates), and the author's interview at the linkage seminar held in Maputo, co-organized by CPI, NEXCO-West and GRIPS (Nov.8, 2012).



# 4. Lessons Learned

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- Industrial linkage development must have two components:
  - Creating linkages btw. FDI and local firms through various types of business matching programs
  - Capacity building of domestic SMEs
- Malaysia and Thailand have integrated these two components, while Mozambique is still weak in local SME support system.
- Unrealistic demand for technology transfer without promoting local SME capability drives FDI away (e.g., VDP).
- The govt. needs to take a coordinated approach to implement linkage programs. At the same time, there is no single model of institutional arrangements.

# Lessons Learned

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- ❑ Linkage programs can be started with financial & technical support of donors & foreign investors. But, the host-country govt. must make every effort to institutionalize externally-supported programs as country-owned programs (e.g., Mozlink II).
- ❑ NPOs and private organizations can also play an important role in business matching, local enterprise capacity building, and management & technical education and training (e.g., PSDC, TPA/TNI).
- ❑ The Malaysian and Thai models are relatively advanced forms of FDI-local firm linkage development and SI promotion, in comparison with other developing countries. This is the result of decades of efforts made by their public and private players.

# Recommendations for Ethiopia



- ❑ Ethiopia should start a pilot **handholding** program for linkage development, by utilizing the existing industry-related agencies/programs. [Cf. HH = time-bound, comprehensive hands-on support to selected high-potential firms to ensure their success as showcase]
- ❑ Possible actions include:
  - **Prepare a list of competent Ethiopian firms**— component suppliers, producers, and distributors of agro inputs & raw materials, service providers, etc. (This can be an enterprise database or, more informally, prompt and precise information provided collectively by MOI, TIDI, LIDI, MIDI, EKI, EIC, IPDC, etc.)
  - **Establish information referral & matching network** among linkage supporting ministries/agencies.
  - **Establish coordinating mechanism with clear functional responsibilities** among them.

# Recommendations for Ethiopia

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- ❑ Ethiopia should initially target at **light manufacturing & agro-processing FDI** (leather, garment, coffee, sesame, jewelry, horticulture...).
- ❑ Build linkage even with **a small number of FDI**; also, the **size** of FDI firm does not matter; investment by foreign SMEs should be welcomed.
- ❑ Devise “**win-win**” incentive mechanisms for both FDI and local firms—e.g., firms acquiring designated technology or training workers in designated fields can receive matching grants from government.
- ❑ **Build on the programs of existing institutions** (kaizen, TVET, EIC, IPDC, TIDI, LIDI, MIDI ... and new SME Agency) —e.g., EKI/JICA can send a kaizen team to FDI or its partner factory for improvement, or adjust kaizen programs to firms’ requirements.