

**Learning from Best Practices in East Asia:  
Policy Procedure and Organization for Executing Industrial Strategies\***

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Success in industrial policy formulation depends not only on the proper choice of policy measures but also, more fundamentally, on policy procedure and organization from which good policies are produced and executed. This paper will look at institutional aspects of policy making which is an essential background for effective policy learning. The purpose of studying various international best practices in policy procedure and organization, as done below, is basically the same as studying alternative policy measures. Rich foreign examples are to be regarded as building blocks from which a policy package most suitable for the home country should be created through the principles of selectivity, modification, combination, and improvement. Haphazard adoption of foreign models without systematic study of local contexts should be avoided.

### **1. Leadership**

Our discussion starts with national leaders. High-quality leadership is the most vital ingredient of national development, a fact that can hardly be overemphasized. Our discussion of leadership will be brief not because it is unimportant but because I expect the reader to find it too obvious. A good leader is crucial because he or she is the primary driving force of national development that can create all other conditions of industrialization if they are initially missing. Major reforms are not possible by bottom-up processes alone unless the top leader takes up the main responsibility. This principle applies generally to all organizations including a nation, local governments, ministries and agencies, political parties, business firms, universities, research institutions, and NPOs.

A national leader must be equipped with strong will and passion as well as genuine belief in productivity and excellence for the country instead of being interested in personal influence or wealth accumulation. He or she must have sufficient political savvy and networks, personal integrity

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and discipline, intellectual ability, and pragmatism. A top leader must be personally committed to a nation's priority policies and use his or her full power and authority to push them to completion. Without a good national leader, all policy proposals, including this one, will be in vain.

One evident problem with installing a good national leader is that no one can consistently select such a leader in the complex political process of any country. Who will be the next prime minister, president, or party general secretary and how effective these persons will be as national leaders is highly uncertain in advance even among candidates, let alone for individual citizens, officials, or business persons. Yet there are indirect ways to influence the quality of national leaders in the long run. These include leadership and elite education, comparative studies in development politics<sup>1</sup>, systematic and concrete analysis of effective policy making (to which this paper hopes to contribute), regional contagion of good leadership through imitation and competition, and publishing biographies of admirable national leaders. Humans are driven by both reason and emotion. While social sciences should do much to reveal the anatomy of strong and wise leadership, intimate knowledge of what excellent leaders in different countries and periods did, presented vividly and concretely, is certain to raise the consciousness of what needs to be done among citizens and political candidates.

Additionally, interaction between agential and structural factors, or relative weight between producing high-quality leaders and institutionalization of good policies, must be borne in mind. An outstanding leader may rise to propel the nation toward development for a while but he or she will not stay forever. If progress depends solely on effective personal leadership, the whole thing may collapse when a next leader of average quality or less arrives. In order to reduce this risk, good policies started by an excellent leader must be institutionalized. That is to say, staffing, budgeting, policy procedures, and policy organizations must be cemented as much as possible by laws, decrees, and agreed practices among multiple stakeholders. On the part of an incumbent national leader, it is necessary to delegate sufficient authority to various people and organizations as well as work early on the succession problem.

## **2. Policy procedure**

In policy formulation, the procedure by which policy is made is often more important than the final document which is drafted and approved. While all policy documents must be revised and updated as time passes, the process that does the revision can remain and continue to be fortified as experiences accumulate. This process should not be improvised for each occasion or left to a small

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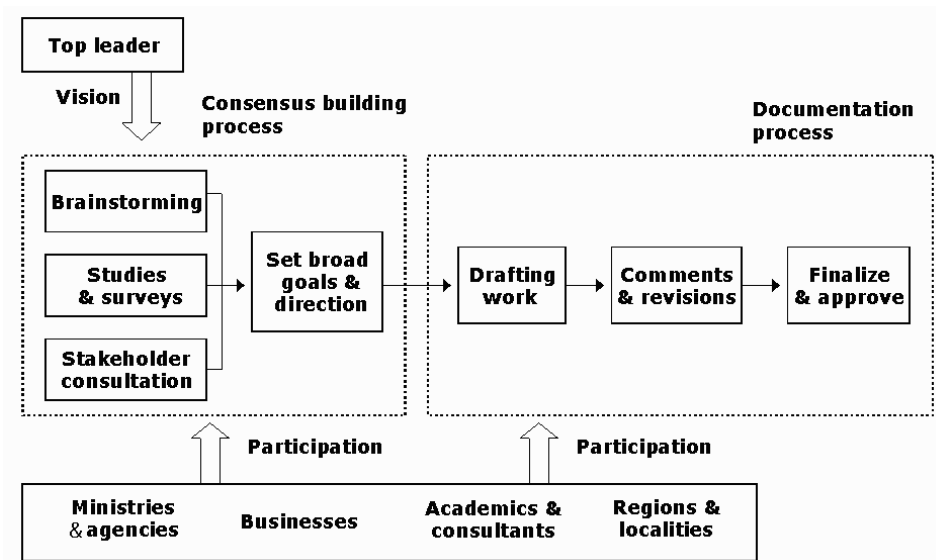
<sup>1</sup> See Leftwich (2009) for a seminal attempt at analyzing the interaction of leaders and elites in forming coalition in the development process.

group of drafters which happen to be assigned to the task. The process must be owned and institutionalized by policy makers even though background studies and drafting can be outsourced after basic goals and directions are laid out.

Policy formulation must begin with the vision produced by the top leader that guides the national development strategy. This vision, which must come from the deep personal conviction of the top leader, needs to be communicated to the people and eventually win their approval through election or other means. It is also the vision by which his or her government is judged. The existence of a seriously committed policy vision is the prerequisite for making any high priority strategy without which policy tends to be *ad hoc*, reactive, and scattered.

After the leader’s vision is provided, the vision must be given more concrete forms in terms of goals, time frame, major directions, and key issues to be overcome through the discussion and agreement among all stakeholders, both government and non-government. When this consensus is formed, drafting work follows. In these processes the two crucial procedural requirements are *inter-ministerial coordination* and *stakeholder involvement*. Figure 1 illustrates the policy making procedure recommended generally for countries in the process of policy learning.

**Figure 1. Standard Policy Making Procedure**



Note: the entire process is coordinated by a lead ministry or agency.

Any vital industrial policy in developing countries—whether it is SME promotion, industrial human resource, quality and productivity movement, or industrial cluster development—normally covers multi-sectoral issues managed by more than one ministry or agency. Thus intra-government

coordination becomes imperative if the policy is to be effectively designed and implemented. A lead ministry or agency must be designated and given a clear mandate to formulate the policy. While the ministry in charge of industry usually takes main responsibility, other ministries in charge of finance, ODA and FDI, education and training, science and technology, transportation, infrastructure, agriculture, urban development, and so on, must also be made to cooperate. Since one ministry or agency is unable to direct or overrule other ministries and agencies horizontally, there should be a higher mechanism that supervises the whole process, gives full authority to the lead ministry or agency, and provides a forum in which multi-sectoral issues are deliberated and solved. Concrete organizational arrangements that ensure this will be the topic of the next section.

Besides cooperation among ministries and agencies, policy making must receive active participation of non-government players. For the purpose of industrial policy formulation, by far the most important players are domestic and foreign firms that carry out investment and production as well as their business associations. Without their willing participation, any industrial policy is doomed to fail. Since not all firms share the same business interests or sectoral goals, a mechanism must also be in place to coordinate various voices among them. In addition, domestic and foreign academics, industrial experts, and consultants should be mobilized for conducting necessary surveys, analysis, and international comparison, as well as drafting and commenting on policy documents as needed. Depending on the issue at hand, residents, user firms, consumers, NPOs, and other stakeholders may also be involved.

It should be stressed that mobilization of non-government stakeholders must be substantial with sufficient time and opportunities provided for contact and input. Nominal participation, such as hearings in which official views are unilaterally communicated or a large-scale symposium where little time is allocated for interaction with the floor, does not contribute much to the betterment of policy formulation. Public-Private Dialogue (PPD) will become an important policy mechanism only when it goes beyond setting a formal framework and begins to incorporate private opinions seriously and effectively into policies.

Many governments in East Asia succeeded in institutionalizing government-business interactions for information sharing and policy coordination (Weiss, 1998; Weiss and Hobson, 1995; Kondo, 2005). Large flows of high-quality information between the two parties contributed to building mutual confidence, credible commitments, and predictability between the public and private sectors. The nature and intensity of government-business coordination have evolved over time as the private sector has improved its capability and graduated from direct public intervention.

Through strong inter-ministerial coordination and stakeholder involvement, all major stakeholders inside and outside the government participate in policy formulation leading to a growing sense of shared ownership and responsibility as well as willingness to cooperate in implementation. This fact is far more important than producing documents which may be comprehensive and theoretically advanced but are not supported by concerned organizations. In the early stage of policy learning, agreed policy may be relatively simple with only a small number of specified actions. Even in that case, if the drafting process reflects existing policy capability and local context, the resulting policy will be unique, ambitious, and at the same time feasible for the country in question. Indeed, this is the very process in which policy making is learned. If the process is outsourced in its entirety to a group of domestic or foreign consultants, little learning will take place within the government.

This also has an implication for appropriate speed with which policy should be drafted. Some governments set unreasonably short deadlines for policy documents. This compels the ministry in charge to either rush to produce the document internally at the cost of quality or contract out the drafting work to outside experts and consultants, which militates against the policy learning described above. While the situation varies across countries, if proper internal and external consultation is conducted, a realistic amount of time needed to revise an existing policy is about one year, and for creating a new policy it may take two to three years. This includes loss time due to administrative delays and political cycles which are often inevitable in policy formulation. Quality, not speed, should be the main objective of policy making. Quality here means that, based on sufficient information and analysis, all key aspects of the policy have been agreed among major stakeholders through persuasion and compromise so that the policy, once adopted, will be strongly supported and willingly implemented.

An example is given from Thailand. The Thai automotive industry boasts the largest production volume in Southeast Asia (1.65 million vehicles in 2010) and has expanded strongly despite two serious regional and global economic crises in 1997-98 and 2008-09. Its policy making is competently coordinated by the Thailand Automotive Institute (TAI), one of the ten sector-specific non-profit organizations established by the Thai government which are required to be financially autonomous from the government budget (see section 3-(iv)). The structure of the Thai automotive policy is given succinctly in the Executive Summary of the Automotive Master Plan 2007-2011 which emanates from Vision 2011<sup>2</sup> and branches out to four objectives, five strategies, and 12 action plans. The most important part of the Master Plan is the exposition of the 12 action plans.

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<sup>2</sup> Vision 2011 states that “Thailand is the automotive production base in Asia which creates more value added to the country with strong automotive parts industry.” This vision remains unchanged from the previous Master Plan 2002-2006.

Drafting of the Thai automotive master plan takes about a year which is genuinely a joint process between private firms and the Ministry of Industry. Close-knit networking among all stakeholders is ensured by TAI. The drafting process begins with the “CEO Forum,” a discussion forum among foreign and domestic firms, government officials, and academics, that agrees on basic directions and identifies key areas (in the current automotive policy, they are human resource, productivity, marketing, engineering, and investment and linkage). Production and export targets are proposed collectively by the industry, not the government. After a broad consensus is formed, the Automotive Master Plan Steering Committee will commission studies on the identified key areas to “focus groups.” Finally, the master plan is drafted by TAI staff after all major aspects of policy revisions have been agreed among stakeholders and studies have been conducted. TAI serves as a secretariat throughout the entire process and provides administrative and logistic support. Mr. Vallop Tiasiri, President of TAI, meets foreign and local producers at least twice a month formally and meets them more often informally.

From the perspective of effective policy making, common mistakes include: (i) the lack of a clear vision of the leader; (ii) drafting by a few designated officials without building consensus or facilitating interaction among all stakeholders; (iii) outsourcing of the entire policy drafting to outsiders with the role of policy makers limited to making comments and revisions; (iv) bottom-up collection of subdocuments drafted by various ministries which ends up in unconnected chapters with too many priorities for implementation. These negative practices must be avoided as a first step toward policy learning.

### **3. Policy organization**

What organizational arrangements are necessary to realize inter-ministerial coordination and stakeholder involvement discussed above? An international comparison of policy making points to different policy organizations that can equally attain good policy procedure. The choice should fundamentally depend on the unique characteristics and existing policy capability of the country in question. Below, five alternative policy organizations for conducting high priority development policies are explained with examples. Again, the intention here is to provide raw materials from which policy organization for each country can be constructed under the principles of selectivity, modification, combination, and improvement.

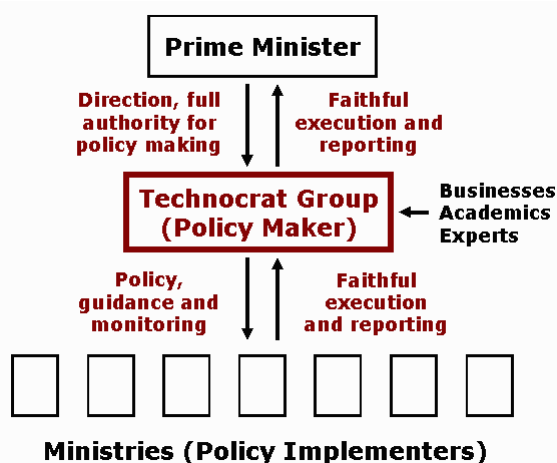
It should be noted that these organizational arrangements are not mutually exclusive. There are countries that adopt more than one arrangement to execute different national strategies. It is also

important to recognize that high-performing economies in East Asia did not possess strong institutional bases at the beginning of their rapid growth. Policy procedure and organization were strengthened during, and not before, their high growth periods. State-building is a dynamic process in which the government has to build up industrial policy capability through concrete hands-on efforts and trial-and-error in the actual process of industrialization.

3-(i) *A technocrat team supporting the top leader*

One of the key ingredients of the “East Asian Miracle” was strong alliance between the top leader and the technocrat team (Campos and Root, 1996; Ohno and Shimamura, 2007). Many countries in East Asia established a semi-permanent technocrat group that directly supported the Prime Minister or the President in executing his priority national programs. Examples include Korea’s Economic Planning Board (EPB), Malaysia’s Economic Planning Unit (EPU), Taiwan’s Kuomintang elites, Indonesia’s Berkeley Mafia, and Thailand’s National Economic and Social Development Board (NESDB)<sup>3</sup>. Among these, Malaysia’s EPU and Thailand’s NESDB still exist while others have been disbanded as income and private sector dynamism rose and new policy organization replaced the old.

**Figure 2. Technocrat Team Supporting Top Leader**



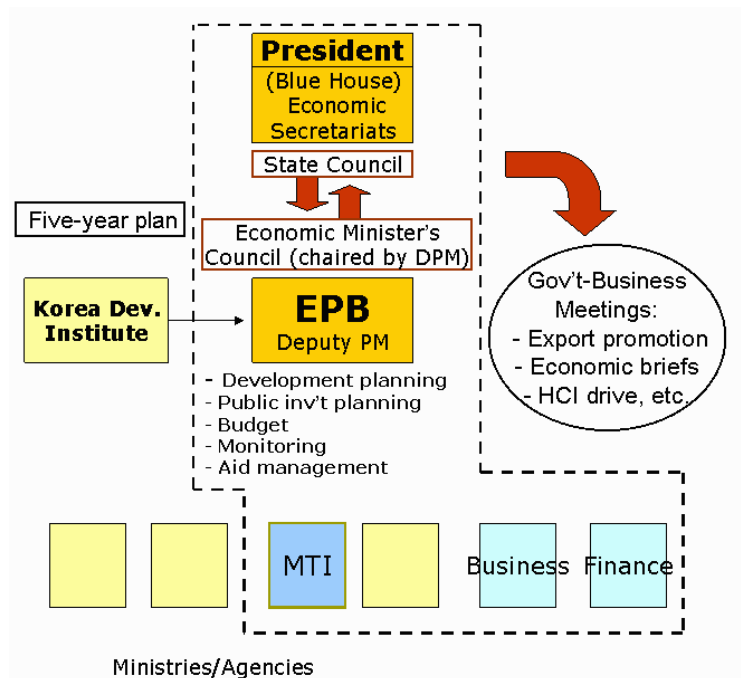
These technocrat groups were created by convening well-educated and/or highly experienced officials, scholars, and business leaders to act as a policy-making brain of the country. Many of them had high degrees from foreign countries or had been summoned from prominent positions in foreign

<sup>3</sup> In Latin America, policy support in Chile was provided by Chicago Boys, or Chilean economists trained at the University of Chicago under Milton Friedman and Arnold Harberger, to the military junta which carried out free-market reforms starting in 1973.

countries. These elites had full trust of the top leader while ministries were placed under them as implementing agencies. Their authority and directives constituted central coordination mechanisms for formulating, implementing, and monitoring development policies (Kondo, 2005).

This policy organization model works best under a strong and wise leader who exercises power for a relatively long time. Korea’s EPB and Malaysia’s EPU were the supporting arms of their charismatic leaders, namely, President Park Chung-hee (in power 1961–79) and Prime Minister Mahathir bin Mohamad (in power 1981–2003).

**Figure 3. South Korea 1960s-70s: Economic Planning Board**



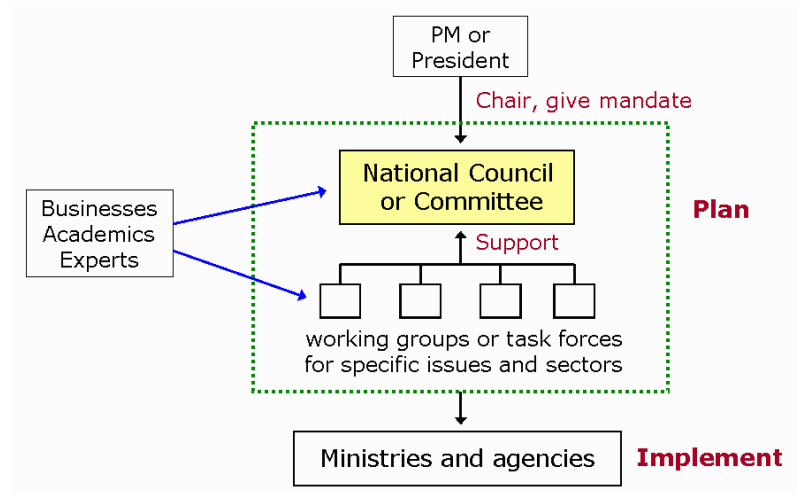
3-(ii) *A national council or committee*

A national council or committee—the precise name does not matter—is a less permanent policy making arrangement that can replicate strong coordinating functions of the technocrat team in the previous model. This approach may be adopted by a strong, long-serving leader but it can also work effectively in a country where no such charismatic leader exists. In this model, the task of policy formulation is taken up by a national council or committee headed by the top leader himself, a near-top leader such as vice president or deputy prime minister, or someone trusted and appointed by the top leader. Its members are selected from a broad base including ministers or vice ministers, business people, scholars, retired officials, civil society leaders, media, and so on. The council or



committee is supported by a secretariat staffed by seconded officials from related ministries which does administrative and logistic works. Working groups (or task forces) prepare studies, reports, and draft chapters in specialized fields. Unlike a technocrat team, these councils or committees are normally organized around a specific mission and are terminated when the policy objective is achieved or there is a change of government. Such councils and committees can be more than one, each working on an assigned issue.

**Figure 4. National Council or Committee**



In this model, concerned ministries and agencies can participate in the policy process in three ways: (i) through the minister’s membership in the national council or committee; (ii) as official experts in working groups or task forces; and (iii) as implementing bodies. Compared with the technocrat model explained above, this configuration may be more acceptable for ministries and agencies wanting to participate in policy formulation extensively rather than receiving top-down instructions from the elite group and being confined to policy implementation.

The national council or committee approach is used widely and frequently with various adjustments. Three examples are given below from Singapore, Malaysia, and Korea. This approach is adopted to carry out a small number—usually up to several—of top priority programs in each country<sup>4</sup>.

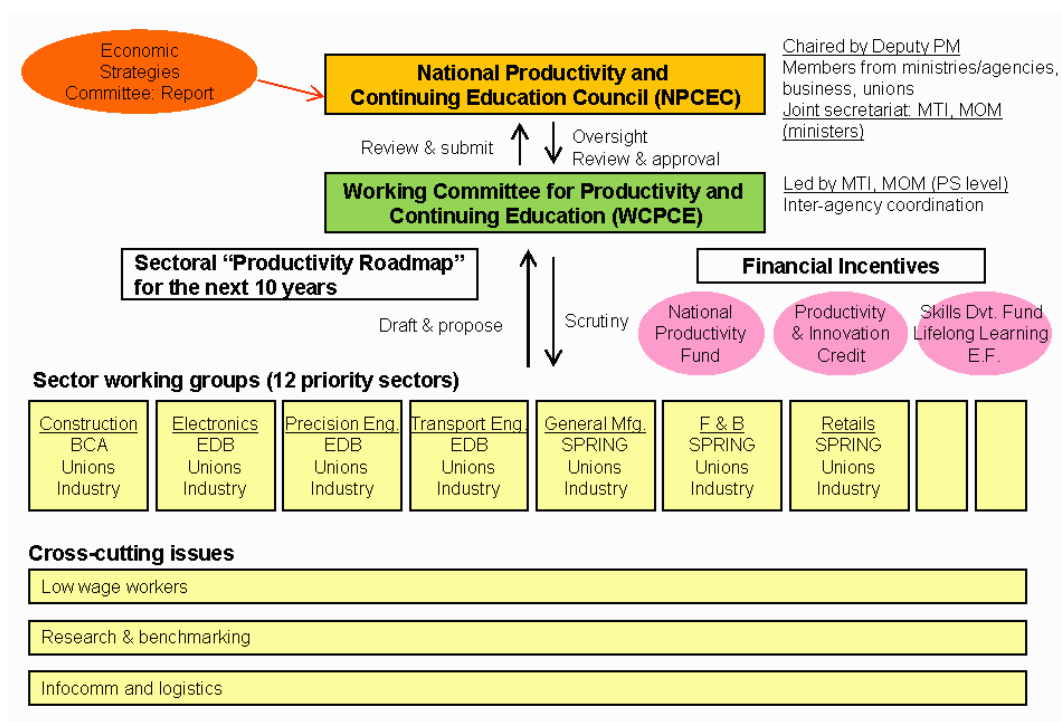
<sup>4</sup> Following the Korean model of the 1960s and 70s, Ethiopia has established a monthly Export Steering Committee presided by the Prime Minister and attended by relevant ministers and officials. The Committee seems to work well in monitoring export performance and solving problems that may arise. However, the Ethiopian Committee is narrower in operational scope than the original Korean model or other approaches explained in this section as it is not accompanied by designation of the lead ministry and agencies, the secretariat, and working groups or task forces that perform various functions. Moreover, it remains an implementing body rather than an official policy making body.

In Singapore, productivity has long been a top national agenda. In recent years productivity began to receive renewed attention in the context of lagging productivity of aged or foreign migrant workers, the rise of China and India, and the aftermath of global economic crisis. To propose basic policy directions, the Economic Strategies Committee (ESC) chaired by the Finance Minister published a report in January 2010. It recommended a drastic shift from factor-driven to productivity-driven growth and set an annual productivity growth target of 2-3% and an average GDP growth target of 3-5% in the next ten years. The main thrust of the ESC Report was endorsed by the Prime Minister and reflected in the fiscal year 2010 budget.

One of the key recommendations of the ESC Report was establishment of the National Productivity and Continuing Education Council (NPCEC). NPCEC was formed in April 2010 as a policy making body for realizing a productivity-led economy (Figure 5). It is chaired by the Deputy Prime Minister with its members coming from government, business community, and labor unions. The Ministry of Trade and Industry (MTI) and the Ministry of Manpower (MOM) jointly act as the secretariat. Under NPCEC, two layers of organizations are created: (i) the Working Committee for Productivity and Continuing Education (WCPCE) led by the Permanent Secretaries of MTI and MOM; and (ii) sectoral working groups and horizontal thematic working groups. Three financial mechanisms fund incentives and subsidies to firms and individuals based on their action and performance.

NPCEC has selected 12 priority sectors that have large contribution to employment and GDP and high potential for productivity gain. Each sector group is required to draw up a productivity roadmap for the next ten years. They are reviewed by WCPCE and submitted to NPCEC for approval. A ministry or an agency is assigned to oversee each priority sector. In addition, horizontal working groups work on cross-cutting issues such as low-wage workers, research and benchmarking, and infocomm (ITC) and logistics. In all of these working groups, tripartite representation of government, businesses, and unions is ensured.

**Figure 5. Singapore: National Productivity and Continuing Education Council**

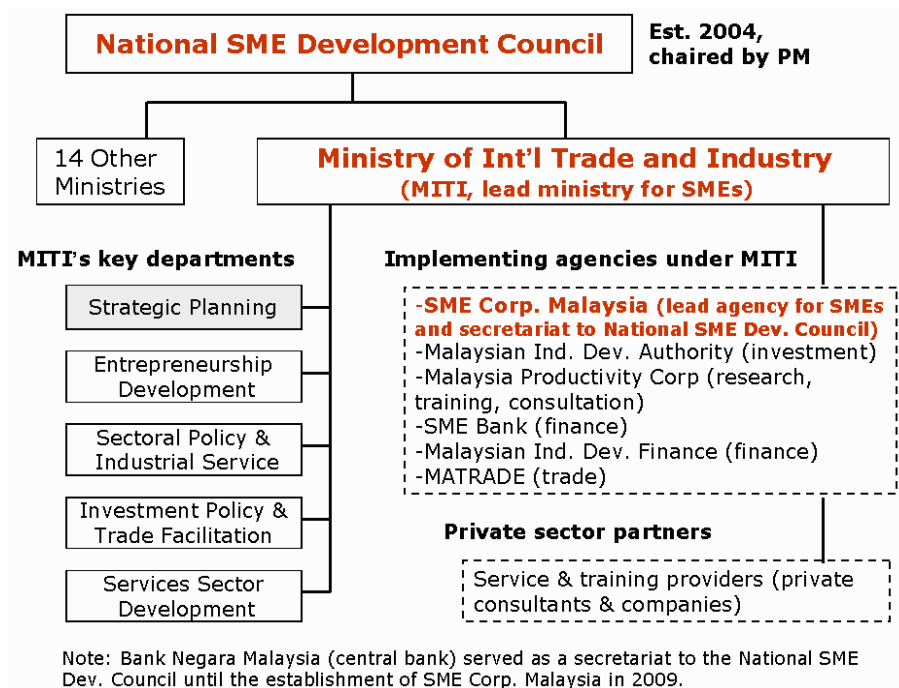


The Malaysian government puts high priority on SME development as a policy instrument to shift the growth engine from large multinational corporations to autonomous and innovative indigenous firms (Preface of the SME Annual Report, 2008). SMEs are to play key roles in job and income creation as well as moving the country out of the middle income trap and into high income. The National SME Development Council was established in 2004 as a leading body that sets the policy direction for cohesive SME development. It is chaired by the Prime Minister and brings together 15 ministries and more than 60 government agencies to work together toward this goal. Initially, Bank Negara Malaysia (central bank) served as the secretariat of the Council which set three policy pillars (enabling infrastructure, capacity building, and financial access), five-year targets, and common SME definition, and published the Annual SME Integrated Plan of Action and the SME Annual Report. The Council also improved National SME Database and SME training and marketing, and introduced new financial products for SMEs.

In 2009 the SME Corporation Malaysia (SME Corp.) was created as a central coordinating agency at the operational level by upgrading the previous functions of the Small and Medium Industries Development Corporation (SMIDEC) which belonged to the Ministry of International Trade and Industry (MITI), a lead ministry for SME development (Figure 6). As the new secretariat to the Council, SME Corp. serves as a central reference point for all SME matters and undertakes impact studies on SME policies and programs across all economic sectors. Malaysia has many SME-related ministries, agencies, and private sector partners whose activities are now brought under the vertical

policy organization consisting of the Council, MITI, and SME Corp.

**Figure 6. Malaysia: National SME Development Council**

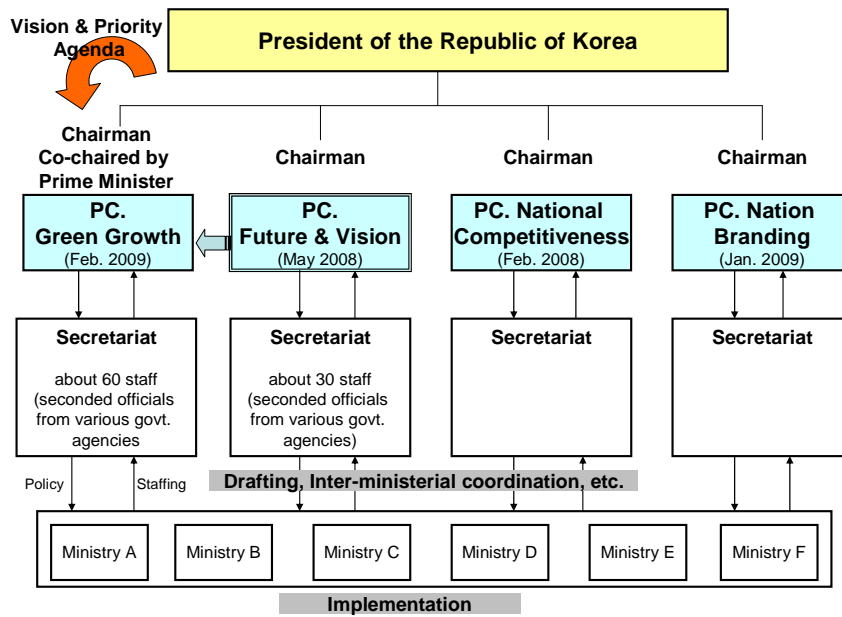


In present Korea, presidential committees serve as a key instrument for economic policy making. Upon assuming power, every president establishes a small number of presidential committees as a vehicle to concretize, implement, and monitor the priority agenda during his five-year term. Each presidential committee is headed by a person who has expertise in the chosen subject and enjoys strong confidence of the president as well as secretarial support by staff seconded from various ministries.

President Lee Myung-bak, who assumed office in February 2008, established four Presidential Committees for Future and Vision, Green Growth, National Competitiveness, and Nation Branding (Figure 7). The most important among them is the Presidential Council for Future and Vision (PCFV), established in May 2008, which advises the President for designing overall national strategies and setting policy priorities. It is chaired by Prof. Seung Jun-kwak, Dean of Korea University, and has 26 members drawn from academia, NGOs, legal experts, and business leaders. Vice Ministers also attend the Council. The Council meets on a need basis without any fixed schedule. PCFV is supported by the Executive Office of the Council, a secretariat of about 30 staff comprised of seconded officials from various government ministries and agencies. The secretariat is charged with drafting of policy documents, inter-ministerial coordination, and related administrative

works. In addition to four presidential committees mentioned above, a temporary (one-year) presidential committee was created to host the G20 Summit which took place in Seoul in November 2010.

**Figure 7. Korea: Presidential Committees**



3-(iii) *A super-ministry*

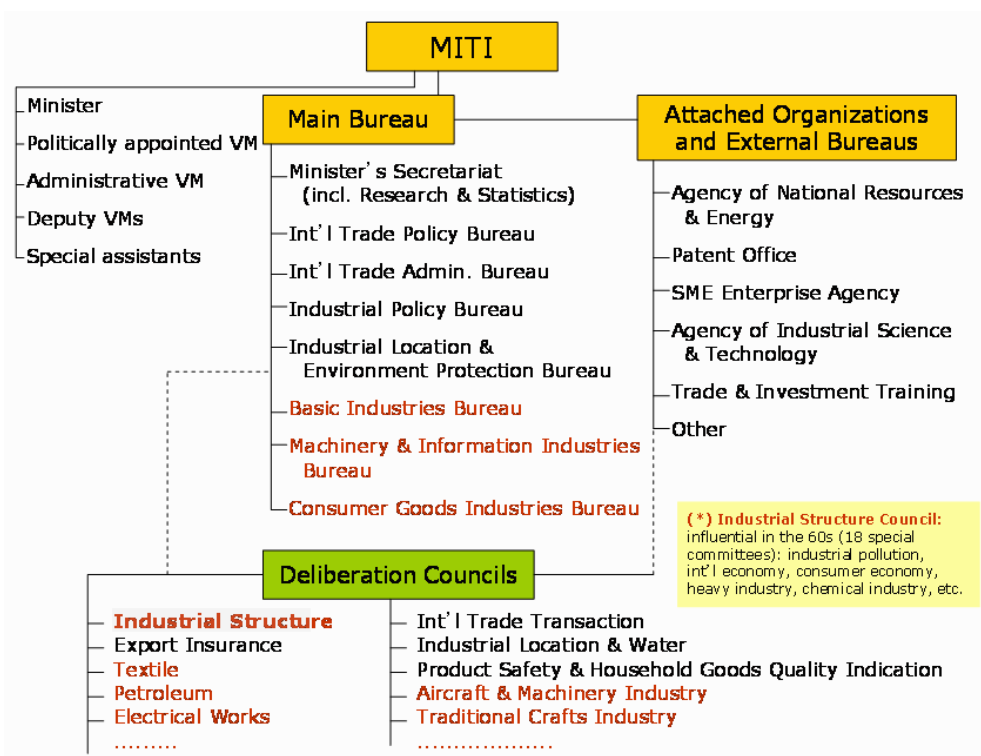
Another way to secure dynamism and consistency in industrial policy is to give broad responsibility to one ministry and let this ministry do the designing and implementation of industrial strategies as well as additional works such as interface with political parties, interaction with non-government stakeholders, preparation of necessary laws and regulations, and dissemination of policy objectives and outcome. While this ministry is just one among many ministries in legal standing, it has sufficient authorities and policy tools to become a one-stop house for initiating and carrying out industrial strategies. As long as the importance of industrialization is generally agreed, this approach may not even require a strong and wise national leader to constantly supervise the process since the ministry can internally and autonomously produce coherent visions and strategies with its highly motivated officials and extensive information network.

Japanese industrial policy making from the late 1950s to the early 1970s was the prime example of this model. The Ministry of International Trade and Industry (MITI) was created in 1949 by merging the Ministry of Trade and Industry, the Coal Agency, and the International Trade Agency to become

the lead ministry for post-WW2 industrial catch-up<sup>5</sup>. MITI had broad authority over creation of visions and strategies; individual industrial sectors such as textiles, steel, machinery, and electronics; technology and productivity; trade promotion and negotiation; product, quality, and safety standards; intellectual property rights; competition and anti-monopoly policy; SME development; policy finance; restructuring of sunset industries; and energy and environment. Legal frameworks and policy tools needed to promote these policy areas were created during the 1950s.

According to Okimoto (1989), MITI was the *de facto* super-ministry for Japanese industrial policy. Compared with the fragmented industrial policy making mechanism in the United States, MITI was distinctive in having broad jurisdiction over many industrial sectors and functional issues as described above, as well as having both vertical (industry-based) and horizontal (cross-sectoral) bureaus in its organizational structure (Figure 8).

**Figure 8. Japan: Organizational Structure of MITI**



Source: Adapted from Okimoto (1989), p.117, Figure 3.2.

As the lead ministry for industrialization, MITI worked closely with the Economic Planning Agency (EPA) under the Prime Minister's Office and the Ministry of Finance (MOF). The former was in charge of national economic planning and assessment and the latter was responsible for budgeting

<sup>5</sup> In 2001, MITI was renamed to the Ministry of Economy, Trade, and Industry (METI).

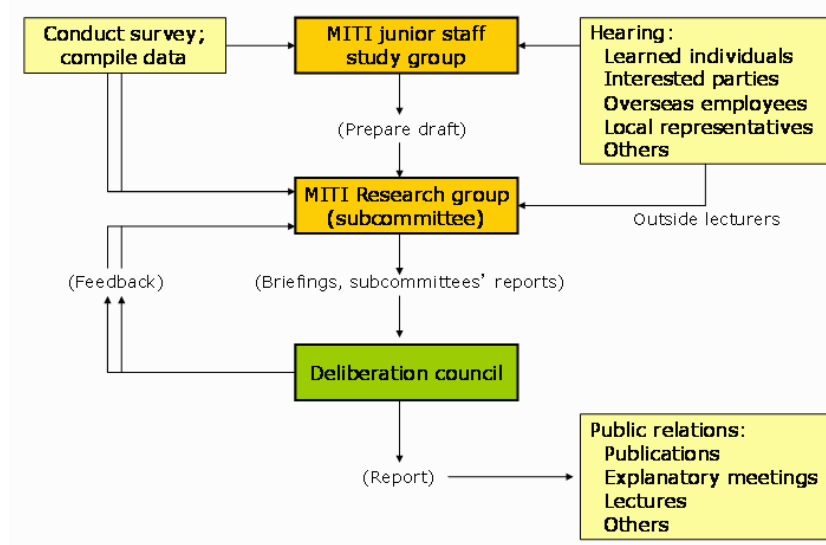
and financial issues. MITI, EPA, and MOF collectively assumed the primary role in formulating and executing medium- and long-term national visions and economic plans. In addition, EPA and, subsequently, the Land Agency (established in 1974) under the Prime Minister's Office, formulated spatial plans that included corridors, industrial zones, and land and regional development plans.

In Japan, deliberation councils functioned as the key instrument for vision making, policy consultation and coordination, and information sharing within and outside the government. Deliberation councils were extensively used by MITI. They provided a forum in which government and businesses met and discussed policy issues and business trends, and built consensus (World Bank, 1993). They were similar to national councils and committees discussed above but they were organized and managed by a super-ministry rather than the top leader, with MITI serving as the secretariat. Members of any deliberation council included representatives from related ministries, business leaders, experts, and academicians. Additionally, the structure of deliberation councils reflected both vertical and horizontal bureaus within MITI. This contributed to enhancing MITI's capacity to aggregate diverse interests (Okimoto, 1989).

Among deliberation councils, the Industrial Structure Council, established in 1964, was most influential as it oversaw industrial policy in its entirety with the participation of representatives from the public and private sectors (Johnson, 1982). The Industrial Structure Council drafted a vision for industrial policies in each decade. It published the vision of Heavy and Chemical Industry (HCI) in the 1960s, the vision of knowledge-intensive industries in the 1970s, the vision of creativity and knowledge-based industries in the 1980s, and the vision of better quality of life in the 1990s (Kawakita, 1991). The Industrial Structure Council also discussed measures to support pioneer industries and ensure the transition of sunset industries.

Japanese policy making process was bottom-up. It started with MITI's junior officials gathering and analyzing data and conducting intensive hearings from various stakeholders, especially the business community (Figure 9). Information thus collected served as the basic input for subsequent discussions in the subcommittee and the deliberation council, which respectively drafted and finalized policy recommendations. Throughout the process, deputy division directors (officials in their mid-thirties) were at the center of communication flows both inside MITI and between MITI and the private sector and thus had a considerable voice in determining the policy direction (Okimoto, 1989).

**Figure 9. Japan: MITI's Policy Formulation (late 1950s-early 1970s)**



Source: Ono (1992).

Akira Suehiro, a leading expert on East Asian development, stresses the Fiscal Investment Loan Program (FILP) and close linkage between technical support and financial support to SMEs as Japan's two most successful policy instruments for high growth in the post WW2 period. FILP was a mechanism in which funds from postal savings and pension contributions from the private sector were mobilized to conduct investment and loans having public nature (typically infrastructure and business support) through state institutions and credit mechanisms. Its financial resource was at times as large as half of the central government's general budget. Part of FILP was combined with MITI's industrial policy, whereby policy formulation and technical support to SMEs were provided by MITI and financial support for SMEs was provided by the Japan Development Bank (JDB) under MOF using FILP funds. *Shindanshi* (state-certified SME management consultants) played a key role in linking management and technical support to SMEs with loans by JDB and commercial banks (Do and Pham, 2010; Ohno, 2010).

During Japan's high growth period from the late 1950s to the early 1970s, there was no charismatic leader who ruled for a long time. Under the leadership of MITI, key economic ministries and agencies worked in collaboration, with close contact with political leaders, to formulate visions and concretize them into various plans and policy measures.

### 3-(iv) A specialized institute as a policy making hub

While industrial visions and broad direction should be set by the government, detailed plans, master plan drafting, and daily contact and consensus building among stakeholders for any particular sector



or issue can be delegated to a specialized, neutral, and non-profit organization. Thailand adopts such an approach together with other approaches for industrial policy formulation.

The Asian financial crisis of 1997-1998 prompted the Thai government to conduct a comprehensive industry review. The Industrial Restructuring Plan (IRP) was quickly formulated for enhancing industrial competitiveness with due attention to social conditions (this was conducted by the national council approach discussed above). IRP consisted of the Master Plan, the Strategic Plan, and the Action Plan for industrial restructuring, and included as its objectives upgrading labor skills in target industries, supporting SMEs, relocating high pollution industries, and promoting clean technology. The Ministry of Industry (MOI) was the lead ministry, which facilitated involvement of various stakeholders such as the public sector, businesses, and academicians. Although IRP was formulated and implemented within the framework of structural adjustment loans from the World Bank and the Asian Development Bank, the Thai government took full initiative in developing its content.

To implement proposed plans, ten specialized institutes were established or re-created to design concrete measures for targeted industries and issues and to cope with problems arising in the implementation process. They were initially operated jointly by the public and private sectors, each with its own staff and board. They acted as a hub of information sharing and consultation between government and businesses and in some cases formulated industry-specific master plans. Some institutes were created by the Industry Promotion Department of MOI while others were transformed from existing agencies or established with donor assistance. As shown in Table 1, they included six industry-specific institutes (textile, food, automobiles, electrical and electronics, cane and sugar research, and iron and steel) and four thematic institutes (productivity, technical training, management and certification, and SME development). After five years of establishment, these institutes were required to become financially independent from the government budget.

**Table 1. Thailand: Specialized Institutes**

Name	Start-up Date	Organizations
Thailand Productivity Institute	June 1995	Originated from MOI industry promotion dept. 20 Board members, 161 staff.
Thai-German Institute	Nov. 1995	Financial cooperation from KfW, GDC. Technical training (CNC, CAM/CAD, etc.), 12 Board members, 79 staff, 5 German experts.
Thailand Textile Institute	June 1997	Based on MOI industry promotion dept. and industry association. 20 Board members, 27 staff.
National Food Institute (NFI)	Oct. 1996	Based on MOI industry promotion dept. and industry association. 20 Board members, 27 staff.
Management Systems Certification Institute (MSCI)	March 1999	Originated from Thai Industrial Standard Institute (TISI). 14 Board members, 55 staff.
Thailand Automotive Institute (TAI)	April 1999	Supporting industry development. 20 Board members, 28 staff
Electrical & Electronics Institute (EEI)	Feb. 1999	Supporting industry development. 29 Board members, 28 staff.
Foundation for Cane & Sugar Research Institute	April 1999	Originated from Cane & Sugar Research Institute. 13 Board members.
Institute for SME Development	June 1999	Modeled on Japan's SME Univ. Operated by Thammasat Univ. in cooperation with 8 local universities. 21 Board members.
The Iron & Steel Institute of Thailand	Dec. 1998 (cabinet approval)	Aimed at joint marketing promotion of four steel companies (oversupply)

Source: Higashi (2000).

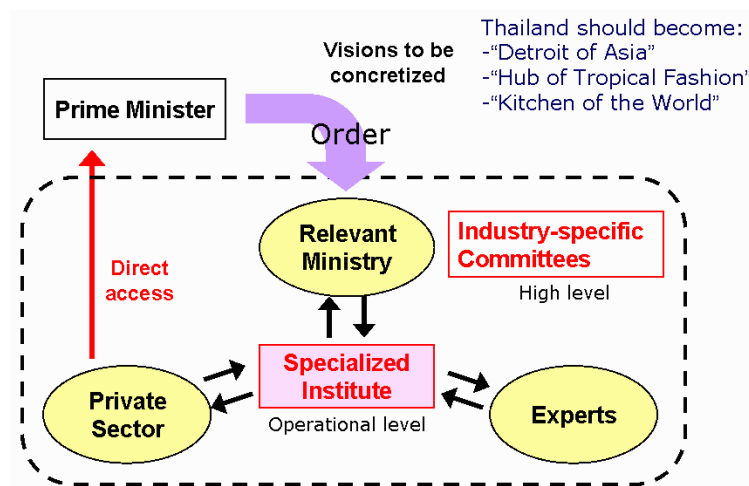
Among these institutes, the Thailand Automotive Institute (TAI) has been highly successful as a policy making and implementation hub connecting the Thai tripartite of government, businesses, and experts. TAI conducts policy study and advice, supports clustering of auto parts makers, and promotes export. It provides training for factory engineers and workers, runs an automotive testing laboratory, and serves as the secretariat for consensus building and drafting policy documents. TAI cooperates with MOI, MOF, the Ministry of Commerce, and the Ministry of Science and Technology as well as researchers from ten universities in Thailand. It provides research and information services and manages an APEC-supported website for automotive part makers. At the beginning it was financed jointly by the government and the private sector. By now it has become a self-financing organization. As of November 2009, half of its 91 staff were at the testing laboratory and the remaining half were in policy research and training.

As the secretariat of master plan drafting, TAI supplies not only administrative support but, more fundamentally, ideas for new policy direction and coordination of different interests between government and businesses as well as among businesses. The idea of subsidizing Eco-Car production was one of such ideas emanating from TAI and accepted by the government and the industry in the current automotive master plan. The process by which TAI drafts the master plan was already explained in section 2.

Figure 10 depicts Thai policy making for specific policy areas adopted under Prime Minister Thaksin Shinawatra, a strong leader who served the country from 2001 to 2006. The prime minister produced highly vague visions, such as becoming the “Detroit of Asia” or the “Hub of Tropical Fashion,” for relevant ministries to concretize and implement. A specialized institute functioned as a policy hub among the tripartite at the operational level while an industry-specific committee approved and adjusted policies at a higher level. The private sector could influence policy through these institutes and committees, and it also had direct access to the prime minister. However, even after the strong leader was removed, the Thai policy system continues to function basically in the same way as before with only minor changes because these specialized institutes are already “institutionalized.” Its operation does not hinge critically on the existence of a strong leader.

**Figure 10. Thailand: Specialized Institute Approach**

(Under Thaksin Government 2001-2006)



The institutional hub approach works well in the case of the Thai automotive sector because there is deep trust among all stakeholders, because TAI has build solid relations with them, and because Thai policy making is pragmatic and flexible without too many bureaucratic requirements. According to Thai MOI officials, the Thai automotive sector is already sufficiently developed and the role of government has shifted from direct support to the industry to general policy making. Thus managerial, technical, and financial support for managers, engineers, and workers is to be conducted by private service providers and private financial institutions. However, in a country where the private sector is weak, where mutual trust between government and businesses does not exist, or where policy making is highly rigid and hierarchical, assignment of policy making authority to a neutral non-profit organization may not work as effectively as in Thailand.

### 3-(v) *A strong top leader as a policy driver without institutionalization*

A very different type of policy making is possible with the existence of a strong and economically enlightened leader without institutionalization. In this case, the head of the state (or a similarly high-level actor) plays the instrumental role in all policy making functions. This includes vision and strategy making, coordination among ministries and agencies, implementation and monitoring, solving problems and coping with shocks, mobilizing the private sector, and dealing with foreign investors and development partners. Policies become action-oriented and coherent if the leader's mind is lucid and dynamic. Actions of different ministries become mutually consistent even though ministers do not talk to each other. The private sector and foreign investors will know where the country is headed and international cooperation will be made to align with the national development plan. All this is possible because the top leader personally directs every player in the game.

This type of policy making depends heavily on the personal capacity and dynamism of one particular individual and, for that reason, can be quickly realized if such a leader assumes power. In the early stage of economic take-off, a leader who sets everything right is highly welcome since the nation has no time or money to build strong enough systems for sustainable growth. But the risks of this approach are also clear. Without institutionalization, the exit of a capable leader will stagnate and even reverse economic gain and no policy learning by policy makers will take place. To avoid this fate, the capable leader must work even harder not only to conduct good policies but also to create new laws, systems, and organizations that cement the way of policy making which he or she has started. This is indeed an enormous demand on the wise leader.

## **4. Policy structure<sup>6</sup>**

While policy documents such as industrial master plans and strategies do not have one “correct” format applicable to all countries, structural variation must come from conscious choice based on local context and policy purpose at hand rather than by chance. If a policy document is produced without serious consideration of overall design, it may end up reflecting the whims of particular drafters—ministerial officials, academics, or foreign consultants—that happened to be assigned to the task. As argued in section 2 above, basic visions and policy direction must be established through a consensus building process involving major stakeholders before the drafting of a policy document

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<sup>6</sup> For more discussion on policy document structure, see “An International Comparison of Industrial Master Plans,” ch.6, GRIPS Development Forum, *Policy Dialogue for Industrial Policy Formulation in Ethiopia: Interim Report Draft*, June 2010.

is commissioned.

The standard components of an industrial master plan are illustrated in Figure 11 and discussed individually below. Each of these components may occupy either one chapter or a number of chapters. Selection and order of these components are somewhat flexible. For example, targets may be inserted after situation analysis and policy issues. However, the vision should most properly be stated at the outset and the action plan matrix should come at the end (unless specified in another document or mechanism). Terminology is also flexible and substitutable by other phrases of similar connotations. In addition to these basic components, there may be additional materials such as preface, table of contents, list of tables and figures, executive summary, introduction, drafting procedure and organization, appendices, and so on.

**Figure 11. Standard Ingredients 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>	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. 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.

- (i) *Vision*—a master plan must clarify the purpose of industrial promotion. This includes why this particular industry is important in national development, what role it should play in stimulating other sectors, what positioning it should take in the global, regional, and national economies, and so on. If these purposes are already presented in other documents and widely shared among stakeholders, they can be mentioned only briefly without spilling much ink. On the other hand, if these are not yet sufficiently expressed, the master plan should clearly and concisely state the importance of the sector in question. This section should be no more than a few pages. One way to state the vision is to present it as part of

the introductory chapter. Vision is sometimes stated in a layered structure consisting of vision, missions, and objectives. This is acceptable but not obligatory.

- (ii) *Targets*—long- and medium-term targets, quantitative or qualitative, should be presented with a clear time frame, which should normally extend over a few to several years<sup>7</sup>. These targets should be ambitious but realistic. Numerical targets should be higher than simple extrapolation of the present course but also reachable with serious exertion of cooperative efforts by both government and businesses. The appropriate number and levels of these targets, including how many numerical targets should be set with how much detail, depend critically on the characteristics of the sector in question as well as the capability of the government and the private sector of that country. For this reason, there is no fixed formula applicable to all master plans for all countries. Generally speaking, there should be fewer (numerical) targets if the industry is not capital-intensive, markets and prices are unpredictable, the industry produces final consumer goods, the domestic private sector is mature, policy capability is weak, or the private sector does not trust the government. Before setting any targets, policy makers should have a thorough discussion with all stakeholders, including businesses and experts, for the proper configuration of such targets.
  
- (iii) *Situation analysis*—the master plan must analyze the current status, potentials, and obstacles of the domestic industry in question. Data should be presented in tables and graphics, and the results of surveys and benchmarking should be reported (if available and relevant). Information should not be thrown in randomly but must be inserted with a clear purpose of making certain points. Routinely reviewed issues include the past performance of output, capacity, demand, export and import, and localization of inputs; product mixes and producer profiles; regional distribution of production; productivity and competitiveness; demand forecasts; and global, regional or domestic market trends that may impinge on the development of the industry. The appropriate selection of these analyses depends on the degree of understanding and consensus among stakeholders. If businesses, policy makers, and experts generally agree on the current position of the domestic industry, situation analysis can be brief or even skipped. If, on the other hand, policy formulation is in an early stage and stakeholders do not yet share basic information, situation analysis becomes an integral part of the master plan.
  
- (iv) *Policy issues*—after the industry situation is reviewed comprehensively in (iii), specific

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<sup>7</sup> Targets are also called goals, objectives, strategies, action plans (different from “action plans” in (v) below), and so forth. We regard all of these as “targets” as long as they set some qualitative or quantitative aims to be achieved.

aspects that need to be fortified by policy to realize vision (i) and targets (ii) above must be identified and analyzed. The issues may call for removal of negatives or strengthening of positives. Obviously, which issues are most important cannot be prejudged because circumstances differ from one industry to another and from one country to another. Here, some of the common focal issues are listed by way of examples: skills and technology, cost reduction, quality improvement, product design and development, input procurement (localization and supplier policy), marketing, export promotion, infrastructure, financing, labor supply and workers, and so on. The most relevant topics for the industry in question should be identified and agreed among stakeholders, and studies should be conducted for each of them (as in the Thai automotive industry discussed in sections 2 and 3-(iv) above). It is important to work on prioritized issues only rather than cover all issues broadly and superficially. Issues raised here should be given concrete solutions in the following action plan section.

(v) *Action plan or action mechanism*—an action plan matrix or an action mechanism is essential for ensuring implementation. An action plan matrix is a large table that translates analyses and proposals conducted in previous chapters into concrete actions. It may be included in the master plan text or prepared in a separate document. Either way, it is crucial that its progress is monitored and reported to the government at regular intervals and any problems are attended to as they arise. The action plan matrix typically contains the following cells: actions, sub-actions, deadlines, expected output, performance criteria (success indicators), main responsible organizations, and other cooperative organizations. One sample format from Zambia is presented in Table 2. The implementation procedure, such as who will report what to whom by when, must also be specified alongside the action plan matrix.

**Table 2. Zambia: Action Plan Matrix Format for the Triangle of Hope Project (Excerpt)**

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					

Note: extracted and edited by the author. The Triangle of Hope Project aims at improving investment climate and establishment of an industrial zone.

Alternatively, an action mechanism, such as a high-level monthly committee chaired by a top leader or minister, or a well-focused budgeting and project approval process coordinated by an effective hub organization, can be adopted. Compared with the action plan matrix approach which stipulates all actions in advance, these process-oriented approaches are more flexible in coping with shifting circumstances. However, their success requires strong and effective guidance by the leader or the designated hub organization. In cases where political and administrative support for policy execution is weak, the action plan matrix approach may be preferable.

An industrial master plan must be implemented and supported by all stakeholders. A policy document, however excellently written, is just paper if it is not implementable. As we close this section, a few general features that must be satisfied throughout chapters can be reiterated. These can be attained more easily if proper policy procedure and organization discussed in the previous sections are already in place.

First, relevance and conciseness should be the criteria for including any information in policy documents. All text and data should support the main arguments and proposals of the master plan. Statistics that add little informational value, abstract words with no concrete implication such as “improve,” “strengthen,” and “level up,” and general statements applicable to any industry in any country should be removed as much as possible. If all chapters are logically connected, it is possible to summarize relations among key targets, strategies, and actions in one diagram or table—as done in Thailand’s supporting industry master plan in 1995 and automotive industry master plan 2007-2011.

Second, flexibility and adaptability must be ensured across countries, sectors and time. Since all industries are different and countries face different challenges, cookie-cutter molds cannot be applied to the making of master plans. Even for the same industry in the same country, shifting circumstances will call for policy revisions over time. In particular, the relative scope of government intervention must be set properly. The optimal borderline between state and market must continue to be re-drawn for each industrial master plan. Industry’s characteristics such as capital intensity, gestation period, product type, and market volatility should influence the appropriate weight of state intervention. In addition, the maturity and dynamism of the private sector and government’s policy capability should also be taken into account. Creativity is needed to fit policy documents to the changing reality of the industry in question.

Third, proper balance between pre-determined actions and flexibility in implementation must be



pursued. In general, the higher is policy capability, the more flexibility should be given to policy makers. In the early stages of policy learning, it is a good idea to regularly and strictly monitor the progress of each pre-agreed action. This will increase the percentage of actions implemented, but at the cost of agility as situations change. As implementation is assured and policy response to shocks is learned, rigid policy matrices should give way to the improvise-as-you-go approach. For this reason, low-income countries usually spell out proposed actions in large tables while advanced countries prefer to state strategies generally or even do away with master plans completely, and leave annual project formulation, budgeting, and institutional revisions to a competent organization in charge.

Mr. Vallop Tiasiri, President of the Thailand Automotive Institute, which drafts the automotive master plan, prefers the process-oriented approach in ensuring implementation. Although the first automotive master plan of Thailand (2002–2006) had a large action plan matrix, the second automotive master plan (2007–2011) has only a small action summary table and relies heavily on ongoing project-based implementation toward agreed goals. If in any given year greater budgetary resources and more projects are available, policy implementation is accelerated and vice versa. In the case of the Thai automotive industry, strong leadership exercised by Mr. Vallop and his institute, and deep trust and information sharing among industry, government, and donors, enable such an approach<sup>8</sup>.

## References

- Campos, Jose Edgardo, and Hilton L. Root (1996), *The Key to the Asian Miracle: Making Shared Growth Credible*, Brookings Institution.
- Do, Thi Dong, and Pham Thi Huyen (2010), *Shindanshi: The Japanese Business Management System*, Hanoi: The Publishing House of Transportation and Communication.
- GRIPS Development Forum (2010), *Policy Dialogue for Industrial Policy Formulation in Ethiopia: Interim Report Draft*, June.
- Higashi, Shigeki (2000), “Industry: Business and Government in a Changing Economic Structure,” chapter 3, A. Suehiro and S. Higashi, eds., *Economic Policy in Thailand: The Role of Institutions and Actors*, Institute of Developing Economies.
- Johnson, Chalmers (1982), *MITI and the Japanese Miracle: The Growth of Industrial Policy*,

---

<sup>8</sup> An interview with Mr. Vallop at TAI, November 5, 2009.

- 1925-1975, Stanford University Press.
- Kawakita, Takao (1991), Ministry of International Trade and Industry: Conversion from the General Headquarters of Economy, Kodansha (in Japanese).
- Ketels, Christian, Nguyen Dinh Cung, Nguyen Thi Tue Anh, and Do Hong Hanh (2010), *Vietnam Competitiveness Report 2010*, Central Institute for Economic Management and Lee Kuan Yew School of Public Policy.
- Kondo, Hisahiro (2005), *Comparative Analysis of Governance: Relationship between Bureaucracy and Policy Coordination Capacity with Particular Reference to Bangladesh*, Institute for International Cooperation, Japan International Cooperation Agency.
- Leftwich, Adrian (2009), "Bringing Agency Back In: Politics and Human Agency in Building Institutions and States: Synthesis and Overview Report," Developmental Leadership Program Research Paper 6, June.
- National SME Development Council of Malaysia, *SME Annual Report 2008: Rising to Meet Global Challenges*.
- Ohno, Izumi, and Masumi Shimamura (2007), *Managing the Development Process and Aid: East Asian Experiences in Building Central Economic Agencies*, GRIPS Development Forum.
- Ohno, Kenichi (2009), "Avoiding the middle-income trap: renovating industrial policy formulation in Vietnam," *ASEAN Economic Bulletin*, 26(1), 25-43.
- Ohno, Kenichi (2010), "The Shindan System: Transferability of Japan's Small and Medium Enterprise Management Consultants System to ASEAN," mimeo, GRIPS Development Forum, April.
- Okimoto, Daniel I. (1989), *Between MITI and the Market*, Stanford University Press.
- Ono, Goro (1992), *Practical Industrial Policy*, Tsusansho Sangyo Chosakai [Survey Group of the Ministry of International Trade and Industry] (in Japanese).
- Weiss, Linda (1998), *The Myth of the Powerless State*, Cornell University Press.
- Weiss, Linda, and John M. Hobson (1995), *States and Economic Development: A Comparative Historical Analysis*, Polity Press.
- World Bank (1993), *The East Asian Miracle: Economic Growth and Public Policy*, Oxford University Press.
- World Bank (2010), "Avoiding the Middle-income Trap: Priorities for Vietnam's Long-term Growth," a paper presented at Senior Policy Seminar, Hanoi, August.