Industrial Development Planning:

CLUSTER-BASED DEVELOPMENT APPROACH POLICY SEMINAR
14–19 March 2007
Tokyo, Japan

ADBInstitute

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Seminar Design and Coordination

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Preface

Recent developments in the global arena have prompted many developing countries to restructure their economies to deal with the demands of the global economy. Most of these countries have started crafting their economic policies with the primary aim of fostering openness and competition with other countries. Most of the economic structural reforms across countries have focused on industrial development. Increasing urbanization and the penetration of Global Value Chains and Foreign Direct Investments in many developing countries for instance, are indicative of the economy's structural shift to industrialization, modernization and technological innovation. Transition economies are a good example of this modern-day industrialization, where most economies have shifted from a centrally planned economy to a market-oriented one.

Small and Medium Enterprises (SMEs) play a critical role in industrial development. They are the lifeblood of most developing countries in Asia and some other parts of the world. In most countries in Asia, they not only constitute a significant share of the economy's total output but also generate many employment opportunities, absorbing the majority of the labor force. These roles, though recognized, are not internalized by many policymakers and government officials in several countries. Repeated failures with regard to SME development have been committed over time due to inappropriate or poor policies and strategies. Hence, there is a need for an approach that is appropriate for and will strategically match the economic requirements of a country.

The "Industrial Development Planning by Local Governments: Cluster-Based Development Approach Policy Seminar," held in Tokyo, Japan from 14 to 19 March, 2006 was spearheaded by the Asian Development Bank Institute (ADBI) in collaboration with the United Nations Industrial Development Organization (UNIDO), the Japan International Cooperation Agency (JICA), the Organization for Economic Cooperation and Development (OECD), the Foundation for Advanced Studies on International Development (FASID/GRIPS), the Asian Development Bank (ADB) and other private practitioners in the field of SME/Cluster Development.

The policy seminar was intended to disseminate successful cluster development cases among key policymakers and to provide opportunities for discussing possible collaborations among academics, donors and governments. The seminar served as a follow-up activity to an earlier workshop held in Hanoi in May 2006, entitled Cluster-Based Industry Development Workshop. Lectures, presentations and interactive discussions enabled the participants and seminar members to freely share and exchange country-specific information about industrial policies and SME-related issues and challenges with each other. The roles of policymakers, donor institutions, experts, academics and other relevant key players in fostering cluster development were highlighted during the discussions. The action planning session focused on the formulation of a national policy framework for cluster development for each country.

Exposure trips to clusters in the Keihin Industrial Area and Kanagawa Science Park were organized and made the participants appreciate and learn from the effective strategies undertaken by successful enterprises in the area.

The five-day policy seminar included lectures, presentations and interactive discussions on the following topics:

- Major challenges in SME Development (Framework of Analysis & Development Stage and SME Assistance)
- Country-specific SME Analyses
- Market Failures and the Role of Government in SME Development
- The Advantages of Industrial Clusters for SME Development
- The Pattern of Cluster Development
- Lessons of the Asian Experiences
- UNIDO's Approaches to Cluster Development
- Diagnostic Study and Action Plan for Cluster Development
- Japan Center and Business Courses
- ADB's Experience in SME Assistance

The outcomes of the program include:

- Well-trained policymakers on the issues of SMEs and the various approaches for cluster development
- Creation of network of government agencies to share information and knowledge on cluster development
- Executive summary of proceedings
- CD-ROM of course materials

The policy seminar brought together 19 policymakers from 9 Asian countries who are involved in Cluster/SME Development, namely: (1) Cambodia; (2) Kazakhstan; (3) Kyrgyz Republic; (4) Lao PDR; (5) Mongolia; (6) Myanmar (7) Tajikistan; (8) Uzbekistan; and (9) Viet Nam. The participants were mostly from the trade and industry sector. Resource Speakers/Persons from Academe, donor institutions, foundations and the private sector were also invited to discuss specific issues related to the thrusts of the seminar.

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Presentations and Lectures

Lecture 1: Major Challenges in SME Development: Framework of Analysis

The lecture aimed to provide a historical review of SME policies in Japan and a thorough appraisal of current undertakings related to SME and market development in three countries, namely Lao PDR, Viet Nam and Tunisia. A comparative analysis of the major challenges faced by SMEs between developing and developed countries was made. Recommendations as to what policies ought to be reviewed and are necessary for SME development were also provided.

Presenter: Hidekazu Tanaka, General Manager / Principal Consultant, Mitsubishi UFJ Research and Consulting Co., Ltd. (MURC)
Discussion Moderator: Hidekazu Tanaka, General Manager / Principal Consultant, Mitsubishi UFJ Research and Consulting Co., Ltd. (MURC)

Lecture 2: Major Challenges in SME Development: Development Stage & SME Assistance

While there are various ways through which the countries of the world can address their economic development issues, there is no internationally recognized methodology for the analysis of development. This also applies to the development of small and medium enterprises (SMEs). Methodologies about SME promotion and development are often considered not well developed due to the lack of consensus on how to simply understand its actual state and issues. Thus, there is an increasing need to construct methodologies that can be easily understood by implementers. This lecture underlined the importance and applicability of various indicators to monitor SME's stages of development (i.e., business, financing, business development services support and technology) in particular countries. Rather than looking at the indicators exclusively, the interrelatedness of all the policy parameters and how they reinforce each other should be given importance. The manner in which the approaches discussed can be applied in crafting or formulating policies and strategies for SME growth was also discussed.

Presenter: Nori Iai, Consultant, Unico International Cooperation
Discussion Moderator: Hidekazu Tanaka, General Manager / Principal Consultant, Mitsubishi UFJ Research and Consulting Co., Ltd. (MURC)

Lecture 3: Public Policies for SME Development: Market Failures and the Role of Government

Governments play a vital role in industrial development. The reasons why government has to intervene in industrial policies were clearly spelled out in this lecture. Government intervenes in the market for four major reasons, namely: (i) to correct market failures that arise from monopolistic distortion, natural monopolies and externalities, both positive and negative; (ii) to provide for public goods; (iii) to respond to social preferences; and (iv) to ensure macro economic stability. A conceptual framework for a National Innovation System was presented highlighting the processes and mechanisms through which key players interact. The evolution of industrial policies was likewise discussed, with emphasis on the changing roles of government over time, from merely an originator or creator of industries to a facilitator of enterprise establishment. Cases of successful industrial districts were presented, highlighting Italian industries. The difference between tacit and explicit knowledge was one of the important points tackled in this lecture.

Topics included:

- Economic rationale for government intervention
- Recent changes in productive structures and international competition
- Evolutionary economics
- Old and new industrial policies
- Innovation systems
- The cluster approach
- Industrial policy for cluster development
- Lessons learned from Italian industries
- Successful service centers
- Policy implications for government interventions

Presenter: Andrea Goldstein, Senior Economist, Organisation for Economic Cooperation and Development
Q&A Session Moderator: Andrea Goldstein, Senior Economist, Organisation for Economic Cooperation and Development

Lecture 4: The Advantages of Industrial Clusters for SME Development

Proximity is one of the salient features of successful industrial clusters. Enterprises that are located near each other, producing similar products and parts or components realize enormous economic gains. A number of industrial clusters exist in both developed and developing economies. The lecture focused on the types of industrial clusters and the types of firms in each cluster, the several advantages firms derive from being in a cluster (e.g., flow of information, absorption of new production ideas and techniques, development of trust among key players), and the role of innovation in the success of clusters. Results of case studies about cluster industries in Asia, particularly Wenzhou in People's Republic of China and Dhaka in Bangladesh, and the lessons derived from the experience of both countries in cluster-based industry development were featured. The roles of the government in promoting SMEs and ensuring their sustainability were likewise given emphasis. Misconceptions and skepticism about SMEs (e.g., SMEs being a thing of the past, with a vanishing role in an integrated and globalized economy), the reasons behind such and the ways by which these misunderstood ideas can be dispelled, were articulated during the discussion.

Presenter: by Tetsushi Sonobe, Deputy Director, Foundation for Advanced Studies on International Development (FASID)
Commentator: Michele Clara, Industrial Development Officer, United Nations Industrial Development Organization (UNIDO)

Lecture 5: The Pattern of Cluster Development: An Endogenous Model of Cluster-Based Development

This Lecture introduced a framework for an Endogenous Process of Cluster-Based Industrial Development and some details about the importance of multi-faceted innovations for SME development. It included a summary of findings of case studies of industry clusters in Japan, People's Republic of China and Taipei,China (motorcycle and garment clusters in Japan and People's Republic of China and machine tool cluster in Taipei,China). It was noted that the profitability, sustainability and survival of enterprises depend largely on innovations, particularly in a globalized economy. Education and knowledge transfer from abroad were cited as important factors behind successful innovations. Well-functioning markets, appropriate policy instruments, appropriate choice of industry to be developed (taking into consideration both comparative and competitive advantages) were some of the requisites mentioned for successful innovations. The importance of global value chains (their advantages and downsides) in promoting clusters was emphasized. Some country examples were presented, such as the Philippines, Cambodia, Lao PDR and Viet Nam. FDIs, their impact on the local industry and the measures that have to be taken in attracting/inviting them were also incorporated into the discussion of global value chains. The dynamics between labor-intensive industry and poverty reduction especially in developing economies was given weight.

Presenter: Keijiro Otsuka, Director, Foundation for Advanced Studies on International Development (FASID)
Commentator: Andrea Goldstein, Senior Economist, Organisation for Economic Cooperation and Development

Lecture 6: Lessons Learned from Asian Experiences

The lecture intended to showcase Asian Experiences on cluster development, compare and contrast the factors that led to the success of each cluster, and draw the lessons that can be learned from such experiences, particularly in cluster development. The roles of different institutions (public sector, industry and business associations) at different stages of industrial development (i.e., initiation, quantity and quality expansion) were underscored. The highlight of the discussion was on the differences and similarities between Dhaka and Wenzhou with respect to the strategies taken in each case and their models of industrial development and the different roles government played.

Presenter: by Tetsushi Sonobe, Deputy Director, Foundation for Advanced Studies on International Development (FASID)
Moderator: Tetsushi Sonobe, FASID
Commentator: Mukesh Gulati, Project Coordinator, Foundation for MSME Clusters

Lecture 7: The Role of Government in the SME Development

Though the government plays a major role in promoting cluster-based SME development, various other institutions have roles to play. Non-market institutions such as international organizations, donor agencies, and non-government organizations are important players of industrial development. Collaborative actions among these institutions nonetheless are the key to successful cluster-based SME development. The main objective of the paper was to highlight the role of government in fostering cluster-based SME development. Lessons from the successes and failures of other countries in SME development were highlighted and recommendations were given as to the manners by which the government can assist in developing SME clusters. The vital role of marketplaces in countries with successful SME clusters was pointed out. Among the important contributions of marketplaces in the productivity of SMEs are enhanced interaction among dealers and buyers, stable supplies of parts and materials, improved information flow, enhanced quality of products in the area, regular transactions and harnessed relationship among key players. The implications of macro economic policies (e.g., the appropriate tax policy and trade protection measures) on cluster development were pointed out. Simple and transparent tax systems and competition were some of the important policy strategies considered in the discussion. Some proposals were also given regarding the proper timing for employing and inviting foreign advisers and consultants. It was explained that enterprises need to know what kind of consultants to invite and when to invite them (e.g., at the initiation stage, technology experts are more appropriate; during the production stage, management experts are more suitable). It was also emphasized that learning should be a continuous process such that even when enterprises become profitable, advisers or consultants' guidance and opinions should still be considered. It was also reiterated that FDI and global value chains are not a panacea for SMEs or industrial clusters. It was likewise noted that developing countries can benefit from getting involved in global value chains only when they have the ability to absorb knowledge, because foreign investors only approach countries that produce products of exportable quality.

Presenter: Keijiro Otsuka, Director, Foundation for Advanced Studies on International Development (FASID)
Moderator: Keijiro Otsuka, Director, Foundation for Advanced Studies on International Development (FASID)
Commentator: Michele Clara, Industrial Development Officer, United Nations Industrial Development Organization (UNIDO)

Lecture 8: UNIDO's Approaches for Cluster Development

The lecture aimed to introduce the cluster-based development approach to industrialization, the roles the UNIDO plays and the strategies and practices it adopts in promoting industrial development around the world. The presentation highlighted UNIDO's programme, activities and approaches to cluster development. Great emphasis was placed on the discussion and definition of a cluster, and how it differs from each of the following: (1) industrial park/export processing zone; (2) industry or subsector; (3) a value chain; (4) a network and (5) an association/consortium. Key differences involve proximity and concentration of firms, similarities of production activities, the role of the government in each and linkages among firms (i.e., backward and forward linkages), among others. Performing from non-performing clusters were also compared and contrasted, by pointing out their major differences in terms of costs of production factors (i.e., labor, input, technology), behavior of firms and people working for these firms, the role of public sector institutions, the framework in which each operates and the level of innovation. The role of social capital in cluster development was thoroughly debated, and interesting views and discussions from the plenary were generated. At the core of the arguments was the distinction between cooperation and competition. It was argued on the one hand that without cooperation or social capital, clusters can successfully thrive and on the other hand, it was stated that most of the successful clusters possess the characteristics of social capital, i.e., mutual trust among firms and people, cooperation in productive activities, etc. Though the views of participants and discussants about social capital were somewhat conflicting, there were some mutually reinforcing insights. The ways by which social capital can help cluster develop and the situation and conditions under which social capital works well and not so well were likewise given great emphasis. The role of the government in promoting cluster development was once again tackled in this session.

Presenter: Michele Clara, Industrial Development Officer, United Nations Industrial Development Organization (UNIDO)

Lecture 9: Cluster Development Approach: How Does It Work on the Ground?

This lecture provided a venue for the participants to discuss specific problems and difficulties with regard to SME development, the potential and prospective areas and sectors for SME growth and the role of public sector institutions and other key players such as donor institutions and international experts in ensuring the success of clusters. During the session, the participants were given guidance and consultations in the formulation of their country-specific action plan for SME development.

The presentation zeroed in on practical examples of SMEs' experiences, both feats and problems, using the social capital perspective. Looking at the Indian example of SME development, problems such as high factor inputs, lack of access to credits, underdeveloped sector-specific infrastructure and innovation bottlenecks were discussed and thoroughly

analyzed. A glimpse was given into the methodology used to address the problems of non-performing clusters and other market-related problems. Country-specific market-related problems (particularly SMEs/cluster industries) were actively discussed and carefully examined by both the discussants and the participants. Among the problems that emerged in the interactive discussion include: (1) marketing problems – firms are not well equipped with appropriate marketing techniques and strategies; (2) small firms have difficulties in accessing markets or have inadequate access to credit facilities; (3) there is a lack of information on foreign markets and information asymmetry as regards government rules and regulations on enterprises and (4) the regulatory environment for business is unfavorable – cumbersome and costly procedures for small industries, e.g., red tape with firms having to obtain many signatures in each step of the process (acquiring licenses and business permits, certifications problems). Among the strategies identified for policy makers in addressing some of the market-related problems and promoting cluster development include (1) harnessing private-public sector partnership (through dialogues between the government and firms, building linkages); (2) prioritization of core issues; (3) finding the real underlying causes of failures or non-performance of firms; (4) capacity building for entrepreneurs (training programs for improving their competitiveness); (5) providing infrastructure and access to credit

Commentator: Mukesh Gulati, Project Coordinator, Foundation for MSME Clusters

Lecture 10: What Is Japan Center & The Japan Center Business Course

At the core of innovation is the quality of human resources. Without the right knowledge, skills and technical know-how, innovation cannot succeed. Thus, investment in human capital is the key to achieving sustained innovation and further growth of the industry. On the other hand, donor agencies play a very important role in the development of an economy. There are various channels through which donor institutions can contribute to the existing efforts of nations to develop their economies such as by providing financial and technical assistance in the area of capacity building. Programs that enhance the technical capacities of people and communities are a crucial ingredient of industrial development. Knowledge about the latest technologies and techniques for managing a business, for instance, can be obtained from various training programs, either local or abroad. Technology and knowledge transfer, the key factors for successful innovation, are likewise acquired from training programs. The main objective of the lecture was to promote the Japan Center, the courses it offers and the importance of this initiative in building the industrial workforce of a country.

Topics included:

- The Japan Center, its history, mission, characteristics and main activities
- Concept and purpose of the Business and Japanese Language Courses
- Concept of Mutual Understanding Activities
- Collaboration with other Japanese organizations
- Outcomes of Business Courses
- Specific details about the Business Courses (lecture courses, etc.)
- Sustainability of the courses (localization of lecturers and operation, employment of local lecturers, action plans, etc.)

Presenters: by Yoshikazu Tachihara, Team Director, Japan International Cooperation Agency (JICA) / by Yasuyuki Kuroda, Senior Economist, International Development Center of Japan (IDCJ)

Lecture 11. ADB's Experience in SME Assistance

One of the main thrusts of the Asian Development Bank (ADB) in transition economies at present involves technical assistance and support for policy reform agenda and strategies that are geared towards accelerating the process of structural change in these countries, i.e., moving from a centrally-planned economy to a market-oriented one, through sound economic reform and management with the ultimate goal of reducing poverty. This lecture aimed at presenting ADB's experience in SME assistance, with particular emphasis on the GMS (Greater Mekong Subregion) Countries, namely, Cambodia, Lao PDR, and Viet Nam.

Topics included:

- Basic facts about the economies of Lao PDR, Cambodia and Viet Nam
- Poverty reduction: causes, strategies and directions
- The role of the government in GMS in supporting the process of structural change
- The role of the government in GMS in supporting SME development and the process of structural change
- Channels and strategies through and by which ADB supports or assists GMS to support SME development and the process of structural change

Presenter: João Pedro Farinha Fernandes, Economist, Asian Development Bank

Lecture 12: Policy on Industrial Clusters in Republic of Korea

The presentation focused on the role of the government of the Republic of Korea in promoting industrial clusters. A showcase of successful industry clusters and the specific roles of public sector institutions (national and local) through some policy agenda items were the essence of the presentation.

Topics covered:

- Rationale for forming industrial clusters
- Efforts to boost the rural economy: Benchmarks of best practices
- Issues raised as stumbling blocks of national development
- Strategies to enhance industrial clusters
- Policy agenda for industrial clusters
- Situation of industrial clusters in ROK
- Blueprint on industrial clusters
- Economic situation of Jeollabuk-do
- Understanding KSF
- Partnering with existing enterprises

Presenter: Bobae Park, Head of Administrative Service, Chonbuk National University, Republic of Korea

Country Presentations

A. Country Presentation: Lao PDR

Presenter: Manohack Rasachack, Deputy Director General, Ministry of Industry and Commerce

B. Country Presentation: Uzbekistan

Presenter: Aziz Abdukhakimov, Deputy Head, Cabinet of the Ministers

C. Country Presentation: Viet Nam

Presenters: Hoang Kim Huyen, Manager, Industrial Policies and Strategies Institute (IPSI); Truong Thi Chi Binh, Manager, Industrial Policies and Strategies Institute (IPSI); Vu Xuan Thuyen, Senior Official and Head of GEL & LP Division, Ministry of Planning and Investment

D. Country Presentation: Cambodia

Presenter: Tung Ciny, Director, Ministry of Industry, Mines and Energy

E. Country Presentation: Mongolia

Presenters: Bat-Undrakh Nyamsuren, State Secretary, Ministry of Industry and Trade; Amarkhuu Erdenepurev, Deputy Director, Policy Coordination and Strategic Planning, MIT; Osorpurev Batsuren, Officer, PCSP, MIT; Bataa Ganbold, Deputy Director, Financing Department, Ministry of Finance

F. Country Presentation: Kazakhstan

Presenter: Kuat Tumabayev, Head of Budget Investment and Planning Division, Ministry of Economy and Budget Planning

G. Country Presentation: Kyrgyz Republic

Presenter: Emil A. Abdykaparov, Head of Division, Ministry of Economy and Finance

H. Country Presentation: Tajikistan

Presenter: Nasimjon A. Hakimov, Chief Specialist, President's Office

I. Country Presentation: Myanmar

Presenters: Khin Maung Than, Deputy Director, Directorate of Industrial Supervision & Inspection, Ministry of Industry and Htwe Htwe Win, Assistant Director, Directorate of Industry, Ministry of Industry

Field Trips

Field Visit to Kawasaki City on 16 March 2004

- SMEs in Keihin Industrial Area (Kakumaru Kinzoku Co., Ltd. And Hinode Corporation)
- Kanagawa Science Park
- Kawasaki Entrepreneur Asian Village (VTECHMATE CO., Ltd.)

Opening Remarks

Masahiro Kawai, Dean
Asian Development Bank Institute (ADBI), Japan

Background

The promotion of small and medium-sized enterprises (SMEs) is one of the key elements for achieving economic growth, employment generation, and poverty reduction in developing countries in Asia. The Cluster-Based Development Approach Policy Seminar was intended to showcase the various advantages of a cluster-based approach to industrial development planning and SME development. Supportive national policy frameworks and enabling local business conditions are needed for these clusters to flourish. Given the rapid development of market-based economic activities and the rapid pace of economic globalization, policymakers and government officials in the former centrally-planned economies, who are the main target of this endeavor, are facing new challenges with regard to the "role of the public sector."

Emerging Issues and Challenges

SMEs constitute an integral part of any economy in Asia. They continue to produce a significant part of gross domestic product and, more importantly, generate a majority share of employment. They offer entry points for migrant workers from rural to urban areas, provide substantial off-farm employment opportunities in rural areas, and have the potential to harness local capacities and resources. Until recently, it was believed that successful industrial development often coincided with the emergence of large enterprises with an intra-firm division of labor that resulted in high productivity and competitiveness. However, technological and market developments have challenged this industrial perspective. With the development of new information and communications technologies and the rapid pace of globalization, the optimal size of industrial firm operations does not have to be so large. What appears important is the role of networks among firms, large and small, with specific technologies, know-how, skills, competencies and, above all, entrepreneurship. Also, consumers put a premium on customized goods rather than standardized, mass-produced goods. As a result, successful industries are increasingly characterized by flexible specialization, high-quality networking and close relations among small-scale firms and supporting institutions. This phenomenon presents new opportunities for SMEs, even within developing countries, to become main actors of industrial development much more substantially than previously believed.

Against this background, groups of firms located in close proximity have proved to be capable of achieving rapid growth of domestic sales, exports, output and employment,

while preserving high-value-added jobs and technological advantages. Evidence from both developed and developing countries testifies to the unique opportunity that SME cluster development provides for reconciling the often conflicting objectives of economic development, environmental sustainability and social equity. In many dynamic clusters around the world, these features are the outcome of cooperative linkages formed among local firms, business partners and government officials. Appropriate interventions by public sector institutions, local governments, and public-private partnerships have proved to be an essential element in creating mutual trust and collaborative frameworks among various actors within the clusters, and to harness the endogenous growth potential in the local areas.

The role of government in promoting economic growth and development has also shifted as the world has entered the new era of globalization where many countries have adopted market-oriented economic reforms and policies. As trade barriers and behind-the-border impediments are lowered, it is no longer sufficient for governments to focus on growth and development issues in a purely domestic context. Industrial activities of foreign firms are often an important part of growth equations: they not only bring in financial resources, advanced production technologies and management know-how, but they also connect domestic producers, large and small, with foreign markets through their logistics and distribution systems. At the same time, the public sector needs to withdraw from industrial activity—directly through state-owned or state-operated enterprises (which are often inefficient) or indirectly through its guidance of domestic firms to invest here and there. Essentially, governments must now create a supportive environment to enable domestic and foreign firms to be active and leave such activities to the private sector, while setting up appropriate regulatory frameworks so that the market system functions efficiently. It is likewise recognized that facing a certain degree of market imperfection, SMEs clearly benefit from some non-distortionary public sector interventions. However, these new requirements are not yet widely practiced in many developing countries in Asia. It is essential for policymakers and government officials to have a clear understanding of the catalytic role of the public sector in the industrial development process.

Expectations for the Policy Seminar on a Cluster-Based Development Approach

The seminar was an attempt to equip key policymakers with sufficient knowledge and information about industrial development in their respective countries, particularly about successful SME development experiences, focusing on the cluster-based approach in Asia and other parts of the world. Policymakers were expected to learn from lectures and interactive discussions about the common patterns of successful cluster development in the region. Key catalytic roles of governments were highlighted and the importance of conducive policy environments was emphasized. One of the vital roles of representatives from donor institutions is to demonstrate the importance of capacity development activities that have been applied in Asian countries so as to convey a clear understanding of the essential elements of successful policy interventions.

The seminar was also a venue for interactive discussions, dialogues and consultations among academics, donor practitioners and government officials on the necessity of assistance from donor institutions and the possible modalities of collaboration among the participating countries. Most importantly, the seminar aimed at generating appropriate and implementable concrete action plans and policy strategies from country representatives, in ways geared towards industrial development. As part of the learning process, a field trip/exposure visit to some industrial areas in Kawasaki City (located next to the Tokyo Metropolitan area) was scheduled to encourage participants to observe "marketplaces,"

industrial zones, key infrastructure, and other software support provided by the public sector in Japan.

Conclusions

The policy seminar not only allowed fruitful exchange of information and interactive discussions among participants but also offered a gamut of new and apposite policy strategies that country representatives can choose from in crafting and formulating their own industrial development policies. The ADB Institute, as the prime mover on endeavors such as this, continues to provide support through collaborative actions with its partners and stakeholders for faster growth and development in the entire region.

The opening remarks session was followed by a brief introduction of the seminar by Toru Hashimoto, Senior Capacity Building Specialist, ADBI. The introduction addressed the seminar objectives, schedules, coverage and topics and some procedures for country and group work preparation and presentations. The objectives of the policy seminar were as follows:

1. To provide knowledge on possible policy intervention under market economy for SME development, highlighting the cluster-based approach to industrial development planning

2. To provide opportunities to discuss possible national policy framework and action plans among participants, donors and academics.

3. To provide opportunities for future collaborations.

Closing Remarks

Masahiro Kawai, Dean
Asian Development Bank Institute (ADBI), Japan

Mr. Kawai conveyed his gratitude and compliments to all the participants, guests and members of the policy seminar, hoping for a very successful endeavor. The interactive process by which the seminar was conducted would be useful, he stated, for both the ADBI and the participants as it would not only serve as a training course for participants but also an intelligent and active communication that allowed for greater exchange of relevant information and practical knowledge about country experiences on and future prospects for successful cluster-based SME development. Further understanding of the issues about the subject matter was expressed in great anticipation.

He said that despite the importance of SMEs in the process of structural change and economic development, not much attention has been paid to them. The cluster-based approach to industrial planning and SME development brings about a win-win solution and situation for all key players involved in the process. Competition is a crucial game to be participated in by concerned stakeholders and in such a game, some end up in glorious victory while some are bound to fail. The challenge for policymakers and for the government as a whole rests on strategic policies and actions plans that will continuously support the successful clusters and provide assistance to clusters that are falling or way behind the growth frontier.

Market liberalization and deregulation are a crucial part of the process of economic development but this does not mean that the government's roles and functions are to be taken for granted. In many economies the world over, the government is the most crucial institution for economic development. A dysfunctional government is not supportive of market and economic development. Market infrastructure, legal systems, regulatory policies, conducive environment for business, investment and politics are a necessary mix for well-functioning markets. This range of government powers over the economy however only extends when markets fail or when externalities are present.

The market economy works best in conditions where there is a harmonious and collaborative partnership and relationship between the government and the private sector, with the former being responsible to the latter and the latter being appreciative of the functions of the former. Apparently, in some parts of the world insufficient economic development is often associated with a poor relationship between the public and private sectors. Fortunately, mutual beneficial interaction is something Asian countries can nurture, which can then move economies forward.

The greatest challenge for participants is how to come up with sound policy actions that will move their economies forward and allow them to survive in a globalized environment.

Major Challenges in SME Development: Framework of Analysis

Hidekazu Tanaka, General Manager/Principal Consultant
Mitsubishi UFJ Research and Consulting (MURC)

Introduction

Countries face several issues and challenges regarding SME development that vary across countries and periods the world over, so the policy applications vary as well. The session was aimed at providing a historical review of SME policies in Japan and a thorough appraisal of current undertakings related to SME and market development in three countries, namely Lao PDR, Viet Nam and Tunisia.

SME Policies in Japan and Economic Development

SME policies in Japan changed with the country's economic development, dating back to the reconstruction period after the Second World War to the present-day concept of SME and its corresponding laws and relevant policy instruments and strategies. At the end of WWII, Japan's economy started reconstruction, following the dissolution of the business conglomerates named the zaibatsu, which were once the controlling and dominating force in most of the country's economic activities; as well as fundamental economic reforms such as privatization and the democratization of the market economy.

During the period 1945-1954, the government encouraged the development of SMEs through the improvement of basic tools for SME policies based on the establishment of the Small and Medium Enterprise Agency (an agency under the Ministry of Government Trade and Industry) in 1948. The period 1955-1962 witnessed Japan's first stage of high growth. During that time, gaps between SMEs and large enterprises were reconciled through the rectification of the Dual Structure with emphases on finance, organizational upgrading, management diagnosis and guidance. The second stage of high growth occurred during the period 1963-1972 when SMEs were becoming modernized and the government enacted the "Small and Medium Enterprise Basic Law" in 1963. Knowledge intensification transpired during the stable growth period 1973-1984 when intangible managerial resources were enriched via the Institute for Small Business Management and Technology. After the mid-80s throughout the first stage of the country's economic transition period, structural change and industrial agglomeration took place as part of the government's efforts to support start-up and new businesses and to promote SMEs. The most recent policy instrument the government has initiated was the 1999 amendment of the Small and Medium Enterprise Basic Law that promotes diverse and vigorous growth and development of independent SMEs. This law not only strengthens the management base of SMEs but also facilitates their adaptation to overall economic and social changes.

SME context in the Japanese Economy

Based on the SME Basic Law, SMEs in Japan are defined as follows:

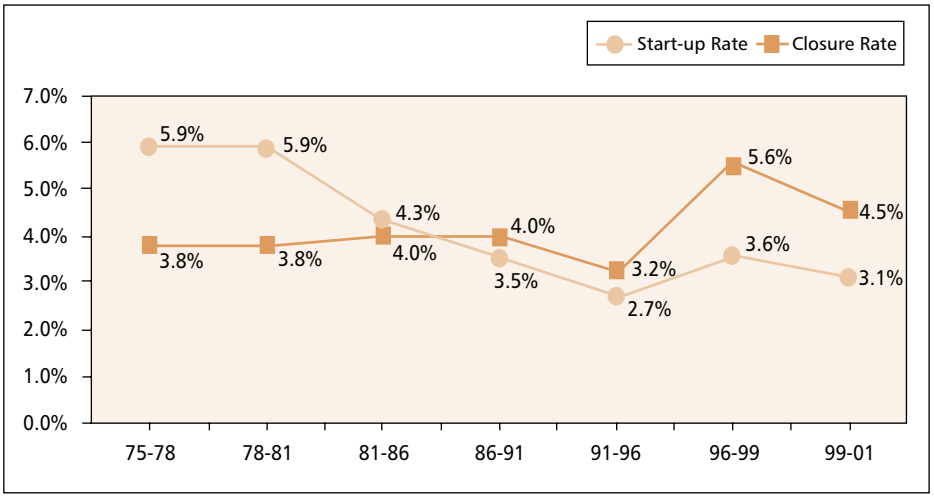
Definition of SMEs in Japan (SME Basic Law)

Sector	Definition
Manufacturing	Capital: < US$3million (¥300mill) Employment: <300
Wholesale	Capital: < US$1million (¥100mill) Employment: <100
Retail	Capital: < US$0.5million (¥50mill) Employment: <50
Service	Capital: < US$0.5million (¥50mill) Employment: <100

In terms of the number of enterprises, SMEs account for 99.7% (4,690 in absolute figures) of the total enterprises in the country, the remaining comprises large enterprises. In terms of the number of employees, 29,960 thousand or 70.2% are employed by SMEs and the remaining 30% work for large enterprises. As regards the value of shipment in manufacturing, SMEs and large enterprises have an equal share in the economy, at a ratio of 50-50%.

The graph below shows that there were more cases of business start-ups in the past than at present, where there are more enterprise closures. Apparently the ideal scenario is to have higher rates of or more business start-ups than closures. This change happened due to the country's economic slowdown.

Change in Start-Up and Closure Rates (enterprise based)



Major challenges in Japan

SMEs in Japan are predominantly still in the business of subcontracting. Some of the automotive and electronic enterprises are moving to foreign countries but most are still in Japan, so that there are still a considerable number of parts and component suppliers. This being the characteristics of SMEs, the following are the major characteristics of SME development in Japan:

- SMEs are in a disadvantageous position vis-à-vis large enterprises
- SMEs need to be protected from unfair trade by large enterprises
- Recently, SME have functioned as innovative and venture enterprises.

In general, the major challenges in the transition and developing economies include:

- SME as locally capitalized private sector enterprises
- SME for utilizing local natural and human resources (employment creation characteristic of SMEs)
- SME to form national industrial structure (some SMEs function as part of bigger industries)
- Challenge on the concept of SMEs, whether size is sufficient to define SMEs.

Major Challenges in Transition and Developing Economies

The following are the country-specific challenges based on some SME-related development programs conducted:

Case of SMEs in Lao PDR

SME Decree (No. 42 PM) states that the major tasks are:

- Improve the regulatory environment
- Enhance the competitiveness of SMEs
- Expand the domestic and international market
- Improve access to finance
- Encourage the development of business organization and accounting
- Enhance entrepreneurial attitudes and characteristics within the society

Policies to be reviewed as regards SME development in Lao PDR:

- Registration and licensing: simplifying registration and licensing procedures to make business start-up easier
- External trade: simplifying import and export procedures such as the importation of regulation items, inspection at border to facilitate trade
- Investment promotion: simplifying FDI approval procedures using the OSS technique (one-stop-service)
- Access to finance: providing access to finance such as the development of banking products for SMEs, financial leasing and non-collateral financing
- Accounting: simplified accounting for SMEs
- Business Development Services (BDS): enhancing function of business organizations to support SMEs.

Case of Tunisia: Investment Credit for SME

- Despite the country's satisfactory economic performance in 2002-2005, it still has low investment growth and that growth is very limited in several export sectors; it is coupled with high unemployment rate
- Recognizing the role of SMEs in Tunisian economy, there seems to be a need to further upgrade SMEs

- Government-created SME Finance Bank
- Active commercial banks exist as co-financiers
- Government applies non-discriminatory policy for foreign capital
- Has requested Japanese government finance though Japan Bank for International Cooperation (JBIC)

Case of Viet Nam: Competition Law for the Market

- Recognizing the need for market rules for a competitive business environment, the government of Viet Nam enacted the Competition Law in 2005 (the Anti-monopoly law is the equivalent policy instrument in Japan). Alongside this effort, technical assistance was received from JICA with assistance from the Fair Trade Commission of Japan
- Issues include the prevailing dominance of State-owned enterprises (SOEs) in the country's basic industries (cement, among others)
- Foreign invested enterprises already share some major products such as soft drinks and insurance (Coca-cola and prudential insurance)
- Economic growth vs. fair competition
- SME promotion under competitive market rules

Among the points considered for further discussion include:

- To review the definition of SMEs
- Policy applications for the market economy
- The government's role in promoting SMEs

Q&A/Discussions:

Queries about some best practices in the US and the Europe were made, i.e., Affirmative procurement for SMEs and Small Business Act, respectively as regards government intervention in promoting SME and developing industrial clusters and whether said practices or laws and regulations also exist in Japan.

Compared with the US, investment funds in Japan are relatively limited and funding institutions are less active in providing loans to enterprises. As a result, opportunities for obtaining funds are very limited especially among businesspersons and investors who want to start up a new business. Hence, prefectural governments are encouraged to set up their own investment funds to provide the equity for financing/loans to SMEs. At the national level, although the government does not provide financial assistance, there are SME agencies that are responsible for the technical aspects of SME operations. At present, issues about funding and equity financing have been gaining increased attention, and initiatives from the prefectural governments are starting to have effects. While the prefectural governments are responsible for SME development policy, the central government is promoting a scheme for certain groups of enterprises, such as in infrastructure. State-owned financial institutions also play a role in SME financing. In Japan, while the government provides the non-collateral financing, the commercial banks provide the loans.

One of the major characteristics of the Japanese economy is the prevalence of the subcontracting system. While there are many disadvantages with subcontracting-dominated businesses, the advantages far outweigh the disadvantages, as the system facilitates technology assistance (provided by large enterprises to SMEs), managerial assistance and some forms of financial assistance from large enterprises to SMEs, resulting in reduced market failures in credit, technology and technical know-how.

Major Challenges in SME Development: Development Stage and SME Assistance

Nori Iai, Consultant, Unico International Cooperation

Background

There are various ways by which the countries and regions of the world can address their economic development problems. Despite the abundance of economic development methodologies and theories, it is acknowledged that there is no internationally recognized methodology for the analysis of development. The same is true for the development of small and medium enterprises (SMEs). Methodologies for analyzing SME promotion and development are often not well developed in that there is lack of consensus among players on how to understand the actual state and issues in a simple way. Thus, there is an increasing need for methodologies that are easily understood by implementers.

Awareness of the problems regarding SME development through time has grown on account of the following: (1) the promotion of SMEs has become an essential policy for sustainable development in developing countries; (2) on top of the diverse nature of SMEs, the initial conditions in which they operate also vary by country; (3) it is recognized that the Southeast Asian model of Japanese Economic Cooperation is not always applicable in other situations; and (4) countries are encouraged to conform to innovation models that emphasize market mechanism and accountability. The biggest challenge therefore is how to respond to diversities involving initial conditions, momentums of development and benchmarks by countries.

As previously mentioned, the initial conditions under which SMEs operate differ by country or area. Among these conditions are the level of literacy and basic education; the level of infrastructure development, policy and systems; the incongruous relationship between the international and domestic social and economic systems; the diversity of development influences from Japan, Europe, USA and neighboring big economic powers.

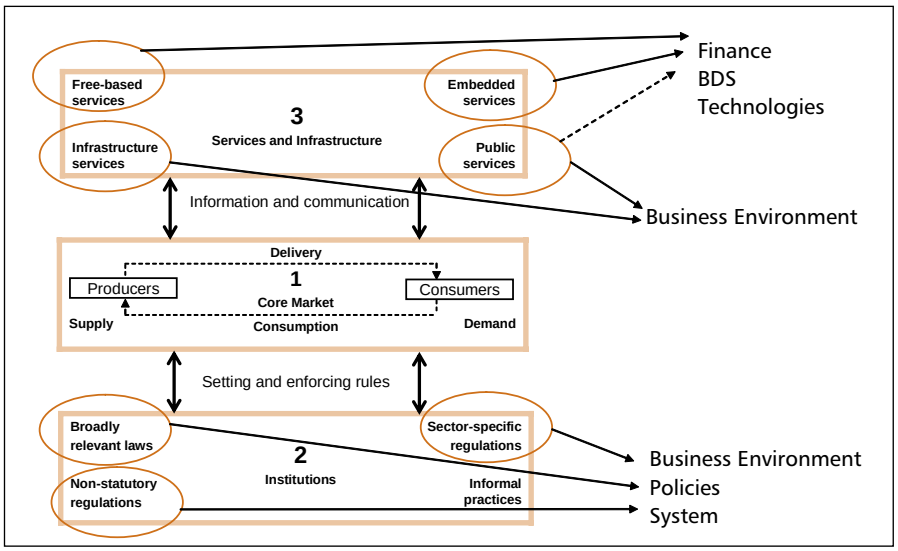
Given this, a persuasive and effective methodology for SME promotion must start with the development of frontline oriented policies by harmonizing global perspectives with the inherent circumstances of each country. The next step would be to develop or adopt an innovation model that focuses on market mechanism through: (1) the benchmarking of the business environment where country-specific investment environment is studied; and (2) a breakthrough in the MF and BDS approach.

Hypothesis and Framework of the Study

SME promotion policies can be designed in different stages. The first is to define four themes: (1) Policies/systems/business environment; (2) Business Development Service (BDS); (3) Finance; and (4) Technology. The second involves designing the development stage by category. Third is to select indexes for monitoring the stages of development. The fourth involves preparing support measures by stage of development. The final stage involves examining the stage of development of sampled countries.

The correlation and interrelationships among the core market, systems and services are depicted in the figure below, which serves as a framework for evaluating SME development. Considering this, participating countries can review their existing methodologies for SME promotion and development.

Correlation among Core Market, System and Service



In each of the four theme categories, the stage or phase in development is determined by a set of mutually relevant factors. This framework serves as a guide for developing countries that are interested in evaluating the state of SME development in their countries.

The table below summarizes the conditions or situations under each stage of development per category of SME development. These conditions also determine the stage of development of the country in terms of its SME development.

Initial Stage	Development Stage
Actual Status of SMEs	
▪ Enterprises are mainly micro enterprises and there are informal sector markets ▪ Level of education and specialized knowledge and technologies is low ▪ Low access to finance ▪ Linkages among enterprises are low	▪ There is an abundance of competitive SMEs ▪ Level of education and specialized knowledge and technologies is high ▪ High access to finance ▪ Linkages among enterprises are high
Business Environment	
▪ Complicated procedures for registering companies (e.g., whether acquiring licenses to export/import are constraints) ▪ Complicated tax system and collection system are elements of constraints ▪ Judicial system does not always protect economic rights ▪ Labor laws constitute impediments	▪ Procedures are simplified ▪ Tax systems are in place to enhance competition ▪ Decreasing unforeseeable judicial risks as a result of well functioning judicial system ▪ Reforming laws to enhance competition
BDS	
▪ Access to basic services is low ▪ There is a market failure in the commercial base provision of BDS ▪ Direct provision of services and subsidies by the government	▪ Access to basic services is high ▪ There is free competition among commercially independent service providers ▪ Government and business associations complementarily support markets
SME Finance	
▪ People's confidence in financial markets is low ▪ Access by SMEs to financial services is low ▪ Ratio of informal finance is high ▪ Development of Credit Insurance System is low ▪ Function of financial supervision is low	▪ People's confidence in financial markets is high ▪ Access by SMEs to financial services is high ▪ Ratio of informal finance is low ▪ Development of Credit Insurance System is high ▪ Function of financial supervision is high

For a thorough evaluation of SME development in each country, there are also proposed indicators by which stages in development can be evaluated or reviewed.

Indicators to Monitor Stages in Development

Actual Status of SMEs

Items	Check points	Indicators (samples)
Place of SME sector in national economy		
Definition of SME, number of SMEs	■ Who (authorities/institutions or laws) and how define SMEs? ■ How many companies are registered and how about proportion of micro-enterprises, small companies, medium-sized companies and big companies?	Number of business places by size of company, number of companies
Ration of formalized SMEs	■ At what percentage of SMEs do they stay in informal sector?	Informal sector ratio in national economy
Position of SMEs in national production activities	■ Activities of SMEs, how are they important in the manufacturing sector as a whole?	Number of business places by size of manufacturing company, number of companies, sales volume, added value, amount of capital investment
Competitiveness of SMEs	■ To what extent are SMEs competitive and productive, compared with big business? ■ What is the share of SMEs in domestic market and that in international markets?	Sales volume, added value and capital investment per employee, export and import data of industrial products
Employment absorbability of SMEs	■ How do SMEs contribute to labor market (employment numbers)?	Number of employees by size of company
Dynamism of SMEs	■ How do SMEs contribute to industrial dynamism? ■ (Start-up ratio and closure ratio, are they both high?)	Number of start up (start-up ratio), number of closure (closure ratio)
Level of education/training and technology		
Level of education/ training and technology of SMEs	■ At what level of education/training are entrepreneurs and middle management? ■ How many entrepreneurs have mastered professional expertise and management know-how?	Enrollment ratio of primary/ secondary and higher education, number of graduates of vocational and business schools
Finance		
Access to finance	■ Financial institutions: do they grant loan facilities to micro-enterprises and SMEs? ■ What kind of constraints do SMEs face in case of finance from financial institutions?	Ratio of funding in formal financial sector
Linkage		
Linkages among enterprises	■ How strongly do SMEs have vertical or horizontal linkages among enterprises and what synergies do they appreciate? ■ Are SMEs included in supporting industries of big business or international network?	Ratio of procurement from SMEs of big companies, number of subcontracts of SMEs

Business Environment

Items	Checkpoints	Indicators (samples)
Procedure of start-up business, acquiring approvals and licenses		
Start-up business	■ How easy is it to register companies in order to pursue official business?	Number of days, cost and minimum capital needed for registration
Acquiring approvals and licenses	■ How complicated and how expensive is it to acquire approvals/licenses related to business activities?	Amount of time and cost needed for acquiring approvals/licenses
Procedure of international trade	■ How complicated is process of export and import, and how long generally does it take to complete the process?	Number of documents and amount of time needed in process of export and import
Tax system and its collection		
Tax system and its collection	■ Burden of tax and complicated procedure of tax payment: how serious are they?	Type of tax, taxation ratio, amount of time that company takes for tax payment
Improvement and enforcement of legislation		
Protection of business property and personal assets	■ Does it happen that central government or local authority unreasonably dispossess business property or personal assets?	Lawsuit and percentage of win
Investor protection	■ Investors' rights: how strongly are they protected by means of enforcement of laws?	Degree of investor protection
Effectiveness of contracts	■ In case of breach of contracts, how much time and cost does it take to compensate damages by means of lawsuit?	Amount of time and cost to be spent from initial lawsuit to final compensation
Bankruptcy proceedings	■ In case of bankruptcy of debtors, how much time and cost does it take to collect debts by means of legal proceedings?	Amount of time and cost to be spent from initial lawsuit to final collection
Legislation to assure free competition	■ Laws to assure competition such as antitrust acts: are they well prepared in order to assure free competition in markets?	Lawsuit and percentage of win
Employment-disemployment		
Employment/disemployment of workers	■ Laws and rules related to employment and disemployment of workers, how flexible are they and how much does it cost to comply with them?	Degree of difficulty and cost for compliance with law/regulations

BDS

- Are basic services steadily provided at a low cost?
- What is the ratio of commercially-based provision of BDS?
- How many commercially independent providers are there?
- Do independent providers have any fear of crowding-out?
- Do business associations and chambers of commerce and industry support the development of BDS market without competing with private providers?
- Does government policy on BDS place a disproportionate emphasis on direct services and provision of subsidies?

- Are regulations enforced by government constraints on the promotion of BDS?
- Is there any control of government or self-control of the business association?
- Do business associations and chambers of commerce and industry work for the interests of the private sector?
- Do stakeholders understand the BDS approach?

SME Finance

	3 fields to be checked	Main items	Viewpoints	Indicators (samples)
SME Finance	Financial institutions (Financing)	Delivery	Procedure	Days and cost needed to register new company, to take out mortgages
			Network	Oligopoly ratio of big banks, loan ratio of rural/urban area
		Deposit	Interest rate	Interest-rate differential between deposits and loans
			Outstanding balance	Deposit reserve ratio, ratio of cash outside banking system
		Loan	Interest rate	Interest-rate differential between deposits and loans
			Outstanding balance	L/D ratio, ration of loans to private sector, NPL ratio
			Collateral	Function of credit guarantee system, margin of collateral
	SMEs (Funding)	Funding	Formal finance	Ratio of companies which finance in formal market and ratio of amount financed
			Informal finance	Ration of informal micro finance
		Corporate information	Financial statement	Degree of disclosure of account book and financial statement
			Business information	Appropriateness of business plan
	Authorities (Supervising/ monitoring)	Supervision	Supervision	Ration of financial institutions monitored by competent authorities, application of prudential standard
			Monitoring/report	
		Financial infrastructure	Legislation	Enforcement of banking law, days and cost needed to proceed to bankruptcy and repossession
			Accounting system	Enforcement of accounting standards, ability of CPA
			Information	Trustworthiness of credit bureau

Technologies

Technologies	Explanation	View Points
Equipment technologies	Technological skills to operate and improve introduced/imported equipments	What is the level of precision and quality? Do they source equipment from equipment manufacturers in the country or within the same region? Do they alter and improve equipment they originally bought?
Proper technologies	Technological capability for development, design, and production; processing and assembling skills, product inspection technologies	Do they develop new products by themselves? Do they design in-house? Do they manufacture machinery tools by themselves?
Management Techniques	To materialize quality improvement, cost reduction and faster delivery	Do they implement management by visualization? Do they make production plans in-house? At what frequency? Do they have a quality inspection unit?
Procurement of parts and materials	How much of parts and materials necessary for production can be sourced within the country	Are material and parts major factors leading to defective products? What is the level of industrial clustering in the region?
Industry associations	Level of organization of industry-specific chambers and associations	Are private sector organizations formed? Are there prime contractor firms among local firms? Are there assembling firms among local firms?
Public institutes	Public institutions exist, e.g., testing and research institutes, sectoral promotion centers, standard and accreditation institute	Is there a technology support center? Do they have a technology counseling window? Is there a vocational training institute?
Institutions & promotional schemes	Existence of organizational unit in charge of promoting SME technologies	Is there policymaking unit on technology promotion for SMEs? Are there laws for SME promotion and professional engineer law? Is there budget provision for SMEs' technology development?

In addition to the above-listed indicators and checklists for monitoring and reviewing the stages of SME development per category and function, more effective approaches for each function by development stage have been proposed. At each stage of development, i.e., from initial to developed stages, there are suggested entry points for donor agencies, involving, for instance, the focus or direction of assistance in each stage of development. The tables below summarize these approaches.

Effective Approaches in Policy, Institution, Business Environment
by Development Stage

Stages	Direction of Effective Assistance Approach
1 (Earlier stage)	1. Knowledge Exchange, Transfer and Dissemination (Policy Dialogue) on Advantages of Free and Fair Business Environment and Effective SME Policies and Institutional Framework 2. Basic Training of Government Officers on Design/Implementation of SME Policies and Institutional Framework 3. Human Resource Development for Broad Range of People through Development/Strengthening of Basic Education and Vocational Training
2	1. Development/Improvement of Institutional Framework for Promoting Free and Fair Business Environment 2. Knowledge Exchange, Transfer and Dissemination (Policy Dialogue), Technology Assistance, and Human Resources Development for Establishment/Strengthening of SME Promotion Policies and Institutional Framework 3. Human Resources Development of Public and Private Sectors for SME Promotion at Central/ Local Levels
3	1. Knowledge Exchange, Transfer and Dissemination (Policy Dialogue), Technology Assistance for Development /Implementation of Concrete SME Promotion Measures Targeted for Specific Policy Objectives 2. Assistance for Design/Implementation of Concrete Policies Measures for Promotion of Specific SME Issues (Development of Industrial Sector, Sub-Sector, Region, and Value Chain Activities) Human Resources Development for Promotion of Specific SME Issues (Development of Industrial Sector, Sub-Sector, Region, and Value Chain Activities)
4	1. Assistance for Design/Implementation of Institutional Framework for Strengthening Industrial Linkages with Foreign Companies including Japanese Firms 2. Assistance for Design/Implementation of Institutional Framework for Strengthening Competitive Advantages of SMEs, which Contribute to Promoting Trade and Investment in Consideration of WTO and FTA (with Japan and Others) 3. Strengthening of Human Resources Development in relation to 1 and 2
5 (Developed countries)	No Basic Assistance Needs

Effective Approaches in BDS by Development Stage

Stages	Direction of Effective Assistance Approach
1 (Earlier stage)	1. Prioritizing Upgrading and Expansion of Basic Services and Improvement of Business Environment before Promoting BDS, or Considering Measures Combining All 2. BDS Awareness Raising Training for Policymakers in Public and Private Sectors (Existing BDS training seminars could be made part of such awareness raising training) 3. Development of BDS Roadmap through Market Assessment (Including assessment of other regulations and public services which might limit development of BDS market) 4. Development of BDS Strategies that also Facilitate Core Market Development 5. Provision of Information on BDS Providers ant Their Service Menus 6. Strengthening Policy Dialogue with Chamber of Commerce and Industry and Business Associations and Enhancement of their Capacity to Develop BDS Market 7. Introduction of Modern Management Studies into Educational and Training Market, Entrepreneurship Development
2	1. Expansion and Deepening of the Above 2. Capacity Building of Model Case of Private BDS Providers 3. Introduction of Pilot BDS Presumably Suitable to Particular Clientele
3	1. Expansion and Deepening of the Above with Narrower Targeting 2. Time-bound Use of Market Facilitation Tools such as Matching Grants and Training Vouchers
4	1. Limited Application of the Above, Efforts for Remaining Specific Issues 2. Support for Developing New BDS Products
5 (Developed countries)	1. BDS Development Focusing on Other Poor and Socially Vulnerable Groups

Effective Approaches in Technologies by Development Stage

Stages	Category	Direction of Effective Assistance Approach
1 (Earlier stage)	Industry level	1. Technical Assistance by Public Institutions on Equipment Operation and Simple Repair Techniques 2. Train Processing Technologies of Simple Manufacturing Industries Using Local Raw Materials
	Public	3. Design Technology Policies by Establishing Organizational Body Responsible for Technology Policies.
2	Industry level	1. Improve Capacity Utilization Ratio by Planned Technical Assistance on Preventive Maintenance on Equipments 2. Train Light Industry Technologies and Processing of Related Parts
	Public	3. Establish Industry Associations and Build Awareness on Data Collection and R&D Activities
3	Industry level	1. Train Engineers who can Alter and Improve Equipments, by Promoting Equipment-related Technologies through Imports of Heavy Chemical Industry Plants 2. Technical Assistance on Management for Cost Reduction such as Inventory Management and Subcontract 3. Technical Assistance to Willing SMEs to Improve Local Procurement of Parts and Materials.
	Public	4. Establish High Level Vocational Training Institutes to Increase Skilled Labor.
4	Industry level	1. Develop Human Resources who can Design Complex Integrated Assembly Products (Development of Management Resources). 2. Promote Supporting Industry by way of Technology Development Strategy and Facilitating Linkages to Core Manufacturing Firms.
	Public	3. Further Development of Information Infrastructure
5 (Developed countries)		No Basic Assistance Needs

The application of these methodologies and approaches and the use of the proposed indicators to review or monitor the state of SME development in each country and to assess which development stage of assistance programs are most crucial in SME development may vary by economy, depending on the prevailing economic circumstances. This kind of framework could, however, aid policymakers, especially in developing countries in reconsidering or rethinking which policy parameters and instruments are most suited or needed for reviewing and improving SME policies or institutions. The framework is not a standard tool for evaluating SME development but simply provides policymakers with a checklist or guidelines for assessing the state of SME development in their countries. Finally, a number of future directions need to be considered in this regard, namely: (1) Use of check-sheets by the relevant ministry officer in order to recognize the stage of development by category; (2) Deepening discussion with other ministries or donors, whenever necessary, about fulfilled check-sheets in order to have a common recognition and to improve checking methods; (3) Establishing standards free from the personality of the individual ministry officer and to make an appropriate and transparent Development Road Map (4) Developing more clear-cut evaluation systems for SME promotion policies as well as Economic Cooperation.

Q&A/Discussions:

Putting together all the elements of the policy parameters into four categories, namely business, financing, business development services support and technology is crucial for monitoring and assessing the level of SME development. Arguments may arise regarding the appropriateness of the categories developed in the monitoring and assessment tool, but what is most important in the process is that policymakers are aware of which policies need to be put in place and which of them require assessment and improvements. It is worth emphasizing that the importance of the study does not solely rely on how to gauge the stage of a country using the indicators, but the manner by which all these policy parameters are drawn together to set up valid guidelines, such as by putting these elements into the next stage of legislation more rigorously.

A few recommendations were made on how the study could be improved. One suggestion was to clarify the shift from one stage of development to the next (e.g., does the country have to move from the first stage to the last to be guaranteed SME growth?). Another suggestion was to determine the applicability and appropriateness of the study not only in terms of describing the actual scenario of SME development but also in formulating policies or strategies for SME development (e.g., if technology and finance are weak but policy is good, does policy need to be changed?). The interrelatedness of the elements in each development stage was given emphasis, e.g., indicators that capture the mix of policies.

It was pointed however that the indicators and stages of development included in the study are just the minimum standards, and that each country can customize its own SME monitoring and evaluation tool based on country characteristics, prevailing issues and pressing needs.

Public Policies for SME Development: Market Failures and the Role of Government

Andrea Goldstein, Senior Economist, Organisation for Economic Cooperation and Development

Rationale for Government Intervention

There are four major reasons justifying government intervention in industrial policies. One is to correct market failures that arise due to monopolistic distortion, natural monopolies and externalities (both negative and positive spillovers) caused by firms or enterprises. Another reason for government intervention is the provision of public goods. Under economic theories, the role of government in the provision of public goods is very crucial given the non-excludability and non-rivalry characteristics of public goods (e.g., non-payers cannot be excluded from the consumption of a public good, for either technical reasons or cost inefficiency). Public intervention in this respect is important especially in cases when there is asymmetric information (e.g., a small firm despite being sound, may not be able to gain access to credit due to asymmetric information). The third underlying principle for public intervention pertains to social preferences. In some countries, governments play an important role in the economy while in others, they do not. Macro economic objectives are the fourth reason for government intervention in the economy. Ensuring macro economic stability and promoting growth and competitiveness are the basic principles behind public intervention in this regard.

Policy Rationale for Government Action

In many developing countries, industrial policies are seen as an ingredient of the development strategy. Industry has the capacity to organize production, mobilizing both tangible and intangible assets, in the sense of using existing assets and creating new necessary assets. Many countries have come to the realization that industrialization is essential for the transformation of the economy as a whole. Industrial policies are a subset of several government policies, which likewise encompass different public actions that aim to ensure the sustainable structural transformation process of an economy. Public actions relating to industrial polices are also important especially in a rapidly changing environment where competition and globalization are the name of the game. Industrial policies in this sense need to be harmonized and consistent with recent developments brought about by global changes such as the integration of economies. Succinctly, industrial policies concern all productive activities.

Among recent changes in productive structures and international competition are: the entry of new competitors, such as Japan in the 1980s and People's Republic of China and India more recently; technological changes such as the diffusion of information and telecommunication technologies (ICTs); scientific breakthroughs such as genetic engineering and the development of biotechnology; institutional changes such as the deepening of European integration and enlargement of European Union (EU); social and demographic changes such as the ageing of the population in developed countries and transformation of (local) clusters into (global) value chains.

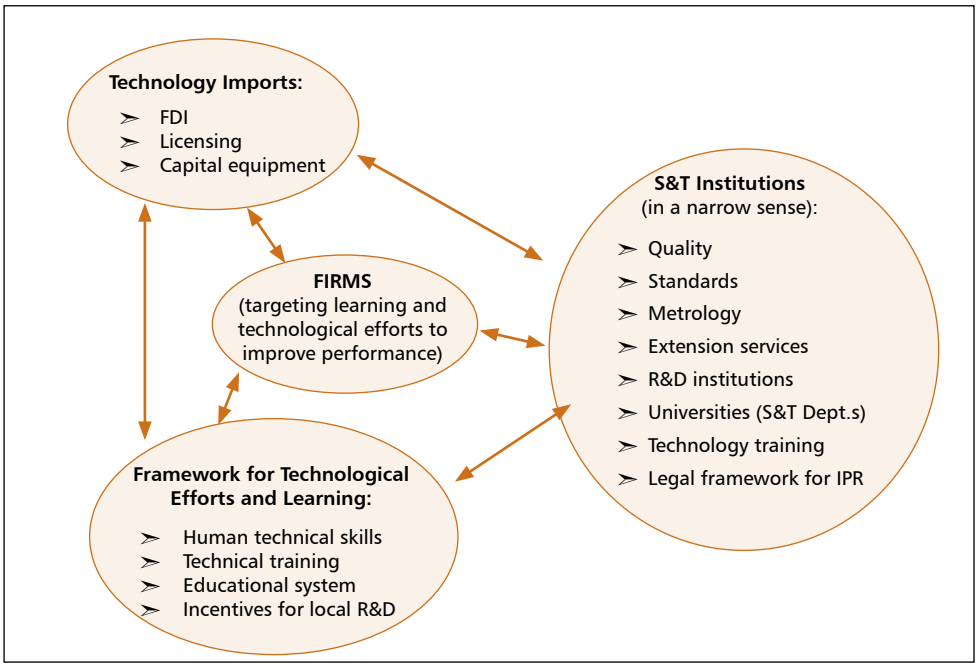
Clusters evolve over time. This kind of transformation depicts the fundamentals of evolutionary economics characterized by a system that is continuously disrupted by technological change. This kind of change implies a dynamic process under which mutation leads to superior responses and outcomes, which are then geared towards innovation. The factors that facilitate the successful evolution of clusters over time consist of firms that are

the key players in the transformation process, with their strategies and intrinsic capabilities; an institutional framework that is key in any transformation process; tacit knowledge – a knowledge that is accumulated through experience; and learning by doing, one that is embodied in individuals, transferred through social interaction, a non-formalized (as opposed to codified knowledge which can be stored, copied and transmitted easily) knowledge which large part is needed for innovation.

New Industrial Policy

Industries change, as do industrial policies. There are at least three key differences between old and new industrial policies, particularly in terms of design. One of the differences is that there is a growing recognition that growth is led by the private sector. During the 60s and up to the mid 70s, industrialization was mainly led by the state, but at present, growth and industrialization focus more on the initiatives of the private sector. Thus policies are geared towards promoting private entrepreneurship where great emphasis is on high-powered incentives to trigger private risk taking. Industrial policies are designed in such a way that incentives are created for firms to form clusters. Another difference involves the role of public entrepreneurs, i.e., top policymakers engage themselves in organizational experimentation. Policymakers have become more visionary and are good at steering the process of structural change. The role of capacity building has gained ground, identifying and training people who can implement changes in the country. The third difference is that at present, the focus is on process not outcomes. This entails a private-public process of discovery to generate new opportunities for private agents. Rather than focusing on the outcomes of growth in terms of GDP or GNP, emphasis is now on the process of growth whereby the public-private sector relationship is strengthened, e.g., a dialogue over projects and programs between private and public enterprises is given importance.

National Innovation System: A Conceptual Framework



The Cluster Approach and Industrial Policies for Cluster Development

Clusters are defined in various ways. Berger and Locke (2001) define them as geographically concentrated productions systems characterized by a large number of small and medium-sized firms that are involved in various stages of the production process in a particular industry. HBS-Porter defines them as geographic concentrations of interconnected companies, specialized suppliers, service providers and associated institutions in a particular field. The process by which clusters exist and the means by which they are defined influence public and industrial policies. Moreover, the so-called associated institutions that define public policies include educational and training institutions that build the workforce for an industry; research institutions that generate the scientific knowledge required for technological change; banking and financial institutions; and government institutions whose policies and practices have an impact on the providers of infrastructure for the industry. Central to the understanding of clusters is proximity. Proximity enhances innovation and facilitates the speedy transfer of tacit knowledge among actors, who then logically and clearly build clusters.

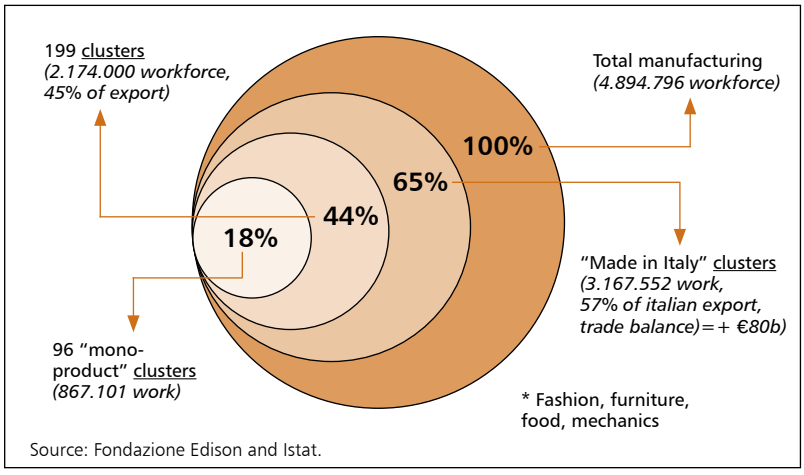
Cluster theory offers several lessons for the design of industrial policies. One is a shift from comparative advantages (better access to raw materials, cheap energy sources, natural harbors, large markets) to competitive advantages (unique, place-specific factors stimulating learning and innovation activities). Clusters are places that in particular stimulate the formation of competitive advantages (Porter). Taking account of these attributes of clusters, government should initiate policies that promote cluster formation and upgrading. This can be done by ensuring the supply of inputs such as skilled workers and infrastructure and by stimulating competition and rivalry among key players. The government's role is to support all clusters, however, rather than attempting to create entirely new clusters. Government should focus its efforts on reinforcing and building on existing and emerging ones.

Learning from Italy

The Italian model of industrial districts is a very good source from which lessons about cluster development can be derived. The Italian model of cluster development is mainly characterized by: a high degree of cooperation among competitor firms in order to share risks, stabilize markets, and share innovations; strong trade associations that provide shared infrastructure, management training, marketing, technical and financial support; and a strong local government role in regulating and promoting core industries. The figure to the right illustrates the performance of the manufacturing industry in Italy.

In Italy in particular, real service centers play a vital role in promoting and sustaining clusters. These centers

Italian manufacturing industry in 2001:
The weight of specialization and districts in employment



Source: Fondazione Edison and Istat.

provide business development services that are highly customized to the specific industrial tradition of each area. The services provided by this kind of center include credit guarantees, export insurance and/or promotion, organization of fairs, access to information on the evolution of markets and technology, client rating, consultancy, training, waste management, pollution control, quality certification and award of trademarks, product promotion, support for innovation, bulk purchase of inputs, and product testing. Successful service centers display four features, namely: (1) an effective platform; (2) customer-orientation; (3) embedded autonomy; and (4) enhancing governance potential.

Industrial clusters have been the lifeblood of Italian industrialization. Although Italy's industrial clusters have experienced many challenges, and face tough competition from Asian clusters, particularly in some traditional sectors such as clothing and footwear, which are labor-intensive industries, its industrial districts still thrive. In fact, new forms of coordination are emerging, not only among district firms, but also between SMEs and "lead firms." Italy is notable for its pioneering efforts in building industrial districts and clusters. Towns such as Agordo – where the world's largest manufacturers of eyeglass frames operate; Luxottica – a world leader in the design, manufacture and distribution of quality prescription frames and sunglasses as well as owner of leading chains of optical shops; and Safilo – also a leading manufacturer and distributor of luxury eyewear, are among the most successful cluster districts in Italy.

Conclusions and Policy Implications

A useful theory of industrial policy must view policy-making and implementation as an endogenous process of experimentation and learning that aims to deal with vested interests. Learning from the experiences of Italy, a number of policy implications have to be taken into account for successful cluster-based industrial development. Firstly, government interventions must be systemic in terms of policies relating to enterprise development, competition, trade, regional development, research and development, public procurement, health and consumer protection. All of these require improved and functioning markets and a favorable framework for enterprise development and innovation. Secondly, policies need to be context-specific, to allow for failures to occur, and to be prepared to address such failures. Thirdly, linkages between industry and the knowledge infrastructure should be reinforced. This can be achieved through the stimulation of formal and informal cooperation. Next, systems and clusters should be compared in a detailed manner through the use of benchmarks for recognizing systemic problems. Further, rather than direct innovation, efforts should focus on indirect inducements such as building the right institutions and facilitating linkages that will allow clusters to flourish naturally. Another important implication is that policy actions should kick off at the firm level. Finally, improving the capabilities of key actors is necessary for strategic policy design, and for the formulation and implementation of cluster-based industrial policies.

Q&A/Discussion:

Clusters are defined as geographical concentrations of enterprises in the same sector and in the same area, which face similar opportunities and challenges. Clusters with a radius of about 50-75 kilometers are the most common targets. Depending on the country's legislative process, clusters tend to coincide with districts, which are normally the smallest administrative unit of a country, e.g., a municipality or a small administrative district. It is worth emphasizing, however, that radius should not be the only consideration for whether a cluster is effective. Rather, the proximity and the extent to which this gives rise to daily/

weekly interactions between people should be considered. Apart from the infrastructure shared by clusters, values such as the trust and bonding that result from physical proximity, are among the advantages gained by firms in clusters.

Clusters are defined in various ways. Michael Porter's definition for instance, does not coincide with UNIDO's definition. At the core of Porter's definition and analysis of clusters is competitiveness analysis. UNIDO's approach to cluster development is just one of the many different approaches espoused by different organizations and business experts. Ultimately, the choice of approach rests on the prevailing needs and conditions of a country.

The key difference between tacit and explicit knowledge hinges on the way one acquires such knowledge. The former has its roots in individual experience, individual perspectives, values and relationship with others, while the latter is often referred to as recorded or formal knowledge. The strategies of firms need not be based on explicit/patentable knowledge to form clusters or to cluster their industries. A classic example of this would be branded bags such as Prada in Switzerland where on the one hand, companies have recently clustered their products that need patenting as soon as they are invented and on the other hand, other clusters exist.

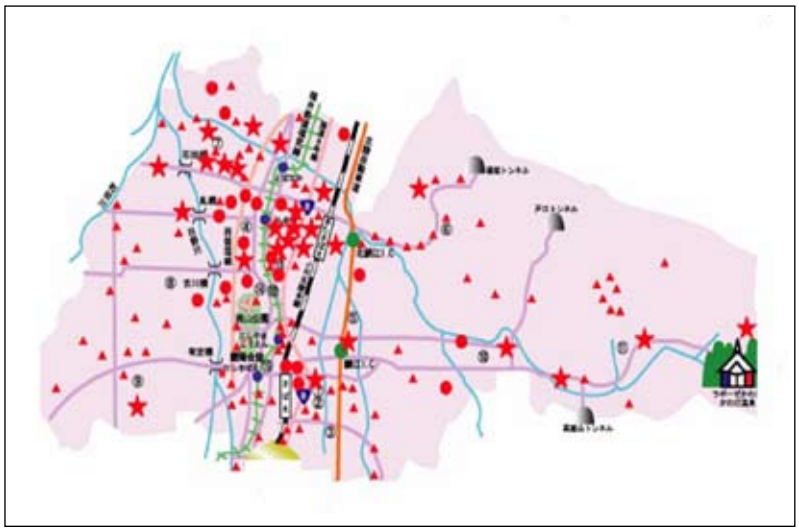
The Advantages of Industrial Clusters for SME Development

Tetsushi Sonobe, Deputy Director, Foundation for Advanced Studies on International Development (FASID)

Introduction

The misconceptions and skepticism about SMEs (e.g., SMEs being a thing of the past, with a vanishing role in an integrated and globalized economy), the reasons behind these misconceptions, and the ways by which these misunderstood ideas can be dispelled were articulated. In Japan for instance, Sabae, a city located in Fukui prefecture, is famous for its clusters of eyeglass frame manufacturers (see figure below). Sabae began its production of eyeglass frames about a century ago. Accordingly, Fukui prefecture accounts for 90% of Japan's market and 20% of the world's.

Distribution of Eyeglass Frame Makers in Sabae City, Fukui Prefecture



Industrial Clusters: Definition and Examples

An industrial cluster refers to a geographical concentration of enterprises producing similar and closely related products (e.g., assemblers and part-suppliers) in a small area. There are two types of industrial clusters. Type 1 clusters are those that are characterized by the dominance of SMEs and Type 2 clusters are pyramidal types in which there is one assembler, many sub-contractors and an even greater number of sub-sub-contractors (e.g., Toyota).

Traditional handicrafts, furniture, garments (both tailor- and ready-made garment producers such as those in New York City and Old Delhi in India), footwear (both leather and synthetic such as those in Agra in India, Wenzhou in People's Republic of China, Kobe in Japan, Sinoy Valley in Brazil and Addis Ababa in Ethiopia), metal works (scissors and tableware such as those in Solingen in Germany and Tsubame in Japan), machinery and IT (Silicon Valley in California, Bangalore in India and Dalian in People's Republic of China), are some examples of successful industrial clusters.

Benefits of Industrial Clusters

As pointed out by Alfred Marshall more than 100 years ago, industrial clusters facilitate the following:

- Information spillovers – enterprises can easily learn from other enterprises
- Division of labor – enterprises can easily transact intermediate goods and services with each other
- Formation of market for special skills – enterprises can easily find workers with desired skills and people can easily find jobs.

In addition, industrial clusters can attract customers and material suppliers.

SMEs benefit more from industrial clusters than do large enterprises. Without industrial clusters, it is difficult for SMEs to undertake activities such as absorbing new ideas on production, management and marketing; testing new practices; finding good transaction partners; monitoring parts suppliers; finding good workers, customers and material suppliers; and ensuring the collection of money and punishing betrayers or cheaters.

SME-led Development of Labor-Intensive Industry

Type 1 industrial clusters, which are dominated by SMEs, are more common than type 2 clusters. SMEs are prevalent in labor-intensive industries. Hence, the promotion of cluster-based industrial development is often equated with the promotion of labor-intensive industries, which in turn is linked to employment generation (particularly for the poor) and poverty alleviation.

In labor-intensive industries, production cost is largely dependent on wage rates. Essentially, developing countries have comparative advantages in labor-intensive industries due to lower wage rates. However, labor-intensive industries are not necessarily growing in developing countries due to constraints such as: (1) poor infrastructure – expensive transportation and unstable and limited power supply; (2) poor business environment – underdeveloped legal system and dominance of SMEs which face various transaction difficulties; and (3) poor technologies – SMEs face difficulties in absorbing foreign technologies. Industrial clusters mitigate all of these impediments and as such, SME-led development of labor-intensive is often cluster-based.

Innovation and cluster

Not all industrial clusters in the world have successfully developed. A number have become extinct as a result of competition among clusters, both local and overseas. The survival and success of industrial clusters essentially hinge on innovation. The most important finding from a series of intensive case studies conducted in East Asia, South Asia and Africa is that a great similarity is observed in the process of industrial development among different industries in these countries. Empirical results from these case studies suggest that industrial clusters break new ground for innovations by attracting various human resources, such as engineers, merchants, part suppliers, skilled workers and individuals who will contribute to subsequent innovations. Succinctly, industrial clusters develop market transactions and enlarge the possibilities for innovation.

Q&A/Discussions:

Firms can gain various advantages from operating in clusters. These advantages depend on proximity. As a firm moves away, the advantages vanish gradually. Some advantages that were previously mentioned about mutual trust and flow of information clearly cannot be stretched indefinitely. The question boils down to what is at the core of the efficiency of the cluster model and the degree to which the advantages are dependent on proximity. Contrary to what Michael Porter believes, the drivers for successful clusters depend on the spatial concentration of firms.

Innovation is not just about big projects by big corporations using large amounts of capital. Innovations come in various ways such as in marketing, production, management and technology. The process of accumulating small improvements can also be called innovation.

Moreover, there is a general misconception regarding innovation, i.e., only large-scale enterprises can innovate because they can dedicate a great deal of money and resources to innovative projects. Innovation can also refer, however, to the creative ideas of individuals. The literature finds that large corporations are very poor at motivating innovation because they are bureaucratic. Innovation is not suitable to large-scale bureaucratic organizations. A case at point is Boeing, where the bulk of effective valid innovation of the company was not done at the R&D department but at the factory level, with small improvements being made to the engine. Another example is Microsoft, a company with a number of dynamic engineers and programmers, which conveys that innovation can happen at the individual level. Often, innovation is with large-scale R&D; while it may be true in some industries such as pharmaceutical, in the vast majority of sectors, innovation is not amenable to large-scale corporate enterprises. Innovation is indeed much more feasible at smaller than larger enterprises.

The major obstacle in the field of cluster development is the skepticism that surrounds it. Many people believe that SMEs are a thing of the past, that they are bound to disappear in a globalized economy and that they will disappear into nothing as progress comes. Contrary to these beliefs, SMEs are very relevant especially in developing economies, where the majority of firms and enterprises are SMEs. Another obstacle is the lack of awareness of people about clusters. The challenge therefore is to prove that clusters exist and that they are still relevant. Empirical studies and the literature find a long list of clusters across the globe, and show that many of these are in developing countries.

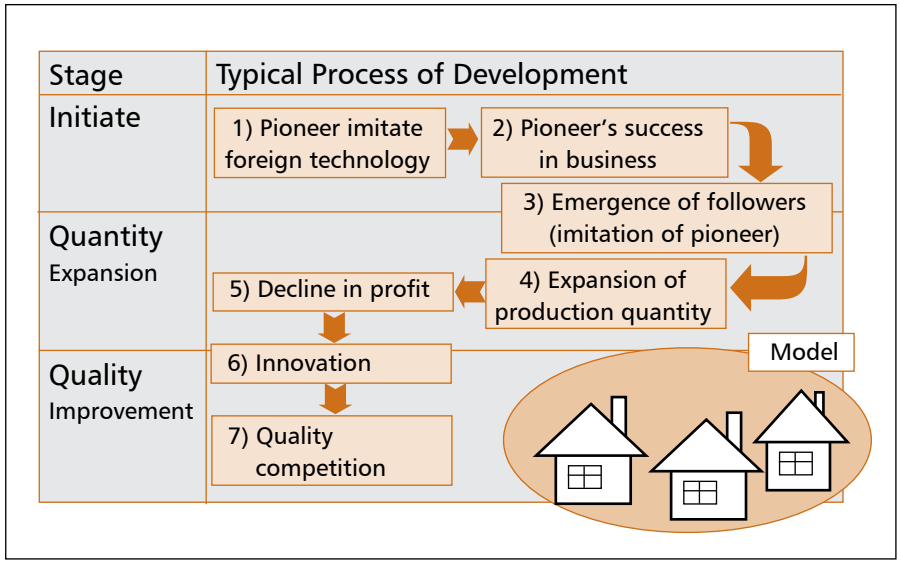
The Pattern of Cluster Development: An Endogenous Model of Cluster-Based Development

Keijiro Otsuka, Director, Foundation for Advanced Studies on International Development (FASID)

Endogenous Process of Cluster-Based Industrial Development

Industrial Development consists of three stages. The first is the Initiation Stage during which pioneers imitate foreign technology, and then succeed and are followed by emerging firms that imitate their technology. The second stage is the *Quantity Expansion Stage,* which takes place right after the emergence of new firms that imitate the pioneers' technology and produce the same products as the originators thus, increasing production. However, with the expansion of production, supply exceeds demand, causing a decline in the profitability of firms. It is also at this point that entrepreneurs realize the need for new skills and knowledge, hence, the accumulation of various human resources. Sluggish growth or declining profitability induces firms to compete through *Quality Improvement,* which is the third stage. Hence, declining profits trigger innovation and as a result, quality competition is strengthened. The figure below depicts this simple model of industrial development.

Stages of Industrial Development



The table below briefly summarizes the model depicted above in terms of who the initiators are at each stage of development, the level of their education, the stage at which innovation and imitation take place occur and the different institutions and locations where market transactions transpire at each stage.

Stage	Prior experience	Education	Innovation & imitation	Institutions & locations
Initiation	• Traders • Engineers	Low	• Imitate foreign technology	• Suburbs and villages • Urban
Quantity Expansion	• Spin-offs Entrants with various backgrounds	Mixed	• Imitate imitation • Stagnant productivity • Profitability ⇩	• Market transaction • Division of labor • Formation of industrial cluster
Quality Improvement	• Second generation of founders • Newcomers with new ideas	Very high	• Multi-faceted innovations • Exit • Emergence of large enterprises • Productivity ⇧	• Reputation & brand names • Direct sales • Sub-contracts or vertical Integration

Innovation has to be multi-faceted for firms to be successful. Multifaceted innovations require a lot of skills and abilities, and thus necessitate educated or highly and technically-equipped entrepreneurs. Several points have to be underlined as regards the crucial role of multi-faceted innovations:

- The quality of products must be improved through the work of engineers, designers, and skilled workers.
- Since consumers do not immediately perceive the quality improvement, innovative enterprises must convey the quality information by establishing brand names and opening their own retail stores, for example.
- Since improved products are differentiated products, innovative enterprises need special parts, which embody new ideas. To protect new ideas, they must develop trust and establish long-term sub-contracts with parts-suppliers.
- Innovative enterprises should embark on exports, absorb non-innovative enterprises, and seek economies of scale.

Only educated entrepreneurs can perform the multi-faceted innovations spelled out above.

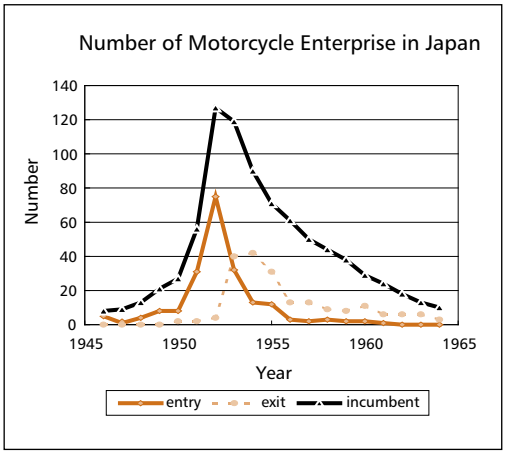
Based on case studies on certain cluster industries in selected Asian countries, the succeeding sections briefly explain the trends and patterns of cluster development.

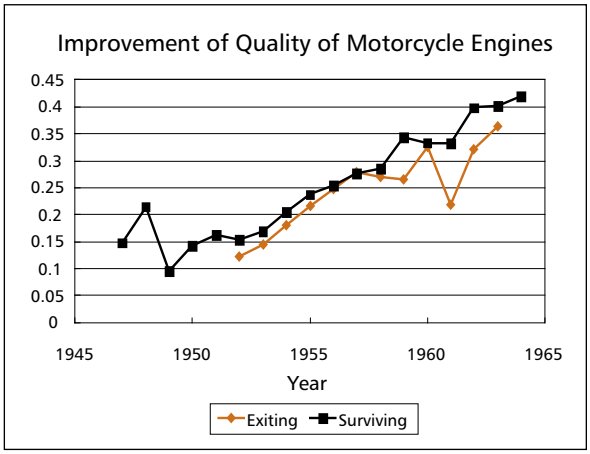
The graphs below illustrate the process and trends of the development of the motorcycle industry in Japan, particularly in the quantity and quality expansion stages.

The Motorcycle Industry in Japan

SUZUKI's first motorcycle "Powerfree" (1952). Suzuki used to be a power-loom maker. It was a late comer to the motorcycle industry

A recent model of HONDA's Super Cub, the world's best seller



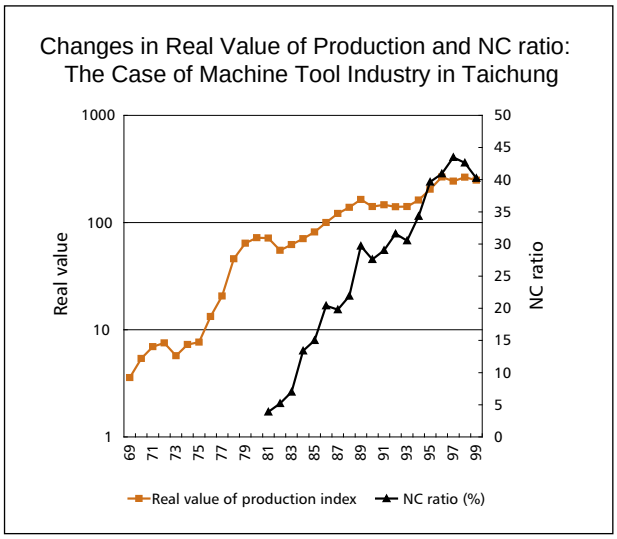


Garment Clusters in Japan and the People's Republic of China

Jili and Bingo were the subject cluster districts for a comparative case study on garment clusters in the People's Republic of China and Japan. Case studies on these garment cluster districts reveal various similarities in the characteristics of clusters. One is that garment clusters in both countries have a strong tradition of commerce. Commonly, it was local merchants who introduced the idea of producing garment products in rural areas. The major difference is in the stage of development, i.e., Jili in the People's Republic of China is currently in transition from the quantity expansion phase to the quality improvement phase, whereas Bingo in Japan is in the mature stage, having experienced the quality improvement phase. Moreover, in both cases, it was found that sales of high quality product seem to be more effective through direct transactions with outside traders or direct marketing channels.

Machine Tool Industry in Taipei,China

Knowledge transfer or learning from abroad played a vital role in the success of machine tool clusters in Taipei,China. The success of the industry began with Taiwanese entrepreneurs importing a certain type of machine from an American company located in Bridgeport. This phenomenon was the basis for a quantitative expansion of the industry in Taipei,China. The cluster produced cheap copies of Bridgeport machines until it became a major producer of (numerically controlled) machining centers. The resulting surplus of low quality machines, however, lowered prices of machines, triggering innovation and subsequently, a qualitative expansion. The figure to the right summarizes the expansion and pattern of growth of the machine tool industry in Taichung, Taipei,China.



The motorcycle industry in the People's Republic of China

The motorcycle industry in Chongqing, People's Republic of China, is an embodiment of knowledge transfer from abroad. State-owned enterprises were allowed to obtain technologies from Japan, leading to the accumulation of technical and managerial expertise of engineers and technicians in SOEs. However, these knowledge and skills were not effectively used in the 1980s. After this period, privatization increased, resulting in the rapid formation of clusters by former employees of SOEs. These SOE-turned-private experts, after gaining the knowledge transferred from Japanese companies, began producing motorcycles and continued until the 1990s, when the prices of motorcycles declined. Again, the decline in prices prompted firms to further innovate. Innovation in this case resulted from the growing number of educated entrepreneurs among firms and enterprises in the motorcycle industry.

Conclusions

Case studies on industrial clusters were carried out in select countries in Asia. The results of the case studies reveal that among those firms that did were unsuccessful or those that stagnated over time are the ones that did not innovate or had very few innovations, and that therefore faced difficulties in terms of competition with firms or enterprises that expanded sales and production based on quality improvements. Also, anchored in these case studies are two key factors worthy of note in considering the innovative aspects of firms and enterprises in clusters, i.e., high education and knowledge transfer from abroad. Without these factors, it would be difficult to carry out multi-faceted innovations (or simultaneous innovations such as the introduction of new ideas, quality improvement of products, development of new marketing channels, development of trust with subcontractors, mergers with unsuccessful firms and exportable products), which are prerequisites to the survival and success of firms or enterprises in clusters.

Q&A/Discussions:

The success of innovation depends largely on the mix of policies and on the characteristics of an economy. For innovation to be successful, markets must be functional and policy instruments should be supportive of cluster development. In deciding which industry or big sectors to kick off with innovations, a country must consider its competitive/comparative advantages or competitors, e.g., large-scale production and cheap labor in the People's Republic of China. Similarly, in order for clusters to prosper, markets have to be working/functioning efficiently. Markets facilitate cluster formation and clusters make markets work.

The roles of business associations largely depend on the international stance of economies. International trade is a necessary condition for business associations to work. Business associations play a very important role when the economy is engaged in international trade.

Global value chains are both advantageous and disadvantageous. In the case of the Philippines for instance, the arrival of global value chains at first resulted in the production of high quality goods (garments). However, as wages rose (due to child labor laws and policies in the country), production flowed out of the Philippines and shifted to Viet Nam. This phenomenon led to the failure of enterprises in the Philippines due to a lack of marketing capacity. Firms had difficulties surviving because they only learned how to produce quality products but did not learn how to sell their products. Thus, marketing is one of the keys to success. Producers that merely fulfill orders from global merchants do not learn how to sell, so once the latter goes away, they just collapse. On the one hand, global value chains help improve the production method but on the other hand, they never consider the essence of marketing and management. Foreign Direct Investments are also a form of global value chains where one of the advantages is the transfer of management techniques from firms (MNCs) to local experts. The People's Republic of China and Taipei,China are good examples where production methods from FDIs and foreign companies were transferred to local industries.

Developing countries have an abundant supply of skilled labor. Although machines are considered a capital-intensive industry, it is possible and effective to utilize labor to produce machines. Countries may import cheap machines and use a lot of labor to produce relatively high quality machine products. Motorcycles, for instance, can be made out of cheap machines and be produced at a low cost, which in the long run can enhance a country's international competitiveness. Finally, the development of labor-intensive industries is necessary for poverty reduction.

Lessons Learned from Asian Experiences

Tetsushi Sonobe, Deputy Director, Foundation for Advanced Studies on International Development (FASID)

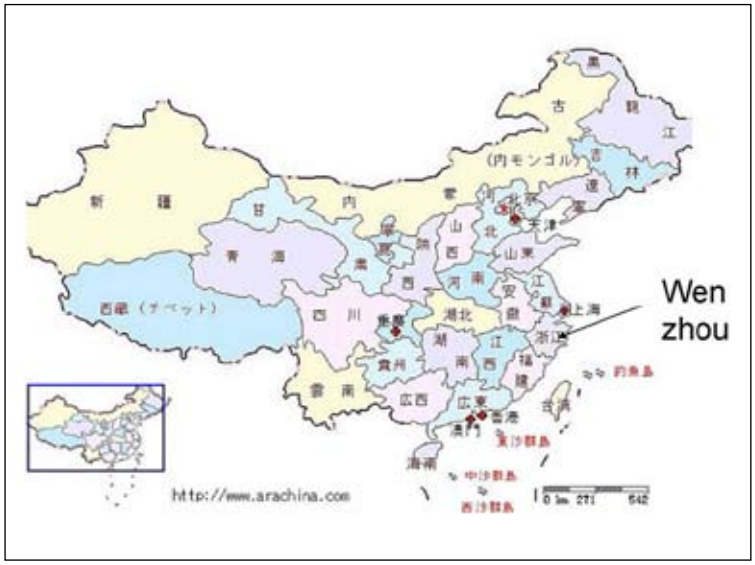
The Wenzhou Model of Industrial Development

Most successful industrial clusters in Asian economies are characterized by successful innovations. Two models of industrial development provide useful insights and practical guidelines regarding the essential elements of successful industrial clusters.

The Low-Voltage Electric Appliance Cluster is one of the industrial clusters thriving in Wenzhou, People's Republic of China. Wenzhou was once a poor rural area whose industrialization began in the earthen floors of poor farmers' houses. Farming households survived through shared work between husbands and wives, i.e., the latter producing low-quality products (e.g., shoes, garment products) and the former selling them illegally throughout the country. Half of its inhabitants migrated abroad (e.g., to Italy) and a significant portion of the population migrated illegally within Mainland China. Township governments could not afford to build township- and village enterprises (TVEs). All enterprises were "essentially private" and industries were densely clustered. Major industries were apparels, low-voltage electric appliances, cigar lighters, shoes, and other labor-intensive types. The rapid economic development was mainly initiated by entrepreneurs who learned from relatives and friends abroad and from SOEs in Shanghai.

During the early 1980s, Wenzhou was infamous for its "junk" products throughout the People's Republic of China. People believed that products from Wenzhou were of low quality until the late 1980s when one enterprise introduced a testing machine in the electric appliance industry. Consequently, quality checks on products were conducted and in the early 1990s, an improvement of quality took place, with multifaceted innovations coming about. Despite the perceptions of inferior product standards in Wenzhou, enterprises determinedly resolved these problems through the initiation of marketing strategies such as full-scale use of sales agencies, use of brand names as well as seeking certification of national standards for their products. Brand names and the seal of national standards indicated a superior quality for products, increasing consumers' confidence and leading to increased production and profitability for the firms. Traders have also played a very important role in the development of the clusters as the initiators of small enterprises that have grown throughout the period. The growth of clusters also involved the proliferation of engineers and subcontractors among firms, signifying the importance of human capital accumulation and building trust with key players.

HQ building and one of the factories of a low-voltage electric appliance maker in Wenzhou



Map showing the Low-Voltage Electric Appliance Cluster in Wenzhou, People's Republic of China

Specifically, the Wenzhou Model of Industrial Development features the following:

- Assistance from local governments in the formation of industrial clusters through the establishment of "marketplaces," where an enterprise can easily procure all the necessary materials and sell its products through local merchants.
- Merchant-led quality improvement and multifaceted innovations led by highly-educated entrepreneurs.
- Multifaceted innovations such as the establishment of brand names, the formation of independent distribution networks, the use of subcontracting and the formation of enterprise groups, among others (The essence of these

innovations was for the innovators to assure a much greater number of potential customers that the quality of products was high, without depending on traders)

- Collaborative efforts between innovators and other producers in introducing advanced knowledge through imitation

The Knitwear Cluster in Bangladesh

The export-oriented garment industry in Bangladesh started in the early 1980s. Workers of a Korean joint venture in Bangladesh were sent to Korea to receive training and upon completion of the training, these workers went back home to start their own garment businesses. This phenomenon jump-started the export-oriented garment industry in Bangladesh. Producers and purchasing houses (i.e., local traders who served as intermediaries between US or European buyers and local producers) collaborated to attract orders from buyers in developed countries. At present, the industry accounts for more than 70% of the country's exports. The industry consists of woven garment and knitwear sectors. While the woven garment sector developed first, the knitwear sector has been growing faster in recent years.

Recent developments in the world economy brought about by globalization resulted in an increasing number of developing countries entering the world garment market, with buyers demanding higher quality products at lower prices and shorter lead times. Spinning and weaving are basically capital-intensive activities and as such, Bangladesh does not have a comparative advantage. As a result, Bangladesh has come to import woven fabric from India, Pakistan, People's Republic of China and other exporting countries. The lack of domestic supply of woven fabric puts Bangladesh garment producers at a disadvantageous position. However, in the case of knitwear, the disadvantage is less serious because there is no weaving process in this sector and yarn is domestically supplied, though self-sufficiency has not been achieved. This is why knitwear production has been growing faster in the last decade.

Bangladesh is considered a male-dominated society where women have limited roles. However, the knitwear industry there typifies women's empowerment (a large number of women are employed in knitwear factories), as it not only changed the role of women in the economy and society but also led to the further growth of the economy in general.

Illustration of workers in knitwear factories as well as various machines used in the production of knitwear in Bangladesh

Quality Improvement in the Knitwear Industry

As in other cluster industries in different Asian countries, the development of the knitwear industry in Bangladesh is mainly merchant-led, with purchasing houses playing important roles in quality improvement. Innovators in this industry also succeeded in assuring the most profitable market segment that their products are of high standards. In the case of the garment industry, the most profitable segment is the largest retailers in the world, which are well known for their high fashion. To assure them of high quality, innovators managed to deal directly with them without depending on purchasing houses. Multi-faceted innovations were also made possible by the employment of specialists, compliance with existing laws and standards of product quality, and vertical integration. Highly educated entrepreneurs were the main drivers of innovation.

Taking account of the demands of customers is another factor that led to the success of the knitwear industry in Bangladesh. These demands include: (1) product quality; (2) lead time; (3) production capacity; and (4) compliance with labor codes in developed countries.

However, the knitwear industry also faced a number of challenges. One is that local producers have to deal with some production issues such as compliance with existing international laws. Labor unions and mass media in the developed countries are very concerned about the use of child labor, workers' safety and healthy working environment. Violation of any of these laws puts the industry in an unfavorable situation since retailers and manufacturers in developed countries ban the importation of their products. Compliance with these labor codes therefore enables developing countries, including Bangladesh, to join global value chains. These challenges have been somewhat resolved by knitwear factories in Bangladesh, though the establishment of day care centers inside the factories to ensure that children are taken care of while mothers are working, and avoidance of the use of child labor in production.

Conclusions

In brief, the success of the rapid development of the knitwear industry in Bangladesh resulted from:

- Specialization in highly labor-intensive industries
- The role played by the government, i.e., granting tax exemptions to investments in equipment garment production
- Merchant-led industry development
- Multifaceted innovations, led by highly educated entrepreneurs, who had high ability to learn advanced technologies and management from abroad.
- Collaborative efforts between innovators and other producers in introducing advanced knowledge through imitation.

Q&A/Discussions:

Merchant-led cluster development focuses on the importance of the roles of local producers and their commercial activities. Local producers are not passive, but actively attract buyers, especially global ones. To reach the higher buyers, local producers should carry out strategic marketing activities and produce high quality products, or products of exportable quality. In a commercial sense, they are also like traders although they are producers.

As regards the role of government in Dhaka, Bangladesh, since 70% of economic activities are from industry, there is a very strong political support. It is impossible to keep wages low through the force of the government; instead the government can prevent wages from artificially rising. In other sectors, labor unions put pressure on the government to implement a minimum wage. Industry uses political power to get exemptions from those kinds of labor regulations, and as a result, the market wage in the government sector is the market rate, whereas other sectors have an artificially high rate.

In the case of the People's Republic of China, the government played an important role in terms of building market places, and constructing the roofs of market places to attract material and parts suppliers and buyers of finished products. Local government did not intervene too much in the operation of the market in People's Republic of China.

The Role of Government in the Cluster-Based SME Development

Keijiro Otsuka, Director, Foundation for Advanced Studies on International Development (FASID)

Introduction

Though the government plays a major role in promoting cluster-based SME development, various other institutions have roles to play. Non-market institutions such as international organizations, donor agencies, non-government organizations are important players of industrial development. Collaborative actions among these institutions nonetheless are the key to successful cluster-based SME development.

Choice of Appropriate Industry

Choosing an appropriate industry is crucial for the economy. Often, driven by political motives and a desire for "big bang" industrialization, politicians and officials, especially in developing and poor countries, tend to develop hi-tech and heavy industries such as automobile and electronics. Theories of industrialization and the experiences of other countries, however, suggest that low-income countries never succeed when they develop or start with these types of industries in which they lack comparative advantages. One reason is that these industries barely survive or do not thrive at all in labor-abundant, low-wage countries. Simple and light industries are far better industries to begin with in poor economies. Industries that require labor-intensive activities such as garments, shoe, weaving, metal work and simple machinery are among those that can certainly survive in developing economies. Thus, low-income countries aiming to industrialize successfully should focus their development efforts towards appropriate industries.

FDIs and Global Value Chains

Contrary to some claims, Foreign Direct Investments (FDIs) and Global Value Chains (GVCs) are not a panacea for economic problems. Such economic strategies can only be of best use to developing countries when appropriate policies are in place.

To keep FDIs from ending up as "enclave industrialization," host countries must have the ability to absorb foreign technologies and management know-how, since FDIs are active only when supporting industries (e.g., metal processing) have been developed. Similarly,

developing countries can benefit from being involved in GVCs only when they have the ability to absorb knowledge, as GVCs approach an industry in developing countries only when the industry can produce products with exportable quality. Hence, in order to attract FDIs and GVCs, industries must be successful in upgrading the quality of their products.

Learning from Abroad

Learning from abroad is the essence of the Asian miracle. It is always the key to successful industrialization in developing countries. Rather than inviting FDIs to begin domestic production or export, the aim ought to be to learn from the new technologies and skills they bring from their participation in the economy. Accordingly, learning from FDIs and GVCs, visiting advanced countries and employing foreign advisers and consultants are critical. However, the ability to learn or imitate can only be developed when prior investments in human capital and technology development are successful.

Recognizing Similarities and Dissimilarities Between Successful and Unsuccessful Cluster-Based Development

The ways in which industrial clusters are formed are similar in many cases. One of the dissimilarities between successful and unsuccessful clusters, however, is that multifaceted innovations take place in the former and not in the latter. Another distinction is that successful entrepreneurs learn from the experience of Japan and other forerunners in Asia, whereas unsuccessful entrepreneurs often do not know from where they should learn.

The need to promote industrial clusters

As repeatedly mentioned, the promotion of clusters industries is essential for industrialization. Clusters promote enterprise-enterprise and enterprise-merchant transactions by reducing transaction costs (e.g., cheating, stealing, lying, shirking), thus, giving rise to well functioning markets. They stimulate multifaceted innovations by attracting a variety of useful human resources, such as engineers, designers, merchants and part-suppliers. The disadvantage however of clusters is that they discourage investment in innovation as benefits for innovators are reduced by imitation.

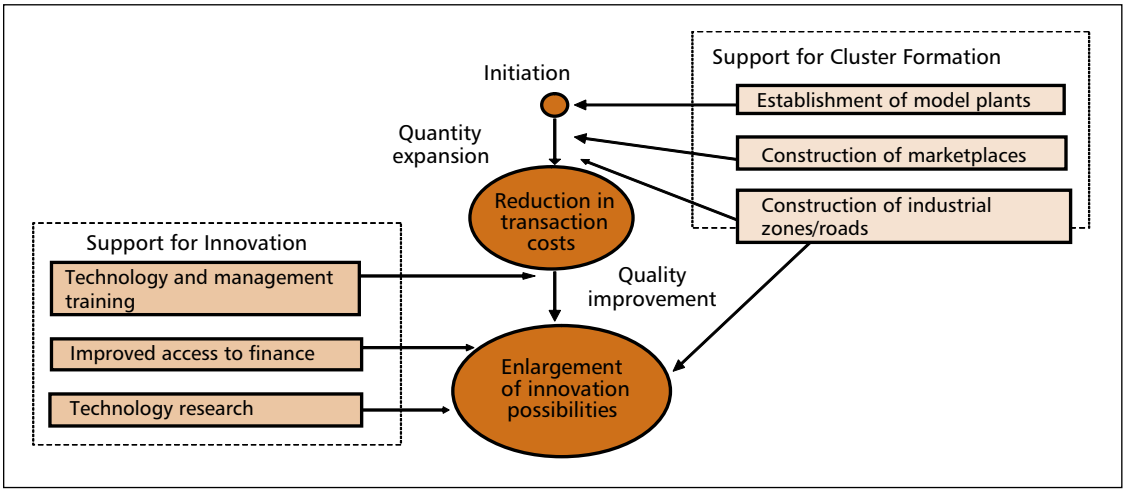
Taking account these advantages and disadvantages of clusters, there are three strategies by which industrial clusters can be effectively promoted.

1. Initiate new industry – this can be done in different ways such as: (i) establishing SOEs from which private firms can learn; (ii) attracting FDIs and learning from the new skills and technologies they bring in; (iii) building model plants from which people can be trained to initiate new businesses and to explore and exhibit appropriate systems of technologies and management
2. Support for cluster formation – support may come in the form of: (i) construction of market-places that will facilitate the transactions of intermediate inputs between manufacturers and the final goods between manufacturers and traders; (ii) industrial zones and parks that will attract enterprises producing similar and related products to enhance agglomeration economies; as well as roads connecting cluster and markets.
3. Support for multifaceted innovation – once a cluster is formed, appropriate training programs for entrepreneurs are helpful such as in marketing,

management and technology. Providing low-interest loans to successful enterprises and high-performing entrepreneurs in training programs can also further innovations.

These strategies are depicted in a simple framework below:

Strategy for Cluster-Based Industrial Development



Recommendations and Conclusions

In order to sustain and promote the efforts of entrepreneurs in various aspects of cluster development such as innovation, training programs are a requisite. As an institution that is involved in education, training and research on international development, the Foundation for Advanced Studies on International Development (FASID) is carrying out intensive discussions with international and Japanese development organizations to undertake new initiatives in various locations in the developing world.

Q&A/Discussions:

Choosing the right industry is the starting point for successful cluster development, based on the country's comparative advantages. In developing countries, those that start with heavy industries like automobile, high tech industries at the initiation stage barely survive or do not survive at all. The development of heavy industries depends mainly on the country's income level. People's Republic of China, for instance, failed to grow until 1978, because the emphasis was on the development of heavy industries. When reforms were launched, the industrial infrastructure shifted from heavy to light industries, in which the country had comparative advantages and they started to grow. Similarly, in 1970, Korea wanted to catch up with Japan immediately but it completely failed and its economy stagnated for a certain period. After a series of economic reforms, it returned to its growth path and is now continuously growing. Hence, for economies in low-income stage of development, it is not advisable to develop heavy industries, e.g., automobile industry, electronics, etc. Rather, simple labor-intensive industries are good industries to start with, e.g., shoe, weaving, simple metal industries.

Tax policies are important for cluster development. The formulation and implementation of a simple and gradual income tax system can speed up cluster development. A tax system that strategically distinguishes large enterprises from small ones for income tax differentiation is crucial for avoiding distortions in the economy. Non-discriminatory, clean and transparent tax systems are thus an important ingredient for successful SME Development.

Other macroeconomic policies such as trade protectionism are also worthy of consideration. Trade protection policies can be justified for a certain period of time. Prolonged trade protectionism, however, contributes to lethargic growth or the demise of protected industries. Japan's model of industrial development reflects its effective trade policies, under which the government protected industries for a period of five years and after that, discontinued trade protection policies.

Especially for landlocked countries (e.g., Central Asian countries like Kazakhstan, the Kyrgyz Republic and Uzbekistan and Mongolia), trade liberalization is very beneficial since there are more opportunities at the border due to lower transaction cost as opposed to island countries like Japan where even within the country itself, transaction costs are high. On the one hand, tariff liberalization may harm domestic producers and products due to lower prices of imports. On the other hand, import liberalization can encourage domestic producers who would like to import inputs like raw materials (e.g., Lao PDR imports raw chemicals for processing natural materials).

The provision of space for and the physical construction of market places by local governments is a major initiative that encourages business transactions and market interactions. The active and aggressive roles of local governments in the People's Republic of China, especially in building commune markets, have made the country home to many successful clusters. This strategy enhances the interaction among parts suppliers and assemblers, makes business transactions more regular, facilitates the free flow of information, boosts information credibility and enhances the trust and bond between market players.

Foreign Direct Investments (FDIs) and Global Value Chains (GVCs) are not a panacea for industrial development problems. Developing countries can benefit from getting involved in global value chains only when they have the ability to absorb knowledge, because these chains only approach countries that produce products of exportable quality. Learning from abroad is always the key to the success in the development of industries.

Inviting foreign advisers and consultants also helps local firms to innovate and improve their management skills and technical know-how. The enterprises have to know what kind of consultants they need and at what stage of the production process the participation of experts is most desirable (once production is set in motion, managers teach how to manage the factors of production, hence the need for management experts, account and financial analyst for viability of enterprises; technology type is more important at the initiation stage than in the production stage where management experts are most needed).

UNIDO's Approaches to Cluster Development

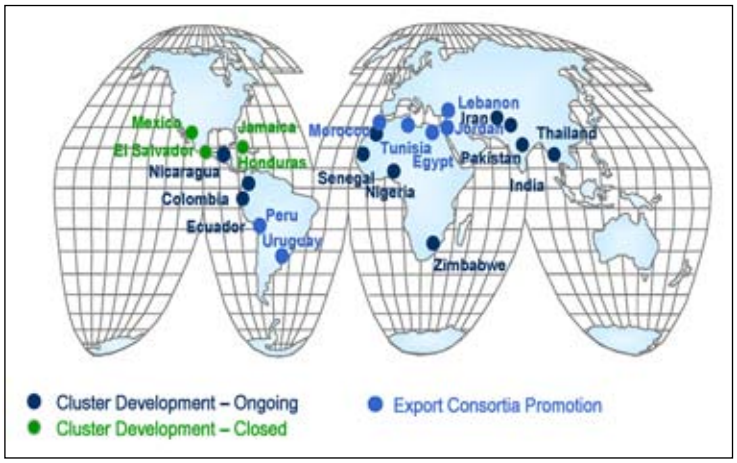
Michele Clara, Industrial Development Officer
United Nations Industrial Development Organization (UNIDO)

Introduction: The UNIDO Global Programme for Cluster Development

The United Nations Industrial Development Organization is the UN's specialized industrial agency mandated to promote industrial development and international industrial cooperation. The organization was established in 1966 with the primary objective of improving the life of the world's poor by helping countries achieve sustainable industrial development. At present, UNIDO operates in 42 countries (figure below), with an ongoing portfolio of US$450M. It is based in Vienna, Austria. UNIDO is not a funding agency; rather, it undertakes development projects in collaboration with participating countries and donor agencies.

Thus far, UNIDO has implemented technical cooperation projects across the world based on a Cluster and Network Development since the mid 1990s. The implementation and monitoring of these projects are based on three core assumptions:

Participating countries



- Clustering and networking among enterprises promotes enterprise competitiveness
- Public policy can facilitate clustering and networking
- Support targeted at groups of enterprises is more efficient and effective than support targeted at individual enterprises

Definition of a Cluster

A cluster is a sectoral and geographic concentration of Small and Medium Enterprises (SMEs) with common opportunities and threats.

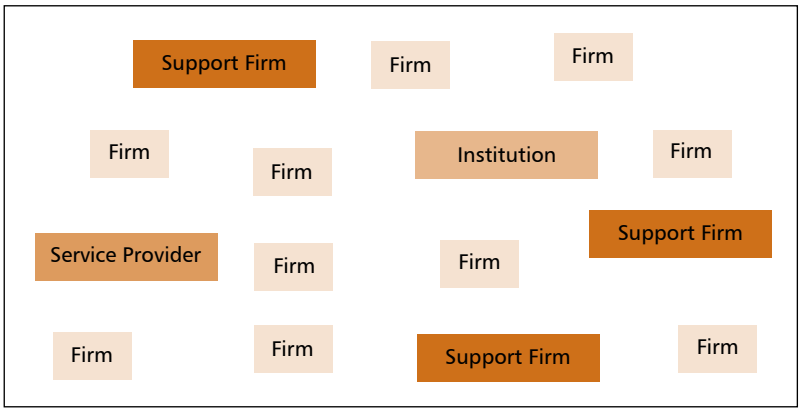
Despite the general lack of awareness about clusters, they exist in many countries across the globe. UNIDO has successfully completed some projects in Central America, and has recently launched some in Africa and in South Asia. Projects have likewise been lined up and are about to kick off in some socialist countries, such as Viet Nam, that are endeavoring to shift from a centrally planned economy to a market-oriented economy. While some countries, such as India, have achieved notable success in cluster development, there is no single framework, roadmap or strategy that can be mechanically carried out from one country to another. Cluster development ought to be customized to the characteristics of an economy.

There are two basic criteria by which UNIDO selects countries to implement cluster development projects. One is by invitation from a national government that desires to

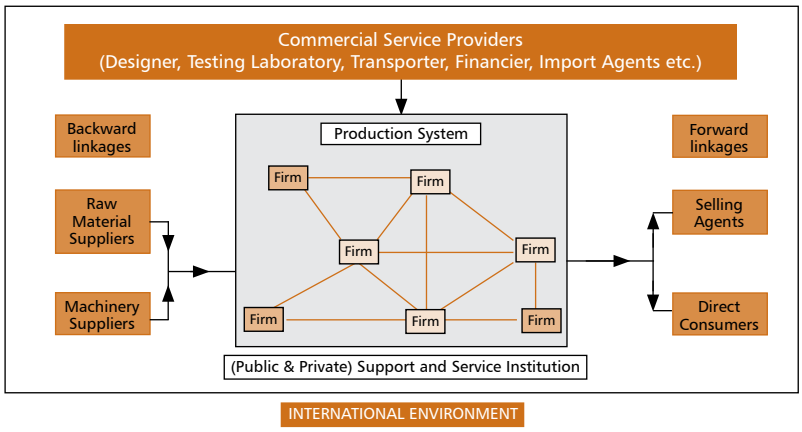
collaborate with UNIDO in developing clusters, and the other is by mobilizing resources for operations. However, as stated previously, UNIDO is not a funding institution, and obtaining funds for implementation tends to be the more challenging task. UNIDO assists the government in terms of clusters mapping, i.e., determining which sites are suitable based on industrial development standards. However, due to political considerations, the selection of cluster sites is often decided by the national government with appropriate technical recommendations from international experts.

A cluster is more than an agglomeration of firms and service providers. The two figures below present a general idea about clusters.

Concentration as Seen by Firms, Support Firms, Institutions and Service Provider



Relationships among Key Players in a Cluster



The first figure shows a concentration as seen by firms, support firms, institutions and service provider. While it may represent a cluster, it is not a complete representation of what clusters really are. The second figure is a more integrated and complete representation of what clusters are. It shows the relationships between firms inside the production system, e.g., the backward linkages between raw material suppliers and machinery suppliers; the forward linkages between selling agents and direct customers; the links between the firms and commercial service providers such as designers, testing laboratories, transporters, banks or financiers, and import agents, among others. The relationships and linkages among firms and between firms and other key players are very crucial as they distinguish successful clusters from unsuccessful ones.

Terminologies

More clearly stated, a cluster is different from each of the following:

- **Industrial park/export processing zones** – unlike clusters, these are usually created by government agencies. Most clusters were not created, but are organic in nature and have existed for 100 years or more. In addition, in export processing zones, firms are of different types, i.e., garments, IT and service firms, with no relationship at all. The distinction between industry parks and EPZ and clusters is important in that the proximity of similar enterprises is the fuel that starts the exchange of information and the creation of linkages which are more difficult to create among firms operating in different markets. As they are similar and face the same problems and opportunities, they have greater opportunities to face their commonalities and work together compared to firms that don't have such commonalities. Moreover, the competitiveness of firms depends largely on the competitiveness of their part suppliers, auxiliary industries and their mutual proximity, which make the interaction and dialogues greater.

- **Industry/subsectors** – Proximity and concentration are what set clusters apart from industries or subsectors. Unlike a cluster, firms in an industry may not necessarily be in the same area; some may be located in capital cities and some may be located in remote areas.

- **Value chains** - The value chain is an attempt to picture the relationships and the processes in the production and distribution of a product (e.g., paper product – every step of the production from cutting the trees to producing a sheet of paper and to the consumption of end users). Who gets what share of the price in each production process and why are also appreciated in value chains. Moreover, a value chain is large, often stretching across the world while a cluster is just a portion of it in a specific location. Finally, clusters are concentrated geographically whereas value chains are dispersed.

- **Networks** – A key difference between a network and a cluster is membership. Being in a network is a choice whereas being in a cluster is not. Being in a cluster, however, facilitates network creation and establishment.

- **Associations/consortiums** – Associations are very diversified and respond to very different demands, but often fail to have clear strategies. Clusters, on the other hand, require much more focused strategies than associations. Chambers of commerce for instance, often represent the whole private sector in the location and as a result, lack the focus and strategy to support clusters effectively because they need to address many problems at the same time.

Some observed advantages for SMEs in operating in clusters:

Firms operating in a cluster gain a number of benefits. Firstly, in a cluster, they benefit from low labor costs thanks to the abundance of specialized labor. Secondly, input costs are lower because there are competing suppliers of raw materials. Thirdly, technological diffusion is faster and easily accessible at a low cost due to the presence of dedicated providers of

machinery, thus making innovation easier. In addition, firms in a cluster can operate easily since services are specialized, making possible economies of scale and scope for service providers. Another advantage is that there is a responsive support framework for firms in clusters. Since firms in a cluster face the same problems and challenges, addressing their issues and challenges are simpler than they are for industries where production and economic activities are very diverse. Finally, firms benefit from infrastructure as they accumulate over time. All these advantages are mutually reinforcing elements that lead to the success of clusters.

Unfortunately, not all clusters perform well. Several features are observed in clusters that do not function satisfactorily. One is the low productivity of firms due to a lack of skilled local labor. There is no incentive to improve and activities are done the traditional way. Another is that there is aggressive competition among the firms, driving down product prices to the advantage of traders. On occasion, products are sold below the cost of production, making these firms unprofitable. Also, low performing clusters often have low levels of innovation and great secrecy on technology used. Firms never share information on production and market techniques with each other. Rather than competing for the benefit of the entire clusters, firms compete to the detriment of other firms. It is also observed that in most cases, service providers or banks hardly interact with local firms and policymakers are uninterested in them. As a result of the lack of support from service providers and policymakers, infrastructure tends to be underdeveloped, missing or dilapidated. All these unfavorable circumstances are mutually reinforcing elements that create a vicious cycle leading to lower dynamism and success of firms.

Behind the dynamism (lethargy) of performing (non-performing) firms are a number of challenges that ought to be addressed such as the roots of all the mutually enforcing features of both types of clusters, the results of such phenomena and the different approaches to cluster development.

The Role of Social Capital

At the core of UNIDO's approach to cluster development is the idea that the key difference in the features between performing and non-performing clusters is the nature of social capital in the cluster. Social capital refers to the strength and quality of inter-relationships among cluster stakeholders that enables them to work closely together. It is invariably the least visible of the assets of the cluster, but also the most crucial. The following are the ways by which social capital can facilitate the development of clusters:

- Foster the level of local economic activity by decreasing risks and focusing expectations
- Make joint activities more likely and sustainable
- Improve the character of competition and refocus it from cut-throat to innovation and quality
- Facilitate the dissemination of best practices and the absorption of new techniques
- Make it easier for the public and private sector to cooperate in creating and operating infrastructure
- Increase usage of credit/business services

Social capital is not without its downsides. While it is very abundant and self-replicating in dynamic clusters where success breeds further success and cooperation, it is extremely

scarce in non-performing clusters where competition is high, margins are poor and people do not trust each other. Social capital suggests that interpersonal trust is the key factor that triggers cluster development. Without it, cluster problems are more difficult to solve easily and sustainably.

Several factors contribute to the success of clusters. Among them are the environment in which the clusters operate, the availability of credit, high technology, and adequate infrastructure. However, there are alternative approaches and other complementary and mutually reinforcing elements that make clusters thrive. Social capital is one crucial determinant of the success and failure of clusters. It is one strategy that drives each firm to work closely with and trust others. Social capital is an approach that can transform non-performing clusters into performing ones. It helps non-performing clusters revive their strengths through activities that encourage internal collaboration and governance capacities as well as collaboration with neutral and external brokers. Highlighting the importance of social capital, UNIDO offers a few strategies that are aimed at restoring non-performing clusters and helping emerging clusters succeed.

1. Participatory approach to vision-building
   - Establishment of dialogue and trust
   - Diagnostic studies

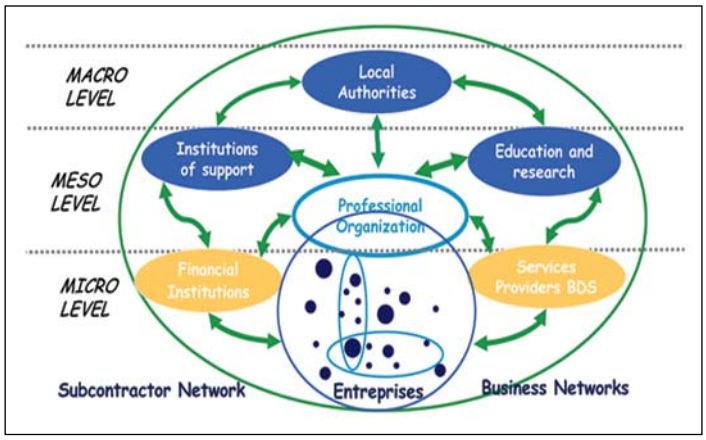
2. Capacity-building based on shared targets
   - Identification of a vision for the cluster
   - Bridging the gap between supply and demand
   - Building networks

3. Sustainability of the cluster development process
   - Training programs
   - Joint learning workshops
   - Presentation of best practices
   - Study tours/visits to performing clusters
   - Ownership by stakeholders

The approaches spelled out in the preceding section are essential in helping low performing or non-performing clusters to survive and catch up with performing clusters. Collaborations however are not uniform in all circumstances or conditions. Some collaborative efforts may help clusters escape from a vicious cycle of low performance and some may just make clusters remain in such a condition. Thus, the more crucial challenge of fostering social capital is to devise a strategy that incorporates all or a mix of any of these elements, depending on the needs and conditions of a particular economy.

The diagram below depicts and summarizes UNIDO's approach to cluster development, which places great emphasis on the importance of the linkages between and among key players, institutions and different networks (as shown by connecting arrows) that operate at all levels of the economy, i.e., micro, meso and macro levels.

UNIDO's Approach to Cluster Development



Recommendations: The role of the government

The role of government is indispensable in cluster development. In economies driven by perfect competition, government intervention is less necessary. For clusters that are already in a trajectory of growth and success, the government's role can be limited to providing them with what they need and ask for (e.g., simple and convenient rules, i.e., less red tape in their transactions with public sector institutions). Governments should not engage in cluster creation or formation. In conditions where clusters are under-performing or non-performing and are about to shut down, the government's role becoming crucial. In such a condition, governments can support cluster development in various ways such as partnerships and collaboration between the private sector and local government (as facilitator/honest broker) and by inviting international experts with proven experience in fostering cluster development.

Q&A/Discussions:

Some empirical case studies on cluster development reveal that in many economies where a cluster is growing, performance seems to differ among enterprises. Some succeed while others do not grow and some are forced to close down. The initiation of innovation creates huge gaps among clusters in the level of their performance. At the quantitative expansion stage, firm size is almost similar across the cluster; but with the advent of newer and higher levels of technology, qualitative expansion tends to be more evident among firms that innovate than firms that do not. Social capital was observed to play a less significant role in clusters that grew successfully.

Cluster policies are not the only solution to the real world problem. Cluster development is a small subcomponent of an industrial policy. Competition laws, taxation laws, market economic policies, and exchange rates are what make up an industrial policy. In a perfectly competitive economy, neither cooperation nor government is required for development. However, in the real world, economies are not considered perfect in that they operate in systems and environments that in economic theories can be classified according to any of the second to fourth best conditions. Hence, the competitive equilibrium is not the most common one.

The bias between cooperation and competition is something policymakers should be very aware of. Neither perfect competition nor full cooperation can create the social optimum. The balance between these two however, can result in more benefits to those who have already succeeded and are bound to grow in the future. It is in this aspect that the role of policymakers is important, i.e., creating a balance and sound mix between cooperation and competition in order to produce the conditions suitable for cluster development.

The most effective way to foster innovation is to focus on the individual enterprises, on the quality of entrepreneurship and on the linkages outside the clusters.

Cluster Development Approach: How Does it Work on the Ground?

Mukesh Gulati, Project Coordinator, Foundation for MSME Clusters

Introduction

Social capital is often associated with a number of types of problems, namely: (1) survival problems; (2) competence building issues; and (3) long-term sustainability aspects. These common problems among clusters can be addressed by building necessary linkages in the system. These linkages ought to be built or strengthened among core enterprises, between core enterprises and other business enterprises, between core enterprises and non-market based institutions and between non-market-based institutions.

Competition, as argued earlier, does not necessarily solve all the problems of clusters. In many countries, clusters are normally small; hence, the advantages or disadvantages that small firms can gain for competing with large enterprises are very uncertain. On the contrary, interactions among small enterprises certainly bring forth a difference. The possibility of survival is most likely when small enterprises get together and collaborate with each other. Even in many developing countries, collaboration among firms breeds successful clusters.

Typology of Problems

Case studies on the common problems faced by SMEs in many economies the world over reveal the following:

1. High cost of inputs (e.g., raw material and capital equipment)
2. Access to timely and adequate credit without collaterals
3. Linkages with markets
4. Innovation bottlenecks (e.g., Technology and knowledge input)
5. Sector specific infrastructure (e.g., Testing lab, Effluent discharge, Electricity, Inland container depot, Estate roads)

Social capital plays an important role in addressing each of the problems listed above. Firms that get together and carry out their activities collectively tend to face fewer risks in terms of high cost of product inputs. By purchasing raw materials and capital equipment together, getting bulk discounts from suppliers, small firms can reduce costly outlays on such production factor inputs. The quality of these inputs is also ensured by the presence of a common consultant to advise on options regarding the kind of materials and equipment to purchase and where to purchase them from.

Large firms are not vexed with regard to credit availability and access. Quite the reverse is true when it comes to small firms that face access problems to credits. Common problems such as the non-availability of guarantees, low creditworthiness of individual borrowers, the common practice (historically) of banks that do not or hesitate to lend to small borrowers and the high cost banks face when lending to small borrowers, are what prevent firms from having or starting off with sufficient capital to start business. In some countries like India where many small firms borrow from the informal sector, interest rates range from 5 to 10% a month. Small firms that band together when borrowing money from banks are more likely to be granted credit. There are banks at present that provide credit through group guarantees (e.g., Italian MCGFs, Self Help Group, Micro-finance Institutions through JLGs

as among artisan groups in Orissa, Ambur cobbler manufacturers). Firms in clusters are also able to negotiate with banks for cheaper interest rates. However, to ensure that these conditions work, the following have to be considered: the existence of formal financing systems; groups that are legally established; prosper contracts, and the existence of a well-functioning method of legal redress. The risks attached to the implementation of this type of collective activity should also be considered (medium to high risk). Backstabbing by firms can result in group failures and the withdrawal of banks, hence, the need for clarity, trust, legal frameworks and banks.

Linkages with markets are easily built when firms join forces. Small and medium enterprises (SMEs) can gain access to new markets through bulk tendering (in Rajkot, engineering, transformers & other equipment for electricity companies in Dhaka); hiring of common marketing consultant to seek out new buyers among non-competing yet similar suppliers (Machine tools in Bangalore, drugs & pharmaceuticals in Ahmedabad for sub-contracting market research for new options); participation in international fairs (COTEX in Jaipur in Japan & Italy); common marketing outlets in major cities (Ambur shoes at Coimbatore), and blacklisting of unwanted buyers. The risks attached to this are medium to high. Just as in the case of financing, group failures result from backstabbing by firms. Hence, there is a need for clarity on profit/loss sharing and higher trust among firms in the group.

SMEs can overcome costly and risky innovations by: hiring high-end designers (COTEX in Jaipur for product diversification, Chanderi by hiring NIFT); setting up quality systems (ISO certifications in Tiruchirapally engineering & Tirupur RMG, FDA standards in Pune food processing & Drugs & Pharma in Ahmedabad); Exploring new technologies (by undertaking joint visit to Bangalore wood fair and Buyer Seller Meets in Jallandhar); Specialized training courses (40 new courses in 7 clusters by local/national institutions or consultants on marketing in Jaipur, stitching in Tirupur & Ludhiana, making long-lasting shoes in Ambur, painting machines in Bangalore); Setting up common facilities for building skills (in the area of mechanized foot-ball stitching at Jallandhar); and mutual problem solving and sharing of best practices (CEO club of machine toolmakers at Bangalore, RMG manufacturers for go-down management at Ludhiana). These strategies are not likely to work when and where there is history of cheating among potential partners; differences in innovative capacities among potential enterprises are very wide; and the potential gains are extremely diverse. The risks involve here are: training (low); hiring expensive designers (medium); and setting common facilities (high). To avoid such risks, innovations should be commensurate to the current needs and the needed support should be available.

Infrastructure is notably one of the more difficult problems faced by SMEs. In the case of India, the infrastructure project interventions were most difficult in the following areas: Common effluent treatment & disposal (Ambur, Vaniyambadi in Tamilnadu leather tanneries, Vapi & Ankleshwar chemicals); Common R&D & testing laboratory (Food processing cluster in Pune by MCCI); Common design facility (Tiruchirapally for design development and in Bangalore for the machine tool industry); Water supply (to Tirupur city, Inland container depot at Tirupur, Common exhibition ground at Greater NOIDA by Handicrafts Export Promotion Council and TEA); maintenance of industrial estate roads & other infrastructure building of new industrial estates & related infrastructure (more than 30 such projects on PPP model in progress). This kind of initiative will not work if there is not a major threat that can only be solved credibly by easing local infrastructure bottlenecks; there is no previous history of simpler, low-risk common ventures ensuring SME contribution, however small; there is no public support possible under the given support framework; and management capacities for building and running infrastructure is low.

Role of implementing agencies

Collaborative actions and partnership between and among various institutions from the public (government agencies) and the private (including firms, small and large), donor institutions, academics, and local and international experts are the key to successful cluster-based industrial development. The following spell out a number of activities these institutions ought to carry out to facilitate cluster development:

1. Stimulate trust, create awareness, instill confidence in key players – this can be done through various meetings, exposure, general seminar/workshop
2. Initiate pilot activities – through testing ideas in the field, demonstration of new technology, conduct of training programs, seeking pilot contributions
3. Regular (short/medium run) activities – through participation in fairs, common purchases, quality upgrading, training/ consultancy, skill upgrading
4. Strategic (long run) initiatives – via laboratory creation, information centers, R&D center, technology modernization, relocation of firms
5. Improvement of linkages – through network formulation, association/ institution building/ restructuring

Q&A/Discussions:

Presentation zeroed in on the practical examples of SMEs' experiences, both feats and problems, using the social capital perspective. Looking at the Indian example of SME development, problems such as high factor inputs, lack of access to credits, underdeveloped sector-specific infrastructure and innovation bottlenecks were discussed and thoroughly analyzed.

Among the country-specific market-related problems (particularly of SMEs and cluster industries) that emerged in the interactive discussion include: (1) marketing problems – firms are not well equipped with appropriate marketing techniques and strategies; (2) small firms have difficulties in accessing markets or have inadequate access to credit facilities; (3) lack of information-standard designs, e.g., intelligence on foreign markets is very difficult and expensive to get and there is information asymmetry regarding government rules and regulations on enterprises; and (4) an unfavorable regulatory environment for business – cumbersome and costly procedures for small industries, e.g., red tape or firms have to obtain many signatures in each step of the process (acquiring licenses and business permits, certifications problems).

In terms of policy interventions and strategies, the following were identified by addressing some of the market-related problems and promoting cluster development: (1) harnessing private-public sector partnership (through dialogues between the government and firms and building linkages); (2) prioritization of core issues; (3) uncovering the real underlying causes of failures or non-performance of firms; (4) capacitating entrepreneurs (providing them with appropriate training programs to improve their competitiveness); and (5) providing infrastructure and access to credit.

What Is the Japan Center?

Yoshikazu Tachihara, Team Director, Japan International Cooperation Agency (JICA)

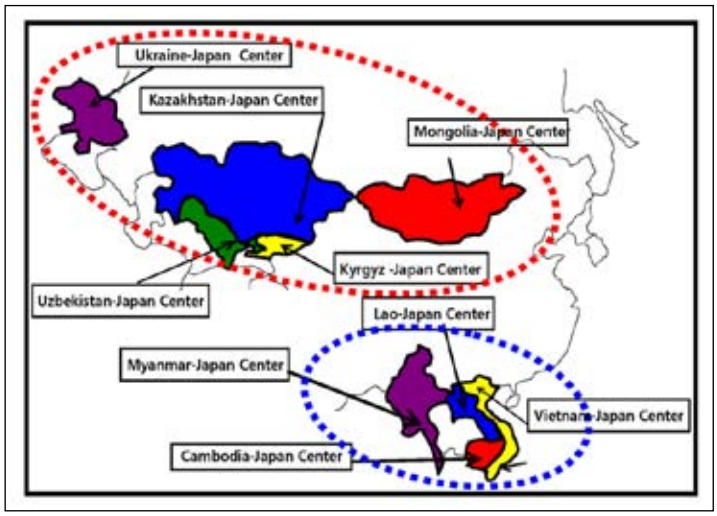
Introduction

Donor agencies play a key role in the development of an economy. There are various channels through which donor institutions can contribute to the efforts of nations to develop their economies, such as by providing financial and technical assistance in the area of capacity building. Programs that enhance the technical capacities of people and communities are a crucial ingredient of industrial development. Knowledge about the latest technologies and techniques for managing a business, for instance, can be obtained from various training programs, either local or abroad. Technology and knowledge transfer, which are the key factors for successful innovation, are likewise acquired from training programs.

Mission and Vision

The Japan International Cooperation Agency, as an institution that serves as a bridge between the people of Japan and developing countries, is aimed at advancing international cooperation through knowledge sharing for a more peaceful and prosperous world. At present, JICA is involved in several training programs geared towards promoting the market economy in transition economies in Asia. The Japan Center is an institution dedicated to the development of human resources for SME promotion in countries transiting to a market economy. Consistent with JICA's mission, the Center endeavors to promote mutual understanding between the peoples of Japan and those of the respective countries. Accordingly, the Center's main goal is to enhance the human, social and economic relationship between Japan and the recipient countries, an essential condition for the promotion of economic development in these countries.

Ten Japan Centers in Nine Countries



Currently, there are ten Japan Centers (image on left) operating in nine countries in Asia, namely: Ukraine, Kazakhstan, Mongolia, Kyrgyz Republic, Uzbekistan, Lao PDR, Myanmar, Viet Nam (with two centers) and Cambodia. Japan Centers operate for a period of five years. The most recent Center was established in Ukraine in May 2006 and the oldest Centers are found in Viet Nam and Cambodia whose operations started in late 2000. Of the nine Centers, five were constructed by Japanese Grant Aid in Hanoi & Ho Chi Minh cities in Viet Nam, Lao PDR, Cambodia and Mongolia, while four were established in collaboration with universities (provision of space) in Kazakhstan, Kyrgyz Republic and Ukraine. The Japan Center in Uzbekistan operates in an International Business Center, which is under the jurisdiction of the country's Agency for Foreign Economic Relations.

Features of the Japan Center

Each Japan Center has the following attributes:

1. It is open to the Public and provides a venue for forums.
   - The Center does not only target business-persons and officials but extends potential benefits to university professors and students, NGOs as well as children. It caters to various needs of people (themes include but are not limited to economy, society, culture and science). It is demand-driven.

2. It operates in collaboration with other Japan ODA organizations, universities and foundations (e.g., AOTS, JF, JASSO, JETRO and JBIC).

3. It is co-managed by a counterpart university that shares costs (e.g., utility costs such as water and electricity charges).

4. Its services are fee-based. To ensure the sustainability of the Center and keep the motivation of participants high, participants pay tuition fees.

Activities

Japan Centers focus on three main activities, namely: (1) Business Courses; (2) Japan Language Courses; and (3) Activities for Mutual Understanding. To achieve the Center's purpose, the key challenge is how to interrelate these activities in order to create a synergy effect.

The Business Course highlights the following:

- Promotion of SMEs and entrepreneurial education
- Introduction of Japanese styles of management to SMEs in the respective countries. Part of this is the 5S management technique which basically stands for: (1) Seiri [Organization]; (2) Seiton [Orderliness]; (3) Seiso [Cleanliness]; (4) Seikatsu [Standardization] (5) Shitsuke [Discipline]). Another technique is Kaizen, which is an approach to productivity meaning continuous or continual improvement. The "just in time" discipline and Total Quality Management techniques are also taught in this course.
- Provision of practical know-how through case studies and on-site consultation
- Course implementation based on the demands of the beneficiaries

All of these contribute to the development of human resources in the private sector, particularly SMEs. Similarly, these management techniques are helpful in changing the mind-set of the employer and employees, increasing productivity and encouraging new business, thus, paving the way for the productivity and development of SMEs and local industries.

The Japanese Language Course is intended for hotel employees, tour guides and interpreters. It also includes software program development using the Japanese Language.

The concept of Activities for Mutual Understanding is to provide information about Japan and the country and to facilitate exchange of information through various seminars, conference, study tours and Internet surfing.

Sample outcomes of the Business Course:

The Kaizen Association in Mongolia

Before 5S | After 5S

Vietnam and other countries

Before Quality Control | After Quality Control

Cambodia

To date, the Business Course has already achieved a few favorable outcomes. One is the establishment of the Kaizen Association in Mongolia by graduates (43 members). The association intends to diffuse the knowledge and skills learned to other SME employers, especially those that are located in remote areas. In Viet Nam and other countries, the 5S management technique has significantly contributed to the growth and productivity of goods and services of SMEs. In Cambodia, the introduction and adoption of the Quality Control technique resulted in a 30% reduction of defective products among enterprises.

Conclusion

The Japan Center has great potential for building and developing human resources. It endeavors to expand its activities to other regions by collaborating with local organizations such as chambers of commerce and industry and universities. It enhances the quality of learning by redesigning courses based on the evaluation and needs of participants. It empowers countries by entrusting nationals with the Center's operation. Finally, it ensures project sustainability by strengthening the Center's financial base through diversified revenue streams and the reexamination of tuition fees.

Japan Center Business Course: Outline of Current Activities The Case of Cambodia

Yasuyuki Kuroda, Senior Economist, International Development Center of Japan (IDCJ)

Introduction

The Cambodia-Japan Cooperation Center (CJCC) is an effort to pursue the objectives of the Japan Center in Cambodia, i.e., the promotion and development of human resources among entrepreneurs, with the aim of fostering SME clusters.

Cambodia is one of the many transition countries in Asia that is endeavoring to shift its economic structure from a centrally-planned economy to a market-oriented one. Economic transition entails a rigorous process of economic and structural reforms including the training of future business managers and economic drivers who will lead the country's economic development. Hence, human resource development plays a crucial role. However, human resources development in Cambodia leaves much to be desired. As a result of the purging of the political system and the bureaucracy, a considerable number of human resources have not received education. At present, Cambodia's economy is still considered to lag behind other economies in the region. The structure of its population is of a pyramidal type, where the majority of its people are considered young, giving rise to a more serious economic issue of generating employment for the younger generation. These pressing economic problems necessitate strategies that will develop human resources in a way that is compatible with a market economy, in order to generate new businesses or to expand existing ones. This is where the role of the CJCC comes in.

In response to the challenges mentioned above, Cambodia is now formulating a system that is aligned with a market economy, with an emphasis on areas such as civil law, collateral law and accounting standards. Industries and companies in the country are mainly small businesses such as food processing and beverage firms managed by individuals or families, and large companies are concentrated mainly in the textile industry. Due to the lack of practical knowledge and skills in marketing, sales and management, some owners of small businesses and firms tend to carry out unclear business plans, ambiguous employment contracts and imprecise accounting work. Hence, there is a need for human resource development programs.

Courses Offered

In view of the above and consistent with the goals of human resources development, i.e., to promote the market economy and further strengthen mutual understanding and cooperation between Cambodia and Japan, the Center formulated the following business courses:

1. Entrepreneurship Course

This course offers necessary business skills to aid entrepreneurs in preparing a sound business plan and starting up a company. It provides intensive lectures on business planning, marketing and sales promotion, basic accounting and finance, and other relevant courses such as issues on potential target industries. The course lasts about five months, from October to February of the following year.

The courses are offered on weekdays and last about two hours (6-8 pm). Normally, around 20 participants/students are enrolled in the courses, and tuition fees amount to

US$180 per course. One salient feature of this module is that an English-Khmer interpreter is employed to facilitate the transfer of ideas and knowledge.

2. Corporate Management Course

This course provides necessary skills for (SME) managers to change their management styles to more systematic and modern techniques. Managers are allowed to select necessary lecture subjects based on their needs and weaknesses. Lecture subjects include corporate management, marketing, bookkeeping and accounting, financial management, production management, management improvement and human resource management. The recruitment can be on a per subject basis and course completion is flexible (using a credit system just like in ordinary universities). The maximum number of participants per lecture subject is 40 and each lecture subject costs US$30. Interpreters are also employed to facilitate the transfer of knowledge, skills and ideas. The course runs for five months, from October of one year to February of the following year.

3. Business Seminars

This course caters to businessmen, government officials and professors and offers various information about management and the dynamics of the economy and society, among others. This course provides a link between the entrepreneurship and corporate management courses. Among the themes discussed in 2006 include: cost and benefit analysis of investment; small business management – key points for success; major points for business enterprises analysis evaluation – from viewpoint of creditors; enhancement of financial management and economic development; accounting standards for SMEs and developing countries; new wave for food culture in Cambodia–business experience in Cambodia from the viewpoint of Japanese entrepreneurship, basic production of management in Japanese factories – 5S & Kaizen.

Briefly, all the above-mentioned courses aim to implement a practical business course to empower entrepreneurs and SME managers, offer various courses and lectures to meet diversified needs of local businessmen and provide lectures including business experiences and know-how by Japanese companies – all of which are intended to equip potential economic rowers with the right knowledge and technical know-how in terms of sound business management.

Strategies for Sustainability

The sustainability of the business courses rests on the localization of lecturers and course operation. The HRD course operation was initiated by Japanese consultants in 2005 and shortly thereafter, the need to proceed with a technical transfer to local lecturers and counterparts was realized. In response, the Center formulated an action plan to search for, employ and develop local lecturers. A course operation plan was likewise initiated by the HRD course manager and staff members with support from the Japanese consultant team. Local lecturers go through a rigorous recruitment process that includes among other things: intensive interviews with pre-screened applicants (e.g., good background/reputation) and job matching (fields of expertise and experience in giving lectures). After successful placement, local lecturers undergo human resource development training before they are considered full lecturers at the center, including: attendance in lectures given by Japanese lecturers, working and acting as assistants to Japanese lecturers and joint lectures/sessions with Japanese lecturers.

A number of photos below exhibit some of the recently concluded activities undertaken by the CJCC:

Lectures

Outside Lecture at a Popular Hamburger Shop

JVC Workshop

Three-Day On-Site Lecture in the Cambodia Institute of Banking

5S at Kek Seng Company
(Plastic Bottle Maker)

Business Seminar

ADB's Experience in SME Assistance (Cambodia, Lao PDR, Viet Nam)

João Farinha-Fernandes, Economist, Asian Development Bank

Introduction

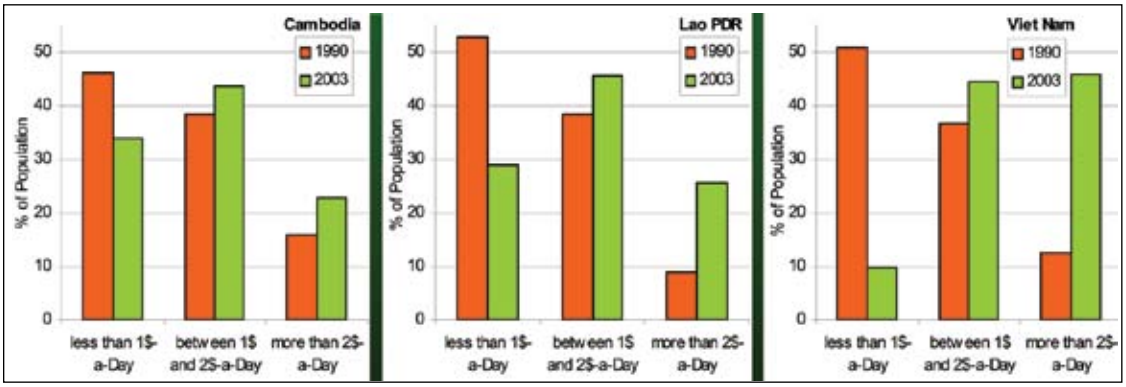
One of the main thrusts of the Asian Development Bank (ADB) in most transition economies at present involves technical assistance and support for a policy reform agenda and strategies that are geared towards accelerating the process of structural change in these countries, i.e., moving from a centrally-planned economy to a market-oriented one, through sound economic reform and management with the ultimate goal of reducing poverty.

The GMS and the structure of their economies

The majority of the people in the GMS (Greater Mekong Subregion) countries still live in rural areas and are engaged in rural activities like agriculture and fishing. Products are sold through direct personal exchanges. The creation of impersonal markets, that depend more on the system of rules, enforcement of contracts, will allow for specialization and increasing returns to scale in intermediate goods production, providing benefits for the economy and for what people call export competitiveness. Most ventures (formal or informal, registered or unregistered, licensed or unlicensed) in these economies are SMEs and more than 75% of the population is occupied in agriculture.

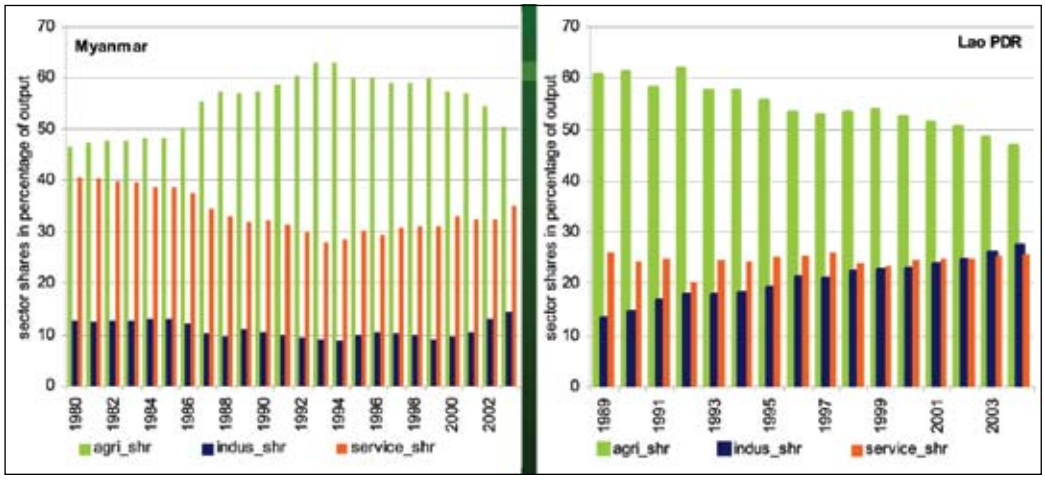
The three economies have been successful in reducing poverty over the past 13 years. As can be seen from the graphs below, each country has taken great strides in reducing the percentage of population living on less than US$1 a day. In Viet Nam, for instance, the proportion of people living on less than US$1 a day has significantly improved from 50% of the population in 1990 to less than 10% in 2003. Significant developments were also clear in Cambodia and Lao PDR, where the proportion of the population living on less than US$1 a day decreased from nearly 50% to a little more than 30% for Cambodia and from more 50% to a little less than 30% for Lao PDR. However, most people in these countries still live on less than US$2 a day and their income-generating activities are largely based on agriculture, with agriculture having a large share of value added.

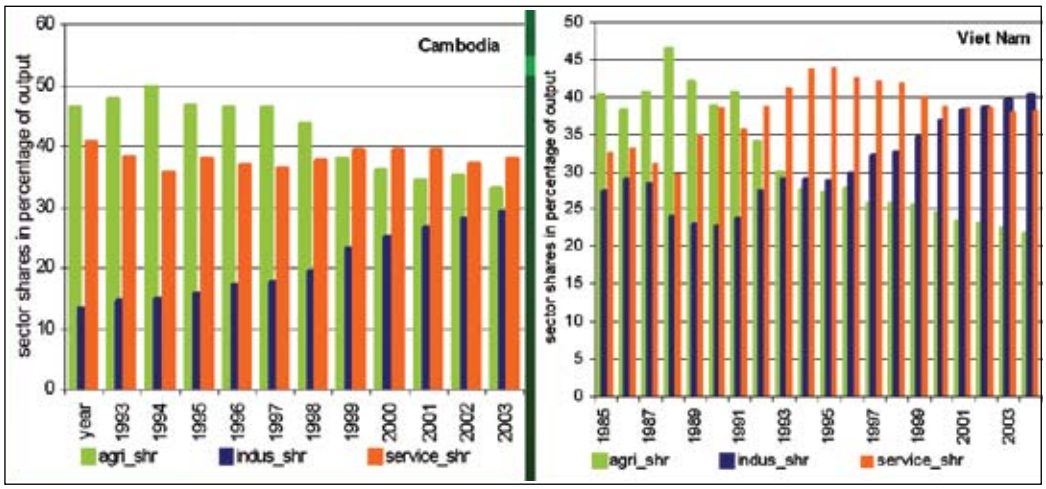
Percentage of Population Living on US$1/Day, US$1-2/Day, and US$2+/Day



These countries are at different stages of transforming their economies, from being essentially rural and agrarian (e.g., Myanmar and Lao PDR) to becoming urban and industrial (e.g., Cambodia and Viet Nam).

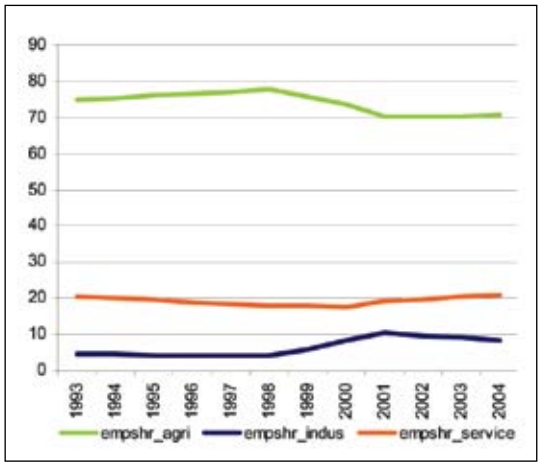
Shares of Agriculture, Industry, and Service Sectors



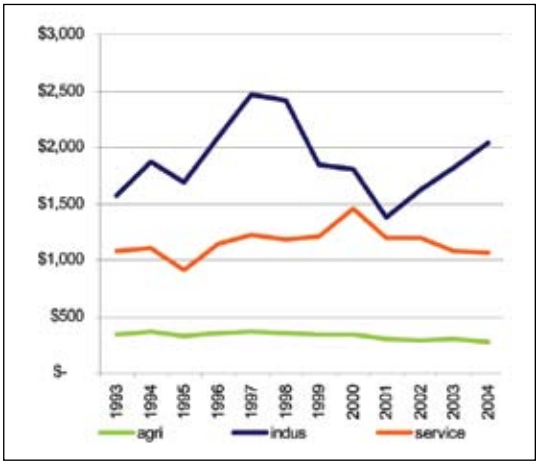


As can be seen from the figures above, in Myanmar and Lao PDR, agriculture still holds a large share of value added whereas Cambodia and Viet Nam are considered to be in the modern stage of economic transformation. The shift of population from one sector to another where there is an improvement in productivity is in itself poverty reducing. The extent to which inter-sectoral migration has contributed to poverty reduction in the region is determined by the employment shares of each sector in the total employment of the economy. In Cambodia for instance, the industry's share of total employment doubled (especially in 1998-2001, mainly due to garment manufacturing expansion) and as a result, people who migrated became 6 to 9 times more productive. Similarly, in Viet Nam, industry and services have absorbed an increasing share of employment, and in the process became 5 to 7 times more productive. This means that as people shift from lower to higher productivity, poverty is reduced. The graphs below illustrate the sectoral shares of employment for Cambodia and Viet Nam, respectively.

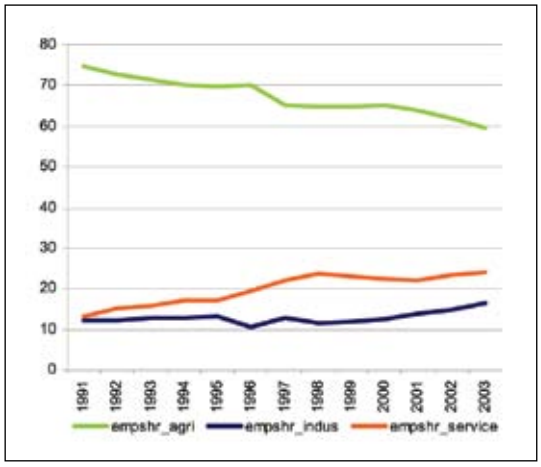
Sectoral Shares as % of Total Employment: Cambodia



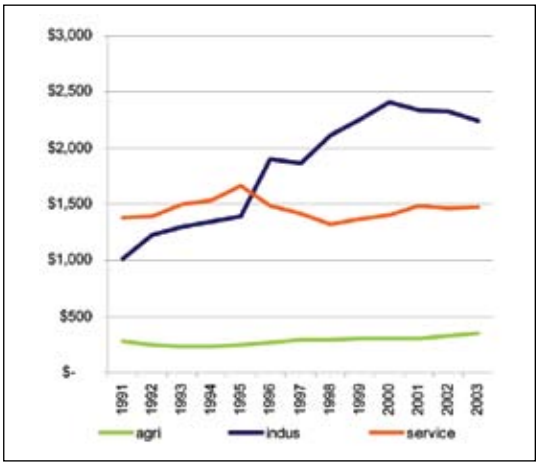
Sectoral Labor Productivity: Cambodia



Sectoral Shares as % of Total Employment: Viet Nam



Sectoral Labor Productivity: Viet Nam



In these two economies, where agriculture still represents a substantial share of the economy (both in terms of output and employment), employment expansion in the industry and services sector has been a major determinant of labor productivity growth and has been accompanied by poverty reduction.

However, despite the efforts of governments in these economies and considerable inflows of donor assistance, not much improvement has been witnessed in the rural or agricultural sector, where most of the labor force is employed. Correspondingly, agricultural productivity in these economies has been very sluggish over time. Hence, moving out of the agricultural sector and into the industry sector could lead to a significant rise in people's incomes. As previously mentioned, inter-sectoral migration associated with industrialization and the expansion of urban-based activities seems to have had a significant impact on poverty reduction in these economies.

Innovation is a crucial element of productivity growth in industrial countries. However, for some countries that lag far behind the world's technological frontier, it seems to be much more effective to create for conditions for copying and importation of technologies rather than trying to be at the forefront or attempting to innovate. In addition, for countries that do have sufficient capacity to innovate, a better alternative for increasing labor productivity is to create the institutional conditions for the transformation of their production and export structures and enable a shift of resources to activities with higher levels of productivity.

Public policies, SME development and structural change

Public policies in these economies play an important role in supporting the process of structural change. To speed up the process of structural change, several points have to be emphasized:

1. Employment expansion and investments in manufacturing and in supportive financial and business services are a necessary condition. To enable the GMS economies to benefit from technical and organizational innovations made elsewhere in the world and to increase their labor productivity, public policies should focus on encouraging private investments in manufacturing and financial and business services.
2. To enable these innovations to then spread across the economy, it is necessary that new firms be able to enter markets for impersonal exchange, that substandard firms be allowed to fail, and that good firms face less barriers in increasing their scale of production.
3. Creating the institutions that produce these markets for impersonal exchange, which is what selects good firms, irrespective of size, and drives the spread of these innovations across the economy.
4. Ensuring a transparent, consistent and predictable legal and regulatory framework to support commercial and financial contractual arrangements (at the heart of which is a fair and effective judicial system) in order to encourage long-term investment commitments by firms.
5. Openness to trade and FDI are not sufficient for achieving sustained structural change and poverty reduction. It must be accompanied by the improvement of a large range of institutional factors and policies to enable small and medium businesses to expand and grow.

In terms of promoting and supporting SME development, public policies need to draw attention to the following:

1. A favorable business environment, characterized by the following:
   - Transparency and predictability of rules
   - Competitive markets (easy operation, entry and exit)
   - Contractual framework (judicial efficiency)
   - Correction of market imperfections resulting from inefficiencies in markets for information

2. A sound physical and regulatory infrastructure to promote efficiency in telecommunications, financial services, power, roads, ports, transport and water supply, among others.

The ADB, SME development and structural change

The Asian Development Bank plays a major role in supporting SME development in the GMS. The ADB assists the governments in formulating policies that create institutions that allow for the structural changes to happen. In addition, the ADB initiated the GMS Regional Cooperation Strategy Program, which helps strengthen the transport, telecommunications, energy, environment, tourism and agriculture sectors of the GMS countries, as well as facilitate trade, promote investments and develop human resources in these economies. The individual country programs in Viet Nam, Lao PDR and Cambodia are likewise instruments of the ADB that aim to enhance and speed up the process of structural change in these transition economies. These programs focus on economic sector work and provide technical assistance and lending for policy reforms and physical infrastructure development.

Some examples of policy reform assistance programs in each of the GMS countries are listed below:

In Cambodia:
- Financial Sector Program Loans support the development of credit and risk sharing markets (e.g., regulatory and supervisory structures development).
- SME Development Program Loans assist formalization (e.g., business registration), regulatory (e.g., business licensing), and access to finance reforms (legal and informational underpinnings of finance).

In Lao PDR:
- Banking Sector Program Loans support the development of credit (e.g., regulatory and supervisory structures development).
- An SME Development Program Loan is under preparation to support formalization, regulatory, trade and access to finance reforms.

In Viet Nam:
- Financial Sector Program Loans support the development of credit (e.g., bank and non-bank) and risk sharing markets.
- SME Development Program Loans assist formalization, regulatory, access to resources (e.g., finance and land use rights) and access to international markets (e.g., industrial/technical standards) reforms.

Panel discussion: Cluster-Based Industrial Development

This session was aimed at stimulating comments and generating feedback from all participants, discussants and members of the seminar. The session also served as a venue for opening up and soliciting suggestions for future research and collaborative activities focusing on the cluster-based approach to SME development. Identifying the key differences between non-performing and performing clusters was one of the highlights of the discussions in this session. The panel of discussants included academics, donor representatives and international experts on cluster development.

The discussion points included:

1. Elements of successful cluster formulation and expansion (what makes some clusters successful and others unsuccessful?)
2. External support/input in the above process (desirable intervention/critical support)
3. Role of national government (macro and micro level)
4. Interaction with local government and other concerned parties
5. Interactions with international donors and foreign experts

Elements of successful cluster formulation and expansion and the external support systems needed for cluster development

Innovation is the key to successful cluster development. While clusters can expand naturally (quantity expansion phase), it is difficult for them to enter the quality improvement phase without appropriate innovations.

Training programs that provide knowledge basic management technologies, e.g., training programs offered by the Japan Center, are necessary for building and accumulating human capital, which is also needed for successful cluster development. Training programs should be expanded to facilitate the formation of new clusters and sustain and further develop existing ones. Training programs that focus on specific industries where the country/economy is most competitive at are most likely to yield the best results.

Critical support should be provided for improving the relationship within the clusters. This is both desirable from a policy perspective and feasible from an implementation perspective. There are a number of clusters that are not doing well. The key difference between successful and unsuccessful clusters lies primarily in the quantity and quality of relationships between and among firms and their relationships with public sector institutions. Clusters that are locked in a vicious cycle of competition require assistance. Without assistance, these clusters will very likely disappear. It should be noted however that the government should not be directly involved in the formation of clusters. Rather, it should provide the necessary conditions and a conducive policy environment for clusters to thrive.

There seems to be a great deal of overlap between the roles of social capital and innovation. The two are mutually reinforcing elements that foster successful clusters, which can develop social capital; social capital sets in motion innovation, but only successful innovation breeds the ground for further social capital. Similarly, the byproduct of innovation is greater collaboration and trust, leading to more coordination whereas the necessary byproduct of social capital is greater innovation.

The following challenge remains with policymakers: which approach or methodology is most useful and relevant to their economies, subject to constraints and opportunities?

Succinctly stated, social capital is needed to innovate and innovation is a requirement for clusters to move from non-performance to performance. Knowledge transfer, innovation spillover, flow of information and human capital building are the fundamentals for the development of clusters.

As regards the relationship between innovation and imitation, a few considerations have to be made. For example, given three enterprises, in order to make progress, at least must one of them must innovate. In order to increase the level of management, others must imitate. Imitation is the way by which the level of management efficiency improves in the industry as a whole. But after innovation, everyone imitates, and to some extent, imitation makes the other firms innovate less. Imitation reduces the incentives of the imitators to innovate. Innovation is very important for making progress while imitation is very important for diffusing new ideas. However to maximize social benefits, innovation should be stimulated.

The economic rationale for the existence of clusters is also worthy of consideration. The suitability of location, the benefits of getting together in a common space, the proximity of the clusters to the market, the availability of resources in the area, the commonalities of skills and specialization among labor suppliers and other relevant economic characteristics are crucial for assessing the success of potential clusters.

Institutional arrangements for cluster development: The role of the national government, interaction between local institutions and interaction with donor agencies

As an economic principle, the national government should provide the goods and services where it is best at providing them and where there are no incentives for private enterprises to provide them. Such areas include national defense, safety and national sovereignty, among others (natural public goods). In terms of industrial development, relevant public goods that the national government ought to provide include: better policy systems, judicial and law systems, banking systems, networks, roads and infrastructure, railroads and bridges connecting industrial clusters from different regions and parts of the country, and all other goods and services that extend the confines of local governments and whose externalities are national in scope.

However, the national government should not set up clusters directly. Existing clusters that are not performing well are the ones that need help. For potential cluster industries, decisions to create or initiate clusters should be left to the private sector. The best assistance the government can provide is to listen to what enterprises ask for. Rather than trying to impose upon them bureaucratic dos and don'ts, it should facilitate the changes that the private sector calls for.

Local governments, on the other hand, should provide marketplaces where transactions can take place. However, to enhance the efficiency of local governments in providing local goods, they should compete with each other, i.e., yardstick competition. Nurturing and helping industrial clusters within the boundaries of a local government is key to ensuring sustainable industrial development. In addition, since local governments are close to the private sector, they play a more important role than the national government in the success of the clusters. An alliance between business firms and the local government is enough to take the cluster development forward.

Simple administrative procedures often hamper industrial development. Hence, administrative reforms should be executed to eliminate unnecessary burdens on the private sector such as cumbersome rules and regulations, permits, licensing, etc.

Cluster development, as stated repeatedly in the previous sections, is not the sole strategy for solving the many problems of industrial development. It is just a subcomponent of a broader set of industrial policies, and is on par with other equally important policies such as the rule of law, policies about macro economic stability, business environment, and FDI policies. None of them should be seen as a replacement for the others.

Industrial donors should be brought in and provide for the needs of the country in situations when it is no longer capable of providing local needs. In the case of industrial development, donor agencies should provide experts such as accountants, other human resources, and working expatriates to implement various programs that capacitate cluster industries in general, and local entrepreneurs in particular (e.g., JICA Center and other JICA training programs).

COUNTRY PRESENTATIONS

The country presentations focused on the following areas:

- Country economic overview
- Major challenges and issues faced by the economy in general and SMEs in particular
- Policy environment and institutional arrangement with regard to industrial cluster management/development
- Industrial or cluster-based development approach scenario

Country Presentation: Lao PDR

Country Economic Overview

Lao PDR (Laos) is a landlocked and mountainous country in South-East Asia with a land area of approximately 236,800 square kilometers and shared borders with five countries: People's Republic of China in the north, Viet Nam in the east, Cambodia in the south, Thailand in the west and Burma in the north-west. Lao PDR has a population of about 5.62 million, with an annual population growth rate of 2%.

The Gross Domestic Product in 2005 amounted to US$2.8 billion and GDP capita was US$490. Among Lao PDR's sources of economic growth are agriculture, industry, and the services sectors, each accounting for 45%, 28.2% and 26.4% of the GDP, respectively.

The industry sector of Lao PDR focuses on three major activities, namely manufacturing, mining and electricity, each having 62.32%, 26.17% and 11.51% share in the total production of the sector, respectively. The industry sector grows at approximately 11.3 annually.

Industrial policies in Lao PDR focus on the development of key industries, namely: (1) Electricity; (2) Manufacturing – with particular emphases on wood processing, construction material, food processing and textile and garment industries; and (3) Agriculture-related industries such as fertilizer and food processing. In order to promote and develop these industries, the government recognizes the importance of promoting private sector participation in the market economy as well as attracting foreign investors. Electricity, mining (gold, copper, gypsum and coal) and some processing industries (wood processing, agro-processing industry such as tea, coffee, rubber, vegetable, fruit, oil plant, and fragrant rice) are among the industries in which Lao PDR is considered to have comparative advantages.

Position of SMEs

SMEs in Lao PDR are basically defined according to the number of employees and total assets, as shown in the table below:

Category	Average Annual Number of Employees	Total Assets in KIP	Annual Turnover in KIP
Small	≤ 19	≤ 250 million	≤ 400 million
Medium	≤ 99	≤ 1.2 billion	≤ 1 billion

Further, SMEs are classified according to sector, namely: manufacturing, trade and services. The majority of the enterprises in Lao PDR are SMEs, accounting for 95%; the remaining 5% are large firms.

In terms of employment, large firms absorb about half of the labor supply in the country, accounting for 50.5% of total employed people, followed by medium firms, and small and micro firms, each having 28.8%, 19.3% and 1.4% share in the total labor workforce. In terms of sectoral distribution, most of the SMEs are in the trade sector, which accounts for 44% of the total number of SMEs, while about 38.5% are in the services sector and approximately 17.5% in the manufacturing sector. By employment, medium enterprises grow the fastest with a 23% growth rate, followed by small enterprises and micro enterprises, each with growth rates of 20% and 6.7%, respectively.

As regards the use of BDS, only 16% or so of the SMEs make use of BDS, this means that the majority of SMEs (64%) rely on family, relatives, friends and partners. In terms of access to finance, most SMEs borrow from suppliers (52%), about 30% obtain credit from relatives and friends, while only 4% have access to banks. The rest obtain credit from other sources.

Major challenges and issues faced by SMEs

The main constraints faced by SMEs in Lao PDR are as follows:

- Limited competitiveness due to
  - Low level of technology and small-scale production
  - Lack of qualified technical staff and skills
  - Inadequate business management skills
  - High transaction costs and risks

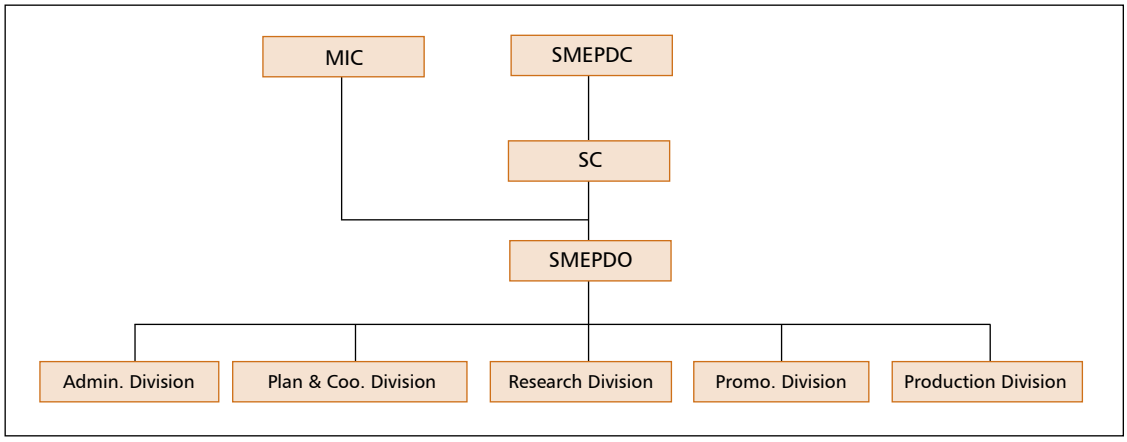
- Lack of awareness of the importance of technical and management
- Lack of know-how and skills
- Lack of capital and financial resources
- Lack of capacity for business development services
- Inadequate knowledge of laws and regulations
- Underdeveloped inter-business linkages/value-added chains
- Unfavorable administrative and regulatory business environment
- Unfavorable attitude and limited capacity of public/civil servants

Policy environment and institutional arrangements

The government of Lao PDR has already initiated some laws and policy strategies regarding SME promotion and development, i.e., Prime Minister's Decree No. 42, which was enacted in April 2004. The decree aims to create, improve and expand SMEs in Lao PDR and contains six main policies, namely: (1) creating an enabling regulatory and administrative environment; (2) enhancing the competitiveness of SMEs; (3) expanding domestic and international markets; (4) improving access to finance; (5) encouraging and creating favorable conditions for the establishment of organizations; and (6) enhancing entrepreneurial attitudes and characteristics within the society.

Below is an illustration of the institutions involved in SME development in Lao PDR.

Industrial or cluster-based development approach scenario



"Industrial cluster" is a relatively new term for Lao people. At present, there are no industrial clusters in the country. However, there are some associations of firms and enterprises, particularly in the following industries:

- Textile and garment
- Construction material
- Food production
- Wood processing
- Handicrafts

At present, the government is in the process of developing a legal framework for the development of industrial areas in the country. The SMEPDO is in charge of exploring and evaluating potential sites for industrial clusters in selected sectors and provinces.

Country Presentation: Uzbekistan

County Economic Overview

The Republic of Uzbekistan is located in the central part of Central Asia, between the Amudarya and Syrdarya rivers. The Turan Lowland in the northwest and Tien-Shan and Pamir-Alay in the southeast are the two mountain ridges that border the territory. The Kyzyl-Kum Desert is in the North. Uzbekistan borders Turkmenistan, Kazakhstan, Tajikistan, and Afghanistan.

There are about 26.3 million people in the country, of which 13.1 million are male and 13.2 million female. Approximately 9.5 million live in urban areas whereas 16.8 million inhabit rural communities. The overall population density is 51.2 people per square kilometer and the population is growing at an annual rate of 1.1%.

The dynamics of the main macroeconomic indicators for 2000–2006 demonstrate the positive tendency toward macroeconomic stabilization and acceleration of the country's economic growth. In 2006, the GDP growth rate was 7.3%, primarily as a result of the increase in investment activity, and the growth of internal and external demand for domestically produced goods and services. With investment and construction growing by 9.0% and 10.7%, respectively, the growth in the economy's real sector remained strong, and the expansion of industry made up 8.6% of the sector's total growth while the share of agriculture was 7.1%.

Agricultural production, along with the services sector, made the major contribution to the country's GDP's growth. These economic sectors amounted to about 5 percentage points of the total 7.3% GDP growth. The decrease of the net contribution of indirect taxes (by 0.8-0.9% points) reflected the current process of tax burden reduction on producers and participants in foreign trade activities.

The service sector constitutes the bulk of the of the country's economy, with a 36.7% share of GDP. The share of the agriculture sector has fallen by 0.5 percentage points, whereas the share of the industry sector increased has risen to 22.1%. As for expenditures, the growth of internal demand was led by retail trade and services (12.5% and 15.0%, respectively).

In general, steady economic growth has been achieved as a result of the improved balances of government budget and payments, lowered inflation, growth of real incomes, moderate devaluation of the national currency, strengthening of the banking system, and improved financial intermediation that helped to increase saving and investment.

In terms of trade, the main export items of Uzbekistan are gold, cotton, zinc, inorganic chemicals, perfumery and cosmetic products, plastics, grains, vegetables and fruits, and automobiles. Exports have focused on diversification into new finished products such as cars, petrochemical production, mineral fertilizers, metal products, textile products, building materials and others. The country's main export markets are Russia, the United Kingdom, United States, Germany, Turkey, Iran, Kazakhstan, Azerbaijan, Afghanistan and Tajikistan. The share of exports to these countries comprised 80% of total exports in 2006.

In 2006, exports grew by 18% amounting to more than US$6.3 billion. The export growth rate averaged 10.1% over the past seven years (2000-06). The average value of exports per capita was US$213.4 in 2006. This growth was supported by an increase in industrial production that became a basis of qualitative change of the foreign trade structure and direction. Exports of machinery and equipment have increased by more than 42.7%, chemical products and plastics 25.2%, foodstuffs by more than 2.5 times, and production of metallurgy by 1.6 times.

The expansion and diversification of exports was promoted by the Investment Program and the Localization Program initiated by the Government of Uzbekistan. The economic benefits of import substitution amounted to more than US$900 million. Exports of goods produced in accordance with the Localization Program accounted for 24% of export gains.

Industries in Uzbekistan with a comparative advantage are electricity, mining (gold, copper, gas) and some processing industries (textile and garment, wood processing, agro-processing, beverage industries).

Imports, on the other hand, have increased by 7.5%, and amount to US$4.4 billion. The growth indices of the following three commodities were higher than the average growth of imports: energy carriers (82.8%), foodstuffs (24.4%) and chemicals (17.8%). Imports of organic chemical compounds, dyes, paints and varnishes, perfumery-cosmetic and washing liquids, transport vehicles, and oil and petroleum products have increased significantly.

Position of SMEs

In Uzbekistan there are three types of legal entities, namely: micro, small, and other enterprises. Each is characterized by the following:

- From 30 to 50 employees—in agriculture, the agro-processing sector and other industrial and manufacturing areas;
- From 20 to 25 employees—in science, research services, transportation, communications, services (with the exception of insurance companies), retail trade and other industrial and other non- manufacturing areas.
- More than 50 employees—in mechanical engineering, metallurgy, fuel, and energy sector and chemical industry;
- More than 25 employees—in wholesale trade and public catering.

Official data from the State Statistics Committee of Uzbekistan reveal that the share of small enterprises in the country's GDP have risen, accounting for about 38% in 2005. Similarly, SMEs provided 66% of the country's total employment in the same year. In 2005, there were ten operational small enterprises per 1,000 residents. As of 2006, the share of small business in the GDP amounted to 42.1%, resulting in an increase in the number of operating enterprises in small and private business, accounting for 346 thousand units, 1.5 times more than in 2004. At the same time their share in the total number of registered enterprises reached almost 90%.

The fastest development of small businesses was observed in the wood and timber industries, where over 67.5% of total output is derived from SME production. Increased production of consumer goods by small businesses has continued as a positive trend. Small businesses produced 40% of consumer goods and 10.6% of light-industry products.

In the machinery building industry, small business are concentrated in areas such as the production of a variety of spare parts for large industrial enterprises, thus allowing them save on import expenditures, resulting in a reduction of total production costs. Small businesses accounted for 9.8% of industrial output in the machinery building industry. Another significant factor in the development of small businesses is their share in total exports, which reached 10.7% in 2006 (7.3% in 2004).

Major challenges and issues faced by SMEs

In Uzbekistan, taxation has traditionally been one of the most problematic issues for SMEs. High tax burdens, low compliance as a result of the complex taxation system and an unwieldy tax administrative system are among the factors that hamper further development of SMEs.

Cumbersome business procedures for obtaining permits and businesses licenses also impede SME expansion in the country. Some unneeded interventions by public authorities on business transactions and on the market as a whole have been reported by businesspersons and entrepreneurs. The voluminous paper requirements for starting up a business and the delays in the processing of papers characterizing the business regulatory system are constraints on start-ups or investments by enterprises.

Providing SMEs with greater access to credits and loans is also necessary to foster cluster development. Though the government has already taken great strides in this respect, wide and more universal access of SMEs to financing, credits and loans has not yet been achieved.

Policy Environment and Institutional Arrangements

While the business environment has been beset by some challenges, as previously mentioned, the government of Uzbekistan is working hard to improve the business environment to develop the SME sector. A number of improvements, in the form of legislative acts, have already been introduced by the government. In 2005, laws were enacted to:

- Improve legal protection for businesses
- Improve the system of submitting reports and calculations
- Introduction of single tax payment
- Ensuring uninterrupted access to cash
- Optimizing license and permit procedures
- Reducing and streamlining inspections
- Simplification of registration procedures

Providing SMEs with greater access to credits and loans is also necessary for fostering cluster development. In 2005, the government established a specialized "Mikrokreditbank" to satisfy the needs for financing. At present, there, there are 37 credit unions operating countrywide and offering financial services for the SME sector. Though the government has already taken great strides in this respect, wider and universal access of SMEs to financing, credits and loans leave much to be desired.

In Uzbekistan, there are a number of laws prescribing basic policies for SMEs, including:

- Law of the Republic of Uzbekistan "On Guarantees of Free Entrepreneurial Activity," 25 May 2000
- Law of the Republic of Uzbekistan "On Business Partnerships," 6 December 2001
- Law of the Republic of Uzbekistan "On Companies with Limited Liabilities and Additional Liabilities," 6 December 2001
- Law of the Republic of Uzbekistan "On Private Business Entities," 11 December 2003

Furthermore, in order to develop SMEs in Uzbekistan, the President created the State Committee on Demonopolization, Competition and Entrepreneurship Development in 2004. Later, this became the state body responsible for ensuring favorable conditions and capacity building of SMEs. This committee is also a working body of the Small Business and Private Entrepreneurship Development Coordinating Council under the Prime Minister of the Republic of Uzbekistan. The council was created to provide integrated decision-making among related ministries and departments, especially the Ministry of Economy, Ministry of Finance and Chamber of Commerce and Industry.

In addition, the President of Uzbekistan established a fund for small and private business support funded by means of financial allocations coming from the privatization and management of state property (2% of total amount). In 2006, SUM350 million were spent on SMEs support programs. Additionally, SUM35 billion in the form of favorable credits were directed to creating jobs in small business entities from the Population Employment Fund under the Ministry of Labor and Social Security.

Laws on micro financing and micro-credit have promoted the activation of the micro financing process in Uzbekistan. These measures resulted in an increase of the scale of micro crediting of business entities considerably. The number of micro-credits provided by banks increased by 44.4 % and amounts to about SUM65 billion.

Industrial or cluster-based development approach scenario

Thus far, there are no industrial clusters in Uzbekistan. The government, however, is in the process of encouraging and attracting industrial enterprises operating in the same industrial sector to form associations or groups.

Under the supervision of the Uzbekistan Chamber of Commerce and Industry, industrial associations have been established in the following areas: textile and garment, construction material, food production, handicraft and so on.

Realizing that clusters of industrial enterprises are an effective form of industrial organization for meeting the challenges arising from the operation of free market forces, the Department of Industry, Ministry of Economy, has been taking the initiative to develop a legal framework for the development and operation of industrial clusters. In addition, the Ministry of Foreign Economic Relations, Investment and Trade has already started promoting a so-called "Localization Program," in areas such as the Fergana valley and Tashkent region. The value of goods produced in accordance with the Localization Program equals US$1.3 billion. The contribution of the Localization Program accounts for 11.3% of industrial production.

Country Presentation: Viet Nam

Country economic overview

Over the past years, Viet Nam has made significant socio-economic achievements. The average annual economic growth rate of 7.5% has helped double GDP over the ten-year period from 1991–2000 and has led to remarkable changes in the socio-economic panorama of the country. Since 2001, Viet Nam has succeeded in maintaining an annual growth rate of about 8%. The country's average GDP per capita 2001–2005 was US$620 and the population as of 2005 was about 83 million.

The country's GDP consists of shares from different sectors—industry, services, and agriculture—each making up approximately 41%, 38%, and 21% of the country's total economic output in 2005. As a result of industrial reform policies, the shares in the value added of each sector have changed dramatically: while in 1991 agriculture was the leading sector at nearly 38% of GDP and the industry sector only had a 23% share, these industries had swapped positions by 2005.

At present, the industrial sector not only accounts for the bulk of total production in the economy but also accounts for the lion's share of the country's exports, at 70%. The value of industrial output in 2005 consisted of 10%, 82%, and 8%, for the mining industry, the processing industry, and the electricity, gas and water industry, respectively. In the same year, the number of industrial enterprises in the country was estimated at 20,000, nearly twice the number five years earlier. Industries were concentrated into agriculture, forest, aquatic product processing (39%), and textile and footwear (13%). For the main industries, mechanical enterprises consistently accounted for approximately 58-59% while the chemical industry made up 33%. The processing industry (consisting of food and beverages, tobacco, textiles, garments, leather, wood and bamboo, paper, coke coal and refined petroleum products, chemicals, rubber, building materials, metal and other machinery and equipment, electronic products, health equipment, motor vehicles, transport equipment, furniture, recycling, etc.) made up 89.4% of total industrial enterprises, in which most enterprises had 10 to 200 workers. The electricity, gas and water supply industry only made up 1.34% of total industrial enterprises.

In Viet Nam, SMEs are defined as "those independent business and production establishments that have registered under the current legislation and have registered capital of less than VND10 billion and/or have an annual average number of permanent employees of less than 300." The type of and details for each enterprise are summarized below:

Enterprise Types in Viet Nam

Type of enterprise	Definition by employment
Micro enterprise	1 to 10 persons
Small enterprise	10 to 49 persons
Medium-sized enterprise	50 to 299 persons
Large enterprise	300 persons or more

The contribution of SMEs to the national budget has increased in recent years, from about 6.4% in 2001 to over 7.4% in 2002 (those of FDI enterprises and SOEs were 5.2% and 21.6% in 2001 and 6% and 23.4% in 2002, respectively). SMEs have been active and dynamic in almost all sectors. However, most SMEs were active in distributing goods to consumers through the wholesale and retail trade. SMES involved in manufacturing, hotels and restaurants and transport, storage and communications are also among those that have performed satisfactorily during the same period. Towards the end of the last quarter of 2001, of the total number of SMEs participating in trade, 80.6% were involved in exporting, and 84.2% in importing.

Major challenges and issues faced by the economy in general and SMEs in particular

Despite the considerable progress made in the SME sector, there is still much to be done. The following are some of the major problems and challenges that SMEs and relevant key players face at present:

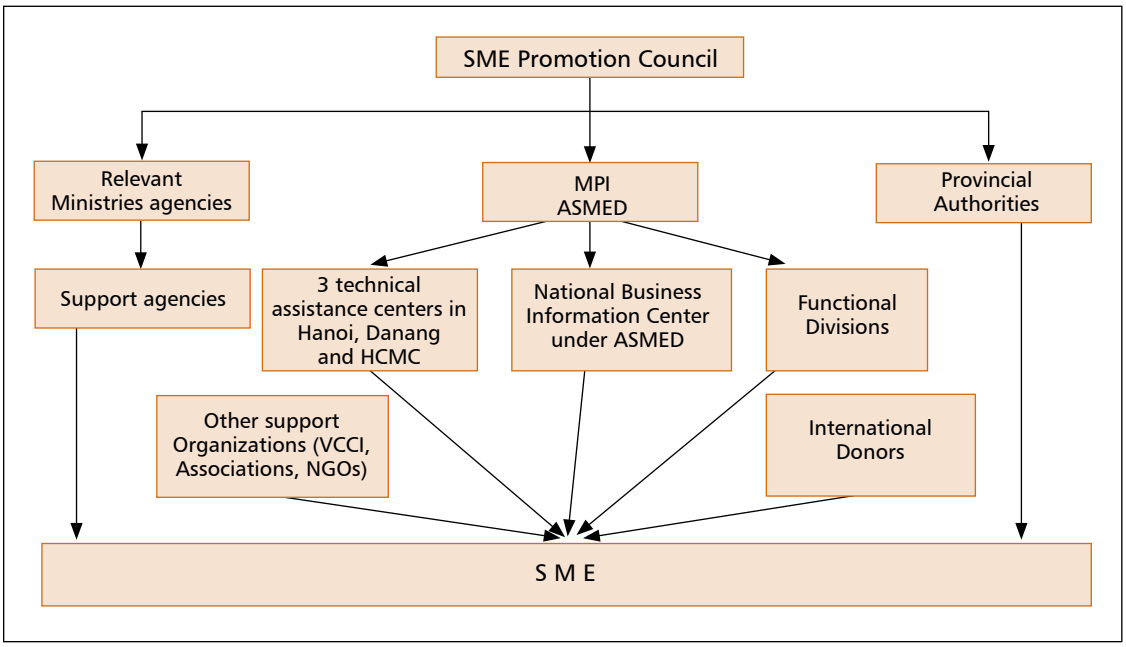
- Most SMEs do not realize the great impact of globalization and the process of international and regional integration on the domestic economy, on the commercial and manufacturing activities of enterprises, including those producing goods for exports and domestic consumers (Kokko, et al. 2004)
- Most SMEs are small in scale, have limited capital and a small number of employees, operate dispersedly, and do not have sufficient skills to compete effectively in increasingly liberal markets because of the lack information on input markets, limitations in market access, and weaknesses in equipment and science and technology capacity. As a result, the goods and services they provide are often of poor quality and of low competitiveness, and they face difficulties in the domestic and export markets. At the same time, they cause damage to the environment and the eco-system. Investment in technological innovation by SMEs is at a low level compared with the demand for development. While there is a lack of concrete evidence of this, it appears that there is hardly any ongoing research and development activities (R&D) in the SME sector.
- The prevailing protective policies, lack of a level business environment between economic sectors, the mechanisms that provide subsidies and privileges to some enterprises, and the instability in legal regulations, lead many Vietnamese enterprises to try to obtain privileges from policies to gain short-term benefits rather than to build long-term business strategies.
- The lack of adequate cooperation between large-scale enterprises and SMEs leads to limitations in business quality and efficiency and competitiveness of both SMEs and large-scale enterprises, and in an inability to make use of economies of scale for both of these sectors.
- The internal management of SMEs is often underdeveloped, unprofessional and weak, and mainly based on the limited, personal experiences of the owners. There are usually no clear distinctions between the possessions of the enterprises and those of the owners of the enterprises. The owners are also the managers of enterprises. There is usually no clear legal distinction between the rights and duties of owners, employers and employees. Most enterprises lack strategies and long-term business plans, and try to operate with untrained professional staff.

- Financial management in SMEs usually lacks of transparency. The reported data do not reflect the real financial conditions of enterprises and is not reliable. Some enterprises are confused regarded tax registration, tax enumeration, tax paying and other financial duties. Some financial representations are dishonest or late. Underreporting of financial results and perceptions of non-transparency prevent a large number of SMEs from getting loans from banks, especially unsecured loans available through policy lending instruments.

Policy environment and institutional arrangement with regard to industrial cluster management/development

The diagram below depicts the institutional arrangement for the SME infrastructure.

Structure of the Institutional SME Support Infrastructure



The responsibilities of each of the key institutions involved in the promotion and development of SMEs are detailed below:

SME Promotion Council, by virtue of Decision No. 12/2003/DQ-TT dated March 2003, the council is tasked to carry our the following:

- To serve as a consulting body to the Prime Minister in the formulation of SME development mechanisms and policies through out the country, specifically the strategy orientation and the SME Development Plan that shall be in line with the national orientation and socio-economic development plan;
- To propose amendments, supplementation to current SME development mechanisms and policies; to propose solutions, measures and SME support programs to improve and enhance the competitiveness for SMEs; other SME-related issues assigned by the Prime Minister.

Ministry of Planning and Investment

- To perform the state management function on enterprise development;
- To be the host agency and/or coordinate with relevant Ministries and agencies to submit development policies and management mechanism for SMEs in different economic sectors to the Prime Minister;
- To be permanent body under the SME Promotion Council;
- To draft and submit to the Prime Minister the Comprehensive Export Promotion Support Program for SMEs;
- To draft the SME Development Plan 2006-2010 and to prepare for the expansion plan of NBIN;
- To coordinate and collaborate activities that involve among other things, the issuance of legal documents relating to improving the investment environment.

Agency for SME development

- To draft the Comprehensive Export Promotion Support Program for SMEs, the Comprehensive Human Resource Support Program for SMEs and the guidelines for the implementation of this program (activities are ongoing);
- To draft the SME Development Plan 2006-2010 under the instruction of the SME Promotion Council;
- To coordinate with Ministries, agencies and localities to develop and to finalize the business information system including information provision to SMEs, a critical feature;
- To set up relationships with domestic and international organizations and business associations;
- To serve as the host agency in negotiating with international donors on SME development ODA programs/projects;
- To serve as the secretariat for SME Promotion Council meetings.

Ministry of Finance

- To amend and supplement tax and fee laws to ensure equality on tax liability among different business lines, different products, different social strata and different types of enterprises and to perform other tax-related activities such as tax monitoring and compliance;
- To ensure that accounting and auditing regimes for enterprises are carried out in line with the existing laws and international standards;
- To ensure non-discriminatory financial support measures including tax and fee incentives; wipe out of tax debt and other payables to budget, settle outstanding debt and export bonus, etc. and some SME-specific support measures such as establishment and operational guidelines of Credit Guarantee Fund, financial management mechanism for the Comprehensive Support Program on Human Resource Training for SMEs, etc.

Viet Nam State Bank

- To boost capital mobilization to meet the credit financing demand of enterprises and other economic sectors by diversifying channels of capital mobilization, particularly medium- and long-term capital to expand lending in response to mounting demand of capital in the national economy;
- To renew credit policies so as to allow credit institutions to exercise self-control and accountability;

- To reform the secured lending mechanism to expand non –security lending and lending with collateral as future acquired assets.

Provincial Peoples Committee

- To provide an orientation for SME promotion;
- To draft or participate in the drafting of the implementing guidelines for government, Prime Minister and MPI regulations on local SME promotion;
- To consolidate/develop SME support programs;
- To coordinate, guide and supervise the implementation of support programs after they are approved;
- To facilitate SME activities in terms of production premises, land fund and incentives policy for developing industrial zones and sub-zones for SMEs;
- To facilitate access by SMEs to market information and prices of goods, help SMEs in market expansion, products consumption, and marketing potential products for SMsE; provision of essential information through conventional papers and the Internet.

Industrial or cluster-based development approach scenario

At present, there are 112 industrial parks and export-import processing zones in Viet Nam, of which 68 are IPs & IEPZs. Together, these have attracted FDI projects with over US$11 billion invested capital and domestic investment projects with nearly VND73 trillion invested capital.

Country Presentation: Cambodia

Country economic overview

Cambodia has a population of approximately 13.5 million people. Over 80% of the population lives in rural areas and the agriculture sector accounts for over 70% of total employment in the country. Poverty is concentrated in rural areas: the majority of the poorest people are located in rural communities and engaged in agricultural activities. Over five million people or 36% of the population live below the poverty line, and 90% of them inhabit rural areas. Economic activities are dominated by small-scale medium enterprises in all sectors. Despite rapid economic growth over the last decade, GDP per capita remains low at US$308. On the United Nations Development Program (UNDP) Human Development Index, Cambodia ranked 130 out of 173 countries. By most measures, Cambodia remains a poor rural-based economy.

In terms of the three major sectors—agriculture, industry, and services—the industrial sector has been the most dynamic. By 2003, it had grown significantly, accounting for 27.7% of GDP. This was largely due to the growth of the garment industry. The textiles, footwear and garment industry accounts for 12.5% of GDP, and from 1994 to 2002 created over US$579 million investment in fixed assets. The agriculture and services sectors have the largest share in the country's GDP and employment. In 2003, agriculture accounted for 36% of GDP while the services sector share was over 36.2%.

The SME Development Framework defines SMEs as follows (based on equivalent full-time employees):

- Micro: less than 10 employees
- Small: 11-50 employees
- Medium: 51-100 employees
- Large: over 100 employees

Small-scale enterprises dominated economic activities and account for a substantial part of employment. In 2005 the Ministry of Industry, Mines and Energy (MIME) determined that there were 29,297 small industrial establishments with fewer than 50 employees. This represents an approximate 21% growth in the number of establishments since 1999. Food, beverage and tobacco manufacturers represent the largest number of small industrial establishments. Of these, approximately 90% are rice-milling enterprises. Below is a table summarizing the employment distribution per SME sector.

Small Industrial Establishments by ISIC, 2005

ISIC	Number	Total Labor
Food, beverage and tobacco	23,727	57,557
Textile and wearing apparel and leather industry	1,665	7,073
Rice milling	21,516	47,531
Spinning, weaving and finishing textiles	345	461
Apparel except footwear, others	215	5,059

Major challenges and issues faced by the policy environment and institutional arrangements

The government of Cambodia has been implementing policies and programs for SME development. At present, the government is improving its policy and business environment to attract more enterprises. Among these efforts are the following:

Capacity Building

The SME Development Framework (SMEDF) is the overall guideline for the promotion, development and monitoring of small and medium enterprises in Cambodia. The SMEDF was approved in July 2005 and lunched in February of the following year. It is basically aimed at providing a roadmap (2005-2010) for creating a more conducive business environment for SMEs. It comprises two phases and four main components, namely: policy framework and implementation; regulatory framework; access to finance; and SME support activities. The SME Sub-Committee seeks to update the framework taking into account the progress of SME reforms since July 2005 and changes in the economic environment.

In fulfilling the above objectives, the first SME annual report has been issued, providing a snapshot of the sector's progress. The SME Secretariat has likewise lined up some activities to attain the above-mentioned targets, such as hosting a donor coordination meeting to identify and discuss issues for revision in the new SMEDF document, conducting a survey to assess the impact of SMEDF, and revising the SMEDF to be submitted and approved by the SME Sub-Committee.

Supporting the SME Sub-Committee and Secretariat to undertake donor coordination

Avoiding overlaps, highlighting the needs and stressing the opportunities for operational coordination of donor support is very important in order to successfully implement the SMEDF. This activity is intended at increasing the efficiency and effectiveness of donor support and to catalyze more donor assistance for the Government's implementation of the SMEDF; conducting regular meetings and workshops to exchange information and progress on overall implementation of the SMEDF; regularly updating the Development Partner Coordination Matrix of the SMEDF; and producing short assessments. The use of web-based tools is also encouraged to facilitate easy exchange of information between donors.

Collecting information on the SME sector

To enhance policymaking, implementation, and the monitoring of impacts, there needs to be a fairly comprehensive, accurate (and regularly updated) profile of the SME sector. At present however, Cambodia's SME data tends to be dispersed across ministries and agencies, largely as a result of the licensing process. Hence, this activity focuses on the collection of information about SMEs, a task given to the National Institute of Statistic and SME Sub-Committee. Establishing a technical working group from relevant agencies is needed to facilitate the collection of information.

Crucial to the growth and development of SMEs is the availability and accessibility of information related to their activities, such as laws and regulations and other SME-related activities. In so doing, the MIME and SME Sub-Committee are responsible for issuing a

plan that provides for the wide dissemination of SME-relevant information. This entails the development of a plan for greater dissemination of information relevant to SMEs, through the SME Sub-Committee website portal, and other channels as well as technical training programs for SME Secretariat officers about improving webmaster skills in order to maintain the portal.

Licensing, Review and Recourse

Attending to the needs of SMEs contributes to their development. Businesses and enterprises should be able to able to submit grievances regarding administrative decisions that they believe are unfair.

There is a pilot hotline in the country, but with few activities, largely due to the lack of publicity, and some hesitation from SMEs about maximizing it use. In this regard, workshops with the private sector on utilizing the resources mechanism ought to be planned and carried out.

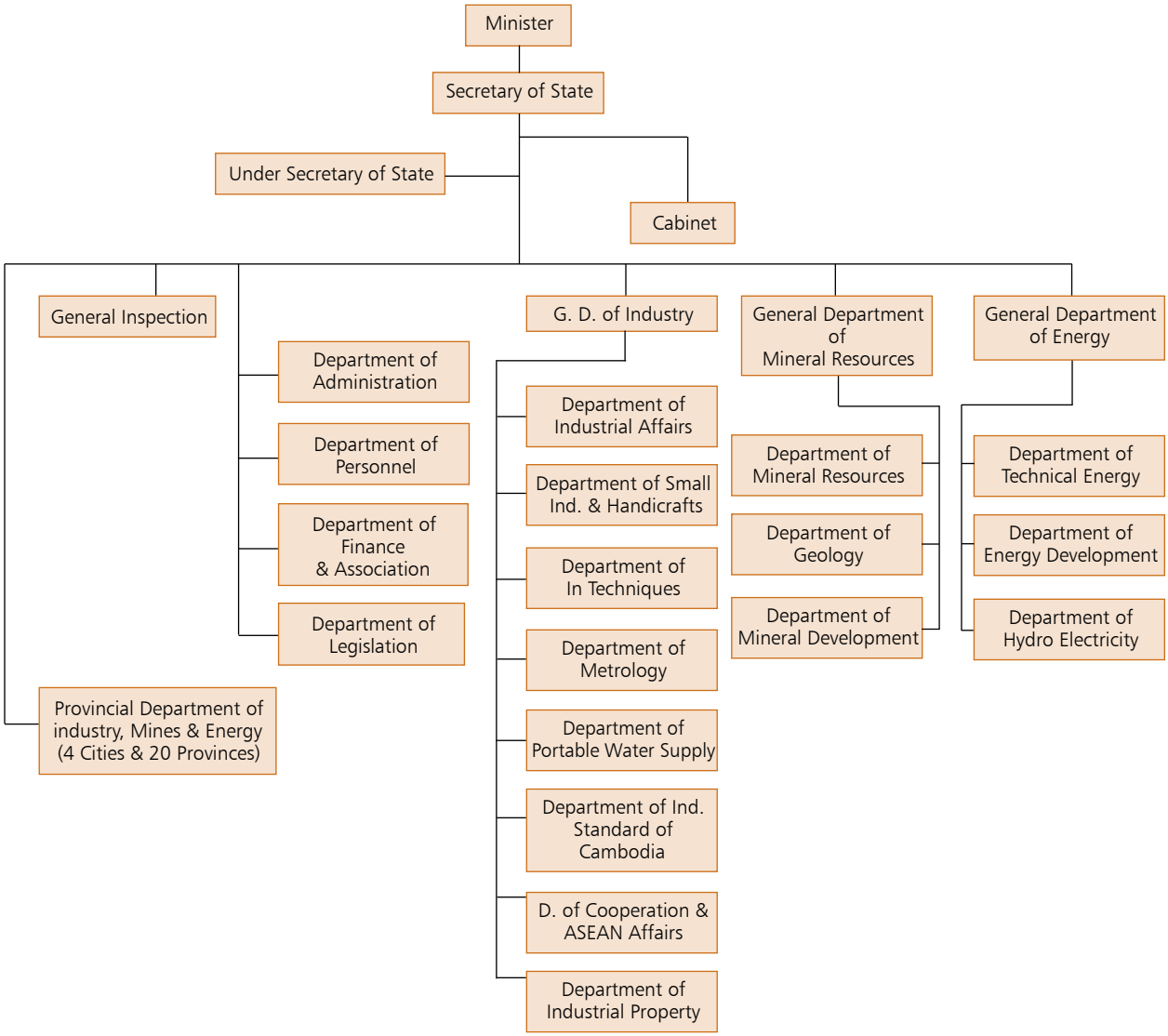
SMEs need to know what business licenses and inspections are required, how and from where or whom they are obtained in order for them to properly comply with regulatory laws and policies. Hence, there is a need for a one-stop information window on licensing and inspection. The intent of this kind of strategy is to gather data on business licenses and upload information on licenses and inspections. Activities to realize these goals are already underway, such as supporting the draft information window design in the SME Sub-Committee for approval and consulting on design and operational plans for the one-stop window. Similarly, the handbook on the law of commercial enterprises is under review and will be printed and disseminated after the Framework is finalized.

Computerized company registry

This activity or project will be completed through a complete review of the existing systems of registry, followed by recommendations for enhancement. The activity covers the following: (1) Scope/procure IT equipment/ Software required; (2) Program upgrades (ISIC, Declaration, others); (3) Install updated database, test and update data; (4)Develop database maintenance plan; and (5) Dissemination activities.

Below is the organizational chart of The Ministry of Industry, Mines and Energy's Department of Industrial Technique (DIT), the institution that is mainly responsible for the operation, monitoring, promotion and development of SMEs.

The Ministry of Industry, Mines and Energy Organization Chart (Department of Industrial Technique (DIT)



Country Presentation: Mongolia

Country Economic Overview

Mongolia is a landlocked country, bordered by Russia and the People's Republic of China. The country has a land area of 1,567 square kilometers and is endowed with rich natural resources. Its population is about 2.56 million, and livelihood activities are derived from nomadic animal husbandry and agriculture.

Currently, the country's GDP is growing at an annual rate of 7.5% (2006) and the per capita GDP is US$950. Mongolia ranked 116 in the latest Human Development Report. Its unemployment rate is not terrible, at 3.3%. Compared to other Asian countries, the country's national poverty level is low at 36%. Trade turnover is US$34.2 million and exports and imports are US$1.47 billion and US$1.43 billion, respectively. The country has 92 trading partners, and 36% of trade is accounted for by People's Republic of China; 20% by Russia; 16% by the European Union; 8% by the United States; and 6% by Canada, with others including Japan and Korea accounting for 14% of total trades.

Position of SMEs

In Mongolia, SMEs are defined as legally registered business entities engaged in the production, processing or manufacturing of products or commodities, including agro-processing, trading and services, and mining entity, that fall into one of the following categories:

Category	Sector	Number of employees	Annual revenue in MNT*
Small			
	Retail/wholesale	≥9	≥150 million
	Service	≥9	≥70 million
	Agriculture (husbandry)	≥5	≥50 million
	Agriculture (crops)	≥10	≥70 million
	Manufacturing/processing	≥20	≥150 million
	Mining	≥5	≥100 million
Medium			
	Retail/wholesale	≥30	≥300 million
	Service	≥25	≥150 million
	Agriculture (husbandry)	≥25	≥150 million
	Agriculture (crops)	≥25	≥175 million
	Manufacturing/processing	≥50	≥500 million
	Mining	≥20	≥200 million

*US$1 = MNT1165 (official Mongol Bank rate effective 27 February 2007)

At present, there are about 26,000 active SMEs, of these, 81.7% are enterprises with less than 10 employees, 7.6% enterprises with 10 to 19 employees, 6.8% enterprises with 20 to 49 employees and 3.9% enterprises with over 50 employees. SMEs contribute significantly to the high labor productivity in the country, employing over 300,000 people, and accounting for approximately 60% of the GDP. The sector distribution pattern is stable with slight fluctuations, with most SMEs being in trade (41%), service (28%) and manufacturing (26%).

Major challenges and issues faced by the economy in general and by SMEs in particular

Just like other countries, SMEs in Mongolia are beset with problems involving:

- Access of credit/finance/capital
- Access to technology
- Training/human resource development
- Funding for research and development
- Extent of government regulation/compliance costs
- WTO commitments
- Weaknesses in transportation and infrastructure
- Limited information on possible markets and clients
- Broader economic situation

Policy environment and institutional arrangement with regard to industrial cluster management/development

Recognizing the above problems, the government has initiated a number of policy and institutional reforms geared towards promoting and strengthening SMEs. Below are the institutions responsible for the development of SMEs in the country and their respective functions:

The Ministry of Industry and Trade (MIT), Mongolia

To promote SMEs and continuously strengthen them, the following functions are being undertaken by the MIT:

- Providing credits for private sector initiatives
- Improving the legal environment
- Supporting micro-finance schemes, and promoting foreign investment
- Promoting foreign investment

To ensure that the above functions are carried out, the following measures are implemented:

- Support for the development of national industry and the private sector
- Increasing employment generation through development of small and medium enterprises
- Increasing exports by improving the competitiveness of products and services on the world market and establishment of a wholesale network within the

regional development trend, particularly in outlying rural territories to link up consumers in those territories
- Development of foreign trade and promotion of foreign investment
- Introduction of modern advanced administration management, development of national technologies

Legal and Regulatory System

The key to the business or investment environment lies in the integrity and transparency of the legal and regulatory system. In this area, the following measures have been taken:

- Strengthening the National Council for the Promotion of SMEs and a Small and Medium Enterprise and Technology Development Division in the Ministry of Industry and Trade.
- Support for the establishment of a Professional Business Associations' Council, which will serve as a partner for consultations in policymaking.
- In 2002 the Government passed pioneering resolutions directing the establishment of business incubators in each region. The first business incubation centre was established in 2003
- In 2005, the Program for the Support of Small and Medium Enterprises ("National Programme") was launched. It aims to promote the robust growth of SMEs, improve SMEs' competitiveness, and create favorable conditions to encourage the formalization of the informal sector to foster the creation of new employment opportunities.

Financial sector and micro finance for SMEs

Despite the decline in commercial interest rates since 1990s, they are still considered high. High interest rates, continued distrust in the financial sector, and a lack of collateral requirements, have resulted in a serious lack of access to financial services by large groups of vulnerable people, especially the poor, small herders, and urban and rural micro entrepreneurs. Realizing that SME financing greatly affects SME development, the government has made significant progress in mobilizing resources for and ensuring that funds are accessible to SMEs. These measures are as follows:

Government-sponsored Scheme
- The Ministry of Industry and Trade is the underwriter of the Governments Special fund for SME support. The fund, totaling MNT2 billion, is channeled through intermediaries, major commercial banks, and offers soft/discounted loans to qualifying SMEs.

Donor-assisted SME financing schemes
- There are over 20 activities/interventions designed around SME development and promotion, and the majority of them are in the financial and micro-financial sector, with World Bank being the main source of funding.

Industrial or cluster-based development approach scenario

The clustering process is small in scale and scope. Although some progress has taken place in the service and trade sectors, especially in urban areas, the major impediments to industrial

and geographic clustering are the socio-historic requisites of the nomadic culture, sparse population and mobility of the communities in the regions.

To counter these challenges, the government has adopted the following policies:

- Approval of the Industrial Park Bill in early 2007
- Identification of potential main regions for the establishment of Industrial Parks (Ulanbaatar, Darkhan, Erdenet and Nalaikh). Two of the many considerations include relatively developed infrastructure and rich endowment of natural resources in the area.
- Revision of the Technology Transfer law

Although it is hoped that the establishment of technological parks in major cities will intensify the process of SME development, potential problems in terms of deteriorating quality of education and vocational training, the lack of skilled workers are foreseen.

Country Presentation: Kazakhstan

Country Economic Overview

Kazakhstan is situated in Central Asia, deep in the interior of the Eurasian continent. Its territory is 2,724,900 square kilometers, making it the second largest country among the CIS states in terms of area. Kazakhstan shares borders with the People's Republic of China, Kyrgyz Republic, Turkmenistan, Uzbekistan, and Russia. The total length of its borders is 12.187 km. The country's population is 15.21 million as of 2007 and its population density is 5.5 people per square km.

Kazakhstan has made commendable progress in a short period of time during its economic transition. As a result of successful internal policies and favorable external factors (global economic recovery and high commodity prices), the country has become one of the world leaders in economic growth with an annual growth rate of about 9% over the past five years. The main challenge faced by the country is the strategic use of growing oil revenues and accumulated savings (primarily pension system contributions) for ensuring the sustainable growth of a more diversified economy.

Macroeconomic Indicators for Kazakhstan

	2001	2002	2003	2004	2005	2006
GDP (US$ bn.)	22.1	24.6	30.9	43.2	57.1	
Current Account (% GDP)	-5.3	-4.1	-0.9	1.3	3.3	
Gross International Reserves ($ bn.)	2.5	3.1	5.0	9.3	7.1	
National Oil Fund ($ bn.)	1.3	1.9	3.7	5.1	8.0	
External Public Debt (% GDP)	17.2	14.2	11.8	8.3	5.9	
Inflation	8.4	5.9	6.4	6.9	7.6	8.6
Exchange rate (KZT per US$)	146.9	153.5	149.5	136	133	127
State budget revenues ($ bn.)	5.08	5.35	6.84	9.60	15.78	
State budget expenditures ($ bn.)	5.17	5.43	7.15	9.73	14.63	
Deficit ($ bn.)	-0.09	-0.08	-0.31	-0.14	1.15	

The structure of GDP is as follows: goods 44%, service 52%, taxes 6%. Industry has the highest share in GDP, accounting for almost 30%, followed by construction and agriculture with 7.8% and 6.4%, respectively. The number of industrial enterprises and factories is estimated at 13,322. The main industries are oil and gas mining. Combined revenues derived from both sources account for almost 40% of the total budget.

According to the laws of the country, SMEs are defined and classified according to the number of employees, as follows.

- Small: 1 to 50
- Medium: 51 to 250
- Large: more than 250

At the beginning of 2006, there were an estimated 226,908 SMEs, including state-owned enterprises (27,471), private firms (188,642) and foreign-owned enterprises (10,792). Despite this considerable progress, however, the share of SMEs in the total output of the country is only 20.2%.

The following accounts for the sectors where most of the SMEs operate, and shows their distribution across sectors/industries.

Agriculture, hunting and forestry: 12,006 (5.3%)
Fishing and fish breeding: 379 (0.2%)
Mining: 1,383 (0.6%)
Manufacturing: 17,405 (7.7%)
Production and distribution of electricity, gas and water: 1,527 (0.7%)
Construction: 23,682 (10.5%)
Trade, repair of motor vehicles, personal and household goods: 76,659 (34.1%)
Hotels and restaurants: 2,707 (1.2%)
Transport and communications: 9,698 (4.3%)
Others: 79,413 (35.3)

Major challenges and issues faced by the economy in general and the SMEs in particular

SMEs in the country are also beset with the following problems:

- Complicated business registration and license regulations
- Delay in the issuance of business permits and licenses
- Lack of sources for financing, expensive funds, lack of qualified personnel who are familiar with micro finance systems, entrepreneurs and business owners who are not familiar with financial and accounting standards
- Too many and overlapping laws and degrees regulating the SMEs (216 legislative acts about SME regulation, and upon registry, SMEs need to go through different authorities to obtain license and permits)

Policy environment and institutional arrangement with regard to industrial clusters

To address the above problems, the government, through the Committee for SME development under the Ministry of Industry and Trade and its attached institutions, has taken the following measures:

- Enactment of law on private businesses;
- Enact of law on joint stock companies;
- Since 2004 the government has been actively allocating a considerable budget for SME development (US$22 million in 2004, US$99 million in 2005, US$95 million in 2006 and US$91 million in 2007);
- Establishment of the special funds for SME development (e.g., Special Fund for SME Development in the agriculture sector) in order to provide affordable and accessible credit to SMEs;
- Ongoing discussions about the Labor Code, particularly about setting up a minimum wage rate and allowing contract arrangements between employees and employers;
- Streamlining of administrative regulations for SMEs, potential tax exemptions on certain investments;
- Regular dialogues are conducted between the president and business owners, investors, entrepreneurs and business associations regarding problems about business and possible solutions;
- Construction of key infrastructure;
- Strengthening public sector institutions (especially those newly established, i.e., 5-year old institutions);
- Establishment of business incubators and innovation centers by local governments to provide the necessary infrastructure for small enterprises. Activities and services of the centers include consultancy, education, accounting, etc.). At present there are 44 business incubators and innovation centers in Kazakhstan.
- Construction of Information and Marketing centers to help SMEs through the following services: (1) Legal advice; (2) Audit and accounting; (3) Marketing; (4) Business planning; (5) Tax administration; and (6) Custom administration, etc.;
- Collaboration with International Finance Institutions that support SMEs. At present, there are 150 foreign and international organizations in Kazakhstan that support SMEs. International Financial Organizations such as IBRD, EBRD, ADB, JICA and others also play an active role in SME development.

Industrial or cluster-based development approach scenario

Kazakhstan started experimentation with cluster based-development in July 2004. The government invited international experts (American consulting company J.E. Austin Associates Inc and the renowned Professor Michael Porter, the Director of the Strategy and Competitiveness Institute of Harvard University) to discuss and share their experiences and strategies about the cluster-based approach to SME/industrial development.

The consultancy firm has visited and assessed 150 sectors in the country to find out and develop which clusters can give economic competitive advantages to the country. Of all the recommended industries, the government chose seven: metallurgy, transport logistic, textile, construction materials, food, tourism, and oil and gas machinery. Accordingly, the government has developed strategic plans to develop these clusters.

The chosen clusters are as follows:

- Metallurgy – Karaganda oblast (industrial zone)

- Transport logistics – Green transport way "People's Republic of China-Kazakhstan-Europe" and new transport logistic center in Almaty
- Textile – South-Kazakhstan oblast (cotton sector)
- Construction materials – Astana city (industrial zone), Kyzylorda oblast (glass production), Almaty oblast
- Food– vegetables producing cluster (South-Kazakhstan oblast), milk production (Kostanai oblast), and grain cluster (North and center of Kazakhstan)
- Tourism – Almaty and Almaty oblast
- Oil and gas machinery – West-Kazakhstan

Country Presentation: Kyrgyz Republic

Country economic overview

The Kyrgyz Republic is located in the northeastern part of Central Asia, in the "heart" of the Eurasian continent. The country's land area is 1,985 thousand square kilometers and borders the People's Republic of China, Kazakhstan, Uzbekistan, and Tajikistan. Its population is 5.16 million.

For the years 2000–2005 the economy grew at an annual average rate of 4% (real GDP) with the highest growth rates in 2003 and 2004 but negative growth during 2005. Inflation significantly declined from 18.7% in 2000 to just 4.3% in 2005. Unemployment however, has been on the rise since 2000 and reached 8.7% in 2005. The budget deficit has been improving and in 2004 was just 3.4% of the GDP. Similarly foreign debt, though at a very lethargic rate, has been improving over the years from more than a 100% of GDP in 2000 to 82% in 2005. The table below shows the trend in the key economic indicators of the country for the period 2000-2005.

Key Economic Indicators of the Kyrgyz Republic, 2000-2005

Indicators	2000	2001	2002	2003	2004	2005
GDP, real growth (%)	5.4	5.3	0.0	7.0	7.0	-0.6
Inflation (%)	18.7	6.9	2.0	3.1	4.1	4.3
Unemployment (%)		7.8	8.6	8.9	9.0	8.7
Current transitions account (% to GDP)	5.7	-1.6	-3.1	-4.2	-3.4	
Wide money growth (%)	12.1	12.2	35.1	34.5	33.6	
Primary budget deficit (% to GDP)	-6.9	-4.4	-5.1	-4.3	-3.4	
Foreign debt (%)	102	94.15	114.5	104.2	95.5	82.4

Source: NSC, NBKR

The major factors that affected economic growth during the past years are as follows: (i) sustainable growth of economy in the major trading partners at the level of 7-12% (People's Republic of China, Kazakhstan, Russia); (ii) annual growth of personal consumption amounting to 11%; (iii) sustainability of investment, which on average amounted to 20% per annum; and (iv) better budget sustainability and level of fiscal mobilization.

The structure of GDP production went through notable changes, with the share of industrial production dropping from 17.3% in 2003 to 16.1% in 2005, and the share of agriculture—from 33.6% in 2003 to 30.5% in 2005, due to the growth of the service sector which, starting in 2002 has exceeded the share of agriculture and amounted to 40.2% in 2005. Industrial growth in 2003-2005 on average amounted to 2.5%, and derived mainly from gold mining and power industry enterprises which on average accounted for 57.2% of industrial produce. Without gold and energy, the average annual growth of industry amounted to almost 3%.

Unfavorable climatic conditions in 2005, growing oil prices, and reduced livestock production caused a fall of agricultural production volumes to 4.2%, leading to a situation when the average growth rate in 2003-2005 amounted to slightly over 1% per year, thus reducing agriculture's share.

The average annual growth rate of gross production in construction amounted to 1.8%, mainly on account of growing domestic private investments. Foreign investments decreased, e.g. the PIP portfolio dropped from 3.6% of GDP (minus grants) in 2003 to 3.2% in 2005. On the whole, the use of capital investments grew from 9 billion in 2003 to Som10.6 billion in 2005.

Position of SMEs

Small and medium-sized enterprises (SMEs) in the Kyrgyz Republic have existed for more than ten years, and are one of the most influential factors in the country's recent satisfactory economic development performance. Efforts to promote and develop the SME sector in the country in earnest began in 1998 when the government expressed its support for the sector via its Program of Actions.

As of January 2006, the share of SMEs in the country's GNP was satisfactory at 43.6%. On the facing page is a table summarizing the key indicators for SMEs for the period.

Major challenges and issues faced by the economy in general and by SMEs in particular

Despite the considerable progress made by the country in promoting SMEs, the following problems continue to hamper SME growth:

- Over 30% of the small and medium enterprises are unprofitable
- The existing budgetary and tax systems hamper investment prospects and do not stimulate export. The high level of tax payments considerably increases the cost of work, raises the cost of production and the general rate of inflation, and also limits the competitiveness of enterprises.
- The low level of transparency of the legal and regulatory framework
- The complexity of administrative procedures regarding business transactions and registration and the resulting high transaction costs discourage potential investments
- Difficulties of businesses in starting up businesses due to the cumbersome rules of the government

Key SME Indicators for Kyrgyz Republic

Indicator	Jan. 2002 ACT	Jan. 2003 ACT	Jan. 2004 ACT	Jan. 2005 ACT	Jan. 2006 ACT	Jan. 2007 FCST	Sept. 2005 ACT	Sept. 2006 FCST	+ -
Quantity of subjects	**8,579**	**7,759**	**8,089**	**8,485**	**8,557**	**8,780**	**7,792**	**8,288**	**+496**
Number of SMEs	7,555	6,893							
Small	1,024	866	7,298	7,729	7,784	7,930	7,125	7,620	+495
Medium			791	756	773	850	667	668	+1
Individual businessmen	111,295	122,525	134,386	149,280	163,119	175,700	159,033	176,006	+16,973
Share of the total added cost of subjects in gross national product of the republic in million soms in percentage	**42.9**	**44.8**	**43.4**	**43.3**	**43.6**	**44.5**	**45.7**	**46.0**	**+0.3**
Small	8.1	5.6	5.0	6.7	7.4	7.6	8.8	8.1	-0.7
Medium	6.2	4.4	3.4	4.3	4.1	4.3	2.7	3.7	+1
Individual businessmen	13.4	15.1	15.5	14.6	15.0	15.3	19.9	19.0	-0.9
Farms	15.2	19.7	19.5	17.7	17.1	17.3	14.3	15.1	+0.8
Volume of industrial output of SMEs (million soms)	**11,520.5**	**11,539.8**	**10,130.5**	**11,078.9**	**10,405.4**	**10,950.1**	**6,942.5**	**8,069.7**	**+1,127.2**
Small	2,060.0	2,015.3	2,640.6	3,033.2	2,600.3	3,350.5	2,371.5	2,904.4	+532.9
Medium	4,817.2	4,858.9	5,077.7	4,783.0	5,937.6	4,799.3	3,569.1	3,283.7	-285.4
Individual businessmen	4,643.3	4,665.6	2,504.6	3,262.7	1,867.5	2,800.3	1,380.9	1,881.6	+500.7
Volume of industrial output of SME (percentage)	**23.6**	**24.7**	**18.5**	**20.1**	**21.4**	**22.1**	**19.0**	**21.4**	**+2.4**
Small	4.2	4.3	4.8	5.5	6.9	6.7	6.7	7.7	+1
Medium	9.9	10.4	9.2	8.7	9.9	9.6	8.5	8.7	+0.2
Individual businessmen	9.5	10.0	4.5	5.9	5.9	5.8	3.8	5.0	+1.2

Policy environment and institutional arrangement with regard to industrial cluster management/development

In line with the economic development thrusts of the government are policy strategies for SME development. Hence, a number of laws in this regard have been enacted and some are currently being implemented in the country. These are:

- Laws pertaining to the protection of the rights of businessmen
- Creation of associations of employers in the country
- Simplification of the tax system for small businesses
- Providing clear basis for the technical regulation of SMEs
- Simplification of administrative rules on business registration and transactions, resulting in lower transaction costs
- Amendment to the Tax Code. e.g., a 10% reduction in the tax on gross sales or profits of firms and simplification and transparency of the tax system
- Establishment of business incubators that are involved in services such as consultancy, education, accounting, all facilitating a conducive environment for all businesses and investors
- Establishment of economic zones
- Provision of SME financing from the government

Industrial or cluster-based development approach scenario

In the Kyrgyz Republic, little attention has been given to cluster development. In the formal sense, clusters seem to be inexistent in the country. There are however potential clusters, such as the clothing industry in Bishkek. Many may have existed already naturally but they have not been formally classified as cluster industries. Thus, the big challenge for the government is to facilitate SME promotion through a better policy environment and more financing schemes and human resource development, among other things. Partnership with the private sector in activities that will foster the growth of SMEs such as identification of industrial districts will help speed up the process.

Country Presentation: Tajikistan

Country economic overview

Tajikistan is a land-locked, mountainous country in Central Asia with a territory of 143.100 km². In the West, Northwest and Northeast, the country is bordered by Uzbekistan and the Kyrgyz Republic, in the East by the People's Republic of China, and in the south by Afghanistan. The distance from the west to the east is 700 km, and from the north to the south is 350 km. Mountains and plateaus, which belong to the mountain systems of Pamir and Tien Shan, occupy 93% of the total territory.

According to the State Statistics Committee, the population of Tajikistan for 2006 exceeded 7 million. Tajikistan is a multinational country. The majority of the population (80%) are Tajiks. There are also Uzbeks (15.3%), Russians (1.1%), and Kyrgyzs, Tatars, Kazakhs, etc. Only 27% of the population lives in urban areas. The average density of the population is 37 persons per square km. However, 80% of people live in warm valleys—Vakhsh, Hissar, and Ferghana. The mountainous regions of Pamirs (Gorno-Badakhshan autonomous oblast) are sparsely populated.

Since 1997 stable production growth has been observed in the country. In 1997, the GDP growth rate was 1.7%, and in 2001 the growth rate soared to 10.2%. In 2006, GDP amounted to US$2.7 billion while the growth rate was stable at 7.0% and GDP per capita amounted to US$388.6. The output of industrial products increased by 4.9% in 2006 compared with 2005, whereas agricultural production increased by 5.4% in the same period. Details of the structure of GDP are shown below (in percent):

1. Production of goods:	**45.3**
Components:	
Industry	18.4
Agriculture	21.5
Construction	5.2
Other activities for goods production	0.2
2. Services:	**43.6**
3. Taxes:	**11.1**

Tajikistan is an agrarian-industrial country. It is considered to have a comparative advantage in terms of agriculture, with significant water resources, favorable climatic conditions for growing grains and animal husbandry, and an abundance of cheap labor. The share of the agriculture in GDP is significant. Seventy three per cent of the country's total population lives in the countryside. Plant growing dominates agricultural produce. Its principal branches are cotton growing, viticulture and horticulture, and aromatic plants growing. Plant growing produce composes approximately two thirds of the gross volume of agricultural produce, with more than 50% being cotton. In terms of cotton production, Tajikistan is the third in the CIS after Uzbekistan and Turkmenistan. A significant land area is used for grains. Wheat, barley, corn and rice are cultivated. In the area of animal husbandry, cattle breeding and sheep breeding (coarse-haired. caraculs. meat) play the most important roles.

The main industrial branches in the Republic of Tajikistan are the following: metallurgy, mechanical engineering, and the production of durable consumer goods, light industry, and food industry.

The growth rates of indicators reflect the positive impact of reforms initiated by the government. However, much remains to be done, especially in terms of developing the industrial sector, which at present accounts for less than a quarter of the country's total production.

Policy environment and institutional arrangements with regard to industrial cluster management/development

Monetary and fiscal policies

In general, the initiation of reforms and the efficiency of the economic system were made possible by the stability and reliability of the credit-monetary system regulated by the country's National Bank. The circulation of money in the economy is controlled by the National bank in three ways: (1) granting credit to credit institutions; (2) crediting the treasury; and (3) sterilization of the issue of bank notes through their exchange to foreign currency. As a result of various economic and monetary reforms in the country, a number of credit institutions came into existence for the benefits of SMEs. There are at present five micro credit deposit organizations, 20 micro lending funds, and 30 micro lending funds in the country. Altogether, there are about 143 branches and 69 sub-branches of these institutions nationwide.

With the adoption of the Law of the Republic of Tajikistan "On the fundamentals of budgetary structure and budgetary process" in 1997 and corresponding laws on the state budget adopted for each year, the appropriate legislative basis in the area of the budgetary relations of the state was created. This basis facilitated the stabilization of the economy, finance and budget of the country.

The country's Taxation Code was enacted on 1 January 2005. It is expected to facilitate and speed up the implementation of financial reforms. The Code contains five main types of taxes: value-added tax, sales tax, profits tax, income tax, and excise tax on certain types of goods. Moreover, in order to strengthen the state budget and to increase its revenue, sales taxes on cotton and aluminum were authorized and introduced. Revenues of the state budget for 2006 as a percentage of GDP were 17.9%. The state budget on revenues and grants for 2006 reached 106.5% of the adjusted plan for this period and amounted to TJS1,657.6 million. Expenditures of the state budget for 2001 amounted to TJS1,619.5 million or 101.0% of the adjusted plan for 2001. The ratio of expenditures to GDP was 17.4%.

Foreign and domestic investment policies

Investment is necessary for economic growth, as it is the main driving force and catalyst of reforms. There is a need for the country to attract more investments to further and sustain its economic growth. In this regard, the government has carried out an active investment policy aimed at creating a favorable investment climate, granting equal rights and guarantees to both foreign and domestic investors, and protecting their interests and property on the territory of the country.

A legislative framework that focuses on attracting and encouraging foreign investment has been developed by the government. The law of the Republic of Tajikistan "On foreign investments in the Republic of Tajikistan" of 10 March 1992 defines the legal framework for the participation of foreign capital in the economy, and contains a number of benefits for foreign investors. For foreign investment in priority branches of economy and in separate territories, additional tax relief and other benefits can be determined in the legislation of the

Republic of Tajikistan. Other initiatives with regard to attracting investments are the "Law on Investments," the law on "Privatization of state property." The government is also in the process of privatizing some sectors.

Foreign trade

By 2006, the country had already established trade-economic relations with 88 countries. The structure of foreign trade has not been favorable for the economy in past years. In the area of exports, there is prevalence of undesirable exports of raw materials and non-ferrous metals, and in imports, or power resources and foodstuff. The one-sided structure of export intensifies the dependence of foreign trade and the state of the national economy in general on the fluctuation of prices on the world market, particularly on the aluminum and cotton markets, where prices have fallen over the course of several years. Hence, a review of trade and industrial policies must focus on the types of reforms that are

Country Presentation: Myanmar

Country Economic Overview

Myanmar is located in the southeastern part of Asia, and borders the Andaman Sea and the Bay of Bengal, between India, Bangladesh, the People's Republic of China, Lao PDR, and Thailand. The economic system has changed from a centrally-planned economy into a market-oriented system since 1988. The economic structure is mainly dependent on agricultural crops, especially rice, cereals crops and beans, with supplements of natural resources such as petroleum, natural gas, and forest products. Education in Myanmar is well developed. About 83.1% (in 1995) of the population are educated.

The country's total area is 676,577 km^2 with an estimated population of 52.17 million in 2003. Approximately 60% of the total population is in the labor force. In 2006, the country's GDP was MK12,254.6 billion and the growth rate was around 13.2%. GDP in the same year consisted of:

- Agriculture: 50.1%
- Industry: 15.2%
- Services: 34.7%
- Export: US$3.56 billion
- Import: US$1.98 billion

The Government has formulated and implemented national development plans to attain the all-round development of the national economy in accordance with four economic objectives:

1. Development of agricultural as the base and all-round development of other sectors of the economy;
2. Proper evolution of a market-oriented economic system;
3. Development of an economy inviting participation in terms of technical know-how and investments from sources inside the country and abroad; and
4. The initiative for shaping the national economy must be kept in the hands of the state and the people.

Manufacturing accounts for the largest share of products in both the industrial sector and the country's GDP, at 74.9% and 11.4%, respectively. With the exception of "other industries," which account for 20% of the sector's production, the mineral and mining, energy, and electricity industries each accounts for less than 1% of total GDP (meaning that they make nearly no contribution to the country's total output), and a 2.9%, 1.3%, and 0.8% share in the industrial sector respectively. In total, the country's industrial sector as of 2006 is still low at only 15.2 of the country's GDP.

The country's industrial policy is mainly geared towards industrialization and economic development. The MIDC, which was established in 1995, laid down the following objectives for industrial development:

1. To develop the industrial sector based on agriculture;
2. To enhance the quantity and quality of industrial products;
3. To increase the production of new types of machinery and equipment;
4. To produce industrial machines and equipment; and
5. To create suitable conditions for changing over to an industrialized state.

The country has found its comparative advantage in such industries as agro-based Industries; labor-intensive Industries; oil & gas and hydro-power industries. The major export goods include natural gas, garments, timber, jade, hardwood, beans, minerals & mining, prawn, fish and green peas. Its major import goods are petroleum products, machinery products, steel and construction materials, plastic raw materials, edible oil, ship and accessories, pharmaceuticals, vehicles and accessories, steel and accessories and telecommunication equipment.

Position of SMEs

SMEs in Myanmar are defined according to the size of firm, the number of employees and the firms' capital investment. Below is a table summarizing the details of SMEs in the country.

Enterprise Types in Myanmar

Size	No. of Workers	Capital Invested (kyats)	Power Usage (HP)
Cottage	< 10	-	< 3
Small	10-50	1 million	3-25
Medium	51-100	1-5 million	26-50
Large	> 100	>5 million	> 50

In terms of number of employees, the following table provides some basic facts.

Current Status of SMEs in Myanmar

Size	No. of Industries	No. of Workers Employed	Annual Production (million kyats)
Small	31,724 (82%)	125,988	6,736
Medium	4,725 (12%)	39,093	5,290
Large	2,442 (6%)	112,976	5,698
Total	38,891 (100%)	278,057	17,724

SMEs in the country can be found in the following industries:

Number of Enterprises in Myanmar by Type and Size

Business Type	Small	Medium	Large	Total	%
Food & beverages	22,003	3,659	1,765	27,427	**63.3**
Clothing & apparel	1,354	360	276	1,990	**4.6**
Construction materials	2,413	536	449	3,448	**8.0**
Personal goods	479	280	249	1,008	2.3
Household goods	122	90	104	346	0.8
Printing & publishing	243	98	20	361	0.8
Industrial raw materials	650	278	97	1,025	2.4
Minerals & Mining	1,201	429	188	1,818	**4.2**
Agricultural equipments	36	20	8	64	0.1
Transport vehicles	65	18	56	139	0.3
Electrical goods	12	12	34	58	0.1
Miscellaneous	4,674	615	145	5,434	12.5
Total	**33,456** (77%)	**6,443** (15%)	**3,452** (8%)	**43,351** (100%)	**100%**

In general, the growth rate of SMEs has been very sluggish over the years. In 2006, all except for small industries, which remained stagnant during 2005, grew at less than 1% compared to the previous year, with growth rates of 0.8% and 0.7% for medium and large enterprises respectively. This is an alarming trend considering the efforts of the government to improve Myanmar's business climate.

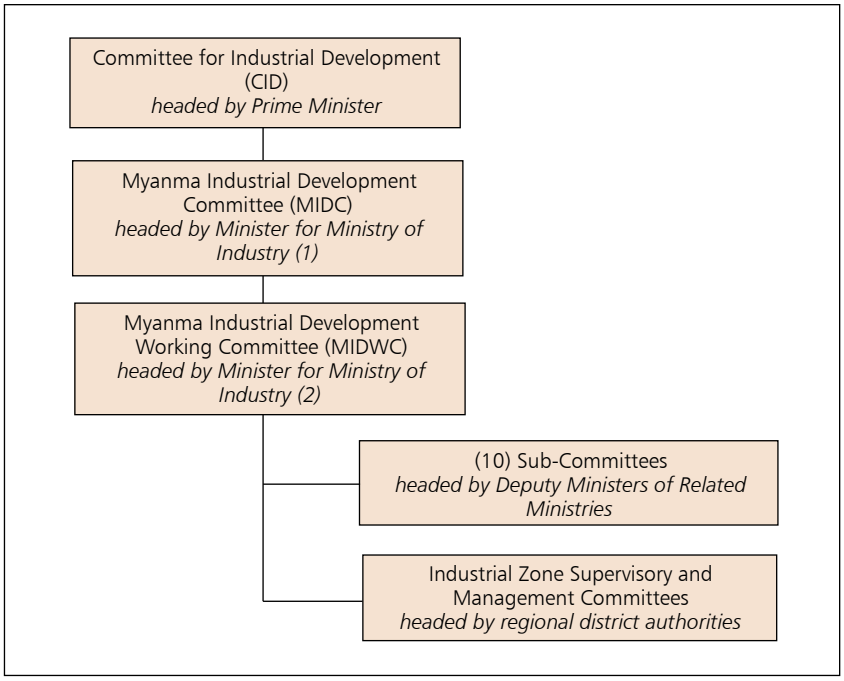
Policy environment and institutional arrangement with regard to industrial cluster management/development

SME development policies are geared towards the following:

- Assisting the development of the economy with a more suitable income distribution;
- Complementing and supporting large-scale industries through a network of industrial linkages;
- Producing high quality and value-added products; and
- Increasing productivity through the use of modern technology and management system.

The government also undertakes activities that promote private industrial development in general and SMEs in particular. Namely, it supports the establishment of industrial zones; holding of industrial exhibitions, seminars and workshops; and establishment of the Myanmar Industrial Development Bank for granting industrial loans to private enterprises. In addition, there are laws that encourage, promote and foster the establishment of private SMEs, such as: Private Industrial Enterprise Law (1990); Promotion of Cottage Industries Law (1991); and Myanmar Citizen Investment Law (1994). The institutions involved in the conduct of these activities are shown in the organizational/functional chart below.

Institutions for SME Development



Furthermore, business-specific measures are being undertaken to encourage more investments, and thus facilitate SME growth in the country. These are:

- Myanmar Citizen Investment Law. MCIL (1994)
- Partnership Act (1932). Myanmar Company Act (1914)
- Promotion of Cottage Industries Law (1991)
- Labor Act and Social Security Act (1954)

In addition, the government has business development services (performed by sub-committees) to assist the SMEs in their respective industries:

- Farm Machinery & Equipment Production Sub-committee
- Standardization Sub-committee
- Industrial Law Drafting Sub-committee
- Small & Medium Industry Development Sub-committee
- Industrial Information & Publication Sub-committee
- Human Resource Development Sub-committee
- Motor Vehicle Production Development Sub-committee
- Iron & Steel Production Development Sub-committee
- Research & Development Sub-committee
- Rubber Product Development Sub-committee

Industrial Associations are formed and affiliated with the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI), such as:

- Myanmar Rice Millers Association (MRMA)
- Myanmar Industries Association (MIA)
- Myanmar Computer Industry Association (MCIA)
- Myanmar Garment Manufacturers Association (MGMA)
- Myanmar Plastic Industries Association (MPIA)

Among the services and activities provided and undertaken by NGOs in terms of business development services are the following:

- Consultancy services in project formulation and implementation;
- Conducting seminars, workshops and trainings on topics of commercial, industrial and managerial interest;
- Publication and distribution of industrial information bulletins and newsletters;
- Organizing member companies to participate in local and overseas trade fairs and exhibitions;
- Organizing and making arrangement for the exchange of information and views among local and foreign industrialists;
- Organizing and arranging business opportunities networking between local and foreign enterprises;
- Organizing and making arrangements for factory visits, study tours and sending business mission overseas;
- Acting as representative of the member companies in advising government in matters affecting businesses and the economy;
- Facilitating networking through a variety of Chambers/Associations activities.

In terms of SME financing, credits and loans to SMEs are provided by both private and government banks.

Industrial or cluster-based development approach scenario

Myanmar has already initiated some cluster-based industrial zones in a few areas and sectors such as the: (1) Myaungtagar Steed-based Industrial Zone and (2) Watayar Wood-based Industrial Zone. The first is located in Hmawbi Township, Yangon Division near Myaungtadar Steel Factory. The steel-based industrial zone mainly caters to the domestic market and produces and manufactures steel-based construction material products, such as: steel round-bars; steel flat-bar; steel angle-bars; steel sheets; and steel roofing sheets.

PRESENTATION OF COUNTRY ACTION PLANS

Country Presentations on Action Plan for Cluster Development

This session aimed at evaluating the participants' general understanding of cluster-based SME development, the relevance of this strategy towards industrial development, especially in transition economies, and the role of policymakers in fostering cluster-based SME development.

Below are the guide questions provided to the participants that served as their pointers for discussions/presentation:

1. Do you understand the advantage of cluster-based SME development? Did you find the concrete cases presented in the seminar useful?
2. If so, can you find any cases/areas (towns or districts), and examples in your country which you would like to promote or are worth promoting through cluster-based approaches?
3. What policy interventions you feel are appropriate for promoting cluster-based industry development? Please consider macro-level interventions, such as legislative and fiscal actions as well as micro-level interventions that are appropriate at the local level.
4. What specific actions you propose to undertake once you return to your home country and to the agency you belong to?
5. What supports do you need at this time upon the completion of the seminar from international agencies such as ADBI, UNIDO, JICA and from foreign experts like FASID?

Country Presentation: Action Plan for Viet Nam

The representatives from Viet Nam asserted that the cluster-based approach to SME development is very advantageous. They expressed a clear understanding of the potential benefits of this approach, which are as follows:

- Collective benefits that firms in clusters receive: sharing of raw materials, components and machinery, and highly specialized skills of workers;
- Co-operation between public and private institutions can be facilitated by clusters;
- The environment in which firms in clusters operate has a support system to make coordination of activities simpler.

Among the cases considered useful by this group of participants were: (1) the low-voltage electric appliance cluster in Wenzhou, People's Republic of China; (2) the Chandlery loom cluster in India; (3) the machine tool cluster in Taipei,China; (4) the motorcycle industry in Chongquing, People's Republic of China; and (4) eyeglass frames in Sabae City, Japan.

The group identified a specific ceramics industry (Battrang Ceramics Village) in Hanoi as one industry worth promoting through a cluster-based approach. The industry was chosen as it is a potential export cluster and it has the ability to form linkages in terms of raw materials, showrooms and logistics. The challenges to developing this industry however include poor access to new markets, lack of product development strategies (designs. products and value added), emerging environmental issues and low economies of scale.

Among the policies identified as crucial to fostering cluster development at the macro level include: (1) Support for and programs pertaining to SME financing; (2) simple rules and regulations for business registration and establishment; and (3) availability of credit guarantee funds. At the micro level, the following policies were identified: (1) increasing the role of local governments in assisting cluster-based industries, such as promoting transparency in transactions with SMEs; and (2) encouraging SMEs to join business associations or to participate in the latter's business activities.

Knowledge transfers, conduct of seminars about cluster-based industrial development (intended for local governments, industrial development, local SME agencies and BDS providers) and undertaking pilot projects are among the specific actions the group planned to embark on upon return to their home country.

To carry on with the efforts of promoting cluster-based SME development, the group will require the following: (1) financial and technical assistance from ADBI and JICA to organize similar seminars in Viet Nam, with a need for international experts to give lectures on the subject matter such as FASID, ADBI and UNIDO experts and training documents that illustrate successful case studies of SMEs in clusters; (2) assistance from UNIDO to conduct a pilot project in Viet Nam, specifically in terms of cluster and area selection, and training for local counterparts; and (3) financial support in general from ADBI and donors.

Country Presentation: Action Plan for Lao PDR

The Lao PDR representatives stressed that they gained a great deal of new knowledge, information and experience from the seminar, specifically from the country presentations of the participants from other countries, seminar lectures and interactive discussions and field trips.

The Lao representatives gained insights into the definition of cluster, the difference between a cluster and an industrial zone, subsector, association, network and value chain, as well as the benefits and advantages of having clusters of firms.

The group emphasized that in terms of policy interventions, its government has already initiated some laws and policy strategies regarding SME promotion and development, i.e. Prime Minister's Decree No. 42, which was enacted in April 2004. The decree aims to create, improve and expand SMEs in Lao PDR and contains six main policies: (1) creating an enabling regulatory and administrative environment; (2) enhancing the competitiveness of SMEs; (3) expanding domestic and international markets; (4) improving access to finance; (5) encouraging and creating favorable conditions for the establishment of organizations; and (6) enhancing entrepreneurial attitudes and characteristics within society.

With regard to the specific actions the group intends to propose to its government, the following were emphasized: (1) knowledge gained form the seminar, especially the idea of a cluster, its advantages and the role of the government in fostering clusters; (2) implementation of a survey or study about clusters in the Lao PDR; and (3) formulation of a national strategic framework for cluster development. In doing so, the group will seek the assistance (technical and financial) of various experts and donor agencies that are involved in cluster-based industrial development.

Country Presentation: Action Plan for Myanmar

A potential area for cluster development in Myanmar is located about 30 kilometers from Yangon, on the banks of the Hlaing River. The industrial land area is about 800 acre, with 400 acres still available and 35 factories in operation. Operations in this area began in 2003. Of the 35 factories, 10 enterprises belong to the government while 25 are owned by private firms. However, at present there are a number of under-performing clusters as a result the following: basic infrastructure problems; insufficient power supply; difficulties with raw wood supply; decreasing market share; insufficient cooperation among factories and weak support by local governments. Overall, though, cluster industries in Myanmar have the following features: strong central government support; high labor supply; suitable infrastructure and easy creation of markets.

Clusters in Myanmar have several opportunities but some threats as well. Among the opportunities are a high demand for natural wood products, presence of foreign customer support and high support from lending institutions. The threats, on the other hand, include strong competition in foreign markets, difficulties in making transactions overseas or internationally, and high customization requirements.

In view of the above, the group realized that the cluster-based development approach to industrialization would aid Myanmar in its efforts to generate more jobs and create employment in the region. It also aims to promote and further strengthen the wood-based cluster industry and in so doing, crafting or formulating a realistic industrial cluster model is crucial.

The proposed action plan for Myanmar will be implemented over four years. During the first year, the aim will be to carry out preparatory activities to enable SMEs to start up their businesses, such as providing an adequate supply of power and raw wood. This objective can be realized through public-private partnerships (central and local government support and cluster stakeholders) in activities such as negotiations with suppliers of power and raw wood materials and in lectures involving international experts, which will enhance the understanding of concerned stakeholders about the advantages of cluster-based approach to SME development. During the second year of implementation, the aim will be to explore foreign markets and develop cooperation among factories. This will involve activities such as hiring marketing consultants, participation in trade fairs, both local and international, dialogues with cluster factory members, and holding of seminars and workshops related to cluster-based SME development. The third year of implementation will involve endeavors to further economic growth by ensuring the profitability of markets and creating channels and providing conditions to attract more entrants to the cluster. Activities during this implementation year will focus on activities involving the customized production of target markets, innovation, setting up quality systems and diagnostic evaluation of prospective or potential market players or new firm entrants. During the last year of implementation, the aim will be to foster human resources development, further development of markets and

establishment of an association of wood-based furniture makers. These objectives will be carried out through activities involving basic and specialized training courses for business managers and owners, participation in trade fairs, marketing strategies that will expand the markets of clusters and seeking the approval and participation of government in the establishment of business associations and networks.

Country Presentation: Action Plan for Mongolia

The group from Mongolia felt that cluster-based industrial development is essential for economic development. The advantages of locating firms in clusters, according to the group, are: absorption of new production ideas and techniques; sharing of experiences; faster and easier flow of information; trust among key stakeholders/players; cost reductions, profit increase; and more effect monitoring and control.

A number of industries and areas have been identified by the group as potential opportunities for cluster development: ICT parts; manufacturing area in UB (agro-raw material processing firms and leather goods, shoe manufacturing); textile industrial areas (Gobi, Eermel, Buyan, Goyo, etc.) camel wool, cashmere products, manufacturing metal fibers, copper cathodes in Erdenet, free economic zones and industrial and technological parks.

In promoting cluster-based industrial development, the Mongolian representatives identified the following as appropriate policy interventions:

At the macro level:

- Formulation of a "cluster map" reflecting the comparative advantages and unique conditions of localities
- Pursuit of sound fiscal and monetary policies (ensuring law inflation, reducing the cost of financing. stable exchange rate etc.)
- Creation of a suitable legal environment for SMEs (SME law, company law, leasing law)
- Provision of basic public goods (infrastructure, roads, electricity, water supply, and others)
- Development of "One stop services"

At the micro level:

- Conduct/implementation of regular training programs (management, marketing. accounting, technology, etc.)
- Establishment of industrial parks, business incubators (like Kawasaki city incubator, ICT incubator in Mongolia)
- Taking actions to bolster cooperation and collectivism among firms in cluster area as implementing suggested policies and measures, enhancing social capital
- Implementing two-step-loans (JBIC example)
- Ensuring incentives for firms, reducing asymmetric information in cluster area and ensuring the availability and accessibility of guarantee funds

In terms of the needed support from ADBI, UNIDO, JICA, FASID and other relevant institutions, the group will solicit the following: continuation of training programs; information updates about international best practices (knowledge sharing as well) and partnership in conducting field studies/research with UNIDO (practical actions/support).

Country Presentation: Action Plan for Cambodia

Among the industries identified as potential industries for cluster development in Cambodia are garments, footwear and textile, traditional handicrafts and furniture, and metal working and machinery. Potential areas where these industries can thrive in clusters are Phnom Penh and its surrounding provinces.

In terms of policy interventions, the group emphasized that the government's industrial policy is focused on diversifying production away from reliance on a few key sectors, increasing its range of exports and improving productivity. The Cambodian government intends to carry out these objectives by concentrating on: (1) the development of labor industries such as garment, toys and footwear; (2) the promotion and development of agribusiness by strengthening the legal framework for long-term land management and by providing tax incentives for establishing factories to process agricultural products, such as cotton, jute, sugar, palm oil, and cashew nuts; and (3) the development of industries based on processing existing natural resources such as fish, meat, cement production, bricks and tiles. Also, as part of the industrial development strategy, the Cambodian government is endeavoring to promote SMEs, micro-enterprises, and handicrafts; (4) the creation of Knowledge Management Centers; and (5) Crafting industrial development plans (for industrial zones).

The group proposes to undertake activities related to knowledge transfer upon its return home. The key players in cluster development need to be equipped with the proper knowledge, both tacit and explicit, to enable them to pursue activities that can foster cluster development. Knowledge transfer may come in training programs on problem solving, discussion and preparation of manuals, and creation of proper databases for SMEs/clusters and their activities.

To group also seeks the assistance of ADBI, UNIDO, JICA and FASID for the conduct of training courses related to cluster development in Cambodia, with a focus on industrial security and safety (e.g. technology on food processing. which is under the science and technology division of the trade department).

Country Presentation: Action Plan for Central Asia

To encourage further growth, the Central Asian participants believe that cluster-based SME development will be very helpful. The cluster-based approach to SME development generates employment, induces innovation, increases the country's economic competitiveness and improves product quality and the expansion of exports.

The potential cluster industries in Central Asia are pyramid cluster types. Examples are detailed below:

1. **JC "Uzavtoprom"**
   The company has a manufacturing plant in Asaka city, Andijan region in Uzbekistan (the sector has a production capacity of over 200 thousand units a year and its exports account for over 60% of the region's GDP). The region has more than 40 independent SMEs manufacturing spare and component parts for cars that are mostly located in the Andijan region.

2. **Shurtan gas and chemicals complex**
   This cluster has a plant that manufactures different types of polyethylene in Shurtan city, Kashkadarya region (the largest gas condensate field in Uzbekistan). There are over 100 SMEs in the region manufacturing goods with the application of polyethylene (greenhouse film, bags and netting, a wide assortment of packaging materials, and construction materials, among others. Overall, the cluster produces up to 100 types of goods and the SMEs are mostly located in neighboring regions and Tashkent city.

3. **JV "Nestle"**
   The company has a manufacturing plant that produces dairy products (milk for long-term storage, yoghurt, different types of milk blends) and is located in the Namangan region in Uzbekistan. The cluster has more than 200 farmers who supply the plant with raw materials (milk) on a contract basis. The cluster maintains veterinary services, livestock breeding, and quality control service enterprises.

4. **Shirin factory**
   The company produces candies (chocolate, cake, zefir, etc.) and is located in Dushanbe city in the central part of Tajikistan. More than 100 workers supply the plant with raw material on a contract basis.

There are also potential horizontal cluster types including:

5. **Tourist centers**
   Samarkand City in Uzbekistan has more than 50 hotels (only 5 large hotels with up to 300 rooms, with the rest having about 30-40 rooms); in Bukhara city, there are over 40 hotels in operation (only 3 large hotels with up to 200 rooms, with the rest having about 30-40 rooms). In Khiva city, there are over 20 hotels (only 2 large hotels, with the rest having about 30-40 rooms). In tourist destinations such as the mountains of Uzbek i.e. Mountain resort Chimgan-Beldersay, there are over 40 hotels (only 4 large hotels, with the rest having about 5-20 rooms).

6. **Traditional crafts**
   In the Pamir region, juraby (a kind of sock made of wool) production is dominant. This product is produced by 40 small enterprises; in Margilan city, there are several dyeing and weaving enterprises manufacturing silk by traditional technology (without artificial dyes and mechanical lathes); in Bukhara city, there are hand-manufacturers of silk carpets; in Tashkent city, there is an old town that manufacture tin-ware products with around 70-80 small enterprises, each having at least five employees.

There are many more potential or prospective clusters in Central Asia such as finished textile goods producing clusters; agro industrial clusters (processing, storage and packaging of agricultural products) and construction materials manufacturing clusters (processing of marble and granite, ceramic covering materials).

The above-listed prospects for cluster development can only be realized and made possible if the following problems are resolved:

- A VAT exemption on every stage of processing (the VAT is charged every time a semi finished product is transferred from one legal entity to another) by introducing a conception of "cooperative supply" and a VAT exemption into the legislation
- Exclusion of R&D expenses from the taxable base
- Passing a law on clusters (SME) and financial-industrial groups (big companies)

Practical implementation of the target strategies will involve the following steps:

- Establishment of special group consisting of a number of experts from ministries, state departments and research centers
- Conduct of analytical research to define cluster development strategies and the most attractive fields of their foundation (growth points)
- Selection of prospective production areas via competition among local governments
- Signing of investment contracts with investors and allocation of the mentioned production areas and land plots to them

The Central Asian group consists of participants from Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan. The group is seeking the assistance of ADBI, UNIDO, JICA and FASID in terms of partnerships in the conduct of training programs and knowledge transfer.

FIELD TRIPS

On the third day of the seminar, all the participants and some of the speakers visited two SMEs in the Keihin Industrial Area, which is located in Kawasaki city, Kanagawa Prefecture. One group visited **Kakumaru Kinzoku Co., Ltd.** The company's profile is as follows:

Founded:	1960
Type of business:	Mold component supplier
Description of business:	Manufacturing of tools for vehicle parts Precision components for electronic parts
Clients:	Major telecommunication manufacturers Major car equipment manufacturers 100 small and medium-sized electronic component manufacturers

The other group visited **Hinode Cooperation.** The company profile is as follows:

Description of business:	Manufacturing of vehicle parts, processing and assembling of machine components
Clients:	THK Corporation, Fuji OOZX Inc., Toshiba Corporation, etc.
History:	1960 Founded in Kawasaki City 1989 Moved to Kawasaki industrial zone 2005 ISO 9001: 2000 Certified 2006 Started sale of in-house products

The whole group then visited **Kanagawa Science Park,** KSP Inc., which is a semi-public corporation established as the central entity of the Kanagawa Science Park. KSP actively promotes the growth of new industries by systematically developing R&D corporations as well as through the overall operation of the Science Park. Its business incubation service is exemplified in the following categories: Business Start-up Support Services, Development Support Service, and Entrepreneur Nurturing Service.

As the final visit, the whole group took a tour to **VTECHMATE** in **Asian Venture Business Town(*1).** VTECHMATE is a Japanese corporation founded in 2004 by former Vietnamese, government-financed students. It is the first company to join the Asian Venture Business Town with active support from the City of Kawasaki. VTECHMATE is expected to be a breakthrough for activating economic exchanges between Viet Nam and Japan, and has been widely supported by the City of Kawasaki in terms of administration and legislation matters. Their company profile is as follows:

Description of business: Development of:

- Web systems;
- Applications for mobile phone;
- Contents for mobile GPS;
- Image processing technology.

(*1) about Asian Venture Business Town

Kawasaki City is currently engaged in the revitalization of the Keihin Industrial Area. By utilizing the power of the rapidly expanding industries and markets of Asia, the Asian Venture Business Town aims to nurture venture businesses and establish globally active companies primarily through the efforts of Asian entrepreneurs. The final product of this process will be the establishment of a core community of industries and joint research projects located in Kawasaki, promoting the creation of new industries that can be active global contributors.

ANNEX 1: AGENDA

Industrial Development Planning: Cluster-Based Development Approach Policy Seminar

Wednesday 14 March 2007 (Day 1)

8:30-9:00	**Registration**
9:00-9:15	**Opening Remarks & Photo Session** by Masahiro Kawai, Dean, Asian Development Bank Institute (ADBI)
9:15-9:30	**Introduction to the Seminar** by Toru Hashimoto, Senior Capacity Building Specialist, ADBI
9:30-10:20	**Major Challenges in SME Development: Framework of Analysis** by Hidekazu Tanaka, General Manager / Principal Consultant, Mitsubishi UFJ Research and Consulting Co,, Ltd, (MURC)
10:20-10:40	Discussion/Q&A Session Moderator: Hidekazu Tanaka, MURC
10:40-10:50	Coffee Break
10:50-11:40	**Major Challenges in SME Development: Development Stage & SME Assistance** By Nori Iai, Consultant, Unico International Corporation
11:40-12:00	Discussion/Q&A Session Moderator: Hidekazu Tanaka, MURC
12:00-13:00	Lunch Break
13:00-16:25	**Group Presentation: The Analysis of SME in Country** 1. Cambodia 2. Uzbekistan 3. Viet Nam 4. Cambodia 5. Mongolia 6. Kazakhstan 7. Kyrgyz Republic 8. Tajikistan 9. Myanmar • **Coffee Break** 15~20 minutes presentation followed by short Q&A

16:25-17:15	Public Policies for SME Development: Market Failures and the Role of Government by Andrea Goldstein, Senior Economist, Organisation for Economic Co-operation and Development
17:15-17:30	Discussion/Q&A Session Moderator: Andrea Goldstein, OECD
17:45-	**Dinner Reception at Tokai Club**

Wednesday 14 March 2007 (Day 1)

9:00-9:50	**The Advantage of Industrial Cluster for the SME Development** by Tetsushi Sonobe, Deputy Director, Foundation for Advanced Studies on International Development (FASID)
9:50-10:20	Discussion/Q&A Session Moderator: Tetsushi Sonobe, FASID Commentator: Michele Clara, UNIDO
10:20-10:35	Coffee Break
10:35-11:25	**The Pattern of Cluster Development: An Endogenous Model of Cluster-Based Development** by Keijiro Otsuka, Director, FASID
11:25-12:00	Discussion/Q&A Session Moderator: Keijiro Otsuka, FASID Commentator: Andrea Goldstein, OECD
12:00-13:30	Lunch Break
13:30-14:20	**Lessons Learned from Asian Experiences** by Tetsushi Sonobe, Deputy Director, FASID
14:20-14:50	Discussion/Q&A Session Moderator: Tetsushi Sonobe, FASID Commentator: Mukesh Gulati, Foundation for MSME
14:50-15:05	Coffee Break
15:05-15:55	**The Role of Government in the Cluster-Based SME Development** by Keijiro Otsuka, Director, FASID
15:55-16:30	Discussion/Q&A Session Moderator: Keijiro Otsuka, FASID Commentator: Michele Clara, UNIDO

16:30-17:00	**Summary of Day 2** by Toru Hashimoto, Senior Capacity Building Specialist, ADBI

Thursday 15 March 2007 (Day 2)

7:50	Departure from ANA Hotel
9:00-10:00	**SMEs in Keihin Industrial Area** Kakumaru Kinzoku Co., Ltd. Hinode Corporation
11:00-12:00	Lunch
13:00-15:00	**Kanagawa Science Park**
16:00-17:00	**Kawasaki Entrepreneur Asian Village** VTECHMATE Co., Ltd.
18:00	Arrive at ANA Hotel

Friday 16 March 2007 (day 3)

9:00-10:20	**UNIDO's Approaches for Cluster Development** by Michele Clara, Industrial Development Officer, United Nations Industrial Development Organization (UNIDO)
10:20-10:35	Coffee Break
10:35-12:00	**UNIDO's Approaches for Cluster Development** (Continue)
12:00-13:30	Lunch Break
13:30-14:45	**UNIDO's Approaches for Cluster Development: Diagnostic Study & Action Plan** by Mukesh Gulati, Programme Coordinator, Foundation for Micro, Small & Medium Enterprise Clusters
14:45-15:00	Coffee Break
15:00-16:30	**UNIDO's Approaches for Cluster Development: Diagnostic Study & Action Plan** (Continue)
16:30-16:45	**Policy on Industrial Clusters in Republic of Korea** by Bobae Park, Head of Administrative Service, Chonbuk National University
16:45-17:00	**Summary of Day 4** by Toru Hashimoto, Senior Capacity Building Specialist, ADBI

17:00- **Group Work: Cluster Development Action Statement**

Saturday 17 March 2007 (Day 4)

9:00-9:45 **What is the Japan Center?**
by Yoshikazu Tachihara, Team Director, Japan International Cooperation Agency

Japan Center, Business Course
by Yasuyuki Kuroda, Senior Economist, International Development Center of Japan

9:45-10:00 Discussion/Q&A Session
Moderator: Toru Hashimoto, ADBI

10:00-10:30 **ADB's Experience in SME Assistance**
(Cambodia, Lao PDR, Viet Nam)
by João Pedro Farinha Fernandes, Economist, Asian Development Bank

10:30-10:45 Discussion/Q&A Session
Moderator: João Pedro Farinha Fernandes, ADB

10:45-11:00 Coffee Break

11:00-12:30 **Panel Discussion: Cluster Based Industrial Development**

Moderator: Toru Hashimoto, ADBI
Panelist: Hidekazu Tanaka, MURC
Panelist: Keijiro Otsuka, FASID
Panelist: Michele Clara, UNIDO
Panelist: Mukesh Gulati, Foundation for MSME
Panelist: Tetushi Sonobe, FASID
Panelist: João Pedro Farinha Fernandes, ADB

12:30-13:30 Lunch Break

13:30-17:00 **Group Presentation: Cluster Development Action Statement**

1. Viet Nam
2. Lao PDR
3. Myanmar
4. Mongolia
5. Cambodia
6. Central Asian Countries (Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan)

- **Coffee Break**

10~15 minutes presentation followed by 5 minutes Q&A

17:00-17:30 **Closing**
by Jeoung-Keun Lee, Director of Capacity Building and Training Dept., ADBI, and Toru Hashimoto, Senior Capacity Building Specialist, ADBI

ANNEX 2: LIST OF PARTICIPANTS

Country Delegates

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The Asian Development Bank Institute (ADBI), located in Tokyo, is a subsidiary of the Asian Development Bank (ADB). It was established in December 1997 to respond to two needs of developing member countries: identification of effective development strategies and improvement of the capacity for sound development management of agencies and organizations in developing member countries. As a provider of knowledge for development and a training center, the Institute serves a region stretching from the Central Asian republics to the Pacific islands.

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