Chapter IX
Suggested policy framework for the development of SMEs

The SME sector has demonstrated its inherent strength by making significant contributions to national economies in Asia and the Pacific. SMEs help in the development of entrepreneurship, the creation of employment opportunities and social empowerment, particularly for women, the expansion of trade and, above all, income generation. All of these factors raise the standards of living for the nation as a whole. Adaptability, resilience and the ability to manufacture and render services with a high degree of flexibility and cost effectiveness make SMEs a force in today's global economy.

Perhaps the greatest selling point of SMEs is their ability to innovate. SMEs have emerged over the years as a “nursery” for fostering entrepreneurship and innovations, experimenting with various product and process improvements as well as more basic R&D. This openness and flexibility towards new knowledge has been a crucial driver of economic development around the world, including the Asia-Pacific region. One message emphasized in this publication is that the Asia-Pacific countries can and should do more to develop innovations in the SME sector. The region as a whole still lags behind Europe and North America in this critical aspect.

Within this context, it is imperative that government officials recognize the following critical factors:

(a) The need for the reduction of entry barriers (and thus costs) facing new business;
(b) The importance of cash flow to SMEs – the major reason most new and small businesses fail is not lack of profits but lack of cash;
(c) The strengthening of entrepreneurship through training and education; and
(d) The strengthening of networking and information dissemination – a lack of networks and information hinders effective deployment of technology and business development services as well as collaboration with other firms.

Walking in the shoes of the SME owner will go a long way towards crafting effective policies.

This chapter recapitulates some of the major ideas and suggestions for expanding and sustaining SMEs. It begins with a discussion of barriers to SME development as well as issues for associated policy planning in Asia and the Pacific. To facilitate policy prioritization, a supporting tool for policymakers is presented. Then the main points of each chapter are reviewed, and the importance of policymakers empathizing with the small business owner is reiterated. Finally, a comprehensive policy package is proposed, both for the national and the regional levels. A monitoring and evaluation system that creates feedback loops for SME policy is detailed in the annex to this chapter. These feedback loops are necessary for dynamic policymaking.

A. National policy planning: Major constraints and issues

The comprehensive review in this publication of the SME policies and programmes in Asia and the Pacific demonstrates that the nations of the region appreciate the importance of SME development. In many of the countries in the region, the SME sector faces numerous threats and challenges that necessitate a proactive approach by policymakers. National governments and various stakeholders in charge of policy planning would do well to recognize not only the threats and challenges, but also the changing needs of SMEs.

SMEs in the Asia-Pacific region typically face the following constraints:

(a) Absence of a user-friendly enabling environment;
(b) Lack of an adequate and modern infrastructure;
(c) “Shy” entrepreneurship, i.e., lack of confidence and a high level of risk aversion in exploiting opportunities;
(d) Inequality for women entrepreneurs;
(e) Inadequate and/or expensive access to financing;
(f) Obsolete technology;
(g) A lack of R&D and innovation facilities, and commercialization thereof;
(h) Absence of marketing support and information;
(i) Inadequate input of BDS; and
(j) Poor institutional networking, which bars access to GSCs and integration of SMEs into international markets.

Before moving on to the next section, which starts from a broad perspective, and then narrows its focus to specific policy areas, the general points to consider concerning SME policy include:

(a) A comprehensive SME development policy package addressing the problems, needs and prospects of SME development for the domestic, regional and global markets must have feedback mechanisms that reflect the dynamic environment in which SMEs operate, so that policymakers can be proactive in anticipating and tackling SME issues;

(b) Major topics for a comprehensive policy should cover general entrepreneurship development, development of female entrepreneurship, rural enterprises, enhancing competitiveness, providing sound infrastructure and a business enabling environment, financing SMEs, delivering access to technology, R&D and innovations, creating business development services and developing opportunities for global integration;
(c) Policymakers can enhance SME competitiveness by promoting clusters as they produce spillovers of knowledge and agglomeration benefits that all firms can share;

(d) Encouragement of rural industrialization via SMEs, which is a clear priority. In the near term, diversifying agricultural activities can be a viable strategy;

(e) Building a strong base of entrepreneurship and providing support to make the SME sector competitive in the regional and global markets should be the central theme of the SME development agenda. The private sector should be involved as partners in policymaking and the implementation of programmes; thus, public-private partnerships are a crucial mechanism; and

(f) The need to develop SMEs in LDCs, in particular, in the process of globalization in order to remove the economic disparities between LDCs and the developed and developing economies in Asia and the Pacific. Adequate provisions need to be built into the policies in order to encourage them to access the regional and global markets on competitive term.

In addition, two points that deserve repeating are considered here. First, although policymakers naturally want firms to survive, they must provide an easy means of exit for SMEs that fail. Reforming the bankruptcy code is a prime example of a concrete step that governments can take on this issue. Second, as mentioned above, policymakers should concentrate on SME cash flows when considering various policies. Policy options that provide cash today to small business owners are preferable to those that defer cash.

Box IX.1. Prioritizing policies

Resources are scarce and government officials cannot tackle all the issues facing SMEs simultaneously. Policymakers need supporting tools to prioritize the issues and identify effective policy options. Figure IX.1 provides a thought process map for identifying the obstacles to private investment and entrepreneurship.

This map is a simplification, but it helps to prioritize policies, at least in the short term. According to Hausmann, Rodrik and Velasco (2006 and 2005), policymakers need to address the one or two of the most binding constraints on economic growth. They noted that in a low-income country, the problem may be due to low returns on economic activity or to the high cost of finance. Although both conditions may hold, one is likely to be more prevalent than the other.

After considering the root causes shown in the thought process map (figure IX.1), policymakers will need to work from the bottom up. Government officials should first work to provide stability, both legal and financial. Legal stability involves minimizing the threat of expropriation of rents by the government; this is the first action dealing with corruption, taxes and protection of property rights. Note that the focus is not to expunge the threat of expropriation entirely; that would be quixotic and wasteful. The short-term goal should be to perform near the average of a “peer group” of nations while the long-term goal should be to improve performance towards that of an “aspirant group.” For example, a middle-income Asia-Pacific country might compare its score on Transparency International’s Corruption Perceptions Index (see chapter III) to other middle-income countries. If it is faring worse, it should work to improve its score to that level in the short term. In the long term, it would seek to match the scores of upper-income countries.

The next stage of improvement concerns management of the economy. Officials must ensure that there are sound macroeconomic policies and procedures in place; e.g., ceilings for the overall national debt and for annual budget deficits, an

Figure IX.1. Thought process map for policy prioritization


132 These two papers are particularly relevant to policymakers, as the authors explain the nuances of their model and how piecemeal reform generates suboptimal outcomes.
autonomous central bank tasked with fighting inflation, a transparent process for adjusting the national currency if it trades at a fixed rate for other currencies etc. in many cases, both legal and financial stability correlates with one another.

Policymakers have less control over the sources of market failure. Regulations can require transparency among firms in their dealings with suppliers, customers and investors. Such transparency would alleviate the information asymmetry responsible for most market failures.133 Another means of preventing market failure is simply to avoid intervening. Setting wage and price controls distorts markets because such controls do not allow buyers and sellers to establish their own equilibrium; the new market-clearing price in a controlled market creates inefficiencies that, over time, can lead to failure.

Coordination externalities involve multiple economic actors cooperating to produce mutual benefit; failure occurs when one or more parties refuse to cooperate. Sometimes the issue may be one of standardization. A basic principle for economic development is that a government must establish and enforce a uniform system of weights and measures. At other times, the issue is one of cost and appropriation. It is often necessary for governments to fund basic research because a firm is unwilling to undertake that expense when the entire industry, including its rivals, will benefit.

After tackling the basic causes, government officials then need to move to the next level of causes that are actionable: poor infrastructure, low human capital, a meagre savings rate and underdeveloped financial intermediation. Policymakers would first need to decide which of these constraints is the most pressing before acting. Note that this will likely differ from country to country, depending on the stage of economic development.

B. Summary of recommendations

There are many facets to SME development. It is imperative to design and implement a comprehensive policy package that addresses the development of SMEs’ capacity and competitiveness more effectively in order to utilize untapped business opportunities in national, regional and global markets. This chapter proposes some specific activities for immediate action which are designed based on: (a) the centrality of SMEs in adding value; (b) six critical issues in SME development (i.e., business enabling environment, entrepreneurship, access to finance, business development services, innovation and technology and market access); and (c) immediate implementation of the policy options on the basis of stakeholders involved and the need for further feasibility enquiries. Policy recommendations are summarized by issue and presented in turn below.

1. Business enabling environment

The crucial elements of chapter III are the components of the business enabling environment (BEE) and the role of policymakers. There are a number of salient points for government officials but the overarching theme is that appropriate procedures and incentives with reasonable cost implications must be offered to businesses if SMEs are to thrive. It goes without saying that modern infrastructure, both physical and ICT, are sine qua non for business development. The major policy recommendations are reiterated below:

(a) Design effective public policies based on an understanding of constraints faced by SMEs;
(b) Implement specific programmes enabling SMEs to overcome marketing constraints;
(c) Invite the business sector to interact with policymakers at regular intervals on pressing business issues, including effective infrastructure development;
(d) Place economic and financial safety nets for SMEs to insulate them from the ill-effects of a possible future economic crisis;
(e) Design a fair and transparent legal and regulatory regime for SMEs;
(f) Create a business-friendly environment for SMEs by:
   (i) Providing for relative ease of entry and exit of small firms, particularly for women and young entrepreneurs;
   (ii) Streamlining bureaucratic rules and procedures;
   (iii) Assessing the costs and benefits of specific regulations and eradicating the roadblocks;
   (iv) Simplifying import-export procedures;
(g) Reform the government procurement system, perhaps with the inclusion of e-procurement;
(h) Give adequate attention to trade facilitation measures and address legal and regulatory obstacles;
(i) Identify gender imbalances and make suitable provisions for encouraging female entrepreneurship;
(j) Give priority and incentives to R&D, innovations, high-risk projects and IPR issues in the regulatory framework;
(k) Reduce social stigma for SMEs going bankrupt and provide suitable exit routes; and
(l) Provide incentives for providers of business development services.

2. Entrepreneurship development

The various definitions and concepts surrounding entrepreneurship were discussed in chapter IV, and the importance of innovation and firm expansion was underscored. Various subtopics were then considered, such as female entrepreneurship, rural entrepreneurship and social
entrepreneurship. Entrepreneurship was considered in relation to various stages of economic development, and data was provided on barriers to entrepreneurship. The chapter concluded with the following general recommendations to policymakers:

(a) Offer a “single window” for permits;
(b) Reform business registration;
(c) Encourage the wide-spread use of the business plan platforms and tools;
(d) Ensure formal property rights;
(e) Provide credit information systems;
(f) Strengthen investor protection;
(g) Simplify tax collection procedures;
(h) Create positive attitudes towards entrepreneurship;
(i) Encourage female entrepreneurs;
(j) Increase resources for entrepreneurship education; and
(k) Create interest in being an entrepreneur as a career.

3. Financing a business

The financing of SMEs was highlighted in chapter V, and the myriad sources of capital that SMEs can tap were discussed, with the focus on the bank-borrower relationship. Emphasis was placed on the need for empathy; banks should recognize the concerns of SMEs with regard to obtaining cash and SMEs must understand the banks’ need to mitigate risk. For policymakers, the importance of cash flows to the survival and success of SMEs cannot be overstressed. Therefore, some of the best practices are reiterated below:

(a) Avoid introducing direct credit programmes or the operation by banks of government programmes at subsidized rates;
(b) Do not plan for the government to operate its programmes for financial assistance to the SME sector directly;
(c) Foster SMEs’ understanding of the importance of cash flow management as well as useful financial instruments (working capital enhancement, trade credit, cost savings etc.) that improve their cash flows;
(d) Give adequate attention to the provisions of creditors’ rights by introducing a suitable set of laws that protect lenders from non-payment;
(e) Promote collateral and a third-party guarantee free lending system that is suitably backed by setting up credit guarantee schemes to encourage lenders to assist SMEs;
(f) Concentrate on policies for promoting availability of risk capital to innovative SMEs mainly at early stages of the financing, possibly through the development of equity and bond markets where feasible to the nations;
(g) Recognize the need for proximity between the lenders and borrowers, particularly for small-scale investment;
(h) Combine entrepreneurship training with commercial loan programmes;
(i) Facilitate international investments in the SME sector; and
(j) Encourage, in association with private sector associations and accounting bodies, small businesses to maintain and report reliable information.

4. Business development services

Beyond the immediate need for cash, SMEs require a plethora of services related to production, supply chain, marketing and overall quality improvements. These business development services (BDS) and the role that policymakers play were discussed in chapter VI. Differentiation was made between traditional and market-oriented modes of BDS, and it was suggested that governments act more as a facilitator rather than as a provider. BDS represents a prime opportunity for public-private partnerships, as the private sector is generally the repository of the expertise that SMEs need. Frequently, however, SMEs do not know where to find the help they require; likewise, consultants do not know which small businesses desire assistance. Policymakers can bridge this gap. Some of the chapter’s policy suggestions are highlighted below:

(a) Combine financial services with a BDS package;
(b) Develop public-private partnerships to provide BDS;
(c) Create a suitable enabling environment for BDS and awareness;
(d) Ensure that the capacity of BDS providers and the quality of their services is adequate; and
(e) Allow private sector service providers to give a kick-start to BDS.

5. Innovation and technology

Chapter VII addresses the important issue of innovation and technology. The most crucial message communicated in this chapter is that SME competitiveness and national competitiveness are inexorably linked. Policymakers will boost the innovative edge of firms as they improve their own nation’s capacity to innovate. We stress the need for a holistic policy approach that embraces human resource development, science parks, business incubators, technology acquisition and ICT applications. In general, the Asia-Pacific region has lagged behind other parts of the world in terms of R&D spending and technology capacity building; this is a fruitful area for further improvement. The following priorities and policies are provided as guidance:

(a) Priorities:
   (i) Technology-driven policies that encourage and facilitate innovations;
   (ii) Incentives for creating and adopting innovations;
   (iii) Institutional framework, e.g., technology centres;
   (iv) Access to finance;
   (v) Training and capacity-building; and
   (vi) Strategic partnerships and alliances (e.g., national and subnational innovation systems).
(b) Policies:

(i) Introduce a comprehensive science and technology development policy under a simplified and streamlined institutional framework (at both the national and the subnational levels), offering a friendly enabling environment for SMEs;

(ii) Government subsidized financial assistance to SMEs as well as other key stakeholders for R&D, technology transfer and technology commercialization (e.g., grants, loans and tax breaks);

(iii) Development of national and subnational innovation systems through institutional networking and coordination, capacity-building and infrastructure development (e.g., science and technology parks);

(iv) Open-market policy support for technology outsourcing and transfer of technology for SMEs; and

(v) Business and technology incubation and training.

6. Market access

In chapter VIII, the significance of global integration for SME development in the region is noted. With regard to this aspect, policymakers can serve as communicators and educators, as SMEs are often unaware of the latest developments in WTO regulations, intellectual property rights, product and service standards and certifications, and requirements for their participation in regional and global supply chains. Over the longer term, efforts to improve BEE should also reap dividends for SMEs trying to tap global markets. With this in mind, key policy issues and integration tactics for SMEs are listed below:

(a) Export infrastructure – export industrial estates; export processing zones; and bonded production centres;

Table IX.1. Recommended actions for challenges of SME development

<table>
<thead>
<tr>
<th>Challenges</th>
<th>National</th>
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<tbody>
<tr>
<td>Business enabling environment</td>
<td>(a) Formulation and implementation of a strategic pro-SME development policy, and placing financial safety nets for SMEs;</td>
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<td>(b) Establishment of incentives for R&amp;D, innovations, high-risk projects and IPR issues in the regulatory framework;</td>
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<td>(c) More open and transparent government procurement practices;</td>
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<td>(d) Fiscal measures – taxation and subsidy measures for the products under consideration, and on import of raw materials and machinery;</td>
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<td>(e) Productivity improvement through infrastructure development and enhanced logistical efficiency;</td>
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<td>(f) Lobbying and coordinating with other government ministries and departments for infrastructure development;</td>
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<td>(g) Improving power and gas supply;</td>
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<td>(h) Improving rural road links between production, processing and market centres of the products under consideration; and</td>
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<td>(i) Establishment of special economic zones.</td>
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**Table IX.1. (continued)**

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<th>Challenges</th>
<th>Regional</th>
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<td>(a) Pro-business regulatory reforms in various functions (e.g., registration, licensing, closure, and bankruptcy) through a regional capacity-building programme which develops best practice manuals and tool kits;</td>
<td>(b) Public-private dialogue to develop handbooks and toolkits for business environment reforms; (c) Joint infrastructure development with neighbouring countries at the border areas.</td>
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<td>(c) Joint infrastructure development with neighbouring countries at the border areas.</td>
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<td><strong>Entrepreneurship development</strong></td>
<td>Regional</td>
<td>(a) Sharing experiences and best practices for entrepreneurship development through regional programmes; and (b) Building the capacity of regional business associations and networks.</td>
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<tr>
<td><strong>Access to finance</strong></td>
<td>National</td>
<td>(a) Development of a conducive financial services framework and capacity-building of financial institutions; and (b) Training on cash flow management and relevant instruments:</td>
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<td>(b) Training on cash flow management and relevant instruments:</td>
<td>(i) Public credit guarantee schemes (ii) Collateral and property rights (iii) SME loans (iv) Trade finance (v) Loans for restructuring and cost saving initiatives (vi) Credit information sharing (vii) Simplified accounting and taxation systems for SMEs</td>
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<td>(c) Development of public business incubation programmes;</td>
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<td>(d) Strengthening flow of market information and business counseling services; and (d) Preparation for the establishment of brand image.</td>
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<td><strong>Business development services (BDS)</strong></td>
<td>Regional</td>
<td>(a) Business matchmaking services between foreign investors, including regional firms and local enterprises, and in particular SMEs, with emphasis on backward linkages in regional and global supply chains;</td>
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<td>(b) Sharing experiences about the development of commercial and public business advisory services, such as accounting, engineering, legal advice and marketing; and (c) Establishment of laboratory testing facilities, quarantine centres and certification bodies based on cost sharing among participating nations.</td>
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<tr>
<td><strong>Innovation and technology</strong></td>
<td>National</td>
<td>(a) Develop national and subnational innovation systems; (b) Investment in research and development to build regional brands (e.g., regional products and service development with low costs);</td>
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<td>(b) Investment in research and development to build regional brands (e.g., regional products and service development with low costs);</td>
<td>(c) Improved capacity for process and product innovation; (d) Foster innovation and a culture of creativity;</td>
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<td>(e) Increase ICT usage in the SME sector;</td>
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<td>(f)</td>
<td>Establishment and strengthening of standards and certification, quality testing and accreditation centres; and</td>
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<td>(g)</td>
<td>Establishment of product development centres.</td>
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<td>Regional</td>
<td>(a) Networking and collaboration among research institutes at the regional level.</td>
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<td>Market access</td>
<td>National (a) Encourage capacity-building and export operations of SMEs;</td>
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<td>(b) Enhance SMEs’ understanding of international markets, and their practices and rules;</td>
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<td>(c) Identify and implement appropriate trade promotion tools for local products and services while improving their quality and effectiveness;</td>
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<td>(d) Foster global supply chains led by developing-country enterprises, and development of regionally and later globally recognized regional brands;</td>
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<td>(e) Foster strong market orientation in the business sector to penetrate markets and increase market shares;</td>
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<td>(f) Strengthening of enterprises’ capacities to meet global supply chain related standards and certificates; and</td>
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<td>(g) Pay adequate attention to trade facilitation measures.</td>
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<td>Regional</td>
<td>(a) Open markets for trade and investment: avoidance of protectionism (e.g., limited public bailouts of enterprises which are ineffective and inefficient; market mechanisms determine the future of enterprises);</td>
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<td>(b) Regional integration to create a region-wide market (possibly including development of regional regulatory frameworks and infrastructure);</td>
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<td>(c) Strengthening, deepening, consolidation and integration of free trade and investment agreements, possibly on a region-wide basis;</td>
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<td>(d) Promotion of FDI (including intraregional South-South investment) which fosters backward linkages with SMEs;</td>
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<td>(e) Intraregional trade promotion through business networking (e.g., cross-border partnerships among SMEs); and</td>
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<td>(f) Strengthening of region-wide market information dissemination and the use of ICT.</td>
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Source: Authors’ compilation.

**C. Conclusion**

This publication has attempted to develop policy guidelines that will assist policymakers, practitioners, support institutions, chambers and associations in their efforts towards SME development. These guidelines are based on regional (and global) best practices and the vast field experience of the researchers, contributors and authors involved in their preparation. In addition, the United Nations Economic and Social Commission for Asia and the Pacific has played an essential role in guiding and supporting this effort.

This publication is not a substitute for local knowledge; rather, it is aimed at complementing such knowledge. Each sovereign country has developed its own policy frameworks, institutions and linkages with SMEs and entrepreneurs. No one policy guideline can fit all. Thus, individual countries and their institutions must assess the status of their SMEs, level of enterprise, culture, ethos and needs before addressing the emerging issues. Based on this assessment, each nation can develop a plan of action most suited to its particular situation that will enable it to address the

(a) Preparation of feasibility studies on developing country-led supply chains;
(b) Implementing projects to foster and support the development of partnerships between enterprises;
(c) Raising awareness and knowledge among developing countries’ SMEs of standards and certification;
(d) Developing national business environments that are more conducive to entrepreneurship and business innovation; and
(e) South-south cooperation of intraregional trade and FDI facilitation and promotion.

Reviewing the national status of SMEs in relation to the issues listed above as well as identifying possible areas of interventions by regional programmes, will lead to greater efficiency. It is again emphasized that local sources of knowledge, especially universities and research institutions, are often overlooked by policymakers who reflexively reach for outside experts. Assessing national sources of expertise should come first.
requirements of its SMEs and entrepreneurs. Naturally, consultations with experts, SME leaders and other stakeholders are a prerequisite before finalizing any plan that might involve policy changes, reorientation of officials, capacity-building of delivery organizations and encouragement of public-private partnerships. The long-term objectives of all the countries in the Asia-Pacific region are clear – to build the capacity of SMEs, enhance their competitiveness, attain global integration and be partners for progress in economic development, employment generation and the well-being of the population of their countries.
In the current environment, there is constant pressure and scrutiny to do things correctly and efficiently; in this regard, the monitoring and evaluation (M&E) tool has often been used to ensure proper governance, transparency and accountability of organizations and programmes. OECD (2002a) defines M&E as:

(a) Monitoring – “A continuing function that uses the systematic collection of data on specified indicators, to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds”; and

(b) Evaluation – “The systematic and objective assessment of an ongoing or completed project, programme, or policy, including its design, implementation, and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors”.

M&E thus comprises two distinct but complementary concepts, with the former based on observation and the latter focused upon analysis of the results. The distinction between monitoring and evaluation can be presented according to a gradation of sophistication, also called the “Six Steps to Heaven” approach (OECD, 2007c). The first three steps are considered to be monitoring and tend to use qualitative indicators, whereas steps 4, 5 and 6 are associated more with quantitative evaluations (see annex table IX.1 for an example).

### Annex IX.1
Monitoring and evaluation

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<th>Evaluation</th>
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<td>Step 4</td>
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</table>

Source: OECD, 2007c.

As the definitions and examples above indicate, M&E is used as a management tool to learn from past experiences and improve future services, to plan and allocate existing resources, and most importantly to understand whether targets have been met. Specific to the development context, M&E is used to (a) determine the worth or significance of a development intervention, (b) contribute to future improvements, (c) consider continuation or discontinuation and (d) account for expenditures to stakeholders (OECD, 2010b).

### A. M&E frameworks

In a literature review of more than 100 studies of M&E, Stem and others (2005) noted two points germane to policymakers: (a) it is not necessary to design such systems from scratch since effective approaches already exist; and (b) different M&E needs require different M&E approaches.

When M&E is undertaken for a project, a framework has to be constructed that covers the entire process of the project, from planning to implementation and outcomes, to ensure that the objectives are quantifiably assessed. Three major M&E frameworks – the logical framework approach, result-based impact chain and standard for results measurement – are presented below.

#### 1. Logical framework approach

The logical framework approach is a widely-used project development tool as well as an M&E tool. It involves using causal logic, a baseline study, an impact statement and assessment, client-centred programme design, performance indicators, a learning system and risk assessment to map out how the various components of a project relate to each other in order to meet goals and achieve the desired impact (IFC, 2008).

Annex figure IX.1 illustrates the logical framework and indicates M&E’s position. Monitoring focuses on tracking inputs, activities and outputs; evaluation primarily tracks outcomes and impacts in relation to project goals (IFC, 2008).

M&E applies differently at each project level. An overview of programme logics and indicators at various project levels is presented in annex table IX.2.

#### 2. Result-based impact chain

Another popular M&E method is the result-based impact chain, utilized in GTZ’s M&E approach. It focuses on analysing the results generated by a project or a programme in order to prove its validity. Annex figure IX.2 outlines the entire result chain and shows how the results are generated.

First, a project or a programme is resourced through inputs (advisers and finance). Using these inputs, an organization launches activities that generate outputs. These outputs are then utilized by target groups or intermediaries, generating medium-term and long-term development results. The results

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134 The logical framework approach was developed by USAID at the end of the 1960s and has been used by various bilateral and multilateral development agencies throughout the world.
Annex table IX.2. Programme logics and indicators at various project levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Programme/project logic</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>What are the problems that the project will address?</td>
<td>The measures for judging whether or not the goal has been achieved.</td>
</tr>
<tr>
<td>Inputs</td>
<td>The resources needed to deliver the project activities (funds, people, equipment etc.).</td>
<td>Implementation and work programme targets.</td>
</tr>
<tr>
<td>Activities</td>
<td>The activities or tasks that need to be undertaken to accomplish or deliver the identified project outputs.</td>
<td>Implementation and work programme targets.</td>
</tr>
<tr>
<td>Outputs</td>
<td>The direct measurable results (goods and services) of the project that are largely under project management’s control.</td>
<td>Measures of the quantity and quality of outputs and the timing of their delivery.</td>
</tr>
<tr>
<td>Outcomes</td>
<td>What are the expected benefits (or dis-benefits) and to whom will they go? What improvements or changes will the project bring about?</td>
<td>Measures by which achievements at the end of the project can be quantified – indicating that the purpose has been achieved and that these benefits are sustainable.</td>
</tr>
<tr>
<td>Impacts</td>
<td>What are the long-term changes that are likely to occur as a result of the project outcomes?</td>
<td>Measures of general quantitative or qualitative changes that can be linked to the project.</td>
</tr>
</tbody>
</table>

Source: Modified from IFC, 2008.

Annex figure IX.2. Results-based impact chain

are defined as changes occurring due to the project and its different facets, which can be direct or indirect. Up to the point where a causal relationship between outputs and observed development changes can be shown, the project is entitled to claim the observed development changes as a "direct benefit", which is also the project objective.

A project or programme also generates impacts beyond the objectives level. This can be difficult to prove as many other factors can also influence the causal relationship between the project and the indirect impacts. This results in an attribution gap in the result chain. Both direct and indirect effects of a project should be considered before implementation, because the results could be insignificant or even negative. Only when the hypotheses on the project's contributions to overarching development results are plausible can the project be valid and successful (GTZ, 2004).

To identify causalities between the project and results, several tasks must be performed. The outcomes attributable to the project or programme, defined as its objectives, must be identified. It is also necessary to identify changes that take place beyond the attribution gap to determine whether they can plausibly be linked to the project. As such a causal relationship may be impossible to prove. It is sufficient to demonstrate plausibly, on the basis of the monitored data on inputs, activities, outputs, use of outputs and outcomes, how the project or programme might have contributed towards the changes in the environment (GTZ, 2004).

This approach is based on a similar logic to the logical framework approach mentioned above and it uses some of the same terminology. However two main differences are observed (IFC, 2008):

(a) The focus is on measuring results throughout a project and analysing the causal impact chain; and

(b) The way the impact is measured and attributed throughout the impact chain differs.

3. DCED standard for results measurement

DCED (2011b) has developed its own M&E process, the standard for results measurement, developed through field experience from various programmes and agencies focusing on private sector development. The DCED method "comprises all of the minimum elements required in any results measurement process". The steps outlined in the standard are:

(a) Articulating the results chain – the first step is to utilize the results chain tool to make each step explicit in the logic of the programme. This allows staff to "think through" the intervention process, clarify assumptions, agree on logic and monitor progress in achieving that logic;

(b) Defining the indicators of change – following clarification of what is expected to happen, it is then possible to define what is expected to change. Indicators should be precise and measurable, either quantitatively or qualitatively, and should include information about the sustainability of changes;

(c) Measuring changes in indicators – at this stage, programmes need to develop a system for measuring changes in the indicators. The first action is to conduct baseline research in order to establish a starting point. It is also strongly recommended that programmes "triangulate", or cross-examine, the information they collect or generate in order to validate and confirm the findings; and

(d) Estimating attributable changes – the standard requires programmes to address the issue of attribution for the key indicators and intermediate steps within the results chain (annex figure IX.3). While rigorous proof is not required, it is important for the programme to build a credible and convincing case;

(e) Capturing wider changes in the system or market – it is important to make an effort to capture wider changes as well. System or market-wide changes can occur as a result of crowding-in and copying, sector growth, backward and forward linkages, and other direct impacts;

(f) Tracking programme costs – there should be a statement of the programme's annual and cumulative costs to put programme achievements into perspective;

(g) Reporting results – the standard calls for programmes to document key changes in indicators. These should be communicated at least annually to internal programme-related persons and the external community; and

(h) Managing the system for results measurement – programmes should develop a system for measuring key indicators at selected intervals. Such a system should include a monitoring plan as well as sufficient financial and human resources, so that it can be sustained and developed.
While the components of the DCED standard are not new, its comprehensiveness is unique. It is the first to combine most of the existing results measurement features together in one complete framework. However, the standard is not entirely complete as it lacks certain elements found in other methodologies. For example, stakeholders participatory techniques are not included, primarily because private sector development generally aims to enable stakeholders to solve their own problems. These stakeholders are often not aware of donor-funded interventions (DCED, 2011b).

4. Data collection

Data forms the basis of all M&E systems. The indicators and research questions in the M&E plan dictate the data required. Generally, the different indicators in an M&E system require three types of data sources – routine, periodic and one-off – as shown in table IX.3 (World Bank, 2009b).

Before selecting a method, consideration must be given to whether a quantitative or qualitative method should be used. Quantitative methods measure directly the status or change of a specific variable, whereas qualitative methods gather information about what people see, feel, believe or do as well as how they behave. It should be noted that the difference between these types of data is not absolute. Qualitative data can be counted and made quantitative; transforming quantitative data the other way is also possible. The appropriate method depends not only on the type of information needed but also on capacities and resources available, how the information will be used and the level of data precision needed (IFAD, 2002). Annex table IX.4 presents some examples of qualitative and quantitative methods.

B. Evaluation

There are different types of evaluations, depending on what is being evaluated and the overall objectives of the M&E process. Formative evaluations are designed to assess programme design before implementation. Process evaluation examines the procedures and tasks related to implementing a programme. Outcome evaluation is used to obtain descriptive data on a project and to document short-term results. Economic evaluations assess costs and funding to determine value for money and efficiency. Impact evaluation systematically identifies the long-term effects (World Bank, 2009b). Annex table IX.5 provides additional details about each type.

Regardless of which evaluation method is applied, there are a number of key principles that should underpin all evaluation practices. According to OECD (2007c), these are:

(a) Evaluation should lead to policy change – e.g., increasing or decreasing the policy budget; whether the policy as a whole is abandoned; creating different objectives; adjusting policy delivery methods etc.;

(b) Evaluation should be part of the policy debate – evaluation should lead to policy learning in order to provide new knowledge and information about future policies;

(c) Evaluators should be “in at the start” – evaluators can assist in crafting clear and tangible policy objectives, planning budgets and highlighting evaluation methods and criteria for policymakers;

(d) Evaluation techniques should always use the most appropriate methodology – e.g., the Six Steps approach as already discussed;

(e) Evaluation should apply to all policies and programmes – it is important to avoid evaluating particular policies and programmes more frequently or rigorously than others; and

(f) International comparisons should be made where necessary – for some policy areas, evaluation can only be undertaken on an international basis, e.g., comparing the impact of tax regimes.

Evaluation can compare the various aspects of a programme with those of other programmes. Policymakers can learn what works in similar regions, countries and policy fields, and for intended beneficiaries. Such comparisons will provide useful benchmarks for assessing the level of success and those areas that require further improvement, as they often reveal gaps in existing programmes.

Annex table IX.3. Types of data sources for different types of indicators

<table>
<thead>
<tr>
<th>Indicator type</th>
<th>Data collection time frame</th>
<th>Types of data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>Continuously</td>
<td>Routine data sources such as statistics about government services</td>
</tr>
<tr>
<td>Output</td>
<td>Quarterly/ bi-annually/ annually</td>
<td>Routine data sources such as statistics about government services</td>
</tr>
<tr>
<td>Outcome</td>
<td>One to three years (short to medium term)</td>
<td>One-off data sources such as special studies (research or evaluation)</td>
</tr>
<tr>
<td>Impact</td>
<td>Two to five years (mid term to long term)</td>
<td>Periodic data sources such as surveillance. One-off data sources such as special studies (research or evaluation)</td>
</tr>
</tbody>
</table>


Annex table IX.4. Data collection methods, qualitative and quantitative

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-structured interviews, case studies, maps, transects, diaries, historical trends/timelines, seasonal calendars, flow diagrams, brainstorming, focus groups, SWOT, drama and role plays, maps, transects, geographic information system (GIS), rich pictures, visioning and well-being ranking</td>
<td>Biophysical measurements, structured questionnaires, maps, transects, geographic information system (GIS), diaries, flow diagrams, nominal group technique, historical trends/timelines, seasonal calendars, matrix scoring and ranking</td>
</tr>
</tbody>
</table>

Source: Authors’ compilation.
### Annex table IX.5. Types of evaluations

<table>
<thead>
<tr>
<th>Type of evaluation</th>
<th>When to use</th>
<th>What it shows</th>
<th>Why it is useful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formative evaluation</strong></td>
<td>During the development of a new programme. When an existing programme is being modified or is being used in a new setting or with a new population.</td>
<td>Whether the proposed programme elements are likely to be needed, understood, and accepted by the target population. The extent to which an evaluation is possible, given the goals and objectives of the evaluation and the programme.</td>
<td>It allows modifications to be made to the plan before full implementation begins. Increases the likelihood that the programme will succeed.</td>
</tr>
<tr>
<td><strong>Process evaluation</strong></td>
<td>As soon as programme implementation begins. During the operation of an existing programme.</td>
<td>How well the programme is working. The extent to which the programme is being implemented as designed. Whether the programme is accessible and acceptable to its target population.</td>
<td>Provides early warning of any problems that may occur. Allows programmes to monitor how well their programme plans and activities are working.</td>
</tr>
<tr>
<td><strong>Outcome evaluation</strong></td>
<td>After the programme has made contact with at least one person or group in the target population.</td>
<td>The degree to which the programme is having an effect on the target population's behaviour.</td>
<td>Reveals whether the programme is being effective in meeting its objectives.</td>
</tr>
<tr>
<td><strong>Economic evaluation</strong></td>
<td>At the planning stage, using cost estimates. During operation of a programme, using actual costs.</td>
<td>The resources that are being used in a programme and their costs (direct and indirect) compared to outcomes.</td>
<td>Provides programme managers and funders with a way to assess effects relative to costs.</td>
</tr>
<tr>
<td><strong>Impact evaluation</strong></td>
<td>During the operation of an existing programme at appropriate intervals. At the end of a programme.</td>
<td>The degree to which the programme meets its ultimate goal.</td>
<td>Provides evidence for use in policy, funding and future programming decisions.</td>
</tr>
</tbody>
</table>