# Chapter 2

**PROSPECTS OF SELECTED SMES' INTEGRATION IN GLOBAL VALUE CHAINS:** A Synthesis of Country Studies on Bangladesh, Nepal and Sri Lanka

Most of the South Asian countries have significantly improved their economic growth rates, with five to six per cent average annual growth during the last decade of earlier century and first decade of this new millennium (ESCAP 2009c). South Asian countries, perhaps with the exception of Nepal, have improved their trade performance, particularly exports, and have been successful in integrating their economies in the regional and global markets. Growing intraregional trade and further enacting trade and investment liberalization measures, new prospects for cross-country industrial linkages within emerging international production networks are providing new impetus to establishment of regional value chains. Such regional value chains, as well as individual enterprises in selected South Asian countries, are also establishing networks in global value chains.

While most enterprises and policymakers in South Asian countries have yet to fully understand certain basic fundamentals of conducting international trade, there is also a growing need for them to be more familiar with the emerging realities of modern business practices and trade transaction procedures as well as realize that higher productivity, better technological capability and time-bound delivery of products and services are the basic tenets of international business. Furthermore, disintegration of production process, either on vertical or horizontal lines, is giving rise to new prospects for enterprises to enter global and regional value chains. In this way, SMEs in South Asia have growing opportunities to form an integral part in value chains – regional or global (UNIDO 2004).

In this chapter, the prospects for promoting value chains for selected sectors and products are analyzed and critical constraints in enhancing value added are identified. The analysis is focused on strengthening the value added in sectors and products domestically, while adopting value chain approach and looking into regional and international perspectives. To address constraints and find opportunities in value chains for the products, it is essential to be a familiar with the prevailing national economic conditions. Therefore, the chapter starts by reviewing socio-economic trends in Bangladesh, Nepal and Sri Lanka, including the status of SME sectors. Then, a synthesis of the three country studies, incorporating the major suggestions evolved

at national and subregional workshops under the project, is presented.<sup>5</sup> Finally, a subregional action programme is proposed to promote sectoral value chains for SMEs in Bangladesh, Nepal and Sri Lanka

# 2.1. Summary of economic conditions in Bangladesh, Nepal and Sri Lanka and the status of SME sector

Bangladesh, Nepal and Sri Lanka are at different levels of development. Sri Lanka is well ahead of two other countries. Bangladesh and Nepal are categorized as least developed countries, while Sri Lanka is in a category of lower middle-income developing countries. As indicated in Table 1, of the three countries, Sri Lanka has the highest per capita income of \$2,290 (or \$5,098 in purchasing power parity). The per capita incomes of Bangladesh and Nepal are \$640 (or \$1,677 in purchasing power parity) and \$490 (or \$1,255 in purchasing power parity), respectively. In terms of the average growth rate of GDP (in ordinal term) from 2006 to 2010, Bangladesh (6.1 per cent) closely follows Sri Lanka (6.4 per cent), while Nepal shows the lowest rate (4.4 per cent).

Table 1: Macroeconomic indicators

Indicators	Bangladesh	Nepal	Sri Lanka
GDP growth rate (2006-2010)	6.1	4.4	6.4
Per capita GDP at current purchasing power parity (2010) – (in US\$)	1 677	1 255	5 098
Per capita GNI at current US\$	640	490	2 290
Share of agriculture (2010) – as per cent of GDP	18.8	35	12.8
Share of industry (2010) – as per cent of GDP	28.5	15	29.4
Share of services GDP (2010) – as per cent of GDP	52.6	50.1	57.8
Exports of goods and services (2010)  – as per cent of GDP	18.5	9.8	21.7

Source: ADB (2011).

The level of development of these countries is also reflected in their respective shares in agriculture, industry and services as a percentage of GDP – the share of the agricultural sector being the greatest for Nepal (35 per cent) and the lowest for Sri Lanka (12.8 per cent), while Bangladesh is occupying the middle position with 18.8 per cent. As for the industry sector, Sri Lanka has the highest share of 29.4 per cent of GDP, followed by Bangladesh with its 28.5 per cent and Nepal with its 15 per cent. Sri Lanka has the largest share in services sector (57.8 per cent of GDP), whereas Bangladesh and Nepal show 52.6 per cent and 50.1 per cent of GDP, respectively. In terms of exports contributing to higher growth rates, it is noted that exports as per cent of GDP is higher for the countries having higher GDP growth rates and higher per capita income. For example Sri Lanka having the highest GDP growth rate also has the highest exports at

 $<sup>^{\</sup>rm 5}$   $\,$  See "Methodology" section in Chapter 1 for the information on national and subregional workshops.

21.7 per cent of GDP, while Bangladesh exports occupy the middle position with 18.5 per cent of GDP and Nepal exports lag behind with just 9.8 per cent of GDP.

While reviewing the economic conditions and SMEs prospects in the value chain process, one should look into poverty level and human development status so that the potentiality of SME sector contributing to high growth and poverty reduction is clearly realized. In terms of poverty and human development indicators, Sri Lanka is clearly the most advanced among the three countries in all categories (Table 2). Human Development Index (HDI) ranking, adult literacy rate, life expectancy at birth and the population living below two dollars a day indicators are all better in Sri Lanka. Broadly these indicators not only point out the ways for improving competitiveness but also suggest the absorption capacity of the economies. Population living below the level of two dollars a day indicator could also be a sign for the need to address employment based on less capital-intensive programmes in devising a strategy emphasizing the need for SME development. From this perspective, Bangladesh and Nepal call for more employment generating development programmes in which SME sector should be accorded a higher priority.

Table 2: Poverty and human development indicators

Indicators	Bangladesh	Nepal	Sri Lanka
Human development index (HDI) – 2010	0.469	0.428	0.658
HDI rankings – 2010 (out of 169 countries)	129	138	91
Adult literacy rate (15 years old and above) – 2009 (in per cent)	55.9	59.1	90.6 (2008)
Life expectancy at birth – 2009 (in years)	66.6	67.1	74.3
Population (million)	146.2	28.3	20.7
Population growth rate	1.3	2.2	1.0
Population below two dollars purchasing power parity per day – in per cent	81.3 (2005)	77.6 (2004)	29.1 (2007)

Source: ADB (2011).

### 2.1.1. COMPETITIVENESS AND BUSINESS ENVIRONMENT

Given the strategy of private sector led development in the countries under the study it is also necessary to assess their prospects for competitiveness and ease of doing business.

First, with the three countries being at different levels of economic development, their capabilities are reflected in the global competitiveness index (GCI) (Table 3). All the three countries are in the stage 1 category wherein competitiveness is very low and the economy is more factor-driven. Even so, they display a large variation of factors with Sri Lanka having a 62<sup>nd</sup> ranking among 139 countries while Bangladesh and Nepal are lagging behind having 107<sup>th</sup> and 130<sup>th</sup> rankings respectively. These differences will affect the ways by which the competitiveness of the economy, including that of SMEs, is improved and the possibility of SMEs integration in global value chains.

Table 3: Global Competitiveness Index (GCI) 2010-2011

	Bangladesh	Nepal	Sri Lanka
Global Competitiveness Index – 2009-10	3.64 (107 <sup>th</sup> out of 139 countries)	3.34 (130 <sup>th</sup> out of 139 countries)	4.25 (62 <sup>nd</sup> out of 139 countries)
Basic requirement sub index 2009-10	3.71 (114 <sup>th</sup> )	3.52 (125 <sup>th</sup> )	4.42 (73 <sup>rd</sup> )
Efficiency enhancers sub index 2009-10	3.62 (97 <sup>th</sup> )	3.14 (131 <sup>st</sup> )	4.01 (69 <sup>th</sup> )
Innovation factors sub index 2009-10	3.01 (109 <sup>th</sup> )	2.67 (133 <sup>rd</sup> )	3.97 (40 <sup>th</sup> )
Components of basic requireme	nt sub index:		
Institutions	3.24 (115 <sup>th</sup> )	3.03 (130 <sup>th</sup> )	4.06 (55 <sup>th</sup> )
Infrastructures	2.15 (133 <sup>rd</sup> )	1.81 (139 <sup>th</sup> )	3.82 (70 <sup>th</sup> )
Macroeconomic stability	4.49 (80 <sup>th</sup> )	4.41 (86 <sup>th</sup> )	3.60 (124 <sup>th</sup> )
Health and primary education	4.96 (106 <sup>th</sup> )	4.81 (109 <sup>th</sup> )	6.18 (35 <sup>th</sup> )

Source: WEF (2011).

When GCI is decomposed into basic requirements, efficiency enhancers and innovation factors, Sri Lanka shows the prospect for innovation-driven competitive strength, which can be observed in its country study on rubber products sector and more explicitly in its electronic industry. The emphasis on new high value product lines also indicates the trend. Bangladesh looks to be moving towards the efficiency-driven category in which more efficient production processes and increases in quality are relied upon. Nepal looks like a factor-driven economy when a country relies more on its factor endowments – primarily unskilled low-cost labour and natural resources, thus demonstrating dependence on the agriculture sector.

Further decomposition of basic requirement index into two of its four major subcomponents (i.e., institutional capacity and infrastructures) shows that Bangladesh and Nepal have severe limitations in these two components to be competitive enough – while Sri Lanka is in a better position. The country studies on Bangladesh and Nepal and their interactions at national workshops had emphasized the need for infrastructure development – particularly electric power and gas lines in Bangladesh and rural roads in Nepal. While Sri Lanka shows the highest ranking in health and primary education among the three countries, Bangladesh and Nepal demonstrate better rankings in macroeconomic stability.

Second, business environment is closely related to the overall development level in these countries. SMEs need to have enabling operational environment, including reasonable legal and institutional frameworks, stable macroeconomic policies and adequate infrastructures. The World Bank's Ease of Doing Business Index focuses on nine topics that aim to measure the regulation and red tape relevant to the life cycle of domestic SMEs. As such, a nation's ranking is based on the average of the following nine sub-indices: starting a business, dealing with construction permits, registering

property, getting credit, protecting investors, paying taxes, trading across border, enforcing contracts and closing a business. The rankings of its various components and values of their sub-indices reflect how enabling and friendly the conditions are for SMEs to operate in these countries.

In so far as ease of doing business is concerned, the three countries show once again similar patterns with Sri Lanka ranked as  $102^{nd}$  out of 183 countries followed by Bangladesh with its  $107^{th}$  ranking and Nepal occupying the  $116^{th}$  position (Table 4). As for some of indicators on the ease of doing business, such as starting a business sub-index, both Bangladesh and Nepal are far behind Sri Lanka – Sri Lanka is ranked  $34^{th}$  while Bangladesh and Nepal are in the  $79^{th}$  and  $96^{th}$  positions, respectively. One of its sub-components, cost of starting a business (as a per cent of income per capita) is also the highest in Nepal – 46.6 per cent of the per capita income, while Bangladesh and Sri Lanka registered at 33.3 per cent and 5.4 per cent of the per capita incomes, respectively. High initial cost generally comes as a discouraging factor to potential investors.

Table 4: Rankings on the ease of doing business 2010

	Bangladesh	Nepal	Sri Lanka
Ease of doing business (rank)	107	116	102
Starting a business (rank)	79	96	34
Procedures (number)	7	<b>90</b> 7	4
Time (days)	, 19	31	35
Cost (per cent of income per capita)	33.3	46.6	5.4
			0.0
Minimum capital (per cent of per capita)	0.0	0.0	0.0
Dea ling with construction permits (rank)	116	130	169
Procedures (number)	14	15	22
Time (days)	231	424	214
Cost (per cent of income per capita)	194	100.2	51.1
Registering property (rank)	172	25	155
Procedures (number)	8	3	8
Time (days)	245	5	83
Cost (per cent of property value)	6.6	4.8	5.1
Getting credit (rank)	72	89	72
Strength of legal rights index (0-10)	7	6	4
Depth of credit information index (0-6)	2	2	5
Public registry coverage (per cent of adults)	0.6	0.0	0.0
Private bureau coverage (per cent of adults)	0.0	0.3	18.6
Protecting investors (rank)	20	74	74
Extent of disclosure index (0-10)	6	6	4
Extent of director liability index (0-10)	7	1	5
Ease of shareholder suits index (0-10)	7	9	7
Strength of investor protection index (0-10)	6.7	5.3	5.3

	Bangladesh	Nepal	Sri Lanka
Paying taxes (rank)	93	123	166
Payments (number per year)	21	34	62
Time (hours per year)	302	338	256
Total tax rate (per cent of profit)	35.0	38.2	64.7
Trading across border (rank)	112	164	72
Documents to export (number)	6	9	8
Time to export (days)	25	41	21
Cost to export (US\$ per container)	985	1 960	715
Documents to import (number)	8	10	6
Time to import (days)	31	35	19
Cost to import (US\$ per container)	1 390	2 095	745
Enforcing contracts (rank)	179	123	137
Procedures (number)	41	39	40
Time (days)	1 442	735	1 318
Cost (per cent of claim)	63.3	26.8	22.8
Closing a business (rank)	101	107	43
Time (years)	4.0	5.0	1.7
Cost (per cent of estate)	8	9	5
Recovery rate (cents on the dollar)	25.8	24.5	47

Source: World Bank (2011a).

One of the critical issues identified by stakeholders in all the three countries was the inadequate access to institutional credit. In this context, Nepal ranked last among these three countries occupying the  $89^{th}$  position while Bangladesh and Sri Lanka both ranked at  $72^{nd}$ . The countries under consideration have particularly low value on the index on depth of credit information.

Trading across border is another important indicator affecting trade potentialities of countries, and in this respect Sri Lanka is ahead with the 72<sup>nd</sup> ranking, followed by Bangladesh with the 112<sup>th</sup> and Nepal, a landlocked country, with the 164<sup>th</sup> ranking, respectively. However, the rankings of Sri Lanka and Bangladesh change when they are viewed from the overall trade facilitation services perspective, as reflected in the Logistics Performance Index (LPI)<sup>6</sup> (Table 5). Besides the availability of infrastructure, it also takes into consideration the quality and cost of logistics services.

<sup>&</sup>lt;sup>6</sup> Logistics Performance Index (LPI) reflects the overall perception of a country's logistics environment based on 1,000 responses to a survey of logistics performances evaluated on six key criteria – efficiency of customs clearance, quality of transport and transport related infrastructure, ease of arranging competitively priced shipments, quality of logistics services and tracking ability and timeliness of shipments. It thus combines availability of physical infrastructure with their quality and cost.

From this perspective, Bangladesh tops the list followed by Sri Lanka and Nepal, which is understandable with both countries having geographical disadvantages, one as an island country and another as a landlocked country. Nepal comes at the top in the ranking among the three countries in one of its sub-components on domestic transportation costs as a proxy in the diesel price.

Table 5: Logistics Performance Index (LPI) and some of its sub-components related to infrastructures (2006-2009)

	Overall	Quality of transport and IT infra- structures	Logistics competence	Domestic trans- portation costs	Inter- national transport costs
South Asia (trade weighted average)	2.99 (61.1)	2.74 (62.4)	2.96 (57.7)	3.06 (50.6)	3.06 (53.5)
Bangladesh	2.74 (80 <sup>th</sup> )	2.49 (74th)	2.44 (100 <sup>th</sup> )	3.08 (46 <sup>th</sup> )	2.99 (62 <sup>nd</sup> )
Sri Lanka	2.29 (142 <sup>nd</sup> )	1.88 (145 <sup>th</sup> )	2.09 (149th)	3.08 (46 <sup>th</sup> )	2.48 (123 <sup>rd</sup> )
Nepal	2.20 (155 <sup>th</sup> )	1.80 (151st)	2.07 (151st)	3.25 (20 <sup>th</sup> )	2.21 (150 <sup>th</sup> )

Source: World Bank (2010).

*Note:* This survey covered 211 countries (1 to 5, best). Figures within brackets indicate the country rankings.

Finally, it is noteworthy that the three countries have relatively high rankings in some key factors of the ease of doing business. These include protecting investors for Bangladesh (20<sup>th</sup>), registering property for Nepal (25<sup>th</sup>) and closing a business for Sri Lanka (43<sup>rd</sup>).

# 2.1.2. TRADE AND INVESTMENT SITUATION

As stated earlier, trade and investment have been the driving forces for steady economic growth in most of South Asian countries. These countries, typically, have increased export competitiveness and have attracted large inflows of FDI, creating better business opportunities for local SMEs and additional employment.

Table 6 presents information on the top 10 export goods of the three South Asian countries. The results of the main export goods indicate two types of export goods portfolios based on different levels of development and supply-side capacity of the countries. The two types of export goods portfolios include: (a) natural endowment driven export (e.g., agro-products and minerals); and (b) light manufacturing export (e.g., textiles, garments and footwear). Within this classification, Nepal belongs to the natural endowment driven export type, while Bangladesh and Sri Lanka are light manufacturing export type countries. It is noteworthy, however, that Sri Lanka has started exporting value added manufacturing goods, such as electronic equipments and parts as well as machineries, indicating its ongoing transition to an exporting country of advanced manufacturing goods.

Table 6: Top 10 export goods of the three South Asian countries by the two digits, 2010

Ranking	Bangladesh	Nepal	Sri Lanka
1	Articles of apparel, accessories, knit or crochet	Iron and steel	Articles of apparel, accessories, knit or crochet
2	Articles of apparel, accessories, not knit or crochet	Manmade filaments	Articles of apparel, accessories, not knit or crochet
3	Other made textile articles, sets, worn clothing, etc.	Carpets and other textile floor coverings	Coffee, tea, mate and spices
4	Fish, crustaceans, mollusks, aquatic invertebrates	Articles of apparel, accessories, not knit or crochet	Rubber and articles thereof
5	Vegetable textile fibres, paper yarn, woven fabric	Manmade staple fibres	Pearls, precious stones, metals, coins, etc.
6	Footwear, gaiters and the like, parts thereof	Edible vegetables and certain roots and tubers	Electrical, electronic equipment
7	Raw hides and skins (other than furskins) and leather	Other made textile articles, sets, worn clothing etc.	Fish, crustaceans, molluscs, aquatic invertebrates
8	Headgear and parts thereof	Coffee, tea, mate and spices	Mineral fuels, oils, distillation products, etc.
9	Mineral fuels, oil, distillation products, etc.	Articles of iron or steel	Milling products, malt, starches, inulin, wheat gluten
10	Tobacco and manufactured tobacco substitutes	Copper and articles thereof	Vegetable textile fibres, paper yarn, woven fabric

Source: ITC (2010).

One interesting phenomenon that deserves further enquiry is the level of FDI inflows in the three countries. FDI is a critical force in the promotion of global and regional integration of economies and industrial activities (Dhungana 2009). Although Bangladesh and Nepal stand close to each other in terms of global rankings of competitiveness and business enabling conditions, Bangladesh has over-performed Nepal (and even Sri Lanka recently) in attracting FDI. One visible reason for this phenomenon is the security factor, as the political volatility in Nepal is creating the unsafe environment and leading to lagging investment and slow policy reforms, particularly related to the manufacturing sector. Bangladesh has lately been experiencing an encouraging inflow of FDI resulting in a FDI inward stock level exceeding that of Sri Lanka. Sri Lanka surpasses the other two countries in the FDI inward stock level as a percentage of GDP (see table 7 for details).

Table 7: Inflow and stock of inward foreign direct investment (FDI) (in million US dollars)

	Ва	nglade	sh		Nepal		9	Sri Lank	a
	2008	2009	2010	2008	2009	2010	2008	2009	2010
FDI inflows	1 086	700	913	1	39	39	752	404	478
FDI inflows as per cent of gross fixed capital									
formation	5.6	3.2	3.7	0	1.4	1.0	7.3	4.3	4.0
	1990	2000	2010	1990	2000	2010	1990	2000	2010
FDI inward stock	478	2 162	6 072	12	72	205	679	1 596	5 008
FDI inward stock as per cent of GDP	1.7	4.8	6.1	0.3	1.3	1.3	8.3	9.5	9.9

Source: UNCTAD (2011).

### 2.1.3. STATUS OF THE SME SECTOR

Finally, the status of the SME sector in the three South Asian countries is briefly reviewed. Table 8 summarizes operational definitions of SMEs used in the three countries. Researchers generally used these SME definitions for commercial entities with less than 100 employees in Bangladesh, less than 200 employees in Nepal and less than 150 employees in Sri Lanka, although the countries also set such definitions based on the size of investment. The definitions of what constitutes an SME vary quite widely from country to country in Asia and the Pacific (ESCAP 2009b). Both the number of employees and the size of investment are mainly used for such national definitions, and some countries also set separate definitions among different SME segments, such as manufacturing and services. Developing countries in Asia and the Pacific typically define SMEs, including micro enterprises, as commercial entities with less than 100-200 employees, which is in line with the definitions adopted in Bangladesh, Nepal and Sri Lanka.

Table 8: Operational definitions of SMEs in literature

Bangladesh	Nepal	Sri Lanka
Less than 100 employees	Less than 200 employees	Less than 150 employees

Sources: APO (2007); CDR (2006).

Note: Micro enterprises are included.

Research literatures, which aim to compare the status of the SME sector among various countries, mainly use the number of employees to define SMEs to avoid cumbersome calculation for foreign exchange rates among different currencies (cf., AAMO 2007).

It is, however, useful to distinguish between micro enterprises operating in the informal sector and small enterprises in the formal sector – particularly in the context of their access to financing. Microcredit programmes often address the collateral free credit needs of micro enterprises in the informal sector, while small enterprises without the adequate collateral base are the ones suffering from the limited access to collateral free credit, as many financial programmes facilitating access to credit through commercial banks have been unsuccessful because of high operation costs (i.e., high transaction costs) dealing with a large number of small enterprises.

Over the years, SMEs have made significant contributions to the economic development of Asia and the Pacific countries, including Bangladesh, Nepal, and Sri Lanka (AAMO 2007). The SME sector in developing countries of Asia and the Pacific generally:

- (a) Makes up more than 90 per cent of all enterprises;
- (b) Provides over 60 per cent of jobs in the private sector;
- (c) Generates over 30-40 per cent of total employment;
- (d) Contributes approximately 50 per cent of sales or value added; and
- (e) Generates approximately 30 per cent of total direct exports.

Table 9 illustrates economic contribution of the SME sector in Bangladesh, Nepal and Sri Lanka. SMEs dominated the business community making up more than 95 per cent of all enterprises in the three countries. Also, SMEs created the majority of employment opportunities with more than 80 per cent of private sector jobs in both Bangladesh and Nepal, while 56 per cent of employment depended on SMEs in Sri Lanka. SMEs percentage share in GDP, value added and export in the total output in these countries were also significant.

Table 9: Contributions of SMEs (2001-2003)

SMEs' Share (per cent)	Bangladesh	Nepal	Sri Lanka
Total number of enterprises	98	95	96
Total employment	82	85	56
GDP/Value Added/Export	5 per cent of GDP	90 per cent of export	20 per cent of value added

Sources: AAMO (2007); APO (2007); CDR (2006).

# 2.2. Synthesis of country studies with a synopsis of main findings

As the project's objective was to identify potential export products and conduct thorough studies on prospects for integration into the value chain process, ESCAP had established regular contacts with the Governments in participating countries. National steering committees were established with representatives of producers, exporters, government officials and business associations members. Senior government officials chaired the steering committees and acted as focal points. National research teams,

coming from leading research institutions, were formed to conduct national studies in the participating countries. Products for national study projects were selected on the basis of the following criteria:

- (a) Export potential;
- (b) Value added:
- (c) Job creation potential;
- (d) Support function in other industrial sectors;
- (e) Level of maturity;
- (f) Impact on gender empowerment;
- (g) Supply-side capacity (e.g., product development and international standards and certificates);
- (h) Strategic geographical focus;
- (i) Environmental sustainability;
- (j) Government identified priority area; and
- (k) Government's need for a national action/business plan for future development.

The studies took note of the regional and international trade arrangements relevant to the products selected and the possibility of responding to constraints through appropriate reform measures.

After careful consideration and consultations with government officials and business associations, Bangladesh identified one product, while the other two countries chose two products each. Steering committee in each of the countries facilitated the process based on recommendations made by national research team. As a result, plastic industry product lines were selected in Bangladesh, while agro-industry (ginger and coffee) was chosen for Nepal. Industrial rubber products and electronic/electrics goods were identified for Sri Lanka.

During the preparation of the studies, a comprehensive review of existing government policies and programmes, as well as a review of earlier studies were undertaken. Documents on the products under consideration included the analysis of sectoral/product value chains and SWOT analysis for all three countries. Structured interviews and field visits were undertaken. Focus group discussions were also conducted with farmers and traders in Bangladesh and Nepal.

Draft studies were intensively discussed at national workshops organized in Colombo, Dhaka and Kathmandu attended by policymakers and private sector representatives, including product specific stakeholders. Subsequently, revised studies were presented at a subregional workshop held in Colombo with participation from representatives of the governments and the private sector from participating countries, and international organizations, such as ADB and UNIDO. The recommendations of the subregional workshop were incorporated into the final studies, particularly focusing on the programmes for further subregional actions. One of the major limitations of the

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Table 10: Comparison of three country studies on value chain analysis

	Bangladesh	leN Ne	Nepal	SriL	Sri Lanka
	Plastic products	Coffee	Ginger	Natural rubber and rubber products	Electronics
Product type	Finished industrial	Agro-processed – high quality coffee	Mostly raw and negligible in semi processed agricultural	Finished industrial	Parts and finished industrial
Market type	Domestic and export	Domestic and export	Export	Domestic and Export	Domestic and Export
Government policy	Not first priority product for export; lower custom duty on pharmaceutical grade plastic raw materials	Priority products for export included in Trade Policy 2009: interest subsidy and subsidy on the cost of machinery equipments	Priority products for export included in Trade Policy 2009: subsidy on the cost of machinery equipments	No export restrictions and licensing requirements	Promotion of more diversified export oriented industries
Sources of raw materials	Domestic and imported	Domestic	Domestic	Not applicable for raw rubber. For rubber products both domestic and imported	Mainly import. Support to global value chain in the electronic industry under contract arrangement
Major raw materials	Granules and additives	Suitable land area, seeds and manures	Suitable land area, seeds and manures	Seed and fertilizer	Electronic components, plastic enclosures, metal fabricators and chemicals
Sources of machinery	Largely imported (first and second hands); some domestic moulds; use of semi automated injection and blow machines; automated ones in the large factories.	Not applicable	Not applicable		Plant and machinery all imported
Production level (MT)	12,761 MT (2007/2008)	270 MT (dry cherry) (2008)	16,1171 MT (2008)	129,243 MT (2008)	

Table 10: (continued)

	Bangladesh	Ne	Nepal	SriL	Sri Lanka
	Plastic products	Coffee	Ginger	Natural rubber and rubber products	Electronics
Production level (in US\$)	714 million for domestic market and 234 million for the export market (2006/2007)				
Growth rate of production (MT)	14.4 per cent	Started from low base	From 865,000 MT in 1998 to 1,387,000 in 2007	36 per cent (2004 -2008)	
Growth rate of production (US\$)	10.0 per cent	Started from low base			
No. of manufacturing units/producers	About 3,000 units	Farming house holds involved: 750 coffee growers' groups	Farming house holds involved; farmers not so well organized; only few districts having farmers' groups	529 manufacturers	171 units involved in export of electronics
No. of employees	One to two million people	20,000 farmers affiliated with Federation (460,000 up to the level of farmers)	009'99	200,000 with 34,000 directly in the industry.	10,000 workers in exporting manufacturing units
Type of labour force	Unskilled and semi skilled: some in-house trained in large factories	Unskilled	Unskilled	Unskilled and skilled	Skilled
Sales in domestic market (US\$)	714 million	35 per cent of production sold in domestic market	40 per cent sold in domestic market	62 per cent of natural rubber used in manufacturing industry	

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# Table 10: (continued)

	Bangladesh	Ne	Nepal	SriL	Sri Lanka
	Plastic products	Coffee	Ginger	Natural rubber and rubber products	Electronics
Sales in export market (US\$)	234 million by large manufacturers only; SMEs for domestic market only	65 per cent of production sold in export market; 112,000 kg valued at NRs. 107 million	Fourth largest exporting county in the world; export to India amounting to NRs. 403 million in 2008/2009	USD 543 million in 2008; 38 per cent of natural rubber products exported in raw form	USD 48.9 million; mainly in the form of components to the branded products abroad
Major export market (countries)	China, India, United States, United Kingdom, United Arab Emirates, Germany, Malaysia	Japan, Germany, Canada, some to United States and United Kingdom.	India	Pakistan, European Union, India, Japan, United States, Hong Kong, China	To major electronic hubs of the world
Major export market in SAARC countries	India, Sri Lanka, Nepal		India	Pakistan and India	
Any preferential treatment?	O <sub>N</sub>		Preferential treatment in India; somewhat less in Pakistan; duty free access in other countries.		
Production process	Imported granules and additives     Collection and recycled waste materials     Moulding – injection, extrusion and blow Moulds – locally produced (of low quality) and imported (of better quality)     Polishing of finished products	Planting, growing and harvesting     Picking cherry     Initial processing, or wet processing, roasting, grinding and packaging     Export or distribution in domestic market	<ul> <li>Planting and harvesting</li> <li>Cleaning ginger</li> <li>Storing without sorting and grading for quality</li> <li>Grading done at the district level</li> <li>Collection in Nepal.</li> <li>Wholesales and retail sales in India</li> </ul>	Plantation and collection of field latex and field coagulum     Conversion to raw rubber and concentrated latex by rubber manufacturers/ compound manufacturers	Component     manufacturing for the     branded products

Table 10: (continued)

		Bangladesh		Nepal	pal			Sri Lanka	anka
		Plastic products		Coffee		Ginger	Natu	Natural rubber and rubber products	Electronics
Marketing linkages	• • •	Makes products for contractor under contractual arrangement Obtains raw materials also from contractor Sales and marketing department under own account production Virgin resin importers organized into one association	• • •	Supplied to intermediary for export Shipping to importing countries Importers pass the beans to roasters for retail sales	•	Local traders collect and transfer to district level traders and wholesalers Link to terminal market of India through commission agents	Domest agents/ Exports wholese wholese auction internat operatif country	Domestic sale through agents/dealers Exports through wholesalers Export sale by auctioning International brands operating from the country	Access to international market through contract manufacturers
Major issues in production	• • • • •	Delay and hassles at the port while importing Inefficient services of pre-shipment in spection Poor collection and recycling methods No impact/load testing particularly for SMEs  No training facilities: only apprenticeship High turnover of skilled workforce	• • • •	Problems with quality humidity, black and broken beans, and impurities Ad-hoc and sporadic coffee cultivation without being quality conscious Unskilled and untrained labour force Absence of proper storage No institutional mechanism for technical support		Scientific method of cultivation not followed Inadequate postharvest management No good storage for fresh ginger even at the wholesale level No processing units Grading and modern packaging methods not practiced Low quality with high fiber content freditional method of drying not suitable for industrial uses	product develops development polymer and proc facilities Low aver rubber train	Lacks expertise on product and compound development No central rubber/ polymer based product and process testing facilities Low average days of rubber tapping due to rain	No own design and brand products     Need for development of die and mould design capability     Insufficient engineers and skilled labours

Table 10: (continued)

	Bangladesh	Nepal	al	Sril	Sri Lanka
	Plastic products	Coffee	Ginger	Natural rubber and rubber products	Electronics
	Life of the machine; inadequate servicing facilities for SMEs and semi-automated machine demanding technology upgradation     Low quality moulds for SMEs     Limited access to institutional credit for SMEs     Poor electricity supply     Poor gas supply     Poor gas supply     Onclear long term government policy preventing large scale investment	Inadequate access to institutional credit     Inadequate automation for pulping, washing and drying.	Farmers unaware of processing technology and secondary products of ginger     Market information not available to the farmers		
Major issues in marketing and export for SMEs	No branded products and poor finishing from SMEs.     No standards to sort plastic wastes; thus, no export potential     Poor quality recycled raw materials     Large producers leading the market	Problem with quality certification and organic certificate for each of the production steps, high cost of certification abroad.     No market intelligence     No quality and market regulations – no cup testing laboratory	<ul> <li>Inadequate quarantine centres</li> <li>Imposition of sanitary standards in India</li> <li>High commission charges by the middlemen due to inadequate market intelligence with the traders</li> </ul>	Potential for new rubber products	Low value addition as the marketing dominated by brand owners and/or technology leaders

Table 10: (continued)

	Bangladesh	Nepal	pal	Sri Lanka	anka
	Plastic products	Coffee	Ginger	Natural rubber and rubber products	Electronics
	SMEs having less bargaining power against wholesalers     Inadequate laboratory facilities and skilled labour with testing authority     National budget 2009/10 increased import taxes on intermediate products to 25 per cent; custom duty increased and VAT exemption lifted out for plastic	<ul> <li>Extra transportation cost for export</li> <li>Branding; barriers for entry</li> </ul>			
Prospects for value added	<ul> <li>Improvement in recycling management and improved technology</li> <li>Need for improved mould making facilities and capacities</li> <li>Skilled workforce</li> </ul>	<ul> <li>Improved farming including intercropping</li> <li>Standardization of coffee, quality laboratory, certification agencies</li> <li>Exploring new markets</li> </ul>	<ul> <li>Training on farming system</li> <li>Product diversification</li> <li>Certification centre</li> <li>Establishment of new quarantine centres</li> </ul>	Use of rain guards for increasing tapping days     Training on new tapping technology	<ul> <li>Producing more components for electronics</li> <li>Establishing own brand</li> </ul>
Global/regional value chain discussed	Yes No	Yes Yes	Yes Yes	Yes No	Yes No
Any quantitative assessment?					

country studies was their use of secondary sources of information and, therefore, quantitative estimates of value added at every stage in processing and distribution chain could not be properly assessed, except in the Nepalese study on coffee and ginger. A brief summary of findings in the studies is presented in table 10.

Based on the respective outcomes in value chain analyses, national action plans were designed with the goal to improve SME business environments and eventually facilitate the access of SMEs to regional and global markets. Brief summaries of national action plans are presented below.

# 2.2.1. THE PLASTICS INDUSTRY IN BANGLADESH

Bangladesh attaches significant importance to development of plastic products and aims to meet the growing demand of both domestic and international markets. The country has formulated a vision of achieving a market size of \$2 billion by 2015 and \$4 billion by 2020 from the level of approximately \$1 billion in 2008. In order to achieve these targets and create a value chain in plastic products in Bangladesh, an action plan is proposed to improve the performance at a firm, industry and sector levels. The action plan should include the following activities:

- Establishing national brands;
- Collaborating with the Bangladesh University of Engineering and Technology for technological support for quality testing and technical consulting (as a short-term measure). Creating separate institutional arrangement (in the long run);
- Providing business counseling by the SME Foundation and the Bangladesh Small and Cottage Industries Corporation (BSCIC) with separate specialized units for plastic products;
- Conducting feasibility study of high quality local mould-making centres two such centres should be immediately established;
- Equipping Bangladesh Standards and Testing Institution with modern amenities for proper standardization measures and strengthening its facilities to outreach the SMEs involved in the plastic sector;
- Simplifying different government processes including certification process;
- Setting-up training facilities for developing human resources in plastic manufacturing, plastic engineering, heat treatment, mould making and design, plastic waste management and recycling;
- Enquiring into the possibility of exporting degradable plastic products to the United States of America and the European Union;
- Supplying new industrial high value added plastic components for computers, electronics, machineries and automobiles;
- Including the plastics sector in the highly prioritized export development sector list by Export Promotion Bureau to ensure easier term loans, income tax holidays and other incentives;

- Developing provision on collateral free loans by according priority to the plastics industry; and
- Conducting awareness campaigns for promoting better collection of waste materials/waste management – piloting in Dhaka and Chittagong areas.

# 2.2.2. THE AGRO INDUSTRY (COFFEE AND GINGER PRODUCTS) IN NEPAL

In order to address some of the major and critical problems in promoting value added in coffee and ginger production and trade, especially export trade in Nepal, several stakeholder actions are proposed at the national level. The action plan aims at reaching coffee production level at 3,000 MT and coffee export level at four per cent of total exports in Nepal in 10 years. Likewise, with ginger products, the aim is to make ginger export five per cent of Nepal's total export in 10 years by increasing production and diversifying the product and, thus, providing full time employment to 200,000 people in the rural areas. The action plan includes the following:

- Conducting research and development on both coffee and ginger products for improved farming system by establishing coffee and ginger resource centres;
- Conducting training of farmers on improved farming system, processing and storing, and on new appropriate technologies;
- Making small farmers aware of quality standards by developing and maintaining their skills;
- Introducing a certification system, including legal and institutional standards and establishing a national accreditation body for agro-products exploring new markets and meeting sanitary and phyto-sanitary standards;
- Strengthening organic certification system;
- Improving processing and storage system;
- Developing rural roads reaching coffee and ginger production centres;
- Encouraging contract and lease farming;
- Ensuring easy access to institutional credit; and
- Fostering auction market.

# 2.2.3. THE INDUSTRIAL RUBBER AND ELECTRONIC PRODUCTS SECTORS IN SRI LANKA

The industrial rubber sector in Sri Lanka sets a target of increasing supply of natural rubber by 50 per cent, increasing rubber export by 50 per cent and achieving rubber price sustainability by 2014. In order to achieve these targets, several measures are proposed:

- Increasing plantations in non-traditional cultivation areas and launching new inter-cropping programmes;
- Temporarily allowing the import of raw rubber to stabilize the supply for unmet local demand:

Coffee	Ginger
Implement Coffee Policy 2003.	Encourage and support exporting semi-processed and processed products.
Form Coffee Development Board.	Establish strategic alliance with ginger traders of the region and promote FDI in ginger processing.
Develop logo and brand name for Nepalese coffee.	Improve warehouse facilities at customs points.
Establish commercial nurseries.	Establish additional quarantine centres at customs points.
Support establishing cup testing laboratory.	Develop ginger collection and processing centres.
Reduce freight using Nepal-Bangladesh land route.	
Introduce new technology for pulping, drying, storage, and roasting.	
Develop preliminary processing platforms (warehouses).	
Introduce levy on export to fund research on coffee.	

- Introducing new tapping techniques improving timing, using mechanical devices and training unskilled tappers;
- Attracting FDI for high value latex based products;
- Promoting crepe rubber products (food and pharmaceutical grade products);
- Developing skilled workers for rubber production processing and manufacturing of rubber based products;
- Strengthening R and D facilities for innovation in rubber industry;
- Expanding present characterization and physical testing facilities at research institutions/universities and providing services to SMEs;
- Establishing a national accreditation body;
- Forming a central rubber recycling unit; and
- Encouraging long-term purchase agreements with importers from major importing countries

Sri Lanka aims at creating its own brands in electronic products by expanding its export markets to neighbouring countries, such as SAARC and ASEAN countries and achieving at least 0.1 per cent of the global market share (equivalent to \$2 billion) by 2020. For moving towards this direction the following actions are proposed:

- Attracting FDI for commencing production of basic raw materials (e.g., silicon, gallium, etc.), discrete semiconductors, integrated circuits, electronic components and/or consumer electronics;
- Promoting electronic technology parks;
- Preparing industry for environmental conservation (e.g., lead free soldering);
- Establishing Sri Lankan brands promoting design and manufacture of electronic components for niche markets;
- Establishing design service providers in electronic circuits, die, mould and rapid prototyping; and
- Promoting Sri Lanka as a suitable destination for own design manufacturing in addition to contract manufacturing.

# 2.3. Subregional Action Programme facilitating SMEs integration in global value chains and the lessons learned for development agencies

This section proposes a subregional action programme, which was designed based on critical areas for action identified by national studies and recommendation and through interactions in national and subregional workshops. Broadly, the programme is categorized as follows: (a) actions based on policy reforming and lobbying carrying no financial implications; (b) actions requiring considerable financial investment in capacity-building, planning, establishing certification/quarantine/accreditation bodies. The activities are outlined in the form of a matrix and are presented in table 12.

In addition, some specific activities under the subregional programme are proposed for immediate action by multilateral development bodies to include:

- Reviewing SMEs and activities for strengthening SMEs, recommending specific actions in relation to (a) enhancing collateral free access to institutional credit, (b) determining value added in products under consideration, (c) improving SMEs business environment, (d) providing business and innovation incubation services and (e) understanding SME trade facilitation and critical infrastructure needs;
- Establishing South Asian Accreditation Council;
- Establishing regional laboratory testing facilities, quarantine centres, and certification bodies;
- Strengthening market information dissemination and the use of ICT down to farmers' groups through the United Nations specialized regional centres;
- Training on die and mould making and promoting subregional cooperation between Sri Lanka and Bangladesh in the field of technology transfer through some regional arrangement;
- Promoting subregional trade in ginger and related products trade facilitation measures to enhance ginger trade in other South Asian countries:

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Table 12: Subregional action plan facilitating SMEs' integration in global value chains

Areas of	Bangladesh	Nepal	le	Sri Lanka	nka
intervention	Plastics	Coffee	Ginger	Rubber	Electronics
Policy	<ul> <li>Plastics to be included as high priority export product in the policy documents</li> <li>Collateral free access to institutional credit</li> </ul>	Collateral free access to institutional credit     Tax subsidy on the import of machinery	Collateral free access to institutional credit	Collateral free access to institutional credit	Policy recognition to provide state support to introducing and achieving brand image
Lobbying/ coordinating infrastructure development	Lobbying for providing efficient power generation		Lobbying for Nepal – Bangladesh land route	Lobbying for FDI for latex based products	<ul> <li>Lobbying for FDI for basic raw materials for electronics</li> <li>Promoting technology parks</li> </ul>
Capacity- building	Review of SME status to develop concrete proposal on strengthening SMEs, including entrepreneurial culture     Training on improved recycling management     Apprenticeship training to unskilled workers	Review of SME status to develop concrete proposal on strengthening SMEs, including entrepreneurial culture and business incubation     Training of farmers and workers in product	Review of SME status to develop concrete proposal on strengthening SMEs, including entrepreneurial culture and business incubation  Training of farmers	Review of SME status to develop concrete proposal on strengthening SMEs, including entrepreneurial culture and business incubation     Training of workers	Review of SME status to develop concrete proposal on strengthening SMEs, including entrepreneurial culture and business incubation

Table 12: (continued)

Areas of	Bangladesh	Nepal	Jal	Sri	Sri Lanka
intervention	Plastics	Coffee	Ginger	Rubber	Electronics
Standards/ certification/ accreditation centres/brand development	Strengthening BSTI     with quality testing     facilities	Introducingnational standards and certification system	<ul> <li>Additional quarantine centres at customs points</li> </ul>	<ul> <li>Establishing an accreditation body</li> <li>Expanding current facilities of physical testing</li> </ul>	Planning action plan for obtaining own brand for electronic products
Improvement in production and marketing processes	<ul> <li>Establishing mould manufacturing centres</li> <li>Improving collection and management of waste materials</li> </ul>	<ul> <li>Improving processing and storage system</li> <li>Strengthening flow of production and market information</li> </ul>	<ul> <li>Improving warehouse facilities at customs points</li> <li>Strengthening flow of production and market information</li> </ul>		

- Training on improved recycling management for plastic products;
- Training on improved farming systems for coffee and ginger products;
- Training on improved tapping methods for rubber products;
- Strengthening/capacity-building of producers'/farmers' associations by organizing study tours and sharing of best practices; and,
- Establishing a South Asian centre for value chain development that could facilitate coordinating and follow-up activities among countries in the subregion.

In order to implement the subregional actions as suggested above, the following institutional arrangement were recommended:

# (i) SME/GVC working group for the programme (at the subregional level)

This group will consist of senior technical experts from countries on specific products to guide the overall direction of the activities of the subregional programme. ESCAP could function as a coordinating body and assist in providing technical assistance to the group.

# (ii) Steering committees for the subregional programme (at the country level)

A steering committee led by the focal Government agency with representatives from the private sector, trade promotion agencies and governmental and non-governmental agencies, including academia and research institutions, could be set up. It would guide the country's activities under subregional programme and serve as a follow-up with other governmental and non-governmental agencies concerned to include some of the actions identified in providing policy reforms and coordinating similar activities.

# (iii) Review of SMEs and activities for SME strengthening in the three countries

A quick review of SMEs could be made on a regular basis in each of the three countries to evaluate plans and policies regarding (a) enabling environment for SMEs' overall business development including the access to institutional credit and finding the ways to extending collateral free institutional loans, (b) fostering SME sector by providing business and innovation incubation services and (c) identifying critical training needs for enterprise development and value chain development.

### (iv) Establishing South Asian Accreditation Council

Access to global market depends on product certification process for ensuring product quality to the buyers. Certification requires highly skilled human resources and well equipped test laboratory facilities acceptable to importing countries. Providing such services in a cost effective manner and making the best use of regional resources would require establishing an accreditation council for South Asia, inviting all counties in the subregion. The proposal is a credible one and a feasibility study could be made in this respect.

### (v) Establishing laboratory testing facilities, quarantine centres and certification bodies

The availability of in-country testing of export consignments for the required level of quality and sanitary standards for agricultural products would greatly facilitate and reduce the cost of exports. So, a feasibility study on establishing such facilities at the regional level could be made to assess their eventual effects.

# (vi) Strengthening market information dissemination and the use of ICT

The system would provide market information to different actors in the value chain process down to farmers or raw material suppliers so that their awareness level on the quality aspects, timeliness of supply and negotiation strength can be significantly enhanced. It could be achieved through effective use of ICT and, wherever possible, should be coordinated with similar efforts by other agencies. Training would be one important component of this programme, particularly on ICT use in information management. In order to undertake such regional programme, partnerships with private sector businesses and industry associations in countries would be helpful.

### (vii) Establishing a South Asian centre for value chain development

This centre could be responsible for (a) carrying out research on value chain development in South Asian countries, (b) networking the institutions of South Asian countries involved in the promotion of value chains and (c) following-up and lobbying respective Governments and other national agencies to implement agreed upon actions. The centre could be stationed in one of the three capital cities. Its establishment would be coordinated by ESCAP and the support is expected from various other development partners. The centre could work under one of the UN regional bodies, preferably under Asia-Pacific Centre for Transfer of Technology (APCTT).

# The lessons learned for development agencies

With concrete action plans prepared, where multilateral development and donor agencies could play a significant coordinating and supporting role, there are a few lessons that could be learned for these agencies, particularly important for South Asia. These lessons should be kept in mind in order to provide better and more coherent technical assistance, regardless of the implementation level, subregional or national.

First, there seems to be a commonly agreed approach for SME development, covering the six key success factors, such as policy and regulatory framework; infrastructures; entrepreneurship; access to finance; technology; and business development services. However, such a comprehensive approach has not been fully adhered to among the development agencies and donors. This has resulted in scattered activities in various areas/sectors and the resulting lack of coordination among donors' activities has produced limited success.

Second, collaboration among development agencies has been weak and should be enhanced while developing better coordinated project supporting programmes in most countries in the subregion. For example in Bangladesh, Katalyst<sup>8</sup> and BICF<sup>9</sup> are large-scale, cost-sharing programmes supported by development agencies, which typically promote enabling business environment, access to finance and direct support to individual enterprises' business development. The joint programmes help the Governments, producers' associations and individual enterprises by providing business development services and financing. Some of them also adopt sectoral development and value chain approaches. A large joint programme also tends to establish an independent secretariat to manage its activities and funds, which sometimes make the projects somewhat isolated from other national stakeholders

Third, direct support of enterprises and priority areas through SME association involvement could be initiated on an experimental basis.

Fourth, entrepreneurial culture has been recognized as one of the key factors for SMEs growth and competitiveness enhancement; however, traditional technical assistance has overlooked this issue. A comprehensive "entrepreneurship training programme," on subregional or national level, should be launched with a focus on rural areas. Special preferences could be given to women and youth entrepreneurs to further their development.

Fifth, conventional technical assistance to SMEs was less focused on technology development and adaptation, and thus SMEs are weak on technical issues and practical solutions.

Sixth, assistance to business development services should be provided for SME strengthening, particularly in offering business consultancy services.

Seventh, donors mainly focus on agro-industry and light-industry. It may be desirable to explore opportunities for manufacturing of other resource-based SME development.

Finally, the usefulness of the value chain approach, including cluster development, has been attracting more attention. However, in the past value chain activities were typically focused on domestic issues. Presently, more attention should be paid to the linkages with existing trade and a FDI-driven development strategy.

<sup>&</sup>lt;sup>8</sup> Katalyst, which has been funded by SDC, DFID and SIDA, is one of the largest SME development projects in Bangladesh. It started in 2002 and aims at pro-poor growth through market-led SME development. It has worked with more than 30 manufacturing and agriculture sectors in Bangladesh, providing technical assistance in the areas of institutional capacity building, business plan development, technology transfer and business development services. It also works with business associations to improve the enabling environment for businesses (Katalyst 2010).

<sup>&</sup>lt;sup>9</sup> Bangladesh Investment Climate Fund (BICF) was jointly established by DFID, EC and IFC in 2006, aiming to assist the Government of Bangladesh to promote pro-poor growth for increasing income and employment through improving business environment. BICF has designed and implemented programmes to institute more business friendly policies, laws and regulations (Embassy of Japan and GTZ 2006).

The subregional action plan provides a non-exhaustive number of concrete steps promoting SMEs integration in global value chains. Governments and multilateral development and donor agencies should provide increased assistance based on the lessons learned to enable SMEs to enter and benefit from global and regional value chains.