Effectiveness of HRD for Developing SMEs in South Asia

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Acronyms

ATVI  Afghan Technical Vocational Institute
AMA  Afghanistan Microfinance Association
ADB  Asian Development Bank
BTEB Bangladesh Technical Education Board
BTEB Bangladesh Technical Education Board
CSR  Corporate Social Responsibility
CRBs Co-operative Rural Banks
CTEVT Council for Technical Education and Vocational Training
DFID Department for International Development
DTE Department of Technical Education
EEA European Economic Area
EU European Union
FDI Foreign Direct Investment
FINGOs Financial Intermediary NGOs
GDP Gross Domestic Product
GOB Government of Bangladesh
GOP Government of Pakistan
HRD Human Resource Development
HRM Human Resource Management
HR Human Resource
HEC Higher Education Commission
IFC International Finance Corporation
ILO International Labour Organization
ISCs Industry Skill Committees
IAG Industry Advisory Groups
ICG/MIDAS Int’l Consultancy Group/ Micro Industries Dev. Assistance and Services
IT Information Technology
LSBs Licensed Specialized Banks
MDG Millennium Development Goal
MOE Ministry of Education
MISFA Microfinance Investment Support Facility for Afghanistan
MFDBs Microfinance Development Banks
MFPs Microfinance Providers
MFIs Micro-Financial Institutions
NPSD National Policy on Skill Development
NSDC National Skill Development Corporation
NVQF National Vocational Qualification Framework
NAVTEC National Vocational and Technical Education Commission
NGO Nongovernmental Organization
NAST Nepal Academy of Science and Technology
OECD Organization for Economic Corporation and Development
PMN Pakistan Microfinance Network
PDR Pakistan Development Review
PVTC Punjab Vocational Training Council
Effectiveness of Human Resource for Developing SMEs in South Asia

PPAF  Pakistan Poverty Alleviation Fund
R & D  Research and Development
RPL  Recognition of Prior Learning
RSP  Rural Support Programs
RDBs  Regional Development Banks
SME  Small and Medium Enterprises
SMEDA  Small and Medium Enterprise Development Authority
SAARC  South Asia Association for Regional Cooperation
SSA  Sarva Shiksha Abhiyan
STP  Science and Technology Policies
S&T  Science and Technology
SIDBI  Small Industries Development Bank of India
SHGs  Self Help Groups
SACCOs  Savings and Credit Cooperatives
SFCL  Small Farmers Cooperative Limited
SBSs  Samurdhi Bank Societies
TVET  Technical and Vocational Education and Training
TCCSs  Thrift and Credit Co-operative Societies
TFP  Total Factor Productivity
UGC  University Grants Commission
UNCTAD  United Nations Conference on Trade and Development
UNDP  United Nations Development Program
UNESCO  United Nations Educational, Scientific and Cultural Organization
VET  Vocational Education and Training
WDI  World Development Indicators
WEF  World Economic Forum
1. Introduction

The Small and Medium Enterprises (SMEs) sector plays a pivotal role towards economic development regardless of an economy’s size. It creates employment, increases production base and provides support to large scale enterprises. Economic revival after the East Asian crises of 1990’s and global financial crisis of 2009 has forced the policy makers to look towards stronger domestic markets being led by SMEs. The smaller firms have responded well to the deregulation and liberalization of trade and investment regimes.

The global economy in the past two decades has experienced changes that originate from new definitions of innovation and entrepreneurship. This is witnessed in the form of product and service quality, technology proliferation, deregulated economic structures and the growing competition among countries. This has led the productive firms and economies to revamp strategies in line with the concepts of endogenous growth models. This in turn implied a new paradigm for SMEs in which they have to force themselves to be more productive and efficient.

A survey by the Organization for Economic Corporation and Development (OECD, 2004) revealed that about 90 percent of total enterprises in OECD are SMEs. Another report, based on 670 Asian organizations concludes that one-half of the SMEs expect to grow significantly in future as they can react and innovate more quickly and have closer customer relationships (Newberry, 2006).

The SME sector plays the role of absorbing more labour-intensive production processes. Therefore, they can be seen to be contributing more towards the socio-economic development through reduction in unemployment. For instance, Philippines has shown significant strides for the last two decades and SMEs represent 99.6 percent of all businesses with total labor force employment contribution at 69.9 percent. Moreover, it accounted for 32 percent of the country's Gross Domestic Product (GDP) \(^1\). It is an established fact that SMEs have led to a transition of agriculture-led economies towards industry and services for an environment where small and large firms are integrated and attract greater foreign investment and ensure stable terms of trade. This trend can be witnessed in China, Korea, Singapore and other industrialized economies.

In the European Union (EU), SME sector employs two thirds of total labour force (Shipton, 2006). In EU’s case the key factor towards employment in SMEs has been loyalty and motivation of employee’s available training opportunities and skill development (Bhattacharyya, 2006). The SMEs have more recently adopted sophisticated Human Resource Development (HRD) strategies for better performance in the medium to long term (Hayton, 2003). The human capital and knowledge as intangible assets for SMEs are becoming increasingly important in taking future investment decisions (De Winne, 2003). According to the diagnostic approach adopted by Milkovich and Boudreau (2000), the HRD process is divided into four phases:

- Clarity of firm objectives
- Evaluating the external conditions
- Choosing training regimes having long term outcomes
- Evaluating the outcomes regularly

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\(^{1}\) Leano, 2006
The early efforts in HRD focused more on promoting behaviors designed to deliver firm strategies and were mainly addressing the relationship between employee behavior and company strategy (Snell, 2001 and Schuler and Jackson, 1989). However, firms have now shifted towards focusing more on training aspect and innovative skills for remaining competitive in the market, suggesting the fact that as the competitive conditions change, firms evaluate their strategies to strengthen their present and future positions. The increased competition has changed the measures for adopting future HRD strategies and the key changes rest primarily on\(^2\):

- Determination and work analysis
- Prior planning of work places and recruiting policies
- Selection procedures
- Direction and updated education of new employees
- Evaluation of the pre and post efficiency/output
- Demand driven knowledge absorption
- Retaining of employees through incentives and benefits
- Effective communication skills with employees
- Education and capacity building of existing and new employees
- Loyalty and dedication of the employees

The owners of the SMEs always aspire for efficient and organized enterprise which achieves high rating in terms of profits but not necessarily compliments the employees with high level of motivation under the recent themes in management factors such as reward and motivation plans, acquisition of new technology and skill development are cornerstones for realizing the firm objectives. In addition to this, the newly created value of intellectual capital/assets, skills, creativity and information provide an edge to firm’s competiveness in the market. This century will focus more on human element, since quality of employees has been recognized as the most important tool for the long term sustainability of an enterprise.

The demand for the multifaceted talent is increasingly viewed as an area of interest for public policy researchers and practitioners. Home grown research in attracting and managing talent is important as SMEs particularly in developing countries lack capabilities and infrastructure to make the most of their human capabilities and as a consequence tend to have lower levels of average productivity of labour.

In the face of lifelong learning needs, training of individuals working in firms is a serious need for any emerging industry. In the South Asian SME sector, factors such as weak in-house training, lack of in-house capabilities for formalized learning, limited knowledge about external training opportunities, desire for short-term results, budget constraints, limited number of trainees, and absence of local peer groups are recognized as the main hindrances.

Across the South Asian Association for Regional Cooperation (SAARC) region, human resource base still needs a lot of augmentation and technical and financial assistance from both governments and foreign development partners. The human development index has been lagging

\(^2\) Ceranic and Popovic, 2006
on the lower side and needs further improvement in the form of skill development and overall knowledge base (Figure 3.1).

**Figure 3.1: Human Development Index 2010**

![Human Development Index 2010](image)

Source: Human Development Report, 2010
Note: Higher value implies poor performance

According to Ease of Doing Business Report 2009, Pakistan and Maldives performed better than other SAARC Member Countries in terms of business competitiveness indicators (Table 3.1). Any improvement in this rank will imply further reduction in barriers to entry and exit, which is a must for SME growth and ultimate absorption of growing labor force in South Asia, therefore, need for greater quantity and quality of human resources.

**Table 3.1: Ease of Doing Business in SAARC Region**

<table>
<thead>
<tr>
<th>Country</th>
<th>Ease of doing business index (1=most business-friendly regulations)</th>
<th>Rigidity of employment index (0=less rigid)</th>
<th>Time required to start a business (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
<td>2008</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>168</td>
<td>160</td>
<td>20</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>115</td>
<td>119</td>
<td>28</td>
</tr>
<tr>
<td>Bhutan</td>
<td>124</td>
<td>126</td>
<td>7</td>
</tr>
<tr>
<td>India</td>
<td>132</td>
<td>133</td>
<td>30</td>
</tr>
<tr>
<td>Maldives</td>
<td>71</td>
<td>87</td>
<td>0</td>
</tr>
<tr>
<td>Nepal</td>
<td>123</td>
<td>123</td>
<td>42</td>
</tr>
<tr>
<td>Pakistan</td>
<td>85</td>
<td>85</td>
<td>43</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>97</td>
<td>105</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010
2. **Socio-Economic Overview of the SAARC Region**

Some key HRD indicators in the SAARC Member States are given in Table 4.1. Some of the member states performed weakly in terms of education and health. Overall process of globalization has brought new ideas in terms of training, technology and cost minimization, which have the potential to translate into wealth gains. Improved HDI builds the confidence of foreign investors in turn bringing much needed ideas and technology for improving the knowledge base. Low HRD has repercussions in the form of low productivity, fall in exports, declining foreign exchange reserves, and an overall inefficient utilization of resources.

<table>
<thead>
<tr>
<th>Countries</th>
<th>HDI[^3]</th>
<th>Life Expectancy at Birth</th>
<th>Mean Years of Schooling</th>
<th>Expected Years of Schooling</th>
<th>GNI per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.469</td>
<td>66.9</td>
<td>4.8</td>
<td>8.1</td>
<td>1,587</td>
</tr>
<tr>
<td>Bhutan</td>
<td>..</td>
<td>66.8</td>
<td>..</td>
<td>11.3</td>
<td>5,607</td>
</tr>
<tr>
<td>India</td>
<td>0.519</td>
<td>64.4</td>
<td>4.4</td>
<td>10.3</td>
<td>3,337</td>
</tr>
<tr>
<td>Nepal</td>
<td>0.428</td>
<td>67.5</td>
<td>3.2</td>
<td>8.8</td>
<td>1,201</td>
</tr>
<tr>
<td>Maldives</td>
<td>0.602</td>
<td>72.3</td>
<td>4.7</td>
<td>12.4</td>
<td>5,408</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.49</td>
<td>67.2</td>
<td>4.9</td>
<td>6.8</td>
<td>2,678</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.658</td>
<td>74.4</td>
<td>8.2</td>
<td>12</td>
<td>4,886</td>
</tr>
</tbody>
</table>

Source: Human Development Report, 2010

HRD is an essential ingredient to enhance the productivity of SMEs. Developed HR benefits the foreign orientation of SMEs in the following ways:

- High quality HR attracts Foreign Direct Investment (FDI) into the country. The latest and efficient technology and expertise are injected which leads to rapid economic growth
- Provision of better training or development of vocational skills to individuals may result in increasing entrepreneurial activity due to the creative process. The lack of creativity failure to replicate suitable foreign ideas hampers firm development in the long run
- A workforce having orientation with foreign practices is well aware of its rights and is better able to protect against human rights and workplace violations
- A globally integrated workforce earns competitive wages which at micro level add to their well being and at macro level helps in overall poverty reduction.

[^3]: Measures poverty, literacy, education and life expectancy
SAARC region is home to one of the largest stock of human capital (Figure 4.1). The labor force participation rates in the SAARC region clearly suggest that Nepal and Bangladesh have highest participation rates in the region and other countries are also not far behind. A higher rate however, does not necessarily imply more productive labor force. The past and current policies have been geared towards increasing the stock of trained labor force without realizing the skill development, creativity and innovation capabilities of employees which is a crucial factor in determining the long term benefits in an era of global competition (Table 2.2).

Table 2.2: SAARC Labor Force Participation Rates (%)  

<table>
<thead>
<tr>
<th>Years</th>
<th>Bangladesh</th>
<th>Bhutan</th>
<th>India</th>
<th>Maldives</th>
<th>Nepal</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>70.6</td>
<td>54.7</td>
<td>58.4</td>
<td>54.7</td>
<td>70.4</td>
<td>51.3</td>
<td>56.5</td>
</tr>
<tr>
<td>2001</td>
<td>70.7</td>
<td>55.9</td>
<td>58.3</td>
<td>56.2</td>
<td>70.6</td>
<td>51.1</td>
<td>56.3</td>
</tr>
<tr>
<td>2002</td>
<td>70.8</td>
<td>57.3</td>
<td>58.1</td>
<td>57.9</td>
<td>70.6</td>
<td>51.0</td>
<td>56.1</td>
</tr>
<tr>
<td>2003</td>
<td>70.9</td>
<td>58.6</td>
<td>58.0</td>
<td>59.6</td>
<td>70.7</td>
<td>51.5</td>
<td>56.0</td>
</tr>
<tr>
<td>2004</td>
<td>70.9</td>
<td>59.7</td>
<td>57.8</td>
<td>61.3</td>
<td>70.8</td>
<td>51.9</td>
<td>55.6</td>
</tr>
<tr>
<td>2005</td>
<td>70.9</td>
<td>60.5</td>
<td>57.8</td>
<td>63.1</td>
<td>70.9</td>
<td>52.9</td>
<td>55.2</td>
</tr>
<tr>
<td>2006</td>
<td>70.8</td>
<td>60.9</td>
<td>57.8</td>
<td>64.8</td>
<td>71.1</td>
<td>54.0</td>
<td>56.1</td>
</tr>
<tr>
<td>2007</td>
<td>70.7</td>
<td>61.0</td>
<td>57.8</td>
<td>65.2</td>
<td>71.2</td>
<td>53.7</td>
<td>55.0</td>
</tr>
<tr>
<td>2008</td>
<td>70.6</td>
<td>60.9</td>
<td>57.8</td>
<td>65.4</td>
<td>71.5</td>
<td>53.6</td>
<td>54.3</td>
</tr>
</tbody>
</table>

Table 2.3 shows the constraints in the way of sustained improvement in HRD. Overall South Asia’s percentage of formal training is 17 percent which is less by any global standards. Nepal and Pakistan rank the lowest. Sri Lanka has the highest proportion of firms offering formal training. The average number of permanent employees has been more than the temporary employees, therefore suggesting a strong need for in house HRD in the firms. South Asian firms have huge potential and require strong training attitude towards its employees to remain globally competitive. The fact that low percentage of firms identified labour laws as a constraint is also
reflective of these entities remaining small or at times informal so that they do not come under the ambit of labour laws. Public policies must see SMEs graduating in to becoming large firms.

Table 2.3: Constraints to HRD

<table>
<thead>
<tr>
<th>Countries</th>
<th>% of Firms Offering Formal Training</th>
<th>Average no. of Temporary Employees</th>
<th>Average no. of Permanent Employees</th>
<th>% of Firms Identifying Labour Laws as Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>All countries</td>
<td>34.3</td>
<td>7.8</td>
<td>49.2</td>
<td>11.4</td>
</tr>
<tr>
<td>South Asia</td>
<td>16.8</td>
<td>13.3</td>
<td>93.5</td>
<td>10.7</td>
</tr>
<tr>
<td>Afghanistan (2008)</td>
<td>14.5</td>
<td>17.6</td>
<td>20.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Bangladesh (2007)</td>
<td>16.1</td>
<td>18.1</td>
<td>162.4</td>
<td>3.8</td>
</tr>
<tr>
<td>India (2006)</td>
<td>15.9</td>
<td>1.6</td>
<td>34.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Nepal (2009)</td>
<td>8.7</td>
<td>2.6</td>
<td>13.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Pakistan (2007)</td>
<td>6.7</td>
<td>11.5</td>
<td>32.4</td>
<td>6.3</td>
</tr>
<tr>
<td>Sri Lanka (2004)</td>
<td>32.5</td>
<td>33.1</td>
<td>367.9</td>
<td>25.5</td>
</tr>
<tr>
<td>Bhutan (2009)</td>
<td>23.2</td>
<td>8.7</td>
<td>23.5</td>
<td>16.4</td>
</tr>
</tbody>
</table>


Lee (2010) has shown that India and Pakistan lagged behind Asian economies in the Total Factor Productivity (TFP) growth during 1981 to 2007 (Figure 2.2). However, the more concerning aspect is that the gap between South Asia and rest of the emerging Asian economies will increase further in future. The total Asian exports during years 2005 to 2009 have increased from $ 132 to $219 billion. Although the trend is encouraging but this growth is matched by ever growing competition with other countries who are bringing latest technologies, more skilled work force, improved techniques of management and other capacity building programs for its employees.

Figure 2.2: Total Factor Productivity Across the South Asia

Source: Lee, Jong-Wha and Kiseok Hong, 2010

The gap between exports from South Asia and rest of the world (Figure 2.3) is still substantially large and can only be bridged if high quality HR can help SMEs in achieving the desired economies of scale.
The South Asian share in global exports is only 2 percent. The example of China and Korea in aligning HRD processes with evolving global markets is also worth mentioning.

**Socio-Economic Overview of Afghanistan**

Agriculture remains the main livelihood of the Afghan economy and contributed 33 percent in the overall GDP of 2009. About 12 percent of land is suitable for cultivation\(^4\), and 80 percent of Afghan population is living in the rural areas\(^5\). The main output in agriculture sector is wheat, cereals, fruits, and nuts.

Industrial sector’s value addition was 22 percent of the overall GDP in 2009. The main industrial output included wood products like furniture, paper, printing and publishing. The value addition by services sector in 2009 was recorded at 45 percent of GDP. Services sector mainly includes wholesale and retail trade, hotel and restaurants, transport and communication, banking and financial activity and government services.

Over the last 7 years there is downward trend in agriculture and industry as compared with the services sector which is mainly due to investment in transport and communication (establishment of 4 cellular mobile phone companies and 4 private airline companies) and commencement of new financial intermediaries. Table 2.4 summarizes the socio-economic situation of Afghanistan. One can observe the effects of global demand slowdown and cuts in foreign assistance which are ultimately being reflected in the slowdown of domestic economy and economic growth rate.

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\(^4\) World Bank, 2005

\(^5\) Afghanistan Country Overview, World Bank, 2011
which fell from 16.2 percent in 2007 to 2.3 percent in 2008. However, recovery has been witnessed in 2009.

### Table 2.4: Socio-Economic Situation of Afghanistan

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>14.5</td>
<td>11.2</td>
<td>16.2</td>
<td>2.3</td>
<td>40.8</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>254.3</td>
<td>296.7</td>
<td>359.3</td>
<td>405</td>
<td>-</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>39.5</td>
<td>38.8</td>
<td>37.5</td>
<td>31.6</td>
<td>33.0</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>25.3</td>
<td>26.6</td>
<td>24.9</td>
<td>26.3</td>
<td>22.0</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>35.2</td>
<td>34.5</td>
<td>37.6</td>
<td>42.1</td>
<td>45.0</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>96.5</td>
<td>86.9</td>
<td>73.9</td>
<td>70.0</td>
<td>-</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>25.2</td>
<td>22.9</td>
<td>17.3</td>
<td>17.2</td>
<td>-</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>71.3</td>
<td>64.0</td>
<td>56.6</td>
<td>52.7</td>
<td>-</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>8.8</td>
<td>7.9</td>
<td>7.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

### Socio-Economic Overview of Bangladesh

Bangladesh has agrarian economy. Around 63 percent of the workforce is associated with agriculture, forestry, and fisheries. The major agricultural products are wheat, pulses (leguminous plants, such as peas, beans, and lentils), sweet potatoes, oilseeds of various kinds, sugarcane, tobacco, and fruits such as bananas, mangoes, pineapples. The main industrial output includes garments and knitwear, jute goods, frozen fish and seafood, textiles, fertilizer, sugar, tea, leather and ship-breaking for scrap. Frequent cyclones and floods are one of the major impediments to growth in the country. Table 2.5 shows the socio-economic situation of the country. In 2009, GDP growth rate was 5.7 percent. The contribution of agriculture sector was 19 percent of GDP. The contribution of the industry is recorded at 29 percent of GDP in 2009, whereas, the contribution of services sector was 53.0 percent.

### Table 2.5: Socio-Economic Situation of Bangladesh

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>5.9</td>
<td>5.9</td>
<td>6.0</td>
<td>6.6</td>
<td>6.4</td>
<td>6.2</td>
<td>5.7</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>260.6</td>
<td>334.6</td>
<td>393.7</td>
<td>398.2</td>
<td>433.7</td>
<td>497.2</td>
<td>551.0</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>30.3</td>
<td>25.5</td>
<td>20.1</td>
<td>19.6</td>
<td>19.2</td>
<td>19.0</td>
<td>19</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>21.5</td>
<td>25.3</td>
<td>27.2</td>
<td>27.9</td>
<td>28.4</td>
<td>28.5</td>
<td>29</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>48.3</td>
<td>49.2</td>
<td>52.6</td>
<td>52.5</td>
<td>52.5</td>
<td>52.5</td>
<td>53</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>19.7</td>
<td>33.2</td>
<td>39.6</td>
<td>44.2</td>
<td>46.5</td>
<td>49.1</td>
<td>41.3</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>6.1</td>
<td>14.0</td>
<td>16.6</td>
<td>19.0</td>
<td>19.8</td>
<td>20.3</td>
<td>19</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>13.5</td>
<td>19.2</td>
<td>23.0</td>
<td>25.2</td>
<td>26.7</td>
<td>28.8</td>
<td>27</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>3.1</td>
<td>3.3</td>
<td>3.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>1.6</td>
<td>2.4</td>
<td>-</td>
<td>2.5</td>
<td>2.6</td>
<td>2.4</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

SMEs have a special place in Bangladesh economy. The contribution of firms having 2 to 5 workers is 51 percent of the GDP. This points toward the need for micro-level capacity building programs and its synchronization with the overall objectives of macro economy (Figure 2.4).
Figure 2.4: Size of Firm and Contribution in GDP (2003)

Source: ICG/MIDAS, 2003

Socio-Economic Overview of Bhutan

Bhutan is one of the world's smallest and least developed countries. Agriculture and particularly forestry are the backbone of the economy, which provide the main livelihood to more than 60 percent of the population. Agriculture sector largely comprises of subsistence farming and animal husbandry. Building of roads and other infrastructure is difficult and expensive in the country due to dominating mountain area over the terrain. The country has strong monetary and trade linkages with India.

The industrial sector is technologically backward, with most of the production arising from cottage industry. Many programs are in progress in the fields of education, social and environmental development with the support of multilateral development organizations. Detailed controls and uncertain policies in the areas such as industrial licensing, trade, labour, and finance continue to hamper foreign investment. Hydropower exports to India have boosted Bhutan’s overall growth. New hydropower projects will be the driving force behind Bhutan's ability to create employment and sustain growth in the coming years. Table 2.6 shows the socio-economic situation of Bhutan. The GDP growth rate was 7.4 percent in 2009. The contribution of agriculture, industry and services sector in GDP was around 18, 45 and 37 percent respectively in 2009.
Table 2.6: Socio-Economic Situation of Bhutan

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>9.1</td>
<td>7.5</td>
<td>6.7</td>
<td>6.4</td>
<td>14.0</td>
<td>13.8</td>
<td>7.4</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>512.6</td>
<td>762.3</td>
<td>1183.3</td>
<td>1330.3</td>
<td>1705.6</td>
<td>1868.7</td>
<td>1805</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>36.3</td>
<td>28.4</td>
<td>24.5</td>
<td>22.8</td>
<td>20.5</td>
<td>18.7</td>
<td>18</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>24.1</td>
<td>35.3</td>
<td>37.4</td>
<td>38.5</td>
<td>43.5</td>
<td>46.1</td>
<td>45</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>39.6</td>
<td>36.3</td>
<td>38.2</td>
<td>38.6</td>
<td>36.0</td>
<td>35.2</td>
<td>37</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>61.3</td>
<td>81.8</td>
<td>94.8</td>
<td>105.7</td>
<td>109.7</td>
<td>107.0</td>
<td>81.4</td>
</tr>
<tr>
<td>Exports of goods and services(% of GDP)</td>
<td>28.6</td>
<td>30.5</td>
<td>35.1</td>
<td>45.2</td>
<td>52.6</td>
<td>55.9</td>
<td>58</td>
</tr>
<tr>
<td>Imports of goods and services(% of GDP)</td>
<td>32.7</td>
<td>51.3</td>
<td>59.7</td>
<td>60.5</td>
<td>57.1</td>
<td>51.1</td>
<td>48</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>3.7</td>
<td>3.6</td>
<td>4.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>-</td>
<td>5.8</td>
<td>7.3</td>
<td>-</td>
<td>-</td>
<td>5.1</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

Socio-Economic Overview of India

India experienced dismal economic conditions in early 1990s. Soviet Union in that period was the main trading partner of India. The country faced huge balance of payment problems when Soviet Union was dissolved. In order to mitigate the situation, Indian government initiated the long term trade and investment liberalization plan. Foreign direct investments were welcomed, public monopolies were abolished and banking, services and tertiary sectors were in general developed. Indian government prioritized the development of money and capital market. Since the liberalization of markets in the early 1990s, India has experienced favourable economic growth. India is amongst the fastest growing economies of the world. Figure 2.5 shows the rising real GDP growth rate of India from 1990 to 2007.

Figure 2.5: Economic Growth in India

![Economic Growth in India Graph]

Source: World Development Indicators, 2010

Table 2.7 shows the socio-economic situation of India. The value addition by agriculture sector as percentage of GDP was 17 percent in 2009. The major agriculture outputs of the country are
wheat, rice, coarse grains, oilseeds, sugar, cotton, jute and tea. Value addition of industrial sector as percentage of GDP was 28 percent in 2009. The major industrial output of the country are textiles, processed food, steel, machinery, transport equipment, cement, aluminium, fertilizers, mining, petroleum, chemicals, and computer software. The major imports of the country are petroleum, machinery and transport equipment, electronic goods, edible oils, fertilizers, chemicals, gold, textiles, iron and steel. U.S., China, U.A.E., EU, Russia, Japan are the major trading partners of India. Indian economy has witnessed a recent boom in services sectors which in total contribute 56.3 percent of GDP.

Table 2.7: Socio-Economic Situation of India

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>5.5</td>
<td>4.0</td>
<td>9.3</td>
<td>9.4</td>
<td>9.6</td>
<td>5.1</td>
<td>7.7</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>373.7</td>
<td>453.0</td>
<td>740.1</td>
<td>824.4</td>
<td>1046.3</td>
<td>1016.8</td>
<td>1134</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>29.3</td>
<td>23.4</td>
<td>19.1</td>
<td>18.2</td>
<td>18.1</td>
<td>17.5</td>
<td>17.0</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>26.9</td>
<td>26.2</td>
<td>28.8</td>
<td>29.5</td>
<td>29.5</td>
<td>28.8</td>
<td>28.0</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>43.8</td>
<td>50.5</td>
<td>52.2</td>
<td>52.4</td>
<td>52.4</td>
<td>53.7</td>
<td>56.3</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>15.7</td>
<td>27.4</td>
<td>29.0</td>
<td>31.6</td>
<td>30.8</td>
<td>42.5</td>
<td>31.5</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>7.1</td>
<td>13.2</td>
<td>19.9</td>
<td>22.2</td>
<td>21.2</td>
<td>22.7</td>
<td>21.0</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>8.5</td>
<td>14.2</td>
<td>22.7</td>
<td>25.2</td>
<td>24.7</td>
<td>28.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>3.7</td>
<td>4.4</td>
<td>3.2</td>
<td>3.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

Socio-Economic Overview of Maldives

Maldives comprises of 1,191 islands in the Indian Ocean. Tourism and fisheries are the major economic activities of the country. Petroleum products, ships, foodstuffs and clothing are the major imports. The country exports mainly comprises of fisheries. France, Italy, UK, Singapore, UAE, India, Malaysia, Sri Lanka and Thailand are the major trading partners of the country. In December 2004, Maldives was hit by tsunami and growth declined sharply, however the economy saw a revival of tourism and construction in the year 2006. The economy contracted in 2009 due to the global recession. Falling tourist arrivals and fish exports, combined with high government spending on social needs, subsidies, and civil servant salaries contributed to a balance of payments crisis, which was eased with a $79.3 million IMF standby arrangement in 2009. Global warming is a major threat for the county as 80 percent of the area is 1 meter or less above sea level.

Table 2.8: Socio-Economic Situation of Maldives

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>16.9</td>
<td>4.8</td>
<td>-4.6</td>
<td>19.1</td>
<td>6.6</td>
<td>5.2</td>
<td>-3.0</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>998.0</td>
<td>2293.3</td>
<td>2564.1</td>
<td>3131.5</td>
<td>3509.3</td>
<td>4134.9</td>
<td>4760</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>14.9</td>
<td>8.9</td>
<td>7.7</td>
<td>9.1</td>
<td>7.2</td>
<td>6.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>12.8</td>
<td>11.8</td>
<td>13.2</td>
<td>-</td>
<td>17.5</td>
<td>17.7</td>
<td>17.0</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>72.3</td>
<td>76.1</td>
<td>58.7</td>
<td>77.9</td>
<td>79.3</td>
<td>76.1</td>
<td>78.0</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>168.1</td>
<td>161.1</td>
<td>120.9</td>
<td>125.6</td>
<td>125.6</td>
<td>136.6</td>
<td>77.1</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>85.5</td>
<td>89.5</td>
<td>64.6</td>
<td>83.7</td>
<td>83.1</td>
<td>83.5</td>
<td>67.0</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>82.6</td>
<td>71.6</td>
<td>99.3</td>
<td>101.3</td>
<td>103.9</td>
<td>110.1</td>
<td>94.0</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>10.6</td>
<td>10.4</td>
<td>9.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>3.8</td>
<td>7.8</td>
<td>8.0</td>
<td>-</td>
<td>8.1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010
Table 2 shows the socio-economic situation of Maldives. The economy posted a real GDP growth rate of -3 percent in 2009. The contribution of agriculture, industry and services sectors was 5, 17, and 78 percent respectively in the overall GDP. Maldives maintains higher expenditures on health and education as percentage of GDP in comparison to the bigger economies in SAARC region.

**Socio-Economic Overview of Nepal**

Nepal’s GDP growth was 4.7 percent in 2009. Table 2.9 shows the socio economic situation of Nepal where agriculture contributed 34 percent to overall GDP. The major agricultural outputs are wheat, maize, sugarcane, oilseed, jute, millet and potatoes. Industrial sector contributed 16 percent to the GDP. Carpets, pashmina, garments, cement, cigarettes, bricks, sugar, soap, and matches are the major industrial outputs of the country and have contributed positively in the trade with total exports of $ 872 million in 2007. The share of exports in GDP increased from 12.1 percent in 2008 to 16 percent in 2009. Germany and U.S are the major exporting partners. Main imports are manufactured goods from India and during 2009 total imports were 37 percent of GDP.

**Table 2.9: Socio-Economic Situation of Nepal**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>4.6</td>
<td>6.2</td>
<td>3.1</td>
<td>3.7</td>
<td>3.3</td>
<td>5.3</td>
<td>4.7</td>
<td>-</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>189.9</td>
<td>224.9</td>
<td>298.7</td>
<td>326.9</td>
<td>363.5</td>
<td>437.9</td>
<td>427</td>
<td>-</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>51.6</td>
<td>40.8</td>
<td>36.3</td>
<td>34.6</td>
<td>33.5</td>
<td>33.7</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>16.2</td>
<td>22.1</td>
<td>17.7</td>
<td>17.2</td>
<td>17.1</td>
<td>16.7</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>32.1</td>
<td>37.0</td>
<td>46.0</td>
<td>48.2</td>
<td>49.4</td>
<td>49.6</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>32.2</td>
<td>37.7</td>
<td>38.7</td>
<td>36.7</td>
<td>38.6</td>
<td>35.9</td>
<td>41.5</td>
<td>-</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>10.5</td>
<td>23.3</td>
<td>14.6</td>
<td>13.4</td>
<td>13.0</td>
<td>12.1</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>21.7</td>
<td>32.4</td>
<td>29.5</td>
<td>31.3</td>
<td>31.3</td>
<td>32.7</td>
<td>37</td>
<td>-</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>6.0</td>
<td>5.6</td>
<td>5.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>2.3</td>
<td>3.0</td>
<td>-</td>
<td>-</td>
<td>3.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

**Socio-Economic Overview of Pakistan**

Pakistan’s economy has experienced an average growth rate of 5 percent between 2001 and 2010 (Table 2.10). During this period Pakistan’s merchandise exports and remittances doubled while imports more than doubled. For most part of the decade the improved fiscal discipline helped to maintain a high poverty related expenditure. However in the wake of food, fuel and financial crisis, the economy saw decline in aid and FDI inflows (Ahmed and O’ Donoghue, 2010). With dwindling foreign exchange reserves, Pakistan resorted to IMF standby arrangement and gradually moved towards a recovery phase during 2008-09. However, in 2010 the economy was hit by a domestic energy crisis, where inter-corporate debt crippled the energy sector and led to electricity and gas shortages in turn contributing to negative growth in major manufacturing subsectors. With some recovery in large scale manufacturing the growth in 2010 crossed 4% and exports remained robust despite the looming global recession. In the recent past, devastating floods have disturbed the socio-economic life of the country. The initial damage assessment by World Bank shows it a bigger disaster than the tsunami. The damage needs assessment put the loss at around $ 12 billion. The country is also a front line state in the war against terror. The
direct and indirect loss from the war since 2002 is estimated to be beyond $ 43 billion. Such constraints on the budget have led Pakistan to squeeze its development spending. The country had one of the lowest expenditures on education and health (as percent of GDP) during 2000s.

Table 2.10: Socio-Economic Situation of Pakistan

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth*</td>
<td>4.5</td>
<td>4.3</td>
<td>9.0</td>
<td>5.8</td>
<td>6.8</td>
<td>3.7</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>370.6</td>
<td>535.6</td>
<td>703.6</td>
<td>801.2</td>
<td>880.8</td>
<td>990.5</td>
<td>995</td>
<td>1086</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>26.0</td>
<td>25.9</td>
<td>21.5</td>
<td>20.4</td>
<td>20.5</td>
<td>20.4</td>
<td>22.0</td>
<td>-</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>25.2</td>
<td>23.3</td>
<td>27.1</td>
<td>26.9</td>
<td>26.9</td>
<td>26.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>48.8</td>
<td>50.7</td>
<td>51.4</td>
<td>52.8</td>
<td>52.6</td>
<td>52.7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>38.9</td>
<td>28.1</td>
<td>35.3</td>
<td>38.5</td>
<td>35.5</td>
<td>36.6</td>
<td>30.5</td>
<td>-</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>15.5</td>
<td>13.4</td>
<td>15.7</td>
<td>15.2</td>
<td>14.2</td>
<td>12.8</td>
<td>13.0</td>
<td>-</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>23.4</td>
<td>14.7</td>
<td>19.6</td>
<td>23.2</td>
<td>21.3</td>
<td>23.8</td>
<td>20.0</td>
<td>-</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>2.8</td>
<td>2.7</td>
<td>2.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education, (% of GDP)</td>
<td>2.6</td>
<td>1.8</td>
<td>2.3</td>
<td>2.6</td>
<td>2.8</td>
<td>2.9</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010
* Pakistan Economic Survey, 2009-10

Socio-Economic Overview of Sri Lanka

Sri Lanka is a developing economy largely dependent on agriculture. Rice, sugarcane, grains, pulses, oilseed, spices, vegetables, fruit, tea, rubber, coconuts, milk, eggs, hides, beef and fish are the main agricultural outputs. Sri Lanka suffered a brutal civil war from 1983 to 2009. Despite the war, Sri Lanka’s GDP growth averaged nearly 5 percent in the last 10 years. The growth rate was 3.5 percent in 2009. Food processing, textiles and apparel, food and beverages, port construction, telecommunications, insurance and banking are the rising and growing sectors of Sri Lanka. About 1.5 million Sri Lankans are working abroad and the country receives more than $ 3 billion in the form of remittances annually. The end of the 26 year civil war has opened the doors for reconstruction and development projects in the north and east regions. The funding of these projects will be difficult, as the government already is faced with high debt servicing, a bloated civil service, and high budget deficits threatening to push prices higher. In terms of market capitalization, the Sri Lankan stock market gained over 100 percent in 2009 and was ranked one of the best performing markets in the world. Official foreign reserves improved to above $5 billion by November 2009.

Table 2.11 indicates the socio-economic situation of the country. The value addition as percentage of GDP for agriculture sector was 13 percent in 2009 whereas value additions by industrial and services sector were 30 and 58 percent respectively. Sri Lanka (along with Maldives) has one of the highest per capita income in the SAAR region at around US $ 2068.

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6 Pakistan Economic Survey, 2009-10
Table 2.11: Socio-Economic Situation of Sri Lanka

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>6.4</td>
<td>6.0</td>
<td>6.2</td>
<td>7.7</td>
<td>6.8</td>
<td>6.0</td>
<td>3.5</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>469.4</td>
<td>872.7</td>
<td>1240.9</td>
<td>1422.2</td>
<td>1617.4</td>
<td>2012.5</td>
<td>2068</td>
</tr>
<tr>
<td>Agriculture, value added (% of GDP)</td>
<td>26.3</td>
<td>19.9</td>
<td>11.8</td>
<td>11.3</td>
<td>11.7</td>
<td>13.4</td>
<td>13</td>
</tr>
<tr>
<td>Industry, value added (% of GDP)</td>
<td>26.0</td>
<td>27.3</td>
<td>30.2</td>
<td>30.6</td>
<td>29.9</td>
<td>29.4</td>
<td>30.0</td>
</tr>
<tr>
<td>Services, etc., value added (% of GDP)</td>
<td>47.7</td>
<td>52.8</td>
<td>58.0</td>
<td>58.0</td>
<td>58.4</td>
<td>57.3</td>
<td>58.0</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>68.2</td>
<td>88.6</td>
<td>62.2</td>
<td>60.0</td>
<td>58.9</td>
<td>55.0</td>
<td>41.8</td>
</tr>
<tr>
<td>Exports of goods and services(% of GDP)</td>
<td>30.2</td>
<td>39.0</td>
<td>32.3</td>
<td>30.1</td>
<td>29.1</td>
<td>24.9</td>
<td>21.0</td>
</tr>
<tr>
<td>Imports of goods and services(% of GDP)</td>
<td>38.1</td>
<td>49.6</td>
<td>41.3</td>
<td>41.1</td>
<td>39.5</td>
<td>38.3</td>
<td>28</td>
</tr>
<tr>
<td>Health expenditure, (% of GDP)</td>
<td>-</td>
<td>-</td>
<td>4.0</td>
<td>4.2</td>
<td>4.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Public spending on education,(% of GDP)</td>
<td>2.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010
3. **Effectiveness of HRD for Developing SMEs: Review of Literature**

The SMEs that critically evaluate their business environment and seek to understand their industry and competitive conditions tend to adopt the most suitable set of HRD practices. The SMEs that consider the competitive situation and human resource strategy simultaneously survive the test of time better.

The success of a firm depends on its short and long term objectives that aim at promoting a culture of learning in an integrated organizational structure, up-to-date technology, high quality of inputs and more importantly a human resource that responds to firm’s goals. Considering this, HRD is important for firm’s longer run strategic development.

**Global Evidence**

In order for the employees to carry out their roles and functions in managing successfully, they must be well-trained and educated to play multifaceted role (Huang, 2000). Training can be a powerful driving force for firm expansion and developing its capabilities. Jones (2005), who examined the influence of training towards enterprise growth, confirmed that SMEs that increase the training effort, managed to increase its growth in term of sales and revenues. Tan (1996) showed that skills required for upgrading activities among the top management of the companies lead to an improvement of the productivity level and customer’s satisfaction.

The role of training in an organization for improving efficiency and knowledge has been effective for the SME development. Johnson and Devins (2003) have explored the potential of sustained trainings for SMEs in UK’s work force. The training aspect has significant contribution towards firm development and there is significant improvement still needed towards increasing the supply of multiple skills which in turn can bring manifold advantages to the working structure of the firm and more importantly influencing the performance of the firm in the long run.

Training is crucially linked with the market situation and perceptions. For instance in Slovenia, a study of 151 small firms was carried out to see the ways in which SMEs are managing to cope with new opportunities. A link was found between human resource efforts in SMEs and its contribution to the competitive advantage of firms. The enterprises with regular capacity building initiatives gained more in the longer term. The improvement came through innovation and export diversification which is realized by new ideas generated by the employees in the firm. The innovative efforts are not limited to the introduction of new products, services or procedures, but also include the developing of internal (operational) mechanism in firms to foster technological awareness (Ferligoj and Jordan, 1997).

In South Korean IT sector HRD practices have expanded rapidly over the past 10 years (Cho and McLean, 2009). The importance of organizational culture was an important factor in the development of IT industry with regular training and capacity building of employees in the face of growing competition regionally and globally. It remains imperative to recognize the proper relationship between the employer and the employee with changing training, reward and motivational needs and other requirements. It is seen that a knowledgeable worker, being owner
of valuable and often scarce knowledge assets, has a better bargaining position in relation with employers than traditional average workers and is less dependent on a particular organization or operational routine (Bartlett and Ghoshal, 2002). In this new reality where knowledge workers are key assets, talent is scarce and people are more mobile; every company has to develop a strategy for optimizing talent attraction, retention and development (Jensen, 2005).

According to Wright and McWilliams (1994), the source of sustained competitive advantage lies in the HRD, not the practises used for attracting, utilizing and retaining them. The management of HR hold the key to future success in terms of profits and market share. Hashim and Fawzi (2005) have shown the importance of HRD for the innovation spurs taking place in Malaysia. The new millennium recognizes globalization, trade and investment liberalization and stiff competition to be prime modus operand. This has impacted the economic, social, political and technological environment. At the firm level, changes in values, work attitude and lifestyles, new skills and training requirements have repercussions for firm’s output and expansion. A strong and significant relationship was found between HR practises and innovation activity across 48 SMEs. The finding is consistent with the observations by Galia and Legros (2003).

Moreover, the study by Lehman and Sanne (2009) points towards reforms by Malaysia and Thailand in the face of shocks and how quickly they adapted to new conditions. The financial crisis in 1997 exposed the weaknesses of Southeast Asian economies, which was regarded as a dynamic region with steady growth and rising foreign direct investment. The crisis revealed a structural inability of the industrial sector to move into higher value-added production to meet the competition from low cost countries such as China. These developments have led the governments of Malaysia and Thailand to embark on ambitious plans to transform from production-based economies to knowledge-based economies in order to restore high growth and development. In essence, increased reforms have been seen towards improving the HR base which brought stability and development in the long run. Thai and Malaysian services sector firms have made huge efforts and investments to introduce new HR management with inclusion of talent management, prioritizing specific high impact sectors, IT influx and quality training centres. It was also the flexibility of goods and factor markets that for example enable Malaysia to quickly move from a dominant industrial sector (adversely hit by Chinese growth) and towards a booming services sector economy.

The fast growing economies and the ones with competitive capabilities have realized the importance of HRD as of prior importance and therefore invest heavily in HR in the form of capacity building and acquisition of modern skills. The phrase “Egypt invests in stone rather than people” refers to the decades in which the country spent billions on construction, mushrooming real estate market and machinery rather than HR. The recent reforms in the form of increased expenditure of upgrading the human skills accelerated the growth of Egyptian economy via reinvigoration of SMEs. In 2002 the International Finance Corporation (IFC) reported that as many as 15,000 of the 25,000 factories in Egypt are enterprises with between 10 and 150 workers and have investments of around $1 million on average. In 2004-05, SMEs accounted for 75 percent of all jobs in Egypt, 80 percent of GDP and 99 percent of the non-agricultural private sector. At the same time, SMEs accounted for only 4 percent of the nation’s exports and 10 percent of fixed capital formation which in turn indicates that the country still has a lot to

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Moheeb, 2010
plan and execute so that SMEs can become part of the formal tradable sector and remain competitive globally.

A survey report by OECD for determining the relationship between the training and SMEs competitiveness and productivity shows that the nature and impact of training and skills development in firms is viewed by firm managers as being an important contributor for firm’s development. Firms have a positive view of the role of Industrial Training Organizations in facilitating formal vocational education and training (VET) activities, while others, even small firms continue to have a preference for arranging their own trainings in line with their particular business needs. Besides, this the data across OECD countries shows that SMEs participate 50 percent less in training activities than large firms, with some systematic access gaps meaning that younger, better educated workers in high-skilled occupations (such as managers, professionals and technicians) have greater access to training opportunities than the less-educated ones (OECD 2008a).

The World Bank (2002 and 2004) gives three core arguments in supporting the view that SMEs can function as the engine of growth in developing countries. First, SMEs enhance the level of domestic competition, efficiency, innovation and aggregate productivity growth. Secondly, SMEs are generally more productive than large enterprises (due to flexibility of operations) and finally SME expansion boosts employment because SMEs are more labour intensive. A conducive business environment along with human resource and technological up gradation that focused on higher product quality, and cost efficiency were crucial factors in determining the export competitiveness of Indonesia and Philippines SMEs, both in the domestic and export markets.

Vietnam is cited as one of the best examples of an economy which took off from scratch and is now proving to be a mature competitor in the global market. One of the reasons for its successes was the role of SMEs in catering to the needs of the trading partners and the management of firm’s HR. The significance of skill orientation of SMEs can also be illuminated in case of UK firms where the employment alone by SME’s is 55 percent with employee strength of 500 and above. The total establishments employing workers between 1 to 4 is 66 percent. Moreover it has also been contributing effectively to the Government efforts for scaling up resource mobilization and increasing revenues.

An integrated HRD is important component of the firms operating in East Asia and the best case can be seen for Singapore. Jacobs (2005) studied the tactical advantage of the companies operating in Singapore in terms of trade and technological change. The on-job training was seen as the most frequently used method due to which positive impact of technological change on HRD has been significantly higher. Around 52 percent respondents were from the SMEs and on job training was the highest ranked method reported by firms to cope with technological change and majority of the companies used the services of foreign consultants and vendors to provide HRD expertise in order to disseminate global best practices.

In China, Zhejiang Province is one of the fastest growing due to its favourable geographical condition and openness in trade and investment. The SMEs have become an important pillar in

8 Johnson and Devins, 2008
regional progress of Zhejiang Province. The output from SMEs ranged from 75 to 83 percent at the end of 2004. The number of employees in the SME sector of Zhejiang Province was around 11.3 million. The adoption of new HR methods has vastly helped the Chinese firms to merge indigenous practices well with the rest of the world. These business concerns are famously known for thinking globally but acting locally. Their business practice is home grown but takes full stock of global knowledge in complete supply chain. The effective training methods helped the improvement of both the employee and firm credentials.

The SMEs in South Africa account for about 91 percent of the formal business entities, contributing around 57 percent of the GDP and 60 percent of employment. SMEs produce more than half of the country’s non-farm output. The vast portion of the business in the country is expanding due to SMEs that are continuously investing in HR led innovations (Ntsika, 1999).

Rogerson (2000) also highlights the importance of HRD for SMEs in South Africa. Taking the case of South African clothing sector the author establishes a positive effect of education and training, besides other factors influencing firm performance in the short as well as long run. The increased education and training efforts have been considered as driving force for multipronged skills acquisition. In particular, the capacity to design, to undertake specialized production processes and to innovate new range is linked to cases of successful training and penetration of new ideas. It has been strongly observed that firms in clothing sector have been able to respond to the challenges of a highly competitive market because of improved design capacity built upon merited human resource.

In United States small firms with less than five hundred employees are regarded as SMEs which provide jobs to half of the nation’s workforce. In 2004 alone there were an estimated 23,974,000 businesses in the US, of which 683,700 were small businesses employing about 5,666,600 workers (Longly, 2006). In the post global financial crisis milieu, Obama administration is now particularly relying on SME sector to create jobs. The laid off workforce is being retained on huge scale in order to enter the job market in quickest possible time. It is noteworthy that smaller firms were less willing to lay off during the recession as the new cost of hiring, training and retaining an employee are substantial.

A research study was carried out in 2003 to investigate the role of small firms and their contribution in the EU. Around 93 percent had less than 10 employees with 20.5 million enterprises in the European Economic Area (EEA) and Switzerland. The small firm’s provided an employment for 122 million workers. Some 93 percent of these enterprises were micro (0 to 9 employees), 6 percent were small (10 to 49 employees), less than 1 percent were medium-sized (50 to 249 employees) and only 0.2 percent were large enterprises (250+). The SMEs provided up to two thirds of all jobs, therefore implying one third of all jobs being provided by large enterprises.

Some basic facts about SMEs in EU are given in Table 3.1. It can be seen that the average European business provides employment for four people, including the owner and manager. The

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9 Ma chi and Hu Yingde, 2006
10 European Commission, 2003
average turnover is around € 0.6 million.\textsuperscript{11} The SMEs have been providing jobs to around 66 percent workers in the EU.

Table 3.1: Basic Facts about EU Enterprises

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Units</th>
<th>SME</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of enterprises</td>
<td>(1000)</td>
<td>20.5</td>
<td>40</td>
</tr>
<tr>
<td>Employment</td>
<td>(1000)</td>
<td>80.790</td>
<td>40.9</td>
</tr>
<tr>
<td>Persons employed per enterprise</td>
<td></td>
<td>4</td>
<td>1.020</td>
</tr>
<tr>
<td>Turnover per enterprise</td>
<td>Million €</td>
<td>0.6</td>
<td>2550</td>
</tr>
<tr>
<td>Share of exports in turnover</td>
<td>%</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Value added per person employed</td>
<td>€ 1000</td>
<td>65</td>
<td>115</td>
</tr>
<tr>
<td>Share of labour cost in value added</td>
<td>%</td>
<td>63</td>
<td>49</td>
</tr>
</tbody>
</table>


It was the HRD combined with strong vision and ideas for firm development that played a critical role in proving EU companies with renewed identities. There are however, differences in firm and labour structure amongst EU countries and these differences are rooted in various business philosophies followed across EU through the past many centuries. The UK today has a large business population however it has fewer small employers as seen in Italy or Germany\textsuperscript{12}.

Evidence from SAARC Region

The appreciation for formal HRD processes has only recently been established in the SAARC region with only specific clusters adopting detailed method and systematic follow up. The change has mainly been witnessed in India, Pakistan and Sri Lanka. India has given top priority to HR functions especially after the economic liberalization and IT boom. Singh (2003) shows that in the South Asian region, firms have been involved in retaining workforce according to future requirement locally and abroad. This realization is partly due to increase in exports and foreign direct investment (FDI) and is especially true in case of India. The same holds for clothing industry in Sri Lanka (Rees 2006) and IT based business picking pace in Pakistan which also have increased participation of women and youth entrepreneurs (Alam, 2009 and Zafar, 2010).

India in the last two decades has shown remarkable growth in the services sector. The economic liberalization has brought technological change and also appetite for increased competition. Realizing this IT industry has shown resilience and has emulated the best practices of HR and this in turn has impacted the exports positively. Som (2008) shows significant change between 1993 to 2002 by studying innovative practices used in the training of staff in 69 Indian firms. The data was compiled using detailed questionnaires and Vanscom Database 1993–2002. The innovative recruitment and compensation practices have impacted the firm performance positively.

Sri Lanka opened its economy at the end of 1970s and this has brought many changes in the business performance. Plenty of private sector concerns recognized the usefulness of state of the

\textsuperscript{11} European Commission, 2000

\textsuperscript{12} Barclays Bank, 2000
art training and best practices for innovative results. The local entrepreneur has adopted new corporate management for better HRD outcomes and to gain a competitive edge. This can be seen primarily in case of clothing industry in Sri Lanka. Akuratiyagamage (2006) shows the change in the clothing industry and how it has positively impacted the exports. Besides this, an empirical investigation of 219 managers and 78 HR personnel in different local firms operating in Sri Lanka suggested that the varied experiences in an organization are regarded as the ideal mode of learning.

Table 3.2: South Asia Export Performance (US $ billions)

<table>
<thead>
<tr>
<th>Country</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>10384</td>
<td>12071</td>
<td>13827</td>
<td>15969</td>
<td>12146</td>
</tr>
<tr>
<td>SAARC</td>
<td>132</td>
<td>156</td>
<td>184</td>
<td>227</td>
<td>219</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>9.0</td>
<td>11.7</td>
<td>13.1</td>
<td>16.7</td>
<td>16.4</td>
</tr>
<tr>
<td>Bhutan</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>India</td>
<td>100</td>
<td>121</td>
<td>145</td>
<td>181</td>
<td>176</td>
</tr>
<tr>
<td>Maldives</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Nepal</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Pakistan</td>
<td>16.1</td>
<td>16.9</td>
<td>17.8</td>
<td>20.3</td>
<td>18.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>6.2</td>
<td>6.8</td>
<td>7.7</td>
<td>8.2</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Source: International Trade Centre, UNCTAD/WTO, 2010

The prospects for SMEs are greatly reflected in the improved export performance of SAARC countries. Table 3.2 highlights the export performance between 2005 and 2009. India has been at the forefront in terms of increased exports volume and value. This is followed by Pakistan and Bangladesh. However the gap between India and other SAARC economies is expected to remain large unless substantial vertical and horizontal integration takes place amongst these countries.

Table 3.3: Conceptual Details of Micro, Small and Medium Enterprises

<table>
<thead>
<tr>
<th>Indicator / Country</th>
<th>Micro Enterprises</th>
<th>Small Enterprises</th>
<th>Medium Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment</td>
<td>Total Assets</td>
<td>Employment</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Industry household-based family labour</td>
<td>Workers in firms</td>
<td>Investment of less than Takka 100 million</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Investment of 100 million is categorized as micro or cottage, small and medium enterprises based on invested capital</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>India</td>
<td>The hire or purchase of plant and machinery does not exceed Rs 10 million.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maldives</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nepal</td>
<td>-</td>
<td>Upto Rs 200000</td>
<td>-</td>
</tr>
<tr>
<td>Pakistan</td>
<td>SME means an entity which employs less than 250 persons and total assets of Rs 50 million and with manufacturing concern of Rs 300 million</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Up to 10 employees</td>
<td>-</td>
<td>Upto 10-49 employees</td>
</tr>
</tbody>
</table>

Source: Conceptual details of Micro, Small and Medium Enterprises, World Bank, 2004
Effectiveness of Human Resource for Developing SMEs in South Asia

There remains ample opportunity for increasing the exports base via SME development and further investing in HRD through the provision of updated training and new technology utilization. Table 3.3 highlights the conceptual details about SME sector in South Asia. It also explores the various distinctions drawn between micro, small and medium enterprises.

At the moment the SMEs contribute 40 percent to the exports of India with output contribution of 45 percent in the industry. It produces more than 8000 products and employs more than 60 million people. The increased services sector contribution in Indian economy has allowed for advancing of SME sector on a more sustainable basis (Mahmood, 2008) as shown in table 3.4.

Table 3.4: India: Structural Transformation 1990-2010 (% share)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>1989-90</th>
<th>1999-00</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>31.8</td>
<td>25.0</td>
<td>15.5</td>
</tr>
<tr>
<td>Industry</td>
<td>19.7</td>
<td>19.6</td>
<td>18.8</td>
</tr>
<tr>
<td>Services</td>
<td>48.5</td>
<td>55.4</td>
<td>65.7</td>
</tr>
<tr>
<td>GDP</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India, 2009

Mitra (2001) has viewed the Indian automobile industry as growing in demand and therefore appropriate policies for HRD are required for developing this sub sector. Automobile ancillary firms are equally important and should be made part of the formal sector as much as possible. Eight critical factors are identified to be of utmost importance, of which HRD at the lower tier of employees is the key factor for generating future internal and external economies of scale. Most training facilities are only limited to managerial level positions. However it is well known that innovations can be stimulated by involving the lower tier in the creative process.

In India a large number of firms are owner-controlled family businesses. However global changes are forcing Indian firms to change traditional approach and move towards giving employees a stake in business. The starting point is to provide them with the necessary life and work skills, so that they can exercise maximum opportunity for growth.

Table 3.5: Employment, Production and Exports in India

<table>
<thead>
<tr>
<th>Years</th>
<th>Units (Million Numbers)</th>
<th>Production (Rs Crore)</th>
<th>Employment (Million Number)</th>
<th>Production per Employee (Rs Thousand)</th>
<th>Exports (US $ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970s</td>
<td>0.6</td>
<td>48143</td>
<td>5.2</td>
<td>93</td>
<td>923</td>
</tr>
<tr>
<td>1980s</td>
<td>1.3</td>
<td>119530</td>
<td>9.4</td>
<td>125</td>
<td>2759</td>
</tr>
<tr>
<td>1990s</td>
<td>8.2</td>
<td>120213</td>
<td>19.4</td>
<td>61</td>
<td>9255</td>
</tr>
<tr>
<td>2000-2008</td>
<td>11.7</td>
<td>363281</td>
<td>28.2</td>
<td>127</td>
<td>21811</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India, 2009

In the rapidly changing scenario of HRD practices, India has redefined its role through incorporation of new techniques for skill development. This ranges from improved service delivery, capacity building and introducing efficient practices in the market place. Table 3.5 shows the contribution of Indian SME units towards production, exports and employment generation. Sinha (2003) explains the training needs that are correlated with the changes taking place in the business tactics regionally and globally.
Box 1: Indian Vision 2020 and SMEs Development

The Indian SMEs Vision 2020 outlines the importance of SME development focusing on the aspect of “change” as the only permanent thing. The process of change has accelerated in recent years due to macroeconomic transformation taking place both domestically and globally. In an era of borderless and market-oriented economy, the two big global economic forces which are competing for world attention are: (a) the emergence of a ‘new economy’ underpinned by information and communication technologies and (b) growing instability and uncertainty linked to external shocks. The Vision 2020 highlights that the attention should be diverted towards motivating the employees who can then produce and trade, quality high-tech products over international boundaries. The Vision comprises of three components: state of the art training, promotion of innovation and improved efficiency.

In Pakistan around 97 percent of enterprises are SMEs employing less than 10 workers (SMEDA 2005). The SMEs contribution to manufacturing sector GDP is around 30 percent. Its contribution in employment is around 80 percent. It also contributes 25 percent to overall exports. In terms of geographical location of enterprises, 65 percent enterprises are located in Punjab, 18 percent in Sindh, 14 percent in Khyber Pakhtunkhwa and rest 3 percent in Balochistan and Islamabad. In sectoral terms 53 percent are wholesale, retail, restaurants and hotels, 22 percent community, social and personal services and 20 percent are in manufacturing. Table 3.6 exhibits Pakistan’s enterprises by employment.

Table 3.6: Enterprise by Employment Size in Pakistan

<table>
<thead>
<tr>
<th>No of workers</th>
<th>% Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 9</td>
<td>970</td>
</tr>
<tr>
<td>10 to 49</td>
<td>2.50</td>
</tr>
<tr>
<td>50 to 99</td>
<td>0.23</td>
</tr>
<tr>
<td>100 to 199</td>
<td>0.10</td>
</tr>
<tr>
<td>200 and above</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Source: SMEDA, Pakistan, 2005

The Pakistan SME Policy 2007 outlines the strategy and policy measures for firm development in areas which include the business environment at macro level, access to finance, HRD and the support for technology up-gradation and product marketing of the SMEs. Mumtaz and Rohra (2009) have outlined the potential of SMEs in case of Pakistan and how it can be a valuable factor in increasing the level of jobs and production base of the economy. They have pointed out that the dearth of HRD has been the key factor which is not allowing the SMEs sector in Pakistan to achieve diversification.
SMEDA in Pakistan carried out SME base line survey in 2009. The key findings of the survey with reference to research and development are as follows:

- Entrepreneurs with education level up to intermediate show desire to upgrade and replace the machinery
- More than 55 percent of the respondents do not feel any need to spend on research and development
- Most ambitious in terms of spending on research and development is the category of firms with employment size 6-35

Source: SMEDA, Pakistan, 2009

In Bangladesh, SMEs have played a key role in reducing poverty to some extent by creating employment and contributing towards industrialization. The firms having number of workers in the range from 2 to 5 have 51 percent share in the GDP as shown in Table 3.7.

### Table 3.7: Bangladesh: Contribution of Workers in GDP

<table>
<thead>
<tr>
<th>No of workers</th>
<th>Contribution in GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>26</td>
</tr>
<tr>
<td>2-5</td>
<td>51</td>
</tr>
<tr>
<td>6-10</td>
<td>10</td>
</tr>
<tr>
<td>11-20</td>
<td>6</td>
</tr>
<tr>
<td>21-50</td>
<td>5</td>
</tr>
<tr>
<td>51-100</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: ICG/MIDAS Survey, 2003

The definition of Bangladesh enterprises consists of micro (0-9 employees), small (10-49 employees), medium (50-99 employees) and large (Above 99 employees). The share of SME in the manufacturing sector is comparatively higher than rest of the sectors with contribution of 38 percent overall GDP. Besides this agriculture, wholesale and retail trade sectors have substantial contribution towards national income (Figure 3.1).

The smaller countries in the SAARC region have immense potential to gain through smaller but flexible enterprises. The SMEs contribute half of the Bangladesh’s industrial GDP and provided employment to about 5 million people or 82 percent of the total industrial sector employment. In 2001 Bhutan had 409 small-scale and 43 medium-scale enterprises. In Nepal, SMEs contribute more than 98 percent of all establishments covered by censuses. More than 80 percent of the national value-addition in manufacturing comes from the SME sector. Finally in Sri Lanka, the SME sector comprises largely well-established businesses of which sole proprietorships and partnerships account for 80 percent of all SMEs. These statistics point towards the immediate need for managers and firm owners in the SAARC region to focus more on HRD as the key pillar of future growth strategy.

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[^13]: Zaman, 2008
Figure 3.1: Bangladesh Sector Wise Contribution of SMEs in GDP

Source: ICG/MIDAS Survey, 2003
Where: A=Agriculture, F=Fishing, M=Manufacturing, C=Construction, WT=Whole sale and retail trade, HR=Hotel and restaurants, TSC=Transport, storage and communication, RRB=Real state, renting and business, E=Education, HS=Health and social work and OS=other social activities
4. Current Status of HRD in SAARC Region

The classical economists like Adam Smith (1776) regarded HRD as a resource for the wealth of nations. The modern day competition as suggested by Jayawarna et al. (2007) is based the training which in turn depends on the market conditions, firm’s own performances, business characteristics, managerial leadership and the level of social capital (Figure 4.1).

The SMEs in South Asia require facilitation from the public sector in terms of basic market place competition reforms, access to finance, technology, logistic support, HRD and entrepreneurship development. Marquardt (2002, 2005) argues that modern HRD should be adopted in a manner that ensures benefits of globalization to workers on an even basis. Similarly, Bierema and D’Abundo (2003) argue for ‘socially conscious’ HRD which involves promoting ethical and socially responsible management and leadership. These ideas reflects two things: First, the growing influence on organizations of business ethics and Corporate Social Responsibility (CSR) and secondly the influence of a humanist perspective in learning and HRD.

Figure 4.1: Modern Competition Model

The importance of policy in the areas of education, labour, skill development, technology and micro finance has important reverberations on the HRD effectiveness in the SMEs. It will be instructive to have a bird’s eye view of some of recent policies of SAARC countries for the uplift of the human resource. Most of the commentary below is based on published government sources across SAARC countries for the uplift of the human resource.

I. State of Education

Education provides requisite knowledge and skills required for sustained growth of the economy and overall intellectual progress. The importance of education is recognized, as the foundation block for achieving national socio-objectives and building a more inclusive, equitable and
sustainable society. SAARC has a demographic advantage with a large youth population. But this advantage can only be realized if economic opportunities for youth expand on a substantial scale. Education amongst other factors can help in expanding such opportunities.

In Afghanistan, education system has been undermined due to 23 years of external and internal war. Under the Taliban regime, girls were not allowed to go to school and fewer than 900,000 boys were enrolled. In 2002, Ministry of Education in Afghanistan devised education policy to overhaul the system. The salient features of education policy in Afghanistan are as under:

- Provide compulsory primary education opportunities for all regardless of gender, ethnicity, language or religion
- Deliver a balance and equitable education opportunities for all particularly rural provinces
- Design, develop and implement a unified curriculum
- Improve the quality of education and establish a modern learning system reflecting the evolving needs of society
- Coordinate a sequence of learning experiences involving early childhood education and subsequent levels of learning, up to higher education
- Launch campaigns in eradicating illiteracy
- Modernization of the educational environment and delivery of education
- Expand vocational and professional education and teacher put in place a web of training colleges.
- Encourage humanitarian assistance from friendly countries, international communities, UN agencies and national NGO’s education and also carry out capacity-building of education ministry
- Benefit from the educational expertise and successes of other countries and international communities
- Raise student awareness on the negative consequences of terrorism, drug addiction, war/conflict, discrimination, etc.
- Strengthening a spirit of unity among students and endowing them with peaceful values in order to practice good citizenship and develop progressive attitudes of national unity, and enriching cultural orientation

During Taliban government, girls were not allowed to attend the schools and less than 90,000 boys were enrolled in schools. University enrollment was 7881. Now about 7 million students are enrolled in primary and secondary schools (37 percent are female) and university enrollment has grown to 62,000.

Bangladesh has developed National Strategic Plan for Higher Education for the next 20 years. The strategic plan highlights major challenges facing the sector in Bangladesh and recommends strategies to address the issues. The strategic plan recognizes, among other factors, limited access, weak governance and management of institutions and low quality of higher education as

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14 National Education Strategic Plan, 1385-1389
15 World Bank, 2010
the major issues which need to be addressed. The Plan proposed a number of policy reforms and interventions to be implemented in three consecutive phases. Some of the key recommendations made by the Plan are:

i. De-politicization of public universities
ii. Setting up a national search committee for selecting Vice-Chancellors and other senior Professors
iii. Strengthening of University Grants Commission (UGC)
iv. Establishment of Accreditation Council
v. Enhanced support for high quality research
vi. Development of strategies for retaining and developing quality teaching staff.

The higher education in Bhutan is at its embryonic stage although the nation now has increased quantity and quality of professionals who were trained in India and abroad. Due to increase in number of students going abroad for higher education and also growth of public as well as private colleges, Ministry of Education in collaboration with the Department of Adult and Higher Education has come up with a draft Tertiary Education Policy which will help in instituting a system to coordinate, align and expedite the development of the tertiary education system in the country. The strategies discussed in draft tertiary education policy document are as under:\(^\text{16}\):

- Align developments in tertiary education to the needs of the changing society and economy
- Facilitate and enhance the growth and expansion of quality tertiary education institutions for all Bhutanese who are willing and able to pursue tertiary education
- Establish relationship between the government and the tertiary education providers in terms of registration and licensing, planning and financing, and accreditation and quality assurance
- Create a liberal and stable policy environment that is conducive for the growth and participation by private and international campuses in the tertiary education system
- Facilitate creation of a knowledge hub in support of knowledge economy in the country
- Develop tertiary education as an industry that can cater to both domestic and international markets
- Provide guidance on financing tertiary education through government and on-government sources and
- Consolidate and create a system of national research.

The population of India is estimated to be around 1140 million and large portion of the population is young. In order to ensure the equitable access to education for all citizens, Indian government has integrated the values of secularism, egalitarianism, respect for democratic traditions and civil liberties and quest for justice in the mainstream education system. It aims at creating citizens equipped with necessary knowledge, skills and values to build an inclusive and progressive society. The Mission of Ministry of Human Resource Development and the Department of Higher Education is as follows:

\(^{16}\)UNESCO, 2009
• Provide greater opportunities of access to higher education with equity to all the eligible persons and in particular to the vulnerable sections.
• Expand access by supporting existing institutions, establishing new institutions, supporting State Governments and Non-Government Organizations/civil society to supplement public efforts aimed at removing regional or other imbalances that exist at present.
• Initiate policies and programmes for strengthening research and innovations and encourage institutions –public or private – to engage in stretching the frontiers of knowledge.
• Skilled development so as to reap the benefits of the demographic advantage of the country.
• Promote the quality of higher education by investing in infrastructure and faculty, promoting academic reforms, improving governance and institutional restructuring.
• Engage with civil society, state governments and with the international community in furtherance of knowledge, language and culture.

In Maldives the school enrollment rate is relatively high. The various responsibilities of Ministry of Education are delegated to its different sections and educational institutions functioning directly under its supervision, as well as schools. The Ministry also sets guidelines and monitors the service of private and community educational institutions including schools and tuition centers. The Ministry is focused on providing “school” education to Maldivians, both formally as well as informally; and higher education and training has been removed from its mandate. In public sector institutions, education is free whereas, private sector institutes charge nominal fee. The education system is based on english medium curriculum.

In Pakistan the Higher Education Commission (HEC) was formed in 2002. To improve access, learning needs for the 21st century had to be balanced with the willingness and capacity of institutions to expand. It has therefore been a priority to optimize the utilization of existing resources and focus on physical infrastructure, as well as technological infrastructure development so that modern approaches including distance education methods can play their proper role. To raise participation in higher education, the HEC has also focused on quality improvement in faculty, research and learning environment, curricula, governance, assessment, accreditation of institutions, and industrial linkages. Equity issues have been approached mainly through the provision of need-based scholarships for marginalized groups. As per the latest data, enrolment in public institutions is now increasing at approximately 30 percent per year – at par with the private sector.

The HEC has declared the following as its core strategic aims:

• Faculty development
• Improving access
• Promoting excellence in learning and research
• Relevance to the economy
• Developing leadership, governance and management
Effectiveness of Human Resource for Developing SMEs in South Asia

- Enhancing quality
- Physical and technological infrastructure development

In Sri Lanka the University Grant Commission (UGC) is an apex body whose mandate is to allocate resources to the public universities and specialized institutes. At the macro level, the “Mahinda Chintana: Vision for a New Sri Lanka” is a 10-year Horizon Development Framework (2006-2016) built around an ambitious 8 to 10 percent GDP growth rate target. The Framework aims to create a knowledge economy able to sustain global competitiveness and higher education is one of the channels to achieve this goal. However, there is currently no real long term higher education strategy. This is why the Government has recently launched the formulation of such a strategy, using a two-pronged approach combining technical expertise and consultative process.

The above mentioned commentary about educational reforms across SAARC region indicates how countries are striving hard to promote higher education, but due to limited resources most of the SAARC member states are lagging behind the desired minimum standards for competing in a globalized competitive and continuously evolving world. In case of Maldives and Sri Lanka, there is no clear higher education strategy, although both the countries are focused on disseminating primary level school education. There is need for collective efforts to promote higher education in the region. The South Asian University is one of the best examples in terms of collective capacity building efforts. The mandate of the South Asian University is as follows:

- Enhance learning in the South Asian community that promotes an understanding of each other’s perspectives and strengthen regional consciousness;
- Provide liberal and humane education to the brightest and the most dedicated students of South Asia so that a new class of quality leadership is nurtured; and
- Enhance capacity of the South Asian nations in science, technology and other areas of higher learning vital for improving their quality of life

There is strong need across the SAARC region, for institutes capable of providing managerial education producing trainer of trainers, design and develop school curricula and conduct policy research in various themes of business management. The leading countries in higher education in the region for instance Bangladesh, India and Pakistan should help other member states to establish higher education goals and provide technical help in implementing these goals.

II. Labor Policies

The stock of total labor force in the SAARC region is given in Figure 4.2. Due to poor skills quality there is a strong need to ground HRD Strategy in SAARC region within an overall framework of growth and employment strategy.

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17 South Asian University, 2010
In the SAARC region, India is leading with the highest stock of workers at 450 million. India has formulated a National Policy for Skill Development (NPSD) in February 2009 which targets of having 500 million skilled workers by 2022 with the following vision\textsuperscript{18}:

- Skill development should harness inclusivity and reduce economic and social divisions among Indian workforce particularly across rural-urban, male-female, and organized-unorganized sectors
- Matching the emerging demands for skills across various industries and economic enterprises
- Evolving National Vocational Qualification Framework comparable with international standards
- Developing standard certification system by recognizing and including quality skills acquired through any informal system of learning
- Greater and more active role for workers, organizations, industry, civil society, Panchayati Raj Institutions and other professional bodies
- Greater reduction of poverty through enhanced earnings of skilled workers

In India National Skill Development Corporation (NSDC) is one of the recent initiatives by the government. NSDC is a non-profit company registered under the Companies Act 1956 with an appropriate governance structure. The Head of the Corporation is a person of eminence/reputed professional in the field of skill, vocational and professional development. The Corporation would constitute of sector skills councils with the following functions (NPSD 2009):

\textsuperscript{18}Ministry of Labor India, 2009
a) Identification of skill development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals in making informed choices
b) Development of sector and skill development plans and maintain skill inventory
c) Determining skills and competency standards and qualifications
d) Standardization of affiliation and accreditation process
e) Participation in affiliation, accreditation, examination and certification
f) Plan and execute training of trainers
g) Promotion of academies of excellence
h) Establishment of a well structured sector-specific Labor Market Information System (LMIS) to assist planning and delivery of training

Bangladesh in order to effectively manage its human resources strongly believes in the need to think beyond state controlled Technical and Vocational Education and Training (TVET) systems and emphasizes the varied types of formal and non-formal trainings involved in skills development. In Bangladesh, Skills Development Policy 2010-15, aims at promoting access to education, training and lifelong learning for people with nationally identified special needs, such as youth, low-skilled people, people with disabilities, migrants, older workers, indigenous people, ethnic minority groups and the socially excluded; and for workers in small and medium-sized enterprises, the informal economy, the rural sector and in self employment. The aim of the skills development system in Bangladesh is to support rapid and inclusive growth through:

- Enhancing individuals’ employability (wage/self employment) and ability to adapt to changing technologies and labor market demands
- Improving the productivity and profitability of enterprises and
- Strengthening national competitiveness and reducing poverty

To that end major objectives of the National Skill Development Policy are to:

- Provide a clear vision and reform agenda for skills development
- Improve the quality and relevance of skills development
- Establish more flexible and responsive delivery mechanisms that better service the needs of industry, individuals and the community at large

In Pakistan, government is aiming to ensure full adherence of labor laws and worker friendly environment in all establishments to promote decent work in the country. Social and economic well-being of the people is one of the principal objectives of the present people’s government. Labor Policy, like policies in other areas, should also aim for attaining the objectives in a manner best suited to the resources of the country and the prevalent state of economy. There is an urgent need to revitalize the domestic economy, increase the level of productivity, promotion of investment and maximization of employment. There is an equally genuine requirement to create among workers and employers, a better awareness of their obligations to the national objectives
stated above. The main elements of HRD and Employment strategy (Labor Policy, 2010) are outlined below:\(^{19}\):

i. Given the need to create 1.25 million additional employment annually and recent declining employment elasticity, the growth rate of the economy need to centre around a minimum of 8.3 percent per annum

ii. Primary emphasis will be on employment generation in rural areas and surrounding small towns through development of physical and social infrastructure and rural industries

iii. Special measures will be taken to reduce unemployment among the educated not through inefficient public sector employment in administrative jobs but to meet real needs of the economy especially in the social sectors and private sector wage and self-employment

iv. Effort will be made to accelerate development, increase productivity of small scale and informal sector enterprises and to generate employment in less developed regions to remove regional disparity

v. Self-reliance and austerity will be taken as cardinal planks of the entire policy package

In Sri Lanka, Department of labor is involved in activities such as worker’s education, human resource placement, labor market information, social dialog and monitoring. In this department there is a Social Dialogue and Workplace Cooperation Unit. The functions of this unit are as under:

i. Prepare policy and position papers on social dialogue and workplace cooperation

ii. Plan, organize and conduct training workshops on social dialogue and workplace cooperation for the benefit of workers, employers and their organizations

iii. Prepare and disseminate public awareness materials on social dialogue and workplace cooperation among workers, employers and their organizations

iv. Capacity building of the stakeholders on social dialogue and workplace cooperation

v. Liaise with trade unions employer organizations in promoting social dialogue and workplace cooperation

vi. Participate in meetings, conferences and workshops concerned with social dialogue and workplace cooperation

### III. Skill Development

The SAARC region have been striving hard towards the achievement of Millennium Development Goals (MDGs), SAARC Development Goals (SDGs) and skill development for increased human development is recognized as an important element. At the moment these countries are in evolving process achieving some success but at the same time a lot of room for improvement to bring the efforts closer to international best practices around the world. Figure 4.3 illustrates the position of formal training around the world. The incidence of formal training is highest in Latin America and Caribbean i.e. 56 percent followed by East Asia and pacific and

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\(^{19}\) Ministry of Labor and Manpower Pakistan, 2010
Africa at 54 and 35 percent. In South Asia, formal training is 24 percent which is low as compared to rest of the regions of the world.

Figure 4.3: Incidence of Formal Training by Region (%)\textsuperscript{20}

![Pie chart showing the incidence of formal training by region.](image)

Source: National Skill Strategy, NAVTEC 2010-13, Pakistan, 2009

The vision and strategy of Bangladesh draft skill development policy 2010-15 enumerates the provision of improving the quality and relevance of skills development, establishing more flexible and responsive delivery mechanisms for effective service needs of the industry, increasing participation in skills development by employers, workers and the community and enabling more effective planning, coordination and monitoring of skill development activities by different ministries, industry, public and private institutions\textsuperscript{21}.

**Box: Examples of informal training and learning in small enterprises**

- Analyzing and observing the work of skilled worker

\textsuperscript{20} Formal, job-related training includes courses or programs related to a worker’s current or future job. These courses and programs have a structured plan whereby a student, led by a teacher or trainer, follows a planned program and receives some form of formal recognition upon completion, such as a certificate, diploma or degree.

\textsuperscript{21} ILO and Planning Commission of Bangladesh
### Effectiveness of Human Resource for Developing SMEs in South Asia

- Trial and error experimentation through hands on practice session, therefore acquiring new skills
- Lecture deliverance of skilled worker. For instance in case of new technology or product
- Rotating workers between jobs for ensuring multi skilled formation
- Designating an employee through social mentoring and creating social capital
- Regular Seminars and conference knowledge

Source: Ashton *et al.*, 2008

The Government of Bangladesh aims at strengthening the National Skills Development Council (NSDC) to act as forum where representatives of government, employers, workers and civil society can provide leadership and clear direction to the skill development system. Moreover, role of this body is expanded for monitoring all activities of public and private training providers, approval and implementation of all governance, regulatory and legislative provisions, coordinating the provision of skills development delivered by public and private providers under guidance of different government ministries. The Bangladesh Technical Education Board (BTEB) is responsible for ensuring quality assurance system for skills development, changes in the public service recruitment rules for appointment of fulltime professionals and restructuring to include representatives from industry, professional bodies, civil society and other key government ministries for strengthening the operational autonomy of the board.

The key Principles that encapsulate the government’s vision for skills development rest on:

- The demand driven, flexible and responsive training through structural reforms
- Competency based training via achievement and demonstration of practical skills
- Increasing the nationally recognized qualifications through revision of formal programs
- Maintaining the quality of training through introduction of skill quality assurance system
- Collaboration with industry via network of tripartite Industry Skill Committees (ISCs)
- Skills and labor market data collection
- Competent and certified instructors through common and uniform standardization policy
- Institutional management by decentralization of financial and administrative authority
- Strengthened apprenticeships through the provision of variety of incentives
- Increased skills at work place through facilitation of recognition of prior learning
- Improved access for under-represented groups through reforms for an inclusive education system
- Support and promoting the role of private sector for meeting minimum quality standards

The Ninth Five Year Plan (2002-2006) of Bhutan envisaged the policy of gross national happiness by maximizing the resources and preserving the culture.\(^{22}\) The qualification is being relaxed for attaining eligibility for vocational training; special leaves allow for technical course participation and courses should be in line with the demands of industry and market.

The only education in the past was available in the form of monastic education, but now the education has grown in leaps and bounds, both in terms of number of schools and institutes and

\(^{22}\) [www.rnrstat.bt](http://www.rnrstat.bt)
in enrollment, especially since the introduction of modern planned development in 1961. Figure 4.4 shows that the rate, at which the schools and institutions have expanded, it has greatly helped the skill development and economic growth of the country. Yet, the policy focus has been only on increasing the enrollment and institutes and this needs to be broadened by offering a clearer role for skill developers in the country. The quality aspect in skills training needs to be further inculcated.

**Figure 4.4: Educational Institutes in Bhutan**

![Graph showing educational institutes in Bhutan from 1961 to 2007](source: Bhutan Country Strategy Paper, 2007-13)

The current capacity of skill development in India is around 3.1 million persons per year. The 11th Five Year Plan envisions an increase in that capacity to 15 million annually with target of producing additional 500 million skilled workers by 2022. The vision for skill development highlights objectives such as: harnessing inclusivity, promoting excellence via supporting the supply of trained workers, weightage to outcome and users choice in growing competition and skill development to be an integral part of economic, labor and social policies.

The Plan also envisaged the mechanism for increasing the scope of training in the country (India 11th five year Plan). This strategy includes the flexibility for innovation, creation of National Vocational Qualification Framework (NVQF) with and flexible system, permit individuals to accumulate their knowledge and skills perpetually, public investment for increasing the training arrangements, promoting partnerships between government, industry, local governments, civil society institutions and all potential skill providers, reforming institutional mechanism and standing platforms for ensuring sustainability and facilitation for provision of training facilities without disturbing the normal working and school affairs.

Several steps were taken in the 10th Plan to expand access to primary education, especially the expansion in the Sarva Shiksha Abhiyan (SSA) and the Mid-Day Meal Scheme. As a result, the number of out-of-school children declined from 32 to 7 million, indicating that SSA brought an

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23 The Buddhist monastic education system, 2010
additional 25 million children into the education system during the 10th Plan period\textsuperscript{24}. The 11th Five Year Plan thrust is on creating a pool of skilled personnel in appropriate numbers with adequate capabilities, in line with the requirements of the ultimate users such as the industry, trade, and wider service sectors. Such an effort is necessary to support the employment expansion, including the shift of surplus labor from agriculture to non-agricultural sectors. This can only take place if current labor force is sufficiently skilled.

Although India is one of the fastest growing economies in the SAARC region and the demand has increased in the services sector, yet the vocational and education system has been faced with many loopholes\textsuperscript{25}. Therefore, the government in collaboration with private sector is making efforts for increasing technical education for its growing labor. The Government has made investment in the SME sector by increasing the pace of HRD, but the modus operandi still needs to be standardized to make it more across the country and particularly less developed areas.

The current policy focus of Maldives gives increased weightage to the private sector for playing an important role in the development of the country. It envisions the expansion of vocational training institutes in the country for expanding the skill development content. This includes the non formal and formal education at both rural and urban areas. Focused programs aimed at rural communities and small farmers have been implemented and the scope is increasing with increases in the literacy rate over time.

The major policy emphasis of Nepal hinges on expanding training opportunities, inclusion and access to all citizens, integration of training modes into one uniform system, linking economic demands with training, and creating an environment for increased access to technical and vocational training. Moreover, an opportunity of free of charge training of at least 3 months and the facilitation of lifelong learning on fee-paying basis will be available to all citizens.

The expansion of training opportunities will be supported by a flexible system, deregulation, autonomy and decentralization in education sector, provision of free start up support to organized and reliable training providers, assurance of quality outcome (in line with national vocational quality standard), encouraging trainers for bringing children who are outside the school into the mainstream of training, recognition of prior learning for open assessment and bridging technical courses with general education.

In Bangladesh 25 percent of manufacturing establishments provide their employees with in-service formal training. This is significantly lower and therefore the outsourced vocational training institutes mostly run by the Government are the real source, but the quality of service is still dubious. Besides there is lack of information on the supply side and quality of VET and therefore the share of skilled labor force in Bangladesh has historically remained low.

In the same vein, Indian experience has been better than rest of the countries due to its rapid technological revolution and the booming gap created for skilled labor force. This vacuum created a spur for short term intensive trainings comprising diplomas and IT certifications this at the moment has played dividends for the overall economy and particularly the new enterprises. Besides this, the experience in Sri Lanka and Pakistan highlights mismatch in the factor market.

\textsuperscript{24} 11\textsuperscript{th} five year plan of India, 2007-12
\textsuperscript{25} World Bank, 2006
In both cases either there is financing issue and lack of private participation. Although some private sector initiatives have begun, still a lot remains to be done to accelerate the pace of quality trainings and its spillover effects public private partnerships and industry – government and academia nexus also needs strengthening.

In Pakistan, the strategy of National Vocational and Technical Education Commission (NAVTEC) 2010-13 outlines the importance of skill development by introducing competency based training, establishing industry specific centers of excellence, increasing the role of private sector, reforming the apprenticeship system and encouraging entrepreneurship. Besides this the strategy also aims at expanding geographical provision, reforming the apprenticeship system, focusing on skills for women, enhancing the role of industry, training for disadvantaged regions, facilitating the mobility of skilled workers, training of trainers, encouraging entrepreneurship research, developing a national qualifications framework, making training delivery flexible, reforming the management of training institutes, accrediting institutes, introducing vocational education in schools and integrating informal economy workers.

A competency based approach is envisaged to be followed which describes exactly what a worker should be able to do and must know in order to effectively perform a job in the workplace. Sector specific Industrial Advisory Groups (IAG) with representation of large, medium and small industry operating in the will be sought. The centre of excellence will be promoted with close linkage between training institutes and industry for effective flow of information. The role of the private sector is realized via institutionalizing industry’s role in setting standards, determining the content of training programs as well as assessment of trainees and programs.

The mode of apprenticeship will be reformed to include areas where women tend to be employed, or in which there is potential to increase their employment. Besides this, trade associations or industry-led groups will be encouraged to play a facilitating and supportive role for promotion of the apprenticeship system and the entrepreneurship facilitation will be evolved which will include information such as developing business plans, financial administration, marketing, conducting market surveys, ensuring quality, and approaching financiers. Structures and strategies are to be developed that encourage increased enrolment of women in traditional as well as non-traditional areas of training, and its social acceptance.

In Pakistan's labor force, 73 percent is employed in the informal economy, a growing percentage of which is women. Innovative approaches which integrate economic opportunities, social mobilization, training and post-training support will be developed. In Pakistan after the 18th constitutional Amendment, provinces will have more responsibility in designing the curriculum, syllabus, planning, and policy, centers of excellence and standards of education. At the moment it will depend whether the Provinces adhere to the previous policies of Federal administered training institutes and other levels of education or design new policies aimed at specific objectives of the province.

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26 Siddiqui, 2010
The expenditure on education and financing of technical skills in Pakistan has been on the lower side Table 4.1. Bhutan and Maldives have given greater importance to education and it is in the interest of these countries to have a knowledgeable economy where quantity of workforce is complemented by its quality. The education expenditure as percentage of GDP in case of Pakistan and Bangladesh is of serious concern and needs prioritization.

### Table 4.1: Education Expenditure as Percent of GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Education Spending (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>-</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2.3</td>
</tr>
<tr>
<td>Bhutan</td>
<td>5.1</td>
</tr>
<tr>
<td>India</td>
<td>3.2</td>
</tr>
<tr>
<td>Maldives</td>
<td>8.1</td>
</tr>
<tr>
<td>Nepal</td>
<td>3.8</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Development Indicators, 2010

Pakistan is on average investing less than 2 percent of the GDP in education, which is considerably less compared to international standards. The country for the past 7 years has not been up to the mark in increasing the technical and vocational training and nor could inculcate the creative skills in curricula. The inward looking policies with little emphasis on quality products, focus on primitive technologies and choice of economic activities and the limited supply of skilled workers all contribute to the poor state of HR (Atta-ur-Rahman et al., 2005).

The history of skill development in Sri Lanka dates back 200 years and associated with Catholic priesthood. Traditional apprenticeships under master craftsmen date back 3,000 years and remain in place in traditional arts and crafts and selected artisan trades such as masonry and carpentry. In the 1980s the sector was characterized by approximately 300 training centre’s operating under 11 government ministries plus the efforts of the private sector and some NGOs. There was a considerable mismatch between the outputs of vocational education and labor market demands (ADB 1999).

The goals and objectives of the Mahinda Chinthana10-Year Horizon National Development Plan (Ministry of Finance and Planning 2005) have contributed towards the improved quality of the workforce in Sri Lanka. The government is currently emphasizing equity by ensuring greater access to vocational training for rural youth and those in disadvantaged and conflict-prone areas. This has been achieved by increasing the number of rural vocational training centers, by widening the traits they offer and reorienting them to emerging advanced technology applications in manufacturing.

The overarching objective of the framework is to increase the relevance and quality of skills development and vocational and technical education and training, through greater alignment to national development goals, stronger linkages with industry and commerce, increased responsiveness to industry training needs and through convenient and flexible access for potential trainees.
The past 10 years of development in the TVET sector was guided by Presidential Task Force recommendations on TVET reform – 1998 and Mahinda Chinthana Vision for a New Sri Lanka – A Ten Year Horizon Development Framework 2006-2016. This is based on qualification framework in par with internationally recognized systems (National Vocational Qualification- NVQ), competency standards, competency based curricula, competency based training and assessments, quality assurance, continuous and final assessments in accredited courses and Recognition of Prior Learning (RPL) and assessment. In addition to this the policy focus is on enacting legislation to bind all public, private and civil society institutions providing TVET to a common qualification and development framework i.e. curricula and courses provided in state-run TVET institutions should be strictly responsive to economic and social demands, and there should be rationalizing of courses, establishment of formal, long term public-private partnerships at institutional and training centre level and establishing a career guidance network for the TVET system.

The education and training infrastructure in Afghanistan is in dearth due to past conflicts spreading over three decades. The country is now reshaping itself recognizing the importance of human development and in this context it has started to formulate new policies and has taken major steps towards rebuilding of social sector with particular emphasis given to education, training and skills development. This has resulted in increasing school enrollment from 1 to nearly 6 million since 2002, with enrolment of girls increasing to about 35 percent of this 6 million.27

According to Afghanistan national development strategy prioritization and implementation plan (2010 –2013) the Government aims to facilitate HRD through decent work and market-friendly labor regulation program, education for all program, expanding opportunities for higher education and the human resources for health program.

The National Skills Development Program (NSDP) launched in 2004 provides training in selected traits. Besides Afghanistan Compact Benchmarks have been sort out in the London Conference (January 2006) which identified benchmarks related specifically to vocational education and training. It was targeted that 150,000 workers will be trained in various skills by end 2010. Currently Ministry of Education (MOE) has 12000 students under training at the post basic level and admits students into their programs upon the completion of grade 9 and at the moment the benchmark is far from being accomplished due to poor participation rates28. The programs are offered through 44 institutions around the country of which nearly half are in Kabul.

Under the auspicious of World Bank the Government aims to provide for increasing labor skill orientation, demand driven system, skills building across a spectrum of traits and professional skills learning through international and best practices in the region, competence based approach for delivering training programs, investment in increasing training infrastructure, institutional autonomy and close nexus of industry and private sector leadership.

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27 World Bank, 2008

28 A school that is intermediate in level between elementary school and college and that usually offers general, technical, vocational, or college-preparatory curricula.
The formal training and development of individuals in the subsectors of vital interest has been an important component in the overall development initiatives of SAARC region, but still there is ample room for improvement as Table 4.2 suggests that firms offering formal training have been on the lower side and the informal training is not up to the standards on average only 17 percent of firms in SAARC region provide trainings for their employees.

### Table 4.2: Firms Providing Training Across SAARC

<table>
<thead>
<tr>
<th>Countries</th>
<th>Year</th>
<th>Firms Offering Training (as % of Total Firms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>2008</td>
<td>14.6</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2007</td>
<td>16.2</td>
</tr>
<tr>
<td>Bhutan</td>
<td>2009</td>
<td>23.3</td>
</tr>
<tr>
<td>India</td>
<td>2006</td>
<td>15.2</td>
</tr>
<tr>
<td>Nepal</td>
<td>2009</td>
<td>8.8</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2007</td>
<td>6.7</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2004</td>
<td>32.6</td>
</tr>
</tbody>
</table>

Source: World Enterprises Survey, 2010

In higher education and training, India and Sri Lanka have performed better than rest of the countries while the poorest performer in this regard was Nepal (Table 4.3). Indian performance in higher education, quality of education, local research and training and staff training is better as compared to other countries in the SAARC region. Pakistan and Bangladesh have been performing well below the world average. Sri Lanka ranked first amongst SAARC in the extent of staff training and local availability of training services.

### Table 4.3: Comparison of Skill Development Indicators in the SAARC Region (Ranking*)

<table>
<thead>
<tr>
<th>Country</th>
<th>Higher Education and Training</th>
<th>Quality of Education System</th>
<th>Local Availability of Specialized Research and Training Services</th>
<th>Extent of Staff Training</th>
<th>Higher Education and Training (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>126</td>
<td>94</td>
<td>127</td>
<td>129</td>
<td>126</td>
</tr>
<tr>
<td>Bhutan</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Maldives</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Nepal</td>
<td>131</td>
<td>116</td>
<td>133</td>
<td>137</td>
<td>131</td>
</tr>
<tr>
<td>India</td>
<td>85</td>
<td>39</td>
<td>51</td>
<td>59</td>
<td>85</td>
</tr>
<tr>
<td>Pakistan</td>
<td>123</td>
<td>87</td>
<td>97</td>
<td>115</td>
<td>63</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>62</td>
<td>44</td>
<td>46</td>
<td>37</td>
<td>62</td>
</tr>
</tbody>
</table>

Source: World Competitiveness Report, 2010-11

*Out of 139 Countries

From the SAARC platform further attention of policy circles is required to boost the skill development initiatives. The areas of specified attention may be following:

- Improving the private sector linkages with the training institutes and having a common platform at the SAARC level to oversee the medium and short term national plans, which should be reflective of market driven demand
• Sharing of best practices among the SAARC countries where the skill development process have impacted the SMEs and other sectors of the economy
• Improved research and training practices with each other sharing the technology for improving firm level performance
• At the moment the policy focus is on increasing the human development in line with the MDG’s and diverting more resources in improving the educational base of the individuals. One should not forget the targets set for the growth of industrial and services sectors in SAARC countries as well as future sector specific demand of labor globally.

IV. Science and Technology Policies

The Science and Technology Policies (STP) of SAARC countries ought to be integrated for expeditious and cost effective achievement of technological developments in the region. The research in science and technology has immense importance for the member countries because of their growing youth population, divergent policies towards innovative practices and as a symbol for development. Innovation policies play the crucial role in redefining economies of scale and new niches such initiatives should be placed at the centre of all development strategies (Zengpei, 2006).

Table 4.4: High-Tech Exports

<table>
<thead>
<tr>
<th>Regions</th>
<th>High Technology Exports (% of Total Manufactured Exports)</th>
<th>Research and Development Expenditure (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia &amp; Pacific</td>
<td>28% (2008)</td>
<td>1.49% (2007)</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>6% (2008)</td>
<td>0.88% (2007)</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>12% (2008)</td>
<td>0.66% (2005)</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>4% (2006)</td>
<td>0.48% (2005)</td>
</tr>
<tr>
<td>South Asia</td>
<td>5% (2008)</td>
<td>0.79% (2007)</td>
</tr>
<tr>
<td>Africa</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: World Enterprise Survey, 2010

Comparing the region-specific performance, South Asia is on the lower side in terms of high technology exports and also research and development expenditure. The high-tech exports have highest percentage in East Asia and Pacific suggesting the fact that increased importance is attached to innovation, education and entrepreneurship (Table 4.4).

South Asia’s position remains low in terms of technology absorption and its ultimate impact on manufactured exports. Moreover the research and development expenditure as percentage of GDP in South Asia is also low as compared to other regions.

The Information and Communication Technology Policy 2009 for Bangladesh envisages objectives and policy measures for:

• Expanding and diversifying the use of ICTs to establish a transparent, responsive and accountable government
• Developing skilled human resources
• Enhancing social equity
- Ensure cost-effective delivery of citizen-services through public-private partnerships
- Support the national goal of becoming a middle-income country within ten years and join the ranks of the developed countries of the world within thirty years.
- Increasing productivity with efficient use of technology
- Increasing education through investment in research and connectivity via internet usage expansion
- Strengthening exports through optimal utilization of innovative techniques
- Ensuring that all universities provide global standard ICT education
- Develop strong marketing, promotion and branding for Bangladeshi ICT products and services in global markets.

The Government of Bhutan from the social development point of view is ensuring that ICT is used for the purpose of bringing good governance, creation of Bhutanese info-culture and to create an environment for “High-Tech Habitat”. The initiatives are geared for introducing a modern legal and regulatory framework, strengthening the relevant policy and regulatory bodies, liberalized and competitive infrastructure market, ensuring that there is affordable, fast, secure, sustainable and appropriate ICT infrastructure, awareness and skills from basic computer literacy to the high level technical skills for boosting the ICT industry. Activities outlined in this area aim to improve the quality and coverage of training institutions, including through developing a centre of excellence that can improve the quality and accredit ICT training institutes in Bhutan. A national ICT awareness campaign is another step toward improving the capacity to deliver. The planned activities will boost the competency of the local ICT private sector, and provide business opportunities that can be translated into increasing exports of ICT services.

India’s 11th Five Year Plan has a renewed focus on science and technology through education system which nurtures creativity, R&D culture and value system which supports both basic and applied research and technology development, policy framework which encourages young people to enter into scientific careers and developing new models of higher education, particularly for research in universities and high technology areas. The policy realizes that peer reviewed performance should be given recognition through a suitable scheme of incentives.

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29 Ministry of Information and Communication, Bhutan, 2010
In Nepal, the importance of development of science and technology for the overall economic development was felt half a century back in 1956, which is duly reflected in the first development plan of Nepal. This was followed by the establishment of Nepal Academy of Science and Technology (NAST) in 1982. In 1989 NAST put forward the first ever National Science and Technology Policy and emphasized on: Proper resource utilization and development, technology transfer, quality manpower development, extension and participation in science and technology development (NAST 2006). Moreover the constitution of Nepal envisages the development of science and technology, promoting the indigenous technology and enhancing the domestic technological capability.

The 10th Five Year Plan (2002-2007) of Nepal stipulates the policy essence of developed, dynamic and prosperous state by raising the living standards through the appropriate development and use of science and technology. The overarching objectives is of enhancing the national capacity through appropriate development and use of knowledge, skill and efficiency in the field of science and technology, elevating the country to a competitive position, powerful means to increase production and productivity of the country, promote participation of private sector, establish a working system of competitiveness in R and D activities among scientists, encourage universities, research institutes and scientists to become more involved in research activities and to produce high class manpower in S and T by providing special place in university curriculum scientific communities and scientific institutions and in mobilizing skilled human resources.

In Pakistan, a comprehensive Science and technology policy (STP) was adopted in 1984 and reviewed annually thereafter to achieve self-sufficiency in food and energy, and for providing optimal healthcare, increasing literacy, improving national growth, and establishing high-tech institutes to support the industrial sector. The updated Science and Technology Policy aims at optimizing technology-based development by investing in the latest technologies in order to gain an edge in indigenous industrial growth. Figure 4.5 shows that expenditure incurred on science

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30 Ministry of Science and Technology, Pakistan 2010
and technology in Pakistan is on the rise, but given the nature and context of global competition worldwide it is still on the lower side and needs to be enhanced further.

**Figure 4.5: Science and Technology Expenditure as Percentage of GDP**

![Bar chart showing science and technology expenditure as percentage of GDP from 1991 to 2007. Source: Pakistan Council for Science and Technology, 2009]

The most important factor in sustainable growth of information technology in any country is the human resource. The present policy focuses on quality IT education, increasing the internet access in schools, computer education for increasing the skill orientation of labor force, increasing the base of primary, secondary and tertiary education in terms of quantity as well as quality, an efficient and focused educational system with inputs such as innovation and creativity and scholarship programs. For example, initiative of National ICT Scholarship program sponsored by Ministry of IT is a step in the right direction and includes efforts to establish centers of excellence for IT training and establishing IT placement centers for improved knowledge sharing and accumulation.

According to the Global Information and Technology Report 2008-09, Pakistan’s position in terms of internet access in schools and network readiness index depicts a lower ranking and lack of knowledge absorption. Also, the education sector expenditure has seen a drop in case of Pakistan and this does not go well for bringing change in the form of technological innovation (Figure 4.6).

The S and T policy objectives of Sri Lanka hinge on fostering science, technology and innovation culture that effectively reaches all citizens of the country, providing equal and adequate opportunities for all to acquire a basic science education, encourage students towards an inquiring mind and the application of scientific methodologies for efficiency and productivity in everyday life, promoting an appreciation of S and T among the public, leading to a culture of innovation and entrepreneurship, increasing the investment for S and T up to 1.5 percent of GDP.

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31 Global Innovation Index Report, 2010  
32 National Science and Technological Commission, Sri Lanka, 2010
by the year 2016, with the public sector contribution being at least 1 percent, strengthening the existing science and technology institutions and universities to generate quality research, strong linkages of international centers of excellence with local institutions, increasing the number of local researchers, ensuring opportunities for all segments of the population for vocational and tertiary education in S and T, encourage industries and research and development institutions to give greater emphasis to high-tech innovations at the same time not neglecting smaller efficiency including innovations, technology transfer and commercialization and lastly enhancing financial assistance schemes specifically for economically disadvantaged students in post-secondary education including vocational training.

The science and technology policy of Afghanistan is in a nascent stage and it will take some time to imitate the type of policies and development brought about by its regional partners. A lot of global funding is being invested in Afghanistan and the time for the country is ripe to make use of all the resources to be a more productive country. The SAARC region also needs to come up with a facilitation plan for struggling member countries.

According to the Vision 2020 of Maldives the strategic thrust is on developing a viable ICT sector that will support the development and upgrading of its targeted economic sectors within the short and medium-term and to develop a strong export-oriented ICT industry, led by local firms in the long-term. There is need of extensive investment in higher-level skills and core competency among the people. Modern technology is to be employed to facilitate continued progress and to provide modern conveniences to the people.

**Figure 4.6: Education Expenditure as Percentage of GDP**

The current economic structure of Maldives is dominated by tourism and fisheries sectors. This suggests that more areas can be developed by the effective usage of S and T at the institutional

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33 Department of National Planning, Maldives, 2010
34 Seminar Presentation by Dr. Atta Ur Rehman, Former Chairman, Higher Education Commission, Pakistan
and firm level. The use of technology is very important to enhance and speed up the proposed development of the industrial clusters. The current ICT milieu in Maldives is very encouraging as there is already an existing mass of IT activities. The use of e-governance is slowly expanding and IT training is mandatory in most schools.

Table 4.5: Technology Achievement Index for SAARC Region

<table>
<thead>
<tr>
<th>Countries</th>
<th>Technology achievement index 2009</th>
<th>Rank 2009</th>
<th>High technology exports (% of manufactured exports) 2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Bhutan</td>
<td>0.17</td>
<td>84</td>
<td>-----</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.15</td>
<td>89</td>
<td>-----</td>
</tr>
<tr>
<td>India</td>
<td>0.22</td>
<td>80</td>
<td>4.8</td>
</tr>
<tr>
<td>Maldives</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Nepal</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.17</td>
<td>86</td>
<td>1.4</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

Source: Technology Index, World Bank, 2009

Table 5 illustrates the position of SAARC countries in terms of technology indicators and exports of high technology for boosting exports. The high technology exports as percentage of manufactured exports is also low. Therefore the policies need to be set in expanding the S and T initiatives through detailed R and D plans. The technology classification in Table 4.6 shows that the high technology content is lacking in the South Asian exports. The main concentration is in the primary or low technology exports.

Table 4.6: Exports of South Asian Countries According to Technological Classification (% of total exports)

<table>
<thead>
<tr>
<th>Technology type/ Total</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>15.51</td>
<td>15.62</td>
<td>14.92</td>
<td>13.56</td>
<td>12.62</td>
<td>13.28</td>
</tr>
<tr>
<td>Resource based</td>
<td>21.45</td>
<td>21.29</td>
<td>23.48</td>
<td>23.75</td>
<td>27.50</td>
<td>31.76</td>
</tr>
<tr>
<td>Low technology</td>
<td>49.01</td>
<td>48.74</td>
<td>46.69</td>
<td>46.47</td>
<td>43.88</td>
<td>37.44</td>
</tr>
<tr>
<td>Medium technology</td>
<td>10.40</td>
<td>10.09</td>
<td>10.50</td>
<td>11.82</td>
<td>11.96</td>
<td>13.28</td>
</tr>
<tr>
<td>High technology</td>
<td>3.63</td>
<td>4.26</td>
<td>4.42</td>
<td>4.40</td>
<td>4.05</td>
<td>4.24</td>
</tr>
</tbody>
</table>


Note: Figures in the parenthesis indicate South Asia

Table 4.7 gives ranking across SAARC countries in science, innovation and competitiveness. India has shown better performance than rest of the countries except that in terms of

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35 The TAI aims to capture how well a country is creating and diffusing technology and building a human skill base—reflecting capacity to participate in the technological innovations of the network age. The range is from 0 to 1. The value closer to 1 is good performing while closer to 0 is reflects bad performance.
technological readiness and company spending on R and D Sri Lanka has excelled. Other performances have been mediocre and need further investment to gain advantage in this field.

Table 4.7: Comparison of Science and Technology Indicators in SAARC (Rank\(^{36}\))

<table>
<thead>
<tr>
<th>Country</th>
<th>Technological Readiness</th>
<th>Innovation</th>
<th>GCI INDEX</th>
<th>Internet access in Schools</th>
<th>Capacity for Innovation</th>
<th>Firm level Technology Absorption</th>
<th>Company Spending on Research and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>126</td>
<td>119</td>
<td>107</td>
<td>133</td>
<td>115</td>
<td>109</td>
<td>129</td>
</tr>
<tr>
<td>Nepal</td>
<td>134</td>
<td>137</td>
<td>130</td>
<td>112</td>
<td>126</td>
<td>129</td>
<td>130</td>
</tr>
<tr>
<td>India</td>
<td>86</td>
<td>39</td>
<td>51</td>
<td>70</td>
<td>33</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>Pakistan</td>
<td>109</td>
<td>75</td>
<td>123</td>
<td>84</td>
<td>58</td>
<td>88</td>
<td>67</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>84</td>
<td>40</td>
<td>62</td>
<td>82</td>
<td>41</td>
<td>47</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Global Competitiveness Report, 2010-11

The extent of technology progress has been an important factor for firms to generate the economies of scale. The developed countries have strongly relied on research progress for bringing new ideas for firm development. For South Asian countries to remain effective in the global market, the quality certification of products and licensing of technology according to the international standards has been a key area where the SAARC countries require further efforts. As figure 4.7 illustrates that technological capacity is still at an infancy stage across SAARC countries. The international quality certification is high for firms in India and this has been the success for expansion of IT industry and its particular role in the services sector with 22.5 percent of the firms internationally recognized with proper certification. The rest of the SAARC countries have shown little progress in this area. Furthermore, licensing of technology has remained on a low pace due to lack of innovative and risk taking entrepreneurship. The case of Afghanistan has been impressive as most of the new establishments see an influx of new ideas from the foreign firms currently engaged in the country.

Figure 4.7: Technology and Competiveness 2009

\(^{36}\) Out of 139 countries

\(^{37}\) Stands for Growth competitiveness index and captures the microeconomic and macroeconomic foundations of national
A good example can be traced to a series of collaborative R & D ventures in Taiwan during 1990s\(^{38}\). The research concentrated on technological learning, upgrading and catching up industrial creation. The success of Taiwan technological competitiveness rested on a capacity to leverage resources and pursuit of a strategy for rapid catch up. In doing so the model involved the sharing process of technology by involving the smaller firms that could establish clusters. The level of technology has been decentralized for common sharing and its longer term benefits to the whole nation have been ensured.

V. Rise and Fall of Micro Finance

The SMEs face difficulty in obtaining the necessary financial resources to effectively scale up and grow their businesses in developing economies where market reforms have not been fully implemented and barriers to entry and exit. This constraint also impacts HRD needs of SMEs. The Governments in SAARC region have tried to address these issues by creating wide spread microfinance institutions and instruments. Given the youth bulge in most of the South Asian countries and assuming a low capacity to expand wage employment in short term, it is expected that the number of entrepreneurs in this region will expand. This calls for properly addressing “access to finance” issues. Robinson (2002) has identified reasons for the shortage of entrepreneurs in developing countries. Of all factors one of the important factors is lack of financing with poorly developed capital markets making it difficult for potential entrepreneurs to borrow the funds needed for establishing a new business and arranging working capital for needs including HRD.

The formal microfinance sector in Afghanistan came into existence in 2003 with the provision of investment support facility for Afghanistan (MISFA\(^ {39}\)) in collaboration with the World Bank. The objective was to assist the poor through funding mechanism from different donor organizations to help SMEs flourish. The initiative at the moment has proved to be a success story with increasing businesses covering all sectors of the economy. Afghanistan Microfinance Association (AMA) acts as a network of microfinance institutions operating in the country and helping out in the provision of training, financing facility for infrastructure, promotion of exports and development of entrepreneurship in the country.

The success of Grameen model in Bangladesh has increased the scope of this facility for poor immensely. Yunus (1994) claims, “If we are looking for one single action which will enable the

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\(^{38}\) UNCTAD, 2003
\(^{39}\)Microfinance Investment Support Facility for Afghanistan, 2010
poor to overcome their poverty, I would go for credit, money is power.” The credit invested will generate income and enterprise opportunities.

The financial sector in Bhutan is very small and provides limited financial products and services. In Bhutan there are four major financial institutions. There are only two commercial banks—Bhutan National Bank (BNB) and Bank of Bhutan (BOB), and two non-bank financial institutions—Bhutan Development Finance Corporation (BDFC) and Royal Insurance Corporation of Bhutan (RICB). The two commercial banks dominate the financial sector with a market share of 88 percent in total assets and 76 percent in total lending. The majority lending goes to the government enterprises.\(^{40}\)

The increased business activity in India has opened new horizons for microfinance initiatives. Although many of the financing is still in the informal sector, yet the formal sector has been gaining pace for the past decade. This is due to the increasing performance of services sector and growing importance of microfinancing as tool for developing entrepreneurs and reducing poverty in the country. Debt has become the dominant source of finance for Indian Micro Financial Institution (MFIs). The share of debt in top 10 MFIs was high at 71.9 percent in 2008. The commercial banks along with government apex institutions like Small Industry Development Bank of India (SIDBI) are major sources of debt funding to MFIs. The MFI in India take the form of societies, trusts, cooperative societies and self help groups (SHGs). The majority of MFIs are societies and trusts, followed by cooperatives and the share of NBFCs in outstanding portfolio has grown from 50.5 percent in 2005 and 71.3 percent in 2007 to 76.0 percent currently (IOM 2009).\(^{41}\)

**Funds**

In Nepal the microfinance services are provided by MFIs working as regulated Microfinance Development Banks (MFDBs), financial intermediary NGOs (FINGOs), savings and credit Cooperatives (SACCOs) and small farmers cooperative limited (SFCL). The growth of microfinance in Nepal is therefore constrained by the limited number of capable microfinance providers and limited capability of the public-owned MFDBs and requires best practices to be replicated for outsourcing the services of microfinance in generating business activities.

Pakistan’s microfinance facility was particularly highlighted in the government’s strategy document, ‘Poverty Reduction Strategy Paper’. The Microfinance Ordinance 2001 established a separate legal and regulatory framework to promote formal institutions in the country known as Microfinance Banks (MFBs). Presently the microfinance sector has microfinance providers (MFPs) categorized into five peer groups, Pakistan Microfinance Network (PMN) of Micro Finance Banks (MFBs), Rural Support Programs (RSP), specialized MFIs, multi-dimensional NGOs providing microfinance services, and others. The primary funding sources for MFPs in Pakistan are grants or concessional loans, commercial loans and client deposits with significant dependence on donor funding mostly from PPAF, ADB and DFID.

The Sri Lankan microfinance sector comprises a range of institutions including:

- Regional Development Banks (RDBs) and other licensed specialized banks (LSBs)

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\(^{40}\) Hussein M. H., 2009

\(^{41}\) Institute of Microfinance, 2009
• Samurdhi Bank Societies (SBSs)
• Cooperative Rural Banks (CRBs) and other cooperatives
• Thrift and Credit Cooperative Societies (TCCSs/ SANASA Societies)
• NGO and MFIs
• Other Financial Institutions

The institutions are registered under the Companies Act of 2007 and the Voluntary Social Service Organizations (Registration and Supervision) Act. There is sector wide detailed data available for financing structure of MFIs in the country. The main financing sources are donor grants, savings, soft loans and commercial loans, however, donor grants are declining now and they are mostly available for northern and eastern parts of Sri Lanka.

Most developing countries boarded the micro finance bandwagon following the standard donors’ agenda. However in most cases micro finance successes failed to generalize because the prerequisites for commerce were missing in most SAARC economies. Here we are referring to prerequisites such as existence of competition and market reforms. It is widely recognized that micro finance failed to lead towards substantial poverty reduction due to non-existence of level playing field in productive sectors and high barriers to entry and exit. Recently Pakistan growth strategy document issued by the Planning Commission argues that the current structure of urban development and state of cities is anti-entrepreneurship. The cities are not open for poor and small entrepreneurs. This implies that spatial rigidities are an equally important agenda for public policy.

VI. Shortcomings of Public Policies

Afghanistan 42

• Many private sector led institutions and NGOs are offering vocational training and skills development, but the level of curriculum, standards, and monitoring levels remains disaggregated and needs to be floated on common platform for better results
• The eligibility requirement for formal vocational education is strict. In a country which is in its initial phases of development, training can be offered to persons with little or no formal schooling and to youth seeking multiple opportunities for employment or self employment
• Limited curriculum development and standardization pattern with focus on selected traits
• Limited institutional development in the areas of skill development, education and science and technology which needs to be broadened on global model
• Lack of regulatory framework for private and NGO providers of training and quality-assurance mechanism for uniform assessment procedures and entry prerequisites
• Developing better legislation to establish autonomous training bodies and providing technical assistance for strengthening core mandates of the ministries involved which at the moment is overlapping in its objective
• There is alarming drop out of students enrolled after grade 4 and the school quality remains a key issue
• Poor monitoring data therefore undermining the validity and success of vocational institute

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• Training programs restricted to urban and peri-urban areas with training infrastructure unevenly distributed across the country. Most of the centers are located near Kabul and other urban areas. These facilities need to be expanded to the rest of the country.
• Limited insight into labor trends with lack of labor market data, therefore causing disequilibrium in the demand and supply of skilled workers in the market.
• Lack of female participation and the mode of curriculum is outdated and is overloaded with academic subjects, inadequate laboratories for practical training and inadequate training materials.
• The labor market for vocational training institutes has weak economic linkages and does not respond to demand and supply patterns.

**Pakistan**

• There is greater need to produce teaching material in local languages.
• Global integration and competition would suggest increasing the quality rather than quantity which is already been seen with growth of private schools but the quality issue still remains an issue for further improvement in future.
• There is lack of coordination within the domestic firms and industries, which existing policies do not address. Local research institutes should be geared towards increasing self-reliance through domestic research and technology production.
• Training and educational institute’s range from upper secondary to master’s level. The need for progression in the TVET system is possible, but learning pathways from upper secondary education to TVET and from TVET to higher education seems limited.
• Few national skills standards exist in the country with each institution issuing their own certificate. There is no national institution for recognition of these standards. Now after the 18th amendment the subject falls in the domain of provinces which is a matter of concern due to lack of capacity at provincial level.
• The number of training is restricted in few major areas trades.
• The involvement of private and social partners for developing the curriculum and developing new modern training patterns can be very effective. At the moment it is confined to the government and provincial level governments with less or no involvement of community actors.
• The principle of the uniformity of the educational system needs to be brought in close context with the policies accentuated by the provincial and federal governments. The emergence and continued presence of parallel systems of education in Pakistan i.e. private schools and Madaris, violate the principle of uniformity.
• In Pakistan’s case, education expenditure as percentage of GDP is low and even from these resources the funds allocated to the sector remains unspent. Estimates range from 20 percent to 30 percent of allocated funds remaining unutilized.

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Over the past years, the private sector has been attempting to bridge the gaps and ills of education system like inequitable access, poor quality, high drop outs etc. These efforts have sometimes been through formal agreements with the relevant governments and sometimes on an informal basis. It will be fruitful to institutionalize the arrangement to receive optimal results across the country instead of sporadic efforts. 

There is huge gap of research and development for increasing competiveness. At the moment it is a low priority area with less budget allocation which is hampering the development that is needed in the field of science and technology. 

Need for evolving a mechanism for the commercialization of the research is missing. The corporatization towards innovative products has not been substantially discussed in existing policies. 

In the modern era of accelerated technical change there is ever increasing need of technology transfer and sustainable infrastructure for meeting the basic and modern needs of the firms and individuals. The existing infrastructure available to the science and technology establishments should be strengthened and updated as per the requirements of technology adoption and adaptation. 

More importantly, social capital missing is within the horizontal and vertical association of firms with regard to skill development and technology sharing. The process of cluster formation initiated in Faisalabad and Gujranwala needs to be extended to other cities.

Sri Lanka

There is lack of learning competencies in the primary curriculum and communication gap due to weak teachers and high percentage of teacher absenteeism. 

The skills development faces challenges in the form of expanding the coverage of service to other regions, stimulating private investment in education training mismatches, duplication of courses and insufficient linkages between the education and productive sectors. 

There is need for further introduction of technology in teaching and learning. Currently many training institutes lack basic facilities. 

Need of expanding the IT literacy and skills and introducing IT based teaching and learning via equipping schools with IT facilities and connectivity, establishing a national education network and educational software and on-line education resources is need of the hour. 

There is an issue of qualitative and quantitative mismatches in certain areas of skills demand, lack of coordination and inclusion of private sector for targeting youth with an entrepreneurial mindset linking them to performance oriented skills. 

The nexus between higher education institutions is lacking. The link between academia, industry and government also need to be strengthened. 

The quality assurance mechanisms have narrow coverage and needs to be broadened. At the moment the institution lacks quality assurance mechanisms for the education sector.

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India

- There is need to expand the skill development coverage to backward areas of the country. At present only 20 percent of those entering the workforce get some kind of formal training and there is a need to support private skill development initiatives in several high growth sectors of the economy.
- A skill deficit is prevalent in the manufacturing sector with shortages varying from executives and designers at the top to base-level skilled worker such as tailors and machine operators. There is a huge gap in the vocational training capacity, which is less than one-fourth of the entrants in workforce per annum.
- The steps for increasing the access to primary education include the Sarva Shiksha Abhiyan (SSA) and the Mid-Day Meal Scheme which resulted in improvement in drop out of school children from 32 to 7 million. However, the dropout rate still remains high. For the elementary the dropout rate stands around 49 percent.
- The persons aged 15–29 years shows that only about 2 percent are reported to have received formal vocational training and another 8 percent reported to have received non-formal vocational training, indicating that very few young people actually enter the workforce with any kind of formal vocational training. This is one of the lowest in the world and therefore steps are required to cover more areas of the economy.
- With a huge population bulge an alternate maybe to create ‘Virtual Skill Development Resource Network’ which can access as many trainers as possible and this is possible in India in the context of IT boom and increased services of IT industry in India.
- The training pattern for women is not uniform across all sectors and the participation is confined to a few labour-intensive occupations such as stitching, teacher’s training etc.
- There is still non-responsiveness to labour market due to a demand and supply mismatch. This can be seen on several counts via numbers, quality and skill types. It is also seen that the inflexibilities in the course and curriculum set-up leads to oversupply in some traits and shortages in others.
- The quality of the training system is not adequate to meet the growing competitive market needs. The existing institutions also lack financial and administrative autonomy and also the testing, certification and accreditation system is reportedly weak.
- The investments in research and development need to be reevaluated for better outcomes. India invests around 0.8 percent of GNP in research compared to more than 2 percent by the developed countries.
- Increased efforts are required for a national level mechanism that evolves policies and provides directions to basic research, enlarging the pool of scientific manpower and strengthening the S&T infrastructure and attracting and retaining young people to careers in science and establishing globally competitive research facilities and centers of excellence.

Bangladesh

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45 What is the progress in elementary education participation in India during the last two decades? An Analysis using NSS Education rounds, Sankar, South Asia Human Development, World Bank, 2007. Eleventh five year Plan 2007-12, Planning Commission, Government of India
The completion rate needs to be ensured at the primary level for youth to enter the next stage of vocational training with basic skills. Existing policies are silent on how to bring the dropouts from the schooling system

- There is lack of female participation in the areas of manufacturing and skill development despite the success in agriculture sector
- Increasing number of teacher’s absenteeism and lack of standard education operations at the school level due to poor quality of teachers is a usual norm and existing policy must diagnose this issue deeply
- There is need of more teachers’ training and the position of Bangladesh suggests that the impact of teacher’s training on staff quality and schooling outcomes is quite weak.

Nepal

- Lack of female participation and job marketing techniques for increasing the skill development via vocational institutes, which are also limited
- Inadequate institutional mechanism and research and development activities for technology transfer in the SME sector in Nepal
- Lack of technology assessment mechanism related to the purchase of hardware or the contractual agreements for supply of technology
- Lack of adaptation to the use of imported technology to avoid the negative effects on employment
- Lack of networking amongst firms and institutes of learning and research
- Need to develop adaptive skills via participation in innovative activities and linking it with research in the academia
- More reliance on traditional management and dearth of entrepreneurial culture with outdated production technology and lack of access to finance and information technology
- Improve infrastructural and institutional facilities to comply with Technical Regulations and Standards desired by the global best practices
- Lack of business incubation and technology parks
- Need to increase the expenditure on education and research and development activities
- Lack of firm clustering and industrial association.

Bhutan

- Lack of youth participation and entrepreneurship culture with majority focusing on traditional practices

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• Lacking teacher’s quality for raising the educational outcomes in the country and also less focus on female participation
• Primary education is faced with lack of proper planning, institutional integration and implementation mechanisms. Therefore requires specific interventions and introduction of new techniques for improving quality, raising returns from education, cost reduction by reducing fees or by providing cash and other incentives and systemic reforms
• Lack of research and development culture for bringing meaningful outcome for promoting science and technology and linking industry and firms with research taking place in academia

Maldives

• The education system usually does not meet the needs of either employer for a skilled worker or the majority of young people for decent jobs. Relationship need to be clearly established between practical knowledge and demands of the market
• There is weak linkage of Training and vocational institutes operating in the country with industry. This leads to depriving of valuable inputs in the form of knowledge, technology, new ideas, creativity and SME development alternatives
• Progress in terms of gender equality has also been uneven. In recent decades, the gender gap has diminished substantially and has disappeared in primary education. The challenge now is to replicate this achievement at levels beyond primary education.

To sum, key shortcomings of the SAARC regional countries can be presented as:

• Lack of social capital among the firms for cluster formation and technology adaption and transfer
• Need of quality and creativity led policies rather than increasing the quantity of workforce
• Increasing participation of females and need for expanding their access to finance and technology
• Lack of academia and industry linkage which can be very useful for the sustained development of SME in the long run.

5. **Survey Based Analysis**

The main objectives of this survey are following:

- Identification of managerial satisfaction with the skills of work force
- Highlight the HRD factors which are acting as obstacles in the growth of SMEs
- Evaluate entities responsible for the skill development of workforce
- Identify training in various disciplines to make SMEs more productive

**Methodology**

- Study was conducted through a well structured and pilot-tested questionnaire, which finalized after detailed pretesting. The questionnaire was circulated amongst all SAARC member states
- The SMEs owners and managers were requested to send back the requisite information and data within four weeks after receiving the questionnaire. Telephonic contacts were also made in this regard in order to ensure a high response rate. A total of 107 responses were compiled in the end
- After receiving the responses data and other required information was coded using appropriate software. Primary data was analyzed and interpreted for results
- The results and discussion are based on the feedback, responses and comments received against the questionnaires circulated.

**Results and Discussion**
Figure 5.1 shows that the 91 percent of SME entities that participated in the survey were registered with their respective government regulatory bodies and chambers whereas remaining 9 percent were unregistered or informal.

Figure 5.2 shows the 84 percent of SMEs reported that one could easily get the desired skill labor force as per qualification however it was not a guarantee that the same labor possesses entrepreneurial, innovative and creativity lead traits. Moreover, figure 5.3 shows that 71 percent of the owners and managers ranked the skills of their staff as fair. Around 15.2 percent ranked their workforce skills as good and only 12.1 percent ranked their workforce skills as excellent.

According to 56.7 percent of the respondents said that there should be specialized training institutes for capacity building of their employees, and 34 percent believe that government should play the role for the capacity building of their employees whereas 7.2 percent believe that their own firm should be responsible for the trainings of their staff (figure 5.4).

Literature identified that the main impediment for the development of HRD in SMEs are:

- Lack of basic education
- Lack of vocational training institutes
• Lack of higher education institutes
• Lack of political will
• High cost of education
• Lack of trust between firm and employee

Figure shows the view of the respondents about the lack of basic education for the development of low HRD in SMEs. Around 58 percent of the respondents were of the opinion that low HRD in SME sector is attributable to lack of appropriate basic education and ranked it important for sustainable growth of this sector particularly in manufacturing fields.

Figure shows the respondent’s view about the lack of vocational training institutes as an impediment for the development of HRD in SMEs. Around 65 percent of SMEs Owners and Managers attached high importance to the potential availability of vocational training institutes and also stressed that apart from technical education, workers should also be given important life skills.

Figure discussed the respondents view about the lack of higher education as an impediment to HRD in SMEs. Around 47 percent of the respondent considered lack of higher education centers as an obstacle to HRD in SMEs whereas 32 percent consider it a very important factor.

Going beyond education and training related impediments, 51 percent of the respondents have neutral view about lack of political will as a factor in low HRD however, 31 percent believed that lack of political will has been a hurdle in long term growth of SMEs (figure 5.8).
Figure 5.9: High Cost of Education

Figure 5.10: Lack of Foreign Collaboration

Figure 5.11: Overall Poor Quality of Instructors

Figure shows the respondents view about high cost of education as an impediment to low HRD in SMEs. Around 32 percent rate it as very important, 38 percent considered it important whereas 25 percent have neutral view about high cost of education as an impediment to low HRD in SMEs.

Around 52 percent of the respondents were neutral about lack of foreign collaboration as an impediment to HRD in SMEs and 20 percent consider it as important whereas 17 percent consider it as unimportant factor for low HRD in SMEs (Figure). The results for this question seemed ambiguous as many SMEs were not aware about their potential beyond borders. Figure shows that 61 percent of the respondents considered poor quality of instructors as a hurdle to HRD in SMEs.

This section comprises of views of SME owners and managers about trainings in various disciplines to make their entities more effective and developed. Figure reveals that 37.7 percent of the respondents believe that training in the area of new technology as very important, whereas 44.9 percent consider it as important factor in order to make their entities more productive.
Figure 5.12: New Technology

Figure 5.13: Training in Management of Human Resource

Figure 5.14: Strategic and Tactical Management

Figure 5.15: Training in Entrepreneurship

Figure show that 73.7 percent of the respondents believe that training in management of human resource is very important and 63 percent of respondents believed believes that the training to their employees in the area of strategic and tactical management as very important.

Figure show that 95 percent of the respondents believe that development of entrepreneurial skills in their workforce is important.

Figure 5.16: Training in Innovation

Figure 5.17: Training in Branding

Figure shows that 85.9 percent of the respondents think that embedding innovational skills in worker’s curricula is important. Figure shows that 42.9 percent of the respondents consider
branding as important, whereas 35.7 percent consider it as very important for the growth of their business.

6. Pending Issues and Recommendations

In the past chapters we have established the importance of HRD for SME sector and provided examples from cross-country case studies where HRD has been crucial for profitability and expansion of SMEs. For South Asia we established that there is still a long way to go before these SMEs can make them competitive and ultimately secure a respectable share in global exports. If one is to summarize the current issues facing SMEs in SAARC region, the checklist would look like the following:

- The lack of awareness regarding the developments taking place in global markets. Information and coordination channels within the SME sectors are not efficient.
- The increasing growth rate of labour force in the SAARC region requires a lot more investment for quality skill development. The current system of education is theoretical.

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50 Dhungana, 2003
with less practical orientation. Therefore the employee’s capacity to generate new ideas is also limited. A hands-on approach at all tiers of education is missing.\textsuperscript{51}

- The growing competition requires firms to specialize in dynamic niches. This requires additional efforts in enhancing the exposure of trainers. The trainers providing training lack the expertise to transform workers into high end human capital and instil workers a spirit of innovation and entrepreneurship.\textsuperscript{52}

- The SAARC region’s potential for exports is high, but when compared globally the quality of exports and its value is abysmally low. The quality and control in terms of international accreditation is lacking. Although, some steps have been taken in this regard by some countries but still a majority of SMEs are out of the tradable sector due to their ignorance of quality and standardization aspects.\textsuperscript{53}

- A general lack of connectivity with in SAARC member countries hinders the possibility of an integrated educational and innovation system. IT enabled smart solutions are also not a ready answer given the wide spread illiteracy, which becomes a natural barrier in the usage of ICT.

- The training offered by public and private institutions is expensive for most SMEs and individuals. In most cases the training cost cannot be afforded by the firms even after being in several years of operation. The only training system in general is one of on-job mentoring. The regional spread of training facilities is also uneven across SAARC region-again increasing inequality in opportunities.

- In majority of the cases, the concentration of high end training is mostly at the formal and managerial level and the opportunity for lower strata is very minimal. The lower tier has the potential to think or do new in terms of firm development and therefore they should not be ignored in the skill development process.

- There is a sense of fear among the senior managers that as soon as a worker has acquired the skills, he will leave the enterprise and move onwards to greener pastures.

To summarize, SMEs usually lack human capital and most of them are without a strategy as to how they should train their workforce. They face high transaction costs and are found functioning in traditional activities. In today’s milieu SMEs in SAARC region are challenged by a liberalized trade and investment regime which brings about stiff competition internally and externally.

In view of the above mentioned constraints we now discuss in detail possible options that can increase the availability of skilled professionals for long run development of entrepreneurship and innovation in SAARC region’s SMEs.

As a first step there is a need for changing mind set towards software approach to economic growth in SAARC member countries. The increased investment in physical infrastructure (hardware of economic growth) alone ignoring the importance of software (human capital, organization of markets, firms and communities) has kept the labour in SAARC region unskilled and low paid.

\textsuperscript{51} Omar, 2009  
\textsuperscript{52} McLean, 2009  
\textsuperscript{53} Berry, 1998
The traditional pattern of teaching and following the old curriculum with no updated insight has also played a significant role. The new strategy at the firm level should incorporate the various aspects of endogenous growth theory. While efforts towards physical capital should focus on provision of national market-related infrastructure, the efforts towards human capital accumulation should focus on producing quality entrepreneurs who can lead global innovation. At the same time accumulation of social capital should be facilitated through appropriate governance, social safety nets and nurturing a spirit of team building (Figure 6.1). Besides this, productivity has to be measured in both the public and private sectors in order to correctly diagnose the prevalent impediments.

**Significance of Returns to Education**

SAARC countries suffer from rampant corruption, nepotism and non-meritocracy. The culture must change. A high quality civil service should compliment an equally responsive private sector. By giving public sector jobs through connections rather than merit and by keeping the poor out of the market through high barriers to entry, there are no incentives for investing in education and lifelong learning practices. The vast majority of poor consider years spent in education as a waste when they see the vulnerable population stuck in low paid jobs which in turn implies a negative rate of return on education. Training and experience should be respected through proportional rewards:

If firms feel insecure about providing education to their employees, the regional Chambers of Commerce will have to take a lead and reduce moral hazard. Firms must see an incentive for investment in capacity building of employees. It is common to see western firms providing their employees bonus schemes and shareholding incentives in order for them to take greater interest once they have reached a point where their managerial skills are in high demand.

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54 Romer, P., 1986 and Lucas, R.E., 1988
It is the employee if given the environment can bring many changes internally for the firm and in turn increase the productivity and profitability in the long run. Schumpeter (1911) argued that innovation by an entrepreneur, leads to gales of “creative destruction”. Innovations cause old inventories, ideas, technologies, skills, and equipment to become obsolete and cause continuous progress and improvement in the skill development. For an entrepreneur, invention of a product is not necessary; rather innovation by means of improved techniques of production and human development can have an effective role which is learned by doing. SAARC economies must move towards ideas-led innovation, innovation-led productivity and productivity led growth (Figure 6.2).

**Figure 6.2: Idea and Innovation Led Approach for Increased Productivity**

![Diagram of Idea and Innovation Led Approach for Increased Productivity](image)


Triple helix system of innovation (Figure 6.3) is a process by which academia, government, and industry collaborate (i.e. engage in a process of mutually beneficial leveraging of scarce financial and technical resources) to create or discover new knowledge, technologies, or products and services. Final users then consume the knowledge, technology, or products and services or they use them to produce new goods and services that are ultimately sold or consumed. The social returns of such an arrangement for exceed the private returns.

**Figure 6.3: Revisiting Triple Helix Model**
Processes like the triple helix do not come cheap. These require a lot of scaling up by the public and private sector. Therefore one can argue here for SAARC-wide cooperation towards triple helix which may result in cost sharing. All countries need not repeat the R&D processes in the same sectors. They could specialize and then share the research outputs resulting in greater economies of scale. On similar lines SAARC has set up a food bank and South Asia University on similar lines to bring the institutions and individuals together for dealing with mutual challenges and learning opportunities. This model can be replicated in case of HRD at firm level as well. A dedicated SAARC fund for effective HRD specifically for SMEs can go a long way in developing dynamic human capital in this region. The fund can be created in a manner where SAARC government and leading business entities pool their resources. This resource base should be managed by a private sector board which has the capacity to ensure credibility and transparency.  

In case of vocational training a knowledge gap is observed in all SAARC countries. There are trainers who might not have seen industry at all! Such a trend needs to be reversed. The syllabi and subject matter is in English language. However majority of the individuals at the firm level have only matriculate or less. Therefore the medium of instruction needs to be translated in national languages to make it more compatible to local needs. The knowledge gap needs to be reduced to make the individuals working at the firm level more effective and productive. The training literature, user manuals, online courses and tool kits should all be produced in local languages.

The alignment of HR strategy with business strategy is extremely important (Figure 6.4). The process should begin with asking the question: what are the strategic goals of the business? This should be followed by: what employee competencies and behaviours must HR deliver to enable the business to reach its goals? In the third step one needs to answer: which HR strategies and practices will enable HR to produce these employee competencies and behaviours? Finally the concern should be as to how HR can measure whether it is executing well, in terms of producing

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55 ADB has established a pooled infrastructure fund for Afghanistan amounting $90 million project to address water, sanitation and social issues. It is also providing fund for Sri Lanka's conflict-affected areas with provision of hospital facilities.
the required workforce competencies. As the scale of activities expands the measures of performance should also evolve. The measures should focus but not be limited to employee motivation and morale, testing, training and reward policies.

**Figure 6.4: Aligning HR Strategy with Business Strategy**

![Diagram showing the alignment of business strategy with HR strategy](source: Dessler, 2007)

Managers are increasingly dejobbing their workplaces. Dejobbing is about encouraging employees not to limit themselves to what their specific job description states. Three specific measures can help in this regard namely: a) job enlargement: assigning workers additional same-level activities, b) job rotation: moving workers from one job to another on a regular basis, and c) job enrichment: redesigning jobs in a way that increases the vertical and horizontal opportunities for the worker.

Forecasting of personnel needs is often missing in the business practices across SAARC region. This is precisely why many businesses are unable to achieve economies of scale and several defaults as soon as the number of orders and assignments increase. The strategic plans of employers that aim at diversification, vertical integration and geographical expansion should be linked with employer’s function, sales, production, financial and HR plans. The HR plan should then be split into personnel, training, compensation, labour relations, security and safety plans. Finally the personnel plans should then focus on personnel forecasts, recruitment and employee selection plans.

There is variety of techniques used to enhance the capacity of employees at all levels. The ideal method should increase the trust factor, generation of new ideas, innovation and increased expansion of business providing for growth opportunities (Table 6.1). The management in an

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56 Dessler, 2007
organization sometimes misses out on the perspective of skill enhancement of its employees and that inevitably proves to be the weak link in an organization.

**Table 6.1: HRD and SME Relationship Model**

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
<th>Benefits for small business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position need to be filled by new employee</td>
<td>New appointment is made</td>
<td>Promotion strategies</td>
<td>Encouragement for long term engagement</td>
<td>Increased profits</td>
</tr>
<tr>
<td>Employee is recruited</td>
<td>Orientation must be conducted soon</td>
<td>Increased involvement</td>
<td>Understanding the HR needs</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Construct HRD framework for employment relationship</td>
<td>Construction of employee relationship framework</td>
<td>Long term relationship construction</td>
<td>Legal and moral construction</td>
<td>Innovative practices</td>
</tr>
<tr>
<td>New marketing relationship and retention model</td>
<td>“Build relationship” Capacity Building</td>
<td>Promise grooming</td>
<td>Developing trust for long term benefit of an organization</td>
<td>Ideas generation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Increased organizational deliverance</td>
</tr>
</tbody>
</table>

Source: Adapted from Cameron and Miller, 2008

While technical cadre with in any organization remains the backbone for its operational efficiency, the management cadre cannot be ignored. It is the administrative managers that lubricate the entire business process and ensure a smooth flow of activities. Unfortunately in the SAARC region educational systems do not teach students necessary life and interpersonal skills at an early age. These need to be developed at a larger scale now possible under the auspices of regional Chambers of Commerce.

The training process at the firm level consists of five main steps: needs analysis, instructional design, validation, implementation and evaluation. All trainings must be aligned with basic principles of learning which include: usefulness of training material, provision for transfer of training, and keeping trainees motivated. The usual training methods include: on-the-job training, apprenticeship, informal learning, job instruction training, and audio visual tools. However as the business routine gets busier globally, managers are now preferring online training methods which are both cost and time effective.

Performance appraisals should be a regular feature. A supervisor and worker should meet together not just for evaluation but also for benchmarking and feedback. The employee should be able to discuss the progress and aspirations. While there are several appraisal methods each of them have its pros and cons. They should be used in accordance with firm’s short, medium and long term objectives.

The booming growth in population across SAARC region has also seen the growth of home-based SMEs which are often underrepresented in official statistics. This includes a substantial number of women entrepreneurs. In order to cater to this group of business professionals the need for regional open universities has increased manifolds. These individuals should be able to equip themselves with proper certifications on part time or basis at-home study methods.

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57 Fischer and Reuber, 2003
SME-specific public policy needs to focus on: reducing the cost of information, supportive infrastructure for training and learning (as a public good), establishing linkages between firms so that cost sharing becomes easier, and institutional infrastructure including basic public sector delivery services. Traditionally the facilitation provided to SMEs by the public sector focused on access to financing. These programmes included credit guarantee schemes or loans on subsidized interest rates. These programmes have not met much success because they didn’t address the market imperfections faced by new and existing firms. Public sector facilitation may be directed towards addressing market failures. Such an approach can also take the form of cluster development, where specific support may be directed towards a group of firms that could form a potential cluster. The government in SAARC countries should realize that creation of competition through market reforms comes first and the provision of microfinance comes later.

Cluster development needs to be encouraged across SAARC countries. Such an initiative is justifiable on two accounts:

a) Collectively acting SMEs can overcome limitations that may in usual circumstances pose unaffordable costs to individual firms. This is particularly true when it comes to acquisition of goods and factor market information, new training initiatives, and physical access to international markets

b) While knowledge spillovers become a possibility once large number of firms locates in clusters, the inter-firm rivalry can promote efficiency-led gain.

There are important examples across history where clusters have defined the growth and development path of entire nation. These include the textile industry in northern Italy, shipbuilding in Glasgow, software in Silicon Valley. Similar examples can be seen in South Asia, for example in India there is footwear industry in Agra, IT in Bangalore, and knitwear in Tiruppur. In Pakistan light engineering cluster is found in Gujranwala, sports goods in Sialkot, textile in Faisalabad. The clusters collectively have more potential to break into export markets.

There are various ways in which clusters get (or can be) organized. In vertical relationships large firms manage a division of smaller firms. Horizontal relationships will involve similar firms sharing tools and related expertise. The new form of clusters is where multinational corporations are affiliating themselves with local suppliers. The case of Intel and its suppliers in Costa Rica may be an example.

Any national action plan for SMEs should focus on six areas: a) creating a conducive market environment, b) human resource development, c) access to information, d) access to finance, and e) making technology sharing possible. HRD efforts should specifically focus on:

- Developing and strengthening training institutions
- Establishing a framework for regular sector-wise technical workshops
- Promoting apprenticeship programmes
- Facilitating partnerships across individuals, businesses and SAARC countries
- Facilitating incubator programmes

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58 Kristin Hallberg, 2000
59 Spar D., 1998
60 Indonesia’s SME Strategy, 2010
• Facilitating franchising programmes
• Facilitating joint ventures
• Promotion of business development services

In each of the above SAARC-wide cooperation is possible and should be explored collectively by the governments, industry and academia. This will lower average costs of all above initiatives at firm and national level. Some key proposals for easing SAARC-wide cooperation in business are given in Annexure.

The lack of innovative entrepreneurship in the SAARC region together with limited access to capital, skilled workers and technology has been the main important causes of relatively economic backwardness. Therefore, training in entrepreneurship development should be an important part of government and private sector programs to support the development of small and medium enterprises (SMEs) growth in the region.

According to Stevenson and Lundström (2001) the entrepreneurship education is the recognition of an opportunity to create value and the process of acting on this opportunity, whether or not it involves the formation of a new entity with broader application of innovation and risk taking attitude. The women entrepreneurship development in the SAARC region has the potential of transforming the society as a whole. It is observed that less than 10 percent of the entrepreneurs in South Asia are women (Sinhal, 2005).

The need for women’s business associations and to strengthen them is urgent. These business associations can help with access to finance, market channel, information, and training. Besides this, these can provide business-to-business networking, business development services, force policy reform, scale up technical assistance, and mentoring programs. These support mechanisms help women grow their businesses from micro to small, small to medium-sized enterprises.

Level of educational attainment of women is quite high but the level of economic opportunity drops in the SAARC region. The educational attainment leads to economic empowerment but it is seen that the level of economic participation and opportunity in case of Pakistan, India, Afghanistan and Bhutan is quite low as compared to other countries. The case of Bangladesh has been an exceptional one with Grameen Bank project successfully promoting women’s role in the community.

Why Women Entrepreneurs start business?

Chance Entrepreneurs
• Had time / to keep busy
• Was hobby / special interest
• Family / spouse had business

Forced Entrepreneurs
• Money / needed the money
• To help family financially

Created or Pulled Entrepreneurs
• Control over time, flexibility
• Challenge, try something on one’s own
• Show others I could do it
• To be independent
• Self satisfaction
• Example to children
• Employment to others / do something worthwhile

Source: Das, 2000
In India the concentration of women entrepreneurs in SMEs falls within the age group of 25-40 years representing a mixed background with majority highly educated and rest with less education in both urban and rural settlements. Amongst the states, Gujarat, Maharashtra and Karnataka have more women entrepreneurs. The majority of women entrepreneurs in India are concentrated in sectors such as leather, garments, engineering goods, and beauty products. The second most common category is that of services sub sectors such as interior designing, management and placement, consultancy and nursery school. (Ganesan, 2003 and Das, 2000). The 1970s and 1980s witnessed the women involvement in traditionally feminine enterprises, however, from the 1990s and onwards, the increasing level of education and acceptability in market place has expanded the scope of women in India and more women have opted for entrepreneurial careers in plastics, electronics and leather related industries. See Sharma and Dhameja (2002).

In India the Association of Women Entrepreneurs (AWE) was established in 1993 and initially consisted of women who were already engaged in some economic activity and sought to improve their effectiveness and sustainability. Although the key objective of this association has been to explore economic opportunity for women, it is important that associations like these also carry out advocacy and outreach for a gender balance in HRD.

A 2002 survey study conducted in Pakistan for women entrepreneurs in the formal sector showed that most entrepreneurs were in the age group of 20-39 years and women involvement in business has a higher probability, if she opts for a nuclear family structure. The literacy rate of women entrepreneurs and their close relatives were well above the national average. The majority of women entrepreneurs were graduates and post-graduates and the educated women in general are more likely to start a business than an average Pakistani woman (Goheer, 2002). Pakistan’s 2006 Trade Organizations Ordinance has resulted in the formation and growth of more representative associations that can advocate more effectively for female (and youth) participation. Under the new law, women are able to form their own associations without male sponsorship. Each of the four provinces in Pakistan has its own women’s chamber of commerce, and two have succeeded in achieving full legal registration and work towards the same goal of encouraging entrepreneurship and economic independence among Pakistan’s female population. The Women’s Chamber of Commerce and Industry (WCCI) was first registered as the Pakistan Association of Women Entrepreneurs in 1986 in Karachi and is honorary member of the Federation of Pakistan Chambers of Commerce and Industry. The Punjab Women Chamber of Commerce and Industry (PWCCI) are based in the city of Lahore, and were established in 2002 to promote and develop women’s entrepreneurship in Punjab. It provides a forum for debate, opportunity to interact with both local and international counterparts, and a community of support for female entrepreneurs.
In Bangladesh 75 percent of women entrepreneurs are professional degree holders with most successful women entrepreneurs belonging to families having multiple resource base. In Bangladesh, most women entrepreneurs are engaged in cottage and small scale enterprises. Currently the scope is being expanded to other sectors of the economy (ADB, 1999, Abu Saleh, 1995). Women entrepreneurs in Bangladesh also suffer from the myth of women not being effective organizers and are thought to be best suited for housekeeping, but now the changing economic realities have slowly shown the way towards new model of economic growth where female participation is widely appreciated. Anwar (1992) found that due to the prevailing social norms, women entrepreneurs were not allowed to do business independently.

The success story of women in Bangladesh started from the Grameen Bank, founded by the Nobel Prize laureate Professor Muhammad Yunus, which has reversed conventional banking practices by removing the need for collateral and creating a banking system based on mutual trust, accountability, participation and creativity. It provides credit to the poorest of the poor in rural Bangladesh, without any collateral. As of September 2008, it has 7.6 million borrowers, 97 percent of whom are women. Besides this success, the Women Entrepreneurs Association which was established in 2000, under the auspices of the Federation of Bangladesh Chambers of Commerce and Industry has also tried to create a platform for business women establishing themselves in competitive fields traditionally dominated by men, plus the support system for women entrepreneurs to help them improve their product quality, market their products, meet changing market demands, and access training on technical subjects, design, and business development. The Bangladesh Women Chamber of Commerce and Industry (BWCCI) have encouraged entrepreneurial women to enter the IT sector and start thinking in innovative terms for better services and growth.

South Asian region is also known for cultural norms that hinder female participation in the workforce (Acharya, 2001). The Federation of Woman Entrepreneurs Associations of Nepal

The Bangladesh Bureau of Statistics (BBS) with technical and financial support from the ILO in 2007 conducted a study focused on approximately 41,000 workers on hourly wages. The study highlighted significant effect of gender-based occupational and industrial segregation in shaping men’s and women’s average wage rates in Bangladesh.

Women earn 15.9 percent less per hour than men. Furthermore, the data indicates that women tend to be grouped in lower-paying industries and do not have access to the same types of jobs as men. The largest male-female wage gaps are in the construction and hotel and restaurant industries (in which women earn an average of 30 percent less than men per hour). The smallest gaps are in the service sector, such as education, health and social work.

The study showed that as women’s education increases, the male-female wage gap decreases. The investment in education has been seen as an important factor for grooming the women towards entrepreneurship development. The overall gender gap can be reduced by providing more training on entrepreneurship and innovation.

Source: Kapsos, 2008
(FWEAN) has tried to address these issues by placing women entrepreneurs into mainstream national development and bringing women entrepreneurs under single umbrella.

Women participation is increasing in Afghanistan through civil society organizations. The Afghan Women’s Business Association (AWBA) enables women towards entrepreneurial guidance and offers advocacy, training, and research facilities. Women participation in mainstream economy is low in Bhutan however realization for female role is being advocated by National Women’s Association of Bhutan (NWAB).

The need of the hour is to expand the women business development associations and increase training efforts according to the market needs in the SAARC region. Moreover, the region is slowly realizing the role that women can play if appropriate policies for HRD in general are brought by the government. This can include the development, training, and marketing efforts for women-run businesses, with a special focus on SMEs, facilitation of loan acquisition for women, better market linkages for women producers domestically, encouraging female education, membership-based associations, advocacy and friendly national rules and regulations, equitable legal regime, including inheritance laws as well as political and business quotas, social security provisions for women and increasing the level and quality of training institutions.
### Annexure – I  Key Proposal for Harnessing Business Opportunities in South Asia

<table>
<thead>
<tr>
<th>Issue</th>
<th>Challenges</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding the SAARC visa exemption scheme</td>
<td>Entitled person list does not include business travelers and other professional groups. Quota on visa stickers leads to delay. Period of validity and scope of travel permitted is too narrow. Political restrictions impede scheme.</td>
<td>Enable business to procure visa exemptions more easily, expand entitled list. Increase the number of visa exemptions issued. Increase validity terms of visa exemptions and remove restrictions on travel destinations. Move from a sticker scheme to an electronic “business travel card” and install electronic readers at airports.</td>
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<tr>
<td>Adopting a SAARC regional motor vehicle agreement</td>
<td>Different standards for acceptable vehicles. Cumbersome procedures and lack of knowledge staff. Cross border movement is often restricted to border areas only.</td>
<td>Establish special station or “fast lanes” designed for good transport vehicles. Harmonize transit vehicle standards and create “vehicle transit cards.” Often low cost financing options to help business upgrade truck fleets. Establish joint trucking ventures between countries.</td>
</tr>
<tr>
<td>Dealing with nontariff barriers (NTBs)</td>
<td>Measuring the impact of NTBs can be difficult. Regulatory measures are often inconsistent and not mutually recognized among SAARC members. Quotas control the quantity of certain imports.</td>
<td>Marshal consensus on classifying NTBs for better regulatory cooperation. Create NTB notification systems and build online inventories for better monitoring. Strengthen human and institutional capacities for collection and analysis of data on NTBs. Provide technical assistance to firms to help meet technical standards. Establish a dispute settlement mechanism.</td>
</tr>
<tr>
<td>Improving land customs stations</td>
<td>Inadequate roads to land customs stations restrict traffic flow. Parking facilities at land customs stations are mostly paper-based.</td>
<td>Build or designate bypass rods into land customs stations. Expand size of customs stations, including parking and warehouses and provide basic amenities. Establish multi-agency testing laboratories (international standard) at major custom stations, where feasible, or authorize nearby laboratories to conduct testing.</td>
</tr>
</tbody>
</table>
Effectiveness of Human Resource for Developing SMEs in South Asia

Promote public private partnership to fund upgrades.

Promoting intraregional investment

| Source: Key Proposal for Harnessing Business opportunities in South Asia, Joint ADB – FPCCI Report, 2010 |

| Priority Economic Sectors in Selected South Asian Countries |
|---------------|-------------------------------------------------|
| **Country**   | **Sectors**                                     |
| Bangladesh    | Textiles, electronic, IT, natural gas-based industries, frozen foods, leather, ceramics, light engineering, and agro based |
| Bhutan        | Hydropower, agro processing, tourism, medicinal plants |
| Maldives      | Marine based industries, tourism, infrastructure and air and sea port. |
| Nepal         | Medicinal and aromatic plants; agro based (mushroom, spices, vegetables, fruits); dairy; tea; sericulture, hydropower; leather; poultry; and textiles |
| Pakistan      | Housing, engineering, chemicals, and construction  
|               | Value added export industries: manufacturing categories such as garments, bed linens, surgical instruments, and sporting goods |
| Sri Lanka     | Electronics, light engineering, textiles, rubber, mineral and processing, tourism, IT, gems and jewelry, healthcare and pharmaceuticals, ceramics, services |

Source: FDI Promotion Agencies in SAARC Countries. Joint ADB – FPCCI Report, 2010
## Annex – II Questionnaire Guide

1. Name:  
   Company:  
   Address:  
   Type of business:  
   City & Country:  
   Email & Contact No:  

2. Number of staff working in your organization:

3. Does your company registered with Government regulatory bodies or Chambers?  
   Registered  
   Non Registered

4. Are you satisfied with the availability of skilled labor force in your sector of business?  
   Satisfied  
   Not Satisfied

5. Are you satisfied with the skills of your current staff?  
   Excellent  
   Fair  
   Good  
   Bad  
   Worst

6. What in your opinion is the biggest impediment in growth of SME sector in your country?  
   
<table>
<thead>
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<th>Very important</th>
<th>Important</th>
<th>Neither unimportant nor important</th>
<th>Unimportant</th>
<th>Not at all important</th>
</tr>
</thead>
</table>
   | Lack of skilled manpower  
   | Lack of finances  
   | Government policies  
   | Lack of advance machinery |

7. In your opinion who should be responsible for conducting capacity building trainings of your employees?  
   Your own Firms  
   Government  
   Specialized Training Institutes  
   International Donors

8. What is in your opinion is the reason for low HRD in your country?  
   
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<thead>
<tr>
<th>Very important</th>
<th>Important</th>
<th>Neither unimportant nor important</th>
<th>Unimportant</th>
<th>Not at all important</th>
</tr>
</thead>
</table>
   | Lack of basic education centers  
   | Lack of vocational trainings centers  
   | Lack of higher education centers(University level)  
   | Lack of political will  
   | High cost of education  
   | Lack of foreign collaboration  
   | Overall poor quality of Instructors |

9. In which area you want your staff to get trainings? please rate  
   
<table>
<thead>
<tr>
<th>Very important</th>
<th>Important</th>
<th>Neither unimportant nor important</th>
<th>Unimportant</th>
<th>Not at all important</th>
</tr>
</thead>
</table>
   | New Technology  
   | Human Resource  
   | Management  
   | Entrepreneurship  
   | Innovation  
   | Branding |
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