## 1 Introduction

The supply chain, or value-adding chain, is an old-established concept in industrial economics and in the business studies literature, used most prominently by Porter (1985, 1990) and Gereffi and Korzeniewicz (1994). Like all uses of the chain metaphor, its value lies in its emphasis on the sequential and interconnected structures of economic activities, with each link or element in the chain adding value to the process. More recently, supply chains have been embedded in development theory and a stream of literature has emerged that highlights and provides evidence of the developmental role played by global and regional supply chains. Neil et al. (2004) argue that economies of scale and scope within specific regions are only advantageous to those regions - and bring about regional development – insofar as such region-specific economies can complement the strategic needs of translocal actors situated within global production networks. Studies such as that of Smith (2003) on the clothing sector in Slovakia and Nadvi and Thoburn (2004) on Vietnam's textiles and garment industry provide evidence of the developmental role played by supply chains for these countries.

This study attempts to explore the possibility of developing regional supply chains for south Asia in the textiles and clothing sector. The sector has been one of the leading manufacturing sectors in south Asia in terms of its contribution to output, employment and trade, and hence to poverty reduction and development in the region. Collectively it employs 60 million people directly and nearly 90 million indirectly. A large proportion of the workforce is women. Over the last decade or so, south Asia's share in global trade in textiles and clothing rose from less than 2 per cent to 10 per cent, with the absolute volume of regional exports reaching US\$55 billion in 2010.5

The importance of the textiles and clothing sector to the region is also reflected in its share in the total exports of all the region's major economies. It constitutes about 80 per cent

of Bangladesh's total merchandise exports, providing direct employment to 5 million people; 45 per cent of those of Sri Lanka, employing more than 1.8 million; 55 per cent of those of Pakistan, with a workforce of more than 15 million; and around 12 per cent of those of India, providing employment to more than 38 million people. Given the sector's rapid expansion and high employment intensity, it is an important source of growth and poverty reduction in south Asia – a region that is currently home to the largest number of poor people in the world.

Major T&C exporters in south Asia strive to promote their individual competitiveness. One mutually convenient way of doing this would be to improve regional competitiveness by developing cross-border T&C supply chains that boost intercountry and intra-industry trade. The need for such region-wide co-operation has become more relevant given the short-to medium-term global challenges, for example subdued global demand in the aftermath of global economic crises and the need to build up economic resilience, including that of key sectors; the erosion of preferences caused by free trade agreements and multilateral liberalisation, or the withdrawal of the Generalized System of Preferences (GSP); and increased competition from other suppliers in the global economy.<sup>7</sup>

Despite the considerable efforts made over the last two decades, the experience of south Asian regional integration is far from satisfactory.<sup>8</sup> It appears to be the least integrated region in the global economy; intra-member countries' trade accounts for around 5 per cent of their total trade. In this context, there has been broad-based consensus on the need to look beyond trade in goods. While extended co-operation involving areas such as services, infrastructure development and transshipment has been discussed in different forums, both among policy-makers and trade analysts, less attention has been paid to understanding the potential for building supply chains based on industrial units located in different countries within the region. It was against this backdrop that UNCTAD, the Centre for WTO Studies and the Commonwealth Secretariat

decided to collaborate on a joint project to assess the prospects for developing production linkages under south Asian regional co-operation. A salient feature of this initiative was to make the research useful to policy-makers and industries by looking at industry-specific dynamics rather than following a general and broad approach. Given its importance to the region, the textiles and clothing sector was selected.

Findings from the existing literature appear to suggest that cross-border production sharing, development of supply chains and intra-industry trade assist participating countries to more into regional markets and may act as a catalyst for developing countries' industrialisation and growth (Rodas-Martini, 1998; Yeats, 2000). Concentrating on IIT and the strengthening of cross-border vertical supply chains as mechanisms for integration could be an important step in lowering costs, while increasing the level of specialisation of countries and product differentiation within the region. Other potential benefits of the formation of production supply chains through IIT are:

- The creation of a larger market for the product;
- A country could simultaneously reduce the number of products it produces and increase the variety of goods available to domestic consumers;
- By producing fewer varieties of goods, a country could produce them on a larger scale and thus achieve higher productivity.

Preliminary research showed that there is considerable potential for regional intra-industry trade in textiles and clothing in south Asia. Using the average for the period 2005–2007, the Grubel-Lloyd index,<sup>9</sup> the most common measure of intra-industry trade, showed that T&C trade for south Asia with respect to the world was estimated to be 27.3 per cent, as against 16.6 per cent with respect to the region itself.<sup>10</sup> This indicated that the region's imports from the world are much higher than those from the region within the T&C sector. It also indicated that there is significant scope for substantially increasing regional intra-industry trade. At present, intra-

regional trade in T&C is only 3.5 per cent of south Asia's global trade in the sector.

The choice of T&C for in-depth analysis is also important from another perspective. It is generally perceived that as individual south Asian countries are prominent textiles and apparel exporters in global markets, they cannot complement one another in developing supply chains and promoting their mutual comparative advantage. However, because of product variety and relative specialisation in different disaggregated items within the broad sector, it is necessary to map production and export structures in individual countries and their sources of raw materials to make a more informed assessment. It is important to note that while preferential trading arrangements generally attempt to protect the regional market from other world suppliers, the export-oriented textiles and clothing sector is a case where south Asian members' objective is to procure the raw materials from the least-cost suppliers so that they can be more competitive in the global market. Given that India and Pakistan both have a strong textiles base and are sources of important raw materials, while Bangladesh and Sri Lanka are mainly apparel manufacturers, the scope for establishing and expanding regional supply chains is quite significant.

The main objective of this study is therefore to identify potential supply chains, using disaggregated product level information at the HS 6-digit level, that can be formed in the T&C sector (HS chapters 50–63) within south Asia, which will enable the region to lower its production costs and improve its global competitiveness. Enhancing competitiveness is essential to maintain and increase market share in the wake of the global economic crisis. The analysis is undertaken for the four major economies of the region: Bangladesh, India, Pakistan and Sri Lanka. The benefits of regional integration in developing potential supply chains in south Asia are also addressed.

The study is organised as follows: chapter 2 highlights existing regional trends in trade in the textiles and clothing sector; chapter 3 provides a brief profile of the T&C sector in

Bangladesh, India, Pakistan and Sri Lanka; chapter 4 provides a brief review of studies on south Asian production supply chains; chapter 5 discusses the methodology adopted to identify potential supply chains and the sources of the data; chapter 6 presents country potential 3-stage and 2-stage supply chains; and chapter 7 concludes with some practical policy suggestions.