# **ISAS Working Paper**

No. 34 – Date: 22 January 2008

469A Bukit Timah Road #07-01, Tower Block, Singapore 259770 Tel: 6516 6179 / 6516 4239 Fax: 6776 7505 / 6314 5447 Email: isasijie@nus.edu.sg Website: www.isas.nus.edu.sg





# The Skilled South Asian Diaspora and its Role in Source Economies≠•

Paper for the Institute of South Asian Studies

Rupa Chanda\* Professor of Economics Indian Institute of Management Bangalore

22 January 2008

<sup>≠</sup> The author acknowledges the research assistance provided by G Sasidaran and Nivedita Gopinath in preparing this study. The author also acknowledges the inputs provided by Jennifer Zimmerman and Michele Klein Solomon of the International Organisation on Migration (IOM), Zeehan Abedin of the Bangladesh IOM office, Fahmida Khatun of the Centre for Policy Dialogue in Dhaka, Danny Sriskandarajah of the Migration Policy Institute, Janaka Wijayasiri and Saman Kelegama of the Institute of Policy Studies in Colombo, Zubair Faisal Abbasi of the UNDP office in Islamabad, Pranav Kumar of CUTS, and many others who responded to the author's queries and shared their papers and insights.

<sup>•</sup> This paper was prepared for the Institute of South Asian Studies, an autonomous research institute at the National University of Singapore.

<sup>\*</sup> The author is a Professor of Economics at the Indian Institute of Management Bangalore. She can be contacted at rupa@iimb.ernet.in.

# The Skilled South Asian Diaspora and its Role in Source Economies

Rupa Chanda

#### 1. Introduction

Skilled migration has been the subject of much analysis and debate since the 1950s and 1960s. Eminent economists have time and again voiced concerns about the brain drain consequences of skilled migration and the erosion of human resource capacity in developing countries due to skilled migration. Such concerns have led to proposals for a "brain drain tax", that is, a tax on skilled migrants and for the establishment of a World Migration Organisation to manage migration flows in the interests of developing nations. While skilled migration continues and has been on the rise in the past few decades, the thinking on such flows has shifted significantly, away from the concept of brain drain to concepts of brain gain, brain exchange, and brain circulation. More and more countries are now looking at their skilled overseas diaspora as an asset that can be tapped for economic, social, cultural, and political gains. To a large extent, developments in the information technology (IT) sector and the diffusion of technology and knowledge that has been facilitated by diaspora groups in that sector, and the huge growth in remittances and investment flows from expatriate communities into many developing countries lie at the heart of this change in mindset. Hence, from preventing emigration of skilled workers, many governments have turned to examining ways in which they can leverage their diaspora networks and expatriate communities to their own benefit, in addition to exploring ways of better managing migration flows to serve their national interest.

Asia has been a major source of highly skilled workers. Within Asia, South Asia has been an important source region for skilled migration, in addition to being a source region for low and semi skilled migration. India, Pakistan, and Bangladesh and to a limited extent Sri Lanka, are important suppliers of engineers, doctors, IT professionals, accountants, scientists, and educators to the rest of the world. For some destination countries such as the United Kingdom, skilled outflows from South Asia have existed for decades and hence the South Asian diaspora in these countries is quite old with few generations already in place. In other destination countries, such as Australia and the Gulf, the skilled South Asian diaspora is relatively young. The Indian diaspora, skilled and unskilled is estimated at 20 million, the Pakistani diaspora is estimated at four million, and the Bangladeshi diaspora is estimated at around one million. Less is known about the size of the Sri Lankan diaspora, but it is not insignificant by any means, although quite different in its characteristics from that for the other three nations. The driving forces have been many, including, colonial, cultural, social, and economic factors.

In recent years, one finds that the South Asian diaspora is playing a growing role in their source economies. These contributions include long term investments, technology and knowledge transfer in fields such as science, IT, and medicine, influencing host country companies to enter into joint ventures and technology licensing arrangements with companies in their countries of origin, philanthropic contributions to communities back home on a regular basis or in times of emergency, and influencing public opinion about their home countries through the popular media, politics, and cultural channels. Many diaspora associations and networks have also emerged for countries in this region. These associations provide forums for promoting trade, commerce, and investments between host and source countries, for promoting cultural and information exchange, and keeping diaspora connected to their roots. Governments in South Asia are also increasingly recognising these contributions and avenues. Some have undertaken targeted initiatives to institutionalise and facilitate diaspora linkages and to utilise this asset more meaningfully than they have done in the past.

#### Objectives

This paper explores the existing and potential role played by South Asia's skilled diaspora in their source economies. The four main countries of South Asia, namely, India, Pakistan, Bangladesh, and Sri Lanka are covered. The objective is to first understand the nature of the South Asian diaspora and

then to understand the nature and extent to which this group has contributed to their home economies, in what manner, and through what channels. The larger aim is to assess how diaspora linkages can be furthered in this region through government as well as private sector initiatives.

#### Outline

The paper consists of seven sections. The second section examines the profile of the skilled South Asian diaspora in terms of its size, its occupational and sectoral characteristics, and its host country orientation. Commonalities and differences across the four countries are also highlighted. Section 3 discusses the macroeconomic impact of the South Asian diaspora on their source countries. This includes their impact through remittances and transfers, long term financing, and trade flows. Section 4 examines the contributions made by the South Asian diaspora in selected sectors, where their role has been widely acknowledged. These include the IT, health, and science and technology areas. Section 5 examines the social, philanthropic, and political contributions of the South Asian diaspora to their home countries. Section 6 examines existing and proposed government policies and initiatives in the region to leverage the diaspora community and the extent to which policies or the lack thereof have facilitated or impeded the potential role that could be played by the diaspora in this region. It also discusses some of the sensitive issues concerning diaspora status in their source countries, such as dual nationality, voting rights, and national security and conflict of interest related issues. Section 7 concludes the paper by providing some suggestions on policies and issues that need to be addressed by governments in this region in order to maximise contributions from the diaspora community.

A few points are worth noting at the outset. First concerns the definition of skilled. This is a difficult term to define. Does it mean only those who are professionally and academically qualified with some minimum level of educational qualifications or does it also include technical skills derived from on the job experience? For the purpose of this study, skilled is understood to be all those categories of persons, excluding manual labourers, those in occupational trades (such as carpenters, plumbers, electricians), and those with no formal educational qualifications. It refers to those who meet some minimum level of formal educational qualifications and who fall under the categories of administrative professional, and managerial workers.

The second point to note about this study is the relative asymmetry of information across the four chosen countries. There is a huge body of literature on the Indian diaspora while the evidence on the diaspora of the other three countries, especially that of Sri Lanka is quite scant. Hence, many of the dimensions of contribution discussed in this paper, could not be substantiated in equal measure across the four countries and some imbalance in content exists across the four countries in the course of the discussion. This can, however, be accepted given the basic asymmetry in economic size and populations across the four countries.

The third issue to note is the concept of diaspora itself. While diaspora refers to people from one country who are settled abroad permanently, does this mean only those who have changed nationality, or does this also include those who have retained their nationality but changed their permanent residence, or might it also include those staying abroad for a long time, without changing either, perhaps because they are not permitted to do so as is the case with the expatriate community in Gulf countries. For the purpose of this study, there is a blurring of all these categories of expatriates as it is often difficult to distinguish among them based on official statistics. Even those who are currently on non immigrant visas, are potentially part of the diaspora, given that many are likely to adjust their status and would not return to their home countries. Likewise, it is also possible that those who are part of the difficulties in getting detailed statistics on duration of stay, intent, and adjustments, and tracking labour movement, and also given the broader objective of understanding what the impact of the expatriates is on the sending countries, such distinctions are not necessary to make. Thus some leeway is exercised in the way diaspora has been accounted for in this paper.

# 2. Profile of the South Asian Diaspora

The South Asian diaspora consists of skilled, semi-skilled, and unskilled workers, settled in various parts of the world. This section highlights the main characteristics of the South Asian diaspora keeping the aforementioned caveats in mind. It discusses the geographic dispersement of this diaspora as well as its occupational and sectoral profile.

# 2.1 <u>Geographic spread of the South Asian diaspora</u>

The diaspora from South Asia is spread across numerous regions and host countries. Given the common colonial and linguistic characteristics of the countries in this region, the destination markets are quite similar. The regions or markets where the South Asian diaspora is concentrated include:

- Persian Gulf countries like Saudi Arabia, Kuwait and the United Arab Emirates
- African countries like Uganda, Kenya, Nigeria, and South Africa
- South East Asian Economies predominantly Singapore and Malaysia
- Major industrialised economies the United States, Canada, the United Kingdom, Australia and New Zealand

There are also other regions such as Mauritius, Fiji, Trinidad and Tobago, but the diaspora here is largely of Indian origin and is thus not representative of the diaspora dispersement for the entire South Asian region.

By and large, the bulk of unskilled migrant labour is headed towards the oil rich Gulf countries, though in recent years, a growing number of skilled workers are also moving to this region. There is a mix of skilled and less skilled migration from South Asia to the South East Asian and African countries. The bulk of skilled emigration from South Asia is to the OECD countries, particularly the English speaking industrialised countries of the United States, Canada, Australia, United Kingdom, and New Zealand, though even in some of these countries the diaspora population for some of the South Asian countries, such as Bangladesh, represents a mix of skills.

Table 1 shows the size of the expatriate community from the four South Asian countries in some key host countries around the world.

Country	Indian	% of total population	Pakistani	Bangladeshi	Sri Lankan	Other Asian
United States	1,678,765	0.6	200,000	500,000	35,000	
United Kingdom	1,200,000		706,539	275,394	300,000	237,810
Singapore	307,000	7.9				
New Zealand	55,000				8,310	
Malaysia	1,665,000	7.7			20,000	
Canada	851,000		74,015	13,080	61,315	
Australia	190,000	1.02	80,000	80,000	53,000	
Nigeria	25,000	2.0				
Uganda	12,000	0.06				
Kenya	102,500	0.35				
South Africa	1,00,000					

Table 1. Expatriate population from South Asian countries for selected host countries (various years)

Source: Bruyn and Kuddus (2005) and Government of India, Report of the High Level Committee on Indian Diaspora, 2001 for the figures on India.

As is evident from Table 1, India has the largest diaspora community in all the host countries, followed by Pakistan. The Indian diaspora population in the United States was 1.7 million and also over a million in the case of the United Kingdom and Malaysia. It is also very large in Canada, at over 700,000. For the other three countries, the United Kingdom is the most important host nation.

Though there are broad similarities in the geographic orientation of the diaspora, there are some important differences. As evident from Table 1, the Indian diaspora is spread more widely and has colonial roots. It is found in countries as far and wide as Fiji, Nigeria, Uganda, Kenya, Mauritius, Singapore, Malaysia, and the Caribbean. Persons of Indian Origin, who are descendants of immigrants settled in such countries for at least three or four generations previously are as numerous as Non Resident Indians, and have their roots in the colonial period when they were brought over from India as indentured labour and for running enterprises. Although many of the African PIOs moved on to other countries, chiefly the United States, Australia, Canada, and the United Kingdom due to political reasons, a sizeable Indian diaspora community still remains in several of these developing countries. The other South Asian countries, unlike India, have diaspora communities that are more concentrated in the major English speaking industrialised countries, as shown in Table 1.

It is worth noting that there is a huge migrant community from South Asia that works in the Gulf region, mainly in Saudi Arabia, Kuwait, and the United Arab Emirates, and in much smaller numbers in other countries in this region, including Bahrain, Oman, and Qatar. There are over 1,000,000 Indians working in the Gulf region. However, by and large these persons are unskilled and manual workers, the exception being India which does have a sizeable number of professionals (some 200,000) in this region.<sup>1</sup> As they tend to return home, they may not necessarily qualify as diaspora in the same manner as those working and residing in the United Kingdom, United States, Australia, and Canada, although their contribution in some areas cannot be ignored.

Table 2 shows the flows of South Asian workers in recent years, who have received permanent resident status and/or acquired citizenship in the United States, United Kingdom, and Canada, respectively. The figures indicate that the United States has been the most sought after market for permanent settlement by South Asian emigrants, while the trend has been relatively flat for the United Kingdom and Canada and even declined in the case of some countries.

United States	Per	manent residenc	Citizenship				
	2005	2004	2003	2005	2004	2003	
India	84,681	43,695	50,228	35,962	37,975	29,761	
Pakistan	11,555	12,086	9,415	9,685	8,744	7,424	
Sri Lanka	1,874	888	1,234	921	980	827	
Bangladesh	11,487	8,061	4,616	5,492	5,148	4,345	

Table 2. Permanent residence and citizenship by South Asian emigrants in the United States, 2003-2005

Source: Based on United States Homeland Security Immigration Statistics (2006)

Table 3. Acceptance for settlement by nationality in the United Kingdom, 2002-2004

Country	2002	2003	2004
Bangladesh	4725	5590	3115
India	8005	10955	11100
Pakistan	11935	12945	10025
Indian Sub-continent	24665	29490	24240

Source: Office for National Statistics (2006), Table 5.1, p.40

<sup>&</sup>lt;sup>1</sup> See Report of the High Level Committee on Indian Diaspora (2001).

Table 4. Permanent residence by source countries in Canada, 2001-2004

Country	2001	2002	2003	2004
India	27,904	28,838	24,593	25,575
Pakistan	15,354	14,173	12,351	12,795
Sri Lanka	5,520	4,968	4,448	4,135
Bangladesh	3,393	2,616	1,896	2,374

Source: Citizenship and Immigration Canada

Table 5. Ranking of South Asian countries as a source for business immigrants by country in Canada, 2000-05

Country	Number of landings	Rank
Bangladesh	65	8
Pakistan	63	9
India	58	10

Source: Citizenship and Immigration Canada

It is important to note that the figures in Tables 2 to 5 provide an indication of the total stock of permanent residents or naturalised citizens of South Asian origin, but they include people who are abroad for professional reasons, for family reunification, for running their own businesses, and even permanent settlement under the green card diversity scheme as in the case of Bangladesh. Thus, these numbers simply provide an indication of the South Asian region's significance as a source of immigrants for key host nations with large expatriate populations, but do not reveal much about the skill composition of this expatriate South Asian community in these countries.

# 2.2 <u>Sectoral and occupational profile of the South Asian diaspora</u>

The South Asian diaspora covers all range of skills and sectors. By and large, skilled emigration from South Asian countries is to the English speaking industrialised countries and to a lesser extent to the Gulf, South East Asia, and Africa. There is quite some variation in the sectoral and occupational profile depending on the host region or country. There is also some difference among the four source countries, with India having the largest outflows of professional and skilled workers to all host countries.

If one examines the profile of the South Asian immigrants in the OECD (Organization for Economic Co-operation and Development) countries based on data available for 2000, then one finds that over two-thirds of them had tertiary level education, that is, they were skilled immigrants. For India, the proportion of highly educated immigrants in the total stock of immigrants for the year 2000 was over 75 percent. For Pakistan and Sri Lanka, the share was over two thirds, while for Bangladesh the share was slightly lower at around 50 percent. Thus for all the countries, nearly half or more of the immigrants in the OECD countries were skilled workers. Although these figures are not exactly for the diaspora population and cover various kinds of immigrants, temporary and potentially long term, they are indicative of the skew in the educational profile among the South Asian immigrants entering the OECD countries, towards those with tertiary level education.

It is also worth noting that the subcontinent is not unique in this regard. It is quite comparable to other source regions such as East Asia and certain countries in Central Asia and Middle East in terms of the size of its tertiary educated immigrant population as well as the share of this segment in its overall immigrant base in the OECD market.

Country	Total Immigrants	Ed	ucational Leve	1
		Primary or less	Tertiary	
East Asia		-	•	
China	722400	148029	185295	389076
Indonesia	142540	3910	32347	106283
Philippines	356134	27604	70079	258452
Eastern Europe/Central				
Asia	1010700	0(2070	524420	1116075
Turkey	1913782	263078	534429	1116275
Latin America/Caribbean				
Brazil	176519	16026	64097	96396
Jamaica	117199	9483	54647	53069
Middle East/North Africa				
Morocco	560658	30706	168179	361773
Tunisia	142828	10027	41782	91019
Egypt	20373	733	3796	15844
South Asia				
Bangladesh	44417	3852	12902	27663
India	375283	18471	57199	299613
Pakistan	85668	6022	22458	57188
Sri Lanka	64143	1455	16741	45947
Total	4721944	539396	1263951	2918597

Table 6. Number of immigrants (age 25 or older) to the OECD by level of educational attainment, 2000.

Source: Adams (June 2003), Table 4, p.26 (based on OECD, Trends in International Migration, Annual Report, 2001)

Table 7 shows the same statistics for the United States market. It is evident that the number of highly educated immigrants of South Asian origin is much larger for the United States market than for the rest of the OECD, barring the case of Sri Lanka. The latter's skilled diaspora has been more oriented towards countries like Australia and Canada within the OECD region where many have sought asylum for political reasons. India and Pakistan rank among the top 10 source countries for tertiary educated immigrants in the United States market. Even for Bangladesh, the number of tertiary educated immigrants in the United States in 2000 was double that for the rest of the OECD region. Thus, it is apparent from Tables 5 and 6 that the skilled South Asian diaspora is mainly located in the OECD countries and also that the United States is the key destination market for skilled South Asians overseas.

Country	Total Immigrants	E	ducational Leve	el
		Primary or less	Secondary	Tertiary
East Asia				
China	846780	173545	217185	456050
Indonesia	53170	1460	12065	39645
Philippines	1163555	90200	228955	844400
Eastern Europe/Central Asia				
Albania	25785	3540	12400	9845
Armenia	44380	3815	17975	22590
Croatia	35455	6725	14350	14380
Turkey	64780	8905	18090	37785
Latin America/Caribbean				
Brazil	154250	14005	56010	84235
Colombia	402935	53485	163415	186035
Dom. Republic	527520	155685	226270	145565
El Salvador	619185	255170	257455	106560
Guatemala	341590	146515	127860	67215
Jamaica	449795	36430	209710	203655
Mexico	6374825	3081310	2398000	895515
Peru	220815	16965	87085	116765
Middle East/North Africa				
Egypt	96660	3480	18010	75170
Morocco	29670	1625	8900	19145
Tunisia	5555	390	1625	3540
South Asia				
Bangladesh	69180	6000	20095	43085
India	836780	41185	127540	668055
Pakistan	165425	11630	43365	110430
Sri Lanka	21820	495	5695	15630
Sub-Saharan Africa				
Nigeria	109160	2630	15910	90620
Sudan	12730	960	3715	8055
Total	12671800	4116150	4291680	4263970

Table 7. Number of immigrants (age 25 and older) to the United States by level of educational attainment, 2000

Source: Adams (June 2003), Table 5, p.27 (based on United States Census Bureau and 2000 United States Population Census)

This geographic orientation of the skilled South Asian diaspora towards the developed countries is in stark contrast to the large number of unskilled and semi-skilled workers from this region who form the immigrant population in the Gulf region.

The following subsections highlight the occupational profile of the South Asian diaspora in the major host countries.

#### 2.2.1 United States

In the United States, a significant proportion of the expatriate South Asian population falls under the skilled category. United States Immigration Statistics for 2006 indicate that for all the countries except Bangladesh, the two skilled categories of professionals, executives, and managers, constituted 50 percent or more of all immigrants in the United States. The share of the skilled categories was lower at around 30 percent for Bangladesh.

India has the highest share of skilled immigrants in the United States. As much as 60 percent of all Indian immigrants in the United States were professionals or technical personnel followed by executives and managers who constituted another 10 percent of all registered immigrants. Thus, some 70 percent of the Indian expatriate community in the United States was skilled. This share is even higher if one includes other categories such as sales and administrative support, which are likely to require some minimum level of formal educational qualifications (the criterion given earlier for defining skilled persons). Likewise, for Sri Lanka and Pakistan, the skilled categories of executives and managers as well as professional and technical persons constitute around 50 percent of all immigrants from those countries and between 70 to 80 percent if one includes the categories of administrative support and sales persons. Even in the case of Bangladesh, which has a lower share of the former skilled categories, if one includes the administrative support and sales personnel categories, then the total share of Bangladeshis in the total number of naturalised citizens or permanent residents in the United States rises to over 50 percent.<sup>2</sup>

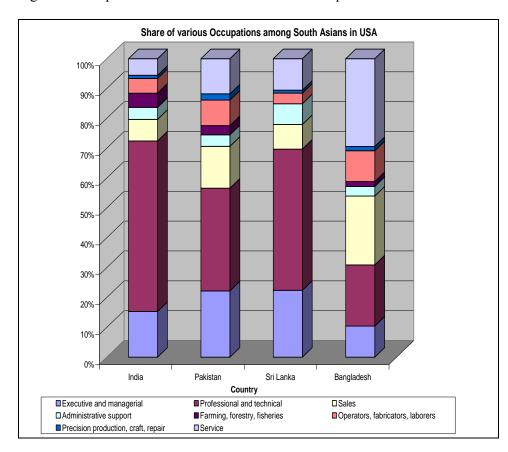


Figure 1. Occupational breakdown for South Asian expatriates in the United States (2006)

Source: United States Homeland Security Immigration Statistics, 2006

<sup>&</sup>lt;sup>2</sup> The relatively higher share of low and semi skilled categories in the case of Bangladesh is partly explained by the recent influx of Bangladeshis into the United States under the diversity scheme for granting green cards.

Figure 2 shows the absolute numbers of expatriates for the four countries in the United States market. It enables a comparison of the absolute size of the diaspora population from the South Asian region in the United States market.

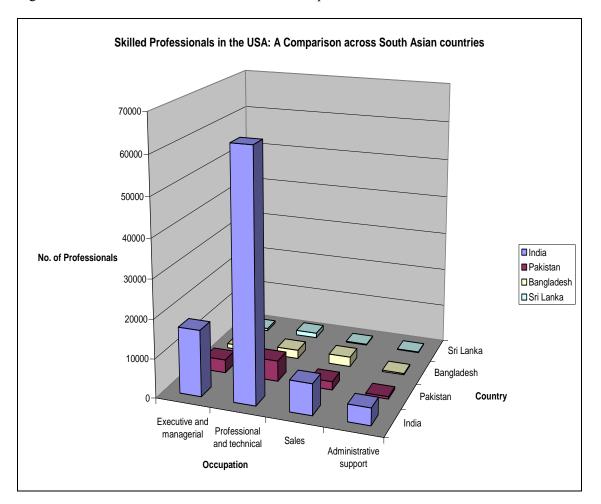


Figure 2. Skilled Professionals in the USA: A Comparison across South Asian Countries

Source: United States Homeland Security Immigration Statistics, 2006

The asymmetry in population size and the emigrant population is evident from Figure 2. There were a cumulative total of over 50,000 Indian professionals and technical persons in the United States and over 10,000 executives and managers, while for the other three countries the numbers are below 10,000 for both categories, over the 2003-2005 period. Thus, the overall stock of skilled persons from South Asia has thus been sizeable, with India being the dominant source country.

Tables 8 and 9 show the occupational profile of persons from the four selected countries who acquired permanent residence and acquired citizenship, respectively in the United States, on an annual basis for the period 2003 to 2005.

As shown in Table 9, excluding the unknown category which is likely to reflect family dependent and reunification types of categories for permanent residence and citizenship, by and large, the most important occupational groups are the executives and managers, and the professional and technical categories of immigrants. Even the sales category is an important occupational group for all the countries. This pattern is more clearly evident for India and Pakistan and least for Sri Lanka for which in any case the numbers are quite small. If one cumulates for each category across all the years, the professional and technical category emerges as the most important group for immigrants from these four countries in the United States market.

	India			]	Pakistan		Sri Lanka			Bangladesh		
Occupation	2005	2004	2003	2005	2004	2003	2005	2004	2003	2005	2004	2003
Executive and managerial	4,395	3,190	2,341	775	578	525	135	152	117	213	139	97
Professional and technical	19,531	18,101	10,211	1,478	974	613	360	248	195	686	513	261
Sales	1,585	1,102	983	299	223	93	46	31	17	583	399	316
Administrative support	766	689	598		56	40	34	35	37	46	26	19
Farming, forestry, fisheries	2,036	1,577	1,607	154	156	162				89	58	37
Operators, fabricators, laborers	738	437	348	138	112	58	27	7	21	81	62	29
Precision production, craft, repair	330		242	92	48	30		12		33	17	7
Service	1,535	1,078	1,047	359	372	516	76	58	49	1,028	877	442
Military	4				3							
No occupation	39,463	31,841	24,957	7,877	6,444	5,741	573	434	383	7,062	4,744	2,872
Unknown	14,298	11,854	7,894	3,678	3,120	1,637	623	454	415	1,666	1,226	536
Total	84,681	43,695	50,228	11,555	12,086	9,415	1,874	888	1,234	11,487	8,061	4,616

Table 8. Legal Permanent Residence by South Asian persons in the United States between 2003 and 2005

Source: United States Homeland Security Immigration Statistics, 2006

	India				Pakistan		Sri Lanka			Bangladesh		
Occupation	2005	2004	2003	2005	2004	2003	2005	2004	2003	2005	2004	2003
Executive and managerial	1,978	2,672	2,380	528	540	495	59	72	72	225	243	233
Professional and technical	4,299	5,691	5,450	632	832	804	111	176	192	208	306	292
Sales	1,197	1,529	1,608	507	511	542	39	46	44	344	419	486
Administrative support	483	891	992	111	174	214	21	28	34	61	74	127
Farming, forestry, fisheries	14	24	24		4	6						
Operators, fabricators, laborers	1,134	1,390	1,431	296	362	354	10	11	20	312	377	276
Precision production, craft, repair	125	222	254	39	52	64		4	11	26	31	44
Service	556	890	1,071	135	198	249	20	39	44	195	319	389
Military	64	91	51		38	24		6	5		13	13
No occupation	4,343	5,495	6,140	1,708	1,921	2,009	109	136	129	822	935	1,039
Unknown	21,769	19,080	10,360	5,729	4,112	2,663	552	462	276	3,299	2,431	1,446
Total	35,962	37,975	29,761	9,685	8,744	7,424	921	980	827	5,492	5,148	4,345

Table 9. Citizenship by South Asian Persons in the United States between 2003 and 2005

Source: United States Homeland Security Immigration Statistics

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
India	4.4	4.6	6.9	10.7	18.0	22.9	26.3	32.0	39.3	44.0	47.2
China	1.7	1.0	1.9	1.7	2.4	2.5	3.2	3.9	4.0	4.2	5.0
Philippines	12.4	12.4	12.2	14.6	18.0	17.8	17.0	7.7	3.3	3.0	2.6
Mexico	6.0	6.4	5.4	4.8	3.1	2.3	2.5	3.2	3.5	2.5	2.1
Russia	4.6	6.3	6.6	3.2	4.5	2.5	2.0	2.1	1.7	1.5	1.4
Total LDCs	29.2	30.8	33.1	35.1	46.0	48.1	50.9	48.8	51.8	55.4	58.2
United Kingdom	13.6	12.2	14.8	13.0	9.5	8.6	8.1	9.3	8.6	6.9	5.7
Japan	7.5	6.5	8.7	5.4	5.1	4.5	3.5	4.0	3.6	3.1	2.9
France	4.7	3.9	4.1	3.3	2.1	2.0	2.1	2.4	2.3	2.3	2.3
Germany	3.7	2.8	3.2	2.9	2.4	2.2	2.5	2.5	2.6	2.5	2.1
Australia	1.8	1.4	1.9	1.9	2.0	2.1	1.8	1.9	1.8	1.8	1.4
Total Developed Countries	31.4	26.8	32.6	26.5	21.1	19.5	17.9	20.2	19.0	16.7	14.3
Others	39.4	42.4	34.3	38.4	32.9	32.4	31.2	31.1	29.3	27.9	27.4
Total no. of Visas	48820	58673	59325	51667	42206	49284	59093	60072	80608	91378	116695

Table 10. Total Issue of United States H-1 Visas & Sending Country Shares. 1989-1999

Source: Commander et al (2002), based on Statistical Yearbook of the Immigration and Naturalization Service, various years.

The significance of India as a source of skilled immigrants is indicated by the figures in Table 10. Nearly half of all H-1 admissions, which cover skilled workers, were from India, with even China being a far distant second source country.

India has been a significant source for professional, technical, executive and managerial workers for the United States, accounting for over 17 percent of all such immigrants into the United States between 1994 and 1996 and around 37 percent of all Asian immigrants in these categories.

Occupation	Indian Immigration	Asian Immigration	World Immigration	Indian as % of Asian	Indian as % Of world
Overall Occupational	114,528	688,327	2,440,777	13.2	4.7
Total Occupational	38,395	295,516	851,507	13.0	4.5
Professional, Technical	19,603	89,917	201,568	22.0	9.7
Executive, Managerial	6,246	41,841	83,631	14.9	7.5
Sales	1489	14,581	39,950	10.2	3.7
Administrative Support	2,390	20,816	61,610	11.5	3.8
Production, craft and repairs	767	17,775	66,780	4.3	1.1
Operator, Fabricator and Labour	846	43,543	195,861	1.9	0.4
Family, Forestry and Fishing	3,567	20,366	42,698	17.5	8.4
Service	3,467	47,406	159,409	7.4	2.2
No Occupation Reported	76,133	572,811	1,589,270	13.3	4.8

Source: Based on Statistical Yearbook of the Immigration and Naturalization Service, various years.

India has been a particularly important source country for skilled worker immigration into the United States in certain sectors. These include software, and others like engineering, management, and medicine as shown in Table 12.

	200		20		2002	
Category	India % Share in Asia	Indian % Share in	India %Share in	Indian % Share in	Indian % Share in	Indian % Share in
		World	Asia	World	Asia	World
Computer- related	79.62%	68.18%	81.53%	71.39%	76.43%	63.21%
Fashion Models	10.53%	0.33%	2.00%	0.11%	11.63%	0.67%
Managers and Officials	32.45%	12.28%	37.16%	13.92%	31.79%	11.42%
Miscellaneous, professional, technical and managerial	27.62%	11.49%	33.63%	15.98%	30.82%	13.97%
Administrative Specialisation	23.69%	13.88%	28.98%	17.14%	22.26%	12.74%
Architecture, engineering and surveying	39.47%	26.01%	42.36%	27.87%	38.10%	22.94%
Art	6.09%	3.36%	8.81%	4.64%	7.62%	3.90%
Education	17.26%	8.36%	19.99%	9.45%	18.64%	9.26%
Entertainment and Recreation	38.42%	17.37%	19.26%	6.74%	23.08%	8.89%
Law and jurisprudence	12.90%	4.77%	15.31%	5.02%	14.40%	5.01%
Life Sciences	19.76%	11.06%	19.03%	10.52%	18.85%	10.52%
Mathematics and Physical Sciences	18.40%	10.03%	21.95%	12.21%	22.33%	12.73%
Medical and Health	27.86%	18.00%	31.86%	20.34%	30.50%	19.58%
Museum, library and archival sciences	18.99%	8.06%	14.18%	5.65%	9.48%	3.49%
Religion and Theology	10.34%	4.41%	14.71%	6.02%	15.56%	5.93%
Social Sciences	29.64%	16.37%	26.01%	13.46%	25.47%	13.30%
Writing	12.12%	6.18%	15.38%	7.73%	10.24%	5.23%
Unknown	38.93%	18.88%	50.00%	23.66%	31.71%	13.22%
Total	61.64%	44.42%	65.82%	48.78%	50.91%	32.89%

Table 12. India's Share in H1B visas, Asia and World, 2000-2002

Source: Statistical Yearbook of the Immigration and Naturalization Service, various years.

#### 2.2.2 United Kingdom

The United Kingdom constitutes the other major host country along with the United States for the South Asian diaspora. Inflows from the Indian subcontinent constituted a significant 12.6 percent of total inflows of non-British employed migrants during the 2000-04 period.<sup>3</sup> Close to half of all inflows from the Indian subcontinent into the United Kingdom market are in the professional and managerial categories.

Table 13. Net inflow of professional and managerial workers by nationality compared to total net inflow of employed migrants, 1975-99

Citizens	Professional and	All Migrant	Professional and
hip Group	Managerial	Workers	Managerial (% of
			Net Inflow)
Old Commonwealth	106000	154000	69%
EU/EFTA	29000	80000	36%
East/Other Europe	10000	16000	63%
Other Foreign Developed	65000	85000	76%
Countries			
Bangladesh/Pakistan/India/Sri	40000	81000	49%
Lanka			
Rest of the Developing World	130000	173000	75%

Source: Based on Salt (2006)

It is interesting to note in Table 13 that although the bulk of migration from the South Asian region consisted of professional and managerial workers, other regions including the rest of the developing world had even higher shares of skilled workers in their overall flows to the United Kingdom during this period. The share of professional and managerial workers in total inflows from the South Asian region to the United Kingdom has, however, risen compared to that for the rest of the developing world, suggesting that there is a growing shift towards high skilled migration to the United Kingdom from the Indian subcontinent.

The growing significance of skilled workers in inflows from the South Asian region is evident from the admissions under the United Kingdom's Highly Skilled Migrant Programme (HSMP) which admits thousands of South Asians every year into the United Kingdom. In 2005 alone, of 17,631 persons hailing from over 100 countries who were admitted into the United Kingdom under the HSMP, Indians and Pakistanis accounted for half of all HSMP approvals. Indians alone accounted for 38 percent of total admissions under this scheme. Indians dominated in most categories Some 77 percent of all HSMP approvals were for persons looking to pursue their careers in four main occupational categories, these being, medical with a share of 33 percent, financial with a share of 19 percent, business with a share of 14 percent, and information technology with a share of 12 percent. With the exception of finance, the largest proportion of approvals in all the other occupational categories was for Indians, who constituted 59 percent of all those admitted in the medical field and 45 percent of those admitted in the IT sector. <sup>4</sup> Table 14 shows the number of applications approved by nationality for the four selected South Asian countries, under the HSMP.

<sup>&</sup>lt;sup>3</sup> Salt and Millar (October 2006), Table 2, p.337.

<sup>&</sup>lt;sup>4</sup> Salt (2006).

Country	2002	2003	2004	2005
India	181	837	1933	6716
Pakistan	59	309	977	2080
Sri Lanka	10	46	84	269
Bangladesh	15	58	113	245

 Table 14. Highly Skilled Migrant Programme applications approved by nationality, 2002-05

Source. Based on Salt (2006)

The asymmetry in numbers is once again evident given the starting difference in population strength across the four countries. But what is worth noting is the significant rise in number of approved applications over the period shown. For India, between 2004 and 2005, there was an increase of 247 percent in the number of approvals. Likewise, for Pakistan, there was more than doubling of the number of approved applications and a similar doubling and trebling of the numbers for Bangladesh and Sri Lanka, respectively. While it is difficult to explain this jump in numbers, which may partly be due to recent efforts by many host countries to attract skilled workers, it is clear that the South Asian region is an important source for skilled workers for the United Kingdom.

The distribution of Indians and Pakistanis receiving work permits in the United Kingdom by occupational category is provided in Table 15.

Table 15. Work Permits and First Permissions by Occupation for Indians and Pakistanis in the United Kingdom (2005)

Country	I	ndia	Р	akistan
ž	Number of	Proportions of	Number	Proportions of
	Work	Occupation by	of Work	Occupation by
	Permits	Nationality	Permits	Nationality
Managers and senior officials	2831	9.7	313	10.9
Professional Occupations	17053	58.3	807	28
Associate Professional and				
Technical Occupations	7156	24.5	926	32.1
Administrative and Secretarial				
Occupations	16	0.1	1	0
Skilled Trades Occupations	924	3.2	475	16.5
Personal Service Occupations	512	1.7	261	9.1
Sales and Customer Service				
Occupations	4	0	1	0
Process, Plant and Machine				
Operatives	20	0.1	7	0.2
Elementary Occupations	745	2.5	92	3.2
All occupations	29261	100	2883	100

Source: Based on Salt (2006)

The significance of professional and technical occupations among the Indian and Pakistani work permit holders in the United Kingdom is evident from Table 15. Over 80 percent of Indian work permit holders and 60 percent of Pakistani work permit holders entering the United Kingdom in 2005 were engaged in professional or technical occupations. If one adds to this the executive and managerial category, then the respective shares rise to 90 percent and 70 percent for India and Pakistan, respectively.

### 2.3 <u>Significance of certain professions among the South Asian diaspora</u>

There are certain professions which are most prevalent among the South Asian diaspora. These include engineering, medicine, and IT. Some illustrative examples from these sectors for selected host countries highlight the predominance of these professional occupations among the South Asian expatriate community.

In Canada, India and Pakistan consistently figure in the top ten source countries for engineers while Bangladesh is also usually in the top twenty source countries. This is shown in Table 16. According to these figures, Indian and Pakistani engineers constituted 17 percent of the total stock of migrant engineers in Canada in 2000.

Country	1998				1999			2000	
	No.	Percentage	Rank	No.	Percentage	Rank	No.	Percentage	Rank
India	459	6.04	4	644	6.07	2	1,230	8.5	3
Pakistan	507	6.67	3	581	5.47	3	1,286	8.88	2
Bangladesh	95	1.25	19	129	1.22	17	263	1.82	9

Table 16. Migrant Engineers to Canada from India, Pakistan, Bangladesh, 1998-2000

Source: Based on Couton (2002)

South Asian doctors are also a significant diaspora community in the major host countries, as seen in Table 17. South Asian physicians accounted for 6-7 percent of the total number of physicians in most of these host markets, their presence being the strongest in the United Kingdom. In the United Kingdom, South Asian doctors and nurses are seen as forming the backbone of the National Health Service.

	United			United Kingdom	
Country of origin	States	Australia	Canada	(GMC)	Total
India	40838	2143	1449	15093	59523
% of total in host country	4.9	4	2.1	4.9	
Pakistan	9667	96	320	2693	12,776
% of total in host country	1.2	0.2	0.5	2.1	
Sri Lanka		627	163	1422	2212
% of total in host country		1.2	0.2	0.4	
Bangladesh				464	
% of total in host country				0.3	

Source: Based on Mullan (2005)

In the past decade, the IT sector has become a major driving force behind skilled migration from the South Asian region, and in particular from India to the industrialised countries. Data on skilled admissions into the United States indicate the significance of India as a source for IT professionals in the United States market and also in total skilled outflows from India to the United States.

Category	India	China	Canada	Philippines	United Kingdom
Computer-related	47,477	5,357	2,770	1,561	1,250
Fashion Models	5	4	92	1	50
Managers and Officials	1,212	388	1,204	315	908
Miscellaneous, professional, technical and managerial	690	349	379	115	283
Administrative Specialisation	2,689	1,660	1,342	2,186	795
Architecture, engineering and surveying	5,780	2,633	1,629	993	1,235
Art	113	76	133	65	245
Education	1,908	3,593	1,507	957	893
Entertainment and Recreation	69	28	77	9	89
Law and jurisprudence	72	93	165	34	99
Life Sciences	727	1,965	415	63	360
Mathematics and Physical Sciences	693	1,401	446	76	272
Medical and Health	2,530	674	949	2,524	297
Museum, library and archival sciences	11	30	56	5	31
Religion and Theology	7	2	14	6	7
Social Sciences	738	413	365	257	206
Writing	77	91	133	44	83
Unknown	182	84	84	84	68
Total	64,980	18,841	11,760	9,295	7,171

# Table 18. H1B Beneficiaries in the Top 5 H1B receiving countries, 2002

Source: Statistical Yearbook of the Immigration and Naturalization Service, 2002

# 2.4 <u>Source country diaspora profiles</u>

Official statistics for each of the selected source countries also highlight the skill and occupational composition for emigrants from these countries. Although it is difficult to get data on a comparable basis across the four countries, existing data indicate that the significance of skilled workers in total emigrant flows is not uniform across the four South Asian countries and is also not uniform across destination markets. The skilled diaspora is more prevalent in certain destinations and regions. The following discussion highlights the skill and destination wise migration features for each of these source countries.

#### 2.4.1 Sri Lanka

Estimates of the stock of Sri Lankan Overseas Contract Workers show that the majority of workers are in the unskilled and housemaids categories. However, around 22 percent of overseas Sri Lankan workers, or around 267,000 were skilled and professionals as per 2005 statistics on foreign employment.

Manpower Level	Male	Female	Total	Category as % of total
Professional level	7445	2136	9581	0.8%
Middle level	22380	5628	28008	2.3%
Clerical and related	34833	7870	42703	3.5%
Skilled	184768	72689	257457	21.1%
Unskilled	171500	52094	223594	18.3%
Housemaid	-	660420	660420	54.1%
Total	420926	800837	1221763	100.0%

Table 19. Estimated stock of Sri Lankan overseas contract workers by manpower levels, 2005

Source: Sri Lanka Bureau of Foreign Employment

The distribution of this outflow is mainly to the Middle Eastern countries, which is host to low skilled Sri Lankan workers and to a lesser extent host to skilled and professional Sri Lankans. It is interesting to note that outflows of Sri Lankans under the professional and skilled categories were largest to Saudi Arabia, Kuwait, United Arab Emirates, and Qatar and other countries such as South Korea, compared to traditional host countries for skilled workers, such as the United States or the United Kingdom.

Country	Professional Level	Middle Level	Clerical & Related	Skilled	Unskilled	Housemaid	Total
Saudi	314	1,802	1,432	12,411	10,063	50,091	76,113
Arabia		ŕ	,			-	
Kuwait	58	470	410	4,395	2,203	28,563	36,099
U.A.E.	408	2,269	3,014	8,179	8,790	13,646	36,306
Qatar	339	1,414	1,723	13,028	14,570	4,858	35,932
Lebanon	1	50	14	73	273	15,978	16,389
Jordan	16	99	163	2,917	221	4,859	8,275
South Korea	1,086	641	3	31	3,086	2	4,849
Oman	109	469	307	704	381	1,551	3,521
Bahrain	53	180	156	890	322	2,142	3,743
Maldives	163	305	374	921	802	154	2,719
Cyprus	3	36	6	50	195	1,937	2,227
Malaysia	1	9	_	417	501	239	1,167
Mauritius	7	3	11	1,034	2		1,057
Singapore	7	34	31	31	150	765	1,018
Seychelles	27	42	29	240	258	-	596
Egypt	-	1	2	164		9	176
Israel	6	126	4	8	7	23	173
Hong Kong	-	7	1	4	16	139	167
Italy	_	1	1	4	4	54	64
Libya	1	3	11	18	1	3	37
Africa	7	10	2	4	4	1	28
Pakistan	15	2	1	3		4	25
Greece	13	4	1	5	4	10	25
United	1	22	-	1	-	-	23
Kingdom	1	22		1			27
Syria	1	-	_	2	8	11	22
Mongolia	-	3	_	19	-	-	22
Swaziland	-	16	_	-		_	16
Ireland	2	-	13	_		_	15
Denmark	-	1	-	11		_	12
Ethiopia	3	5	-	2			10
North	2	-	_	3		3	8
Yemen	2			5		5	0
South	-	3	_	_	1	1	5
Yemen		5			1	1	5
Botswana	7	-	_	1		_	8
Madagascar	4	-	_	-	-	1	5
Malawi	3	1	_	_	-	-	4
Kenya	3	-	_	_	-	1	4
Brunei	-	3		1		-	4
China	-	1	2	-		-	3
Saipan	-	1		1			1
United	- 1	-	-	-	-	-	1
States	1	-	-	-	-	-	1
Others	29	8	20	18	8	9	92
Total	2,678	8,040	7,731	45,590	41,870	125,054	230,963

Table 20. Departures for foreign employment by country & manpower level, 2005\*

Source: Sri Lanka Bureau of Foreign Employment

Thus clearly, the Middle East is the most important host region for the Sri Lankan diaspora, skilled or less skilled. The Sri Lankan case is different from that of the other South Asian countries as the geographic orientation of its skilled population is less towards the industrialised countries and also

because of the much smaller size of its population. Another interesting dimension to the Sri Lankan diaspora is its ethnic and political nature. There is a marked dichotomy in the Sri Lankan diaspora, divided as it is into the Sinhalese and Tamil Refugees.<sup>5</sup> The latter is an important refugee group in countries like Australia and Canada. This group has carved a niche for itself, and mostly comprises of highly skilled people, including doctors, engineers, educators, and other professionals. Thus, while the overall composition of the emigrant stock from Sri Lanka may be dominated by the low skilled, in select markets where the expatriate community is largely a fall out of the ethnic conflict between the Tamils and the Sinhalese, the diaspora population is largely skilled.

Table 21 shows the profile of Sri Lankans in Australia, one such destination market for Sri Lankan refugees, by education levels and occupation.

Educational level	Number of Sri Lankans	% of total
Higher qualification	20103.75	37.5
Certificate level	5361	10
Other	5092.95	9.5
No qualification, attending institution	5629.05	10.5
No qualification, not attending institution	17423.25	32.5
Total	53610	100
Occupation	Number of Sri Lankans	% of total
Managers/Administrators	2135	7
Professionals	8387.5	27.5
Associate Professionals	3202.5	10.5
Trades	1830	6
Semi-skilled	9455	31
Unskilled	5490	18
Total	30,500	100

Table 21. Sri Lankans in Australia- Educational and Occupational profile

Source: Australian Bureau of Statistics Census of Population and Housing, 2003

As shown in Table 21, around 45 percent of the Sri Lankans in Australia were skilled, that is, managers or administrators, professionals, and associate professionals and over a third had higher qualifications. However, the proportion of semi and unskilled still remains sizeable. Thus, among the Sri Lankan diaspora, the Tamil diaspora, much of which has sought asylum in industrialised countries, tends to be more skilled and engaged in professional occupations such as medicine, education, and engineering.

# 2.4.2 Bangladesh

The Bangladeshi diaspora is diverse across destination countries. While the Gulf plays host to mostly unskilled migrant labour, the United Kingdom and the United States are home to second and third generation persons of Bangladeshi origin.

<sup>&</sup>lt;sup>5</sup> This issue is discussed later in the section on contributions by the diaspora.

Table 22. Overview of the Bangladeshi immigrants in industrialised countries

Country	Number of Bangladeshi Immigrants
United Kingdom	500000
United States	500000
Italy	70000
Canada	35000
Japan	22000
Australia	15000
Greece	11000
Spain	7000
Germany	5000
South Africa	4000
France	3500
Netherlands	2500
Belgium	2000
Switzerland	1400
Total	1178400

Source: Bruyn and Kuddus (2005), Table 1, p.18.

According to Bruyn (2006), the Bangladeshi Diaspora is of three major types. It includes welleducated, high or middle income earners, mainly settled in the United Kingdom and the United States, diaspora of Bangladeshi origin in various industrialised countries who belong to the low-income or unemployed segments of the population, and a major group of migrant labourers, residing for a specific period in Middle Eastern, South- East Asian and some industrialised countries. Table 23 provides a breakdown of the skill composition of the Bangladeshi overseas workers for the 1998 to 2002 period and for the 1980-2004 period. It reveals that over half the Bangladeshi labour migrants are unskilled or semi-skilled. The proportion of professionals and skilled is around one third, with professionals constituting a very small part.

Year	Professional	Skilled	Semi-skilled	Unskilled	Total
1990	6,004	35,613	20,792	41,405	103,814
1991	9,024	46,887	32,605	58,615	147,131
1992	11,375	50,689	30,977	95,083	188,124
1993	11,112	71,662	66,168	95,566	244,508
1994	8,390	61,040	46,519	70,377	186,326
1995	6,352	59,907	32,055	89,229	187,543
1996	3,188	64,301	34,689	109,536	211,714
1997	3,797	65,211	193,558	118,511	381,077
1998	9,574	74,718	51,590	131,785	267,667
1999	8,045	98,449	44,947	116,741	268,182
2000	10,669	99,606	26,461	85,950	222,686
2001	5,940	42,742	30,702	10,581	188,965
2002	14,450	56,265	36,025	109,285	216,025
% share of total stock	4%	30%	22%	44%	100%

Table 23. Profile of recorded temporary labour migrants, 1998-2002 and 1980-2004

Source: World Bank (February 2005), Table 3.1, p. 17 for 1998-2002 figures and http://www.scalabrini.asn.au/atlas/data/Bang2.htm for 1990-1997 figures

As seen in Table 23, over the last 25 years, 44 per cent of all recorded temporary labour migrants were unskilled, 22 per cent were semi-skilled, 30 per cent skilled, and only 4 per cent were professionals.

But the figures in Table 23 mask differences in the profile of the Bangladeshi expatriates across different host nations. In the United Kingdom, the educational level of this community is lower in comparison with that for the ethnic white, Chinese and Indian communities. Sixty six per cent are engaged in manual work, 16% in managerial jobs; and 20-30% is in the catering industry.<sup>6</sup> In the United States, in contrast, the expatriate Bangladeshi population shows very high levels of education. This is explained by the fact that many of them came to the United States to pursue higher education. Many Bangladeshi Americans occupy professional or technical positions. Thus, as in the case of Sri Lanka, while the professional and skilled categories are not predominant in outflows, they tend to be prevalent in certain host countries over others.

#### 2.4.3 India

While the earlier generations were unskilled more recent generations of the Indian expatriate community are primarily professionals in the medical, legal, engineering and educational sectors. There is again a mix of skill profiles and geographic orientation of the Indian diaspora. Table 24 shows the distribution of the Indian diaspora by country as well as occupational profile.

Country	РЮ	NRI	Total	As % of host country population	Occupational Profile
Australia	160000	30000	190000	1.02	Until the 1970s, majority of Indians worked as unskilled labour, such as railway workers. After this time, professionals have dominated the scene- doctors, IT, restaurateurs, etc. One third of NRIs are students. Around 50000 PIOs are immigrants from Fiji and Africa.
					The majority of the Indian population here is from Punjab (in 1991, 49% of community was Sikh, 24% was Hindu, 'others' accounted for 10%)
Canada	700000	150000	850000	2.8	An estimated 30% are professionals in public & private sectors; 23% are in the manufacturing sector Indian Canadians enjoy an annual income
					20% higher than the national average.
New Zealand	50000	5000	55000	1.45	Again, 10,000 PIOs from Fiji.
					Main occupations- domestic retail trade. A number of professionals work in the IT and medical sectors.
Kenya	85000	15000	100000	0.36	PIOs form an integral part of the economy. They gradually transitioned from petty business to industry and other professions.

Table 24. Profile of the Indian Diaspora by destination country and occupation

<sup>&</sup>lt;sup>6</sup> A large number of Bangladeshi immigrants in the United Kingdom work in 'Indian' restaurants. See Bruyn and Kuddos (2005).

		15000	25000		Most NRIs are professionals in the medical, educational and engineering fields. Others are involved in business- for example, textiles,
Nigeria	8000	17000	25000	insignificant	pharma, engineering, fisheries.
Uganda	7000	5000	12000	insignificant	Initially, Indians formed an important section of the economy, but not many remained after Idi Amin's regime. However, a few business families have revived activities in recent years.
					Majority of workers are unskilled or semi skilled labourers. There are roughly 120000
Kuwait	1000	294000	295000	12.3	domestic labourers and 14000 in government service.
					More than 165000 NRIs are professionals in law, medicine, engineering; CAs; scientists, software experts; management consultants; architects. Skilled labour also consists of technicians and nurses.
United Arab Emirates	50000	900000	950000	30	75% - labourers, of which half are unskilled
					25% - professionals sought after and well paid.
Saudi	0	1500000	1500000		5% of the Indian population are professionals like doctors, engineers, CA, managers. This section has contracts with public or private
Arabia	0	1500000	1500000	6.9	sectors 10% hold white collar jobs: clerks, secretaries, book keepers, etc.
					85% work as organised labour and technicians working on project sites, maintenance, etc.
Malaysia	1600000	15000	1615000	7.3	Most of the Indians are involved in plantation activities. Others work in the police force, law or medicine.
					Possesses a huge number of PIOs. Most are agricultural workers and farmers. There are a limited number of businessmen and
Mauritius	704640	11116	715756		professionals.
					Indians constitute a sizeable proportion of the city-state's eclectic population. Politics, law, medicine, academics. IT, scientific research, biotechnology etc are the professions of
Singapore	217000	90000	307000	9.71	choice.
South Africa			1000000		60-70% BPL. Few NRIs, mostly PIO
United Kingdom			1200000	2.11	Primarily IT, engineering, medicine
United States			1678765	0.6	A record 300,000 IT professionals 72.3% of Indians are employed 43.6% - managerial or professional 33.2%- sales technical, services 23.3% skilled labourers

Source: www.indiandiaspora.nic.in and various other online sources

It is evident from Table 24, how widely dispersed the Indian diaspora community is and the wide range of occupations it covers. However, unlike the case of Sri Lanka and Bangladesh, the skilled and professional migrants are present not only in the United States, United Kingdom Canada, and other industrialised countries, but also in the Middle East and in South East Asia. Although unskilled labourers outnumber their professional counterparts in the Gulf, even in these countries, there is a sizeable Indian professional community as the figures in Table 24 indicate. The main professions are medicine, IT, science and engineering, academics, accountancy, and management.

Table 25 shows the number of Indian knowledge workers that are present in some of the major host destinations. The significance of the United Kingdom and the United States followed by Canada and Australia is clearly highlighted

Country	Number
France	42,000
Germany	32,000
Netherlands	103,000
United Kingdom	790,000
United States	815,000
Portugal	102,000
Canada	250,000
Australia	200,000
New Zealand	30,000
Indonesia	30,000

Table 25. Indian Emigrants to Europe, America, and Oceania (knowledge workers)

Source: D'Sami (2001), p.3.

The predominance of skilled categories in Indian immigration into the United States is shown in Table 26. The admission categories most commonly used by Indian workers in the United States are the specialty occupation or H1B visa, exchange visitors or J1 visa, and the intracompany transferee or L1 visa. All of these relate to highly skilled and professional migrants. Moreover, India's usage of the specialty occupation and intracompany transferees visa categories is several times greater than for other major source countries for immigrants in the United States.

It is also interesting to note the significant increase in professional and skilled migration from India to the United States around the time of the IT boom and bust in 2000.

Country/	China	India	Japan	Korea	Philippines	Israel
Class of Admission						
Registered nurses (H1A)	57	228	32	25	21	13
Specialty occupations (H1B)	15,838	81,091	13,287	8,000	5,509	5,357
Nurses, Nursing Relief Act, 1999(H1C)	-	2	-	-	84	-
Services Unavailable in United States (Non-agricultural workers)(H2B)	108	310	461	128	221	31
Industrial trainees (H3)	94	96	529	25	17	24
Exchange visitors (J1)	9,795	4,866	12,684	9,951	1,333	4,039
Intracompany transferees (L1)	4,572	20,413	31,044	4,769	2,077	4,440
Workers of extraordinary ability/achievement (O1)	282	523	741	227	191	510
Workers accompanying performance of O1 workers (O2)	117	138	40	72	73	34
Internationally recognised athletes or entertainers (P1)	795	95	395	166	117	246
Artists/entertainers in reciprocal exchange programs (P2)	50	41	16	40	25	32
Artists/entertainers in culturally unique programs (P3)	509	946	367	234	61	77
International cultural exchange programs(Q1)	77	6	303	10	2	1
Total	32,911	110,103	60,631	24,487	10,417	15,335

Table 26. Category-wise breakdown of temporary workers from Asian Countries, 2002

Source: Statistical Yearbook of the Immigration and Naturalization Service, 2002 Note: 1. The figures for China include People's Republic of China and Taiwan.

	1999			2000			2001		
	No.	% of all Indian immigrants	% of all immigrants	No.	% of all Indian immigrants	% of all immigrants	No.	% of all Indian immigrants	% of all immigrants
Professional and technical	3492	11.6	9.4	8632	20.6	14.7	19935	28.4	23.8
Executive, administrative, and managerial	1112	3.7	7.1	1644	3.9	7.9	3062	4.3	11.1
Clerical and administrative support	576	1.9	4.2	573	1.4	3.9	643	0.9	3.9
Sales	648	2.1	6.1	689	1.6	5.3	842	1.2	5.4
Service	559	1.9	3.2	798	1.9	2.6	1041	1.4	2.7
Farming, forestry, fishing	1328	4.4	11.7	1080	2.6	9.5	1161	1.7	12.8
Skilled workers	301	0.9	0.9	208	0.7	0.8	389	0.6	0.8
Total with occupation	8016	36.5	5.7	13724	32.7	7.2	27073	38.5	11.3
Occupation not specified	22221	73.5	4.4	28322	67.3	4.3	43217	61.5	5.2
Total immigrants	30237	100	4.7	42046	100	49	70290	100	6.6

Table 27. Occupational profile of Indians entering the United States, 1999-2001

Source: Khadria (January 2007), Table 1, p. 7.

As seen in Table 27, the share of all professional and managerial and executive categories of Indian immigrants entering the United States among all immigrants more than doubled from 16.5 percent in 1999 to 35 percent in 2001. The share of these categories in overall Indian immigration to the United States similarly more than doubled from 15.3 percent in 1999 to 32.7 percent in 2001. Thus, there is clearly a shift around 2000 towards more skilled workers, especially professional and technical immigrants from India to the United States, reflecting the software industry's demand for Indian professionals for providing on-site services, also corroborated by the earlier discussion on the prevalence of specialty occupations and of the software services sector in the admissions of Indian workers to the United States in the 1990s and recent years.

# 2.3.4 Pakistan

Detailed evidence on labour flows from Pakistan in terms of both geographic orientation and skill composition is difficult to obtain. Some broad estimates are available from the Pakistani government. These indicate that there are 3,180,973 Pakistanis abroad, with 1,552,350 being based in the Middle East, 720,000 in the United Kingdom, 605,000 in North America, 212,568 in other countries of Europe, 52,522 in the Far East, and 38,533 in other countries. The Middle East is mainly a host market for unskilled and semi skilled Pakistani workers although around 9 to 10 percent of Pakistanis working in the Middle East are estimated to be professionals, as shown in Table 28.

	Professional	Service	Production	Other	Total
1990	9.5	21.3	63.2	6.0	100
1991	8.6	19.1	68.3	4.0	100
1992	10.3	19.7	66.5	3.5	100
1993	6.9	20.2	62.3	10.7	100
1994	6.9	19.2	64.8	9.1	100
1995	6.2	19.7	62.7	11.4	100
1996	7.1	19.7	60.0	13.2	100

Table 28. Pakistani migrants to the Middle East by occupation

Source: http://www.scalabrini.asn.au/atlas/data/Pak4.htm

North America and the United Kingdom are the main destination markets for skilled and professional Pakistanis. The Pakistani diaspora presence is estimated at 1.5 percent of the Asian population in the United States according to the United States Census Bureau. Over half of this Pakistani diaspora population in the United States has a bachelor's or more, which is higher than for the Asian population as a whole and second only to the Indian diaspora (for which around 64 percent had bachelors or above qualifications). Close to 60 percent of the Pakistani diaspora has entered the United States in the 1990s. Within the Asian population, Pakistan has the highest proportion of its diaspora entering in the past decade. Thus, the Pakistani diaspora in the United States are engaged in skilled and professional occupations, comparable to the overall Asian average in the United States and ranked third in this regard after the Indian and the Japanese diaspora (with nearly 60 percent and 51 percent engaged in skilled and professional occupations, respectively).<sup>7</sup> The Pakistani diaspora is also comparable in terms of median earnings to the overall Asian diaspora.

In the United Kingdom, the other important host country for the Pakistani diaspora, there were an estimated 747,285 Pakistanis (of Asian or Asian British birth) according to the United Kingdom 2001 census. They represented 1.3 percent of the total population and were second only to the Indian diaspora population (with a share of 1.8 percent in the total population). There has been considerable

<sup>&</sup>lt;sup>7</sup> See Khadria (2007).

growth in the Pakistani diaspora in the United Kingdom during the 1990s, growing from a little over 400,000 as per the 1991 census to over 700,000 as per the 2001 census. As with the United States, one also finds an increase in the number of skilled Pakistanis entering the United Kingdom in the recent past, as is indicated by the number of work permits granted for selected nationalities in the United Kingdom. The number of Pakistanis receiving first permissions for work permits in the United Kingdom in 1995 was 273 or a mere 1.1 percent of total permissions. This increased significantly to 789 permissions in 2000 and further to 2,884 in 2005 or 3.3 percent of all approvals.<sup>8</sup> The predominant sectors in which the Pakistani diaspora in the United Kingdom are employed are teaching and research, science and technology, health, and various technical occupations. Thus, in terms of skill composition, sectors and occupations, and host nations in which the skilled Pakistani diaspora is situated, the profile is quite similar to that for India. Overall, in all four countries, there is a clear divergence between the destination markets for skilled and unskilled workers. There is also lot of commonality across the four countries in terms of the origin sectors, educational qualifications, and professions occupied by the South Asian diaspora.

# 3. Macroeconomic impact of the South Asian Diaspora in the Source Countries

Most studies on the relationship between migration and development have focused on the impact of remittances on source countries. While remittances can be directly related to a country's expatriate population, it is harder to pin down other macroeconomic flows to a country's overseas workers and diaspora population. However, these macroeconomic flows, which take the form of foreign institutional and direct investments, trade, and savings are also very important sources of impact. For the South Asian countries, the diaspora has not only played a critical role through the well established channel of remittances and transfers but also through these other macroeconomic channels as the following discussion highlights. These effects are, however, not equally visible across the four countries under consideration here due to differences in source country policies and circumstances.

# 3.1 <u>Remittances and transfers by the South Asian Diaspora</u>

For all the South Asian countries, remittances constitute a significant share of their GDPs. It is a fact oft cited that remittances today exceed the total amount of official development assistance in the world. In absolute terms, India receives the largest amount of remittances in the world, estimated at US\$27 billion in 2006. Pakistan and Bangladesh received remittances of nearly US\$5 billion in 2006. Table 29 shows the huge growth in remittances that has taken place since 1990 for all four South Asian countries. Remittances have grown twelve fold for India between 1991 and 2006, more than six fold for Bangladesh and Sri Lanka, and over two fold in the case of Pakistan between 2002 and 2007.

Year	India	Bangladesh	Pakistan	Sri Lanka
1990-1991	2068	763.91		361.7
1995-1996	8507	1217.06		675.2
2001-2002	15398	2501.13	2,390	984
2002-2003	16387	3061.97	4,237	1097
2003-2004	21608	3371.97	3,871	1205
2004-2005	20525	3848.29	4,168	1350
2005-2006	24102	4802.41	4,600	1736
2006-2007	27195	4925.07	4988.1	2068

 Table 29. Remittance inflows into South Asia (millions of United States dollars)

Source: State Bank of Pakistan, RBI Handbook of Statistics on the Indian Economy, Foreign Exchange Policy Department, Bangladesh Bank and Central Bank of Sri Lanka, Statistics- External Sector

<sup>&</sup>lt;sup>8</sup> Khadria (2007).

Three of the countries under discussion are among the top 20 recipients of remittances. According to 2004 rankings of remittance recipient countries, India ranked number one while Pakistan and Bangladesh ranked 12<sup>th</sup> and 14<sup>th</sup>, respectively. Thus, certainly migration plays an important role in these economies through the remittance channel.

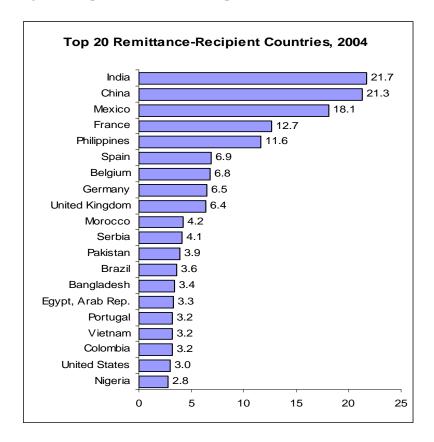


Figure 3. Top 20 Remittance-Receipt Countries, 2004

Source: Kumar (2005)

Remittances are important for all four countries in terms of their contribution to GDP and foreign exchange earnings. Remittances account for nearly 8 percent of GDP in Sri Lanka and over 6 percent of GDP in Bangladesh. In all four countries, remittances constituted over 30 percent of total export earnings and financed 18 percent or more of their imports. Remittances far exceed foreign aid and foreign direct investment in these countries. For instance, remittances were estimated at US\$24 billion in 2005-06 in India compared to FDI which amounted to US\$7.69 billion that same year. Thus, remittances make a substantial contribution to the South Asian countries, to the viability of their balance of payments, and to overall macroeconomic stability by serving as an important source of foreign savings.

Table 30. Workers' Remittances and their significance to the South Asian Economies

Country	Absolute Values in US\$ Mn. (2004)	As a % of GDP (2004)	As a % of Exports (2004)	As a % of Imports (2004)
Bangladesh	3584	6.4	38.9	27.4
India	21727	3.1	26.3	23.2
Pakistan	3945	4.1	24.5	17.9
Sri Lanka	1590	7.9	21.8	17.5

Source: Compiled from World Development Indicators 2006

Recent studies on Pakistan highlight the impact of remittances in that country at the micro and macro levels and the critical role played by remittances in Pakistan's growth process. These studies find that remittances have financed a significant part of Pakistan's merchandise deficit and current account deficit and have also been an important source of consumption, debt retirement, and asset creation at the micro level for households. Remittances have had direct and indirect beneficial effects on trade and income growth, and have made an overall contribution to enhancing welfare and reducing poverty in both rural and urban areas. The empirical analysis shows a significant and positive relationship between remittances and real GDP growth in Pakistan during the 1972-73 to 2002-03 periods.<sup>9</sup> Figure 4 clearly shows the strong positive relationship between remittance inflows and real GDP growth in Pakistan over this period.

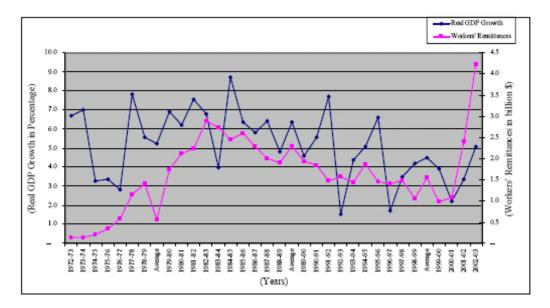


Figure 4. Real GDP growth (%) and Workers' Remittances (billions of US\$)

Source: Reproduced from Siddiqui and Mahmood (2005), Figure 1, p.7.

It is important to note that the remittance figures highlighted in Figure 4 are attributable to both skilled and low skilled diaspora from these countries and it is difficult to identify the extent to which the skilled South Asian diaspora population has contributed. It is also well established that a large part of the remittances to South Asian countries are made by low skilled and manual workers based in the Gulf and that skilled migrants living in the United States, United Kingdom and other industrialised countries tend to save more abroad as they are more attached to their host nations. On average, they remit a smaller proportion of their incomes than labour migrants. However, the skilled diaspora also make substantial contributions, particularly from markets like the United Kingdom and the United States. But the nature of the remittances from the skilled diaspora tends to be different. They take the form of inflows through savings deposits and bonds, or contributions through charitable trusts and institutions for various development and relief purposes, which could be termed as social remittances (as discussed with examples in the next two sections). It could be argued that given the difference in the nature and uses of the funds remitted by the skilled versus the less skilled diaspora, the former tends to have a more direct macroeconomic impact. They contribute to the accretion of foreign exchange reserves and provide savings for productive investment purposes, while remittances from the less skilled tend to be household driven and oriented towards enhancing family consumption and asset creation.

<sup>&</sup>lt;sup>9</sup> Siddiqui and Kemal (2006) and Siddiqui and Mahmood (2005).

#### 3.2 Non resident South Asian savings and investments

The South Asian countries have provided special savings and investment schemes and instruments for their non resident population to bring in capital in various forms into their home countries. Such inflows have played an important role in some South Asian countries, such as at the time of India's balance of payments crisis in 1991, when non resident capital inflows helped alleviate India's acute foreign exchange reserves position. These instruments include non- resident local as well as foreign currency accounts and bonds which offer attractive interest rates and tax benefits to facilitate investments and savings by the diaspora population.

India provides the best example of the role played by the diaspora, especially the skilled overseas population, through savings. The Indian government has through the 1990s provided various forms of incentives for non resident Indians to reinvest in the country. NRIs have been permitted to move capital freely between their home and host countries without much bureaucratic constraint. There are for instance, non resident ordinary accounts in rupees (NRO) which are non repatriable as well as repatriable non resident external accounts in rupees (NRE), and repatriable foreign currency non resident accounts (FCNR). The two latter accounts enable NRIs to bring in large sums of money to start businesses in India and be exempt from taxes on interest earnings. Portfolio investments have also been facilitated for non resident Indians by making income from such investments repatriable and by not requiring NRI investors to report their transactions to the Reserve Bank of India.<sup>10</sup>

As a result of such incentives and schemes, through the 1990s and also in recent years, the skilled Indian diaspora population has remitted and invested substantially through the formal banking channels and through the stock market. For example, the Reserve Bank of India launched instruments such as the Resurgent India Bonds scheme in 1998 and the India Millennium Deposits scheme in 2000. These schemes were specially targeted tax free and high interest earning repatriable foreign currency accounts for non resident Indians. They helped mobilise around US\$4.2 billion and US\$5.51 billion, respectively. During the 1990s, inflows under such RBI schemes for the diaspora Indian population resulted in huge increases in financial flows from Indian expatriates, particularly skilled Indians based in the United States and the United Kingdom. Between 1991 and 2004, inflows from overseas Indians through such non resident deposits increased from a mere US\$1.4 billion to over US\$33 billion, as shown in Table 31.

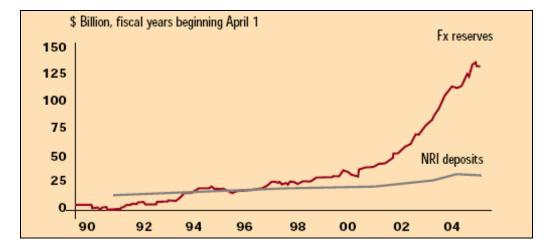
Year1994	FCNR (A)	FCNR (B)	NR (E) (RA)	NR (NR) RD	Total
1991	10,1031		3,618		13,721
1992	9,792		3,025		12,817
1993	10,617		2,740	621	13,978
1994	9,300	1,108	3,523	1,754	15,685
1995	7,051	3,063	4,556	2,486	17,156
1996	4,255	5,720	3,916	3,542	17,433
1997	2,306	7,496	4,983	5,604	20,389
1998	1	8,467	5,637	6,262	20,367
1999		7,835	6,045	6,618	20,498
2000		8,172	6,758	6,754	21,684
2001		9,076	7,147	6,849	23,072
2002		9,673	8,449	7,052	25,174
2003		10,199	14,923	3,407	28,529
2004		10,961	20,559	1,746	33,266

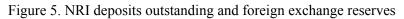
Table 31. Non resident Indian deposits (end March), in United States US\$ million

Source: World Bank (February 2005), Table 3.2, p.19.

<sup>&</sup>lt;sup>10</sup> Ministry of Overseas Indian Affairs- Policies, Incentives and Opportunities for Overseas Indians http://www.moia.gov.in/shared/sublinkimages/51.pdf and Ministry of Commerce and Industry, DIPP

Non-resident Indian deposits have grown significantly to account for a substantial share of total capital inflows, reaching as high as 32 percent of total capital inflows in 2002-03.<sup>11</sup> During the 1990s, these deposits also became an increasingly important source of accretion to the country's foreign exchange reserves. Figure 5 shows the significance of such non resident deposits in India's foreign exchange reserves.





The role of the Indian diaspora with regard to foreign direct investment has been much smaller than in the case of remittances and deposits. According to official estimates, during 1991-2001, the amount of non resident Indian investment approvals stood at Rs. US\$2.5 million or a little under 4 percent of total FDI approved during this period. Actual FDI by NRIs accounted for a little over 9 percent of actual FDI inflows and for 37 percent of total FDI approvals. This discrepancy between approvals and actual inflows from NRIs and the rather limited role of the NRIs in total foreign direct investment flows has been attributed to various bureaucratic and procedural reasons and lack of policy clarity. The single biggest beneficiary of FDI by the Indian diaspora has been the IT and BPO industry. The Indian diaspora has provided start up capital to this industry and helped mobilise capital from well established entrepreneurs and via diaspora organisations (as discussed at length in the next section).

In Bangladesh, the Bangladesh Bank has created several schemes specifically targeted at investors and non residents. These schemes include the Non-resident Taka account, the non resident foreign currency deposit account and the resident foreign currency deposit account. While their purposes may be different, some oriented towards savings and others specifically aimed at facilitating investment in Bangladesh, these schemes offer various financial advantages in terms of taxes and returns. Bonds have also been launched to attract foreign exchange from Bangladeshi expatriates. These include the Wage Earner Development Bond, the Dollar Premium Bond, and the United States Dollar Investment Bond. The skilled overseas Bangladeshi population has invested in such bonds, aided by the tax benefits and convertibility of these bonds. Though the numbers mobilised from specific countries and groups are not available, according to one IOM study, the Bangladeshi diaspora in the United States and the United Kingdom, respectively, account for 14 percent and 5 percent of the country's remittances. According to the Bangladesh Bank estimates, between 1997 and 2004, over US\$6 billion remittances were from Saudi Arabia, that is, mainly migrant workers, followed by an estimated US\$2.2 billion from Bangladeshis in the United States, many of whom are skilled and professional expatriates. The Bangladeshi government has also set up investment promotion bodies to facilitate diaspora investment but these have mostly been small scale in nature and success has been limited. The reasons for the latter include problems faced by overseas Bangladeshis in the approval process,

Source: IBEF (2006)

<sup>&</sup>lt;sup>11</sup> http://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/72354.pdf

bureaucratic inefficiencies, lack of transparency, and lack of proper investment structures for making large scale investments

Sri Lanka has had similar investment schemes, including rupee accounts for non resident Sri Lankan investment. These schemes permit overseas Sri Lankans to maintain foreign currency accounts in a bank in Sri Lanka, to invest in financial and other assets in Sri Lanka, and to repatriate their funds without any restrictions.<sup>12</sup>

Pakistan has provided an attractive investment package to facilitate investments by its diaspora in several areas, including export oriented industries, agro-business, IT and telecommunications, health, education, and real estate development among others. Elements of this package include exemption from requirement of government approval for investments in almost all manufacturing industries, automatic approval to invest in non manufacturing sectors, ease of capital repatriation, tax relief, 100 percent foreign equity permission, no minimum capital requirements, and liberal policies for payment of royalty and technical fees. Expatriates have been known to support specific projects back home, some of them acquiring small and medium enterprises in Pakistan.

# 3.3 <u>Trade flows and the South Asian Diaspora</u>

The South Asian diaspora have helped their source countries to enter their host country markets and to introduce new products and companies in those markets and thus facilitated trade and business flows between the South Asian region and the host countries. The impact on commerce is evident in several sectors such as in textiles, food products, entertainment products (including films, music, and videos), gems and jewellery, leather products, herbal products, and handicrafts. The presence of the diaspora has enabled the introduction and promotion of these products and services in the host countries.

Such evidence is most widely available for the Indian diaspora. In one of India's traditional export sectors, that is, gems and jewellery, the Indian diaspora has had a very influential role in promoting India's exports. The Gujarati community in Antwerp controls the diamond trade and the Indians dominate the gold and jewellery market in Dubai, mainly in the trading of raw or semi finished stones, precious stones, and Indian style jewellery. Similarly, the Indian diaspora has helped promote the image of Indian art and handicrafts abroad and has participated in major auctions overseas.

One sector, however, where the trade impact is clearly visible is in India's IT sector. During the 1990s, nearly 96 percent of India's software services exports were from the on-site provision of IT services. Many of these IT providers remained behind in the United States. The emergence of an Indian IT diaspora in the United States during the 1990s combined with the earlier generations of Indian engineers who had settled in the United States, helped in the growth of India's software services exports as this overseas community provided contracts to Indian IT companies, provided seed capital, influenced their companies to set up operations in India, and aided the offshoring of various back end operations to India and thus growth in India's BPO exports (discussed at length in the next section).

It is believed that the Bangladeshi diaspora has helped promote Bangladeshi garment exports to other countries. Information on the role played by the diaspora from the other countries in promoting their source countries' exports is not available. However, there is reason to believe that they too have contributed in many intangible ways, through networking, contacts with local businesses, and by influencing public policy, although the magnitude of this impact is not possible to measure.

<sup>&</sup>lt;sup>12</sup> http://www.priu.gov.lk/news\_update/Current\_Affairs/ca200108/20010821NRFC\_accounts.htm

#### 4. Sectoral Impact of the South Asian Diaspora

The preceding section discussed the macroeconomic impact of the South Asian diaspora through remittances and transfers as well as investments. This has been the most widely analysed area of impact in the context of migration. However, this larger picture does not reveal the strong sectoral impact that the South Asian diaspora has had in their home countries in selected sectors and occupations. This is of course to be expected as the occupational and sectoral profile of the South Asian skilled expatriate community is concentrated in certain professions, as highlighted earlier. The sectoral contribution of the South Asian diaspora is indeed closely linked to the sectors and occupations in which the diaspora is placed, some of the main sectors being IT, health, science and technology, and education. In particular, the success of certain sectors such as IT in the Indian economy has to a large extent been attributed to the contributions of the Indian diaspora based in the United States Silicon Valley. Likewise, the emergence of reputed corporate hospitals in India or the expansion in health facilities in certain parts of Bangladesh have been spurred by financial and other investments by their overseas doctors, as well as the return migration of their professionals in the health sector.

The channels for such sectoral impact include financial and human capital flows, knowledge spillovers, and technology transfer. These contributions may occur at the individual level with influential diaspora making an impact through their decisions to set up establishments or to enter into contracts with Indian establishments. These contributions may be made at a broader level, through diaspora networks and associations, which help mobilise and channel funds to ventures in particular sectors or liaise with home country governments to facilitate the development of particular sectors in their home countries, or may be made at an individual level in source communities and regions within their home countries.

# 4.1 <u>Contributions by the Indian Diaspora in Selected Sectors</u>

The following discussion highlights the sectoral contributions made by the Indian diaspora in the IT, health, and science and technology professions. The case of India has been discussed here at length as there is a large body of evidence available for India while only limited information is available for the other three countries.. The occupational and sectoral contribution for the remaining countries is discussed briefly based on limited available evidence.

# 4.1.1 The Indian Diaspora and the Boom in India's IT and Outsourcing Industry

The case of the Indian IT industry clearly shows how the Indian diaspora has served as a strategic asset for the development of this sector and how it has helped build social capital in the host countries. The recent boom in India's IT and outsourcing industry is in large part a result of the trust, reputation building, and networking roles played by the Indian diaspora community settled in the United States, Canada, and the United Kingdom. As Kapur (2001) notes, diaspora communities from India, China, or Taiwan have played the role of "reputation enhancers" thus enabling them to lobby in the interests of their home country, to develop the reputation of firms and knowledge institutions in their countries of origin, and to transmit knowledge and information among different firms and individuals, thus fostering innovation which is central to the IT sector. Indian IT professionals living overseas have helped in providing venture capital for startup companies in India. They have helped the development of their sectors by selling India as a safe destination for investments to foreign investors, by bringing in projects, by providing contacts to overseas clients, and by facilitating the mobility of service providers into and from the industry.

The contribution of Indian IT professionals in the United States is the most significant. There are over 300,000 PIOs working in the IT sector in the United States.<sup>13</sup> A substantial number of these professionals are executives in mid and large companies and at least 15 percent of the IT start ups

<sup>&</sup>lt;sup>13</sup> See Report of the High Level Committee on Indian Diaspora (2001).

have been established by PIOs. Non resident Indian IT professionals who have worked abroad for long periods and in senior and managerial capacity have helped to establish and manage subsidiaries of MNCs in India. Often, they have been instrumental in influencing foreign multinationals to set up subsidiaries and offshore development centres in India. Many wealthy Indian entrepreneurs have become venture capitalists in the United States and have helped to boost India's confidence as well as the confidence of overseas investors in India's potential and also stimulated an entrepreneurial culture in India. In the mid to late 1990s, several Indian professionals overseas started their own IT companies in India, some examples being Cognizant and Mphasis Technologies. Some of the top software businesses have been founded by or have been managed by the Indian diaspora. The latter also influenced the decision of their companies to hire Indians which resulted in an increase in the Indian professional population based overseas, particularly in the Silicon Valley area.

As noted in Saxenian (2002), senior Indian engineers in the United States were among the first to outsource software services to India. These professionals have thus facilitated access to foreign capital, technology, personnel, and overseas clients. They have also induced return migration by Indian IT professionals in the growing IT industry back home. Networking effects have been strong as many of these professionals have graduated from the elite institutions in India and thus know their counterparts in India, which has facilitated investments, collaborative ventures, and outsourcing of work to India.

The skilled Indian diaspora has also contributed to skill and technology transfer in the IT sector. A recent survey of 225 IT firms in India confirms that on the whole, migration of Indian IT professionals has created possibilities for "brain gain", through diaspora investment, networking for contacts and projects, technology transfer, information dissemination and exchange, and various forms of collaboration.<sup>14</sup>

The story is similar in the outsourcing arena. The reputation and credibility built by Indian programmes who went to the United States in the early 1990s to provide software services and many of whom stayed back in the United States to become part of the diaspora community, have been instrumental in the outsourcing of services to India. According to a study conducted by the research firm, Evalueserve for the World Bank Institute, the growing influence and expertise of India's diaspora in the United States, United Kingdom, and Canada is expected to help India retain its edge and move up the value chain in outsourcing, despite the emergence of other low cost offshoring destinations. As stated in this study, "Riding the wave of growing reputation and visibility of Indians in the IT sector, many well-placed senior executives (of Indian origin) in big corporations who had moved to these countries in 1960s influenced outsourcing-related decisions in India's favour. As the networking and mentoring role of Diaspora increases India will continue to retain the edge in outsourcing." <sup>15</sup> According to this study, by the 1990s, many Indian engineers, who had started moving to the United States in the 1960s, have since become entrepreneurs, venture capitalists, or senior executives in large and medium-size companies. These expatriates have played an important role in setting up BPO companies in India or in convincing their companies to hire Indian IT professionals and offshore work to India, and have performed mentoring and troubleshooting functions for their companies. The Indian diaspora has also provided capital through investments in India's BPO industry and is facilitating the emergence of the high-end knowledge services sector within the Indian BPO industry. Some venture capitalists of Indian origin and based in the United States are actively funding Indian companies that have back-end operations in India, so that they can save on research and development costs for their companies.

Diaspora associations and networks have played an important role in this process. Indian professionals in the Silicon Valley have institutionalised their social networks through the formation

<sup>&</sup>lt;sup>14</sup> See, Commander et. al (2004).

<sup>&</sup>lt;sup>15</sup> See, "NRI's from United Kingdom, Canada to help India retain BPO edge" (Thursday, September 30 2004) and http://www.infoworld.com/article/04/10/04/HNindiandiaspora\_1.html , John Ribeiro, "Indian diaspora helped outsourcing movement", IDG News Service (October 04, 2004) for further details on this study.

of well known associations, the Indus Entrepreneur (TiE) and the Silicon Valley Indian Professionals Association (SIPA).<sup>16</sup> The main purpose of these organisations has been to foster and support entrepreneurship, particularly in the initial states through angel investing. Saxenian (2000) noted that there were over 700 technology firms in the Silicon Valley that were run by Indians and many of these firms are members of these Indian diaspora networks. Central to these networks are groups of wealthy Indian investors who have influenced the Indian government to facilitate investments and return by entrepreneurs to India, thus helping shape policies in India and transmitting information between their host countries and India. TiE has spread to India through the establishment of local chapters, starting with Bangalore and then Delhi, to provide a forum for information exchange and to link the technical community in India and the United States. Interestingly, the social and ethnic dimensions of this network have also influenced the concentration of linkages with the IT industry in certain parts of India (the South) and thus reinforced the agglomerative tendencies and clustering of IT firms in India.

Surveys conducted among the diaspora Indian population in the Silicon Valley area indicate a high degree of interest in participating in India's IT sector. In a survey conducted by Saxenian et. Al (2002), it was found that 74 percent of the Indians surveyed had plans to start their own business and 76 percent of them thought of locating their businesses in India, though less than half of those surveyed were interested in possibly returning to India.<sup>17</sup> The survey found evidence of "brain circulation" with the existence of a wide range of professional ties between the Silicon Valley Indian (and Chinese) professionals to their home economies and considerable exchange of labour market information, technology, financial flows, and policy advocacy. Of those surveyed, 46 percent of Indians indicated that they had helped businesses in India by serving as an advisor or by arranging a contract, and the proportion of respondents doing so increased with the age profile of the respondent. Similarly, 23 percent of the Indians surveyed stated that they had invested their own money in start ups or venture funds in India at least once, with this share again rising with the age profile of the respondent. Close to 30 percent of the Indians surveyed also stated that they met with government officials from India, regularly or periodically, with older respondents once again being more likely to do so. These responses clearly indicate that a significant proportion of the expatriate Indian community is engaged in business ties with India and that the more financially and reputationally established the diaspora, the more likely is this contribution.

Nonresident Indian entrepreneurs turned venture capitalists have also assisted the Securities and Exchange Board of India in drafting a white paper for the venture capital industry in India. This group was also influential in organising the Indian Venture Capital Association in Bangalore which led to the development of a technology related venture capital cluster similar to that in the United States Silicon Valley or Boston. Much of the capital that has come into the Indian IT industry through these venture capital funds has been raised in the Silicon Valley with the support of such nonresident Indian entrepreneurs.

As a result of such contributions at the individual and the organisational levels, India's reputation as a supplier of software talent and as an outsourcing destination was well established by the late 1990s. The success of the Indian diaspora in the Silicon Valley has influenced the way the world views India.

<sup>&</sup>lt;sup>16</sup> TiE was founded in 1992 in Silicon Valley by a group of successful entrepreneurs, corporate executives and senior professionals with roots in the Indus region. The organisation today has over 10,000 members across 44 chapters in 9 countries and consists of South Asian professionals. SIPA currently consists of over 2300 members. Its members are highly qualified engineers, corporate managers, legal and financial experts, businessmen, and other professionals. Most are actively involved in the high technology industry and work in the major companies in the Silicon Valley.

<sup>&</sup>lt;sup>17</sup> This survey was conducted in 2001. The focus of the survey was to understand the behavior of highly skilled immigrants who were most likely to start companies and to play leadership roles in developing local and global networks. The survey addressed three issues: (i) the participation of foreign born professionals in the Silicon Valley's entrepreneurial economy; (ii) the nature of the professional links maintained by first generation immigrants with their source countries; and (iii) the extent to which these immigrants were becoming transnational entrepreneurs and setting up business operations in their home countries.

Professional associations such as TiE and SIPA have created opportunities for networking and information sharing and also provided models and channels for financing. The success of certain high profile individuals and firms has had an important "reputational spillover" effect, which has not only helped the reputation of the Indian IT industry but of the country as a whole. In this sense, the diaspora Indian community has helped the Indian IT industry to overcome "reputational entry barriers" in the global marketplace.<sup>18</sup> Thus, the IT sector clearly illustrates the importance of social capital that is created by international migrants, in terms of trust, reputation effects, and networking. Indian migrants contributed to the growth of India's software industry and to the transfer of technology and knowledge in this sector to India and helped in expanding trade and investment flows in this sector.

### 4.1.2 The Indian Diaspora and its impact in the Health Sector<sup>19</sup>

Alongside the IT sector, the one other sector where the Indian diaspora has earned its reputation is in the health sector. Indian doctors and nurses are an integral part of the United Kingdom's National Health Service and the healthcare systems of many Commonwealth countries. They have a dominant presence in the Gulf region. In some host countries, they constitute a larger share of the health professionals' community than the share of Indians in the host country's population, indicating that this is a major professional group in the Indian expatriate community. Indian medical technicians and pharmacists are also important in both English and non English speaking countries.

Indian healthcare professionals have contributed to India in many different ways. Indian doctor entrepreneurs from the United Kingdom, United States, and the Middle East and Indian diaspora associations in the medical profession have helped set up world class corporate hospitals and superspecialty health care establishments in India. These have often been set up by returning Indian doctors or by groups of non resident doctors in partnership with local doctors. The Indian diaspora of health professionals has also helped procure the latest equipment and technology, thus raising the standards of healthcare in the country. The reputed Apollo group of hospitals, India's first corporate hospital chain, was set up by Dr. Pratap Reddy, a returning Indian doctor from the United States. Today, Apollo is one of Asia's largest health care establishments and the first to attract foreign investment in India and the first to set up hospitals outside the country. Evidence from regional studies in health care indicates that the growth of private hospitals in Hyderabad was in large part due to expatriate doctors who had practiced in the Middle East, with one-third of the owners of general nursing homes having worked in that region. A number of relatively smaller specialty hospitals have been set up around the country with NRI and PIO participation. An examination of the foreign investors list from the Department of Industrial Policy Promotion in the Government of India for the 2000-2005 period shows that many of the approved FDI projects in the hospitals, diagnostics, and medical devices sectors, were by nonresident Indians based in the United States, United Kingdom, and Australia. The emergence of such doctor entrepreneur hospitals has helped raise the standard of health care within the private sector in India, including the introduction of processes such as counseling for patients, computerised medical records, seminars, education and training mechanisms, collaboration with overseas doctors and institutions, availability of the latest technology and infrastructural facilities, apart from cleanliness, hygiene, and better staffing and management practices. However, as pointed out in a Government of India report, the potential for NRI/PIO investments in the healthcare sector in India, particularly in tertiary care, remains to be tapped as still only a small share of total diaspora investments and technical collaborations is in the healthcare sector.

<sup>&</sup>lt;sup>18</sup> It has been noted, however, that the Indian nonresident community has still not become truly transnational in that is has largely played the role of facilitator, encouraging and assisting United States technology companies to gain access to India's low cost software talent, and relatively few non resident Indians have returned to start their own companies in India.

<sup>&</sup>lt;sup>19</sup> Much of this discussion is based on Chanda and Sreenivasan (2006).

In addition to making investments and setting up health care establishments, NRI and PIO health professionals have also made charitable financial and voluntary service contributions. They have facilitated the holding of eye camps, donated equipment, books, and journals for use in India Some second generation Indian diaspora have come to India as volunteers in fields like public health and family planning and have brought in overseas funding for some of these activities. The diaspora has also helped in forging cooperation agreements between hospitals in the industrialised countries and those in India to facilitate the exchange of professionals, collaboration in medical education and training, the setting up of research fellowships for Indian doctors, telemedicine by Indian hospitals, and possible medical tourism by patients from those countries. A number of Indian overseas professional organisations in the medical field, including the American Association of Physicians from India (AAPI), the Association of Indian Neurologists, and the Association of Asian Indians in Ophthalmology in the United States have contributed to the transfer of skills and technology through medical research and training collaborations.

Thus, one again sees the value of the social capital created by the Indian diaspora community of health professionals for the development of the health sector in India. The networking channel is the most prevalent, while the spinoff benefits from reputation building and trust are yet to be realised to the extent that they have been in the IT sector. The latter would result if there were greater investment in the health sector and facilitation of patient flows, outsourcing of medical activities, and telehealth delivery by the Indian diaspora.

## 4.1.3 The Indian Diaspora and its impact in Science and Technology

As highlighted earlier, a large number of the Indian diaspora are in the science and technology field. This is an organised group and has alumni based and professional associations. The Scientists and Technologists of Indian Origin (STIO) as they are called have made many noteworthy contributions to their home country to facilitate higher education, research, and training not only in the science and technology fields but also in other fields such as business administration and communication. They have set up various higher educational and research establishments, such as the Centre for Theoretical Physics at the Indian Institute of Science in Bangalore, the Advanced Network Laboratory and IBM Research Centre at Indian Institute of Technology Delhi, and various research chairs at reputed higher educational institutions.

In the pharmaceutical sector, expatriate Indians have contributed by awarding contract research assignments to Indian R&D laboratories for the development of new drug molecules, by facilitating access by Indian scientists to research facilities overseas, and by assisting the production of affordable drugs. The STIO community has also helped Indian scientists from various institutions to participate in collaborative research programmes, for the placement of Indian post doctorate fellows in reputed academic and research positions overseas, and in doing research internships and cutting edge work in fields of relevance to India. There have also been bilateral programs of cooperation in science and technology, coordinated by the Indian Department of Science and Technology for bringing distinguished STIOs to India. In recent years, several United States based alumni of the Indian Institutes of Technology have also provided huge endowments to their alma maters for upgrading infrastructure, for capacity building, and for setting up new departments

## 4.2 <u>Sectoral contribution by the diaspora in Pakistan, Bangladesh, and Sri Lanka</u>

There is less information available about the sectoral impact of the diaspora in the other three countries. However, there is some evidence of similar contributions in various professional services sectors. In these countries, the role of diaspora associations has been an important one.

There is evidence of technology and knowledge transfer by the Bangladeshi diaspora in the health sector. The Bangladesh Medical Association of North America (BMANA) have organised workshops on specialised topics in Bangladesh, donated latest technology, and trained specialists. Some specialist Bangladeshi doctors and medical professors from the United States have performed

interventionist procedures and trained doctors in various medical institutions in Bangladesh. Training has also been arranged for visiting surgeons from Bangladesh in United States hospitals. One well known Bangladeshi cardiologist in the United States has established a cardiac Electrophysiology centre at the NICVD in Bangladesh, arranged and hosted few weeks training of NICVD staff in the United States, and has also arranged seminars on cardiology for general practitioners in Bangladesh. Some diaspora have arranged major international seminars such as the second infection control seminar in July 2006, which was organised and attended by several Bangladeshi health care professionals based overseas.

In other professions too the Bangladeshi diaspora has made contributions. The American Association of Bangladeshi Engineers and Architects (AABEAT) has set up the Bangladeshi ICT Business Centre, which is a shared business office in Silicon Valley, which offers the services of over 30 innovative information and communication technology companies from Bangladeshi under a single umbrella. This office was set up in partnership with the Commerce Ministry of the Bangladesh Government and is a good example of a collaborative venture between the Bangladeshi diaspora and the government. This association has worked with the Intel Bangladesh Association for the disbursement of funds towards knowledge transfer and education projects in Bangladesh. One major project undertaken by this association is the establishment of a fully furnished education lab and curriculum development for engineering courses. TechBangla, which is a non profit organisation registered in the United States and in Bangladesh helps in the transfer of technology to Bangladesh. It facilitates technological collaboration between resident and non resident Bangladeshis, through joint ventures and foreign direct investment. The TechBangla IT research Cell aims at fostering IT related research in Bangladesh and to enhance its impact on economic development in that country.

The sectoral contributions of the Pakistani diaspora are similarly seen in the health sector. The Association of Pakistani Physicians and Surgeons in the United Kingdom has used its resources and support of its members to contribute to the modernisation of the health system in Pakistan, in partnership with other sister organisations. There are also specific contributions on which limited information is available. For instance, a well known overseas Pakistani and President and CEO has along with a group of overseas Pakistani physicians established medical facilities in Islamabad, transferring modern technology with the help of talented, qualified Pakistani physicians, surgeons and technicians from the United States. This hospital provides state of the art services and technology and has proved very profitable. There are also cases of establishments such as commercial banks, textile companies, and hospitals which have been set up by diaspora Pakistanis.

The various sectoral cases highlighted here strongly validate the importance of transnational ethnic networks and labour mobility in enabling knowledge and technology spillovers to the home country, in driving the internationalisation of local firms, and the entry of multinational firms in the home country, and in ultimately driving sectoral growth and efficiency as well as overall economic growth. As discussed in the social capital literature, South Asian migrants have contributed by creating trust, building reputation, and by participating in formal and informal networks. It is also evident from the discussion that the sectoral contributions of the South Asian diaspora are predominantly in certain professional domains, such as medicine, engineering, and ICT sectors. The concentration of this impact is of course related to the sectors from which the diaspora originate.

## 5. Other contributions of the South Asian Diaspora

In addition to their economic and sector-specific impact, the South Asian diaspora has also been influential in many other spheres. They have established foundations and trust which have contributed generously to social, developmental, religious, and issue-based causes. Many well established diaspora individuals from the South Asian community have made generous donations. The South Asian diaspora has also been active politically, by creating greater awareness about their home countries overseas, by sensitising policy makers about the concerns and interests of their home countries, and also by acting as intermediaries between governments. The following discussion outlines the philanthropic, social, and political contributions of the South Asian diaspora in their

source countries. As information in this regard is quite scant for Sri Lanka, the discussion on that country remains relatively limited.

## 5.1 <u>Philanthropic and social contributions</u>

The South Asian diaspora has also been involved in charitable causes in their home countries. These contributions have again been both at the individual as well as the diaspora association levels.

The Indian diaspora contributed to India at the time of national emergencies like the Kargil War, the cyclone in Orissa, and the earthquakes in Gujarat and Maharashtra. The expatriate community has donated to various charities in India for rural development, disaster relief, children's education, women's empowerment, and reconstruction, among others. These contributions have been made by individuals, religious groups, overseas Indian associations, and students' groups. Some examples include donations for upgrading municipal schools in source communities of the diaspora, establishment of schools for girls' education, and setting up of trusts to pay old age pensions and scholarship funds.

Prominent associations such as the Indo-American Charity Fund, the Indian Disaster Relief Fund, and the Indian Doctors' Club Charity Clinic have played a very important role in facilitating such philanthropic contributions. There are also religious and ethnic associations overseas which have set up centres of education, worship, and culture in India and raised funds in cases of disaster as well as for ongoing development work in India. Large donations have been made by Silicon Valley Indian professionals for educational projects, including the setting up of higher educational institutions and introduction of specialised education programmes at reputed institutes like the IITs. The India Development Service, founded in the United States, provides support for grassroots economic and social development programmes in India on a voluntary, non-sectarian, and non political basis. It has helped form dairy cooperatives, conducted adult literacy, education, and health camps in India. The India Service Corps, which is constituted by qualified second generation PIOs, works on projects in infrastructure, education, agriculture, micro credit, health, sanitation, and other rural development projects in cooperation with non governmental organisations in India. The Charitable Foundation of the American Association of the Physicians of Indian Origin has set up free clinics in India, donated equipment, and has been involved in AIDs prevention, medical education, rehabilitation, and disaster management programmes.

The High Level Committee for the Indian Diaspora report notes that in the 1991-2000 period total foreign contributions for the voluntary sector, including all PIO contributions were US\$835 million. Most of this has been targeted at rural development, followed by healthcare and family welfare, construction, and help for the poor, aged, and destitute.

Many Pakistani civic organisations based overseas have facilitated organised philanthropy from the communities they serve. Some of these donations have been channeled to development projects in Pakistan. Pakistani American Associations have raised funds for drought victims in Thar, Pakistan. In 2005, overseas associations raised nearly US\$1.8 million in cash support for relief efforts and collected corporate donations to procure more than United States US\$10 million in medical and surgical supplies for earthquake victims in Pakistan. The Association of Pakistani Physicians of North America (AAPNA) Charitable Foundation has helped raise funds for philanthropic causes in Pakistan. Pakistani Americans have helped generate and sustain support for the SOS Children's Villages of Pakistan, which works for the welfare of orphaned and abandoned children, youth homes, schools, vocational centres, medical centres, and an emergency program. Some overseas trusts set up by diaspora Pakistanis have provided free medical treatment to the needy in Pakistan.

One very well known philanthropic initiative is The Human Development Foundation of North America. This foundation is the offshoot of the APPNA and Pakistani physician community and has launched "Project Pakistan" to undertake comprehensive human development initiatives amongst underprivileged communities in Pakistan. The HDF has established programs in every region of

Pakistan and set up over 900 development organisations. The Foundation provides health services at community health centres, pre and post natal care, health checkups, and runs educational programs. The foundation has also undertaken a physical infrastructure program by investing in the construction of roads, dams, and installation of hand pumps. The Pakistani American philanthropic initiative called Developments in Literacy promotes literacy in rural and underdeveloped areas of Pakistan, with particular focus on female literacy. The group has helped establish and operate some 200 schools in underdeveloped areas of Pakistan, in collaboration with local partners. There are many other charitable foundations as well as associations that have undertaken philanthropic activities, mainly in the areas of healthcare, education, emergency and disaster relief, infrastructure building, and rural development. There is also evidence of a growing number of individual and family trusts among the older generations of the Pakistani diaspora. In addition to charitable contributions, these individuals have also given their time and expertise to institutions in Pakistan, thus volunteering their skills and knowledge. According to a survey conducted in 2005 in the United States, the average Pakistani household in the United States had donated US\$450 towards faith-motivated causes (building and maintaining places of worship) in Pakistan per year, another US\$390 per year towards specific causes in Pakistan, US\$190 per year in-kind, for a total contribution of US\$1030 per year in cash and kind.<sup>20</sup> The survey also revealed that Pakistani-Americans are interested in giving even more of their time and finances to their home country and see themselves as playing a critical role in the development of their country.

Several examples of philanthropic contributions by the Bangladeshi diaspora have been highlighted earlier, especially in the context of the healthcare sector. There are also examples of charitable contributions made by non profit and mission driven organisations by the Bangladeshi diaspora. The Bangladeshi American Foundation provides support to the poor and destitute in Bangladesh. The Bangladeshi diaspora in the United Kingdom has facilitated collaborative intergovernmental projects on issues such as waste disposal, local governance, and traffic management. The Bangladesh Environment Network gathers and disseminates information about environmental problems in Bangladesh and tries to facilitate the adoption of environment friendly policies and solutions to environmental problems in Bangladesh by connecting residents and non residents. Surveys of overseas Bangladeshis reveal that there is considerable willingness on the part of the country's diaspora to invest in community development initiatives for altruistic reasons. Their main areas of interest are community development, disaster relief, orphanages, and religious institutions and their upkeep.

There is hardly any information available on the social and developmental role played by the Sri Lankan skilled diaspora in its home country, although much information is available about the role of low and unskilled Sri Lankan workers to the development of the nation. Financial and other assistance provided by the skilled Sri Lankan Tamil diaspora has mainly been viewed in terms of support to the Tamil separatists in Sri Lanka. While some of the remittances from overseas Sri Lankan Tamils have certainly undermined peace in Sri Lanka, these flows have also gone towards local development, humanitarian, and reconstruction efforts in the conflict ridden regions of the country from where these migrants hail.

## 5.2 <u>Political contributions</u>

There has been growing integration of the South Asian diaspora in the local political systems of their host countries. Hence, this community is increasingly influencing policies towards their home countries and is affecting political economy relations between their host and home countries.

The Indian diaspora is increasingly playing an important role in influencing public policy and in mobilising political support in their host countries on issues concerning India. It has lobbied with United States Congresspersons and British MPs on sensitive issues such as India's nuclear status and in the aftermath of the 2000 nuclear tests and the Kargil war with Pakistan. It has influenced

<sup>&</sup>lt;sup>20</sup> See Najam (2006) for further details on the findings of this survey.

politicians to support legislation that is in India's interests or to preempt policies that are not in India's interest. The National Federation of Indian Americans (NFIA) has for example, campaigned with congressmen and senators in the United States to stop military aid to Pakistan. The India Caucus in Washington, DC has helped defeat many anti-India bills and amendments introduced in the United States Congress in recent years. This caucus also lobbied with the United States politicians to support legislation on the United States-Indian nuclear deal signed by the United States President and the Indian Prime Minister recently. Indian Americans are exercising their political influence through campaign contributions and are also involved in fundraising efforts for political candidates at various levels. The Association of Parliamentarians of Indian origin has a membership of several hundred persons from various developed countries, many of whom are taking an active interest in local politics in their host nations and are thus likely to influence public opinion and policies regarding India.

The Bangladeshi diaspora has likewise played some part in influencing public policy and opinion in their host countries. The Bangladeshi-American Foundation for example, works with the United States Department of State to facilitate meetings and interactions between United States government officials and Bangladeshi organisations to mobilise support for home country causes and interests. The American Public Affairs Front that was set up by Bangladeshis not only mobilises the diaspora Bangladeshis in political activities in the United States but also lobbies with the United States government and Congressmen to enact policies in favour of Bangladesh. This group has taken up issues such as the access of Bangladeshi garments to the United States market, arsenic pollution in Bangladesh's ground water, and other environmental problems in their home country.

Unlike the public opinion building and liaising role played by the diaspora from India, Pakistan, and Bangladesh the role played by the Sri Lankan diaspora on the political front has been quite different. As highlighted earlier, a significant part of Sri Lanka's skilled diaspora consists of Tamil refugees who have fled the country due to the ethnic conflict between the Sinhalese and the Tamil population. This Tamil diaspora has continued to send funds to their country and has helped sustain the flow of remittances to Sri Lanka, remittances which have been very important for the country's balance of payments. In addition to its financial contributions, the social and political ties between the LTTE and the members of the Tamil diaspora have also been important. Tamil diaspora organisations have shaped Tamil politics in the homeland and have engaged in financing and political lobbying for the Tamil separatist group, the LTTE. The Tamil diaspora, particularly in Canada, which has grown considerably during the 1980s, has provided financial assistance to the LTTE. According to one estimate, they raised more than US\$22 million (US\$12 million in donation and US\$10 million in business revenues) in 2002 to finance ethnic warfare in northeastern Sri Lanka. Canadian intelligence sources also estimate that some US\$1-US\$2 million of funding is raised in Canada each year for the LTTE from the Tamil diaspora and part of this money has been channeled to weapons procurement.<sup>21</sup>

Such contributions in support of a Tamil homeland have been facilitated by various sources of information exchange, ethnic organisations overseas (such as the Tamil Eelam Society of Canada and the World Tamil Movement), and lobbying for development assistance and humanitarian funding by the Tamil diaspora in their host countries. To some extent, charitable contributions provided by donor governments and non governmental organisations and which have been raised with the support of the Tamil diaspora, have had unexpected political dimensions. Thus, transnational ties between Sri Lanka and some host countries such as Canada reflect the conflict and ethnic displacement in Sri Lanka and its socio-political consequences.

Apart from social and political contributions there are other spheres such as art, culture, and media where the South Asian diaspora has been active in their host countries and has engaged with local counterparts in their home countries. For instance, the Association of Pakistani Professionals (AOPP) founded in 2001 and comprising 500 members has focused on helping the United States media develop an informed view of Pakistan in particular and on the South Asian region in general. Such contributions are likely to have had intangible spillover effects on local knowledge, standards, and

<sup>&</sup>lt;sup>21</sup> See, Hyndman (2003) and Sriskandarajah (2002).

capacity building in their home countries, and also promoted international relations. It is worth noting, however, that existing evidence in the form of diaspora surveys and reports by international organisations reveal that the South Asian diaspora community has faced constraints at various levels in making such contributions. These constraints have mainly arisen due to lack of policy clarity and institutional support, procedural and bureaucratic problems, and ambiguity about the status of the diaspora community in their home countries.

## 6. Government Policies towards the Diaspora in South Asian Countries

It is quite evident that the South Asian diaspora has contributed in many tangible and intangible ways to its source region. But to what extent have the South Asian governments facilitated these contributions? Have these governments introduced proactive policies and institutional frameworks to enable these linkages, be they economic, sectoral, political, or philanthropic? Or have the governments acted as a constraint to the realisation of such linkages, with or without intent?

Limited evidence that is available on the role of South Asian governments in engaging the diaspora community suggests that by and large, the South Asian countries have not had any coherent or proactive policy to institutionalise linkages with their diaspora, unlike the case of countries such as South Korea or Taiwan. Even the various initiatives that have been undertaken have tended to lack institutional frameworks and support structures and have thus had limited impact.

The role of the South Asian governments in incentivising remittances and investments by their diaspora communities through targeted savings schemes and investment policies has been highlighted earlier. Also, as noted earlier, these schemes have helped attract remittances and savings from the skilled expatriates as and when they have been introduced. But by and large, these inflows have been from the less skilled, temporary migrant community from this region. A common complaint by the skilled diaspora community has been that their remittances have not been channeled towards development projects and specific objectives and thus the incentive to remit remains limited to the various financial advantages offered under these schemes, although they would like to contribute towards specific development projects and objectives if given such opportunities in an institutionalised manner. This is perhaps why the skilled diaspora has been more active at an individual level through social contributions and trusts which are clearly linked to development outcomes.

As highlighted earlier, foreign direct investment approvals and actual inflows from the diaspora to the South Asian countries have remained limited, notwithstanding streamlining of procedures and more liberal investment policies for non residents. Institutional factors, failure to integrate these inflows with productive investment opportunities, bureaucracy, corruption, and lack of clear and predictable policies on diaspora engagement have affected the extent to which the diaspora has invested in their source economies in this region, according to various studies and surveys.

But there are some other areas where the South Asian governments have tried to engage their diaspora to benefit the economic development process of their home countries. These relate to networking, transfer of knowledge and expertise, capacity building, and diaspora status.

# 6.1 <u>Transfer of knowledge and capacity building<sup>22</sup></u>

The South Asian governments have undertaken some programmes to facilitate the transfer of knowledge and research capacity by leveraging their skilled diaspora population. For example, special initiatives have been introduced by the Indian government in the area of science and technology in view of the large pool of Indian science and technology professionals overseas. The objective is to strengthen networking with Scientists and Technologists of Indian Origin (STIOs) based abroad, including persons in industries, research laboratories, universities and scientific departments located

<sup>&</sup>lt;sup>22</sup> Much of this discussion is reproduced from Chanda and Sreenivasan (2006).

in various countries as well as those successfully working as entrepreneurs in technology intensive business and as venture capitalists.<sup>23</sup> As part of this effort, the Ministry of Science and Technology has set up a special website titled, "S&T Professionals of Indian Diaspora" which allows professionals to register with the DST online. The STIOs can interact with the Indian academia, research laboratories, industry, and enterprises. Their offers of collaboration are periodically screened and uploaded for browsing by Indian peers or institutions. Information on specific S&T institutions, schemes, programs and opportunities in India that may be of interest to the STIOs worldwide are made available on the website. This link also facilitates follow up action on networked joint proposals.<sup>24</sup> This website aims at tapping the contributions of STIOs abroad for:

- (1) Human resources and research capacity development to augment collaboration for strengthening Indian education, research, and human resource capabilities in frontier areas of basic sciences and cutting edge technologies;
- (2) Technology entrepreneurship to enhance India's competence in this area, utilise venture financing and mentoring the younger generation for creating wealth from knowledge;
- (3) Establishing India as an international science center by catalysing the participation of Indian scientists and institutions in major international science projects and in programs of major advanced research facilities abroad;
- (4) Establishing India as a global research and development platform as a preferred R&D outsourcing destination; and
- (5) Alma mater relationship to connect alumni abroad with their alma mater for purposeful and sustainable relationships

Another programme, Interface for NRI Scientists and Technologists (INRIST), has been in operation since 1990, again implemented by India's CSIR. This programme aims to serve as a focal point of contact in India to establish linkages between expatriates and Indian organisations, and to connect various institutional and voluntary organisations abroad with all the scientific, technical, and economic departments of the Central and State Governments and with industries in the public and private sectors. The INRIST Centre has a database of expatriate scientists and technologists and promotes joint ventures and investments in industrial projects with expatriates. The government has through the University Grants Commission (one of the nodal regulatory agencies in India's education system) set up a Centre at the University of Hyderabad to carry out research on the Indian Diaspora.<sup>25</sup> The Indian government is also working on an Information and Communication Technology based framework to tap diaspora knowledge resources. The Diaspora Knowledge Network project would enable exchange of knowledge between India and its diaspora and enable the transformation of these ideas into projects, including public-private partnership projects across various sectors. But on the whole, these programmes have not been very successful due to bureaucratic, administrative, and budgetary problems.<sup>26</sup> They have lacked an overall institutional framework and holistic approach to knowledge and skill transfer and remain loosely arranged platforms to promote dialogue and exchange of information and possible collaboration.

<sup>&</sup>lt;sup>23</sup> For further details on the initiatives regarding scientists and technology professionals, see http://stio.nic.in, Government of India, "S&T Professionals of Indian Diaspora".

<sup>&</sup>lt;sup>24</sup> There are also industry led initiatives which enable knowledge sharing. For example, the Confederation of Indian Industry's Indian American Council links expatriate Indians to projects in India by providing information on opportunities and offline support.

<sup>&</sup>lt;sup>25</sup> See, C. Bhat, "India and the Indian Diaspora", and C. Bhat, K. Laxmi Narayan, S. Sahoo, "Indian Diaspora: A Brief Overview", Centre for Study of Indian Diaspora, University of Hyderabad.

<sup>&</sup>lt;sup>26</sup> See, http://sunsite.tus.ac.jp/asia/india/jitnet/csir/tokten.html for more details on these programmes and their implementation.

The Pakistani government has also taken initiatives to facilitate transfer of knowledge and expertise from its expatriate community and to promote the latter's involvement in the home economy. Under the UNDP's Transfer of Knowledge through Expatriate Nationals or TOKTEN programme, the services of expatriate Pakistani experts have been utilised to transfer latest technologies and other expertise. The programme involves short duration visits by overseas experts of Pakistani origin, enabling the latter to participate in their country's development process and to make contributions through specialised lectures, seminars and workshops as well as training courses. Some consultants have also helped in setting up new laboratories and in setting up new research and development programmes.

Under this same UNDP programme, distinguished expatriate nationals of Indian origin who have expert knowledge in frontier areas of science, technology, industrial applications, and management have been encouraged to undertake short-term assignments in India on a voluntary basis. This programme has been implemented by the Council for Scientific and Industrial Research (CSIR) in India and aims to obtain technical inputs from expatriates for R&D, industrial enterprises, and academic institutions.

There is no well documented evidence of knowledge and skill sharing or transfer between the Bangladeshi skilled expatriates and their counterparts at home. Some instances of knowledge sharing in the case of Bangladeshi medical professionals and associated diaspora organisations were discussed earlier. There is also some anecdotal evidence about experience sharing between expatriate engineers and academics in Bangladesh. However, these were diaspora network initiated contributions and there does not appear to be any pro active government involvement in liaising with such overseas professionals. Surveys of overseas Bangladeshis indicate that the potential for collaboration and knowledge transfer remains untapped. The latter would like the government to initiate collaborative projects between educational institutions in Bangladesh and the host countries and to participate in the UNDP TOKTEN programme. Some areas where the diaspora is interested in collaborating include health, nutrition, education, and catering.

## 6.2 <u>Facilitating investments and remittances</u>

Much has already been discussed earlier in this paper about the various savings and investment schemes that the South Asian governments have introduced for their diaspora. More recently, certain initiatives have been taken to provide formal institutional structure and support to facilitate the flow of remittances and investment through the financial system.

The Ministry of Overseas Indian Affairs has in partnership with the Unit Trust of India developed an integrated, universal, electronic remittance gateway which would make it easier for overseas Indians to remit money to India. This portal provides advisory services on investment, taxation, and real estate to interested overseas Indians. Through this e-remittance gateway, overseas Indians will be able to remit money to designated accounts in any of the 14,500 bank branches operating on Real Time Gross Settlement network of the RBI.

In Bangladesh, remitter cards have been introduced to encourage expatriates to remit through the branches of five nationalised banks and through exchange centres in Bangladesh. The government has also made it easier for expatriates to purchase denationalised industries, offering them price discounts. The government has also decided to honour important non resident Bangladeshis who invest US\$500,000 in foreign currency and who remit the equivalent of US\$750,000 in the country with special Important Non-Resident Bangladeshis status. For those setting up agro based industries in Bangladesh, various tax exemptions will be granted on interest earnings from foreign currency and on Wage Earners Development Bonds.

Formal institutional structures and facilitating bodies have also been set up in some of the countries to attract direct investment flows from the diaspora. The Overseas Pakistani Investment Conference provides opportunities to diaspora Pakistanis to invest in their homeland and removes hurdles to the

establishment of businesses by this community. Through investment advisory cells, government departments are expected to take immediate action and provide professional advice to facilitate Overseas Pakistani investments. These efforts have been supplemented by diaspora organisations such as the Overseas Pakistani Foundation which help liaise with the government. Another government agency, the Small and Medium Enterprise Development Authority in Pakistan provides sectoral briefs, project profiles, pre feasibility studies and data for those interested in setting up enterprises in different fields.

In Bangladesh, investment promotion bodies have been set up in certain areas such as Sylhet which are home to many expatriates. The institutional frameworks pertaining to the expatriate community in the case of Sri Lanka is oriented towards low and semi skilled workers and their concerns and no concrete evidence is available on pro-active institutional mechanisms to leverage the skilled diaspora for direct investments. This may in part be due to the much smaller skilled diaspora in the case of Sri Lanka and possibly the ethnic factors that have shaped this diaspora. However, in general, an evolved institutional apparatus seems to be lacking in most of these countries.

In India, the government has tried to promote investment by NRIs and by overseas corporate bodies with NRI holding through a nodal agency, the Indian Investment Centre, which provides a single window for such investments and assistance in getting approvals of government authorities. However, it has been noted that this investment centre has not been effective as it has been too investment centric and has not had adequate exposure to the needs and expectations of the NRIs. Further, as this centre has been merely a promotional and not an empowered body, it has been ineffective in interacting with state governments and other organisations.

There have been some pro-active efforts at the state and local governmental levels to encourage direct investment by resources of the diaspora. For example, some state governments in India, such as those of Punjab, Kerala, and Gujarat have created special institutional structures to liaise with their overseas population and to facilitate their investments in the state and local economy. These include overseas visits by delegations from the state, inviting non residents to the home state and giving them incentives to invest in their states, such as by setting up industries, helping in the building of an airport. For example, the Kerala state government has a Non Resident Keralites' Affairs Department which has constituted an infrastructure initiative fund to facilitate investments by non resident Keralites in infrastructure development projects in their home state. The Punjab government deals with its PIOs through a highly professional NRI Sabha, of which the Chief Minister is a patron. The Sabha is headed by an elected Commissioner for NRIs. Nodal officers in each state government department dealing with NRI affairs report to the NRI Commissioner. Such collaboration has resulted in the investment of Rs. 4 million in a village in Punjab. This NRI Sabha looks after the interests of non resident Punjabis and PIOs, facilitating their investments in the state, helping them to maintain cultural and ethnic ties with the state, providing forums for them to interact with the government and the business community, protecting the rights of non resident Punjabis in the state especially with regard to property, and honouring those excelling abroad in various fields. The Sabha also maintains a website, provides services via email, and issues publications to disseminate information on policies, programmes, laws, investments, culture, etc. that have a bearing on the Punjabi diaspora. The state government of Gujarat has likewise made attempts to leverage the non resident Gujarati population. It has created the NRI Division in the General Administration Department of the state government, under the supervision of the chief minister. There is also a separate Minister appointed to deal with this division. The state government of Gujarat has set up an autonomous non resident Gujarati foundation. The NRI Division and this foundation act as a single window to facilitate the role of non resident Gujaratis in the state's development and also help address their problems. This foundation is also issuing cards to non resident Gujaratis which would give them certain privileges when they visit the state. The foundation has also signed friendship agreements with overseas Gujarati associations

However, by and large, the South Asian countries have not had very well developed institutional structures to deal with their diaspora and to leverage their assets for benefit to their home economies. This is in contrast to countries such as China, which have had much better conceived and coordinated

policies to not only encourage overseas Chinese to return but also to leverage the assets of those remaining overseas. For example, the Chinese government has encouraged overseas Chinese scholars to come on short term visits to China under special programmes and has used its network of overseas centres and consulates to disseminate information about opportunities in China. At the central government level, there is an Overseas Chinese Affairs Office under the State Council. This office and its local branches assist overseas Chinese in many ways, including establishing comprehensive databases in each city, county, and province to encourage overseas Chinese to contribute to their places of origin and network with influential members of the local community to help in future business dealings, by providing advisory services to overseas Chinese on investments and providing them with preferential treatment in the form of tax benefits and exemptions, preferential allotment of land, liaison services, and faster approval and clearance processes. The office also organises large scale fairs to match overseas Chinese and local business partners, operates two universities with the help of provincial governments to cater to the children of overseas Chinese, and keeping in regular contact with overseas Chinese organisations by putting together all China conferences where prominent members of the diaspora community and national leaders are invited. Governments at all levels have offices handling overseas Chinese affairs and they get their overall policy direction from the central government office. The Chinese Embassies abroad are a means of maintaining contracts between the diaspora community and the country.<sup>27</sup>

# 6.3 Status of the skilled diaspora<sup>28</sup>

Increasingly, governments in South Asia have changed their attitude towards skilled migrants from that of "brain drain" to that of "brain gain" or "brain exchange and circulation". This shift is evident from recent initiatives by some governments in this region to actively encourage diaspora participation in their countries by streamlining investment procedures for them, consulting with them on technology and education policies, and by creating networks and institutional mechanisms to tap their human and financial capital more effectively, as discussed above. In addition, one important issue that many of these governments are now addressing is that of national identity and legal status of their diaspora. They are addressing issues of residence, dual citizenship rights, eligibility to participate in various activities, and even ways to recognise the diaspora for the contributions they have made and to integrate them more closely with the home country. Some institutional efforts in this regard clearly highlight the shift in attitude towards the diaspora and efforts to engage them more effectively.

In India, the government launched the Persons of Indian Origin (PIO) Card which allows visa free entry to persons of Indian origin living abroad. The card has validity for 15 years from the date of issue and is available up to the fourth generation of Indians living abroad, except for a few specified countries. The PIO card holder is exempt from visa and registration with the Foreigner's Registration Office if the stay in India does not exceed 180 days on a continuous basis. The objective of this card is to reinforce the emotional bonds of Indians who have made other countries their homes, but who now wish to renew their ties with their land of their origin. The foreign spouse of a citizen of India or PIO is also covered under the scheme. This scheme entails a host of facilities to PIOs, which are available to Non-Resident Indians (NRIs). For instance, PIO Card holders can acquire, hold, transfer and dispose of immovable properties in India, except agricultural/plantation properties. They can get admission for their children in educational institutions India under the general category quota for

<sup>&</sup>lt;sup>27</sup> In South Korea, there is a Committee of Korean Residents Abroad, which serves as a consultative organisation for non resident Koreans. There is also an autonomous organisation called the Overseas Koreans Foundation which organizes conferences, addresses the problems of the diaspora community, and maintains an information network for the non resident Koreans. Prominent Koreans overseas are invited to the country and there are annual meetings to promote business links, cultural exchange, and contributions to projects.

<sup>&</sup>lt;sup>28</sup> Discussion of government policy is based on an unpublished note by the Protectors of Emigrants, Ministry of Labour, Government of India and various articles on the recently set up High Level Committee on the Indian Diaspora and various online articles. Some of this discussion is reproduced from Chanda and Sreenivasan (2006).

NRIs. They are also eligible for various housing schemes of Life Insurance Corporation of India, state governments and other government agencies. However, the response to the PIO card scheme was not very enthusiastic, possibly due to lack of information and publicity and thus failure on the part of the expatriate community to fully understand and appreciate its significance. Another reason for the tepid response may have been the high fees that were charged at US\$1,000 per person.<sup>29</sup>

In September 2000, the Ministry of External Affairs in India constituted a High Level Committee on the Indian Diaspora. The role of this committee was to examine the role of PIOs and NRIs in India, the rights and facilities to be extended to them in India and to recommend a broad and flexible policy framework to encourage their participation in the Indian economy. Specifically, the terms of reference of the committee were: (1) To review the status of PIOs and NRIs in the context of the Constitutional Provisions; (2) Examine laws and rules applicable to them, both in India and the countries of their residence; (3)Study the characteristics, aspirations, attitudes, requirements, strengths and weaknesses of the Indian diaspora and its expectations from India; (4) Study the role PIOs and NRIs could play in the economic, social and technological development of India; and (5) Examine the current regime governing the travel and stay of PIOs and investments by PIOs in India. The aim was to benefit from the network of migrants abroad and to given them a greater say in the country's economic and political decision making process.

The High Level Committee examined major issues pertaining to Indian Diaspora, such as culture, education, media, economic development, health, science & technology, philanthropy, and dual citizenship. Based on this study, it brought out a report in January 2002 in which it recommended measures to forge a mutually beneficial relationship with NRIs and PIOs and to facilitate their interaction and participation in India's economic development, in an institutionalised manner. Some of the recommendations included: (1) observation of *Pravasi Bharatiya Divas (Overseas Indians Day)* on January 9<sup>th</sup> of every year (the day Mahatma Gandhi returned to India from South Africa) in India and abroad, to recognise and appreciate the role of Indian Diaspora in the promotion of India's interest and (2) the institution of Pravasi Bharatiya Samman Awards for eminent PIOs and NRIs. The report also suggested that the Central and state governments remove all obstacles for promoting philanthropic and voluntary or welfare activities of NGOs that the members of Indian Diaspora wish to pursue in India.

With regard to the PIO card, given the tepid response to this scheme thus far, the High level Committee has recommended expanding the scope of that scheme in terms of associated rights and privileges, reducing the fees for obtaining this card, and extending its validity to make it more economically attractive. The Committee has also recommended that the Government of India link the issuance of a PIO card to investment in bonds aggregating to US\$10,000 and entitlements to free PIO cards for each additional investment worth US\$5,000. The idea was to link the conferring of various rights and privileges to PIOs to their financial contributions to India.

In line with the recommendations of the High Level Diaspora Committee, the government has been celebrating the Overseas Indian's Day (Pravasi Bharatiya Divas-PBD day) to express its gratitude to Indian migrants based abroad for their contributions to the economy and to motivate them to participate more actively in India's future development. These events have been attended by over a thousand overseas Indians from 61 countries each year. Eminent Indians from all over the world, including Nobel Laureates, business leaders, scientists and innovators, academicians, and political leaders attended the conference. Representatives at the highest level from the government of India, including the President, Vice President, Prime Minister, Deputy Prime Minister, Cabinet Ministers, and Chief Ministers from different states have interacted with the delegates. The PBD days have also been held in collaboration with industry associations to encourage industry-government-academic linkages. There have been discussions on Education, Knowledge-Based Industry, Science and Technology, Healthcare, Rural Development, Ethnic Media and Entertainment, NRIs in the Gulf,

<sup>&</sup>lt;sup>29</sup> See High Level Committee on Indian Diaspora (2001).

Finance, and Tourism, as well as interactive parallel sessions with State Governments. The Indian Prime Minister and President have conferred special awards to expatriate Indians to recognise their contributions.

Some institutional initiatives have also been taken to oversee work relating to the Indian diaspora. In line with the High Level Committee's recommendations, an autonomous and empowered body, similar to India's Planning Commission and a Standing Committee of Parliament has been instituted. The latter would introduce interested diaspora members to the country's Parliamentary procedures and practices and would serve as a mean to reach out to influential persons in the diaspora and convene biennial conventions of PIO Parliamentarians.

On the controversial issue of dual citizenship, the High Level Committee has made significant recommendations and the Indian government has adopted important measures. Demand for dual citizenship had been made by the Indian community in North America and a few other advanced countries for many years, in order to facilitate investments, trade, tourism, and philanthropic contributions by NRIs in India. (According to the Citizenship Act of 1955, an Indian forfeits Indian citizenship when he/she acquires the citizenship of a foreign country). The High Level Committee recommended issuing of 'dual citizenship' after taking appropriate safeguards pertaining to India's security concerns, besides carrying out necessary amendments in the Citizenship Act of 1955. Based on these recommendations, the Citizenship (Amendment) Bill was passed by the Indian Parliament in December 2003 and the Citizenship Amendment Act was passed into law by the Indian government in January 2004. The Act grants Overseas Citizenship of India to PIOs from 16 countries and for those Indian citizens who choose to acquire citizenship of any of these 16 countries at a later date. However, it denies holders of such dual citizenship any participation in electoral process or civil services in India. The philosophy guiding the granting of dual citizenship is that this would help India maintain its connection with emigrants, free up movement between the 16 countries and India, enabling more spontaneous feedback/transfers that promote economic development and in the long term possibly inhibiting migration and helping attract back skilled Indian migrants.

In the other countries, while such organised efforts do not seem to exist, policies have been introduced to grant dual citizenship to the diaspora. Bangladesh provides for dual citizenship but voting privileges are provided only if the citizen is present in Bangladesh. Sri Lanka too has extended the offer of dual citizenship to former Sri Lankans who have acquired or are eligible to acquire foreign citizenship and who have contributed to the home country's socio economic development. The fees levied are, however, quite high. Overall, governments in this region seem to have moved away from the view that dual nationality is problematic due to issues of loyalty, national security, and international relations and towards a view that encourages according formal status and recognition to its diaspora.

## 7. Conclusion

This paper has brought out clearly the significance of the skilled South Asian diaspora in global migration flows, in particular for some of the major host countries for international migrants, and its importance in meeting global labour market requirements in certain sectors and occupations. The discussion in this paper also shows the importance of this skilled diaspora community to their source countries, through a variety of channels, formal and informal, tangible and intangible. These contributions have been driven by the government, by the private sector and individuals, and through public-private partnerships.

There are three main issues that emerge from this study and which need to be highlighted and on which action is required from source country governments. The first issue is the lack of data and information on the South Asian *skilled* diaspora, particularly for Pakistan and Sri Lanka. There is little information on skill and occupational composition of the expatriates from the source country side. One has to use host country information which is provided in the manner that is relevant to those

countries in order to understand the profile of this region's skilled diaspora. For the most part, data on foreign employment and emigration are concentrated on low and semi skilled workers. Even policies regarding remittances and advisory support are geared more towards low skilled workers while policies concerning the skilled diaspora seem more loosely structured and largely privately driven. The relatively better information available for India has to do with the large numbers of overseas Indians in high profile occupations such as IT and medicine and the relevance of these groups to host countries for capturing the contribution of overseas professionals in their labour markets. But similar information is not captured by official statistics on the sending side. Thus, if the governments in this region want to really utilise their diaspora resources, they will need to invest in creating diaspora databases which provide information on the total diaspora stock, its geographic and skill wise decomposition, and accordingly frame policies. Governments also need to gather information on existing diaspora networks and organisations from their countries and to create links with concerned government agencies and departments. Industrial associations and overseas professional groups can also help their home governments in compiling such information.

The second issue highlighted by this study is the lack of institutional structure and framework in the way the South Asian countries have tried to utilise their skilled diaspora resources. While there have clearly been some efforts at tapping the diaspora in terms of their financial, intellectual, and social capital, for the most part, these efforts seem to have been rather piece meal. They have lacked a holistic framework or a proper institutional structure. There do not appear to have been clearly defined roles across government departments and agencies. Even in the case of India, which seems to have been the most pro-active among the four countries in promoting networking, knowledge and skill transfer, and investments by its skilled diaspora, the efforts are quite nascent, without much evidence on outcomes, and there has been a lack clarity in terms of implementation mechanisms and organisational frameworks for carrying out the various recommended policies. Such institutional structures have to be provided both in the home countries and overseas through the network of consulates and embassies and through networking with diaspora organisations and associations to expand the reach of the government.

The third important issue highlighted by this study and related to the previous point is the failure to integrate the skilled diaspora community more closely to concrete development opportunities, through development linked financial, social, and intellectual contributions. This has to some extent kept the skilled diaspora community away from their countries and led them to perceive of themselves as providers of savings under periodic schemes as opposed to critical and sustained players in their countries' economic and social development. Individual enterprise and social capital available with the diaspora community has not been given the kind of organisational support and encouragement required for sustained large scale contributions to the home countries.

Overall, there has been a sort of benign neglect of the skilled diaspora, information wise, policy wise, and attitude wise, until recently. This has only now begun to change. But without some concerted measures on the data front, without the establishment of institutional structures to deal with the diaspora, and without better integration of the diaspora to the local economies through concrete development projects and opportunities, the potential contribution of the skilled South Asian diaspora to their home countries is likely to remain underutilised. Governments and private sector associations and diaspora networks in this region should also explore opportunities for cooperation in at least some of these areas, given basic similarities in destination markets and in the occupational and skill profiles of their diaspora.

## References

Adams Jr, R.H, "International Migration, Remittances and the Brain Drain: A Study of 24 Labor-Exporting Countries", World Bank Policy Research Working Paper No. 3069, June 2003

Addy, D.N., B. Wijkstrom, C. Thouez, "Migrant Remittances – Country of Origin Experiences: Strategies, Policies, Challenges, and Concerns", Paper prepared by the International Migration Policy Programme (IMP) for *the International Conference on Migrant Remittances: Developmental Impact and Future Prospects*, Organised by the United Kingdom Department for International Development and the World Bank in collaboration with the IMP, London, October 9-10, 2003

Aoudia, J.O., "The Support of Non-Governmental Organisations in the Collection of Remittances", Chapter 20, *The Development Dimension - Migration, Remittances and Development*, OECD Publication, 2005

Bhat, C. "India and the Indian Diaspora", Centre for Study of Indian Diaspora, University of Hyderabad.

Bhat, C. and K. Laxmi Narayan, S. Sahoo, "Indian Diaspora: A Brief Overview", Centre for Study of Indian Diaspora, University of Hyderabad.

Bruyn, T., and U. Kuddus, "Dynamics of Remittance Utilization in Bangladesh", International Organisation of Migration (IOM) Research Series No. 18, January 2005

Chanda, R., "Trade Policy and Health Human Resources Planning", Report prepared for the WHO and North-South Institute, September 2005

Chanda, R. and N. Sreenivasan, "India's Experience with Skilled Migration", in *Competing for Global Talent*, (eds.) Kuptsch, C., and P.E. Fong, International Institute for Labour Studies, ILO, Geneva, 2006, pp. 215-56

Charest, E.A., "Using the Social Capital of Nationals Abroad as a Strategy for Development in the IT Sector", Discussion Paper No.172, International Institute for Labour Studies, Geneva, 2007

Commander, S., M. Kangasniemi and A, Winters, "The Brain Drain: Curse or Boon? A Survey of the Literature", Report Prepared for the CEPR/NBER/SNS, *International Seminar on International Trade*, Stockholm, May 24-25, 2002

Commander, S., R. Chanda, M. Kangasniemi, and A. Winters, "Must Skilled Migration be a Brain Drain? Evidence from the Indian Software Industry?", IZA Discussion Paper Number 1422, Institute for the Study of Labour, Bonn, December 2004

Couton, P., "Highly Skilled Immigrants - Recent Trends and Issues", Canadian Journal of Policy Research, Fall 2002 (http://www.isuma.net/v03n02/couton/couton\_e.pdf)

Findlay, A., "From Brain Exchange to Brain Gain: Policy implications for the United Kingdom of Recent Trends in Skilled Migration from Developing Countries", International Migration Papers, No. 43, International Migration Branch, International Labour Office (ILO), Geneva, December 2001

Government of Bangladesh, Ministry of Expatriates' Welfare and Overseas Employment, and IOM Dhaka, "Institutionalizing Diaspora Linkage: The Emigrant Bangladeshis in United Kingdom and United States", February 2004

Government of India, Ministry of Overseas Indian Affairs (www.moia.gov.in)

Government of India, Report of the High Level Committee on Indian Diaspora, 2001 (http://www.indiandiaspora.nic.in/contents.htm)

House of Commons Work and Pensions Committee, "The Work of the Health and Safety Commission and Executive", Fourth Report of Session 2003-04, Volume I, July 2004

Hyndman, J., "Aid, Conflict, and Migration: The Canada-Sri Lanka Connection", Presented to *the International Migration Seminar Series* Organised by MIT/Tufts/Harvard, Fletcher School for International Diplomacy, April 1, 2003

Indian Brand Equity Foundation (IBEF), "Indian Diaspora - Our People, Our Wealth", 2006 (http://www.ibef.org/download/Indian\_Diaspora\_modified.pdf)

Ionescu, D., "Engaging Diasporas as Development Partners for Home and Destination Countries: Challenges for Policy Makers", IOM Migration Research Series, No.26, 2006

Kapur, D., "Indian Diaspora as a Strategic Asset", Economic and Political Weekly, Vol. 38, No. 5, February 1-7, 2003, pp.445-448

Khadria, B., "Skilled Labour Migration from Developing Countries: Study on India", International Migration Papers, No. 49, International Migration Branch, International Labour Office (ILO), Geneva, June 2002

Khadria, B., "Conceptualizing the Typologies of Indian Diaspora in International Economic Relations: 'Tinker, Tailor, Soldier, Spy', or A 'Great Off-White Hope' of the New Century", Institute of South Asian Studies (ISAS) Working Paper No. 19, January 26<sup>th</sup>, 2007

Kumar, P., "International Migration and Development – A Case Study of India", Draft Copy, Study commissioned by the Commonwealth Secretariat, London, April 27<sup>th</sup>, 2007.

Lowell, B.L., and A. Findlay, "Migration of Highly Skilled Persons from Developing Countries: Impact and Policy Responses", Synthesis Report, International Migration Papers, No. 44, International Migration Branch, International Labour Office (ILO), Geneva, December 2001

Mullan, M.D.F., "Quantifying the Brain Drain: International Medical Graduated in the United States, The United Kingdom, Canada and Australia", Health in Foreign Policy Forum 2005, Academy Health, February 4, 2005.

Najam, A., "Pakistanis in America", Chapter 2, *Portrait of a Giving Community – Philanthropy by the Pakistani-American Diaspora*, Global Equity Initiative, Asia Centre, Harvard University Press, 2006

"NRI's from United Kingdom, Canada to help India retain BPO edge", Thursday, September 30 2004, http://www.infoworld.com/article/04/10/04/HNindiandiaspora 1.html

Office for National Statistics, "Annual Abstract of Statistics", No. 142, Palgrave MacMillan, United Kingdom, 2006 edition.

Organisation for Economic Co-operation and Development (OECD) Document, "International Migration Outlook", 2006

Organisation for Economic Co-operation and Development (OECD) Document, "Trends in International Migration", Annual Report, 2001

Russell, S.S., and M.S. Teitelbaum, "International Migration and International Trade", World Bank Discussion Papers, No. 160, May 1992

Ribeiro, J, "Indian diaspora helped outsourcing movement", IDG News Service, October 04, 2004. http://www.infoworld.com/article/04/10/04/HNindiandiaspora\_1.html

Salt, J., "International Migration and the United Kingdom", Report of the United Kingdom SOPEMI Correspondent to the OECD, 2006

Salt, J., and J. Millar, "Foreign labour in the United Kingdom: Current Patterns and Trends", Office for National Statistics, Labour Market Trends, October 2006 (http://www.statistics.gov.uk/articles/labour\_market\_trends/foreign\_labour.pdf)

Sami, B.D., "Migration in India", Unpublished note, 2003

Saxenian, A.L., "The Bangalore Boom: From Brain Drain to Brain Circulation" Revised Paper prepared for Working Group on Equity, Diversity, and Information Technology, National Institute of Advanced Study, Bangalore, India, December 3-4, 1999

Saxenian, A.L., "Silicon Valley's New Immigrant High-Growth Entrepreneurs", Economic Development Quarterly, Vol. 16, No. 20, February 2002

Saxenian, A.L., Y. Motoyama and X. Quan, "Local and Global Networks of Immigrant Professionals in Silicon Valley", Public Policy Institute of California Publication, 2002

Siddiqui, R. and A.R. Kemal, "Remittances, Trade Liberalisation, and Poverty in Pakistan: The Role of Excluded variables in Poverty Change Analysis", Pakistan Institute of Development Economics Working Papers, 2006:1, Islamabad.

Siddiqui, R., and N. Mahmood, "The Contribution of Workers' Remittances to Economic Growth in Pakistan", Pakistan Institute of Development Economics, Research Report No. 187, Islamabad, 2005.

Singh, S., "Economic Impact of Return Migration of Highly-Skilled I.T. Professionals from the United States to India", Thesis Draft, MIT, 2003

Sorensen, N.N., "The Development Dimension of Migrant Remittances", Migration Policy Research, Working Papers Series, No. 1, June 2004

Sriskandarajah, D., "The Migration-Development Nexus: Sri Lanka Case Study", International Migration, Vol. 40, No. 5, February 2002

Stahl, C.W., and F. Arnold, "Overseas Workers' Remittances in Asian Development", International Migration Review, Vol. 20, No. 4, Special Issue: Temporary Worker Programs: Mechanisms, Conditions, Consequences, Winter 1986, pp. 899-925

Study by Pakistan Centre for Philanthropy, "Philanthropy by Pakistani Diaspora in the United States" (http://www.pcp.org.pk/pdf/Diaspora/summary%2012.pdf)

Taubei, F.A., "Transnational Networks and the Evolution of the Indian Software Industry: The Role of Culture and Ethnicity", Chapter 6, *The Role of Labour Mobility and Informal Networks for Knowledge Transfer*, (eds.) Fornahl, D., C. Zellner, and D.B. Audretsch, Springer Science and Business Media Inc

U.S. Department of Homeland Security Report, "Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2005", U.S. Citizenship and Immigration Services, November 2006

Wei, Y., and V.N. Balasubramanyam, "Diaspora and Development", The World Economy, Vol. 29, No. 11, November 2006, pp. 1599-1609

World Bank Document, "Migrant Labour Remittances in the South Asia Region", Finance and Private Sector Development Unit, South Asia Region, Report No. 31577, February 2005

World Bank Document, "Global Economic Prospects: Economic Implications of Remittances and Migration", 2006

#### **Online Statistical Sources**

Annual Statistical Report of Foreign Employment - 2005, Sri Lanka Bureau of Foreign Employment (http://www.slbfe.lk/feb/statistics/stat13.pdf)

Annual Abstract of Statistics, 2006 edition, Office for National Statistics, Palgrave Macmillan (http://www.statistics.gov.uk/downloads/theme\_compendia/Aa2006/AnnualAbstract2006complete.pdf)

Australian Bureau of Statistics Census of Population and Housing, 2003 (http://www.abs.gov.au/websitedbs/d3310114.nsf/Home/census)

Central Bank of Sri Lanka, Statistics - External Sector (http://www.cbsl.gov.lk/pics\_n\_docs/08\_statistics/\_docs/xls\_external\_sector/table2.07.xls)

Citizenship and Immigration Canada (www.cic.gc.ca)

Foreign Exchange Policy Department, Bangladesh Bank (http://www.bangladesh-bank.org)

Migration Information Source (www.migrationinformation.org)

Reserve Bank of India, Handbook of Statistics on the Indian Economy (http://www.rbi.org.in/scripts/PublicationsView.aspx?id=8701)

Scalabrini Migration Center, Asian Migration Atlas (http://www.scalabrini.asn.au/atlas/amatlas.htm)

State Bank of Pakistan, Statistics and Data Warehouse Department (http://www.sbp.org.pk/ecodata/Homeremit.xls)

TOKTEN programme http://sunsite.tus.ac.jp/asia/india/jitnet/csir/tokten.html

United States Homeland Security Immigration Statistics (http://www.dhs.gov/ximgtn/statistics/data/dsnat.shtm)

United States Homeland Security - Statistical Yearbook of the Immigration and Naturalization Service, Various Years (http://www.dhs.gov/ximgtn/statistics/publications/yearbook.shtm)

#### Websites of Various Diaspora Associations

American Association for Bangladeshi Engineers, Architects and Technologists (AABEAT) (www.aabeat.com)

American Society of Engineers of Indian Origin (ASEI) (www.aseio.org)

American Association of Physicians of Indian Origin (AAPI) (www.aapiusa.org)

Asian American Hotel Owners Association (AAHOA) (www.aahoa.com)

Association of Pakistani Physicians and Surgeons in the United Kingdom (APPS) (http://www.appsuk.org/events.htm)

Association of Pakistani Professionals (AOPP) (www.aopp.org)

Association of Physicians of Pakistani Descent of North America (APPNA) (www.appna.org)

British Association of Physicians of Indian Origin (BAPIO) (www.bapio.co.uk)

Michigan Association of Physicians of Indian Origin (MAPI) (www.mapiusa.org)

Network of Indian Professionals (NetIP) (www.netip.org/html/about.html)

Network of South Asian Professionals (NetSAP) (www.netsap.org)

Organisation of Pakistani Entrepreneurs (OPEN) (www.openglobal.org)

Pakistan American Business Association (PABA) (www.pabausa.com)

Silicon Valley Indian Professionals Association (SIPA) (www.sipa.org)

South Asian Journalists Association (SAJA) (www.saja.org)

Scientists and Technologists of Indian Origin (STIO) (http://stio.nic.in)

The Indus Entrepreneurs (TIE) (http://www.tie.org)