

Chapter 1

Indian Skilled Migration and Development: An Introduction

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1 Migration and Development

Any reflection on the impact of skilled migration must be set against the backdrop of the wider debate on migration and development, in which we must give consideration to the uneven development that results from the current climate of neo-liberal globalisation and the internationalisation of capital (Castles and Delgado Wise 2012; Bagchi 2011; Caloz-Tschopp 2010). According to this perspective, migration is determined by the obstacles to development that are associated with a global economic system that deprives a large part of the population of dignified living and working opportunities, and this manifests itself in the form of the movement of workers from the countries of the South to industrialised centres in the North. Under these circumstances, Castles and Delgado Wise (2012) note that human mobility mainly takes the form of forced population movements that have little to do with free choice.

In this global scenario, international migration has intensified and it has become increasingly complex, and one of its dominant characteristics is the migration of highly skilled persons (Docquier and Rapoport 2012a; Özden et al. 2011). It takes place within a context that produces risks and opportunities as an effect, among other factors, of the transformation of countries into knowledge-based economies, the internationalisation of higher education and the various migratory policies of

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the countries of destination that facilitate the entry of highly skilled workers. Other influential factors are related to the socio-economic context of the countries of origin as well as personal options, such as limited professional and educational opportunities in the local context or an interest to grow personally and professionally by spending some time abroad. Favell et al. (2007) state that the mobility of skilled individuals is mostly associated with personal choices, professional careers and educational prospects.

The various perspectives of the effects of human capital mobility within the migratory and development processes have not been free of the tensions that result from the nature of the exchanges and the unequal power relationships that are to be found in both the circulation of world knowledge and in its production, appropriation and use (Caloz-Tschopp 2010; Hollanders and Soete 2010). In fact, the emigration of skilled professionals and scientists from developing countries to industrialised economies has long been a controversial issue, and it has generated a myriad of questions. Firstly, it has economic and social implications for the developing countries of origin whose bank of human capital is limited. Secondly, skilled migrants establish linkages with the host countries, the main focus of which is on the demand for their skills and their integration into labour markets.

In this context, there has been a resurgence of the migration and development nexus in recent research and policy discussions, and one of the main focus of attention is now directed towards the positive effects of skilled migration. This is not a new topic, but it has gained relevance in recent times, with migrants now being considered as a potential leverage tool for development (Lowell and Gerova 2004; de Haas 2006; Katseli et al. 2006) who act as bridges between the home and the host countries. This has changed the dominant vision from the decades between 1960 and 1980 which focused on the negative effects migration had on the development of the countries of origin as a result of the transfer of valuable human resources to the productive systems of the countries of destination. Accordingly, it has been recognised that globalisation and technological advances enable the emergence of new dimensions and opportunities for cooperation between the countries of origin and those of destination (Tejada 2012). This has inspired countries to negotiate new policy options with the intention of finding ways that can allow them to take advantage of the potential benefits of their overseas-based communities for their national development. In practice, diverse studies have shown how skilled migrants can contribute to their countries of origin through transnational diaspora networks, business and investments links, scientific cooperation and eventual return to the home country (Agunias and Newland 2012; Tejada and Bolay 2010; Katseli et al. 2006; Lowell and Gerova 2004).

The relationship between skilled migration and socio-economic development is not a simple one, and indeed, several experiences have shown that the society in the country of origin does not always benefit from brain gain practices. Furthermore, the potential for a positive impact on the various levels of the actual development process (micro, meso or macro) is not the same for all cases as it depends on both the particular characteristics of the migrants, and the contexts of

the countries in which their migratory projects are carried out (de Haas 2008, 2012; Kapur 2010). Therefore, the structural context of the country in question matters as a result of its influence on the possibility of having an impact on development. As Kapur (2010) points out, while international migration is a cause and a consequence of globalisation, its effects in the countries of origin depend above all on internal factors in those countries.

1.1 Uneven Development in India

India represents a good case in point because of the strong presence of Indian skilled professionals, engineers, scientists and students in Western countries, which has long been a cause of national pride as well as a matter of general concern. In recent years, India's gains in the form of reverse flows of expertise, investment and business leads, knowledge and technology and the world's highest financial remittances, have resulted in a more positive view of the influence that foreign-based Indians can have on the economic progress of India and its integration in the world economy (Kapur and McHale 2005; Kapur 2010).

In development terms, India is a paradigmatic case since it has managed to position itself as one of the most dynamic countries in transition in the last two decades, boasting one of the highest rates of economic growth—registering GDP increases of 6 % in real terms during the 1990s and 7 % in the last decade—thereby becoming the second fastest growing large economy in the world after China (D'Costa and Bagchi 2012; Drèze and Sen 2013). However, achieving high growth should be judged in terms of the impact that such economic growth has on the quality of life and the social advancement of people, the expansion of their human capacities and their basic liberties (Drèze and Sen 2013; D'Costa and Bagchi 2012; Sen 1999). It is precisely in this aspect where India still has a long way to go. Drèze and Sen (2013) suggest that there is an urgent need for those who dream of making India a super economic power to reconsider not only the extent of their understanding of the mutual relationship between growth and development, but also their assessment of the demands of social justice, which are integrally linked to the expansion of human liberties. The authors highlight the deficiencies, especially in terms of basic services and gender equality, and they argue that highly privatised health and educational systems offer different opportunities for different social groups, and this has resulted in the huge social disparities being perpetuated rather than reduced or curtailed. Similarly, D'Costa and Bagchi (2012) stress that India's economic transition and high growth encompass deep rural poverty, underdevelopment and unprecedented forms of social and economic inequality.

As India has attained a relevant position on the world stage in terms of its economic growth, technological innovation and competence, the increased demand for a skilled labour force resulting from its modernisation process has intensified the pressure to produce human capital of high quality. Even though the

educational system is a key element in the definition of the quality and magnitude of the human capital available, India is faced with a lack of skilled human capital as a result of a deficient educational system and other serious problems that prevent the vast majority of the population not only from benefitting from economic progress but from participating in it as well. The fact that only the Indian elites have the chance to attain an excellent level of training (including the possibility of studying abroad) is the consequence of a complex structural problem that divides a privileged social group from the rest of society (Drèze and Sen 2013; Mehra and Pohit 2013; D'Costa and Bagchi 2012).

The low level of social and human development attained by the majority of its population has seen India fall behind in the various international rankings on prosperity. In the 2012 UNDP Human Development Index (HDI) (UNDP 2013), the country ranked 136th worldwide among the 187 countries included, sharing that position with Equatorial Guinea. India performs worse than other rapid emerging economies such as Russia, Brazil, China and South Africa, and its HDI average is below that of those countries, and it lags behind in all HDI component indicators¹ and in terms of its overall position (136th while Russia ranks 55th, Brazil 85th, China 101st and South Africa 121st). In the 2012 Gender Inequality Index (GII),² it ranked 132nd out of 148 countries, showing for example that 26.6 % of adult women have reached a secondary level of education compared to 50.4 % for men and that female participation in the labour market is 29 % compared to 80.7 % for their male counterparts (UNDP 2013). Notwithstanding the modest progress made in the last few decades, these data show that the country still has a very long way to go towards effective poverty eradication and a balanced and more inclusive broad-based development.

Since the gains from migration contribute to the discourse on the economic growth of India, it is necessary to look at the options that help channel possible benefits towards the neediest sectors of the population and also to assess the effects of skilled migration from a broad perspective that considers the implications for human development and people's quality of life. All of this is done on the basis that the consequences of skilled migration in the form of transnational diaspora links, knowledge and experience flows, transfers of financial remittances or return migration are neither a panacea nor the way forward for the development of the countries of origin.

¹ The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life (measured by life expectancy), access to knowledge (measured by the level of education attained) and a decent standard of living (measured by Gross National Income per capita) (UNDP 2013).

² The GII reflects gender-based inequalities in three dimensions: reproductive health, empowerment and economic activity (UNDP 2013).

2 Conceptual Evolution of Skilled Migration in the Migration and Development Nexus

As a response to the intensification of international migration in terms of its scale, scope and complexity, and also driven by an interest in reducing the risks and increasing the potential gains for both the migrants and the countries involved, academic research and policy discussions have evolved towards new approaches in the last few decades. As far as skilled migration in particular is concerned, new studies on the factors that influence the mobility of human capital between countries—between the most industrialised countries and developing countries for the most part—the various ways in which they manifest themselves and their effects at different levels have given rise to a variety of possible lines of study. As Castles and Miller (2009) argue, this shows that skilled migration should be seen as a significant component of a complex and multidimensional phenomenon that is part of the current social transformation processes.

The emigration of skilled professionals from developing countries, who go abroad in search of better professional and career prospects as well as an improved quality of life in more advanced countries, has been a traditional and major concern for the countries of origin. However, two main issues have recently influenced the emergence of new alternative ways of assessing and interpreting international skilled migration. Firstly, the consideration of skilled migrants as an irreversible loss for the developing countries of origin and an exclusive gain for the rich countries of destination, which was the basis of the nationalist perspective of the brain drain/brain gain debates of the 1960s and subsequent decades, was not sufficient to allow a move from the general discourse to the implementation of specific policy options that could manage this phenomenon. Even though this view saw return to the home country as the only possible alternative in terms of recovering lost capacities, more often than not, the repatriation programmes were not successful when they were implemented due to various factors that were often related to structural aspects of the countries concerned. Only a small number of countries in South Asia, such as the Republic of Korea and China, experienced satisfactory return practices at a certain level as a response to suitable scientific and technological structures, incentives policies and conducive domestic environments (Yoon 1992; Song 1992; Saxenian 2005), whereas other world regions were unable to reproduce this model.

Secondly, the analysis of the behaviours and experiences of skilled migrants in the destination countries showed that they, as transnational actors (Glick-Schiller et al. 1992; Portes 2001), do not have an exclusive affiliation that automatically links them to the particular geographical place where they are physically located, but rather they have the capacity to hold multiple identities and to feel a simultaneous attachment to their host and home countries (Levitt and Glick-Schiller 2004). This led to a new vision, which replaced the classical emphasis on permanent loss and undefined return with a feasible alternative of long-distance association and multiple connections (Meyer 2001). No longer viewed exclusively

as holders of valuable human capital that needed to be repatriated, this perspective mostly sees skilled migrants as carriers of social capital that is waiting to be organised and harnessed for the benefit of the home country (Tejada 2012).

With this paradigm change, transnationalism has become a popular theoretical framework in the most recent studies of the migration and development nexus and as Faist and Fauser (2011) argue, this has led to the rise of a new agent in the development discourse: migrants, diasporas or transnational communities. Transnationalism understands individuals as belonging to several places at the same time as they establish and promote cross-border links (Portes 2001; Vertovec 2004; Levitt and Glick-Schiller 2004). Diasporas or transnational communities (Wickramasekara 2010) consist of communities established in diverse places outside the country of origin, which create networks and connections with their co-nationals located both in the home country and in other parts of the world. A shared national identity and a collective feeling of loyalty towards the home country are additional core features of diasporas (Sheffer 1986; Cohen 1997; Butler 2001).

At a policy level, establishing a connection with the diaspora has become an alternative to promoting physical return, and as a result, the possibilities of countries of origin being able to take advantage of the resources and experiences of their foreign-based skilled people for the benefit of their development processes have been boosted in recent years as part of what is referred to as the *diaspora option* (Meyer 2001; de Haas 2006; Merz et al. 2009). The diaspora option promotes interconnections between home and host countries, enabling the transfer of knowledge, skills and further financial and social capital, with migrants acting as carriers. The concept of *scientific diasporas* grew out of such an understanding, and this term refers to groups, networks or associations of emigrated scientists, engineers and skilled professionals, who are involved in producing and circulating new knowledge and creating transnational cooperation links with their home country (Barré et al. 2003; Tejada and Bolay 2010).

The recognition of the significant role that diasporas can play in the development of the countries of origin has gained relevance in the global discussion of international migration, especially with regard to the link between migration and development. In this regard, emphasis has been placed on the various ways in which migrant communities have the capacity to make contributions. For example, in its time, the Global Commission on International Migration (GCIM) looked at the question of diasporas and the need to promote their participation in development through transnational knowledge networks (GCIM 2005). For its part, the Global Forum on Migration and Development (GFMD) has repeatedly raised the question of diaspora contributions since its first meeting in 2007. More recently, the International Organisation for Migration (IOM) organised the Diaspora Ministerial Conference (DMC) in 2013 as the first high-level event dedicated to the question of diasporas, and there were calls for strategies at both a local and a global level aimed at taking advantage of their potential.

Concurrent with this change of paradigm, return skilled migration has gained prominence in scholarly research in recent years, and this is mainly due to two reasons. Firstly, the study of skilled migration and its implications cannot consider emigration as a permanent decision. In fact, in contrast to low-skilled migration, skilled migration is characterised by its temporariness, and therefore, we cannot overlook the fact that in reality many migrants do eventually return to their home country, having been driven by different factors. Secondly, return skilled migration is recognised as being beneficial for the development of the countries of origin, and this view is based on the assumption that the skills heading back home will compensate for the outflows. Evidence has shown that while the effects of return migration are context specific insofar as they depend on the nature of the environments to which migrants return, they are also associated with individual factors such as the migrants' age and activity profile, the length of stay abroad and the type and nature of their return (Wickramasekara 2003; Kapur and McHale 2005). The most documented issues influencing the possibility of applying the knowledge and expertise of migrants to the local context of their home country after their return include the sector of activity, the type of professional engagement (self-employed or employees), the match between qualifications and labour market requirements and the particular location that migrants return to (King 2000; Iredale et al. 2003; Cassarino 2004; Chacko 2007).

Both the framework of diaspora contributions and the return channel have gained relevance in the study of skilled migration, and diverse practical examples indicate that home countries can simultaneously gain benefits through transnational diaspora links and through physical return to the home country (Agunias and Newland 2012). However, there is a common understanding which recognises that the extent to which migrants can make positive contributions to their home country hinges on wide structural settings, and this has influenced the change in conceptual methods from a focus on individual behaviour to an interpretation of migrants' decisions, strategies and consequences as influenced by broader transformation and development processes (de Haas 2008, 2012). As a result, current approaches stress the agency role of migrants, highlighting the influence of the structures and environments that stimulate their actions, including their mobility decisions, in both the home and the host countries.

3 The Relevance of India as a Case Study

Within the field of migration and its linkages to development, India is a relevant case for a number of reasons that are related to the specificities of the migration process from the subcontinent and its characteristics.

3.1 *The Scale and Scope of Indian Skilled Migration*

The magnitude and scope of Indian international migration is one of the main motives that have inspired this study. According to recent data from the United Nations, India is the major country of origin of international migrants, and their stocks had accounted for more than 14 million by mid-2013 (UN-DESA 2013). The Indian government estimated the total number of Indian migrants including both non-resident Indians (NRIs) and foreign citizens or persons of Indian origin (PIOs) to be about 20 million at the turn of the twenty-first century, and it is believed that this figure had risen to 25 million by 2012 (MOIA 2012).

While the scale of the Indian diaspora is important, it is equally relevant to note the diversity of profiles among its members. As the Indian government pointed out in the Report of the High-Level Committee on the Indian Diaspora (HLCID), this reflects '*the full multiplicity and variety of the rich social, ethnic, religious and cultural tapestry of the land of its origin*' (Government of India 2001). The high quality of Indian human resources and the low cost of labour have made the country an important source of both highly skilled and low-skilled workers who emigrate with their families to almost every country in the world. While considerable numbers of low-skilled workers have emigrated to the Gulf and the countries of the Middle East over the past few decades, highly skilled Indians have chosen the USA and other industrialised countries such as the UK, Canada and Australia as their most important and attractive destinations (Khadria 2006). For such countries, India is an important source country for skilled migrants mostly in the Information Technologies (IT) sector, engineering and health care.

More recently, industrialised countries in continental Europe have emerged as new destinations for highly skilled Indians. The demand for highly skilled migrants in these countries has been rising because of the increasing specialisation in human capital-intensive activities and their interest in increasing their stock of global talent to improve their competitiveness within settings with a skill-biased technological change and limits on labour force training in specific sectors. As a result, European countries have redesigned their immigration schemes, making them more skill-selective, and all this has had an extensive influence on the flows of highly skilled people (Brücker et al. 2012; Wiesbrock and Hercog 2012; Buga and Meyer 2012; Tejada et al. 2014). This has created new relocation opportunities for skilled Indian professionals especially in IT, finance and management and the academic and research sectors.

Within the EU-27 region, we can see that Indian nationals were the third largest group of non-EU immigrants in 2008 after Morocco and China, with a total of 93,000 Indian immigrants arriving that year. According to Eurostat estimates,³ there were 512,000 Indian citizens in the EU-27 countries, and they accounted for about 2 % of the total foreign population in the EU-27 region in 2008. Docquier and Rapoport (2012a, b) show Indian skilled migrants totalling more than one

³ European Commission, Eurostat, <http://ec.europa.eu/eurostat> (Accessed 16 August 2013).

million worldwide in 2000, and this figure places India in second place among developing countries, after the Philippines. In fact, the emigration rate of the highly skilled from India is estimated at 3.2 % (UN-UNDESA and OECD 2013). More recent data show that about 240,000 Indians emigrated to OECD countries in 2011, representing nearly 5 % of the total immigrant population (OECD 2013). The same source shows that in 2011, a total of 2 million Indians, representing 60 % of the total of 3.4 million Indians living in OECD countries had third-level education. With this figure, India ranks as the leading source of skilled migrants in the OECD countries among developing countries, ahead of China (1.7 million) and the Philippines (1.4 million). Taken together, these three top countries accounted for one-fifth of all tertiary-educated immigrants in OECD countries in 2010/11 (UN-UNDESA and OECD 2013).

While these data on the magnitude and scope of Indian international migration speak for themselves, it should be noted that even though there are sizeable flows of different kinds of labour from India and a large Indian diaspora, available data still remain scattered and imprecise, and this limits more accurate analyses.

3.2 Indian Student Mobility

Education plays a pivotal role in the development of a country, and it is seen as a powerful tool for economic growth and the wellbeing of the population. With the current world trend of knowledge-based economies, the demand for higher education and specialised knowledge is seen as essential. In this context, the rising numbers of international Indian students is another reason for the increased interest in Indian migration. This is mostly the result of the growing global demand for international students and the intensification in the globalisation of higher education that has taken place over the last decade. In fact, increasing demand for skilled work force intensifies the pressure to produce manpower of a higher quality (Mehra and Pohit 2013).

There are also some contextual and structural factors at play in India that influence the supply of international students. The demand for higher education in India has made this country one of the main targets for the world's leading higher education institutions, given the weakness of the educational infrastructure and the low level of government expenditure on education which has resulted in a shortage of recognised institutions at a local level (Mehra and Pohit 2013; Drèze and Sen 2013; Mukherjee and Chanda 2012). Although there are some specialised institutions of recognised quality, such as the Indian Institutes of Technology (IITs) as well as other research centres and some prestigious public universities, the higher educational system has significant deficiencies, which reveal a broader and more complex problem, which in turn is related to social inequality and opportunities. Addressing the latter, Drèze and Sen (2013) argue that the fact that the Indian educational system ensures that only a few young people out of a huge number can achieve an excellent level of education, including the possibility of studying

abroad, is associated with the general division between the privileged and the rest of Indian society. According to the authors, this division is not the effect of specific ends but rather it is linked to the economic and social inequality related to class, caste, gender and social standing. Furthermore, Khadria (2007) stresses that the high emigration of Indian highly educated, skilled professionals and students is associated with the expansion of Western education through the English language and mass graduate unemployment in India without any state policy for the recruitment of human resources.

Additional factors influencing Indian skilled mobility include the motivation that Indians feel to pursue higher education and further specialisation abroad, the prevalent view within society of the value that a foreign degree has in terms of offering better employment prospects, as well as increased earning levels of middle-class families and assistance from formal financial institutions, have made overseas education a possible and achievable option (Mukherjee and Chanda 2012). However, as Drèze and Sen (2013) point out, the option of a private education and education abroad is simply beyond the reach of poor families and less well-off communities, offering further proof of the social inequality between 'the privileged and the rest'.

The magnitude of Indian student migration is significant, and India is now the second most important country of origin of international students. Estimates from the UNESCO Institute of Statistics (UIS) placed the total figure at 200,000 in 2010. In the last decade, the share of Indian students has almost doubled, rising from 3 % in 2000 to 5.6 % in 2010. In absolute figures, this represents an increase from 53,000 to 200,000 and an annual growth rate of 7 %.⁴ While Indian students mostly tend to continue their higher or specialised education in academic and research institutions in the USA and the UK as well as in Australia, Canada and New Zealand, increasing numbers have been moving to other destinations in continental Europe including Germany, France, Switzerland, the Netherlands, Denmark and Sweden. The share of Indian students among all foreign students registered in third-level education in OECD countries increased from 4 % in 2001 to about 7 % in 2009, and Indians are now the second biggest group of students from non-member countries, exceeded only by the Chinese (OECD 2011).

It is interesting to note the two main arguments for the inclusion of students—*'the semi-finished human capital'* (Khadria 2003)—within the context of skilled migration; first, student migration is often a precursor to labour migration as more and more students from the academic stream enter the labour force in the countries of destination once they graduate (Kumar et al. 2009). The retention of third-country students as long-term skilled workers for national labour markets is appreciable in European destination countries, which tend to hold on to these students by adapting their labour migration policies as part of their strategy to attract skilled personnel from third countries in the global competition for talent

⁴ See <http://www.uis.unesco.org/EDUCATION/Pages/international-student-flow-viz.aspx> (Accessed 16 August 2013).

(Kuptsch 2006; Brücker et al. 2012; Tejada et al. 2014); second, the experiences accumulated by students in the countries of destination, ranging from education and further specialisation to their professional working life, represent an interesting collection of valuable resources in the form of skills, professional networks and contacts and the additional social capital gained, which help to shape their migration paths and influence their experiences upon their return.

4 Earlier Research on Indian Skilled Migration and Development

In the recent past, many studies of Indian migration were motivated by an interest in the socio-economic development contributions of the Indian diaspora. One such contribution, probably the most tangible of all, was in the form of financial remittances, which represent a clear link between migration and development, and many studies have highlighted the specific benefits for recipients (Guha 2011; Afram 2012; Rajan 2012). The total amount of remittances has not only made India the world's top recipient but this amount has increased considerably over the past few decades. Data from the World Bank show that remittances from India grew sixfold between 1990 and 2000, rising from \$2.1 billion to \$12.3 billion, and they increased almost fivefold in the last decade, reaching \$55 billion in 2010 (World Bank 2011).

Research has shown how the Indian diaspora has affected the home country in other ways, and a significant part of this research has focused on the development impact of Indian skilled professionals, engineers and scientists who are based abroad. The frameworks of the studies from the 1960s to 1970s were mostly based on the brain drain approach, with most analyses emphasising the loss of human capital and the detrimental cost of public investment in higher education (Johnson 1967; Bhagwati 1976; Borjas 1987). Bhagwati (1976) proposed the idea of taxing brain drain and compensating the losers by giving a share of the sum collected to the home countries. However, over the last two decades, the focus has shifted towards a study of the transfer of knowledge, expertise and social capital gained by Indians overseas that may result in beneficial outcomes. By emphasising the possible benefits for India through the possibility of human capital transfers to the home country without people having to physically return there, Khadria (1999) contributed to a change of viewpoint. All in all, diaspora contributions and return migration became more relevant as attempts were made to understand the impact of Indian skilled migration (Kapur and McHale 2005).

In this fashion, several recent studies illustrate the important role that transnational diaspora networks have played in helping innovation and entrepreneurship in India. Saxenian (2005, 2006) highlights the collective action of the Indian engineers and technicians who mobilised many of their fellow nationals into active associations and networks in the Silicon Valley region of the USA during the late 1990s,

contributing to a reinforcement of India's scientific and technological capacities through knowledge and technology transfers as well as in the form of investment, and entrepreneurial and business linkages. Nanda and Khanna (2010) studied the links between the Indian diaspora and local entrepreneurs in the software industry in India, and they found that relying on diaspora networks for business leads and financing is something associated with better performing firms, especially those based in smaller cities with weaker institutional and financial environments.

A more recent study by Docquier and Rapoport (2012a) analyses the various channels through which Indian skilled migrants have contributed to the Indian economy. Firstly, their presence in the host countries has encouraged business links and they have provided foreign investors with information on the Indian labour force and this has generated demand for both Indian specialists in the IT sector and for IT services exported from India. Secondly, Indian skilled migration has helped to transfer knowledge and technology through diverse channels, including return and circular migration. Thirdly, Indian skilled migrants have played an important role as advisors, helping to improve the settings for entrepreneurship and venture capital in India, and they have also been actively involved in strategic decision-making. The authors show how highly skilled migration can generate positive network externalities and create winners, instead of simply depleting a country's human capital.

While Kapur (2002, 2010) singles out the determining role of the Indian diaspora in India's rise in the global IT sector during the 1990s and after, Chanda and Sreenivasan (2006) show its importance for the national economy, within IT and business process outsourcing. These studies show how Indian IT professionals have attracted significant attention as they have come to be seen as a transnational class of professionals actively engaged in building an India that is global in scope. All these and further studies suggest the strong connections that skilled Indians based overseas maintain with people back in India, and they also show their systematic exchanges of information on jobs, business and investments prospects, science, technology and innovation, which result in beneficial contributions in the form of business and investment links, the expansion of entrepreneurship, the promotion of trade and scientific cooperation. At a policy level, it is noticeable that the Indian government has begun to appreciate these benefits, and it has recently implemented a number of policies aimed at harnessing the resources of skilled migrants.

Beyond diaspora contributions, return migration is seen as another powerful tool for development in India. In recent years, the country has experienced an increase in the number of skilled professionals returning home from the USA, UK and other European countries. It has been documented that these returnees are pulled by the economic, career, entrepreneurial and business opportunities that they see in India and by the chance to access local markets. Diverse research shows that together with family ties, a feeling of patriotism acts as an additional driving force motivating their return (Chacko 2007; Finegold et al. 2011). There are also some push factors at play and these include economic downturn in the

destination countries which results in job insecurity, and the end of temporary contracts (Chanda and Sreenivasan 2006).

Several studies see returning Indian professionals and entrepreneurs as having an important role to play in the socio-economic development of India, and these studies emphasise the transfer of advanced technical skills, managerial know-how and financial assets which they deploy in their professional activities, entrepreneurial ventures and investments, and in the creation of jobs (Kapur 2002; Saxenian 2005, 2006; Chacko 2007). Nanda and Khanna (2010) show how overseas experience allows Indian entrepreneurs to gain access to business and financial opportunities. Taking examples of selected European countries, Rothgang and Schmidt (2003), discuss the issues of return skilled migration and the brain gain effect. They stress the role of disseminating knowledge and the positive economic externalities arising from return migration. They also refer to the benefits that the IT sector in India had gained from such return migration.

More recent research has shown the influence that structures and environments in the home and host countries have on the return plans and mobility decisions of skilled Indians based in developed countries. Finegold et al. (2011) studied Indian students in the US. On the basis of a survey of skilled migrants, they noted that Indian students were potentially prepared to return to India if they could be guaranteed a good quality of life and a good career; Indian students in the USA would become potential returnees if there were good research opportunities and fewer hurdles in the forms of corruption and bureaucratic red tape in the home country. In relation to this point, Dustmann et al. (2011) used the help of a dynamic model to explain how migration decisions often respond to the opportunity and efficiency of skills acquisition (including skills that are applicable to the home country). According to their view, skills are generally acquired where the cost of acquiring them is low and skills will go to the places where they can be applied with the best chance of a high return. The authors argue that there is scope for brain gain through return migration if opportunities exist to apply the acquired skills and if the skills are more valued in the home country.

5 New Research on Indian Skilled Migration, Diasporas and Return

While the earlier mentioned aspects of Indian skilled migration have attracted plenty of interest within the academic literature, there are still some important topics that are far from being conclusive and accordingly they merit further exploration. This volume contributes to the advancement of knowledge to fill some of the existing gaps.

5.1 The ‘Migration, Scientific Diasporas and Development’ Project

This volume is the result of the research project ‘Migration, scientific diasporas and development: Impact of skilled return migration on development in India’.⁵ The objective of this project was to widen the knowledge base on skilled return migration and its impact on development and to explore strategies and measures for leveraging the potential of scientific diasporas.⁶ The study examines the case of Indian skilled migration and it identifies the factors, at both an individual and a structural level in the home and the host countries, that influence the propensity of skilled Indians to deploy their foreign-earned knowledge and skills in the Indian socio-economic context, both through their physical return to the home country and through transnational diaspora actions.

By offering new empirical evidence on Indian skilled migration, this study attempts to fill two gaps in the literature. Firstly, it contributes to a better understanding of the activities of Indian skilled professionals and students in continental Europe, concretely in four countries of destination: France, Germany, the Netherlands and Switzerland. This is a rather recent phenomenon and one that has been particularly under-researched. The topic is an important one since the institutional settings of host countries are not only significant in terms of their attractiveness for skilled migrants but also in how they facilitate the exchange of knowledge between migrants and the home country and influence their mobility plans, including those related to possible return. The four countries selected have become increasingly important destinations for Indian skilled professionals and students, and they have adapted their migration policies to attract skilled people as part of the global competition for talent (Tejada et al. 2014). Secondly, it offers an analysis of Indian skilled return migration and the circumstances under which it takes place. It also examines the experiences of returnees by focusing on their ability to transfer the knowledge and skills they have gained abroad to the local context and the impact generated on their immediate surroundings. In the case of

⁵ The project was coordinated by the Cooperation and Development Center (CODEV) of the École Polytechnique Fédérale de Lausanne (EPFL) and it was implemented in collaboration with the Institute of Development Studies Kolkata (IDSK), the International Migration and Diasporas Studies Project of the Zakir Husain Center for Educational Studies at Jawaharlal Nehru University (JNU), and the International Migration Branch of the International Labour Office (ILO). The project ran from January 2011 until March 2013 and it was funded by the Swiss Network for International Studies (SNIS) in Switzerland. The main findings are included in the final research report (CODEV-EPFL, IDSK, JNU and ILO 2013).

⁶ The research draws on qualitative and quantitative research methods consisting of policy analyses, in-depth interviews with key experts and skilled migrants and two major data sets collected between the years 2011 and 2012 using two complementary survey questionnaires. On the one hand, we examined skilled Indians in four selected European countries, while on the other we studied skilled Indian returnees in six Indian cities. Four sectors were chosen in order to improve the representativeness of the sample: IT; finance and management; biotechnology and the pharmaceutical industry; and research and academia.

India, the factors required for actual development leverage from return skilled migration have not been thoroughly explored. In addition, the influence of institutional settings in the host countries and the experiences of skilled Indians including students there on their mobility plans and return intentions have still not been fully understood.

There are three aspects which make this study innovative and worthwhile. The first is the twofold approach employed: a study through the prism of the country of origin and the countries of destination. This approach allows us to simultaneously observe the impact of return migration on the country of origin and to see how skilled diaspora resources can be mobilised in new destination countries. Secondly, the study concurrently uses three sample types: (1) Indian migrants in Europe, (2) Indian migrant returnees and (3) Indians who have never migrated. The third important aspect is the partnership structure that was implemented, bringing together academic institutions in the North (EPFL in Switzerland) and the South (IDSK and JNU in India), and one international organisation (ILO). This provided a unique opportunity to address research issues from a Northern, Southern and global perspective and to jointly discuss the policy options.

5.2 Main Research Findings

From our study, we observed that Indian skilled migration offers several beneficial impacts for the economy and for society. Going beyond the traditional negative perspective of skilled migration from developing to developed countries, the findings offer a more nuanced picture, which shows how both the countries of origin and those of destination can benefit from skilled migration if it is adequately managed. We see that Indian skilled professionals, scientists and students can contribute to both countries while they are abroad or after they physically return to India. We identified four major channels through which we can estimate and perceive the impact that skilled migration has on development: physical return, remittances and investment, knowledge transfer and social impact. The different facets of this development impact across the specific sectors of IT, financial and management, biotechnology and pharmaceuticals, and research and academia are explained further. Even though knowledge transfer is the most important type of contribution, we must not ignore other effects related to economic, social and cultural changes.

The reasons why skilled Indians emigrate are often based on job requirements and better educational, training and career prospects in the destination countries. The part of the research carried out in Europe shows that Indian students and skilled professionals rank the local living environment and the amenities in the destination countries very highly, and they are satisfied with the existing infrastructure and working conditions. Several different factors influence their decisions to return to India. Besides those cases where migrants return after the completion of a job assignment or the expiry of a job contract, the desire to take advantage of

employment opportunities in the home country in emerging sectors such as IT and biotechnology and the desire to be with their families in the home country are major determinants in return plans, as are recession and rigid immigration policies in the host countries.

We observed that while the desire to contribute to the development of the home country is quite strong among all Indian skilled migrants, a higher propensity of participation is associated with disadvantageous identities related to gender, caste and religion. The fact that socially disadvantaged people such as women, dalits and Muslims feel more strongly about contributing might be the consequence of the difference they experience between a situation of deprivation and social disparity in the home country, and the freedom and rights they enjoyed in the host countries, and this might leverage their motivation to work for greater social equality in India.

We see also that development aspirations of skilled people are linked to their return plans. As the bearers of cross-frontier knowledge and the holders of innovative skills and a suitable attitude towards enterprise, skilled migrant returnees often facilitate the transfer of skills and knowledge, and they also help to inspire a work culture that is suitable for development. Our study shows that socially underprivileged people register the greatest positive effects in terms of social position, and they also manage to attain a more influential role in society as a result of their foreign exposure. However, the research shows that in the Indian context, barriers related to institutional factors, bureaucratic red tape, a lack of proper health and educational facilities for the return migrants and their dependents, and insufficient professional prospects can all damage the potential of return skilled migration. The development impact of return depends on returnees being able to cope with the local system and reach their objectives or goals, as well as their own capacities to adjust to the two different worlds—one with modern facilities and the other where these are lacking. Our study shows that the extent to which the resources and improved level of knowledge and expertise gained by skilled migrants are utilised or internalised largely depends on the availability of infrastructure, a good work environment, future prospects and social security as well as suitable governance. The same reasons play a major role in the choice of a particular city when they return to India. The research also highlights the specific challenges that skilled Indian women returnees face in the workplace or within their families and communities and which limit their potential contributions to the local context.

The findings suggest that migrants' personal enthusiasm and efforts need to be complemented with an enabling environment and supportive policies from both the destination and the home countries. In fact, we can see that in order to use the potential of skilled migration, India has implemented specific policies both to encourage return and to increase cooperation and interactions with the diaspora and capitalise on its accumulated resources and expertise. From their side, the destination countries are interested in attracting skilled migrants in specific emerging sectors to help them increase their competitiveness, and they try to provide an adequate environment to facilitate their settlement and promote their

transnational activities. However, it has been observed that such efforts are still insufficient and there is plenty of scope to increase awareness and foster initiatives that can enable the satisfactory use of the human capital in the interest of the two sides—the home and the host countries—whilst respecting the rights of individual migrants. This last point is important because, as stated by Bagchi (2011), there is a lack of an enforcing mechanism to protect human capabilities and basic human rights within the arena of human migration. Bagchi emphasises the increasing intensity of dehumanised behaviour in the context of human migration during the current age of finance-led globalisation.

6 Objective and Organisation of this Volume

The primary objective of this volume is to shed light on a few of the critical issues related to Indian skilled migration and its development impact, by providing new empirical evidence intensively collected from both the European countries of destination (France, Germany, the Netherlands and Switzerland) and the home country (India). The studies included here use an interdisciplinary and multi-level analysis offering nuanced insights into the dynamics of skilled migration and its home country effects. Because of the various dimensions of the subject matter, we do not claim to have produced a comprehensive, all-embracing study. In fact, the studies show that the issue of skilled migration and the subsequent development prospects, whether real or potential, is an area that deserves to be researched further across geographical and time zones. If the knowledge included in this volume can help policymakers in India and Europe to formulate an effective skilled migration policy that will establish a sustainable environment to benefit all the parties concerned, then we will have achieved the purpose of our study.

The content of this volume is organised in the following way. Part 1 is an introductory section. Part 2, *Context and Trends*, provides a framework of reference and an analysis of new issues in skilled migration that are related to its characteristics and effects as well as the types of public intervention and structures, both from the perspectives of India as a country of origin and Europe as a destination.

In [Chap. 2](#), Binod Khadria offers an overview of two different groups from the Indian diaspora who both share the positive common trait of contributing to Indian economic development, notwithstanding the fact that they are very different from each other in terms of skills and educational level. While low-skilled labour migrants to the Gulf are viewed as India's main source of financial remittances, highly skilled knowledge workers contribute to the nation through their specialised technical skills and by making investments and transferring technology. However, the two groups remain quite different and separate from each other. This calls for public policies in India that can recognise the value of both groups as development agents and also appreciate their complementarities. The author believes that it is necessary to encourage cooperation between both diaspora groups and to bridge their divisions with a long-term holistic policy aimed at establishing India's links

with the Indian diaspora as a constituency that can be tapped into for the benefit of the socio-economic development of the country.

Chapter 3 by Rupa Chanda and Deeparghya Mukherjee analyses skilled labour mobility between India and the EU in the context of bilateral investments flows. It shows that mobility from India to the EU is mainly driven by the need to address skill shortages in the EU countries, and to facilitate the offshoring of client processes to India. Taking the form of business visits, intra-corporate transferees and professionals working for the Indian subsidiaries of European firms, this type of mobility is mostly short-term. In an attempt to produce a better understanding of the investment and labour mobility linkages between India and the EU, the authors examine immigration regulations and entry schemes for skilled professionals to the EU and they present a detailed analysis of country-specific visa regimes for India and the EU together with their respective problems and advantages. Even though India and the EU have both liberalised their investment regulations, the authors argue that both sides need to take further steps in order to facilitate increased skilled migration and business-related flows.

Migration and its linkages with socio-economic development in the countries of origin have become increasingly important in the development cooperation schemes of European countries. **Chapter 4** by Metka Hercog focuses on host country policies and environments in four European countries (France, Germany, the Netherlands and Switzerland), and she seeks to identify major issues in the evolution of the official discourses on migration and development linkages. In the context of skilled migration and development, this is important in the sense that institutional structures and environments in host countries influence the opportunities that diasporas have to gain relevant expertise as well as their ability to mobilise and engage in home country development. While all the studied countries have experienced considerable progress in their policy options in the area of migration and development since the late 1990s, all of them are still at a testing phase and they have not developed a consistent approach as yet. The author argues that national interest is often at the centre of the policies of the host countries.

Chapter 5 by Ana Mosneaga focuses on international student migration, which is increasingly regarded as a sub-class of talent mobility within a globalising knowledge economy in which a highly educated workforce is seen as a prerequisite for sustained growth. Focusing on European destination countries within the supra-national contexts of the OECD and the EU, the author examines the processes that shape international student migration as the nexus point where the tri-juncture of the globalisation of higher education, the global competition for talent and national migration management practices all converge. The chapter outlines a wider context in which the empirical findings related to the migration and mobility of international students should be placed, within the framework of the current understanding and discussions about the trends that make up this tri-juncture. The author highlights the inconsistent policy outcomes that are the result of deep-rooted tensions in the interaction between the different agendas of higher education globalisation, talent attraction and migration management.

Part 3 of the volume, *Empirical Evidence and Policy Implications*, presents new systematised empirical evidence on Indian skilled migration and development, from both the diaspora based in European destination countries and returnees back in India. This part analyses areas such as migration policies and management; knowledge transfer mechanisms; host country environments and return plans; development aspirations and impact; return migrants' entrepreneurship; gender migration, return and development. The chapters included in this part provide specific policy recommendations for the countries concerned.

The complexities of migration research make it necessary for scholars to adhere to a diverse range of methods when approaching their topics of interest. Umesh Bharte's chapter ([Chap. 6](#)) provides an overview of the methods used in India and Europe for our research project on Indian skilled migration. It discusses the characteristics of the sample and the sampling procedure and tools used in the study; it explains how the data were collected in Europe and in India. The author shows the original nature of this investigation given that it offers a complementary twofold perspective—country of origin and countries of destination—in one single study, and it simultaneously observes three sets of highly skilled Indians: diaspora, returnees and non-migrants.

[Chapter 7](#) by Umesh Bharte and Rashmi Sharma looks at the different programmes and policies that the Indian government has implemented to encourage engagement by the Indian diaspora in national development strategies. At an empirical level, the authors observe the views and suggestions of both skilled Indians abroad and returnees in terms of what needs to be done in order to create an enabling setting for diaspora engagement. They conclude that the Indian government needs to build a relationship of trust with the diaspora and to create an environment that can harness the positive impacts.

Focusing on the significance of world knowledge and the relevance of scientific cooperation for the advancement of science and technological innovation in developing countries, the chapter by Jean-Claude Bolay and Gabriela Tejada ([Chap. 8](#)) analyses the opportunities and uncertainties of globalisation in terms of the factors that limit the distribution and fair use of knowledge between the North and the South. The authors place scientific diasporas at the centre of the discussion, and they take the case of India and its relationship with Europe as an example. The chapter includes a qualitative empirical analysis of the experiences and views of Indian students and researchers in Europe and of those who have returned to India, as well as the views of some key informants. This helps to shed light on some of the specific mechanisms that can be used to channel knowledge transfer and identify some of the factors that are necessary to provide benefits for India.

In [Chap. 9](#), Metka Hercog and Md. Zakaria Siddiqui examines individual and host country factors that influence the return plans of Indian skilled migrants living in four European continental countries: France, Germany, the Netherlands and Switzerland, whose institutional settings, language and culture are very different from those of the usual Anglo-Saxon destinations. This original focus is important as returnees from these countries can bring new information and skills that can help diversify the Indian economy. Using primary data from Indian skilled

professionals and students based in the observed countries, the authors aim to discern the influence that migrant's position and experiences in the host country have on return plans. They conclude that return is not associated with dissatisfaction with working and pay conditions abroad but rather it is a sign of unsuccessful integration in the host society at the social level. An important implication of this result, with special relevance for the studied host countries, is that economic opportunities alone cannot foster the retention of skilled migrants.

Chapter 10 by Gabriela Tejada and Md. Zakaria Siddiqui looks at the institutional factors and mechanisms that encourage motivated skilled returnees and diaspora members to effectively share their experience and knowledge for the broad-based development of India. Using a quantitative and qualitative analysis of the perceptions and expectations of skilled Indians, the authors identify the individual and home country factors that influence both their development aspirations and the changes to their social and professional position once they return to India. The study shows that the desire to contribute to development is associated with several disadvantageous identities and that socially underprivileged people register the greatest positive effects in terms of social position. They also manage to attain a more influential role in society as a result of their foreign exposure.

Chapter 11 written by Perveen Kumar, Uttam Bhattacharya and Jayanta Kumar Nayek focuses on the transfer of knowledge, skills and financial resources, and it examines the contributions that skilled Indian returnees make to the development of India. Based on an empirical analysis of the experiences of skilled Indian returnees, the authors observe that their overseas exposure has significant implications at both an individual level, in terms of personal development and living standards, and at a professional level, through the contributions they make to their organisations within the specific sectors observed by the study. The authors argue that while the opportunities offered by India do play a significant role in attracting skilled Indians back, actual development leverage requires a channelling of the knowledge and expertise gained overseas into the local production processes and the provision of an adequate infrastructure.

In the last decade, India has seen many highly skilled workers returning to take up jobs in the country, but there is also a smaller but still relevant group of people who have returned to start businesses in the home country. The chapter by Radha Roy Biswas (**Chap. 12**) offers a qualitative study of Indian skilled migrant professionals who have become entrepreneurs in Kolkata and Bangalore since returning from the USA and the UK. These reverse migrant entrepreneurs bring with them a unique combination of transnational knowledge and assets, which they deploy in these entrepreneurial ventures, thereby helping to create jobs and generate other economic activity in India. Due to the high level of personal and professional investment they bring to their decision to return and start a business in India, they are likely to see this decision as a permanent one. The study provides a better understanding of the motivations, trajectories and experiences of these entrepreneurs and it highlights the enablers and difficulties of their resettlement processes.

In **Chap. 13**, Jayanti Kumari and Rashmi Sharma look at migration from a gender perspective and they focus on the particular characteristics and trajectories of female international migration with special reference to India. They present an empirical study of skilled Indian women who have returned to India from developed countries, examining their specific migratory behaviours and experiences. The authors provide empirical evidence to show that female returnees are more willing to participate in development activities after their return to India than their male counterparts. However, they also show the perceptions and anxiety of both foreign-educated and foreign-trained Indian women professionals who want to serve in the home country, and who simultaneously face many challenges in the workplace or within their families or societies.

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