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Final Report to the SNIS

**Migration, Scientific Diasporas and Development:
Impact of Skilled Return Migration on Development in India**

2. Executive Summary

Research plan

Studies addressing the flows of scientists, skilled professionals and students within the migration and development nexus have empirically shown the potential benefits of skilled mobility for the home countries. The development impact may come in the form of financial remittances and investment, knowledge transfer through diaspora networks as well as through eventual return to the home country. Given the strong links between return migration and development and the increasing number of migrants heading back to their home countries, the return phenomenon has gained momentum in recent years, with studies showing a variety of interpretations of this issue.

The study of diasporas has also garnered attention for the cause of socio-economic advancement in those countries within the migration and development nexus in recent years, with scholars examining the linkages between migrants and their homeland. Different diaspora groups have attracted interest because of their ever-increasing global presence and their growing influence in negotiations at a national and international level. This is especially true for the Indian diaspora - the third largest after the British and the Chinese in terms of size and spread. Although members of the diaspora may not be physically present in their home country in the way return migrants are, nonetheless they can also provide benefits to the home countries through other crucial channels besides return, such as remittances and financial investments, work related knowledge transfer and the transfer of social capital.

Destination countries can make a contribution to shaping enabling environments in the form of policies, bilateral cooperation agreements and further institutional and structural settings that can enhance the transnational activities of skilled migrants in their home country. In this context, Continental European countries are faced with questions about how to attract and retain foreign talent while stepping up their cooperation with developing countries. With the official discourse claiming that attracting foreign talent should not be at the cost of a brain drain for the countries of origin, these destination countries represent a good case for studying the contemporary links between skilled migration and development. The global competition for talent and the internationalization of higher education, together with shortages of skilled labour in developed countries due to an ageing population and limits in labour force training for specific sectors, have all had an extensive influence on flows of the highly-skilled.

India represents a good example because of the high quality of its human resources and the fact that it is a significant source of skilled personnel for many countries around the world. OECD countries in general have seen an increase in immigration from India in recent years, and most of these migrants are highly-skilled Indians. Apart from the traditional emigration countries such as the US, Canada and the UK, in recent years other destination countries in Continental Europe, such as Germany, France, The Netherlands and Switzerland, have experienced a systematic increase in the inflows of skilled professionals from India, as a result of the adaptation of their migratory policies as part of their strategy to attract skilled personnel. The strategy to pull foreign human capital as an economic buffer to meet skills shortages in specific sectors has influenced the adaptation of policies, e.g., the European Union Blue Card Initiative, which is more flexible with offers of entry and residence for employment to skilled personnel, triggering a surge in skilled immigration from India. In addition to recruitment and job opportunities, there has been an increase in the number of skilled Indians emigrating through the academic stream as students. The retention of Indian students as long-term skilled workers for national labour markets after completing their studies is noticeable in the European destination countries. Hence, student mobility should also be included within the context of skilled migration, as it is often a precursor to labour migration taking place as a consequence of specific international student policies becoming tools in the international competition for skilled persons. Another trend observed in Indian migration in recent years is the rise in the number of skilled Indians opting to return to their home country.

Contemporary discourse on migration and development is starting to consider the agency role of both diaspora communities and highly-skilled returnees on equal terms, and we can observe how several countries of origin have been introducing special measures both to engage with their diaspora and to attract their highly-skilled personnel back home.

However, at an academic level, very few approaches have focussed their attention on the role that highly-skilled returnees and diaspora communities play in home country development in one single study. Our research into Indian skilled migration and return aims to fill this gap by offering an empirical investigation of these two components. While India is seen as a country that has benefitted from reverse flows of investments, the world's highest remittances and expertise partly acquired abroad, it lacks a comprehensive understanding of the various hindrances and drivers that influence the process of transferring the accumulated knowledge and resources of skilled Indians in destination countries and of skilled migrants who return to the home country.

The lack of a systematic study on the contribution of both Indian highly-skilled returnees and diaspora to development in India provided the rationale for the project. The purpose of this research project was to broaden the knowledge-base and promote policies to establish links between return migration, diaspora and development in the home country. The two major objectives of the study were: to examine the development impact of highly-skilled return migration in India; and to document the perceptions of Indian professionals and students residing in the selected European destination countries with regard to their potential development role vis-à-vis India. The study sought to answer the following research questions. On the Indian side: What are the motives behind the return of skilled Indians? What is their current employment situation in India? How has the international exposure of skilled Indian returnees affected them professionally, economically, and socially? To what extent do skilled Indians influence development in India through investment, knowledge and skills transfer, and their social impact upon return? On the European side: What are the migration motives that bring Indian professionals and students to continental European countries? What are their current employment/study situation and their experiences there? In what ways are skilled Indians engaged in development activities in India through planned return, remittances and investments, and knowledge transfer?

To address these questions, the study draws on data that was collected simultaneously in the host and home countries between 2011 and 2012. On the one hand, we examined skilled Indians in four European destination countries (France, Germany, The Netherlands and Switzerland) while on the other, we studied skilled Indian returnees in the home country. In applying the framework of diaspora contributions as well as return channels to study the impact on India, the research draws on qualitative and quantitative research methods consisting of policy analysis, in-depth interviews with key experts and skilled migrants, and two major data sets collected between 2011 and 2012 through two complementary surveys designed specifically for this study. In the first survey, which was hosted on line, Indian scientists, students and skilled professionals in the selected European destination countries were asked about their motivation for emigrating, their experience in the host countries, their links with their home country, their future plans and their perceptions of their potential to contribute to the development of India. In the second survey, skilled Indian returnees were asked about their experience abroad, their motivation to return, and their experience upon return (their perception of their current professional and socio-economic situation, recognition of the skills and experience they gained overseas and the change in their position in society, the difficulties experienced in the dynamics of transferring the skills they gained abroad, and their intentions with regard to participating in the development process of the home country). This survey was applied on a face-to-face basis in six field work locations: Kolkata, Delhi-National Capital Region (Delhi, Noida and Gurgaon), Hyderabad, Bangalore, Mumbai and Pune. Along with geographical selection, importance was also given to those sectors that, on the one hand, experience skills shortages in destination countries, and, on the other hand, absorb significant numbers of return migrants in India.

The sectors chosen were - information and communication technologies (ICT); finance and management; biotechnology and pharmaceuticals; and academia in the fields of science and technology. For the sample in India, we also included the medical sector, albeit doctors only. The data was controlled by a group of skilled Indians with no international exposure (non-migrants). The first survey was answered by 878 skilled Indians abroad and the second by 673 skilled Indians (527 returnees and 146 non-migrants) in India.

Main results and their policy implications

The comparison of the experiences and perceptions of returnees and non-migrants in India provided a mixed picture of the perceived impact of return on development in India – some are positive, others indifferent. Out of the four channels of development - physical return, remittances and investment, knowledge transfer, and social impact - knowledge transfer was found to be the most important for highly-skilled Indian returnees. Returnees from the academic sector usually transfer knowledge through their research contribution, whereas returnees from the ICT sector contribute to improving the work culture and institutional environment as a result of their exposure abroad. However, there are several barriers related to the institutional, structural and attitudinal factors that hinder the transfer of knowledge. Furthermore, we observe that a large part of the remittances was spent on routine family related needs, leaving little for long-term investments. Patterns of spending by returnees and non-migrants were found to be similar, as both groups preferred to spend on housing and consumer durables.

With respect to skilled Indians in Europe, we observed that the mobilization of migrants' resources depends on the environment that they are exposed to in the host countries, as well as the policies and structural settings that these countries have to offer. It turns out that with low numbers of Indians in Continental Europe compared to the traditional immigrant countries, it is relatively more difficult to get involved in community groups, associations and networks, which are central to the success of long-distance collaboration. Our study shows a general low level of engagement in the local environment as well as with home-based organizations, and this calls for a further commitment to get the skilled diaspora involved so that they can develop further capacities during their stay abroad. Furthermore, Indians abroad find it difficult to involve themselves in institutional networks as outreach of these networks is often limited to selected groups and lacks participatory and inclusive approaches. Diaspora institutions should avoid creating insider groups.

While skilled Indians in destination countries are satisfied with the working and educational environments in overall terms, there is less satisfaction in terms of their social surroundings. Skilled Indians have high hopes for their migration project and its effect on their career and their academic progress. While many Indian students and professionals plan to return to their home country, they wish to benefit from an international working experience before going back. Indian students in science and engineering disciplines in particular are more likely to continue working in these countries upon completion of their studies, especially in sectors where there are labour shortages. The desire to contribute to the development of India is quite pronounced among people in academia, especially those who have been abroad for a short time. Even though Indians see the regional and national development of their home country as something that is very important, quite often they do not know how they can personally contribute, or they lack trust in the necessary structures in India.

Accordingly, personal enthusiasm and efforts should be met with an enabling environment and with supportive policies from both sides, making it easier and more inviting for individuals to participate in institutionalized collaboration. Hence, it can be argued that the ability to mobilize is a crucial factor in terms of enabling diasporas to function. Also, a majority of Indians skilled migrants (and returnees) were found to have little knowledge/awareness of the varied initiatives undertaken by the Indian government to engage with its diaspora. The government of India may wish to improve communication about its policies for the diaspora community.

Physical return was widely perceived by skilled Indians abroad as a necessary condition to be able to transfer knowledge. In fact, Indian students and researchers in Europe link their development aspirations to their return plans and believe that Indian society can benefit from their scientific networks and expertise, but results of Indian data show that returnees face a number of obstacles within the local system once they are in India. Some of the obstacles that we identified in this study are local work culture, resistance to change, lengthy bureaucratic process, and lack of suitable infrastructure. Such obstacles have implications for employers as well as policy makers. Further, migrants' mobility plans are determined by both personal and structural conditions. Opportunities available and perceptions of the environments in both the home and the host countries determine migration decisions, including the possible return to the home country. Return intentions of skilled Indians and those actually doing so may increase if they believe India can provide an enabling economic environment with adequate career and future prospects. In addition, the government of India does not have a policy to engage with and support skilled returnees to organise themselves in networks. Thus, the necessary supportive initiatives should be put in place.

A large part of return migration seems to be primarily driven by the employers as most of the returnees in the present study had gone abroad on short-term projects/assignments where return was an inherent part of their work contract. Migration policy should therefore take note of this particular kind of short-term project specific migration to capitalize on its development effects for India. One of the important factors that induced return was family; a significant number of returnees came back to reunite with their families and found themselves professionally 'frustrated'. Over time, the average length of stay abroad for migrants has been declining, leading to individual migration instead of family migration. Keeping this in mind as an outcome of temporisation of migration, immigration policies that are geared at retaining talent should consciously promote measures which facilitate family migration rather than individual migration. We observed also that the majority of returnees (as well as non-migrants) preferred to locate themselves in the selected cities in India because these cities offered superior educational and research opportunities and provided a better cosmopolitan environment commensurable with the cities of the developed destination countries. Accordingly, in the present study, return has been found to be induced by the pull of emerging employment opportunities in those cities. Enhancing employment opportunities along with improved infrastructure in smaller cities and towns in India should therefore be a policy priority to channelise return migration for a balanced regional development.

Finally, minority groups express higher commitment to development of the home country, which was found likewise for women, religious minorities as well as for scheduled castes. In order to promote human resource development among the disadvantaged communities in India, European countries should aim at designing policies giving preferential treatment to candidates from these communities; for example by targeted scholarship programmes, admission policies at universities and educational institutes and by adopting equal opportunity policies suited to Indian social realities.

This implies that knowledge transfer by these people would directly affect development among most needy communities as they are intimately connected to disadvantaged social groups of India. Thus, it can promote a balanced development in India.

Match between research results and initial expectations

The purpose of our research project of widening the knowledge base and promoting concrete recommendations to enhance links between return migration, diaspora and development in the Indian context were in scientific terms fulfilled with our research results. On a more specific level regarding the research questions that the study sought to answer, it was on the issue of examining the extent of the development impact of skilled Indian returnees and skilled Indians abroad where our initial expectations were not completely fulfilled. There are two reasons for this. Firstly, it was difficult to identify the social impact of skilled Indians due to the multiple facets of social influence which is difficult to capture through our study.

The developmental impact of remittances was also difficult to capture because of the reluctance among the returnees to reveal their financial information, and also because a significant proportion of remittances go to routine household items and other consumer durables leaving negligible amounts for long-term development spending. Secondly, the study focuses only on individuals' perceptions of and aspirations in regard of development impact, and does not include the perception of stakeholders influenced both by the larger society and by their immediate circles (family members, employers, colleagues, students). Hence, the study could further benefit from examining the perception of influenced stakeholders.

At the operational and implementation level, we faced certain limitations and methodological constraints during the course of the research that we initially did not expect and which influenced our analysis. In the sampling strategy in Europe, we were more successful in certain countries which led to an underrepresentation of responses from skilled Indians in Germany, whereas for the sample studied in India, we had few responses from the pharmaceutical industry and the financial and management sectors due to difficulties in accessing respondents. In all the sectors except academia, it was very difficult to arrange appointments with returnees and non-migrants through formal channels because of entry barriers within their organizations. A majority of respondents were contacted through informal channels and surveys were completed within a sub-optimal duration of time. Accordingly, respondents belonging to different groups had different levels of involvement with regard to responding to similar questions in the survey, and this needs to be considered as a limitation of our study. Another selection bias that this survey may have faced is based on the snowball factor. Since our sample depended initially on our own acquaintances and the acquaintances of the former, it may have suffered from having many respondents with a similar point of view. Also, the limitations of the survey in terms of data collection did not allow us to use standard econometric techniques. Therefore we restricted ourselves to basic exploratory data analysis. These limitations restricted the scope and the chances of extrapolating the results of the present study to other situations. Therefore, the findings of the study should be used with caution when making generalizations. Despite said limitations, it should be stressed that beyond the value of the findings of our study for the discipline and the policy discussion, the study itself has two unique, noteworthy methodological strengths: the simultaneity of our sample, which includes diaspora, returnees and non-migrants alike; and the two-fold complementary perspective, country of origin and countries of destination; in one single study.

Practical application of results

During the course of the research we had opportunities for informing the policy-making bodies in the concerned countries (both India and European destination countries). Preliminary results of the European part of the research were presented at the International Conference on ‘Diaspora and Development’, which was co-organized by the Ministry of Indian Overseas Affairs. Our message was that Indian professionals abroad cultivate strong trans-national links and express interest in development of India but there is low level of institutional contacts and lack of information about government schemes. We also disseminated our research and the provisional findings during our consultations with representatives of institutions in European destination countries related to science and technology policies, academic and professional exchanges, labour policies and of European consulates and embassies in India. Further, the two roundtables, in Delhi and in Geneva, were ideal platforms for disseminating the results and discussing policy implications with a variety of regional and local actors. In addition, the final report with main data collected and research findings and policy recommendations to involve skilled returnees and the scientific diaspora in the development process of India will be published in SNIS website.

Questions that merit further exploration

Longitudinal studies with large and diverse samples of skilled Indian migrants including other sectors (social sciences and academia in general and the social sector –NGOs and civil society at large) could be undertaken to examine more holistic linkages between return migration, diaspora and development within the Indian context. Studies could also be undertaken to compare private and public institutions/firms in order to gain a better understanding of skilled migrants’ contributions to each type of institution. It could prove useful to conduct further studies that go more in depth regarding social and cultural aspects, changing power relationships, and the impact that skilled migration has on family structures and caste rigidities. To broaden perceptions of return migration and its complexities and varied realities, there is a need to further focus on the migrants who continue to leave in search of better livelihoods, social security and cultural exchange. Thus, sociological and anthropological methods could be applied to obtain a more holistic view of Indian skilled migration and its development impact. In the present study, in relation to the migration and development nexus, the emphasis was only placed on highly-skilled Indian personnel; hence, comparative studies might also be undertaken to consider migrants from other skills categories.

Publications and activities

The following public events were organised to disseminate research findings:

- The seminar “Experiences in host countries and return plans: The case of highly-skilled Indians in Europe”, by Metka Hercog, was organized at ILO Headquarters in Geneva on 6 Dec. 2012. The objective of the Seminar was to present a paper on return plans of skilled Indians in Europe that will be included as a chapter in the book with the final results of the project. With an attendance of 25 persons, the Seminar gathered representatives from UN agencies such as ILO, IOM, UNHCR, UNDP, migration and development scholars, and the SNIS. The lively discussion showed the interest of the audience in our research methods and findings, and in the overall policy implications.

- A first Round Table was organized jointly by ILO-Delhi and JNU Delhi, on 4 February 2013, with the objective of discussing the relevance and implications of the research findings of our project in practical and policy terms. Participants included various stakeholders dealing with skilled migration and development relations. The draft version of the policy report resulting from the project was presented there. The report of the Round Table is available here: <http://goo.gl/XeGKI>
- A final Round Table was organized on 1 March 2013, at ILO Headquarters in Geneva. The objective was to discuss the policy relevance and the implications of the research findings with a variety of stakeholders who have an interest in skilled migration and the nexus between migration and development. The final policy report resulting from the project was presented at this event. Besides presenting empirical findings from the research project, specialists and practitioners gave in-depth presentations on different aspects of skilled mobility: policy trends, international student mobility, trade and investment links, philanthropic activities, scientific diaspora networks and institutional collaboration. Comments and suggestions from the audience, either as expert opinions or personal experiences, contributed to the interpretation of the research results. The report of the Round Table is available here: <http://goo.gl/BFMtO>

Our research findings were presented and discussed in the following international conferences and global meetings during 2011 and 2012:

- “International Conference on Diaspora and Development” (New Delhi, 7-8 September 2011). A paper was presented, providing a comparative analysis of host country environments (migration policies and institutional settings from France, Germany, The Netherlands and Switzerland) for skilled Indian diaspora engagement. The paper was selected to be part of the publication resulting from the Conference: "The link with a home country: A comparative analysis of host country environments for diaspora engagement"; by G. Tejada, M. Hercog, Ch. Kuptsch and JC. Bolay, "Global Diasporas and Development: Socio-economic, Cultural, and Policy Perspectives"; S. Sahoo and B.K. Pattanaik (eds.); Springer, New Delhi; forthcoming 2013.
- “UNESCO Tech4Dev International Conference 2012” (Lausanne, 29-31 May 2012). The poster: “Scientific mobility and reverse knowledge transfers” by M. Hercog and G. Tejada was presented. It discusses the mechanisms for channelling human capital and factors that are relevant for the creation of positive knowledge spill-overs, based on interviews with skilled Indians in Europe and returnees to India.
- “Oikos Young Scholars Economics Academy” (Geneva, 19-24 August 2012). The paper “Experiences in the host countries and return plans. The case of highly-skilled Indians in Europe” was presented by M. Hercog. The paper examines the stay/return intentions of highly-skilled Indians in new destination countries, and explores the impact of structural differences between host countries on skilled Indians’ experiences and return plans.
- “International Conference on Research for Development ICRD 2012” (Bern, 20-22 August 2012). The paper “Transferring skills upon return. Matching aspirations in the host countries with reality back in India”, by G. Tejada and Z. Siddiqui was presented in the workshop “Enhancing the Positive Effects of Highly-skilled Return Migrants”. The paper discusses the development expectations of skilled Indians abroad and whether these materialise when they return to India.

- “Workshop on migrant integration, transnationalism and return” (Rotterdam, 25-26 October 2012). The paper “The Links between Transnationalism and Migratory Space: Insights from the Study of Skilled Indians in Switzerland”, by M. Hercog and G. Tejada was presented. The paper presents a qualitative analysis aimed at understanding the migratory space of skilled migrants with a particular focus on the influence of migratory plans.
- Prof. Binod Khadria and Dr. Perveen Kumar, members of our research team from JNU, participated at the sixth Global Forum on Migration and Development (GFMD) which took place in Mauritius on November 19-20, 2012. The GFMD gathered about 140 representatives from around the world to discuss issues related to labour migration, protection of migrants, promotion of their rights, and development. Our study benefitted from a number of observations made by the delegates at the forum such as the emphasis on the opening up of more formal channels for the recruitment of international migrants, putting in place a mechanism to collect data about various sorts of migrants for informed policy decisions, creating more avenues for migrants and diaspora to invest in the countries of origin and to harness their development potential, etc.

We plan to present further results of our study in the following international conferences in 2013:

- Conference on *Diasporas, Development and Governance in the Global South*, organized by the Balsillie School of International Affairs, Waterloo, Ontario, Canada, on 26-29 May 2013. A presentation will be made by Dr. G. Tejada on “Knowledge transfers by diaspora networks and return: from development aspirations to realities in India”.
- International Conference on Science and Technology for Economic Diversification (INSCITED), organised by the National Institute of Higher Education, Trinidad (NIHERST) and India’s National Institute of Science, Technology and Development (NISTADS); Port of Spain, Trinidad, 5-7 June 2013. A presentation will be made by Dr. G. Tejada on the general topic of “Leveraging the diaspora to reverse the brain drain”, with the case of study of India.

The following publication was completed in 2012:

- “The link with a home country: A comparative analysis of host country environments for diaspora engagement”; Tejada, G., M. Hercog, Ch. Kuptsch and JC. Bolay, in “Global Diasporas and Development: Socio-economic, Cultural, and Policy Perspectives”; S. Sahoo and B.K. Pattanaik (eds.); Springer, New Delhi; forthcoming 2013.

The following publications are foreseen:

- A Final Project Report of our study with the methodology, data description, main findings and their related policy recommendations will be published on line as a working paper, through the SNIS web site.
- The book: “Skilled Indian Migration and Development: To Europe and Back”, edited by the 4 main partners of the project (G. Tejada, U. Bhattacharya, B. Khadria and Ch. Kuptsch) will be published by Springer India. The book includes both theoretical and empirical chapters; it will comprise 16 chapters. The contract with the publisher has been signed and all teams will work on the different chapters. The final manuscript will be ready by 30 August 2013 and the book will be released in early 2014.
- The paper: “The Links between Transnationalism and Migratory Space: Insights from the Study of Skilled Indians in Switzerland, by M. Hercog and G. Tejada will be submitted by August 2013 for consideration of the editors for the special issue on “Highly-skilled migration: Risks and economic crises” of the journal *Population, Space and Place* .