

Colombian, Indian and South African Scientific Diasporas in Switzerland Concluding Remarks and Implications for Policy and Research

Gabriela TEJADA, Ibrahima Amadou DIA and Francelle KWANKAM¹

1. Introduction

Engaging diaspora communities in home country development is one of the priority issues in the current international debate on migration and development. An analysis of diverse contributions made by scientific diasporas to their countries of origin is the main theme of the present volume, which looks at the case of Switzerland as a destination country for skilled migrants from Colombia, India and South Africa. The objective is to provide some insights and some guidelines for policies that can promote linkages between migration and development, specifically in terms of how to capitalise on scientific diasporas as a development resource based on primary information. Previous chapters have highlighted theoretical and conceptual issues related to diasporas, scientific cooperation between developing and developed countries and specific studies of scientific diaspora communities from Colombia, India and South Africa.

This final chapter provides an overview of the main findings of the study followed by a summary of the three case studies. The final sections highlight relevant policy implications and areas for further research.

1 We have greatly benefited from the helpful comments and suggestions of Piyasiri Wickramasekara, Senior Migration Specialist at the International Labour Office (ILO).

2. Diasporas on the Current Migration and Development Agenda

For more than a decade, globalization has accelerated the flows of international migration and the mobility of qualified labour in particular. A major concern arising from this situation is the migration of scientific and professional elites from developing countries as they go in search of career and professional development opportunities. This has long been considered a loss or drain for the countries of origin while it has been generally assumed that the developed destination countries are the only beneficiaries of this situation. However, this view of skilled migration in terms of brain drain does not take into account the positive feedbacks for the countries of origin in the form of brain exchange and circulation.

The previous chapters have clearly established that the diaspora concept has moved well beyond the historic notion of the dispersion of an ethnic group outside its country of origin, and it has been shown that the term has now acquired a broader meaning with globalization and transnational forces and actors.

Today, recognition of the heterogeneity of diasporas is crucial to understanding their role and contributions (see the chapters by Caloz-Tschopp and Wickramasekara in this volume). When profiling diasporas, it is common to consider the level of education and qualifications of their members. On this basis, some diaspora members have been categorised as highly skilled or scientific or intellectual diasporas. It is estimated that one out of every three migrant workers in the world belongs to the more skilled category. At the same time, it is important to recognize that all diaspora members are capable of making contributions to their home countries. Indeed, both skilled and low-skilled diaspora members make contributions in the form of transfers of financial remittances, demand for home country goods and services, skills and technology transfer, capital investments and individual and collective philanthropy.

This is why quantifying diasporas and establishing their basic profiles is such a high priority, since it allows us to identify the most appropriate means of getting them involved in initiatives that benefit their countries of origin. Indeed, several recent global initiatives and research projects have recognized the potential of diasporas to benefit their countries of origin through various transnational practices. All of these recognize the importance of identifying the relevant channels and contexts that can have a positive impact on their initiatives.

Evaluating the contributions of the diasporas can lead to a triple-win situation, with the countries of origin, the countries of destination and the migrants themselves all benefitting from their engagement. At the same time, the role of

the diasporas should not be exaggerated as there can be a gap between the real contributions and the potential ones.

Building on the inputs of the different chapters, this book makes a significant contribution to the global debate in terms of concepts and definitions, building up profiles of the diasporas based on primary surveys, and quantifying some diaspora contributions to the home countries

3. Brain Drain vs. Brain Gain: Confrontation or Cooperation?

In the discussion on the value of scientific diasporas, which is the cornerstone of this book, the brain drain vs. brain gain debate may present two opposing visions. On the one hand, brain drain – the first of these two visions – stresses the substantive negative impacts on developing countries, emphasizing elements such as desertion, injustice, appropriation and the privatization of an extremely valuable public asset (knowledge) for the benefit of private interests. On the other hand, brain gain – the second vision (synthesized in the *scientific diaspora* option) highlights those scientific and professional elites as having the potential to generate benefits for development through creative actions. Both perspectives see the development debate in terms of the appropriation of human capital, training and education products, research or the transformation of science and technology, and as a consequence of all these, the appropriation of knowledge itself.

It is commonly accepted that progress in the level of education, the development of science and technological innovation are three key elements that feed knowledge as a key catalyst for growth and poverty reduction. International cooperation presents itself as a promising mechanism that can promote social transformations in emerging and developing countries. In this context, the book looks at the ways in which the structural inequalities, which lead to greater disparities at the global level in terms of access to technological innovations and knowledge, can be lessened by making use of appropriate and clear scientific cooperation policy, resulting in successful scientific partnerships.

Investment in experimental research and development is the main driving force behind innovation. At a global level, there is a very wide gap in terms of investment in experimental research and development (R&D) and most investment in this area is concentrated in the hands of a select group of a few industrialized countries. As a result, many developing countries, which invest little in this area, find themselves dependant on innovation, which is led and managed by the North and this leaves them in a disadvantageous position.

This situation can also be seen in the number of researchers involved in the scientific sector at a world level, as researchers from a handful of industrialized countries account for almost two thirds of all researchers on the planet. It is for this reason that international scientific cooperation is viewed as a promising alternative for advancing the development agenda of the emerging and developing countries. In this process, the scientific diasporas have the potential to play a positive and pioneering role by becoming bridges that can unite the countries of destination and the countries of origin through innovative and creative mechanisms, taking advantage of their resources and their position in the countries of destination. This is how scientific and professional elites can become key actors for development cooperation.

When analysing the links between scientific diasporas, migration and development, we need to define development in a broader sense to embody the vision of human development – which does not only include economic aspects, but the social and cultural elements of the lives and activities of people as well – as the predominant goal and vision.

The actions of scientific diasporas are carried out within a context in which transnational and non-state actors acquire importance and prominence and where the interests of public authorities confront private interests in relation to development. Even though diaspora members are becoming increasingly accepted as a creative force in international cooperation, and development cooperation in particular, they face several obstacles, which are related to the inequalities between the countries and the inequalities of opportunities that they have to face, both within the environments of the country of origin and when they find themselves in new situations (in the countries of destination). These obstacles limit their mobility options and their possibilities to create a positive impact in their communities of origin.

It is for this reason that the concept of human rights becomes important when speaking of scientific diasporas. More and more attention is being paid to the human and labour rights of international migrants at a global level. Indeed, the current international debate on migration and development emphasizes the fact that development must benefit not only the countries of origin and destination, but also the migrants themselves. According to the ILO,

...gains from migration and protection of migrant rights are indeed inseparable. Migrant workers can make their best contribution to economic and social development in host and source countries when they enjoy decent working conditions, and when their fundamental human and labour rights are respected (Mr. Juan Somavia, Director-General, International Labour Office).²

2 <http://www.ilo.org/public/english/protection/migrant/download/dg_ilo_rt3_2006.pdf>.

4. Research Opportunities: a Project on Skilled Migration in Switzerland

The growth in the scale and complexity of international migratory flows has motivated researchers and policy makers and planners to look for strategies that can contribute to minimizing the negative effects and maximizing the positive impacts of migration. As far as skilled migration is concerned, the growing knowledge gap justifies the search for alternative methods that can deal with the migration of skilled students, scientists and professionals, and reverse brain drain by promoting the value and potential of the contributions of the scientific diasporas to scientific, technological and socio-economic development in the countries of origin. In recent international debates and forums, there has been a growing optimism on the role that diasporas play as agents of development.

In looking for ways and means to maximize the contributions of skilled migrants, it is important to re-examine the role of scientific diasporas by promoting research into their experiences, environments, interests and achievements. In fact, the research into migration and development carried out over the past few years has highlighted the need to generate first-hand information through empirical studies that can show the functioning of the brain gain mechanisms and other transnational practices promoted by the scientific and professional elites.

However, empirical evidence in this area remains scarce. In specific terms, there is a need for research into the role that scientific diasporas play, their situation in the countries of destination, their interactions with the communities of origin and the brain gain and circulation mechanisms adopted, as well as the conditions that are necessary to create a tangible and sustained impact.

A desire to advance knowledge in this area and identify the opportunities of skilled migration was the main aim of the research project “A Swiss Network of Scientific Diasporas to Enforce the Role of Highly Skilled Migrants as Partners in Development”, the results of which are presented in this book. The project generated primary data and information through empirical research carried out between 2006 and 2007. An effort was made to translate the results into proposals for specific policies so as to facilitate the positive contributions of the scientific diasporas.

The field research included case studies of skilled migrants from India, Colombia and South Africa in Switzerland – an industrialized country of destination. Switzerland is also a country which has become an important destination not only for skilled migrants and international students, but it also occupies a leading position in terms of the academic level of its immigrants. As a

country which brings in human capital, Switzerland is currently faced with the challenge of capitalizing on the resources resulting from the investment in education and training made in the skilled immigrants' countries of origin. If Switzerland benefits by absorbing this critical mass of human capital from abroad, what is the return for the countries of origin of these academic and professional elites who migrate into the country? What are the risks and opportunities for the countries of origin, if skilled migrants come from developing countries?

This book shows how unequal exchanges and power relations are not only obvious in the circulation of knowledge, but it also shows how they are present in the knowledge production systems themselves and in the use of these systems, as well as in the appropriation of the cognitive capital of individuals, institutions, countries and networks within the current context of globalization. The book also illustrates how the active presence of skilled migrants from developing countries in Switzerland transforms preconceived ideas of migration, development, training, science and technology, as well as migratory policies. Both Swiss and international policies can influence the democratization of knowledge production, while at the same time they reflect the nomadic view of qualified scientists and professionals and the value attributed to the diasporas as well as the possibility of creating an impact in their communities of origin.

In presenting the results from the three case studies on qualified migrants from Colombia, India and South Africa, who have chosen Switzerland as their country of destination, this book shows some ways in which the public policies (of the country of destination as well as of the countries of origin) can move forward in terms of recognizing the value of diaspora resources and maximize their potential.

5. Colombian, Indian and South African Scientific Diasporas in Switzerland: the Empirical Evidence

The case studies, which cover 76 skilled migrants from the three developing countries presented in this book, illustrate the value of their transnational practices for the home countries. The research was based on field work involving in-depth face-to-face interviews, which used open semi-structured questionnaires to elicit information from the sample of skilled migrants from three countries (Colombia, India and South Africa) living in Switzerland. These interviews made it possible to gain a better understanding of their conditions, practices and experiences, as well as their perceptions in three main areas: 1) the

reasons and motives for migrating, migration paths and living conditions in Switzerland; 2) links with their countries of origin and brain gain mechanisms and other transnational practices they have put in place; and, 3) enabling policies and conducive environments that support skilled migrants as development partners.

The following comparative analysis of the three case studies helps us to identify the common elements as well as the specific elements of the reasons for migrating and the living experiences of skilled migrants from the three countries. It illustrates specific ways in which skilled migrants from the three countries live in the host country while maintaining links with their homelands. In doing so, they become distinctive transnational subjects and transcend traditional national identities. This analysis also offers evidence of the obstacles the migrants face and the positive elements that could enable their brain gain practices, social remittances, and further transnational endeavours to have an impact on the development of their countries of origin.

The comparison of the three case-study countries shows the different development options available to diaspora groups. Even though each group is an individual case with its own specificities, there are nevertheless similarities in the way these skilled migrant communities act on behalf of their home countries and in the good practices that can be derived from the experiences of each group.

5.1 Migration: Push and Pull Factors

The case studies reveal obvious similarities in people's motives for migrating. Respondents from all three countries – Colombia, India and South Africa – mentioned a mixture of reasons for leaving their country of origin. These included professional advancement and professional relocation, higher wages, further studies, training and scientific advancement at renowned academic and research institutes, along with the search for better opportunities and a better quality of life or family reunification.

Indeed, the evidence from the field research shows that international mobility is an intrinsic part of the scientific world, since exposure to the international arena is essential for scientific as well as personal advancement. Moreover, the density of the international labour market within various international organisations and private sector headquarters in Switzerland, as well as the country's reputation for science, academic excellence, and a high quality of life make it attractive to students, scientists and skilled workers from countries in the South.

The attractiveness of Switzerland's prestigious scientific and technological research institutes, which are at the forefront of technological progress, is one of the primary attractions for skilled Indian scientists, students and researchers, who are looking for scientific and academic advancement. Bilateral research opportunities and student exchange programmes also provide an incentive for skilled migrants to move. This is predominantly true for India and Colombia and for South Africa to a lesser extent. In particular, the long tradition of scientific cooperation between India and Switzerland, together with the excellent reputation that the Indian higher education system enjoys within Swiss academic and research institutes, has led to greater scientific and student mobility from India to Switzerland than from Colombia or South Africa.

Family reunification and marriage were further important pull factors that could be identified in all three cases, illustrating the important effect that personal and family relations have on migration.

Social contacts, networks of professionals, and scientific linkages can be crucial to the migration process. Respondents from all three countries mentioned that their main source of information about scholarship or exchange programmes and opportunities for assistantships, scientific exchanges or jobs, were relatives, friends or acquaintances, who were already living in Switzerland.

The key push factors also included a feeling of insecurity in their home countries. Some variables involving the current political, social and economic situation in the country of origin also played a role in the decision of skilled migrants to leave their home countries. Accordingly, while some Colombians cited civil war, violence and the insecurity fuelled by diverse social and political conflicts as the catalyst for going abroad, South Africans mentioned violence, a high crime rate and low security, along with scarce opportunities due to the legacy of apartheid, as significant push factors encouraging skilled nationals to leave.

5.2 Living and Working Conditions in Switzerland

Evidence from the three case studies on the working and living conditions of skilled migrants in the host country highlights contrasting first experiences, which are mainly related to their reasons to migrate, and these in turn influence the extent of their integration into social and professional life in Switzerland. Hence, skilled migrants supported by scholarships and work contracts generally have a more positive first experience in the host country and greater possibilities of integration than those who have come for socio-economic reasons or for family reunification and marriage.

The field research highlighted various constraints such as the non-transferability of degrees (diplomas and qualifications not being recognized), the higher cost of living, problems adapting to a new culture and climate, trouble obtaining a work permit, problems making friends, being away from their families, and discrimination and racism upon arrival or during their stay in Switzerland (though respondents from Colombia and South Africa mentioned these constraints more often than Indians did). Citizens holding a passport from a developing country working in protected sectors such as medicine generally had difficulties to obtain a work permit.

As far as gender roles are concerned, most skilled Colombian, Indian and South African working mothers found it hard to balance their responsibilities as mothers and professionals in Switzerland, and they were unhappy about the predominantly conservative attitude within Swiss society, whereby women are expected to stay at home to take care of their children. The rigidity of the Swiss school system, the lack of affordable domestic care, the lack of places at day-care centres, and their remoteness from family and other forms of social support were some of the issues that women mentioned as obstacles to reconciling their professional and family responsibilities. Moreover, skilled women had even more trouble integrating themselves into professional life and/or study programmes, since they encountered significant obstacles when they tried to transfer their academic qualifications across international borders and find a job that reflected their skills level. Several women from the three case study countries mentioned that they felt that people were prejudiced against them and sceptical about their capabilities in their professional lives, simply because they were women and from a non-European country.

Language barriers were not generally seen a major professional hindrance for the interviewees from India or South Africa due to the fact that their mother tongue – English – is a working language in international organizations as well as in Swiss research academic institutes and multinational firms. Although some Colombians found that their familiarity with English was most definitely an advantage in professional terms, they had difficulties learning French – although most of those who came on scholarships had intensive French courses paid for by their exchange programmes. However, the migrants with the greatest difficulties were those who had to learn German or even Swiss German.

Respondents also mentioned that speaking one of the local languages was a prerequisite for being able to integrate themselves into the host society. Therefore, most respondents from the three case study countries took French and German language courses in order to cope better with social life in Switzerland.

Skilled Colombians, Indians and South Africans working at research and higher education institutions mentioned difficult working conditions – a heavy workload, stress at work, a high degree of competition, working in a very de-

manding sector, and a sense of isolation – as a contributing factor to their difficult first experience of the host country.

On the other hand, respondents from all three countries regarded their experiences in Switzerland as positive, interesting or even fascinating. Their positive attitude can be explained by such favourable circumstances as extended social networks and friendship, better professional and academic opportunities, language skills and their previous experiences as skilled migrants. Respondents from all three countries cited the respect for their privacy in their professional lives, flexible working hours and working conditions (part-time jobs), and the wonderful Swiss public transport system as positive aspects of the Swiss system that made it easier to strike a balance between work and family life. Similarly, skilled Colombians, Indians and South Africans recognized the quality of life and security in Switzerland as major assets in their own life and that of their family.

5.3 Integration in the Host Country and Transnational Identity

In general terms, the great majority of the skilled Colombians and Indians we interviewed mentioned that they felt comfortable living in Switzerland and they consider that they are well-integrated into Swiss social and professional life. In the case of skilled South Africans, it is worth mentioning that only about half of the respondents felt well-integrated into the host country and several of these said that they felt well-integrated professionally, but not socially. Those who did not feel integrated at all cited aspects such as not being fluent in an official language and not having much contact with Swiss people as the main reasons for this. While a small number of skilled South Africans felt partially integrated and comfortable living in Switzerland, they did not feel fully accepted. This concern was not mentioned by skilled Colombians or Indians.

For skilled Colombians, Indians and South Africans, social integration in the host country depends on an array of factors, including social and economic conditions, understanding and speaking one of the local languages, having opportunities to meet local people, having friends and social relationships, getting used to social and cultural realities, participating in public and local events, and having a job or suitable opportunities in the labour market. A few of those interviewed (mainly those working for international private firms or employees of international organisations) do not need to be socially integrated into Swiss society as their daily life is confined to a very international environment, especially in Geneva which is seen as a very cosmopolitan city and treated as a “transit city” by many. In addition, respondents mentioned that they do not have any time for social activities with local people outside work.

Moreover, some respondents mentioned that they suffered from cultural isolation and a lack of friends, and the feeling that they “could never be one hundred percent integrated into this country”.

The empirical evidence shows that institutionalised relationships, scientific and social contacts and linkages influence the status of skilled migrants from the three countries studied in Switzerland, providing sustained access to social resources, and thereby making it possible for them to integrate themselves into the labour market as well as socially. The portrayal of skilled migrants as “more able to integrate” in the Swiss state discourse on foreigners has certainly had a positive impact on the status of migrants from the three countries that were studied. Certainly, the differences in status granted to immigrants under current Swiss immigration policy, which prioritises immigration from the European Union (EU) while simultaneously authorising skilled migrants from non-EU countries to enter the country, has played an important role in this.

Furthermore, collective action by migrant associations significantly improves the status of skilled migrants. These associations have also become platforms enhancing collaboration and exchanges among members of the diaspora. In the Colombian and Indian cases, associations of migrants have proved useful both in terms of establishing and developing social and professional contacts and in providing linkages between skilled migrants, thereby enhancing their social capital in the host country. This is not true in the case of South Africans.

By becoming integrated in the host country skilled Colombians, Indians and South Africans have found it easier to implement their mid and long-term plans to give something back to their homelands. However, in all three cases, it is interesting to see how integration was found to be helpful for the development initiatives of migrants, but it was not a prerequisite. While skilled migrants’ social capital and status helped some of them to implement initiatives that could benefit their homelands, others were able to carry out similar endeavours without being well-integrated.

The transnational nature of (most) diasporas means that their members reside in a host country while also nurturing a sense of solidarity and links to their homeland. An ability to maintain this kind of dual frame of reference is a frequently observed aspect of diaspora life, since they constantly contrast their condition in their home country – “*there*” – with their situation in their host country – “*here*” in their daily lives. As the empirical data illustrates, the lives of most of the skilled migrants from Colombia, India and South Africa were simultaneously taking place “*here*” and “*there*” and many share a feeling of “*being at home away from home*”, maintaining a transnational identity that binds them to their home country and to Switzerland at the same time. These

feelings allow skilled migrants to create a type of identity that is composed of more than one specific physical space, enabling a new transnational sphere to emerge that is no longer dominated by direct contact and traditional proximity.

Furthermore, both skilled Colombians and skilled Indians emphasised their “feeling of Colombia” (or “feeling of India”), mentioning that their roots, culture and identity were important to them and independent of how integrated they were in the host country. In the Indian case specifically, this “feeling of India” is shared by most diaspora members – in terms of a sense of community that transcends their various linguistic, cultural and geographic realities – through Swiss-based Indian associations. In the case of Colombia, even though diaspora members share a “feeling of Colombia”, it was observed that skilled Colombians find it difficult to come together with fellow nationals who do not belong to the ‘same’ diaspora (skilled vs. non skilled). Indeed, there is evidence to show that social stratification very often occurs whenever Colombians in the diaspora meet. Accordingly, skilled Colombians are reluctant to meet members of circles of the Colombian diaspora outside their usual circles, and they do not trust them. This shows how the political polarization of Colombian society is reproduced in its diaspora.

For South Africans, the interest and longing for South Africa varies considerably. This depends mainly on the motives for their migration and the links with their country of origin and a sense of racial empowerment or disenfranchisement. In this case, different views were expressed about the sense of belonging to both the host country and the country of origin and it was shown that members of the diaspora do not share a sense of (transnational) identity. Some of the most committed diaspora members, who felt extremely integrated in the host country and who also held Swiss nationality, felt proud to be able to contribute to the development efforts of both countries; they demonstrated their transnational thinking and interests by mentioning that their feet were in Switzerland, but every day they felt as if they were somehow in South Africa as well.

Overall, in all three case studies, long-term migrants (as well as those who have settled permanently in Switzerland) are the skilled migrant groups that were most in favour of a dual sense of belonging or transnational identity. This illustrates that transnationalism is not a phenomenon linked to recent arrival with the tendency to disappear as part of a process of integration by migrants in the country of residence.

The evidence about skilled Colombians, Indians and South Africans in Switzerland reveals the extent to which migrant identities are influenced by their residential status and citizenship. Some skilled migrants who have dual citizenship testified to their multiple identification and loyalties. Over the course of time, skilled migrants from the three countries under study generally acquire

a more stable migrant status in the host country. This is mostly based on the length of their stay or on whether they have managed to find a stable job, but to a lesser extent, is also due to whether or not they are married to a Swiss citizen. It has been shown that a stable residence permit is a significant factor in terms of enabling skilled migrants to settle down, as it makes it possible for them to plan their mid- to long-term future and thus gives them stability. It might in turn encourage them to identify more with their country of residence and thus influence their feelings of integration and their transnational identity.

5.4 Brain Gain Practices and Positive Transnational Initiatives

Most of the skilled migrants from Colombia, India and South Africa who we interviewed maintain a close relationship with family and friends back in their homeland. Accordingly, they maintain frequent and systematic contacts and conversations with their relatives back home by email, telephone, VoIP applications such as Skype, and visits in both directions.

Many respondents are involved in international, local and regional associations and networks in diverse areas linked to science and technology and other knowledge-intensive sectors. These networks of contacts and valuable links and the strategic positions that many of them occupy in the international scientific and/or professional arena, could be potential assets for the economic, social, scientific and technological development of their home countries provided that adequate brain gain mechanisms are put in place and as long as they have the necessary support and an enabling environment in both the host country and the country of origin.

Initiatives and actions by skilled migrants in favour of their homelands offer evidence of mechanisms through migrants can have an impact on development and poverty reduction in particular. Skilled Colombians, Indians and South Africans tend to implement development initiatives in their home countries on an informal, one-to-one basis. These are mainly rooted in their personal ambitions and desires, although in some cases they are complemented by institutionally-organised collective action. When we analysed various examples of diaspora development initiatives, some common forms of activity and good practice could be identified from each community's experiences.

Colombian skilled migrants stressed the fundraising efforts that had been introduced to support local researchers, organisations and entrepreneurs, as well as the efforts made to obtain institutional recognition and support for their work to sustain home country development initiatives. Indian respondents discussed the creation of scientific and technological institutes and the facilitation of exchange programmes in academic and research institutions, while South African

respondents mentioned their efforts to share their business knowledge with their compatriots back home and establish university exchange programmes.

Some respondents from all three countries are engaged in initiatives that have a significant knowledge transfer and/or knowledge circulation component. This type of engagement includes giving lectures or training sessions and participating in scientific conferences and congresses during visits to their countries of origin. They may also carry out assessments for public bodies in key areas of development, accept advisory contracts with private firms, provide investigation advice to research and academic institutions on an informal basis, encourage exchange programmes for students and researchers, and provide support to NGOs, particularly through fundraising and the establishment of strategic contacts. Respondents also mentioned working with research and scientific institutes in their countries of origin and carrying out research projects there. Many of these activities of skilled migrants take place during temporary stays or short visits to their countries of origin.

For skilled Colombians in particular – mainly the more active members of the scientific diaspora in Switzerland – their contacts with the country of origin were related to systematic knowledge transfer activities, through which they maintain a level of permanent scientific cooperation with Colombia. The empirical research revealed more than 15 years of collaboration experiences between Colombian scientists and researchers in Switzerland and partners in the home country. These had mainly come about as a result of individual inspirations with hardly any institutional support and they have led to the creation (or reinforcement) of a critical mass in key fields of development such as the environment, ICTs or medicine.

In the case of skilled Indians, knowledge transfer and knowledge circulation activities were also generally carried out on a one-to-one basis rather than in any collective fashion, and they included knowledge-sharing via the internet, temporary stays as visiting lecturers or researchers, and the systematic exchange of information and scientific publications. In addition, skilled Indians participate in scientific conferences, training activities and seminars on an informal basis during private visits to their homeland.

Skilled South Africans stated that they cooperate with local counterparts in academic and research in sectors such as air navigation, business, management development, social activism, or public health. This is mostly on a one-to-one basis or under the aegis of South African institutes. Besides this, some skilled South Africans mentioned regional and international contacts in areas such as management development, compensation and reducing anti-black racism. Their knowledge transfer and knowledge circulation activities include sharing business information and knowledge with former colleagues working in the South African banking system, giving lectures during private visits, in-

roducing topics about South Africa into the Swiss curriculum, establishing and promoting student and lecturer exchange programmes into universities, and promoting indigenous communities through local tourism.

The evidence shows how skilled Indians, Colombians and South Africans are making a greater effort than ever to use their positions in Switzerland as professors, senior researchers, deans or directors of departments, as well as their wide scientific and professional networks, to initiate institutionally backed knowledge transfer and knowledge circulation activities. For example, in the case of India, these include the creation of specialised institutes in areas such as biotechnology, particularly the KIIT School of Biotechnology at the University of Orissa, which has enhanced local scientific and technological capabilities; the creation of a Master's programme in Switzerland with a strong Indian studies component; or exchange programmes with systematic visits by professors, researchers and students from one country to the other. One particular action by skilled Colombians is the design and promotion of the Colombian-Switzerland collaboration (COCH) project on agro-ecological models, which was signed at government level.

In the case of South Africa, a typical example is the contribution to the creation of the Centre for African Studies at the University of Basle, which carries out research, exchange and training programmes in African studies as well as relations with African universities. This centre has a significant South African focus and seeks to encourage exchanges between academics, teachers and students, as well as joint research projects.

Most of these activities have been carried out with the participation and/or involvement of the most active scientific diaspora members from the three case study countries. All these activities could prove very important in terms of strengthening scientific and technological capacity in the countries of origin.

R&D initiatives are an important brain gain mechanism. Within this perspective, skilled Colombian mentioned various activities involving the transfer of industrial technology and the design of the Alpha Bio 2000 project. The scarcity of specific applications for this project was mainly due to a lack of financial support or interest from the various partners involved. Another interesting initiative is the involvement of scientific diaspora members in the development of the internet in Colombia. In the case of India, it is worth mentioning that most Indian PhD students in Switzerland believe that their research and scientific work could lead to R&D applications that could have an impact on the scientific, technological and socio-economic development of their home country.

Skilled migrants from South Africa emphasized a variety of initiatives which seek to accelerate the quality of science and technology in South Africa by developing new products and technology to address key development problems and build the country's capacity within these areas. These initiatives in-

clude the creation of technology for a rapid diagnosis of the HIV virus in children and the production of drugs for the treatment of tuberculosis.

North-South research partnerships are another brain gain mechanism, with skilled migrants from the three countries undertaking or getting involved in a wide range of research projects. Some of the important North-South research joint projects between Colombia and Switzerland involving skilled Colombians are the cooperation programme for the environment between the EPFL, the Univalle and other Colombian institutions, and the design and promotion of a research collaboration project into malaria between the University of Lausanne (UNIL) and the Univalle.

A range of research partnership initiatives with India by skilled Indians is being implemented from Switzerland. Some good examples are a particle physics project carried out by CERN, involving four different research institutions, and a project on health, ageing, drinking water and technology implemented by the ETHZ in partnership with the Max Planck Institute.

For South Africa, one example of a research partnership is the South African Centre for Epidemiological Modelling and Analysis (SACEMA) project, which is an initiative with a significant capacity-building component that uses mathematical modelling to identify the transmission of diseases, and which is also helping to improve/advance public policy in this field.

In all the countries under study, some of the North-South research partnership activities also included a significant R&D component. A good example is the Colombia-Switzerland collaboration (COCH) project on agro-ecological models, which involved HEIG-VD from Switzerland and the Biotec Corporation, a centre of innovation and technological development promoted by the Univalle, which is working on the application of biotechnology to the bio-industrial sector and the community.

In the case of India, there are some remarkable institutional programmes promoting scientific collaborations and exchanges between Swiss and Indian partners and facilitating capacity building at both an individual and an institutional level. These are the Indo-Swiss Collaboration in Biotechnology Programme (ISCB), which promotes bilateral scientific cooperation in the area of biotechnology through knowledge transfer and circulation and technology transfer, and the Indo-Swiss Joint Research Programme (ISJRP), which backs cutting-edge research that brings students and researchers from both countries together. The ISCB also encourages R&D partnerships between Swiss and Indian institutions and private firms that are significant in socio-economic terms.

Skilled migrants from the three target countries also mentioned their participation in other brain gain mechanisms such as social remittances and philanthropic initiatives. Skilled Colombians, Indians and South Africans mentioned that they were involved in grassroots initiatives such as providing sup-

port to vulnerable children, making donations to schools, or linking up resources in Switzerland with organisations in their home countries.

In particular, some of the actions and practices that skilled Colombians identified as social remittances for the benefit of Colombia include a range of social projects to support NGOs, and philanthropic activities that benefit some of the most vulnerable sections of the population in their home country. Skilled South Africans mentioned a variety of philanthropic initiatives such as donations for orphanages and support for social organisations as some of the main social remittances that contribute to poverty reduction in disadvantaged sections of the society back in South Africa.

Skilled Indians also highlighted aid efforts to mitigate the consequences of natural disasters. For India some other mechanisms that emerged during the course of the empirical research include: outsourcing activities, business links and social remittances, focussing mainly on the home country's health and education systems. Some specific examples of the business links that skilled Indians have encouraged with India including owning property back at home, investing, outsourcing, and providing technical support to private firms as well as undertaking research partnerships with the private sector.

5.5 Factors Influencing the Transnational Activities of Scientific Diasporas

Identification of factors that influence transnational activities of scientific diaspora is important for developing appropriate policy responses. The field research has enabled us to identify important factors as documented in previous chapters.

From the perspective of skilled migrants from Colombia, India and South Africa, some of the elements facilitating brain gain initiatives and practices are their enthusiasm, their knowledge of the culture of both the country of destination and the country of origin and their scientific and professional contacts. For effective impact, these need to be combined with adequate networking and communication, institutional support from both countries, availability of funding, identification of the right partners, and being part of scientific associations.

Respondents identified a number of impediments and constraints that prevented brain gain. These include administrative and financial constraints, time limitations, a lack of institutional support, an unstable professional situation and a lack of political commitment.

At the same time, some skilled Colombians and skilled Indians referred to the non-recognition of degrees and their precarious residential and/or professional status and living conditions as obstacles to their brain gain strategies and initiatives. In addition to this, skilled South Africans spoke about a lack of

information about opportunities to collaborate with their home country, the absence of a stable work situation, a lack of time and an extreme workload as some of the main hindering factors. Moreover, skilled South Africans find it hard to unify their efforts and strategies for the benefit of their home country with their fellow nationals as a result of the huge social fragmentation within the diaspora, which means that there is no shared sense of community or associative mechanisms for collaboration. This jeopardises effective structured and coordinated brain gain strategies and activities as we have already pointed out.

Both skilled Colombians and South Africans mention the precarious status of students in Switzerland as an additional obstacle, while none of the skilled Indians spoke about this issue.

An analysis of first-hand information on the experiences and activities of skilled Colombians, Indians and South Africans in Switzerland helps us to see how motivation, the ability to mobilise and an enabling environment can encourage diaspora involvement in the efforts to advance the development of their countries of origin.

The vast majority of the skilled migrants displayed an impassioned and dynamic motivation to contribute to the development of their communities of origin. "I would love to do something for my country of origin" was a frequently used sentence among all three groups of respondents, offering proof of their lasting desire and eagerness to contribute to the development of their countries of origin.

In the three cases, brain gain initiatives tended to be informal, organised mostly on a one-to-one basis and initiated through individual motivation. However, it is worth mentioning that the mobilisation of the resources of skilled Colombians in Switzerland also takes place through collective efforts, something that does not apply in either the Indian or the South African cases. The Colombian scientific diaspora has a structured organisation that strengthens the shared identity and sense of community of its members and this helps to enhance scientific and technological collaboration between Colombians in Switzerland and research institutes and universities in the home country in a coordinated and formal manner under the aegis of the Association of Colombian Researchers in Switzerland (ACIS).

However, some skilled Colombians feel that the Colombian diaspora lacks a unifying component which cannot be created through an association; for this reason they believe that the diaspora should not be separated by type (skilled vs. low-skilled) if the goal is to encourage the unifying elements and feelings of the whole Colombian diaspora. In contrast to Colombia, neither the skilled South Africans nor the skilled Indians in Switzerland have any professional or scientific associations to promote and coordinate the scientific and technological development endeavours of their diasporas.

In the case of South Africa, there is no shared identity or “feeling of South Africa” and no sense of community among the diaspora, which means that its members do not represent a single, united group. As we have already mentioned, skilled South Africans’ interest in and desire for their home country vary greatly depending on their reasons for emigrating, their links to their home country and also their sense of racial empowerment or disenfranchisement. This is simply the legacy of the racial, social and cultural fractures that typify the country’s recent history, causing the diaspora to remain fragmented.

This also explains why there are relatively few South African associations and why existing social associations which bring South Africans together, such as the Club of Friends of South Africa or the South African Club of Suisse Romande, are mainly dedicated to organising social events. In fact, whereas Colombian and Indian skilled migrants are members of associations and organisations, which act on behalf of their countries of origin and which reflect their “sense of community”, most South Africans do not belong to such associations. For skilled South Africans in Switzerland, individual and sporadic actions for the benefit of their home country are the preferred form of interaction. This explains why there are no institutionalised initiatives and no scientific or professional association that could encourage the skilled South African diaspora in Switzerland to pool its skills and resources to benefit the homeland.

In contrast, the majority of skilled Indians stressed their involvement in social associations, and these aim to reconstruct a “feeling of India”, mainly through a range of social and cultural activities. Within the Indian skilled diaspora, mobilisation is mainly articulated through their ability to organise cultural and social events that produce a sense of solidarity and brotherhood rather than gatherings with a shared objective of promoting collective scientific and technological activities that could make an impact in their home country as in the case of Indian diaspora in the USA. However, many skilled Indians mentioned their interactions with India through the institutionally backed Scientists and Technologists of Indian Origin Based Abroad (STIOs). Hosted by the Indian government, this Internet-based network seeks to mobilise overseas talent and expertise and ensure that this knowledge helps Indian development by encouraging exchanges between skilled Indians who are active in a broad variety of sectors and their counterparts in the subcontinent.

On the issue of enabling supportive environments, the Colombian diaspora has an overriding scepticism about supportive policies, both in the country of destination and in the home country. Regarding the situation back in the home country, although some skilled Colombians recognise that the economy has improved, the majority believe that opportunities have only been created for a minority of the population. Therefore, they are mainly concerned about social inequalities and polarisation and the tense political situation. In a similar way,

Colombians are worried about the inadequacy of institutional support and resources for research and the lack of a long-term vision and consistency in scientific policy. Only a few skilled Colombians express any optimism about long-term progress in their home country.

In contrast, skilled Indians regard political and economic stability and an improvement in their country's good governance and rule of law as key indicators which the environment of their home countries can use to facilitate brain gain initiatives because the more positive situation is already bringing investment and business to India.

In contrast to the Colombian case, most Indian and South African respondents highlighted their governments' efforts to foster scientific and technological research by allocating more funding to the science and technology sector as well as improving the quality of scientific research and trying to involve their scientific diasporas in this. However, skilled South Africans emphasised constraints such as the lack of public health initiatives and on how to tackle racial inequalities in the scientific and technological field, which has resulted in a low representation of coloured women.

While a number of the skilled migrants interviewed emphasized the progress made in economic growth, in key emerging economies in South Africa and India leading to broader opportunities regionally and internationally, they also mentioned persistent social and economic inequalities and problems such as corruption, violence and insecurity, conflicts, and poverty as some of the main constraints. Health problems in South Africa and internally displaced persons in Colombia are additional challenges mentioned by respondents regarding the situation in their home countries.

While respondents from the three countries have a positive perception of Swiss scientific policy and while they recognise the high level of scientific productivity based on significant investment in science, technology and innovation, they note the lack of Swiss institutional support for scientific diasporas from developing countries.

For example, the Colombian scientific diaspora has been striving to carry out knowledge transfer activities on a systematic basis for many years, but there is a lack institutional support. In order to capitalise more on their resources, skilled Colombians insisted on the need for greater recognition in Switzerland, as this might encourage a suitable institutional framework for bilateral scientific collaboration. In contrast to Colombia, both South Africa and India benefit from an institutional framework that supports science and technology exchanges and joint research projects, as both are priority countries in the current bilateral scientific collaboration strategy of the Swiss State Secretariat for Education and Research (SER). This institutional framework certainly provides increased opportunities for enhancing the development of India and

South Africa through projects in which the scientific diasporas of both countries in Switzerland are involved.

India, in particular, has a long tradition of bilateral scientific cooperation with Switzerland, which along with the outstanding reputation of the Indian higher education system and technological institutions and the positioning of India as a key emerging economy, not only facilitates Indian scientific and student mobility, but it also increases the recognition of skilled Indians in Switzerland, compared to Colombia and South Africa. Furthermore, according to some skilled migrants from the three countries, Switzerland should rethink its immigration policies by putting the accent more on skills and capabilities rather than origin and nationality, while it should also address the restrictions on student mobility.

With regard to specific pro-diaspora policies, some clear top-down endeavours designed to benefit South Africa are already underway. For example, South Africa is playing a leading role in the process of creating a common vision for sustainable development on the African continent, integrating the contributions of the diaspora by recognising it as Africa's sixth economic region. Initiatives promoting return migration and the creation of the South African Network of Skills Abroad (SANSA) to link the resources of the scientific diaspora with business opportunities and cooperation projects are further examples of efforts by the South African government. However, SANSA does not have a chapter in Switzerland.

Similarly, skilled Indians do not only see economic growth in their home country and the encouragement given to the scientific and technological sectors as positive developments but they also appreciate the range of pro-diaspora policies of the Indian government for the promotion of their brain gain activities. These are also some of the factors behind the desire of many to return to the home country in the near future. There is an institutional basis for interaction with the Indian scientific diaspora since the Indian government recognises and appreciates the strategic role it plays in supporting scientific and technological as well as socio-economic development. Likewise, the level of Indian scientific and technologic research and its growing pool of technological and innovation-intensive sectors encourage exchanges with the diaspora.

Unlike South Africans and Indians, skilled Colombians mention a lack of pro-diaspora policies in their country of origin (lack of incentives, financial support, and encouragement to get the diaspora involved in policy and decision-making), as well as a lack of institutional scientific cooperation with Switzerland and the need for the country of destination to recognize the Colombian scientific diaspora.

We can highlight a variety of significant efforts and good practices involving scientific diasporas from Colombia, India and South Africa in Switzerland.

While they all have different scopes and include various types of activities, and in some cases the participation of other actors, one thing they have in common is that they all aim to have a positive impact on the development of the countries of origin. Scientific cooperation with Colombian counterparts initiated by skilled Colombians in Switzerland has led to long-term collaborative research with institutions in Colombia and this has boosted individual and institutional capacity through knowledge circulation, seminars, conferences and meetings, student and scholar exchange programmes and joint research projects, which can be considered to have successfully addressed development challenges. It is highly significant that the Colombian diaspora has achieved this over the years without any institutional support.

In the case of India, skilled Indians pointed to the Internet-based network STIOs, hosted by the Indian government as facilitating access to a plethora of opportunities to collaborate with Indians around the world for the benefit their country of origin. The network has seen a significant number of success stories in the fields of science and technology as well as social and economic development.

One key area of good practice highlighted by the South African respondents is the Swiss-South African Bilateral Research Programme which is part of a bilateral scientific collaboration strategy that encourages joint scientific research, cooperation programmes, exchanges and seminars in the fields of public health, bio-medicine, biotechnology, nanotechnology, and human and social sciences. This initiative is a good example of a top-down approach to enhance the local capacities of developing countries by contributing directly to the development of science and technology and focusing on areas of critical need. One additional good practice identified in the three case studies is the appointment of scientific diaspora members as scientific advisors to public and private bodies in the countries of origin as well as in Switzerland.

The findings of the field research indicate that while skilled migrants from Colombia, India and South Africa harbour enthusiastic ambitions for their countries of origin, both the home country and destination country still need to play a pro-active role in engaging with their diasporas. The hope is that this will lead to a continuation and expansion of scientific diaspora activities over time, which they would be in the interest of developing their homelands.

5.6 What are the Future Plans of Migrants: Settlement, Return or Circulation?

Most professionals from Colombia, India and South Africa (including PhD students and postdoctoral researchers) share common aspirations for the next ten years. They want professional stability and a better position in their respective

field and institutional recognition both locally (in the country of origin and the country of destination) and internationally, as well as enhanced exchanges with local colleagues who can benefit from their skills and experience. Besides, there is a common aspiration to initiate activities to improve living conditions and inspire social and economic development in their countries of origin.

The empirical evidence from the three case studies shows that skilled migrants have far more choices than unskilled migrants, and as such these choices allow them to shape their future for themselves. However, a few respondents highlighted the precarious nature of their jobs and regretted that their lack of a permanent work permit prevents them from settling down. This shows that respondents whose professional situation is unstable find it hard to plan their future. On the other hand, respondents from the three countries mentioned that there would have to be good opportunities for them in their home country for them to consider return migration.

Only a few skilled Colombians and South Africans would be willing to return to their countries of origin, whereas most Indian PhD students and postdoctoral researchers intend to return to India in the short term. If this really happens, they could make a significant contribution to poverty reduction by building and developing capacity at individual and/or institutional levels, encouraging science and technology, and making business linkages. This willingness to return on the part of young skilled Indians was not evident, however, among Colombian or the South African researchers and PhD students.

Skilled South Africans and Colombians largely prefer to be involved in *go and come back* (circular migration) schemes or even to stay in the host country. Respondents from the three countries holding a C permit and/or a Swiss passport tended to be more involved in *go and come back* schemes between Switzerland and their country of origin while they attempt to build bridges between the two through their transnational activities. Moreover, some skilled migrants from the three countries dream of returning to their countries of origin after they retire.

According to the information gathered, the issue of return is clearly linked to a variety of factors. Respondents stated that their decisions about their future plans, including returning to their country of origin, mainly depend on their employment situation, professional and training opportunities (professional relocation, position in the field, etc.), as well as their personal and family situation.

In the Colombian case study, some skilled Colombians are very keen to return to Colombia, but they are sceptical about the professional opportunities and conditions that their home country has to offer. Furthermore, on the subject of students abroad, some skilled Colombians mentioned that the system of granting Colombian scholarships in exchange for a commitment to return is not working. Accordingly and despite the fact that some scholarship programmes insist on students going back to the home country to apply what they have

learned abroad and pay back the grant, many with scholarships do not go back as originally planned. Colombian institutions are now realising that people with grants decide not to return for a number of reasons. Some skilled Colombians feel that they would be making a great professional sacrifice by going back and they are not prepared to do this.

Whereas crime, a lack of security, affirmative action policies, and social and cultural divisions are said to deter skilled South Africans from returning, some skilled Indians mentioned the comparative advantage of being in Switzerland (the quality of life, better professional and research opportunities, the excellent reputation of Swiss institutions), their successful integration in Swiss society and marriage to a Swiss citizen as some of the main reasons for not returning to India. Most of the reasons skilled Indians mentioned for not returning are similar to those cited by Colombians. In addition, skilled Colombians mentioned precarious living and working conditions in the home country, social conflict, insecurity and violence, and political problems as some of the main impediments against making concrete plans to return to Colombia.

In both the Colombian and the South African case studies, scepticism about the professional opportunities on offer in their home countries combined with the personal and family situation of skilled migrants were mentioned. For skilled Indians in Switzerland – mainly those working as staff in international organisations and second and third generation Indians – their multiple sense of belonging (having dual or multiple citizenship or having settled in many places) poses a dilemma with regard to choosing any one place to settle down in the future. This does not necessarily have to be Switzerland or their home country. These worries were shared by skilled Colombians and South Africans with dual or multiple citizenship.

Moreover, respondents from the three countries with children of school-going age said that educational opportunities and an adequate environment for their children are factors that will cause them to settle permanently in Switzerland or to go back to their home countries or even to move to a third country in the future.

6. Concluding Remarks and Implications for Policy and Research

Accelerating migration flows and concerns about meeting the resulting challenges lead us to reflect on the potential of skilled migrants to be agents of development as vectors of knowledge. There is consensus that human capital is a fundamental factor in innovation and technology appropriation, and there-

fore it is a critical element in poverty reduction efforts. It is easy to understand the concerns of developing countries about losing their valuable and scarce human resources. Nevertheless, in the current debate considerable attention is being paid to links between migration and development and suggesting ways and means of turning brain drain into a brain gain, capitalising on the resources of scientific diasporas in an efficient and sustained manner to benefit the countries of origin, mainly developing countries.

The research findings have confirmed the role of skilled migrants abroad as a potential development resource that can be mobilized by developing countries of origin. The field research in Switzerland has highlighted transnational contributions to the progress made in science, technology and socio-economic development back in the home countries. The development contributions of skilled migrants are an illustration of their transnational perceptions of development and range from promoting science, technology and education to the encouragement of business opportunities, philanthropy, investment links and other initiatives related to poverty reduction.

Collective action by migrant associations can play a significant role as a platform for enhanced collaboration within the diaspora and strengthening scientific and technological capacities in the country of origin. Yet the empirical evidence presented in this book shows that the development contributions of skilled migrants to their countries of origin are mainly informal and sporadic initiatives based on individual efforts. There is very little collective action based on established associations. Similarly, there are no institutionally backed initiatives to capitalise on the skills and resources of scientific diasporas, which could be considered as crucial, since collective action is much better placed to make the scientific diaspora a real development resource for home countries.

Skilled workers, scientific diasporas, and international and local institutions, both in Switzerland and in the countries of origin, are some of the most significant actors in the efforts towards sustainable development of home countries by making creative and effective use of diasporas resources. For this to occur, policy discourse and thinking should establish more effective interactions between migration, development and scientific diasporas. Institutional support is also important as are favourable national and international environments that can transform the instruments of North-South cooperation into equitable win-win situation for both developed and developing countries.

Although we are wary of simplifying a phenomenon as complex as skilled migration and scientific diasporas, this book argues that local communities and institutions in the areas of science, technology and socio-economic development must be actively involved to ensure that the transnational initiatives of the skilled migrants have a tangible and lasting impact on their countries of origin. The importance of a conducive and enabling socio-economic, political

and institutional environment in the country of origin cannot be overemphasized in this respect. In addition, institutions in the countries of origin and destination must adopt appropriate measures that capitalise on the resources and skills of the diaspora through sustained support and backing for their activities. Institutional actors should improve their dialogue with diasporas while directing diaspora associations and organisations to appropriate public initiatives. The aim is to make sure that these elements of support enable scientific diaspora initiatives to expand them over time on a sustained basis for the benefit of home countries.

These conclusions have important implications for public policy both in the country of destination and the countries of origin:

- Both the countries of origin and the countries of destination must play a proactive role in establishing links with scientific diasporas, and they should encourage them to become true development partners. Dialogue and good communication with diasporas should be promoted, and diasporas should also be encouraged to make use of public pro-diaspora initiatives.
- Both the countries of origin and the destination countries should provide long-term support for the creation, or ongoing activities, of scientific diaspora associations and networks for maximum benefit, and they should also help them to disseminate good practices and other activities that can contribute to the promotion of further diaspora initiatives.
- There is a need for a wide dissemination of information about the position, activities and skills of the Colombian, Indian and South African scientific diasporas in Switzerland in order to show their real value and potential. This could also encourage recognition of the value of scientific diaspora groups from other developing countries.
- Only a conducive and enabling environment and infrastructure in the countries of origin can facilitate the conversion of scientific diaspora activities into specific projects that can have an impact on socio-economic development.

The discussion in this volume has identified a number of promising avenues for further research:

- Additional research into the perspective of countries of origin should be encouraged to complement this study for a more comprehensive understanding of the risks and opportunities of skilled migration.
- Further research should advance knowledge and disseminate data on the profiles of the diaspora, their networks, the operations of migrant associations and diverse mechanisms for individual and/or collective transitional involvement.

- There is a need to explore the level of socioeconomic and cultural integration of diasporas in destination countries and its impact on the nature, level and scale of their contributions.
- We need a better understanding of the enabling factors and constraints on diaspora contributions in order to optimise their potential.
- Further research should examine how effective Swiss institutional bilateral collaboration mechanisms are in terms of encouraging the circulation of knowledge and human resources. This will help to assess their impact on skilled migration from developing countries and to see whether or not the effects are in line with the development efforts being made by the countries of origin.