ADB

Converting Migration Drains into Gains

Harnessing the Resources of Overseas Professionals

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Preface

The international development community has long recognized capacity development—broadly defined as securing a country's ability to manage its own affairs—as crucial for economic development and poverty reduction. Only when the developing member countries (DMCs) of the Asian Development Bank (ADB) build sustainable capacity in a wide range of technical and professional skill areas can they credibly rely on their own country systems to reduce their dependency on foreign aid. Despite considerable investments by DMCs and their development partners,[1] the results are less than desired for many reasons. Capacity development is a long-term process, and not normally something that can show immediate results from pressure and quick fixes. Local cultural and moral value systems need to be respected. New practices often challenge mindsets and vested interests. Capacity development can only succeed if key parties have positive incentives to proceed. External inputs need to be culturally appropriate, responsive to real demand, and in consonance with national priorities. "Where national systems are not strong enough, they should be reformed and strengthened, not bypassed." Countries need to build on existing capacities and use national expertise whenever possible (Lopez and Theisohn, 2003; DAC Network on Governance, 2006).

Debate on how skilled labor migration affects capacity in source countries is ongoing (Rosenzweig, 2005). When skilled workers migrate, the source country loses their skills and output. When migrants are disproportionately made up of skilled workers—the source country experiences a decline in average-per-worker income, even though wages for the skills of the migrant worker in the source country (or "skill price") may go up as the supply goes down. Educational investments in the source country become subsidies to the destination country. These effects constitute the much lamented "brain drain."

Yet other forces at work where skilled migration leads to "brain gain" help to build capacity in source countries. Case studies suggest that skilled migration can prompt families to invest more in education, both because of the prospect of securing an overseas job and because the skill prices are pushed up in the source country as skilled migrants leave. Source countries also benefit from the return of migrant professionals, bringing back increased skills and knowledge. Some evidence suggests that these return flows are significant, and that many of these return migrants have received further education and training (Meyer et al., 1997). Education and training in destination countries benefit source countries when skilled migrants return. When skilled migration estimates are adjusted for such return migrants, the net brain drain can be sharply reduced. For example, a study based on official

immigration records in the United States (US) over the period 1971–1981 indicates an average 30% return rate, with some countries as high as 50%. Although this study does not separate out skilled migrants, many of these return migrants were educated in the US; indeed, an estimated more than 20% of high-skill immigrants in the US obtained some schooling in the US. To the extent that this education is subsidized with public funds, it represents a transfer to the immigrants and their source country when they return. Rosenzweig (2005) estimates that in the case of four out of six Caribbean countries, at least 70% of migrants educated in the US returned to their countries, and in the case of two out of three African countries, 45% of such migrants returned. In all these cases, the "brain gain" was significantly more than the adjusted brain drain. The countries studied that had a net "brain drain"—Sierra Leone and Haiti—each suffered severe political problems, a probable contributing cause to the net loss of skilled labor.

There is also emerging evidence that overseas professionals can benefit their home countries even without returning to them. Factors conducive to such diaspora contributions include: (i) their ability to mobilize (e.g., the existence of social capital or networks that link diaspora members to each other through formal or informal associations); (ii) opportunity structures (policy frameworks and related incentives in the home and host country, opportunities to develop skills and knowledge, and the existence of intermediary organizations); and (iii) motivations, both those deriving from opportunity structures, and migrants' own interests in expressing their identity, perhaps as they seek prestige and economic benefits.

In response to these trends, ADB has commissioned studies on experiences of highly skilled expatriate nationals of knowledge exchange and capacity development, and on the policies and level of awareness among developing countries to capture the benefits of such practices. The emphasis is on knowledge exchange rather than knowledge transfer, since the former suggests that the two-way knowledge flows are increasingly evident: from host to home countries (e.g., advanced technology) and from home to host countries (e.g., reputational advice on potential business partners). Detailed reviews of such knowledge exchanges have been commissioned in the Philippines, People's Republic of China (PRC), and Afghanistan to explore innovative means of improving policies and using networks for knowledge exchange that might otherwise be carried out by nondiaspora, expatriate professionals. Such knowledge exchanges can increase the development impact of remittances, and are valuable in their own right. The ADB studies were carried out in consultation with the respective diaspora organizations.

The five-step instrumental case study methodology draws on work from Barzelay et al. (2003) and others. The first step for each case is developing narratives focusing on events and episodes, how they began, progressed, and ended. In the case of the two cases presented here, the episode covers roughly the last 20 years. The events constituting each

episode relate to the process of policy making in the PRC and the Philippines respectively to encourage knowledge exchanges from diasporas. The research questions try to explain factors associated with the observed outcomes.

There are two types of questions that a case study can try to answer. Type A questions have a high level of generality. Examples would include: Can knowledge exchange (KE) increase the development impact of remittances? Can KE facilitate foreign direct investment? Can development agencies like ADB make better use of diasporas for capacity development?

Type B questions help structure thinking about a particular case. What are the size and characteristics of professional diasporas? What are the channels of KE and types of knowledge exchanged? What are the key government institutions and policies, and how have they changed during the period? Is there policy emphasis on promoting investment, donations, or KE? How effective are government institutions and policies in promoting KE? What are the respective roles of government and nongovernment diaspora networks in promoting KE?

This book provides some answers to type B questions, and helps frame type A questions for future research. In answering the type B questions, we first try to explain the policy and other factors associated with KE and other outcomes. The next step is to understand the causal process leading to the case outcomes, and the final step is to make policy recommendations.

This project is the fruition of nearly 3 years of work by many scholars and practitioners. The three case study teams provided the original empirical contribution to the project. The PRC study team was led by Dr. Xiang Biao, Centre on Migration, Policy and Society, University of Oxford. The Afghanistan team was led by Prof. Shah Mahmoud Hanifi, James Madison University and American Institute of Afghanistan Studies. The Philippines study team comprised Jeremaiah M. Opiniano and Tricia Anne Castro, under the leadership of Victoria P. Garchitorena, President, Ayala Foundation USA. Professor Jennifer Brinkerhoff, George Washington University, authored chapters 1 and 5, and provided substantive and editorial help in finalizing the three case study chapters. Professor L. R. Jones, Naval Post Graduate School, helped in preparing a paper summarizing some initial findings (Wescott, in press). Eden Santiago helped with proofreading, and Judy Goldman with editing of the volume. Liza Valmores, Amir Tejpar, and Cynthia Reyes helped in organizing a workshop to review a draft version. Funding was provided by ADB's Governance Cooperation Fund. The views expressed are those of the research teams, and not necessarily those of ADB.

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ENDNOTE

1 Over $18 billion was spent on capacity development by donors in 2003, accounting for 27% of official development assistance (OECD, 2004: statistical annex, Table 2).

2 Mr. Clay Wescott was Principal Regional Cooperation Specialist, ADB until April 2006. Thereafter, Raza Ahmad, Governance/Capacity Development Specialist saw through the publication of this book.

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Diasporas, Skills Transfer, and Remittances: Evolving Perceptions and Potential

Jennifer M. Brinkerhoff[a]

I. INTRODUCTION

Modern diasporas are "ethnic minority groups of migrant origins residing and acting in host countries but maintaining strong sentimental and material links with their countries of origin—their homelands" (Sheffer, 1986: 3). Diasporas are attracting increasing attention for a variety of reasons. Beyond security concerns related to terrorism and civil unrest, in the international development arena, developing country governments and international donors are taking notice of diasporas' potential contributions to economic development. Here, attention has primarily focused on the impressive totals of economic remittances (defined as transfers of money by foreign workers to their home countries), which now outpace official development assistance. Such remittances sent to developing countries are estimated at $70 billion per year in 2004, $125 billion in 2005, and $167 billion in 2006 (World Bank, 2004; 2005; 2006). This alone is a significant evolutionary development as historically, national governments mainly focused on the security risks posed by organized diasporas, and, along with the development community, emphasized the brain drain phenomenon of out-migration.[1]

As elements of globalization contribute more and more to diaspora size, mobilization, and qualitative expansion of potential contributions, the time has come for more concerted research of actual and potential diaspora contributions and at least preliminary exploration of strategic policies and programs to support them. This volume seeks to contribute to this ongoing research agenda by analytically reviewing three

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case studies of diaspora knowledge transfer and exchange: People's Republic of China (PRC), Philippines, and Afghanistan. Together, the cases provide empirical and anecdotal data relating to skills transfer/exchange, its potential relationship to economic remittances, diaspora motivations, and home country policies and programs.

The purpose of this study was not to conduct a comprehensive assessment of the gain-or-drain question, but rather to consider three cases with the intention of highlighting constructive contributions. The orientation was consciously biased from the outset in order to rectify perceived imbalances in the literature and practice related to skilled migration and to expose a broader context of interlocking contributions and systems beyond the simplistic tradeoff assumptions of knowledge drain and remittance gain. None of the three cases could be considered comprehensive, though each provides some evidence and anecdotes to support its findings as well as the study's overall contention that there may be more to be gained than may often be realized.

Following a brief overview of the case studies, this introductory chapter provides a broader context for situating these cases, introducing in greater detail (i) debates surrounding brain drain versus brain gain, (ii) the economic effects of diasporas, (iii) sending governments' relations with their diasporas, and (iv) factors conducive to constructive diaspora contributions.

II. DIASPORA KNOWLEDGE TRANSFER/EXCHANGE TO PEOPLE'S REPUBLIC OF CHINA, PHILIPPINES, AND AFGHANISTAN

The PRC case study recasts knowledge transfer as knowledge exchange, noting that the phenomena of study operate in both directions. The study emphasizes knowledge exchange as a social process. Biao traces the evolution of the PRC's policies vis-à-vis its emigrants, noting a significant shift from an emphasis on return in the 1990s, to a recent redirection to temporary return "to serve the motherland," where the national Government, knowledge user institutes (i.e., universities, research institutes, high-tech enterprises, and industrial parks), and some local government departments alike are soliciting knowledge exchange and engagement from the diaspora. The PRC Government maintains five central agencies that interface with overseas Chinese professionals, as well as several quasi-government agencies with funding to support knowledge exchange activities, representing the most formal and deliberate approach among the three case studies. The chapter reviews a variety of knowledge exchange programs and, building on a survey of participants in these and in overseas Chinese

professional associations, emphasizes the importance of informal networks and social processes for effective diaspora knowledge exchange.

Opiniano and Castro examine diaspora knowledge transfer in the Philippines. Like that of the PRC, the Government of the Philippines has experimented and established related formal policies. In this case, however, the Government has explicitly promoted skills training and emigration as part of its national development strategy, prioritizing remittances from skilled migrants (in 2001–2003 remittances were over 10% of gross domestic product) and viewing labor export as a means to ease unemployment. The chapter reviews the Philippines' past experiences with knowledge transfer activities—both governmental (the Science and Technology Advisory Council and the *Balik* Scientist Program) and intergovernmental (the Transfer of Knowledge Through Expatriate Nationals [TOKTEN] program of the United Nations Development Programme)—and examines the current activities and potential of Filipino professional diaspora organizations. The latter activities are often concentrated in health and education, may be either demand- or supply-driven, and do not always necessitate long- or short-term diaspora member return. Selected examples of Filipino diaspora knowledge transfer demonstrate high enthusiasm and great potential, but, to date, are small-scale and of limited impact.

The Afghanistan chapter (Hanifi) draws from an investigation of a US-based *hawaladar* (informal money transfer agent) and his clientele, as well as a review of selected knowledge transfer efforts. Following an overview of waves of migration to the US from Afghanistan and the resulting disconnect among Afghan communities in the US, the chapter analyzes survey data and interviews among the *hawaladar*'s clientele. The findings suggest brain drain, some employment concentration (e.g., beauty salons, food stores and restaurants, real estate, and construction), and limited investment-directed remittances (though there is potential for more, with the *hawaladar*'s facilitation). Knowledge transfer efforts are inhibited by competing identity groups within the diaspora, as well as by credential challenges, for example, within the medical profession. The younger generation of Afghan-Americans is demonstrating potential to overcome communal divisions and innovatively, though selectively, to contribute to homeland development.

III. DIASPORAS: GAIN OR DRAIN?

A variety of pithy phrases concerning migration impacts and development have been moving through development industry circles. These range from the traditional "brain drain" (e.g., Özden and Schiff, 2005) to the increasing use of "brain gain" (e.g., Meyer

and Brown, 1999a; Hunger, 2002; Margolis et al., 2004) and subtle variations on these, including "brain strain" (e.g., Lowell et al., 2004), "brain waste" (e.g., Özden and Schiff, 2005), and "brain exchange" and "brain circulation" (Gamlen, 2005; Vertovec, 2002; Saxenian, 2002; Pellegrino, 2001). The latter two are often linked to discussions of globalization and its impact.

One difficulty of navigating this morass of terminology and implied outcomes is the fact that many of the communicators are comparing apples and oranges when contemplating what to classify as a gain versus a drain. For example, while remittances are almost universally affirmed as an important gain to recipient countries, how productive are they? And does their contribution outweigh the potential export of a country's skills and knowledge? Is such human capital static and can one compare migrants' skills and knowledge in receiving countries to what it would be had they not migrated? Do potential increases in education investment due to remittances yield equilibrium in terms of knowledge gains and losses? What role do remittance spillover effects have on skills, knowledge, and development indicators beyond receiving households? What about when an initial brain drain is transformed to a brain gain as diaspora members seek to give back, either through remittances or, more directly with respect to knowledge, through knowledge transfer and exchange?

Despite this complexity, some practitioners and scholars insist on a more definitive answer to the drain versus gain question; more commonly, others imply a bias in one direction or the other, either through their sample selections and/or policy conclusions. While seeking to highlight the complexity of the issues, a recent study by the Center for Global Development (Kapur and McHale, 2005) comes down firmly in support of the brain drain perspective, arguing that remittances cannot compensate for a country's loss of a significant portion of its "best and brightest." Interestingly, the Center for Global Development report is critical of the World Bank's recent findings (Özden and Schiff, 2005). Yet the mere coupling of brain *drain* and remittances in the title of the World Bank report, *International Migration, Remittances and the Brain Drain* (Özden and Schiff, 2005), and the corresponding contents of the volume imply that the report takes the drain as its starting premise where human capital is concerned.

Özden and Schiff (2005) identify four positive externalities that are lost to the sending country as a consequence of skilled migration: (i) spillover productivity of other workers, (ii) public service provision (e.g., education and health), (iii) tax revenues, and (iv) public debate and policy and institution influence. The consequences of brain drain are most commonly noted with respect to health care. Public health systems in Africa are a case in point (see Schrecker and Labonte, 2004). The loss of

nurses in the Philippines (Alburo and Abella, 2002) and Jamaica (Thomas-Hope, 2002) pose serious challenges. Docquier and Marfouk (2005) confirm high brain drain levels in poor and isolated small countries in Africa and the Caribbean.

On the other hand, the so-called "new brain-drain literature" posits that opportunities abroad for skilled migrants produce incentives to invest in education and skills development in the homeland, yielding a "beneficial brain drain." The universal application of this finding is increasingly scrutinized and despite attention to identifying critical factors that yield it, the beneficial brain drain itself is considered by some to be widely exaggerated (see, for example, Schiff, 2005; Gamlen, 2005). However, refuting one of the most accepted and lamented examples of brain drain, Clemens (2006) finds no evidence that African countries experiencing the highest health professional emigration rates consequently have systematically lower health staffing levels, suggesting a beneficial brain drain effect.

There is no doubt that there are some countries and skills areas that experience significant brain drain with potentially dire consequences for the country of origin. However, this introductory chapter (and the volume it supports) argues for a more nuanced approach to assessing gain-or-drain that accounts for the complexity of these phenomena. Many scholars and concerned institutions have been applying such an approach for some time. Yet it seems that some neophytes to the diaspora and development connection remain stuck in traditional and limiting paradigms.

An alternative perspective sees skilled migrants—or diasporas—as assets that can be mobilized (Meyer et al., 1997). Potential resource gains include remittances as well as skills and knowledge. In fact, recent perspectives on remittances promote attention to a broader perspective that includes social remittances, that is, skills transfer, and cultural and civic awareness/experience (Nyberg-Sorensen, 2004). The potential gains to the homeland derive not only from the skills and knowledge from the diaspora itself, but also from the "socio-professional" networks these migrants have joined overseas (Meyer and Brown, 1999a). In its recent migration report, the International Organization for Migration (IOM) (2005) confirms that these extended diaspora networks can yield investments in new technology, market intelligence, and business contacts (see also Hunger, 2002). At the macroeconomic level, migration can reduce unemployment (IOM, 2005), provide access to foreign exchange (Lowell et al., 2004; Gamlen, 2005), and yield other benefits through more sophisticated financial flows (Lowell and Findlay, 2002). The latter can include strengthening the portfolios of home country banks through the purchase of remittance-backed bonds and holding foreign currency accounts (Lowell et al., 2004).

Gain-or-drain results vary by region. Africa seems to suffer the greatest gap in terms of return on skilled migration. For example, it sends 10.4% on average of its skilled labor (Docquier and Marfouk, 2005), but the remittances it receives have not necessarily increased as a result, decreasing from $10.7 billion in 1992 to $7.8 billion in 2000 (Sander and Maimbo, 2005). And they remain low in significance as a percentage of gross domestic product compared to other regions. In his 2003 study of global remittances, Ratha reports that only two of the top 20 recipients were in sub-Saharan Africa (Lesotho and Uganda). The Latin American experience is mixed, with severe drain reported in the Caribbean (Thomas-Hope, 2002; Docquier and Marfouk, 2005). Significant brain drain from Latin America stemmed from the 1980s economic crisis (Pellegrino, 2001). On the other hand, Mora and Taylor (2005) show that most migration from Mexico is not from among the highly skilled (see also Ibarraran and Lubotsky, 2005). A more promising region appears to be Asia, where economic openings and proactive government policies in some countries have inspired entrepreneurial and financial investments from the diaspora (Pellegrino, 2001; Iredale, 2001; Hugo, 2003; Docquier and Marfouk, 2005).

Recent research confirms that generalized answers to the gain-or-drain question, as well as the more specific questions noted above, are not possible. Benefits and costs accrue to sending countries, receiving countries, and to the migrants themselves (IOM, 2005; Özden and Schiff, 2005; Saxenian, 2002). Among other factors, the relative balance depends on the volume of migrants, as well as labor market conditions and the strategy and economic growth of the sending country (IOM, 2005). More specifically, gain-or-drain is determined by the particulars of the migrants, including the migrants' profession; remittance-receiving households; the sending country; the receiving country; and the time frame in which the outcomes are judged. The following section looks at potential economic gains from migration in greater detail.

IV. ECONOMIC EFFECTS OF DIASPORAS

A discussion of the economic impact of diasporas must necessarily begin with an overview of remittances, as these are the focus of much attention and policy, and remain more prominent in terms of data collection and research than other potential contributions. Economic remittances have grown substantially in recent years. As noted above, they now significantly outpace global overseas development assistance (Nyberg-Sorensen et al., 2002), with estimates of $70 billion per year in 2004, $125 billion in 2005, and $167 billion in 2006 (World Bank, 2004; 2005; 2006). The US

Agency for International Development estimates that of all US international assistance (public and private), individual remittances account for more than 30%, and they more than doubled in the 1990s (USAID, 2002).

Accordingly, international development agencies are beginning to direct attention to leveraging the impact of these contributions, for example, through promoting regulatory reforms (Martin, 2001), and brokering relationships to encourage diaspora investment (Gillespie et al., 2001). Home governments are increasingly soliciting remittances and offering supportive policy incentives (discussed below) (see, for example, Lowell and De la Garza, 2000).

However, economic remittances do not automatically contribute to national development. According to IOM, remittances tend to follow three spending phases, with attention to: (i) family maintenance and housing improvement, (ii) conspicuous consumption, and (iii) productive activities (Nyberg-Sorensen et al., 2002: 14-15). A large percentage of remittances does not extend to phase three. Furthermore, such remittances often do not reach the poorest of the poor, who may be less likely to have links to diaspora communities (Massey et al., 1999); and remittances to socioeconomically unequal societies may further polarization (Gardner, 1995). In their study of Mexico, Mora and Taylor (2005) found that remittances have an equalizing effect on incomes only in high migration areas. IOM's recent migration report (2005) also notes that remittance data analyses tend to ignore the proportion of gross transfers that are made to developed countries and among developing countries.

While there is reason to be cautious in making assumptions about the household use of remittances and their consequent productive contributions, IOM (2005) finds that recipients do have a high propensity to save, and remittances may pave the way to accessing investment capital. They can also more directly provide capital for small businesses when channeled through credit cooperative and microenterprises. While the highly skilled are not necessarily the largest remitters, they are more likely to make productive investments (Lowell et al., 2004). In its recent research, the World Bank reports that remittances can (i) reduce recipient household poverty, with spillover to other households; (ii) increase investment in education and health, as well as other productive activities; (iii) reduce child labor; and (iv) increase entrepreneurship (Özden and Schiff, 2005). With respect to poverty reduction, for example, remittances are especially important for addressing the *severity* of poverty, for example, in Guatemala (Adams, 2005). Beyond the beneficial brain drain hypothesis regarding incentives to invest in education, research also suggests that remittances enable and yield increased education investments.[2]

A relatively recent development, which seeks to better channel and coordinate remittances, is the emergence of hometown associations (HTAs) or regional clubs. Through such associations, resources can be channeled to specific development projects, sometimes identified by the targeted communities themselves, and/or coordinated with government funds and expertise (see Orozco, 2003; Orozco with Lapointe, 2004; see also Smith, 2001; Shain, 1999). HTAs in Mexico, for example, usually begin with health and education, sports and cultural projects, and then focus on physical infrastructure. HTAs have also begun to explore more targeted productive activities, such as job creation and direct investments (Orozco, 2003; see also Landolt, 2001). The US Agency for International Development has recently sought proposals for collaborative ventures with HTAs (Lowell et al., 2004).

Of course, a large portion of actual remittances remains unknown due to the use of informal remittance systems. These are systems that range from the unregulated to the illegal. Types include (but are not limited to) hand delivery/couriering, which may include *hawala* systems; money transfer as part of other business transactions; money transfer enterprises; and migrant association and microfinance institution-based transfers (see Pieke et al., 2005). Many of these interact with formal systems, making their identification problematic. Transfers may also be in kind, thus contributing to trade. A recent study commissioned by the Department for International Development of the United Kingdom finds that the more remittances are regulated, the larger the informal market is likely to be (Pieke et al., 2005).

The report concludes that efforts to formalize these systems for the purpose of harnessing the resources for development may be misguided as these systems emerge as adaptive responses to the constraints and opportunities presented to heterogeneous migrant groups. *Hawala* systems, for example, are based on trust and telecommunications and do not often require receipt of the money prior to transfer. They are typically less costly than formal systems. Many migrants find such systems particularly helpful in the early stages of their migration before they have been able to enter the formal banking market in the host country.[3] There is no evidence to suggest that informally transferred remittances are applied any differently to development objectives than formal remittances (Pieke et al., 2005), though *hawala* systems themselves have been scrutinized for illegal trade, money laundering, and general support for terrorism.

Beyond remittance-related efforts, diasporas contribute to the economic development of their homelands through foreign direct investment and transnational entrepreneurship, including support for entrepreneurs and small businesses in the

homeland. The Commission on Private Sector Development of the United Nations Development Programme notes that diasporas are "supporting entrepreneurs in their homelands with remittances, informal financing of small businesses, and business advice and mentorship" (Commission, 2004: 30). In fact, diaspora members may be much more effective than other foreign investors. First, they may be more likely to invest in economies that others would consider high risk, simply because they have better knowledge and relationship opportunities that other investors lack. Second, they can combine this knowledge with the skills, knowledge, and networks they have cultivated abroad, yielding important synergistic advantages.[4] India's information technology success story is a widely cited case, where diaspora members have networked with their returned counterparts, contributing an estimated 16% of total foreign investment (Margolis et al., 2004; see also Saxenian, 2002).

More specifically, a sub-stream of the literature on transnationalism and international migration has begun to examine transnational entrepreneurs. For example, Landolt and Associates (1999; see also Landolt, 2001) developed a framework of transnational enterprises, identifying four types. Circuit firms concern themselves with the transfer of goods and remittances between countries; they include informal couriers as well as large formal enterprises. Cultural enterprises depend upon contacts within the home country for the purpose of importing cultural goods. Ethnic enterprises are based in the host country and provide goods imported from the home country. Finally, return migrant microenterprises are created by returned migrants who depend upon their former host-country contacts for their business. Transnational enterprises may rely on kin networks both in the home country and in the diaspora (see, for example, Portes and Sensenbrenner, 1993).

Regarding development objectives more generally, diasporas also organize philanthropic activities targeted to the homeland, either through diaspora organizations, or less formally and individually. Diasporas represent important opportunities for more formal development organizations to recruit expertise and solicit information for development programs, and to disseminate information about priorities and programming, potentially reducing duplication and cross-purpose efforts (Brinkerhoff, 2004). Diaspora organizations can act as important intermediaries between traditional development actors, and between diasporas and local communities, for example, identifying needs and priorities of local communities and communicating those to donor organizations, nongovernment organizations (NGOs), and diaspora members to solicit funding and expertise. Diaspora organizations may also demonstrate innovative programs and approaches that can be replicated and/or used to advocate for traditional

actor administrative and programmatic reforms (Brinkerhoff, 2004). Examples of both can be found in the experience of postconflict reconstruction in Afghanistan (Brinkerhoff, 2004) and Liberia (Lubkeman, 2004).

V. SENDING GOVERNMENTS' RELATIONS WITH THEIR DIASPORAS

Home government perspectives on diaspora activities differ. In some cases, governments consider them an interference with state sovereignty. In other cases, governments see them as important contributors to social, political, and economic development. Accordingly, some states (e.g., India, Mexico, and the Dominican Republic) actively court the participation of their diasporas while others (e.g., Cuba) ignore or view them as enemies.

The stance of national governments with regard to their diasporic communities varies according to a range of factors, including the national ethos of the country of origin, the make-up of the community (e.g., refugees versus economically motivated emigrants), the importance of economic remittances to national development, and citizenship laws (Shain, 1999). For example, countries that include migrants as "official members of their political communities" include Brazil, Colombia, Ecuador, Mexico, and Portugal (Levitt, 2001). Not surprisingly, the legal rights of immigrants and the implications of dual citizenship have been increasingly debated, and these debates predate the recognized security threats post-September 11, 2001 (see Neuman, 1996; Benhabib, 1999).[5] States are increasingly challenged by the tension between preventing brain drain and controlling the activities of diaspora communities on the one hand, and not limiting their potential economic contributions on the other (see Alexseev, 2002).

Many governments seem to prioritize remittances and the direct transactions that come with them over brain drain.[6] Home governments are increasingly soliciting remittances and offering policy incentives (e.g., dual citizenship, tax-free investment opportunities, and matching funds) and investment options (e.g., remittance-backed bonds and foreign currency accounts) to encourage diaspora contributions (see, for example, Orozco with Lapointe, 2004; Lowell and De la Garza, 2000; Pires-Hester, 1999). Gamlen (2005) labels this a remittance capture engagement strategy. For example, through HTAs, resources can be channeled to specific development projects, sometimes identified by the targeted communities themselves, and/or coordinated with government funds and expertise (see Orozco, 2003; see also Smith, 2001; Shain, 1999). The Mexican Government has introduced a 3x1 matching incentive program to

encourage developmental investments, where HTA investments are matched at local, state, and national levels (see Orozco with Lapointe, 2004). Remittance capture can also be achieved by offering various investment options and supporting incentives, including remittance-backed bonds, foreign currency accounts, investment tax breaks, exemption from import tariffs on capital goods, duty-free shopping bonuses, and free passport issuance (Gamlen, 2005: 20).

The following sections examine diaspora contributions from the perspective of the diaspora, both generally and with respect to knowledge transfer and exchange.

VI. FACTORS CONDUCIVE TO DIASPORA CONTRIBUTIONS TO THE HOMELAND[7]

Three types of factors inform diasporas' mobilization to contribute to the homeland, particularly beyond individual family remittances: those related to their ability, their motivation, and the enabling environment (see Esman, 1986).

A. Ability to Mobilize

Diasporas' ability to mobilize for homeland contributions can be explained, in part, through network theory and associated social capital. The most commonly identified factor necessary for effective mobilization is the creation of a sense of solidarity and community identity (see Pratkanis and Turner, 1996; for diaspora-specific discussions see King and Melvin, 1999/2000; Shain, 1999). That is, "When colleagues see the world together, they are likely to share the same understanding of the world. This makes collective action possible" (Navarro, 2003:138). A dense network of relationships, or bonding social capital, can engender trust (Coleman, 1988; 1990) and generate the shared identity required for collective action (see also Ostrom, 1990). Furthermore, "the more intense the interaction, the higher the likelihood of participation" (Dutton and Lin, 2001: 196).

Community identity is the foundation for acting collectively, as opposed to individually, and it enables the harnessing of diverse resources and capacities. These include material resources, skills, and organizational resources. To effectively mobilize, diaspora members must possess capabilities (personal and interpersonal skills, and experience) and confidence. Diasporas' specific skills and capacities (whether as individuals or associations) inform both the mobilization process and the nature and impact of their contributions to the homeland. Bringing these material resources, skills,

and capacities together requires an organizational or networking base (see Klandermans and Oegema, 1987), which enables diaspora members to contribute their perspectives, skills, and resources to the collective effort. A networking base also enables diasporas to reach beyond their own capacities to pursue heterogeneous networks, where individual actors act as bridges between diffuse sources of information and resources (Burt, 2000), representing bridging social capital.

Social capital is developed and manifested in associations (Anheier and Kendall, 2002; Putnam, 1993). For diasporas, bonding social capital is represented in the development of a diaspora community, complete with various types of diaspora associations or more formal organizations. Both bonding and bridging social capital are facilitated, for example, through Internet-based organizations, that is, digital diasporas (see Brainard and Brinkerhoff, 2004; Brinkerhoff, 2004; Brinkerhoff, 2005c), and through diaspora professional associations.

The importance of social capital and networks suggests a particular vocabulary for describing migration processes and their impacts. As Tilly (1990) argues, units of migration are not individuals, but networks. Put another way, "migration is a process that both depends on, and creates, social networks" (Vertovec, 2002: 3). Such a perspective serves to anthropomorphize migration and knowledge transfer/exchange, moving it beyond an invisible hand of supply and demand and better illuminating human (and political) motives, incentives, and strategies. Throughout his research on migration networks, Meyer has stressed the importance of human interactions and human mediation in migration processes (see, for example, Meyer, 2001). Such a perspective lends support to a new language to describe these phenomena: instead of migration, sending country, and receiving country, one might more accurately describe these processes using terminology that highlights the will to act and to do so through relationships, that is: diaspora, home country, and host country.

To sum up, bonding social capital (represented by dense, homogeneous networks) encompasses solidarity and community identity. It can contribute to developing a sense of efficacy, psychological empowerment, and a felt need to express identity. Bridging social capital (represented by heterogeneous networks) can play a part in developing organizational resources and capitalizing on opportunity structures in the host country.

B. Opportunity Structures/Context

Esman (1986) refers to "opportunity structures" available for diasporas to mobilize for particular agendas. These opportunities may be present, or not, in the hostland,

homeland, and/or internationally. These may include: availability of economic opportunities; at least neutral regulation of diaspora activities generally and with respect to specific agendas; access to necessary infrastructure (political, technical, informational/communication); host country government proactive support of the diaspora, through targeted service provision for integration and potential reliance on the diaspora for input and action in support of its foreign policy vis-à-vis the homeland; a home country government that is neutral or actively solicits diaspora participation and contributions (e.g., through policies and programs as noted above); and private sector actors who recognize the market that diasporas represent for both home and host country business opportunities.

Opportunity structures are highly dependent on diasporas' access to power resources. Uphoff (1989, 2005) outlines six types of power resources: economic, social (social status based on social roles or on complying with socially valued criteria), political (ability to influence the exercise of authority), informational, moral (i.e., the perceived legitimacy of decision makers), and physical (coercion or violence, depending on perceived legitimacy of applied physical force). Related questions for assessing an enabling environment for diaspora contributions include:

- Does the regulatory environment support economic opportunities?
- Do diaspora members have access to positions of authority and respect within society, both for influence and for obtaining these positions for themselves?
- Do they have access to, and the ability to influence, decision makers?
- Do they have access to the information necessary or supportive of their effectiveness for a particular agenda?
- Is their cause perceived to be legitimate?
- Do they have access to physical resources?

C. Motivation to Act

Diaspora groups and members may be more or less inclined to concern themselves with quality of life and policies vis-à-vis their home countries. Much will depend on "their inclination or motivation to maintain their solidarity and exert group influence" (Esman, 1986: 336). Political activism resulting from cultural identity, whether targeted to home or host country, is likely to be driven by "interests and obligations that result from migrants' simultaneous engagement in countries of origin and destination" (Nyberg-Sorensen et al., 2002). The higher the cost to status and security in their

adopted country, the greater the likelihood that the diaspora community will split and/or fail to mobilize (Esman, 1986).

The motivation for diasporas to mobilize, for whatever purpose, is likely to be for the expression of their identity, for maintaining or acquiring power or other resources, or both. The incentive of identity expression can be addressed through the formation of diaspora organizations, and it can be reinforced through activity on behalf of the homeland. For some, the expression of homeland identity is based solely on a sense of belonging, in response to feelings of marginalization in their adopted societies. The felt need to actively express identity may derive from various forms of marginalization (social, economic, political, or psychic), confusion, and a sense that the homeland identity will be lost without proactive expression (e.g., when overwhelmed by pluralism), or simply in response to social reinforcement and perhaps pride (Brinkerhoff, 2005a).

Process factors also influence diasporas' incentives to mobilize. Issues need to be framed in order to focus individuals' attention and energy and to enable effective coordination of their efforts (Snow et al., 1986). That is, some coordination and consensus on the direction of collective energy, including what is acceptable and what is not, is necessary. To sustain motivation, organizers must also generate a sense of efficacy and subsequent impact (see, for example, Klandermans, 1997; Kelly and Kelly, 1994; Hinkle et al., 1996).

VII. FACTORS CONDUCIVE TO DIASPORA KNOWLEDGE TRANSFER AND EXCHANGE

Naturally, the general factors supportive of diaspora contributions to the homeland are highly interdependent. This section discusses the conducive factors specifically for knowledge transfer/exchange, confirming this interdependence.

A. The Origins of Transferable Knowledge

With respect to knowledge transfer and exchange, prior to considering diasporas' ability to mobilize, it is first necessary to consider just what is to be mobilized and how these knowledge resources are created. And who exactly are these diaspora members from whom such contributions are sought? Definitions of skilled migrants are quite varied, complicating any comparative assessments (see Pellegrino, 2001). Skilled migrants are most commonly defined as "those in possession of a tertiary degree or extensive specialized work experience" (Vertovec, 2002: 2). Williams and Balá (2005) argue for

a total human capital approach which, beyond qualifications, income, and occupational positions, accounts for tacit knowledge, including interpersonal skills and self-confidence.

Meyer (2001: 95) discusses how brain drain and the human capital approach "refer to a substantialist view of skills as a stock of knowledge and/or abilities embedded in the individual." In addition to the networking implications of this limited view, discussed below, this perspective ignores the fact that knowledge is not static, nor is it represented only by the credentials the migrants achieved (whether before or after migration). That is, the receiving country may provide the experience necessary to enhance the migrants' skills. This was true, for example, for Italian-born astrophysicist and 2002 Nobel laureate Riccardo Giacconi. In response to disgruntled compatriots' questions about why he left Italy, he responded, "Scientists are like painters. Michelangelo became a great artist because he had been given a wall to paint. The US gave me my wall" (quoted in Margolis et al., 2004: 30).

Meyer and Brown (1999a) elaborate on what this "wall" might mean, noting scientific migrants' work environment in the industrialized host country, which tends to be far superior to the developing country homeland in terms of funding, technical support, equipment, scientific networks, and experimental conditions. They apply the sociology of science and technology to further argue that the process of knowledge creation, transmission, and application requires not only social and institutional communities, also but socio-cognitive ones, which are rarely replicable as they rely upon local conditions and collective tacit knowledge built through daily group practice.

1. Networks

This view of the sociology of science and technology extends to its mobilization for homeland contributions. That is, diaspora knowledge transfer/exchange requires networks. Much has been written about networks' contribution to migration and brain drain (see, for example, McKenzie [2005] on Mexico), but networks also facilitate knowledge development (as above) and transfer/exchange. Indeed, Meyer (2001) argues that it is through intellectual diaspora networks that brain drain is transformed into brain gain.

What are the implications of this networking perspective for knowledge transfer and exchange? Meyer (2001) convincingly argues that the brain drain perspective, whose defining concept is human capital, misses the mark by ignoring the implications and impact of social capital. He cites the findings of Greeve et al. (1999) that social

capital is the larger explanatory factor of firm achievement. With specific application to knowledge networks, he applies Callon's (1991) concept of socio-technical or techno-economic networks to describe how such networks link heterogeneous entities—including equipment, norms, and organizations—such that the potential of each link within the network is only as valuable as what it can mobilize in the network as a whole. Thus, this broader notion of network encompasses the opportunity structures discussed below.

The body of research on intellectual scientific diaspora networks is increasing. In 1997, Meyer and Associates published the first study of a diaspora knowledge network, focusing on Colombia. Only 2 years later, Meyer and Brown (1999a) identified 41 expatriate knowledge networks tied to 30 different countries. These are specific efforts to link diaspora professionals to the homeland for the purpose of transferring knowledge. The networks were categorized into four types: (i) student/scholarly networks, (ii) local associations of skilled expatriates, (iii) expert pool assistance through UNDP's TOKTEN program, and (iv) intellectual/scientific diaspora networks. Of the 41 identified, 15 were classified as intellectual/scientific diaspora networks with an explicit purpose of promoting the economic and social development of the homeland.

Many associations of skilled expatriates are evolving into formal professional associations, which are becoming increasingly active in intellectual/scientific diaspora networks. Already, in terms of recruitment and placement outside of migrants' homelands, professions themselves are viewed as networks (see, for example, Iredale, 2001; Brown, 2000). The highly skilled may rely more on such professional networks, as well as school-based networks and formal recruitment and relocation agencies, than on kin-based ones (Vertovec, 2002). In fact, such reliance is more likely to yield a match of skill levels to jobs than networks based on personal ties, which tend to foster ethnic profession and destination niches that can yield brain waste (see Poros, 2001). These professional associations, or networks, need not be diaspora-specific in order to play a role in fostering knowledge transfer to or exchange with the homeland. While experience varies among professions, they are increasingly becoming international; their operation "has become a transnational matter" (Iredale, 2001: 7).

The most notable examples of knowledge transfer and exchange highlight the role of diaspora identity-based professional associations (see Saxenian, 2002). These include, for example, the Silicon Valley Chinese Engineers Association, the Indus Entrepreneur, and the Korean IT Forum. These associations fulfill a range of social network roles, including facilitating the settlement—professional and otherwise—of recent migrants; professional and technical advancement; ethnic identity formation

and maintenance; and entrepreneurial investments in the homeland. Saxenian (2002) particularly highlights their role of bridging homeland producers and the global economy.

These examples highlight the importance of intermediaries to facilitate both entry into knowledge networks and the successful application of skills and knowledge in both host- and homeland. Intermediaries may include formal recruitment and relocation agencies, and professional associations, among others. Generally, intermediation might include facilitating the migration process, and ensuring transportability of qualifications (Vertovec, 2002). More specifically, Meyer and Brown (1999a:13) argue for a coordinating body to facilitate knowledge transfer: "The function of such a coordinating body would be to collect, organize and maintain the information needed for the systematic search of partnerships, but also to manage and promote the interests and actions of the multiple entities present in a network of this kind."

The business literature has begun to promote the concept of market ecosystems. In a market-based ecosystem, private sector and social actors enact symbiotic relationships for wealth creation (Prahalad, 2004). Such an approach is particularly important for market development at the base of the pyramid.[8] Base-of-the-pyramid markets require multiple stakeholder relationships, including government, NGOs, communities, financial institutions, and other businesses. The symbiotic characteristic communicates that these actors each have a unique role and are interdependent in their efforts. Some such ecosystems will include a nodal firm that facilitates the functioning of the network, including an emphasis on "quality standards, mutual obligations, commitment to contractual relationships, and a shared set of values" (Prahalad, 2004: 69). Knowledge transfer/exchange networks could be viewed in much the same way. They necessarily incorporate actors beyond the skilled diaspora to encompass governments, NGOs, donors, and other intermediaries, and would likely benefit where one or more of these actors assumed roles similar to that of a nodal firm.[9]

2. Role of Information Technology

Information technology (IT) has emerged as an essential enabler of diaspora knowledge transfer and exchange (see, for example, Pellegrino, 2001). Among other things, it holds great potential for providing the information system proposed by Meyer and Brown (1999b), which would include a searchable database of diaspora members and their skills on the one hand, and opportunities/needs in the homeland on the other. It also supports less formal bridging social capital by fostering networks that encompass a broader range of potential actors (including skilled individuals outside of the diaspora),

directly connecting diaspora individuals and organizations, with homeland resources and organizations—both public and private—beyond national governments. Less formally, IT can be used to cultivate bonding social capital and community, which fosters will and ability to mobilize for homeland contributions (see Brainard and Brinkerhoff, 2004; Brinkerhoff, 2004; Brinkerhoff, 2005c; see also Pellegrino, 2001).

Through IT, knowledge transfer and exchange projects can be proposed, designed, and vetted. IT also enables diaspora knowledge contributions without necessitating short-term return or repatriation. This further challenges the human capital approach to brain drain, which assumes that knowledge moves only with the physical body (see Meyer, 2001). It also enables the sustenance and continued development of the socio-cognitive networks that yield and potentially maximize valuable knowledge. In fact, the Internet is the main tool of the intellectual/scientific diaspora networks studied by Meyer and Brown (1999a). It is IT that has enabled diaspora connections to the homeland to evolve from "sporadic, exceptional and limited links" to "systematic, dense and multiple" ones (Meyer and Brown, 1999a: 6).

B. Opportunity Structures/Context

Beyond the presence of intermediary organizations discussed above, opportunity structures specific to knowledge transfer/exchange refer to homeland and host country characteristics, including the opportunities migrants find in host countries to further enhance their skills and knowledge. In questioning the very nature of the "brains" that get "drained," Meyer (2001) posits that migrants seek opportunities to develop their skills and knowledge, and then apply these in supportive contexts inclusive of adequate resources, infrastructure, and professional norms. Astor and Associates (2005) support Meyer's (2001) hypothesis. Their study of physicians from Colombia, India, Nigeria, Pakistan, and Philippines highlighted greater access to enhanced technology and a desire for increased income as reasons, among others, the surveyed physicians migrated. That is, such characteristics of receiving countries produce incentives for out-migration that may lead to further development of skills and knowledge.

Rather than support diaspora knowledge transfer and exchange, most of the attention to host country policy has revolved around the design and implementation of policy that would reduce these incentives or regulate the immigration of migrants whose skills and knowledge are in short supply in the homeland.[10] For example, Deen (2004) notes such policy disincentives for the United Kingdom and France. More commonly, regulatory policy relating to skilled migration is driven by the market and

through trade agreements, whose impact on the home country is variable (see Iredale, 2001). To date, very little, if any, attention is given to receiving country policy frameworks that would encourage diaspora knowledge transfer/exchange to the homeland, though the Department for International Development is investigating the range of diaspora contributions to the homeland, which could inform policy frameworks in the future (see Van Hear et al., 2004).

With respect to home countries, opportunity structures for diaspora knowledge transfer and exchange encompass both home country policies and society. Building on Uphoff's typology of power resources, a supportive context would entail:

1. government policies that enable diaspora economic opportunities, reward and publicize diaspora knowledge contributions, facilitate information exchange, and legitimate knowledge transfer/exchange projects; and
2. a homeland society that welcomes diaspora contributions, perceiving them as legitimate and valuable; does not criticize diaspora members for not returning; and confers prestige on participating diaspora members.

The two sets of supporting factors can be mutually reinforcing: home-government policy frameworks can promote supportive social responses, and society can seek to influence enabling policy frameworks.

More specifically, policy frameworks can foster incentives for diaspora knowledge transfer and exchange. Lowell et al. (2004) identify three policy areas for optimizing skilled migration: migration management, the "diaspora option" (originally proposed by Meyer et al., 1997), and democracy and development. Migration management seeks to create disincentives for skilled migration. Related policies have evolved from an emphasis on value recovery through taxation and repatriation programs (i.e., the return option, see Meyer et al., 1997; Meyer, 2001) to host country immigration regulations and international agreements limiting the immigration of skilled individuals from targeted countries (see Lowell et al., 2004; Gamlen, 2005; Iredale, 2001); and to addressing the causes of migration, that is, tackling economic and political development challenges (Lowell et al., 2004). More conventional return policies persist and their targeted design and application are encouraged, for example, for retirees and students (see Pellegrino, 2001).

The diaspora option, in turn, encompasses several potential approaches. This policy framework conceives the skilled diaspora as an asset to be captured (Meyer et al., 1997), and is the primary focus of this volume. Gamlen (2005) further distinguishes

three types of related diaspora engagement strategies: remittance capture, discussed above; diaspora networking; and diaspora integration. Diaspora networking refers to the bridging social capital discussed above, specifically networking that links the homeland to the diaspora.

The diaspora integration strategy recognizes the diaspora as a constituency that is marginalized from the homeland. Thus, related policies include, for example, the extension of citizen rights such as voting, and the organization of diaspora summits and diplomatic visits to diaspora organizations in their host countries. Mexico, a leader in the diaspora option generally, has even created positions for elected diaspora representatives in state parliaments. Diaspora integration policies confer social status, political influence, and legitimacy to the diaspora and its potential efforts to contribute to the homeland. Zambia's president, Levy Mwanawasa, provides an example that combines remittance capture with diaspora integration strategies. In a recent address to the Zambian community in the US he stated: "I know you expect me to say come home. I am not going to do that. I have no jobs to give you. Work here and send money home" (quoted in Manda, 2004: 74).

Finally, policies for democracy and development include strengthening institutions and human rights, education and targeted development; promoting civil society participation in the policy process; and intergovernmental agreements and harmonization, bilateral and multilateral agreements, and the General Agreement on Trade in Services (GATS) (see Lowell et al., 2004; see also Deen, 2004; Iredale, 2001). This policy area encompasses a broad range of potential actors—home and host country governments, international and intergovernmental organizations, NGOs, and diaspora organizations themselves. Indeed, the active interest in the diaspora of this broad array of actors is an important opportunity structure for the diaspora option more generally. Democracy and development in the homeland at once serve to address the causes of migration for some and provide incentives for diaspora contributions by enabling the contributions and enhancing a sense of efficacy that they can have an impact.

C. Motivation to Act

These strategies and the particular policies that are adopted create important incentives and may frame issues in ways that enhance diaspora members' motivation to contribute to the homeland. Incentives range from the very simple, such as exemption from import tariffs on capital goods, duty-free shopping bonuses, and free passport issuance (Gamlen, 2005) to the more subtle social and moral legitimation that government and the

homeland society can provide. Much of the motivation to mobilize will derive from the diaspora itself—from individuals' own inclination to reinforce and express their homeland identity, and from the supportive diaspora communities and identities they co-create. For some, these identity motives will coexist with other motives, often including profit.

All of the actors referred to above—home- and hostland governments, international and intergovernmental organizations, other donors, multinational corporations, professional associations, NGOs, and other community organizations—can play important roles in framing issues in a compelling way that inspires diaspora contributions and enhances diaspora members' sense of efficacy and meaning of their potential contributions. The role of diaspora organizations themselves is essential in this framing process.

VIII. CONCLUSION

Diaspora contribution to homeland development is a complex consideration with varying potential including tradeoffs between gains in some areas due to losses in others, and a range of mitigating factors, none of which is static. This chapter opened with several related questions and concludes with some tentative responses. The gain-or-drain question can never be answered definitively or universally.

The emphasis of governments and donors on remittances may be counterproductive in some respects, given that remittances may focus primarily on household sustenance, consumption, and emergency response and may detract attention from the broader significant potential diaspora contributions. That said, remittances, alone, are an important gain given potential spillover effects and some documentation of their impact in alleviating the severity of poverty. Whether or not these contributions compensate sufficiently for the loss of human capital in the homeland remains debatable, though arguments and evidences in support of a beneficial brain drain suggest that this question may be answered affirmatively and should be assessed on a case-by-case basis. When contemplating brain drain, it is important also to consider knowledge and skills as dynamic products of knowledge and socio-cognitive networks, yielding assets that would not have been possible without out-migration. The potential for diaspora knowledge transfer and exchange suggests greater opportunities for gain than may be currently recognized and realized.

In seeking to maximize gains, this overview has highlighted conducive factors, particularly with respect to knowledge transfer and exchange. As part of these, it has

introduced several policy options with implications for the opportunity structures for diaspora mobilization. The following case studies provide empirical and anecdotal evidence regarding knowledge transfer and exchange and the drain-or-gain question for Afghanistan, PRC, and Philippines. Together, the cases present different responses to the varied opportunities presented by migration, both on the part of governments and diaspora members. The volume concludes with an analysis of these experiences with respect to the factors conducive to diaspora mobilization and the variety of policy options homeland governments might adopt, and suggested policy implications.

ENDNOTES

1 Of course, security remains a concern. Collier and Hoeffler (2001) found that diasporas substantially impact the risk of renewed conflict; after 5 years of postconflict peace, the presence of diasporas increases the likelihood of renewed conflict sixfold.

2 For example, see Cox-Edwards and Ureta (2003) on El Salvador; Adams (2005) on Guatemala; and Yang and Martinez (2005) on the Philippines.

3 The term *hawala* is used for systems operating in the Horn of Africa, the Middle East, Afghanistan, and Pakistan. Elsewhere such systems may be referred to as *hundi* (India and Bangladesh), *phoe kuan* (Thailand), black market peso exchange (Colombia), *padala* (Philippines), and *hui kuan* (Hong Kong, China) (see Pieke et al., 2005).

4 For a case study from Nepal, see Brinkerhoff (2005b).

5 For a discussion of these concerns in the post-11September 2001 environment, see Faist (2002).

6 For example, see Kaukab (2005) for the Pakistan case and Manda (2004) on Zambia.

7 This section draws on Brinkerhoff (2006), Chapter 2.

8 The base of the pyramid is where approximately 4 billion people live on less than $1,500 annual per capita income (Prahalad and Hart, 2002).

9 Brinkerhoff (2005b) presents a case study of a diaspora entrepreneur from Nepal who plays this role, providing business development services to local small businesses in that country, linking these to the global economy, and working with the Government of Nepal to ensure an enabling IT legal framework to support business as well as economic development more generally. See http://www.thamel.com.

10 For a thoughtful review and analysis of receiving country policy, see Kapur and McHale (2005).

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Promoting Knowledge Exchange through Diaspora Networks (The Case of the People's Republic of China)[1]

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I. INTRODUCTION

This study explores how the approximately 1.1 million overseas Chinese professionals (OCPs) can better help their home country *without* returning on a permanent basis.[2] After efforts that began in the 1980s to encourage the long-term return of OCPs, the Government of the People's Republic of China (PRC) began to pay increasing attention to their short-term return and to transnational connections with them. The initiative of encouraging temporary return and network building can be traced to 1985 with the introduction of postdoctoral programs at the suggestion of Nobel Prize winner Dr. Li Zhengdao (Tsung-Dao Lee) to Deng Xiaoping. In 1987, Zhao Ziyang, then the general secretary of the Chinese Communist Party (CCP), argued that the brain drain should be regarded as a case of "storing brainpower overseas" that would be used in the future (Zweig and Chen, 1995). Similarly, the State Commission for Science and Technology suggested in 1988 that OCPs should be regarded the same. Following this, the Government and other agencies advocated the so-called "dumbbell model", which means that a professional has affiliations in both the PRC and overseas and moves back and forth to serve the motherland. Commonly used terms such as "flexible mobility" (*rouxing liudong*) and "only seek to utilize, not to possess" (*danqiu suoyong, buqui suoyou*) reflect the fact that the *weiguo fuwu* policy has been widely practised. The former means that an OCP can come and go according to his or her convenience, and the

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latter refers to PRC employers' strategy of benefiting from OCPs without forming formal employment relationships.

Short-term return and network building by OCPs are not pushed only by the Government, they are also encouraged by knowledge-user institutes. "Knowledge" in this project includes: (i) technological know-how that can be utilized by industries and research; (ii) management experiences such as expertise in law and finance; (iii) information about the latest theories and research methodologies; and (iv) information useful for policy making, including successful/failed international experiences. Knowledge exchange is the process whereby expertise or information is channeled to institutes or individuals who originally do not possess them. Knowledge-user institutes include universities, research institutes, high-tech enterprises, and industrial parks. Recently, a few local government departments, for example the Bureau of Personnel of the Shanghai Municipal Government, have targeted OCPs in their staff recruitment and have, thus, become knowledge users.

This study aims to provide new information and analysis on three issues. First, it pays more attention to OCPs as a social group and views knowledge exchange as fundamentally a social process. Second, it attempts to systematically review the various programs encouraging knowledge exchange and, more importantly, to reveal and compare their operational modes. Third, the study calls attention to the connection between formal and informal networks such as those based on OCP associations and personal connections. While there is substantial literature on networks in general and on overseas Chinese networks in particular,[3] this study focuses on the mechanisms and strategies of network building and attempts to link them to policy analysis.

Three groups comprised the main subject of this project: OCPs, government or quasi-government agencies related to OCPs, and PRC-based knowledge-user institutes. In line with definitions used by the Ministry of Education (MoE), Ministry of Personnel (MoP), and Overseas Chinese Affairs Office (OCAO), this project defines OCPs as ethnic Chinese residing outside the PRC on a long-term basis with tertiary degrees and working in specialized areas using their specialized knowledge. They can be academics at advanced research and education institutes or can work for private technology companies and other agencies. Self-employed professionals such as high-technology entrepreneurs, lawyers, and other freelance consultants also fall into this category.

The study used a wide range of methods. We started with documentary research and in-depth consultation with OCAO, then collected 180 government policy documents issued from 1986 to 2003[4] and a large amount of research literature.[5] We conducted in-depth interviews with 36 government officials, staff at key research

institutes, and OCPs (for the key interviewees see the Appendix). We organized one workshop in Beijing;[6] organized one focus group discussion at the United Kingdom (UK) Association of Chinese Chemistry Professionals meeting in September 2004 in Leeds; and *participated in and observed two major conventions:* the Third Jilin Convention of Consultation and Cooperation between Overseas Chinese Professionals and Domestic Enterprises on 13–17 July 2004 in Changchun and the Second Cooperation and Exchange Convention of Overseas Chinese Enterprises in Science and Technology Innovation on 17–21 July in Shenyang, Liaoning Province. We sent survey questionnaires to 74 participants in the Association of Chinese Chemistry Professionals meeting in Leeds to investigate: (i) the spontaneous development of networks among OCPs; (ii) OCP career trajectories; and (iii) means of communication and information exchange between OCPs and institutes in the PRC. Of those, 49 were returned. We also conducted an in-depth study of two knowledge-user institutes, and reviewed curriculum vitaes (CVs) of 130 OCPs randomly selected from the OCAO database of more than 20,000 collected on official or private visits by both OCPs in the PRC and OCAO officials overseas at conferences and at other activities. Although these CVs certainly do not represent all OCPs, they at least reflect the profiles of the OCPs with whom the Government has contact.

Following a review of the relevant literature and thinking on diaspora knowledge transfer to the PRC, the chapter reviews state-led programs for accessing OCP contributions; examines OCPs and their connections with the PRC drawing on our UK survey results as well as on more general statistics from OCAO sources; and explores OCP associations and transnational networks providing several examples from our qualitative data. The chapter concludes with implications.

II. BRIDGING THE KNOWLEDGE GAP

Despite the impressive progress in practice and the demand for network building and short-term return, existing research on OCPs has predominantly been centered on long-term, physical return.[7] Almost all available studies take permanent return as the parameter in judging the costs and benefits of student migration, and a higher return rate is almost invariably identified as the key policy goal. The most comprehensive recent research on OCPs includes that conducted by Jia Hao (1996), Zweig and Chen (1995), and more recently by Chen Xuefei et al. (2003). Cheng Xi (2002) also has published a series of papers based on documentary study. For instance, from a survey of 273 Chinese students and scholars in the United States (US) in 1993, Zweig and

Chen (1995) asserted, "Given the exceptionally low return rate in all studies on the Chinese brain drain, China is suffering a significant loss of brainpower." Similarly, Jia Hao and Chen Xuefei argue that the emigration of students not only led to the loss of highly qualified personnel, but, also created a skewed structure in scientific human resources.

As a further reflection of this approach, a body of research examined the reasons why OCPs did or did not return. A large-scale survey carried out by Chang and Deng (1992) shortly after the Tian'anmen Square incident in 1989 highlighted the perception that the political situation was the key to students' decisions on returning. Similarly, Huang Wei-Chiao (1988) argued that the intention to return was closely related to the human rights condition of the home country and that ideological appeals and financial incentives must be matched with impressive improvements in that condition. Brzezinski's research (1994) based on in-depth interviews, however, indicates that politics have little effect on the intention to return and that the prospect of self-realization was the determining factor. Zweig and Chen (1995) suggested that as fall-out from the impacts of the 1989 event decreased, living conditions and working facilities again became more important to students in the 1990s. The research by Xiao Ruo (2001), based on her case study of returned overseas scholars to Beijing University, also reveals that ideological and political concerns were not the main obstacles for return but that lack of professionalism in the workplace was more important.

Furthermore, existing literature tends to target the top government agencies, and so it focuses on formal policies and proposes recommendations that tend to be general. For instance, both Jia and Chen Xuefei et al. suggested that the central Government establish a special unit for OCPs, and Chen Xuefei et al. recommended increasing funding for programs to attract their return. Government officials we interviewed, however, stated that these suggestions are difficult to implement. A great number of articles about the achievements of particular institutes in attracting returnees has been published, particularly in the journal *Research on the Management of Studying Overseas*. Most, however, use very formal language and fail to describe the operational process or to identify problems clearly.

Since the late 1990s, transnational thinking has gained popularity worldwide. It recognizes that in the current era of globalization, global links may be more important than human capital "stock" in a particular country. A professional, thus, may contribute more to the home country by residing overseas than by returning permanently. This transnational approach, nicely captured by such notions as "brain circulation" and "scientific diaspora," constitutes a recognition by governments and international

agencies of the new economic and technological reality. But detailed analysis of practical initiatives along this line is limited. Indeed, PRC researchers and policy makers have little information about comparable experiences of other countries and international agencies when devising their policies. This knowledge gap—where research lags behind practice—is, thus, particularly salient in the PRC case.

III. STATE-LED PROGRAMS FOR ACCESSING OVERSEAS CHINESE PROFESSIONALS' CONTRIBUTIONS

This part reviews three main types of government initiatives for promoting knowledge exchange through diaspora networks: policies, concrete programs (funded and activity), and official websites. The Government tries to motivate them to participate in homeland projects by offering them: (i) social status, as invariably most OCP delegations are received by high-ranking officials wherever they go; (ii) potential economic returns; and (iii) benefits in career development (e.g., collaborative projects).

In the PRC, five central agencies are in charge of the affairs of overseas Chinese. They are the State Council for OCAO; the Committee for Overseas Chinese Affairs of the National People's Congress; the Committee for Hong Kong, Macao, Taiwan, and Overseas Chinese Affairs of the National People's Political Consultation Congress; the Zhigong Party; and the National Federation of Returned Overseas Chinese. Apart from these five organizations, a wide range of departments has been involved in the work related to OCPs. Among them are the Organization Department of the Central Committee of the Chinese Communist Party, MoE, MoP, the Ministry of Science and Technology (MoST), the State Administration of Foreign Experts Affairs, and the Ministry of Public Security (MoPS). MoE has set up the Office for the Affairs of Returned Overseas Students, and other ministries have also designated specific branches to take charge of the work. Interestingly, even the Communist Youth League has announced policies and has experimented with programs in this area.

On 1 December 2003, the central Government put in place a system of interministerial meetings on returned overseas students attended by 13 ministries as members and the All-China Federation of Returned Overseas Chinese as an observer. The system is led by the Central Government Leading Work Team on Skilled Personnel located in the Organizational Department of the Central Committee of the Chinese Communist Party with MoP, MoE, MoST, and the Ministry of Finance as deputy leaders. The meetings aim to smooth and speed up the process of policy making. For example,

if MoST plans to issue a new policy to facilitate the mobility of OCPs by offering favorable visa and taxation policies that are respectively in the charge of MoPS and the Ministry of Finance, the proposal can be discussed and decided on swiftly.

Various semigovernment agencies, for example the Overseas Returned Scholars Association, China Association for Science and Technology, and the National Natural Science Foundation of China, have also played important roles in promoting knowledge exchange. These agencies cannot promulgate policies but have adequate budgets and branches all over the PRC that enable them to carry out various activities on a large scale.

A. Government Policies and Incentives

MoP, MoE, and MoPS are the main policy makers. MoP policies aim to liberalize existing regulations to create a more friendly working and living environment for OCPs. MoE policies tend to offer additional benefits. MoPS policies regulate exit and entry, and include the green card that allows OCPs with foreign passports to enter selected cities in the PRC freely within a period of time. Because so many ministries have promulgated different favorable policies, MoE recently issued a "Notification on Issuing Special ID Cards for High Ranking Overseas Students," which enables OCPs to enjoy all the benefits provided by various ministries from buying cars to sending children to kindergarten.

While policies from the central Government are impressive, local governments, particularly provincial and municipal bodies, are even more enthusiastic, and their initiatives tend to be more proactive and detailed. For example, as early as August 1993, the Shanghai Municipal Government issued the "Notification on Special Treatment for Installing Telephones, Gas and Air Conditioners for Overseas Students Who Are to Work in Shanghai." The Guangzhou Municipal Government gives 100,000 yuan (US$12,000)[8] as a "golden hello" (*jianmianli*) to a returnee who decides to work in Guangzhou over the long term. Local governments in northeastern PRC are acutely aware of the importance of advanced technologies to develop their stagnant economy, and they identify OCPs as an important source to tap. Even poor provinces such as Shanxi and cities such as Xi'an provide OCPs with free offices and facilities, seed funds for research, housing, and even special personnel to assist with applying for national research funds. Liaoning Province, despite acute unemployment, invested 78.5 million yuan in these projects by 2003 (Mu Xiaosen, 2003).

Knowledge-user institutes have also devised their own policies to lure OCPs, offering special financial packages, housing subsidies, and research facilities. One university in Beijing almost guaranteed jobs, often with undeservingly high pay and status, for spouses of returned OCPs.

These policies may be more symbolic than substantive. Interviews and the focus group discussion revealed that only a very limited number of OCPs, including those who have considered returning, have detailed knowledge of the content of government policies. As many of our informants had contacts with the PRC Government and/or professional bodies overseas, there is good reason to believe that in general, even fewer OCPS are aware of government policies. The Shanghai Research Team report "Motivations and Rules of the Return of Overseas Talents and the Strategies to Encourage the Return" (2003) indicates that only 1.6–55.2% (depending on the policy) of the surveyed know about policies offering them special benefits. This was confirmed by Chen Xuefei et al. (2003). A recent online survey conducted by the Department for Overseas Scholars of the All-China Youth Federation and the newspaper *Youth Reference* suggests that 43% of returned OCPs think that beneficial policies to support setting up enterprises are necessary. While this figure may be lower than one would expect, 40.9% of those who have never studied or worked overseas also regard favorable treatment as necessary. This indicates that while OCPs themselves may not take the policies as seriously as hoped, there is consensus on the importance of OCPs, which may be more important than the policies themselves. Furthermore, given the wide range and large number of policies in place, concrete and action-oriented programs to encourage knowledge exchange are now more important.

B. Funded Programs

Funded programs are mainly initiated by government ministries, government or private foundations, and knowledge-user institutes. They can be classified according to their goals.

1. Short-Term Visits

The MoE Special Fund for Sponsoring an Overseas Student's Short-Term Visit and Work in China, also known as the Chunhui ("spring sunlight") Plan is a typical example. The fund supports visits for academic exchange, training, PhD programs, transferring

technology to underdeveloped regions, research and development at large and medium-sized state-owned enterprises, and since 2001, for sabbaticals. Since the Chunhui Plan started in 1996, the program has sponsored about 7,000 OCP visits. Support from local governments is the key to success. While MoE subsidizes international trips, local governments that want OCPs to visit their areas normally cover all the costs of travel and accommodation in the PRC. The plan also intends to lead to larger collaborative activities between OCPs and the PRC, so the Government is keen to support follow-up programs.

2. Collaborative Research Projects

Programs such as the Special Fund for Short-Term Return to Work or to Teach of the National Natural Science Foundation, and the K.C. Wong Education Foundation Fellowship for Short-Term Return managed by the Chinese Academy of Sciences (CAS) are aimed at encouraging collaboration between PRC-based scholars and OCPs. Starting in 1991, the K.C. Wong fellowship sponsored OCPs to return for at least 2 months. The program was expanded in 2003.

3. Overseas Chinese Professional Research Projects in the PRC

Programs of this kind include the Fund for Returned Overseas Students on the Basis of Competition of MoP, the Fund for Returning to China to Work on the Basis of Competition at CAS, and the Start-Up Fund for Research Projects of Returned Overseas Students of MoE. Funding is often relatively small, and the programs support OCPs who return on both a long- and short-term basis.

4. Special Chairs for Overseas Chinese Professionals on a Contractual Basis

These programs aim to recruit outstanding professionals to work in strategic areas; they are often backed by substantial funding. The Distinguished Young Scholars Program set up by the National Science Foundation grants 550,000–800,000 yuan (US$66,000–96,000) to scientists under 45 years of age for 4 years. The One Hundred Talent Program of CAS offers each selected scientist 2 million yuan (US$240,000) for 3 years. Similar to these are the National Science Fund for Post-Doctoral Fellows set up by MoP and the Outstanding Trans-Century Talent Plan established by MoE. Although these programs are open to both OCPs and to those who have studied and worked in the

PRC, OCPs have priority; often more than 80% of recipients are either former OCPs or are still overseas when they receive grants.

Among these programs, the Cheung Kong Scholar Program stands out as the most influential with possibly the largest budget. It sponsors OCPs to work in the PRC in strategic research areas under two schemes: special-term professors whose tenure lasts for 3 years and can be renewed for another 2, and chair professors for a 1-year term. A professor will be given 100,000 yuan as an annual stipend and may be honored with the Cheung Kong Achievement Award of 1 million yuan. By June 2002, nearly 400 out of the 411 special-term professors had previously studied or worked overseas, and 114 of them were working overseas at the time of recruitment. All 33 chair professors were recruited from overseas. Despite the small number of recipients, the researchers and administrative staff in universities and CAS we interviewed unanimously suggested that the program had attracted some top OCPs and had therefore significantly contributed to advancing strategic research, and had helped the PRC scientific community to integrate worldwide.

There are no detailed data available on the financing of these programs, but the amount is enormous. MoE invests about 300 million–400 million yuan (US$37 million–50 million) per year for its OCP programs. MoP has only recently engaged in this work but has allocated nearly 200 million yuan (about US$25 million) to sponsor short-term visits by OCPs in the last few years. Apart from that, in 2003, MoP also granted a special allowance to 2,500 OCPs who returned to work (MoP, 2003).

C. Activity Programs

These programs aim to function as bridges or platforms for knowledge exchange. Since the late 1990s, OCAO has organized teams of OCPs to visit under particular themes to provide technical advice in specific areas. Examples include the Asian Financial Crisis Visit in 1998 and the Venture Capital and High Technology Visit in 2003. In 1999, OCAO initiated One Hundred PhD Holders Homeland Visit Delegations and subsequently turned it into an annual event. The delegations were organized according to broad themes. For example, in 1999, a delegation consisting of specialists in agriculture visited 512 institutes in 18 provinces, and 32 were appointed as advisors to local government. These visits were well received by local governments, and there were a good number of cases where visiting OCPs helped local institutes or enterprises solve technical problems; some OCPs even became shareholders in enterprises as a result.

A second type of program facilitates information exchange between PRC-based institutes and OCPs. For example, CAS has established Young Scholars' Academic Forums and has sponsored nearly 100 conferences since 1991 to enhance knowledge exchange among researchers at the academy and those outside. Of the more than 6,000 participants in these conferences to date, more than 1,500 have been OCPs. *Science and Technology News*, the flagship newspaper of the Ministry of Science and Technology, has a special page called "Who Takes the Plate?" (*shui lai zhaipai*) where institutes all over the country publicize their technological problems and seek solutions. OCAO passes on these questions to OCP associations overseas through its e-newsletter *Snapshots of Science and Technology for Overseas Chinese*.

In 2004, the Chinese Association for Science and Technology launched the program Overseas Talents Serving the Homeland, capitalizing on its connections with OCP associations overseas and its local branches across the PRC. Local branches propose projects and the national association seeks OCPs to participate. The association also plans to establish bases (*jidi*) in selected locations for long-term, multifaceted collaboration between OCPs and local societies. For example, they are setting up a training center for skilled workers in Shenyang and a research base on agricultural development in a semidesert area in Xinjiang.[9]

The third type of activity program brings OCPs and domestic institutes together directly, typically in the form of large fairs. This type of program has attracted the most public attention. The Guangzhou Overseas Students Fair, which started in 1998, is probably the earliest. It is largely an initiative of the Guangzhou Municipal Government and is co-organized with MoE, MoST, MoP, and CAS. The Guangzhou Municipal Government shoulders most of the costs, while various ministries provide technical assistance. The fair takes place during the Christmas break to cater to OCPs working in the West. The 2003 fair attracted 230,000 participants (including both OCPs and representatives of PRC-based institutes) and 1,926 projects. Anyone who has studied or worked overseas is welcome, so it is a valuable vehicle for many OCPs as their first step in exploring the PRC market.

In 2001, Hubei Province and OCAO experimented with a new type of fair, the Convention for Overseas Chinese Professionals' Business Development. It turned into an annual event and by 2004 had invited more than 899 professionals to Wuhan (the capital) and had brought about 257 joint-venture agreements, of which 185 have materialized. Facilitated by the convention, more than 500 OCPs have set up more than 300 enterprises, and 150 have been appointed as technology advisors, guest professors, or overseas representatives for universities and companies (Hubei Province

Overseas Chinese Affairs Office and Foreign Affairs Office, 2004). Unlike the Guangzhou fair, the Wuhan convention invites only those OCPs of interest to local institutes.

Even more selective is the Jilin Convention on Consultation and Cooperation between Overseas Chinese Professionals and Domestic Enterprises, which is jointly organized by the state OCAO and the Jilin Provincial Office for Overseas Chinese Affairs and Foreign Affairs. The first meeting was held in 2002. The criteria for eligible invitees are strict: they must have a PhD and a minimum of 3 years of work experience or a master's degree with a minimum of 5 years of work experience. Suitable proposals from OCPs are forwarded to local enterprises, and one that attracts the interest of three or more will be invited. On average, 50–60 OCPs are invited each year. After the conference, the provincial OCAO works with other economic departments to help both OCPs and local enterprises fulfill their agreements.

The Cooperation and Exchange Convention of Overseas Chinese Enterprises in Science and Technology Innovation co-organized by OCAO, MoST, MoP, the Ministry of Commerce, and the Zhejiang Provincial Government in 2002 in Hangzhou represents yet another network-building strategy. This conference crossed geographic boundaries and included representatives from 34 high-tech zones and more than 600 enterprises along with 100 OCPs from more than 20 countries and regions. The convention promotes interaction among OCPs who contribute knowledge, among overseas Chinese business communities that contribute capital, and among domestic enterprises that contribute links to the PRC market.

In addition, the PRC Government has set up Returned Overseas Students Industrial Parks to provide OCPs with excellent facilities and a wide range of beneficial policies. In Beijing, around 5,000 returned students had created over 2,000 information technology companies in Zhongguancun Science Park by the end of 2003. Nationwide, the PRC had established more than 60 industrial parks specifically for returned overseas students by the end of 2002 (Duan Wenwen, 2004).

Lastly, the PRC Government has resorted to its time-honored working method, "setting up models" (*shu dianxing*), to acknowledge and publicize the achievements of returning OCPs to encourage more to come back. The Government made a total of 939 awards to outstanding returned OCPs (the "models") at special conferences in 1991, 1997, and 2003 for their performance in the PRC. The third was organized jointly by MoE, MoP, MoST, and by the three departments of the Central Committee of the Chinese Communist Party—the Department of Organization, the Department of Public Information, and the Department of United Front—which clearly indicates

the emphasis the Government attaches to this practice. It even encourages competition between government agencies and knowledge-user institutes to establish contacts with OCPs.

D. Official Websites: Gaps between Suppliers and Users

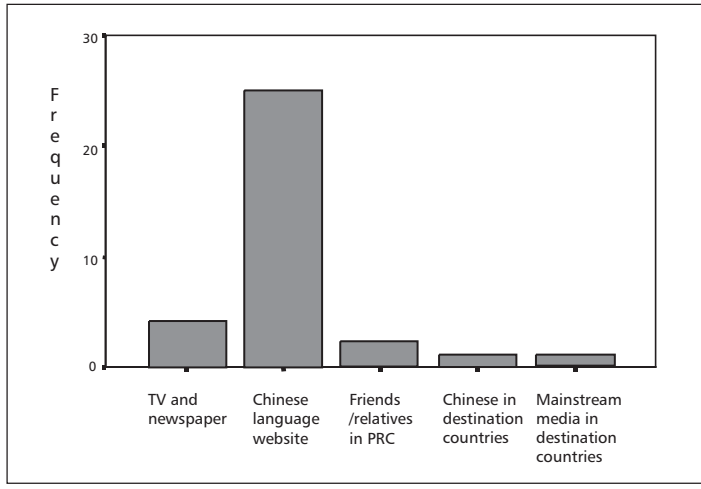
The importance of the Internet for transnational network building is self-evident, and websites specifically catering to OCPs have become an important means of contacting them. Among the 55 OCPs we surveyed, 51 use Chinese-language websites to follow the situation in the PRC, especially those who left after the mid-1990s. Chinese-language websites are not only widely used, but, are also commonly ranked as the most important source for general information (see Figure 2.1).

Acknowledging this, almost all government departments dealing with OCPs have set up specific websites or have at least created special sections in their general portals targeting this group. Websites set up by national agencies can be divided into two types. The first covers a wide range of information from general news to government policies to entertainment. The most notable examples are the websites of Chinese Scholars Abroad (http://www.chisa.edu.cn) of MoE and the China Diaspora Web (http://www.hslmw.com) hosted by OCAO.

The second type is more focused, primarily to provide OCPs with policy-related information. The websites Liuxue.net (http://www.liuxue.net) managed by MoE, China Overseas Talents of MoP (http://www.chinatalents.gov.cn), and CAS Overseas Study and Continuing Education (http://www.castalents.ac.cn) are probably the three largest of this kind.[10] As a reflection of the enthusiasm of local governments, there are numerous provincial or even municipal websites, such as the Nanjing International Talent Networks (http://www.wininjob.com) and Liaoning Overseas Chinese Scholar Innovation Engineering Network (http://www.ocs-ln,gov.cn). These largely focus on policy changes and recruitment information.

A systematic browse, however, suggests these websites tend to be similar not only in content but also in structure, the second type particularly so. For example, the OCP sections in both Liuxue.net and China Overseas Talents have basically three parts: policy information, a platform where job seekers (OCPs) and recruiters (knowledge-user institutes) register themselves, and links to other institutes.[11] The websites have yet to establish their identities, and, according to our interviews and focus group discussion, users do not know which website they should consult when seeking particular information.

Figure 2.1: What is Your Most Important Means of Getting Information on the PRC?



Source: Author's research.

Our survey explored OCPs' usage of these websites. The website of China Scholars Abroad was the most popular, but on average, OCPs visit it only occasionally. Younger OCPs were less likely to visit these websites, perhaps because the websites are conventional and static. This means that significant adjustments are needed in order to attract young OCPs. In our interviews and focus group discussions, informants voiced the view that there are too many, rather than too few, websites for and about OCPs, which sometimes confuse them. Therefore, it appears necessary to have a better structuring of the information within a website and a better division of content across them.

E. Summary

Government awareness, both central and local, of the importance of OCP contributions is definitely very wide and deep. There is anecdotal evidence that government and quasi-government agencies in the PRC have achieved great progress in encouraging knowledge exchange through OCP networks. The Government has not only launched a large number of programs, but, has also experimented with a variety of types that are to some extent complementary. We also find that different levels of government work together well, as most clearly evidenced by the Jilin Convention. Close collaboration between the central and the local levels seems essential for the success of most programs.

Even in the case of programs organized solely by a central agency, local governments also actively exploit opportunities. What concerns us is the lack of coordination among central departments.

IV. OVERSEAS CHINESE PROFESSIONALS AND THEIR CONNECTIONS WITH THE PEOPLE'S REPUBLIC OF CHINA

In order to properly evaluate the government programs, we need to situate them in a larger context, of which three aspects are particularly important: (i) the history of the formation of the OCP group; (ii) the basic profile of the OCPs; and (iii) the spontaneous, informal transnational networks between OCPs and the PRC.

A. Policy Changes

Those studying overseas (as opposed to the migration of professionals who have completed their education) remain thus far the dominant source of OCPs. One source estimates that as many as 60% of all Chinese who emigrated legally after 1978, both skilled and unskilled, were students and their families (Gao Weinong, 2003). The formation of the OCP group has been directly shaped by state policies that, starting at the end of the 1970s, evolved to support an increasing range of options. By the mid-1980s, three main channels of migration were established for PRC students: government sponsorship, work unit sponsorship, and self-financing (including sponsorship by receiving universities).

The late 1980s saw the formation of a sizable OCP group when the number of migrant students increased, but, then the return rate dropped significantly. The events of 1989 were a turning point. The US issued an executive order to grant PRC students permanent residence in 1990 and followed this with the 1992 Chinese Students Protection Act. Other major Western countries followed suit. As a result, 70,000 Chinese students and scholars in the US (including 20,000 family members), 10,000 in Canada through the OM-IS-399 policy (Zweig and Chen, 1995), and 28,500 in Australia (McNamara, 1995) became permanent residents almost overnight.

The 1989 incident, however, dealt only a minor blow to the student migration policy in the PRC, and the Government continued sending them out.[12] Furthermore, the Government soon made a significant policy shift from preventing returns or punishing students who overstayed to encouraging return, regardless of whether they

had broken their agreements with the state. Previously, a student who overstayed without permission had to compensate his or her sponsor, whether government or employer (Zweig and Chen, 1995). The liberalized policy is summarized as the "twelve-words approach": *zhichi liuxue, guli huiguo, laiqu ziyou* meaning support study overseas, encourage returns, guarantee freedom of movement.

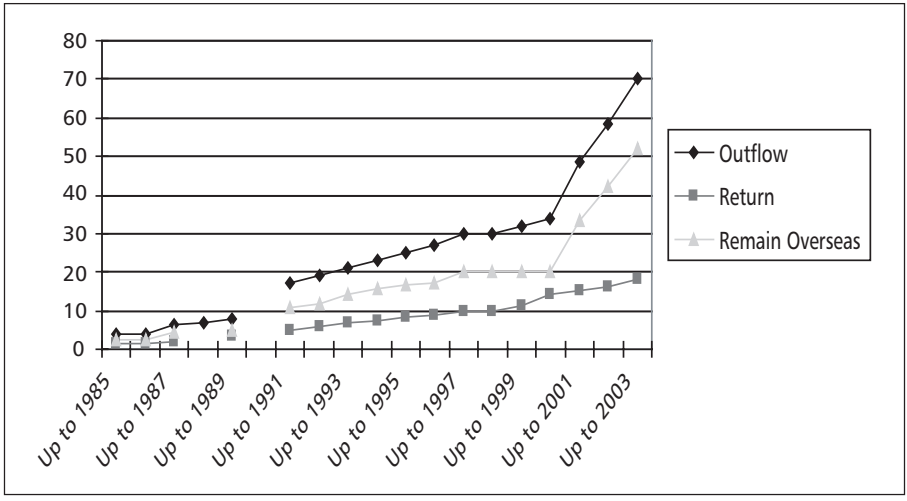
Students in the early 1980s were mainly sponsored by the Government and mostly took postgraduate or short-term training courses. In the 1990s, most were either supported by overseas scholarships or were self-supporting. They tended to be postgraduate students. Those who moved abroad since the late 1990s are mainly young, self-financed students taking undergraduate programs or language courses facilitated by private education agents. These agents first appeared at the end of the 1990s, but by early 2001, there were at least 309 in Beijing alone. Many of these students were admitted by polytechnic institutes rather than universities, and an increasing number went abroad for high school education (Cheng Xi, 2002).

B. Size of the Overseas Chinese Professional Group

There are no data readily available on the exact number of OCPs. MoE is in charge of emigrant students, but, does not have a systematic mechanism to collect data on either their leaving or returning. Departments such as the MoPS and MoP also produce data occasionally, but they are not always clearly defined. Based on a number of reliable sources, we estimated the number of OCPs as illustrated in Figure 2.2 and Table 2.1.

By 2003, a cumulative total of more than 700,000 students had gone overseas for study, and about 180,000 of them had returned on a long-term basis, thereby creating a pool of 520,000 OCPs (including students who may return later). The most recent years for which data are available (2000–2003) are characterized by a rapid increase in both out-migration and return. At the same time, an unprecedented number of OCPs returned to the PRC. Meng Na and Cui Qingxin (2003) estimated that since the end of the 1990s, the number of returned overseas students has increased by 13% a year, and the rate even exceeded 20% in places such as Beijing, Shanghai, Guangdong, Liaoning, and Sichuan. They, therefore, asserted that the country has gone through the "heat for going abroad" phase and has reached the "heat of return" phase. Official MoE data also point out that nearly 18,000 overseas Chinese students returned in 2002 alone, representing a 47% increase compared with the previous year (Deputy Minister for Education Zhang Xinsheng, see Duan Wenwen, 2004).

Figure 2.2: Out-Migrants, Returnees, and Overseas Chinese Professionals Cumulated from 1985 to 2003 (10,000 persons)



Source: Table 1.

C. Who Are They?

Descriptive features of OCPs are taken from available general statistics, as well as our survey results and analysis of the OCAO CV database. We recognize that our own data may reflect biases in terms of characteristics that may be primarily correlated with those who are inclined to join overseas ethnic professional associations, in the first instance, and those who are more likely to contact the Government for potential knowledge transfer participation, in the second.

1. The Majority Resides in North America

The US remains the top country of residence for OCPs, followed by Japan and Canada (see Table 2.2). It is interesting to note that students educated in different countries have quite different rates of return. Between 1978 and 2001, the return rate from the US, Europe, and Japan was respectively 14.0%, 42.1%, and 37.0%. Apart from its large number of universities, the US also became the major country of residence because many students who studied in Europe or Japan moved to the US for work after graduation.

Table 2.1: Out-Migrants, Returnees, and Overseas Chinese Professionals Cumulated from 1985 to 2003 (10,000 persons)

Time	Out-Migrants	Returnees	OCPs (remaining overseas)	Share of those Remaining Overseas in Total No. of Migrants (%)
Up to 1985	4	1.65	2.35	58.75
Up to 1986	4	1.7	2.3	57.5
Up to 1987	6.4	2.2	4.2	65.63
Up to 1988	7.0	—	—	—
Up to 1989	8.0	3.3	4.7	58.75
Up to 1990	—	—	—	—
Up to 1991	17.0	5	11	64.71
Up to 1992	19.0	6	12	63.16
Up to 1993	21.0	7	14	66.67
Up to 1994	23.0	7.5	15.5	67.39
Up to 1995	25.0	8.1	16.9	67.6
Up to 1996	27	9 -	17+	63.33
Up to 1997	30 -	9.6	20	66.89
Up to 1998	30 +	10	20	66.45
Up to 1999	32	11+	20+	62.81
Up to 2000	34	14	20	58.82
Up to 2001	48.6	15.22	33.38	68.68
Up to 2002	58.3	16 -	42.3	72.56
Up to 2003	70+	18	52	74.29

Sources: From 1985 to year 2000 Cheng Xi (2002); for 2001–2003, interview with the Department of International Cooperation, MoE and various government press releases in *Chinese Scholars*.[13]

Table 2.2: Overseas Chinese Professionals by Country of Residence, 1978–2001

	Cumulative No. of Students Who Studied Abroad	Total Returned	OCPs	Share of OCPs (%)
United States	242,700	33,978	208,722	60.7
Japan	69,610	25,755	43,855	12.7
Canada	36,400	13,468	22,932	6.7
Germany	32,800	11,808	20,992	6.1
United Kingdom	27,940	12,852	15,088	4.4
France	18,400	8,648	9,752	2.8
Australia	14,950	7,475	7,475	2.2
Others	17,200	1,984	15,216	4.4
Total	460,000	115,968	344,032	100

Source: Based on Ministry of Education data and Zhang, 2003.

2. OCP Demographics

Our survey results from the professional association in the UK suggest a relatively young group with an average age of 34.6 and an age range from 22 to 62. The survey also indicated that 78.2% were male. Of the 130 CVs examined in the OCAO database, 95.1% were male, and of those honored as "outstanding overseas students" by the central Government in 2003, 91% were male.[14] The gender balance presumably reflects the advantages of males in acquiring superior education in the PRC to enable them to qualify for overseas programs.

3. The Majority Has a PhD, and Most Work in Science and Engineering

The OCAO database shows that 90.3% have a PhD degree and 7.8% have a master's degree. In the professional association, our survey indicates that 78.2% have a PhD, 16.4% have a master's degree, and 5.5% have only a bachelor's degree. In terms of area of study and specialization, the OCAO database suggests that 4% are in social sciences and humanities, while the overwhelming majority is in engineering (41.7%) and science (23.3%). An earlier study by Jia Hao (1996), however, compared OCP subjects from the more general population for the periods 1978–1981 and 1993–1994 and found a significant increase in social sciences and humanities (from 3.6% to 26.0%), suggesting that the OCAO database is not representative of the OCP population as a whole.

4. Most Work in the Middle Ranks in Academic or Industrial Institutes

According to our analysis of the CVs of 103 OCPs, about 41.6% work in the academe, just fewer than 50% work in private enterprises or are self-employed, and the rest, about 10%, are in government departments and nongovernment organizations. In terms of ranking, these OCPs are concentrated in mid-level positions, such as research fellows and managers.

D. Connections with the People's Republic of China

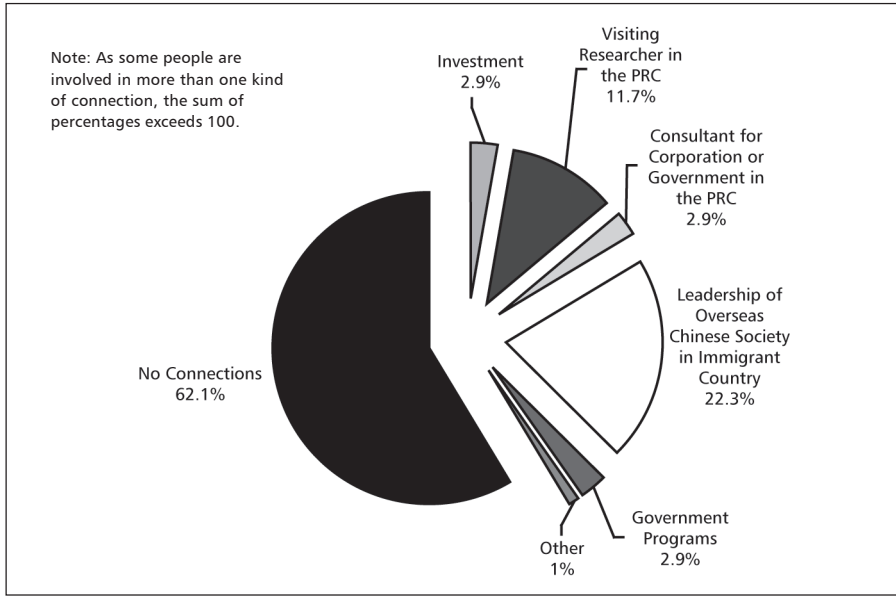
Our study suggests that OCPs have fairly diverse and strong ties with the PRC. Out of the 55 chemistry professionals at Leeds surveyed, only one did not follow news of the PRC and over 90% of those who did followed it on more than one information channel.

The survey also found that these OCPs make an average of 1.3 visits a year and two phone calls a week to the PRC. Those working in commercial enterprises and government agencies tend to visit more frequently, almost twice a year on average, than those working in academic institutes.

Our survey shows that 52.7% of these OCPs have stable academic or commercial connections with PRC institutes. While 60% of the men among these OCPs reported connections, only 25% of the women did. Age and timing of the first trip abroad are also closely associated with the strength of connections. Within this sample, the older an OCP is and the longer he or she has resided overseas, the more likely he or she is to have stable connections with the PRC. Approximately one third have formal affiliations, and of those, 40.7% work as special-term professors/researchers. The OCAO database shows that OCPs are connected to PRC institutes in the following capacities (Figure 2.3).

Of those surveyed, 50% were very willing to return on a long-term basis, and 45% were willing to do so for a short term. Only a very small proportion of those surveyed ruled out the possibility of either. The older an OCP was, the more enthusiastic he or she was about a short-term return. Related to this, those who had worked in

Figure 2.3: Types of Connections with the People's Republic of China



Source: Author's research.

more than one country outside the PRC were more keen to return on both a short-term and a long-term basis than those who were still accumulating experience.

E. Transnational Connections and Career Development

Our interviews and focus group discussion revealed that these OCPs' ties with the motherland are closely linked to career development, which can be roughly divided into four stages. First, a student becomes a professional and often develops a strong interest in contacting the PRC, but few achieve tangible relationships. When OCPs are preoccupied with gaining a foothold overseas, they often target research communities in the US and Europe. OCPs enter the third stage when they obtain secure positions and have more autonomy to start new research projects and choose partners for collaboration. Connections with PRC institutes then become more beneficial. Lastly, those in the later stages of their careers often have the most (and the strongest) connections with institutes in the PRC, and they are often motivated by altruistic development concerns. This is particularly true among OCPs in the private sector as opposed to those in the academe.

V. OVERSEAS CHINESE PROFESSIONAL ASSOCIATIONS AND TRANSNATIONAL NETWORKS

A. Informal Networks

Compared with the limited literature on the formal programs for encouraging knowledge exchange, even less has been documented about OCPs' informal connections, though they are essential for building and maintaining networks. In the end, knowledge must be exchanged by individual scientists, and the exchange must become part of the scientist's daily work to be effective. The importance of informal networks can be further appreciated when we differentiate knowledge from information. While information can be codified and disseminated through impersonal means, knowledge is closely associated with meaning and understanding, and personal communication is indispensable for its transfer. Today, when communication technology is highly developed and information is widely available, interpersonal connections have become more rather than less important for the exchange of knowledge. The following examples illustrate this point.

To our surprise, quite a few PRC students and researchers interviewed in the UK were shocked by the state of equipment there. Dr. Zhang, a visiting fellow at the Department of Engineering, University of Oxford, could not use software programs that she brought from the PRC because the computers in the department were relatively outdated. Nevertheless, she asserted that she had benefited greatly from being at Oxford, and one of the biggest achievements was a good understanding of the research methods and approach taken by scientists there. Another chemist also visiting Oxford University, Mrs. Xu, a specialist in the food industry, from Shandong Province, PRC, said:

> The lab equipment is definitely no better than in China. We always asked, how could they publish so many good papers with such out-dated equipment? Then we learned how they work, how they think. Particularly how they divide the work among the team members and collaborate efficiently. It is not a problem nowadays for us to get published research material. For patents registered in the US and Japan, for example, you can get the full list through the Internet anytime. You can follow the latest products and technologies very easily. But we need to know *how they were made {products and technologies}*....

Dr. Liang, a postdoctoral fellow in chemistry at the University of Cambridge, also emphasized that an "understanding of the research strategies and of the process of research" of his Cambridge colleagues had improved his research ability.

The experience of Dr. Yan Haixue, a specialist in ceramics working at Queen Mary University in London, further demonstrates the indispensable role of personal connections in knowledge exchange. He studied and worked in three universities and CAS (Shanghai) before going abroad and has kept in touch with a number of colleagues since then. For the past 2 years he has made on average one call every 3 weeks to his former colleagues to discuss work, a call that normally lasts more than 1 hour. He elaborates:

> I was involved in many projects [in the PRC] and know how [the projects] were being done. When I came here, I found that many projects were similar to what we did, but researchers in the UK did it much more thoroughly. They thought everything through. In China, we have so much pressure to publish papers for the sake of promotion, but it is different here. The most important thing [for researchers in the UK] is to think things through, otherwise it does not count. I want to tell colleagues in China what is going on here, how we could have

> continued our earlier work to a deeper level. Because all the colleagues did the projects before, they could understand what I am talking about very well.

Dr. Yan further pointed out that PRC scientists in fact do not suffer from lack of information on the latest scientific developments; instead the problem lies in almost exactly the opposite direction.

> In China, researchers are too busy following new fashions. The fashion often comes from overseas. Whatever is thought to be the frontline internationally, people try to jump on it, but, without enough thought of the fundamentals.… When we discuss *how* foreign researchers see frontline research, *why* they think it's cutting edge, our colleagues in China [can thus] understand the root better.

In turn, these phone calls also informed Dr. Yan of the latest developments in the PRC and have made him think more seriously about going back there to work soon.

Informal networks enable the exchange of knowledge that is strongly embedded in a particular setting, and that is difficult to transfer through formal channels. Dr. Zhang Shengfu at Imperial College, London, has close contacts (colleagues and friends) with the physics department of a preeminent university in Beijing, though they have not collaborated on any projects. The department imported two sophisticated escalators, but most staff members were not aware of the multiple functions of the machine. Dr. Zhang demonstrated the various functions of the equipment to them—knowledge which is taken for granted in Zhang's workplace in the UK, but, that would have been very difficult to learn in the PRC without personnel connections.

According to our survey, 83% of OCPs listed personal connections with former classmates and colleagues as the most important means of establishing connections with PRC institutes, while 35% listed academic conferences or programs, 20% cited government programs and fairs in the PRC, and 11% cited recruitment fairs. According to a survey of 447 returned OCPs in Shanghai, 42.2% identified families as their main information source about the situation in the PRC. This finding even prompted the research team to recommend that the Government pay more attention to family members to influence OCPs and encourage their return (Shanghai Research Team, 2003). In our case studies of CAS and Beijing University, a large number of OCPs returned through their personal connections with the staff there.

Informal networks also distinguish OCPs from other groups of foreign experts. According to the staff we interviewed at Beijing University and CAS, non-OCP foreign

experts are often more committed and work harder, but OCPs can communicate with local staff much more effectively. It is also easier for knowledge-user institutes in the PRC to identify quickly the experts they need among the OCPs—again because of extensive personal connections among them. Therefore, ultimately, OCPs may make greater contributions to developing research capacity.

B. Overseas Chinese Professional Associations: A Key Vehicle

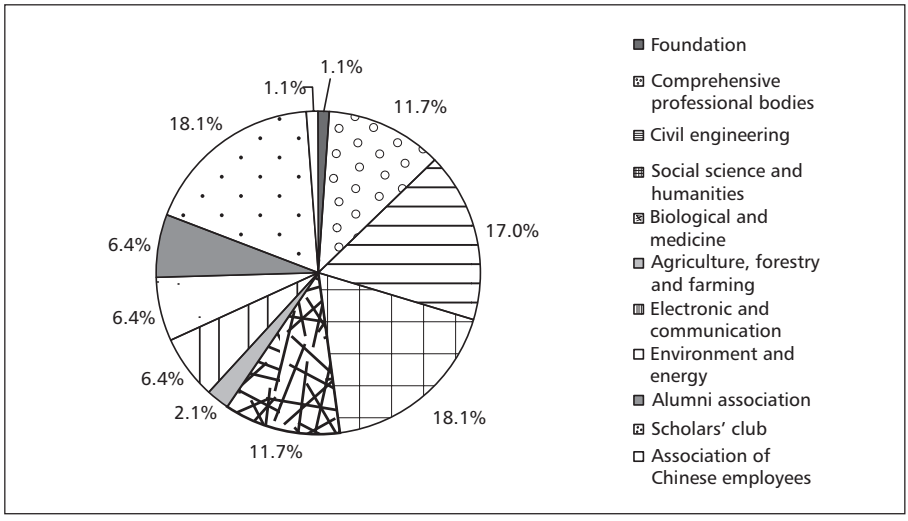
When one examines the specific patterns of informal networks, professional associations are significant and, more important, a key means for transnational network building. It is estimated that there are more than 10,000 overseas Chinese associations including more than 100 international organizations (Xie Chengjia, 2002). Although the exact number is unknown, it is clear they have expanded over the last 20 years in both number and geographic distribution. Established in 1974, the Chinese Professional Association of Canada is one of the oldest. By 1997, it had nearly 1,000 members in 10 branches classified by specialty. The Chinese Association for Science and Technology in the US was set up in New York in 1992 and now has more than 1,500 members in 27 states, with more than 10 regional or disciplinary branches. The Association of Chinese Scientists and Engineers in Japan has a similar structure. Set up in 1993, the association has 1,150 members and is divided into nine branches, according to discipline.

OCAO has connections with 200 OCP associations. Figure 2.4 illustrates the various types of associations represented. The US is the dominant location with 63%, followed by Japan with 6% and Australia with 4%.

Professional bodies, though not necessarily set up by OCPs, are the most popular association represented in the OCAO database. Of the OCPs we surveyed at Leeds who attended their professional meeting, about 71% reported that they attend activities of professional bodies and as many as 36.4% were core members.[15] The second most popular type of association among those surveyed was Chinese-language schools, in which OCPs get involved through their children. The least popular associations were religious and clan organizations. Only about 5% of those surveyed had ever participated in clan organizations. It is unclear from the OCAO database whether association membership entails only attending meetings, or something beyond this.

All those surveyed who were born before 1959 or who had left the PRC before 1985 were core members of professional bodies. In comparison, 71.4% of those born after 1980 and nearly 40% of those who had left after 2001 had never attended a professional body. We also found that those working in commercial enterprises were

Figure 2.4: OCP Associations by Type/Subject



Source: Author's research.

more likely to participate in associations than those working in research and education institutes.

OCP associations have a new type of organizational leadership. Traditional Chinese community leaders typically kept their distance from mainstream society and maintained a strong allegiance with the PRC. In some places, this leadership has been replaced by those keen to join local societies and who are active in fighting for equal rights (Wong, 1982). A third type of leadership emerged in the 1990s with the new migrants (Nyiri, 2001) characterized by increasingly close relations with PRC officials, both at PRC missions and in the PRC itself. OCP societies are a typical example of this type of leadership.

For many OCP associations, organizing delegations to the PRC has become their main or most important activity. At the same time, inviting officials from PRC embassies or even directly from the PRC has also become a standard practice of OCP associations. The Chinese Materials Association UK invited more than 20 researchers from the PRC for its 10th annual congress in Birmingham in 2004. OCP associations often serve as incubators for building close ties with the PRC. Dr. Wang Jun, a former president of the UK-China Chemistry Association, said:

> What do we talk about when we sit down? Inevitably the topic will end up on China. The more you talk about it, the more you think about it. Only when we can sit down regularly and exchange more, people become serious in developing connections with China.

Indeed, it has become a notable trend in last few years that OCPs have returned to the PRC in groups, particularly when setting up enterprises. The importance of the circle of fellow OCPs, be it an association or a looser connection, should not be underestimated.

PRC government and quasi-government agencies have acknowledged the importance of OCP associations and are actively exploiting them in building transnational networks. OCAO, for example, used to rely on embassies and consulates to collect information to establish its OCP database, and the missions recommended about 20–30 CVs a year. After 1998, OCP associations became the main information source; they contributed about 8,000 CVs out of the database of more than 10,000. Similarly, in organizing the One Hundred PhD Holders' Homeland Visit delegations, OCP associations have also replaced foreign missions as the main information source and contact point.

The associations not only master comprehensive information but can also disseminate it effectively. Although most OCP associations are loosely organized, they have large memberships and electronic mailing lists. The China Science and Technology Association has connections with more than 40 OCP associations in seven countries, half of them in the US. Almost all the members of these associations left the PRC after the 1970s. When the Chinese association makes a visit overseas, it normally contacts national associations first, and, through them, contacts embassies or consulates if needed. In order to keep in close touch with them, the Chinese association convenes an annual meeting of OCP association leaders and has launched the newsletter *Work Information of the Program of Overseas Talents Serving Homeland (Overseas Version)* specifically targeting OCP associations.

C. Synergy between Formal and Informal Networks

Informal networks are important not only in and of themselves, but, also because they can effectively enhance formal programs. The evolution of MoE programs for knowledge exchange through OCP networks, as reviewed by Chen Xuefei et al. (2003), suggests

that in practice, formal and informal networks often overlap. Before 1992, interpersonal relations constituted the main channel for knowledge exchange, and they laid down the basis for later program development. After 1992, the emergence of OCP associations made networking a "collective" effort (by associations as opposed to individuals), though still informal. Network building became "formal" after 1995 when the Ministry launched various special programs. In implementing formal programs as in the case of the Jilin Convention, informal connections with OCPs are important. Lastly, formal programs often produce informal networks, and their extent and depth can signal how successful the formal program is. Our in-depth study of two knowledge-user institutes, one from CAS and one department of Beijing University, illustrates the point.

Institute "A" is a large institute of CAS with regular contacts with over 90 OCPs and close contact with about 20 of them. The way in which the current institute head, Dr. Tan, was recruited serves as a typical example of the combination of formal and informal networks. The institute got in touch with Dr. Tan through informal means. The former head then recommended him to CAS as a candidate for the One Hundred Scholars program, and he was accepted. This finally led to Dr. Tan's joining the institute as the deputy director.

Institute staff members often have collaborative research projects with OCPs based on personal connections. To continue and deepen the connection beyond the life of the project, the institute often helps the OCPs apply for a K.C. Wong Fellowship or the Outstanding Scholars Fund. When OCPs visit as part of a formal program, the institute also makes special efforts to develop informal networks in order to make the connections deeper.

Unlike institute A, department "B" at Beijing University is much smaller and has limited resources. The department had 34 faculty members in June 2004, all of whom had studied or worked overseas and 11 of whom held degrees from overseas universities. Most of the degree holders had connections with the department before they joined it. The director, himself US educated, makes a special effort to search for outstanding PRC PhD students overseas. He collects students' email addresses and sends them advertisements for jobs or visits them personally when he travels. The institute often invites OCPs to give seminars and lectures during their visits to Beijing.

Department B hardly has any formal program to turn to. The department can apply for less than 20,000 yuan (US$2,500) a year from the university for inviting scholars from overseas. This makes long-term collaboration difficult. The only major channel for contact is collaborative research. Department staff conducted 29 such projects between 1995 and 2000, almost all of which were funded by overseas bodies,

particularly from Hong Kong, China and the US. None of the projects was secured through open bidding; instead, all were based on preexisting personal connections.

Collaborative research certainly contributes to knowledge exchange, but it may not be sustainable. Our case study also reveals that facilitating formal and informal connections requires a conducive institutional set-up that is largely lacking. Institute A has three branches charged with knowledge exchange: human resources, technology, and personnel. Unlike the situation in the central Government where ministries compete with each other to expand their scopes of work, these branches are wary of encroaching into each other's territory and, therefore, tend to minimize their work in contacting and mobilizing OCPs. This system is also detrimental to accumulating networks as one department may not be willing to share its information. Furthermore, the administrative staff charged with network building, like most other administrative staff, are often assigned to a different position every few years despite the fact that network building is a time-consuming process.

Department B faces almost exactly the opposite problem: it can only develop networks sporadically because it does not have any staff responsible for this task. Thus, in order to reach a synergy between informal networks and formal programs, we need to consider the administrative set-up and the dynamism of informal networks themselves while implementing formal programs.

VI. IMPLICATIONS

A. General Findings and Implications

This study has reviewed the initiatives by the PRC Government to encourage knowledge exchange through diaspora networks. Two features of these initiatives stand out clearly. First, although the programs are aimed at benefiting the wider society including the private sector, the state remains overwhelmingly the major or sole investor and organizer, and the programs are implemented through the state bureaucracy. Our general assessment is that the awareness of the importance of OCPs and of knowledge exchange is high, and that the resources devoted to both are substantial.

The second feature of the OCP programs is the emphasis on commercial projects as the main expected outcome. This is a relatively new development. Previously, emotional attachment and political allegiance (patriotism) underpinned government OCP programs, and OCPs were supposed to provide free services. Frequently, helping to set up profitable enterprises is the central goal, and knowledge exchange is only

secondary. There are good reasons for focusing on profitable projects. First, the connections between OCPs and the PRC in general have increasingly been driven by business. According to an online survey by the All-China Youth Federation and the magazine *Youth Reference*, more than 20% of the OCPs who intend to return are planning to set up enterprises. Many OCPs working in academic or educational institutes develop ties with the PRC precisely to turn their research results into commercial projects there. Second, from the organizer's point of view, the concrete results a program can yield are essential for the sustainability of their work. This is particularly true for local OCAOs that need specially allocated budgets from the provincial and municipal governments to support their work. Lastly, demonstrable results are important to government departments as they are the most convincing evidence of their performance. For this reason, a government department is often very keen to have large numbers of agreements, no matter how tentative, signed at its event.

This project-oriented approach is at odds with the basic fact that knowledge exchange is by definition a long-term and multifaceted process. The approach also fails to reflect the reality that students still form the main part of the OCP group and that work with OCPs is to a great extent an investment in the future. Establishing contacts with self-financed overseas students who will soon form the majority of OCPs remains a challenge. Furthermore, the emphasis on profitable projects does not mean that existing OCP programs truly link themselves to the dynamism of the global economy or to domestic industries.

Our basic policy recommendation is two pronged. On one hand, some government agencies should make their OCP programs less commercially oriented and should instead adopt a longer-term view. On the other, the Government should try to integrate the mobility of the highly skilled to the global high-tech industry rather than focusing narrowly on return, whether permanent or temporary. To specify our policy recommendations, what follows addresses three interrelated questions: How can the leading role of the state be improved? How can state and market mechanisms work together more effectively? And, can civil society play a bigger role in facilitating knowledge exchange?

B. Coordinating Ministries

In terms of the institutional framework, we find that government agencies at the central and local levels in the same system (e.g., OCAO) work together well. The local level also enjoys effective and smooth cross-departmental coordination. At the central level,

however, duplication and lack of coordination are clear. For example, after OCAO initiated the program of PhD home visits, so many other agencies launched similar programs that OCAO decided to drop its own program. Almost all government agencies and large knowledge-user institutes that we visited are establishing comprehensive OCP databases, but they are sharing no information with one another. The same problem is true of websites.

Duplication can be particularly wasteful when one considers the number of OCPs who are likely to participate in these programs (most of whom left the PRC after 1980), and who can contribute to knowledge exchange (those who have completed their education). According to some government officials, the numerous OCP programs have created a class of OCPs sometimes dubbed "conference worms" (*hui chongzi*) because they almost live on conferences and events organized by the government. One participant in a convention had met almost one third of the participants before, and according to him, the project proposals all sounded familiar. This may indicate an oversupply of certain types of programs, especially fairs.

Since coordinating ministries is an unusually complex issue, it may not be realistic to expect substantial changes in institutional frameworks to reduce duplication. Instead, we recommend two more moderate mechanisms. First, more consultations could be carried out through the interministerial meeting headed by the Organization Department of the Central Committee of the Chinese Communist Party and MoP, which is already in place, to avoid repeating work. Second, each ministry should identify its own unique strength and thus develop a work focus that is differentiated from those of other agencies.

One possibility is that different ministries could focus on policies, projects, and people. MoE, MoP, and MoPS can be responsible for policies as policy is already their main task. Most agencies, such as the China Association of Science and Technology can be project oriented, and the work of OCAO should perhaps be people-centered, focusing on developing personal connections. Agencies that focus on projects should pay more attention to identifying domestic needs and to follow-up, and should work with people-oriented agencies for overseas contacts.

There is a strong suggestion from OCPs that OCAO should be more active in foreign countries. OCAO currently has only eight personnel stationed in embassies and consulates worldwide. OCPs and overseas students are in the purview of MoE and of education attachés, but OCPs pointed out that their problems and issues go far beyond those of education. For example, they may wish to establish contacts with particular enterprises or local governments which MoE may not be best placed to

facilitate. Given the very different profile of recent students compared with earlier state-sponsored students, OCAO could also be more active in contacting students, could take a long-term view, and could focus more on people.

As a first step in enhancing cross-ministry coordination, improving data collection and analysis on OCPs—a basis for any solid policy discussion—can be a valuable exercise. Relatively accurate estimates can be made based on five sets of data: (i) the number of students leaving the PRC from MoE, (ii) the number of passports issued for study purposes by MoPS, (iii) border exit records from the Bureau of Exit and Entry Management of MoPS, (iv) estimates from embassies in destination countries, and (v) estimates from government agencies in countries of destination. Despite the high-quality data available in countries such as Australia, UK, and US, very few agencies in the PRC have made use of this information.[16]

C. Coordinating State and Market Mechanisms

Despite the enthusiasm about profitable projects as desirable outcomes, the actual economic contribution made by OCPs through government programs remains unclear. A fairly large proportion of the agreements signed at the Jilin and Shenyang conventions, for example, have very limited high-tech elements. Of the 2,246 enterprises set up in Beijing's 12 high-tech parks for returned OCPs by June 2004, less than 20% were profitable and the failure rate exceeded 20%.[17] Nationwide, returned OCP entrepreneurs have thus far yet to produce groundbreaking technologies or many leading enterprises (Lin Jianren et al., 2003). Furthermore, some OCPs were attracted back by government programs but failed in business because of the underdeveloped market system.

Enterprises face problems in long-term development.[18] Acknowledging this, the PRC Government has set up a venture fund to support high-tech enterprises, but as a state fund, it can hardly be "venture" in the true sense. The fund sets very strict conditions for investing, contributes normally only a quarter to a third of what a project requires, and often supports projects with imminent commercial prospects and shies away from proposals that are still in the research and development phase (Lin Jianren et al., 2003).

This situation suggests that the out-migration from the PRC (mainly as students), the return of OCPs, and the high-tech industry are not coordinated. For example, the majority of the H1-B visa[19] holders in the US are former students who converted their visa categories on graduation. Those who go directly from the PRC for foreign jobs are

helped by recruiters. For example, the New York City-based Headway Corporate Resources, a leading human resource company, has an exclusive agreement with the state-owned Shanghai Foreign Services Company Ltd (SFSC) to bring PRC information technology (IT) workers to the US. Once the worker is hired, Headway and SFSC jointly prepare the documents for an H1-B visa. The PRC workers need to sign contracts with the PRC Government for a specified period of time, and after their stay in the US must return to the PRC (Chepesiuk, 2001).

Thus, while 70% of recent PRC returnees were information technology (IT) professionals,[20] the PRC has not been linked with global IT production networks in the same way that India has. In contrast to the PRC, many Indian IT professionals are sent by IT companies in India to acquire up-to-date knowledge and to strengthen foreign business ties. Whereas physical and virtual connections linking Indian IT professionals to international production networks have helped establish globally competitive niches for India's software industry, OCPs are typically hired under short-term, foreign contracts not connected to the PRC's IT industry.

In order to integrate migration into the high-tech industry, the PRC first of all needs to adjust its regulations on labor exports and to encourage labor mobility as a form of service supply. This approach has great potential since the ongoing negotiations on Mode 4 of the General Agreement on Trade in Services are expected to liberalize regulations on mobility. Currently, labor exports from the PRC are very limited, are unsystematically regulated, and are mostly unskilled.

The PRC can also consider cooperating with the countries of residence of OCPs in linking migration, diaspora networks, and knowledge exchange. Some developed countries have indicated a willingness to explore benefiting developing countries through migration. France, for instance, has proposed the notion of "co-development" and has set up an interministerial mission on codevelopment and international migration.

At the same time, the PRC should also pay close attention to the concerns of receiving countries. Students from the PRC in the US reportedly face more scrutiny than applicants from any country outside the Middle East. A US congressional study found that during a 3-month period in 2003, more than half of all Visa Mantis investigations, a screening process intended to prevent the transfer of sensitive technology worldwide, involved PRC students (Dillon, 2004). More debates should be initiated at international forums on the link between security, migration, and knowledge exchange, particularly to enable the voices of developing countries to be heard.

D. Taking a Broader View: Enhancing Spin-Off Effects

The narrowly focused, state-led, and commercial project-oriented OCP programs tend to neglect the social science sector. Most OCPs participating in state programs have science and engineering backgrounds, and it remains very difficult for OCP social scientists to establish links with relevant government agencies to voice their concerns and contribute insights. The emphasis on profitable projects also neglects the role of civil society. We were approached more than once by OCPs and their children asking how they could work as volunteers in the PRC (for instance as English teachers in the countryside), but there seems to be no program to address this kind of request. This indeed is in sharp contrast to diaspora networks of many other developing countries where hometown development associations, philanthropic organizations, and civil society activities constitute the majority of activities.

The emphasis on profitable projects may have also limited the wider society from benefiting more from existing programs. The Jilin Convention in July 2004, for instance, invited only OCPs and registered enterprises to attend presentations by OCPs. The organizers could have made the presentations open events and arranged for local college students to attend. Although the slogan of "learning society" (*xuexixing shehui*) is widely heard, local government seems to have missed a golden opportunity.

As mentioned at the beginning of this chapter, the fundamental goal of promoting knowledge exchange is not to import knowledge per se but rather to develop the capacity for local research and development in a sustainable manner. Thus far, the programs targeting academic institutes (mainly by MoE) on the one hand, and those targeting enterprises and local government (for example by OCAO) on the other, are often completely separate. Perhaps we can consider initiatives that pair domestic researchers and OCPs to carry out projects together to address problems faced by PRC institutes.

Apart from these recommendations, the state could consider honoring OCPs active in network building without returning (currently most of the state awards are granted to those who returned) and those enhancing the linkage between websites and databases of different departments. Given the importance of OCP associations and the disparity in successful network building among them (associations with relatively young leaders often have difficulties in contacting relevant institutes), the state could commission a study to summarize and disseminate successful experiences.

ENDNOTES

1 This project was designed and carried out in close association with the Departments of Policy Research and of Economy and Technology of the Overseas Chinese Affairs Office (OCAO), State Council, People's Republic of China, during February 2004–March 2005. Ms. Huang Yuqin at the Department of Sociology, Beijing University participated in part of the field research and documentary study, and she was instrumental in producing the first Chinese-language draft of the report. Mr. Wang Di from the same department helped analyze the questionnaire survey data. I also thank Ms. Zhao Jian (Department of Policy Research, OCAO), Mr. Xia Fudong (Department of Economy and Technology, OCAO), and Dr. Frank Pieke (Centre on Migration, Policy and Society, University of Oxford) for their generous help.

2 The 1.1 million OCPs cover four groups: those who left the PRC after the reform movement (starting in 1978); those who left before that; those who were born in Taipei,China and Hong Kong, China and now reside in a third country; and those who were born outside greater PRC (e.g., Malaysia). The current policy focus is the group that left after the reform movement, whose size is approximately 500,000. Among these 500,000, 200,000–300,000 have completed higher education and thus form a "mature" talent pool. For more demographic information about OCPs, see Section IV.

3 For PRC-based scholars, see Li Minghuan (1995), Li Qiushan (1997), Wang LinLing (2002), and Yu Zhenchang and Zou Jianyun (2003).

4 Documents were gathered from the State Council and local governments of various provinces, and municipalities. These concerned industrial parks for returned overseas students; education of children of returned overseas students; employment, nationality, household registration, and even marriage of returned overseas students; and customs regulations and overseas student identity cards.

5 In addition to our own collection accumulated prior to this project and assistance from government agencies, to identify relevant literature we used two Internet-based search engines for Chinese social science literature (Renmin University Database for Published Information) and one for literature related to overseas Chinese (Jinan University Information Centre on Overseas Chinese).

6 On 8–9 July 2004, attended by 21 participants from the Administrative Committee of Zhongguancun Science Parks, Beijing Municipal Government; Beijing Huanwen International Sinology Exchange Centre (part of the State Administration of Foreign Experts Affairs); Beijing University of Technology; China Agricultural University;

Committee of Education, Beijing Municipal Government; Committee of Science and Technology, Beijing Municipal Government; Department of United Front Work; Beijing Committee of Chinese Communist Party; Federation of Returned Overseas Chinese, Beijing; Humanities and Social Sciences Development Planning Office, Beijing Municipal Government; National Federation of Returned Overseas Chinese; Overseas Chinese Affairs Office, Beijing Municipal Government; Policy Research Department, State Council Overseas Chinese Affairs Office; and Tsinghua University.

7 Our emphasis on short-term and virtual return does not mean that long-term return does not matter. Quite a few interviewees during our research, particularly in fields that rely on laboratory experiments such as chemistry, biology, and engineering, suggested that the problem of brain drain still exists. It was argued that the PRC is sorely lacking middle-ranking researchers such as postdoctoral fellows who often play a crucial role in laboratory experiments.

8 Note: 8.2 yuan = US$1.

9 Interview with Dr. Zhang Jiansheng, President, China Council for the Promotion of Applied Technology (a subsidiary of the China Association for Science and Technology), 29 April 2004.

10 Other examples of this type of website include the China Human Resource Network (http://www.hr.com.cn/), China International Employment Net (http://www.chinajob.cc/), and Chinese Service Center for Scholarly Exchange (http://www.cscse.edu.cn/).

11 When we visited the China Talents website in June 2003, 31 knowledge user institutes registered themselves with the website to seek OCPs, comprising 26 academic institutes, 3 commercial firms, and 2 municipal governments—Shanghai and Nantong (Jiangsu Province).

12 A minor change introduced after 1989 was that any university graduate who applied to study overseas had to work for a minimum of 3 years (for bachelor's degree holders) to 5 years (for master's degree holders) in a public institute or pay up to 10,000 yuan per year for the period for which their subsequent work fell short of the 3- or 5-year requirement (see Zweig and Chen, 1995: 22).

13 *Chinese Scholars* is a monthly magazine launched by the Ministry of Education in 1987, targeting OCPs (at that time mainly overseas students). The magazine developed its Internet version in 1995 (CHISA) as the first web-based Chinese public media based on the mainland.)

14 We assume these data are representative enough to be used because the PRC Government is normally very conscious that those granted state awards should be representative of the demographic profile of the entire group, particularly in terms of the field of work, location, gender, and ethnicity.

15 Our questionnaire did not clearly differentiate between professional bodies set up by and for OCPs and general professional bodies. Therefore, it is likely that some informants are reporting their participation in general professional bodies.

16 This scheme for data information is partly based on a proposal of Mr. Miao Dan'gou at the International Cooperation Department of MoE (interview on 29 April 2004).

17 Interview with an official from the Human Resources Branch, Zhongguancun Science and Technology Parks Management Committee, 8 July 2004, Beijing.

18 Recently, the "Hu Hui phenomenon" has triggered a heated debate in the PRC. Dr. Hu Hui returned from the US to set up a firm with an initial capital of US$150,000 in the Zhongguancun Science Park in Beijing in 2002. Despite very generous assistance from the government, the company faced severe problems in marketing and in attracting follow-up investment. In the end, Dr. Hu sold the company together with his technology for remote medical diagnosis to a US-based company for US$18 million. Many more enterprises have failed through lack of funding.

19 This is a special US work permit for highly skilled, temporary migrants.

20 Interview with Mr. Xia Fudong, OCAO.

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APPENDIX

A. Individuals Interviewed Excluding Overseas Chinese Affairs Office Staff

Time of interview	Persons Interviewed and Institutional Affiliations	Place of interview
25/02/2004	Mr. Cheng Xi, Research Officer, China Federation of Returned Overseas Chinese	Café, Chang'an Theatre
10, 15, 29/03/2004	Mr. Yu Hui, Research Officer, Department of Engineering, University of Oxford	Home of Dr. Yu Hui, Matson Village, Oxford
17/03/2004	Mr. Zhang Chenyou, Counsellor, PRC Embassy to the UK	PRC Embassy Office, London
01/04/2004	Mr. Huang Huijin, Division of Scientific Talents and Overseas Scholar Affairs, Bureau of Personnel and Education, Chinese Academy of Sciences	Office of Division of Scientific Talents and Overseas Scholar Affairs, Bureau of Personnel and Education, Chinese Academy of Sciences, Beijing
14/04/2004	Mr. Li Xiaoxuan, Chinese Academy of Sciences	Office of Chinese Academy of Sciences, Beijing
15/04/2004	Prof. Ma Rong, Head, Department of Sociology, Beijing University	Office of Department of Sociology, Beijing University
18/04/2004	Ms. Bai Yan, Department of International Cooperation, Beijing University	Office of Department of International Cooperation, Beijing University
21/04/2004	Ms. Deng Li, Division of Personnel, Institute of Automation Technology, Chinese Academy of Sciences	Office of Chinese Academy of Sciences, Beijing
24/04/2004	Ms. Xiao Ruo, Director, Editorial Office of Research on Studying Overseas Affairs (belongs to the Department of International Cooperation of Ministry of Education and Research Association on Studying Overseas of China's Association on Research on Higher Education)	Yan'nan Café, Beijing University
29/04/2004	Dr. Zhang Jiansheng, President, China Council for the Promotion of Applied Technology (a subsidiary of the China Association for Science and Technology)	Office, China Science and Technology Museum, Beijing
29/04/2004	Mr. Miao Dan'guo, Department of International Cooperation, Ministry of Education	Office of Department of International Cooperation, Ministry of Education
30/05/2004	Mr. Richard Ye, Researcher, University of Illinois, College of Medicine, Chicago, Illinois, United States.	A café in Oxford
28/06/2004	Mr. Shui Chao, Director of Information Centre, Overseas Chinese Affairs Office, Beijing Municipal Government	Overseas Chinese Affairs Office, Beijing Municipal Government
11/07/2004	Mr. Zuo, Director of Politics and Returned Overseas Chinese Branch, Foreign Affairs and Overseas Chinese Affairs Office, Jilin Province	Changchun
11/07/2004	Deputy Director of Branch of External Relations, Foreign Affairs and Overseas Chinese Affairs Office, Jilin Province	Changchun
3/10/2004	Dr. Zheng Yuejun, Associate Professor, Research Institute for Humanity and Nature, Kyoto, Japan	Kyoto, Japan

B. Overseas Chinese Professionals Interviewed who also Participated in Focus Group Discussion, Leeds, United Kingdom, 24–25 September 2004

Dr. He Yufeng, Post-Doctoral Fellow, Department of Chemistry, University of Bath
Dr. Wang Jianhua, Grid Support Centre, CCLRC e-Science Centre
Dr. Wang Jun, Research Scientist, Procter & Gamble
Dr. Xiang Weizhong, CFD Analyst Engineer, Merloni Elettrodomestici UK
Dr. Xu Baohua, Department of Chemistry, University of Leeds
Dr. Yan Haixue, Research Assistant, Queen Mary University of London
Dr. Ye Hua, Research Fellow, Department of Chemistry, University of Oxford
Dr. Zhang Shengfu, Senior Engineer, Imperial College, London
Dr. Zhang Xiaoyu, Visiting Fellow to Inorganic Chemistry Laboratory
Mr. Guo Zhichao, PhD, University of College of London
Mr. Li Hua, PhD, Institute of Mechanics, Chinese Academy of Sciences, Visiting Researcher to the Department of Physics, University of Leeds
Mr. Wu Haicheng, D.Phil student in Department of Chemistry, University of Cambridge
Ms. Shang Hui, PhD Student at School Chemical Environment and Mining Engineering, University of Nottingham

Promoting Knowledge Transfer Activities Through Diaspora Networks: A Pilot Study on the Philippines

Jeremaiah M. Opiniano and Tricia Anne Castro[a]

I. INTRODUCTION

Overseas Filipinos, comprising either temporary contract workers, permanent residents, or undocumented migrants, now number 7,924,188 as per the December 2005 stock estimate of the Commission on Filipinos Overseas. Distributed across 193 countries, overseas Filipinos have come to be regarded as very significant contributors to the country's economic development. The Government itself has recognized this, and recently admitted a policy of exporting labor (OFW Journalism Consortium, 2005).

Migration is a result of both demand and supply factors. Demand factors refer to labor shortages in skilled areas in developed countries; supply factors in the Philippines include high population growth, unemployment rates, and a weak domestic economy. Combined, these have led to increased emigration by both skilled and unskilled workers, especially among private sector professionals in information technology and health. Brain drain of skilled workers is a common challenge for developing countries. However, while many countries continue to complain about the negative effects of migration, some positive contributions of brain gain are increasingly recognized. Many developing countries have been able to harness the talents and expertise of their skilled overseas nationals through knowledge transfer, where overseas nationals act as short-term

Note: [a] Mr. Opiniano is Executive Director of the Institute for Migration Development Issues and Ms. Castro is Instructor, De La Salle University–Canlubang Integrated School, Philippines. Both were under contract to the Ayala Foundation USA for this study.

consultants, investors, and short-term trainers (Meyer and Brown, 1999). Efforts must be initiated to harness the potential for knowledge transfer from the skilled Filipino workforce abroad to benefit the Philippines and to minimize the costs of emigration.

A. The Evolution of the Government's Policy on Out-Migration

In 1974, overseas employment for Filipinos became policy as a temporary, stopgap measure to ease domestic unemployment and to stabilize the country's dollar reserves. Since that time, the exodus has grown, and Filipinos overseas numbered 7.76 million in 2003; these include temporary contract workers, immigrant residents, or undocumented migrants (see Tables 3.1 and 3.2). Overseas Filipino workers (OFWs) is a term applied to temporary contract workers, or those whose contracts were processed by the Philippine Overseas Employment Administration for overseas work in a specified number of years. Out-migration is now regarded by government officials as a permanent fixture in national life; they have even remarked that labor export is the Philippines' own response to globalization (Opiniano, 2004).

Table 3.1: Stock Estimates of Overseas Filipinos in 2005

Region	Permanent[a]	Temporary[b]	Irregular[c]	Total
World Total	3,391,336	3,651,727	881,123	7,924,188
Africa	318	61,525	17,160	79,003
Asia–East and South	186,906	891,088	238,238	1,316,232
Asia–West	2,330	1,565,726	112,750	1,680,806
Europe	211,351	523,442	123,282	858,075
Americas/Trust Territories	2,758,067	304,547	357,923	3,420,537
Oceania	232,366	57,692	31,770	321,828
Total: Sea-based migrants	—	247,707	—	247,707

— Data not available.

[a] Permanent – Immigrants or legal permanent residents abroad whose stay does not depend on work contracts.

[b] Temporary – People whose stay overseas is employment related, and who are expected to return at the end of their work contracts.

[c] Irregular – Those not properly documented or without valid residence or work permits, or who are overstaying in a foreign country.

Source: Commission on Filipinos Overseas (2006) and other sources covering 192 countries/territories.

Table 3.2: Top Countries for Land-Based Filipino Migrants (as of December 2005 estimates)

Permanent	No.	Temporary	No.	Irregular	No.
United States	2,326,675	Saudi Arabia	976,427	United States	157,998
Canada	382,824	United Arab Emirates	231,784	Malaysia	125,000
Australia	214,690	Hong Kong, China	166,457	France	40,105
Japan	114,980	Japan	139,791	Singapore	37,600
United Kingdom	52,977	Taipei,China	113,489	Japan	30,619
Guam	45,968	United States	111,835	Israel	23,000
Germany	43,249	Kuwait	103,072	United Arab Emirates	20,000
Austria	30,000	Malaysia	88,601	Italy	20,000
Malaysia	26,000	Italy	81,232	Saudi Arabia	18,000
Singapore	26,000	Qatar	78,029	Republic of Korea	13,519

Source: Commission on Filipinos Overseas (2006), covering 192 countries/territories.

B. The Pros and Cons of Overseas Migration

International migration is a multi-dimensional phenomenon. While some hail the Philippines' skilled workforce and how it has helped developed countries (e.g., health systems of the United Kingdom [UK] and the United States [US]), overseas employment is a perennial reminder of the country's chronic unemployment problem (Estopace, 2003). This problem is apparently a structural one; overseas employment does not emanate from the country's comparative advantage and domestic unemployment has continued for years (Lanzona, 2004).

Brain drain is one of the perceived negative effects of international migration. The decrease in human capital stock is the most often cited fear, and costs to society include public investment in the education and training of skilled migrant workers; social costs of broken families (e.g., youth delinquency, materialistic values); pressure on wages due to labor shortages in specific sectors; and diminished capacity and quality in affected sectors (e.g., hospitals, schools, information technology). Alburo and Abella (2002) identify the following features of Filipino out-migration and associated negative impacts:

- The migrant labor force encompasses a disproportionate share of the most productive age group (25–44 years), which suggests a loss, even for temporary and limited periods, of those with the most experience, on-the-job training, and likely supervisory skills.

- The migrant labor force represents a disproportionate share of individuals with greater numbers of years of education, especially those who have completed bachelor's or higher degrees.
- A large number of Filipino workers abroad may have been gainfully employed in the domestic economy prior to migration.
- From 1990 to 1999, the number of professional workers who went abroad exceeded net additions to the professional workforce.
- The proportion of OFWs with tertiary education is far greater than the proportion of contract workers with secondary education.
- The supply of professionals in the last decade seems to have responded and adjusted to demand with a dramatic expansion in the computer sciences in the latter part of the decade, declines in medical and allied fields, and a slight fall in engineering graduates.[1]

That said, gains from out-migration are also possible. Potential gains include remittances supportive of the national economy and capital markets; mitigation of unemployment; economic and trade benefits from integration into the global market; and technology transfer from skilled, experienced migrants. Brain gain activities are one way homeland countries can harness the development potential of international migration (see, for example, Bagasao, 2003). The exodus of skilled workers has provided benefits to the Philippines, though previous, effective knowledge transfer activities have been halted. This study suggests that efforts could be made to harness the development potential of knowledge transfer from the skilled overseas workforce to benefit the Philippines and to minimize the costs of emigration.

C. Introduction to the Study

The study's objectives with respect to knowledge transfer activities were to: (i) explore and document their prevalence and their development potential; (ii) describe and analyze their links to the country's development conditions; and (iii) identify priority areas for their focus relative to the development needs of the Philippines. The study used quantitative and qualitative research methods to gather data, including interviews with key informants based in the Philippines, focus group discussions, survey questionnaires, sketch profiles, and socioeconomic data sets.

To explore the commitment and activities of overseas Filipinos in knowledge transfer, 150 questionnaires were sent out online and via mail to diaspora organizations in the US (80), Canada (50), and Australia (20). The questionnaires sought to determine the following:

- the quality of existing diaspora networks in terms of their membership and capacities, programs and services, and modes of operations and delivery systems;
- the feasibility of knowledge transfer using diaspora networks for social and economic development; and
- the steps needed to conduct knowledge transfer activities for the motherland.

The questionnaires were directed at officers of organizations whose names suggest that they are either professional associations or are geared toward helping the homeland. Due to the absence of data on the exact number of Filipino diaspora networks, it was not possible to derive an appropriate sampling frame, so convenience sampling was used. There were only 28 responses, a limitation this study recognizes. Survey questionnaires were also distributed to selected government, nongovernment, and business institutions that have engaged or that are engaging in knowledge transfer with overseas Filipinos. However, only three respondents returned their questionnaires. While the small number of returned questionnaires for both surveys (only an 18% retrieval rate) does not allow for generalizations, patterns from respondents' answers were examined to determine the presence or absence of biased response.

To compensate for the small number of respondents, the researchers also held a focus group discussion on knowledge transfer with 30 Filipino-Americans during a meeting of the National Federation of Filipino American Associations in the US on 19 January 2005. It was during this meeting that the preliminary findings of the survey were presented and comments from participants were solicited.

In order to investigate the demand for knowledge transfer, the researchers interviewed former overseas workers employed in skilled occupations and identified prospective recipients of knowledge transfer. The interviews sought to find out the following:

- how recipients have utilized resources from knowledge transfer;
- what were the respondents' attitudes and views toward acquiring knowledge from migrant Filipinos and their organizations; and
- how to make effective use of diaspora resources for knowledge transfer.

The final set of data is from profile sketches of Filipino migrants and associated organizations. Sketch profiles were selected on the basis of the following criteria:

- the reach of the migrants and migrant organizations;
- membership and organizational capacities of the groups; and
- the perceived effectiveness and innovation in delivery structures and mechanisms of their knowledge transfer activities.

II. BRAIN DRAIN OR BRAIN GAIN: IMPLICATIONS OF FILIPINO MIGRATION FOR THE PHILIPPINES

One indication of the extent of brain drain in the Philippines is that in 1995, 44% of overseas Filipino contract workers and 40% of emigrants had college degrees while only 20% of workers in the Philippines were similarly credentialed (Aldaba, 2004; Lowell and Findlay, 2002). Of those with degrees who worked overseas between 1988 and 2002, 30% were in the medical professions, 13% were in education, and 13% were engineers or architects (Alburo and Abella, 2002). One of the greatest concerns about brain drain is that the continued migration of skilled workers reduces overall productivity.[2] This situation is what Aldaba (2004) likens to reducing the number of machines used in the economy or even of reverting to old technologies in production. Brain drain also has an impact on foreign direct investment as capital will flow only into economies with perceived adequate supplies of skilled labor in key sectors.

The World Competitiveness Yearbook (International Institute for Management Development, 2005) sees a downward trend for the Philippines. The survey had four criteria: economic performance, government efficiency, business efficiency, and infrastructure. However, according to the Asian Institute of Management Policy Center (AIM, 2003), which conducted the survey in the Philippines, "…alternatively, since the overall score shows the Philippine economy's competitiveness in relation to other nations and subnational regions, the decline [of the country's rankings] may not necessarily mean the Philippines' performance has gotten worse in comparison to its own past performance; it could simply mean other countries and regions performed better."

Yet the Philippines still ranks second highest in Southeast Asia, after Singapore, in quality, cost, and availability of labor (PERC, 2005: 3). The AIM Policy Center believes Filipino professionals who work abroad can bring in new ideas and technology to use in national development and thus enhance competitiveness. The Center

identified skilled labor, competent senior managers, and low labor costs as specific strengths (AIM, 2004). Some have nonetheless observed that the country has become reliant on remittances and overseas jobs to keep the economy afloat. Thus, while benefiting from short-term gains, medium- to long-term effects will leave the country in a deficit (Opiniano, 2004).

Remittances also play a key role in brain drain discussions since some believe that they compensate for the loss of skilled workers. The idea gained greater attention in the international community when the World Bank's *Global Development Finance 2003* found that remittances to developing countries were greater than official development assistance flows and furthermore were not affected by external shocks or problems (Ratha, 2003). However, Kapur (2001) argues that remittances and brain drain "are not substitutes." The truly detrimental effects of brain drain on developing countries arise from the migration of professionals who are critical to institution building. Furthermore, if migration is due to economic and political instability, financial capital—not just human capital—is lost.

In the case of the Philippines, remittances are a significant source of foreign exchange. In 2004, the country received a record $8.5 billion through banks alone, which is over 10% of its gross national product (GNP). (See Tables 3.3 and 3.4 for data from the last 5 years.) When officials of the Bangko Sentral ng Pilipinas report remittance figures, they attribute any increase to the rising deployment of skilled workers overseas.[3] The Filipino public is now becoming interested in remittances, and various sectors (including multilateral institutions) are trying to find out how best to direct these private resources into productive uses.

Skills and technological knowledge acquired from abroad can also be used for the benefit of the home country. In the Philippines, migrants may return temporarily or maintain transnational links with colleagues to transfer knowledge (Meyer and Brown, 1999). This study is especially interested in harnessing knowledge transfer from the varied networks and associations of overseas Filipinos, even though return migration programs for skilled workers can also be initiated.

Globalization is creating additional interest in international migration despite the fact that developed countries and multilateral institutions heavily favor liberalizing trade and capital flows, but are still silent on liberalizing labor flows (Rodrik, 2002). As of this writing, the Philippines and Japan are finalizing a free trade agreement that would allow Filipino nurses and caregivers into the Japanese market in exchange for reducing some restrictions on Japanese businesspeople in the Philippines. The General Agreement on Trade in Services, particularly Mode 4, is also something that warrants

Table 3.3: The Value of Remittances from Overseas Filipinos, 1999–2003 ($ million)

Remittances as % of	Gross Domestic Product	Gross Foreign Direct Investment	Gross International Reserves	Exports of Goods and Services
1999	7.48	227.07	44.97	17.41
2000	8.40	236.88	40.28	14.66
2001	10.06	357.71	38.55	17.54
2002	10.17	218.58	44.46	19.21
2003	10.47	677.91	45.30	20.21

Source: Bangko Sentral ng Pilipinas (2004).

Table 3.4: Remittances from Overseas Filipinos, 1990–2005 ($ million)

Year	Land-based	Sea-based	Total
1990	893.40	287.67	1,187.07
1991	1,253.04	375.23	1,500.29
1992	1,757.36	445.02	2,202.38
1993	1,840.30	389.28	2,229.58
1994	2,560.92	379.35	2,940.27
1995	3,658.32	210.51	3,868.38
1996	4,055.39	251.24	4,306.64
1997	5,484.22	257.61	5,741.83
1998	4,650.00	274.61	4,925.30
1999	5,948.43	846.20	6,794.64
2000	5,123.77	926.68	6,050.45
2001	4,937.92	1,093.34	6,031.27
2002	5,963.06	1,226.18	7,189.24
2003	6,345.81	1,294.14	7,639.95
2004	7,082.99	1,461.46	8,544.45
2005	9,019.65	1,669.36	10,689.01

Note: Funds were coursed through the formal banking system.
Source: Bangko Sentral ng Pilipinas (2006).

attention in the near future since skilled professionals will be on the trading block. In keeping with the challenge to maximize the potential of international migration to bring about supplementary developmental benefits while minimizing the costs to developing countries (Opiniano, 2004), among other things, Macaranas (2005a) recommends a multisector analysis of the gains and costs of migration at the country, community, and household levels, as well as collaborative efforts to identify possibilities for enhancing migrants' developmental contributions. He calls attention to the need to address policy gaps efficiently and effectively.

One of the benefits sought from knowledge transfer is job creation in the domestic economy. The 2005 annual report of the Department of Labor and Employment

(DOLE) showed that over 1.6 million Filipinos have jobs. The Labor secretary at that time, Secretary Patricia Sto. Tomas, reported that more than 700,000 workers had local jobs while some 988,350 newly-hired and re-hired contract workers had overseas contracts (Department of Labor and Employment, 2006). For the 6-year term of President Gloria Macapagal-Arroyo, the target is to create 6 million jobs both locally and overseas. As of January 2006, the National Statistical Coordination Board (NSCB, 2006) reported that 32.38 million Filipinos had local and overseas jobs. Knowledge transfer that generates jobs will be beneficial to rural areas because domestic and international migration rates from these areas are high.

III. EARLY EXPERIMENTS WITH KNOWLEDGE TRANSFER ACTIVITIES IN THE PHILIPPINES

Innovative knowledge transfer activities were implemented in the Philippines during the 1980s and early 1990s. One example is the Science and Technology Advisory Council (STAC). Former Foreign Affairs undersecretary for economic affairs Dr. Federico Macaranas encouraged the formation of STAC chapters abroad when former President Corazon Aquino signed Executive Order 239 in 1987, which mandated the creation of advisory councils on science and technology. Other initiatives included the Transfer of Knowledge Through Expatriate Nationals (TOKTEN) program of the United Nations Development Programme (UNDP) and the *Balik* (Returned) Scientist Program. Lack of resources and awareness of the need for and importance of these knowledge transfer mechanisms eventually led to their discontinuation, though individual STAC chapters still exist abroad.

A. Science and Technology Advisory Council

STAC began in 1987 as a project of the Department of Foreign Affairs (DFA) to encourage overseas Filipino scientists to form their own associations and initiate knowledge transfer.[4] At one time, STAC had chapters in San Francisco, Vienna, Seattle, Boston, New York, Silicon Valley, Stockholm, Melbourne, Ottawa, and Tokyo (STAC-Japan, 2002). Among the chapters that are still active is STAC-Japan. Its current membership includes students, professionals, and other Filipinos who are interested in and willing to advance science and technology and advocate it as a necessary tool for Philippine development.

STAC-Japan provides training programs in computer literacy and entrepreneurship and organizes meetings in specific research areas. In order to tap the vast potential of Internet technology, STAC-Japan has been developing an online database on researchers in Japan and elsewhere and has even formed its own grant-making foundation, the STAC-Japan Foundation, Inc. The group also awards undergraduate research grants to science majors in the Philippines. STAC-Japan organizes research conferences both in Japan and in the Philippines (the latter in close cooperation with universities and science and technology organizations) and also assists fellow OFWs in Japan (many of whom are in the entertainment industry) through computer literacy and entrepreneurial programs.

B. Transfer of Knowledge through Expatriate Nationals

During the same period, DFA supported TOKTEN, the first organized system of tapping the expertise of Filipinos abroad by matching volunteers with projects in the Philippines. A DFA Undersecretary, Dr. Federico Macaranas, went abroad and personally invited Filipino expatriates to be involved. TOKTEN then funded visits to the Philippines that lasted from 3 weeks to 3 months (see Box 3.1). DFA and UNDP ran the TOKTEN program in the Philippines from 1988 to 1994; in fact, the Philippines is considered one of the most successful TOKTEN programs. However, the program was discontinued as soon as Undersecretary Macaranas left DFA (though it remains active in European and other Asian countries).

C. *Balik* Scientist Program

The Department of Science and Technology (DOST) created the *Balik* Scientist Program to tap the expertise of expatriate Filipinos for the Government's industrialization efforts. It began in 1994 with the support of DFA and it was institutionalized within DOST through Executive Order 130 (enacted 25 October 1993). The Government contracted *Balik* Scientists for short-term (at least 1 month) or long-term (at least 2 years) assignments (see Box 3.2). Long-term candidates could bring their spouses and two minor dependents with them.

From 1994 to 1999 (when the program ended), the program had 84 grantees, 56 of whom remained in the country. They benefited 23 academic institutions, 22 hospitals, 12 government agencies, and 11 industrial companies, and provided technical expertise to 27 major government programs including the following:

Box 3.1: Profiles of Transfer of Knowledge Through Expatriate National Volunteers

Mr. Larry Asera
Mr. Asera is a third-generation Filipino-American scientist, engineer, educator, and entrepreneur. His specific expertise is in photovoltaic or solar cell technology, and he is known internationally for state-of-the-art projects using solar modules for electric power generation. He was awarded a Transfer of Knowledge Through Expatriate Nationals (TOKTEN) fellowship grant in 1994 and was assigned to the Palawan Sustainable Development Council to conduct a study on the feasibility of using photovoltaic technology for rural electrification throughout the province, a project of the mayor of Puerto Princesa City. Mr. Asera also did a study on the feasibility of using solar energy for pumping water, lighting streets, and electrifying remote health clinics. Since this project, Puerto Princesa has been using solar panels for home electrical systems. Ten years later, the same mayor again contacted him to build a solar electric power generating plant (announced in 2004). Once this is completed, the power generating plant will be the country's first facility of its kind, and may be the largest one in the world.

Dr. Samuel Bernal
Dr. Bernal is a medical doctor in the United States who received a PhD from the University of Chicago in biomedical sciences and does cancer research. He taught at Harvard Medical School for 10 years as an associate professor. After the Department of Foreign Affairs Undersecretary Federico Macaranas invited him to join the TOKTEN program, he agreed to assist in developing test kits to detect cancer in shrimps to help save the industry. He did the same for *tilapia*, a type of fish considered a staple food of Filipinos. Dr. Bernal also arranged for the training of several Department of Health personnel at Boston University. These trainees came back and transferred their knowledge to others in the Philippines.

Dr. Maximo Baradas
Dr. Baradas is an agro-meteorologist with a doctorate from Cornell University. He returned to the Philippines during the Marcos administration and presented his dissertation on how to develop irrigation systems during droughts. The Government was unreceptive. He later met the Department of Foreign Affairs Undersecretary Macaranas, who immediately offered to match him with a private agency to implement his irrigation system in the Philippines. Dr. Baradas' system is now operational in Cebu. Dr. Baradas also helped the Philippine Rice Research Institute to control evaporation in rice fields, and he helped the Cotton Research and Development Institute conserve rainwater on cotton farms by minimizing evaporation and making use of rainwater retained in the soil for crop transpiration.

- the space program of the Philippine Atmospheric Geophysical and Astronomical Services Administration and Advanced Science and Technology Institute;
- the geothermal field development program of the Philippine National Oil Company, Laguna de Bay;
- the quality improvement program of the Laguna Lake Development Authority and the University of the Philippines in Los Baños; and
- the hazardous waste management program of the Department of Energy and the Department of Environment and Natural Resources (Samonte, 2001).

Box 3.2: Profile of a *Balik* Scientist

Dr. Manuel Garcia, a food safety specialist based in Canada, noticed the declining standards for food safety in the Philippines and offered his services to the Department of Science and Technology (DOST). He became a *balik*-scientist awardee. Dr. Garcia visited DOST regional laboratories and educational institutions and gave lectures, seminars, and workshops on food safety. He also met with technical representatives and distributors of laboratory equipment and supplies to get support for future workshops and seminars. He believed that the overall response was, "…strongly positive despite economic constraints." He noticed a "relative lack of knowledge among the workshop participants" which led him to conclude that "unlike the current preoccupation in advanced and some developing countries, integrated approaches to food safety in the Philippines were still in the embryonic stage." He made a list of recommendations to DOST to improve food safety standards and to update techniques on food safety in the Philippines. Dr. Garcia believed the program was "a highly effective approach to attract qualified expatriates for the unusual opportunity to reverse the brain drain in their motherland" (Samonte, 2001).

IV. OVERSEAS FILIPINO WORKERS AND SELECTED KNOWLEDGE TRANSFER ACTIVITIES

A. Possibilities for Knowledge Transfer

Filipino migrants and their organizations have been doing varied types of knowledge transfer or "brain gain activities." These include teacher training, echo seminars (or forums where knowledge and skills learned from previous seminars or learning or work experiences are shared with other audiences) in academic institutions, personal sharing of expertise gained abroad with local communities, consultancies for local government units, investment-related activities using skills acquired from abroad, knowledge-transfer activities as development programs of Filipino migrant organizations, and research and development initiatives.

Key informants—three from the Government and one from a private hospital—said their groups have had experience using Filipino migrants as consultants for government agencies and private institutions. The respondents preferred working with migrants rather than with foreigners because migrants understand the dynamics in the homeland, build a positive and hopeful view about the country, and might even be encouraged to stay longer. Filipino migrants are also better at adapting practices acquired from abroad to local conditions.

Migrant workers in skilled professions who have returned for good have also contributed to brain gain. Sharing of skills acquired abroad with rural communities is one project of the network of associations of Filipino OFWs based in Cebu City, the Overseas Filipinos Federation, Inc. (OFFI). OFFI organizes business seminars to help returning migrants to learn new skills, especially targeting those who work in semiskilled professions. Among the organizations that make up OFFI are cooperatives and entrepreneurial clubs, small enterprises, and self-help groups. Many of these groups, however, lack the capital necessary to start their own livelihood activities.

An interesting case of consultancy for local government units is the work of Filipino alumni of the Asian Institute of Technology (AIT), a graduate university based in Pathumtani, Thailand. Visayan members of the AIT Alumni Association-Philippines are working as consultants to local government units in Cebu and Leyte to help with their local development plans. One Cebu town, Talisay, for example, is now a city with help from the intervention of the AIT alumni.

B. Overview of Philippine Migrant Organizations

The researchers sent 150 questionnaires to diaspora organizations in Australia, Canada, and the US with a response rate of approximately 18%. While Philippine embassies and consulates overseas keep a roster of formal and informal Filipino associations, it is difficult to verify if these organizations still exist unless they report in. Based on information gathered by this study, there are some 112 Filipino organizations in Australia, 674 in Canada, and an indeterminate number in the US (Table 3.5).

Most of the 28 respondents were from professional organizations. All believed that their members possessed the necessary skills to contribute to the development of the Philippines. They also indicated they are very willing to help, though only a fraction are dedicated to helping through donations, investments, and consultancies. Filipino migrant groups that are helping the motherland (e.g., alumni associations) provide financial and material aid, though it is generally directed to the town or school where the members come from. The rest of the groups offered professional services to the country as a whole. Some associations were interested in doing business and trade with Philippine corporations and institutions. Unfortunately, a precise number of how many do specified activities such as hometown donations, professional services, and business and trade is not available from the information provided by Philippine diplomatic missions. Continued verification of the actual number of Filipino organizations (both formal and informal) in the 193 countries where Filipinos are present is still ongoing.

Table 3.5: Number of Registered Filipino Organizations in Canada and Australia

Type of Organization	Canada	%	Australia	%
Community	97	14	42	38
Sports	39	6	3	3
Senior/Elderly	29	4	8	7
Academic/Alumni	40	6	5	4
Socio-Cultural	68	10	20	18
Professional	43	6	5	4
Councils	15	2	3	3
Women	17	3	4	4
Regional	170	25	5	4
Religious	44	7	5	4
Media	41	6	1	1
Political/Advocacy	33	5	0	0
Health	1	0	0	0
Unclassified	37	6	11	10
Total	674	100	112	100

Source: Lists of Filipino associations in Australia and Canada, from the countries' diplomatic posts there.

Based on the survey, services are delivered when the need arises and can be demand-driven or supply-initiated. If driven by demand, a Philippine institution or community communicates their needs through solicitation. Demand-driven projects are usually financial and material (e.g., medical equipment) in nature and do not necessarily require members of diaspora organizations to visit the Philippines. Supply-initiated projects are proposed by diaspora organizations to Philippine institutions or communities and are based on the organization's assessment of the Philippines as reflected in news and research articles. In this case, activities are usually nonfinancial. Supply-initiated projects from Filipino migrant organizations reflect the interest areas of work by these organizations (e.g., medical-related training).

A majority of the groups focus their efforts on supporting education and health. They identify the needs of the homeland mainly through links with Philippine-based organizations that send their requests for financial assistance, professional services, and materials. Some organizations also learn about the country's needs by reading studies and articles on the Internet or in electronic newspapers.[5] Of these, half have identified education as the greatest need, especially updating university curricula. Since most of the respondents were from professional organizations that hold conferences, they also benefit from personal updates from Filipino delegates. After identifying the needs of the Philippines, the groups decide on activities they believe will meet those needs. These are mostly projects and not monetary donations.

When respondents were asked what sort of projects they were involved in, medical missions ranked first, followed by conducting lectures, education and livelihood, knowledge exchange, donations, and scholarships. Others describe their projects as helping professionals and professional training. Organizations involved in health, science, and technology described their projects as medical missions, food safety, and research. Infrastructure was mentioned infrequently, and when it was, it generally meant building hospitals.

Diaspora organizations promote their programs mostly through brochures, flyers, and direct mail to possible beneficiaries (such as individual nonmigrant workers and groups such as academic institutions, nongovernment organizations, and government and business groups) who are in the Philippines. Half of the respondents maintain websites to promote their services. Others post their activities in e-groups, local newspapers, newsletters, publications, and activity venues. With respect to the number of requests received from the Philippines, 10 respondents said they had received 1–4 requests, 8 respondents said 10 or more, 4 respondents said 5–9, and 5 respondents said they had not received any. As to the Philippine-based beneficiary that makes the

requests to these migrant organizations, 10 migrant group-respondents of this study said their requests had come from homeland-based nongovernment organizations.

C. Selected Examples of Diaspora Contributions/Migration Gains

This selection of Filipino migrant activities illustrates the wide range of possibilities, including knowledge transfer, business development support, and philanthropy.

1. Knowledge Transfer

The University of the Philippines Medical Alumni Society in America (UPMASA) began as a counterpart of the UPMAS in the Philippines. UPMASA was started in 1980 and has 12 chapters with 2,000 members. The group has addressed health needs, particularly by supporting Philippine General Hospital's Directly Observed Treatment Short Course Clinic for tuberculosis patients, which treats over 200 poor Filipinos. UPMASA also hosts an annual medical mission for poor patients and encourages members on vacation to take advantage of the visiting professor and consultant program of the University of the Philippines' College of Medicine to give lectures. They receive tax deductions and a certificate from the University of the Philippines. As of August 2002, some 16 members had participated.

The Philippine Institute for Certified Public Accountants (PICPA) was formed to provide continuing education seminars and to promote the growth and development of the Philippine accountancy profession. The US chapter is involved in continuing education in the Philippines and elsewhere. PICPA also organizes global conferences for its members. The first one was in Las Vegas, Nevada in September 2004, hosted by PICPA-California.

The Association of Filipino Teachers (AFTA) based in New York City began the *Balik-Turo* (or Return to Teach) program in 1993 to train teachers in the Philippines. US-based Filipino teachers share their expertise and experience and the latest teaching techniques with their Filipino counterparts. The first group helped 1,500 teachers and other educational professionals. Since then, more than 4,000 teachers and professionals have benefited from the program according to the government-run Commission on Filipinos Overseas (CFO). AFTA formulates workshop modules and submits them to CFO which then forwards the modules to universities, colleges, and schools that then choose those they feel their teachers need. CFO prepares the materials needed for the

workshop, but AFTA volunteers pay their own airfares to the Philippines. The workshops are open to everybody in the participating institution.

The Brain Gain Network (BGN) is a business network of professional engineers, scientists, and organizations with a special emphasis on high technology. Filipino graduate students from Stanford University and the University of California at Berkeley with the cooperation of Filipinos in the San Francisco Bay Area formed BGN in June 1993. BGN seeks to counter the brain drain by reconnecting the expatriate Filipino network with colleagues in the Philippines. BGN has built a large human resource database and encourages venues for business networking and joint collaboration. Mr. Francisco Sandejas, an alumnus of the University of the Philippines, and Stanford University revived BGN and successfully launched its website (http://www.bgn.org) where one can register and join in online forums on high-technology issues. One of the visions of BGN is for the Philippines to set up its local version of the famous Silicon Valley IT community (Posadas, 2005).

2. Supporting Business Development

The Philippines-Canada Trade Council (PCTC) was formed in 1983 as a nonprofit organization to promote trade and business relations. Its general activities involve networking among people, governments, associations, and organizations. They post trade-friendly news on their website and serve as a referral center for trade and business between the two countries. PCTC forged an agreement with the Philippines-Canada Business Council, based in the Philippines, to cooperate and to promote mutually beneficial business relations. A primary activity of PCTC is trade missions. The first was held in Manila in 2003 and resulted in new factories in the Philippines and the purchase of a pharmaceutical company in receivership. Another trade mission was organized in 2005 in Vancouver, Canada, and it was open not only to the Philippines but to other members of the Association of Southeast Asian Nations as well.

Massachusetts Institute of Technology-Philippine Emerging Start-ups Open (MIT-PESO) is a group of Filipino-American graduate students at MIT that seeks to use members' knowledge and expertise to make a positive impact on the Philippines. MIT-PESO just finished its first contest for the Philippines in December 2005. The winners will join the global competition, where participants will design business plans and feasibility studies. This global contest is patterned after MIT's own, in which the winning business plan receives $50,000.

Global Entrepreneurs Network-Philippines (GEN) is a group from Harvard University that wants to support Philippine businesses and entrepreneurial ventures. With the support of Philippine partners, they held a contest for business plans for business students in Manila in January 2005.

3. Philanthropy

Greater American Siquijor Association (GASA)[6] is for residents of Siquijor Province who migrated to the US. It is 21 years old and currently has 70 members who implement projects such as sending books and toiletries to needy compatriots, medical missions and shipping medical equipment, and promoting science and technology. They also conduct youth leadership seminars to help students become responsible citizens and leaders. These annual seminars follow a curriculum that covers many topics (e.g., public governance, health, education, public information, agriculture, commerce, economics, the judicial system, environment, and career choices).

Knowledge transfer is part of Link to Philippine Development (LinKaPil or the *Lingkod sa Kapwa Pilipino* [Service to Fellow Filipinos]) program, run by the Commission on Filipinos Overseas (a government agency under the Office of the President, though was under the Department of Foreign Affairs for more than 20 years). LinKaPil is a philanthropic and cooperative development program that encourages overseas Filipinos to channel support—cash, in-kind, and expertise—to the country. The LinKaPil program was able to raise P1.5 billion from overseas Filipinos from 1990 to 2004.

V. POLICY OPTIONS AND IMPLICATIONS

As noted above, the Philippines, known for its long history of sending workers abroad, does not have a policy to harness the development potential of labor migration so that the gains are maximized and the costs are minimized (Opiniano, 2004). Some think that the Government is unable to integrate the vital role of international migration into national development policy (Macaranas, 2005a). While the Medium-Term Philippine Development Plan 2004–2010 has portions that discuss how overseas Filipinos can contribute to development, they do not provide a clear and broad policy perspective for the country (Opiniano, 2004). Public policy can make or break any knowledge transfer program.

A. Policy Issues and Options

Public policy to address the brain drain issue remains a vexing problem for the Philippines (Alburo and Abella, 2002). Generally speaking, the country's policy is geared more toward sending workers out for jobs. The Philippines, as some civil society advocates have observed, has a return migration and socioeconomic reintegration program that merely provides former contract workers with socioeconomic assistance and job placement. The absence of a policy to address the brain drain thus remains a significant gap in Philippine migration and development. Macaranas (2005b) has recommended the following possible solutions:

- taxing the brain drain;
- providing support for previous and current knowledge transfer activities (e.g., STAC, *Balik* Scientist program, and TOKTEN);
- demanding compensation from departing nationals;
- delaying skilled workers' departure through compulsory service (e.g., as in the case of nurses); and
- creating better paying domestic jobs.

In the absence of government efforts, professional associations have started their own initiatives. Last year, major groups of medical doctors and specialists (e.g., Philippine Medical Association, associations of specialist doctors) agreed to encourage their members, especially new graduates, to serve the country for 3 years before migrating. This will enable the country's health sector to build a new roster of medical professionals to replace those migrating overseas. Medical associations are currently doing advocacy work with the Department of Health.

Beyond these specific options, broader legal frameworks and related policy incentives influence the potential for migration gains. Some laws affecting overseas Filipinos may also have an effect on their efforts to repatriate their resources. A significant law, the Dual Nationality Act (Republic Act 9225, signed 29 August 2003) enables Filipinos coming from abroad to regain Philippine citizenship without giving up their foreign citizenship. However, it was observed that because of the law's technical complexity, Philippine migrants are still unable to effectively transfer their earnings, resources, and skills. For example, Filipinos who have lost their citizenship cannot legally own land or participate as equity holders in a corporation or business. Even if some were able to become equity holders through nominee relationships, this

technicality might be a deterrent as these migrants may fear an inability to enforce their rights of ownership. Serious study is needed on the implications of the law on property rights, taxes, investments, and documentation (Asian Development Bank, 2005).

Despite the abundance of Filipino skilled workers and experts overseas, there are not many knowledge transfer activities from Filipino migrant organizations to benefit the Philippines. There is scope for groups in the Philippines, especially the Government, to encourage skilled OFWs to contribute their skills and knowledge, but there is a need to develop a strategy to effectively do this. The Philippines pioneered novel approaches (e.g., *Balik* Scientist Program, TOKTEN, STAC) only to see them discontinued due to a lack of resources or motivation of government leaders.

B. Responses by Filipino Migrant Organizations

The efforts by overseas Filipino organizations to remit resources to the motherland can be an opening for knowledge transfer activities. Workers abroad send remittances to primarily benefit their immediate families. There are, however, groups of migrants (e.g., hometown associations, community-based groups in the host country, alumni associations, nonprofit or charity groups registered in the host country) that pool their remittances to support development initiatives in the Philippines, or for diaspora philanthropy. As to the scale of Filipino diaspora philanthropy, some $218 million of remittances sent as gifts and donations (in addition to remittances to families) passed through the formal banking system in 2003 (Association of Foundations, 2005). The amount is a 5-year high, according to data from the balance of payments of the Bangko Sentral ng Pilipinas.

The performance of the domestic economy remains a major problem. Factors such as unemployment, noncompetitive salaries, rising cost of living, and poverty are strong push factors for the emigration of both skilled and unskilled workers. Poor conditions in the Philippines are disincentives for migrants either to return for good or to transfer knowledge. On the other hand, if migrants continue to see the motherland as struggling, it can motivate them to do something to remedy the situation. Sensing the need to improve science and technology, STAC and the *Balik-* Scientist programs were opportunities for skilled Filipino migrants to contribute their skills and expertise. The same is true of information technology where BGN hopes to make a contribution by bringing in investment and venture capital.

VI. CONCLUSIONS

A migrant-sending country such as the Philippines should see more of these brain gain programs and knowledge transfer initiatives not just by overseas-based migrant networks or individuals but also by groups of returned OFWs nationwide, by civil society groups and academic/research institutions, by the business and government sectors, and by international organizations. Brain gain activities deserve more attention especially from multilateral organizations, donor agencies, and host countries of skilled Filipino migrants through avenues such as official development assistance windows.

Maximizing migration gains and minimizing brain drain for the Philippines will require several actions. On the Government's part, there is an urgent need to formulate concrete public policy measures to attack the brain drain problem and to attract knowledge transfer (e.g., incentives for migrants involved in these activities). The latter could be addressed by exploring and/or reactivating initiatives to link knowledge transfer to science and technology (e.g., revival of the *Balik* Scientist Program). Policy options to obtain the cooperation and support from host countries for brain gain activities, such as bilateral agreements, should also be explored. More specific targets for policy and material support include:

- directing knowledge transfer activities to benefit small- and medium-sized cities and to provinces with low levels of growth and high rates of poverty (e.g., knowledge transfer incubation centers in rural areas);
- piloting projects that direct knowledge transfer to small- and medium-sized enterprises, especially activities that can lead to job generation for the domestic economy;
- assisting knowledge transfer to the health sector, especially addressing the issue of the local shortage of nurses and doctors and developing health care programs that migrants can match with their skills;
- providing incentives to Filipino migrant organizations and individuals and support to provincial groups of former migrant workers (especially those in skilled jobs abroad) who are involved in individual or group knowledge transfer endeavors; and
- conducting/supporting research that looks at how the migration of the skilled workforce affects the performance and productivity of the country's industries to provide insights on which workers to encourage and which to discourage from migrating overseas.

These recommendations are proposed to encourage decisive and strategic action on the part of the Government of the Philippines in the hope that the potential diaspora contributions described in this report—past and present—can be reactivated, continued, and expanded, thus ensuring greater migration gains for the Philippines into the future.

ENDNOTES

1 Alburo and Abella (2002) also noted declines in medical and allied fields. However, this is no longer the case, with the rising deployment of nurses to the US, UK, and other European countries, as well as a continued steady flow of doctors to the US.

2 The same phenomenon of brain drain is also occurring internally through rural-urban migration.

3 Their press release dated 15 February 2005 reported: "preliminary figures from the Philippine Overseas Employment Administration (POEA) revealed that deployment of both land-based and sea-based workers rose by 2.7% and by 4.2% to 669,539 and 225,122, respectively, reaffirming the continued demand for and preference by the labor importing countries for the highly skilled, educated and professional Filipino workers" (Bangko Sentral ng Pilipinas, 2005). Checking with data from the Department of Labor and Employment, in terms of total worker deployment, some 933,588 workers were deployed in 2004 compared to the 867,969 deployed in 2003.

4 STAC was born when the DFA was reorganized on July 1987 by virtue of Executive Order 239.

5 See, for example, the INQ7 Interactive, Inc., a joint venture between the Philippine Daily Inquirer, Inc. (a newspaper company) and the GMA Network, Inc. (a broadcasting company). Available at http://www.inq7.net (accessed 6 February 2006).

6 *Gasa* is a word in the native Visayan dialect that means "gift."

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Material and Social Remittances to Afghanistan

Shah Mahmoud Hanifi[a]

I. INTRODUCTION

This chapter explores the potential volume and transfer processes of cash remittances and intellectual skills from the diaspora in support of Afghanistan's future development. These material and social remittances are multifaceted and operate within a dynamic global system involving multiple state, nonstate, and transnational actors. The cultural identities, political activities, and economic interactions of the various communities that populate Afghanistan have been analytically misconstrued through an unfortunate combination of thin data, shallow theory, and politicization. This chapter, therefore, offers some conceptual alternatives and combinations that can improve understanding of Afghanistan, the Afghan diaspora, and the recent and potential relationships between the two.

The data on monetary and social remittances collected for this project come primarily from extended interaction with an Afghan money transfer agent or *hawaladar* (from the word *hawala,* an informal money transfer system) operating in the United States (US). The *hawaladar* provided the investigator liberal access to his clientele and business records from November 2004 to May 2005. The primary data sets include interviews with the *hawaladar*, survey questionnaires collected from selected *hawaladar* clients, and sketch profiles of a small sampling of the *hawaladar*'s clientele. Secondary data sets include information from two Afghan diaspora organizations geared toward development and reconstruction in Afghanistan, US immigration and census information, and the author's personal experiences and relationships with Afghan diaspora members and communities in California, Michigan, New York, Texas, and Virginia.

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II. UNDERSTANDING AFGHANISTAN THROUGH MIGRATION

Because of deficient quantitative and qualitative data, little is known about Afghanistan, and what is known is poorly understood. To begin with, it is unclear how many people reside there. The last internationally verified census in 1979 registered 15.5 million residents of Afghanistan (see Nyrop and Seekins, 1986). Today the CIA (Central Intelligence Agency) *Factbook* (2005) reports 29.9 million. The context of war and out-migration raises doubts regarding any estimation of Afghanistan's population, let alone a doubling effect, and suggests at least the possibility of population inflation in appeals and reports.

Anthropological and historical evidences argue that understanding Afghanistan requires an understanding of Iran, India (and Pakistan), and colonialism. Despite a long past animated by rich cultures, "Afghanistan" is a relatively new, highly contingent, and vulnerable nation-state. The emergence of a relatively strong state in the nineteenth century generated spiraling impoverishment and lasting interethnic hostilities that continue to plague the country. Historically and culturally, the political space now known as Afghanistan has been an interstitial link between Iran and India that became commonly identified as Afghanistan only in the late nineteenth century when the state as known today took shape. India has contributed significant cultural content to Afghanistan, particularly in terms of audio and visual media, printed texts, and the *hawala* system itself. Iran represents the cultural high ground and literary point of reference. Afghanistan as a unit of political economy is inescapably a product of British colonialism, and contemporary development is undeniably contextualized by the global war on terror.

Ethnicity is usually seen as the key to understanding Afghanistan, but ethnic identities in the country have rarely been critically examined. Pashtuns are perceived to be the majority and politically dominant population in the country, but analyses most often hinge on reductionist and static views of Pashtun ethnicity. Too often, Afghanistan is discussed as if it is only about Pashtuns (or Kabul, see below). In fact, the Pashtuns, as well as the Tajik, Hazara, Uzbek, Qizilbash, and other communities, represent complex and intertwined ethnic histories and cultures. In Afghanistan, ethnicity is only one of many identity options. It is a political/strategic choice and overlaps with other identities such as class, region, gender, generation, and ideological conviction. Ethnic groups in Afghanistan and elsewhere are not bounded and discrete units as so often but so mistakenly portrayed in commonly circulated maps (see, for example, CIA, 1997).

Migration is here advanced as a conceptual complement to ethnicity as a means for understanding and engaging Afghanistan. Migrations to Afghanistan over the millennia have brought a myriad of identities into the social and historical complexion of the country where multiple cultures and ethnic groups comingle in varied and important respects. To positively engage this environment is to embrace the cultural, economic, and political dynamism and fluidity resulting from Afghanistan's migratory matrix. There are at least five discernible types of migration involving Afghanistan and its constituent communities, each including a variety of subtypes. These are internal immigration, emigration, repatriation, transit, and cycling (repetitive repatriation-emigration). These five types of migration entail diverse motivations and can occur simultaneously and in unexpected sequences among multiple communities. Each type of migration in some form or degree is a part of each community's past and present. Migration involves a set of processes that expose and interconnect Afghan communities to and with each other while also linking them to the outside world.

III. THE AFGHAN-AMERICAN DIASPORA

Demographic statistics of the Afghan diaspora in the US and elsewhere are generally inconsistent, contradictory, and unverifiable. Although there were approximately a few hundred Afghan "pioneers" in the US during the 1950s, 1960s, and 1970s, the exponential growth of this diaspora group into the multiple scores of thousands, and what can be called a community of Afghan-Americans, began to take shape after 1980. These general conclusions are supported by the US Office of Immigration Statistics (2003) that indicates, for example, 33 Afghans arrived in 1976, while 2,566 immigrated in 1983. The US census recorded 45,195 Afghans (defined as people born in Afghanistan) in 2000 (US Census Bureau, 2000), while Afghans in the US consistently estimate their total number to be in the 100,000 range.[1]

A. The First Wave, circa 1980–1996

The Afghans that began to stream into the US after 1980 are a diverse population, but they can be divided into three broad categories: the urban merchant, professional, and technocratic classes; members of the political elite (the Muhammadzai clan and their clients/dependents); and a heterogeneous collection of *jihadist* or *mujahideen* militants sponsored by the CIA, informants working for the Drug Enforcement Agency, and translators for the Voice of America, as well as employees of other US

Government agencies. More than one of these broad categories may apply to the individual(s) in question. The vast majority appear to be culturally and economically connected to Kabul.

This first wave contained educated and/or financially well-off middle-aged and older males, arguably the supra-elite of the previous regime, who were voluntary migrants and brought their immediate families with them. The first wave also included uneducated, less materially prosperous and militarized young men who came as refugees and whose propagation of anticommunist and pro-Islamist ideologies conformed to the image of Afghans emphasized in the US popular media, and among academics in their new environment. The family reunification plan allowed for the less educated and less affluent to subsequently sponsor the resettlement of their immediate families. Some were able to arrange for the arrival of even more extended kin. It was common for families with more educated and wealthy heads of households to stay briefly (for a few months to about a year) in Europe, particularly Germany, before coming to the US. For the less educated without surplus capital, both the male household heads and their families tended to spend longer periods of time (several years) in refugee camp settings in Pakistan, particularly Peshawar, before arriving in the US.

Among the group of what could be called upper class Afghans in Afghanistan, there were varying degrees of professional and mercantile success in diaspora. For example, of the roughly 1,000 men and women who arrived in the US with advanced medical training obtained in Afghanistan, India, and the Soviet Union, only approximately 100 obtained the requisite certification and licensing for establishing relatively lucrative practices.[2] The vast majority of the trained medical personnel, however, were unable to transfer their skills and many of those entered the workforce in nonmedical capacities. According to Ghulam Dastgeer, the President of the Afghan Physicians Association in America, "over 700 Afghan physicians in the United States (are) doing restaurant work, driving taxis, even attending parking lots" (Gabriel, 2002).

Many members of the Afghan mercantile elite who came to the US established businesses, particularly a variety of Afghan restaurants—including fast food/carry-out kabob-centered luncheonettes around metropolitan commercial districts and college campuses (such as Madison, Wisconsin), and in larger cities some higher-end full-course meal enterprises (such as the Karzai family's Helmand restaurants in Baltimore, Boston, Chicago, and San Francisco)—and carpet and handicraft stores. However, it appears that most of Afghanistan's mercantile elite émigrés were not able to successfully transfer their business capital between home and host environments and many now find themselves on public support[3] or working for hourly wages in retail establishments or offices.

The first generation of Afghan-Americans initially settled primarily in Alexandria and other northern Virginia suburbs of Washington, DC, and to a lesser extent in Flushing, New York. By the mid- to late-1980s, increasing numbers settled in northern California, particularly the east Bay communities of Freemont and Hayward.

B. The Second Wave, circa 1996–2001

A second wave of Afghan immigrants is associated with the 1996–2001 period of Taliban rule in Afghanistan. Due to Taliban policies and the international response to them, this second wave of recent emigration from Afghanistan involved a noticeable increase in the number of women and children, especially widows with multiple children, and minority groups such as representatives from the Shia Hazara, and non-Muslim Hindu and Sikh communities in Afghanistan. In 1999, the US began to admit Afghan refugees who entered Pakistan after 1996 and were deemed to be in need of special protection by the United Nations High Commissioner for Refugees (UNHCR) (US Office of Migration Statistics, 2003). In the context of these domestic and international policies, men who could satisfactorily demonstrate they had experienced state torture due to their political affiliation, race, or religious beliefs could be approved for resettlement. Women deemed to be at risk due to the gender-specific policies of the Taliban and either a loss of husband or other male support, or the lack of any means of self or family support, could also be approved for resettlement. During the Taliban period, church groups, women's organizations, and human rights organizations also facilitated the immigration of Afghans to a number of countries in addition to the US.

Power holders in Afghanistan and their domestic policies produced Afghan migrants and refugees and the international system generated mechanisms and institutions to handle them (Hanifi, 2000). Some Afghans have manipulated and circumvented the formal bureaucracies of global migration.[4] Male migrants have invoked fictive and unverifiable experiences involving imprisonment and combat to buttress claims for refugee status and political asylum. Female migrants have distorted activities in relation to real and fictive spouses that frequently involve either anticommunist heroism or domestic abuse. Neither the fact-based nor the more creative engagements of bureaucracies or institutions relating to global migration are unique to Afghans. Verification of claims remains challenging for both Afghan claimants and international aid and relief actors.

Compared to the first migratory wave, the second wave of Afghan migrants is distinguishable by lesser degrees of education and lesser volumes of disposable capital

(US Office of Migration Statistics, 2003). One of the results of that collective disposition is a higher frequency of public assistance (US Census Bureau, 2000), particularly subsidized housing arrangements, and lower-tier wage labor employment, such as in fast food chains. During the Taliban period, US Government aided and sponsored resettlement programs produced new concentrations of Afghans in places such as Lansing, Michigan; Chicago; and Dallas and Houston, Texas.

C. Social Organization

In cultural and historic terms, Afghanistan is a weakly integrated and fragile polity. The Afghan-American diaspora reflects the basic lack of social integration that characterizes Afghanistan. Indeed, the ethnic and class-based diversity that was not surmounted in the homeland has arguably intensified in this particular host setting (see, for example, Nassery, 2003). Furthermore, while there are incidents of communication and exchange, such as marriages, between members of separate Afghan communities in the US, the distances involved and the costs of travel mitigate frequent and intense social interaction between these communities, particularly among the two largest population concentrations in northern Virginia and northern California (the former includes approximately 30,000 and the latter approximately 40,000 members, according to personal communications with residents).

Mosques are important solidarity-producing institutions for the various communities of Afghans in the US, though these may dilute Afghan-specific identity and identities in favor of a larger transnational Islamic identity. Some of the US mosques and the networks they form are financed by Saudi Arabian and Pakistani capital and are accordingly ideologically oriented. In addition, thousands of Afghan *mujahideen* and *jihadists* carried to the US the skills, training, and knowledge contextualized by radicalized Islamic education from the "homeland" that included a prominent place for Saudi-inspired Wahabism acquired in Pakistani *madrassas* and rudimentary terrorist training obtained in US-sponsored *mujahideen* camps. In the US, those transnational Islamist orientations were maintained and fed into a "reverse migration" of hundreds of young Afghan-American men connected to international mosque-based networks traveling to receive further training and experience in places like Kashmir and Chechnya in addition to practicing their trade in Afghanistan.[5]

The events and activities that most effectively promote solidarity and cohesion among the various communities of Afghans in the US include Islamic and Afghan national holidays (e.g., the two Eids and Naw Roz), life course events (e.g., marriages,

births, and deaths), and cultural activities (e.g., Afghan musical performances and Indian movies). The organizations most effective in generating cohesion within Afghan-American communities are athletic teams, clubs, and leagues. Soccer is by far the most popular and potentially unifying sport, but basketball, volleyball, and even American football teams serve to highlight the collective Afghan identity in particular locations. Over the past 20 years or so, a few sports tournaments have also facilitated communication and interaction between the various communities of Afghans in the US.

Neighborhoods in which either Afghan businesses or households are particularly prominent can be found in some of the larger urban areas such as Flushing, New York, and Freemont and Hayward in northern California. Members of the younger generation are generally in school and frequently also work to augment fixed household incomes. The older generation is represented by a high frequency of minimal English competency and an inability to move. This combination can produce noticeable generational and cultural gaps among communities of Afghans in the US that exacerbate preexisting distinctions associated with the homeland. Gender-based issues, involving dating in particular, also heighten divisions across both generational and ethnic lines. Afghan-American female university students often commute and seldom attend universities far away from their homes. There is a higher frequency of Afghan men marrying non-Afghan women than Afghan women marrying non-Afghan men, although the latter is certainly socially visible.

Diaspora Afghans, particularly those in Europe and North America, have demonstrated a robust engagement of the Internet. Hundreds of websites accessible through any search engine using Afghanistan as a keyword serve diaspora communities and, particularly after the September 11, 2001 events, serve non-Afghans as platforms for a number of often overlapping purposes, including education about Afghanistan, dissemination of news about the homeland, forums for artistic and cultural expression and celebration, and, as will be addressed below, mechanisms to facilitate development in the country. Similar to how the low level of literacy in Afghanistan[6] contributes to making printed texts sources of contention, distinction, and division (Hanifi, 2001), for the Afghan diaspora, the Internet is unevenly accessed and its influence unequally distributed. The Internet has been useful for producing episodes of intracommunity solidarity, for example, concerning fundraising for mosque construction or advertising local cultural events such as musical performances. It has generally not been a tool for sustaining communal solidarity beyond isolated events or activities, nor has it been a significantly useful vehicle for fostering intercommunity relations.[7] This is partially explained by the fact that Afghans generally place greater value upon and respond more

favorably to face-to-face oral communication than potentially anonymous cyber-communication at a distance, though there may be generational differences within the diaspora. Websites can also be sources of contention and locations of dissent as well as sites of celebration and solidarity, and in some instances they may arguably heighten rather than transcend indigenous divisions based upon ethnicity, gender, generation, and language.

IV. AFGHAN-AMERICAN CONTRIBUTIONS TO AFGHANISTAN

Afghans in diaspora primarily make two kinds of contributions to their homeland. These broad categories can be termed material and social remittances.

A. Material Remittances

Material remittances include cash transfers, as well as nonmonetary donations such as used books, clothes, and sports equipment (coats, boots, and soccer balls and shoes are especially prominent). Monetary remittances can occur by direct physical carriage and on-site delivery, or by bank-to-bank and Western Union transfers. Among Afghans, cash is most often moved from host to home environments via *hawala* under the auspices of a *hawaladar*, though this may gradually change with the increase in formal alternatives. The Afghanistan Investment Support Agency (2004) offers a high estimate of 500,000 Afghans in the US and Canada and claims an average remittance of $1,500 per person or a total of approximately $75 million per year to Afghanistan, most of which is transferred via *hawaladar*s.

Most treatments of the *hawala* system arise from the post-9/11 period are government-commissioned, do not benefit from direct engagement of either *hawaladar*s or their customers, and often focus on the relationship between *hawala*s and money-laundering and/or terrorism (e.g., Howlett, 2001; Jamwal, 2002; Jost and Sandhu, 2000; Passas, 2003; and US Senate, 2002).[8] Other studies of the *hawala* system consider it an informal institution in relation to formal institutions, or as an inherent development inhibitor produced by a "tribal society resistant to change" (Hayaud-Din, 2003). This study complements Monsutti's (2005) culturally informed investigation that situates the *hawala* system within the larger migration-based social and economic networks that shape Afghan society and that link it to surrounding economies and societies in Iran and Pakistan.

The following section reports on one *hawaladar* operating from northern Virginia. The investigator interacted with the *hawaladar* from November 2004 through May 2005.[9] The *hawaladar* allowed the investigator liberal access to his customers and records. During the data-gathering phase of the project, the investigator communicated with the *hawaladar* regularly, generally on a biweekly basis, primarily in person but occasionally by phone. Information on the *hawaladar*'s client base is taken from two sources: a questionnaire and selected profile sketches (obtained through informal conversations arranged by the *hawaladar*).

The *hawaladar* estimated that about 100 of his customers would be able and willing to participate in the present study, i.e., he thought about that many would be most easily able to read the questionnaire and most willing to complete and return it. Therefore, 100 survey questionnaires were distributed to the *hawaladar*'s selected sample. There are several explanations for the *hawaladar* deeming so few of his customers as appropriate candidates for inclusion in the study, including: a general lack of literacy among Afghans; mistrust or misgivings exhibited toward texts and documents, which highlights an emphasis on oral communication among Afghans; the value placed on the privacy of *hawala* transactions, reflecting a great deal of trust and confidence in the *hawaladar*; and perhaps an awareness of the official illegality of the transaction in the US. Seventy-six questionnaires were fully or very nearly completed and returned.[10] (Beyond material remittances, these survey data also inform the discussion on social remittances, below).

Over the course of 2 weekends in mid-May 2005, the investigator accompanied the *hawaladar* as he traveled around metro Washington, DC, to meet customers and visit retail establishments where he maintains associates who collect funds for transfer. In this context, the *hawaladar* arranged for the investigator to meet with the clients he deemed comfortably able and willing to discuss some of their experiences with the *hawala* system. Twelve meetings were held, each lasting approximately 3 hours. Nine of these meetings yielded data sufficient to merit inclusion in this report; sketch profiles from these conversations appear in Appendix 2. The informal meetings that are not included did not progress far enough to generate substantive reflection or discussion of the *hawala* system.

1. *The* Hawaladar

The *hawaladar* is a large-scale operator, but only one of many *hawaladar*s operating in the greater Washington, DC area. The community of *hawaladar*s in this region includes

a number of large- and small-scale operators. Apparently most operate independent of government oversight, although a few have acquired state money transfer licenses, which some *hawaladar*s believe have accompanied by FBI monitoring (personal communications).

The *hawaladar* deals primarily in cash remittances in US dollars to Afghanistan and Pakistan from the US, Canada, Europe and Australia. The *hawaladar*'s entire customer base at the time of the study was between 2,000 and 3,000 people. In a typical, non-holiday month, the *hawaladar* deals with about 450 customers. For example, in April 2005 he had 273 customers for Afghanistan and 190 customers for Pakistan. This amounted to his handling of about $60,000–70,000 per month for Afghanistan and $50,000–55,000 for Pakistan, or approximately $110,000–120,000 per month for both countries. The *hawaladar*'s business volume during the single month of Ramadan is approximately equal to that of the remainder of the year. The *hawaladar* indicated that his business could keep increasing by 20 or 30 customers per month, but that such an expanding volume would transcend his efficient operating threshold. He is, therefore, selective in acquiring new customers. The majority of the *hawaladar*'s clientele are repeat customers with variable periodicities and volumes of transfer activities. During the course of the study, the *hawaladar*'s clientele included only Afghans. However, non-Afghans, in particular European and American employees of aid and development agencies and nongovernment organizations (NGOs) working in Afghanistan, often use the *hawala* system (Maimbo, 2003).

A typical *hawala* transaction is initiated by a customer's telephone call to the *hawaladar*. The fundamental feature of the *hawala* system is that the *hawaladar* personally negotiates each transaction with his clients, which is something he and his customers highly value. Once specific features of the transaction and a service fee are agreed on, customers have three choices to convey the amount of money intended for transfer to the *hawaladar*: (i) they can deposit the funds in a bank account, the number of which the *hawaladar* provides; (ii) leave money with him directly; or (iii) leave it with contacts at local retail establishments, usually a restaurant or food store. The first option is rarely used, and it was not possible to determine the weighting between the second and third alternatives. The *hawaladar* receives the money usually very shortly (a day or two) after being contacted. He then notes the amount in question, the destination, and the recipient, along with a transaction index number (serial numbers up to 1,000, when he starts another run to 1,000, indicating the next series by attaching the next letter of the alphabet).

The initiator of the transaction is told to inform the intended recipient that he or she can retrieve the money on site in Afghanistan or Pakistan in 2–3 days in normal

circumstances, or anytime after that temporal window. Once the recipient collects the money, confirmation communication is return-routed until a fax is sent to the *hawaladar* who notes completion of the transaction in a book. Any bookkeeping inconsistency, which happens rarely, is resolved quickly and efficiently by fax, and most often results from the *hawaladar* faxing the wrong amount taken from a line or two above or below the correct amount in his book.

The *hawaladar* thinks, talks, and operates on the basis of books. He has three "working books": (i) one for money going to Kabul, (ii) one for transfers to other locations in Afghanistan, and (iii) one for Pakistan/Peshawar. The *hawaladar* works with a *sarraf* or money-changer in Kabul, and employs someone in Peshawar where he maintains an office. Each night the *hawaladar* faxes intended recipients' names, the amounts, and the serial numbers to his employee in Peshawar and his associate in Kabul. The employee in Peshawar gets 1.5% commission, and the Kabul *sarraf* between 2% and 2.5%, depending on the nature of the transaction (i.e., depending on if the funds are destined for a location outside Kabul). This leaves the *hawaladar* with approximately 4.5–5.5% profit when combining Afghan and Pakistani transactions. The *hawaladar*'s *sarraf* in Kabul works with hundreds of other *hawaladar*s, and there are hundreds of *sarraf*s in Kabul alone.

The *hawaladar*'s business activities are heavily weighted toward sending money to Afghanistan and Pakistan, although he does handle transfers leaving Afghanistan, and not always in small volumes (during the course of the study, a high-ranking Afghan government official contacted the *hawaladar* to move $1 million out of the country). His business volumes and the proportional weighting between financial trajectories involving Afghanistan and one of its primary diaspora populations are not always stable and predictable, as for example during an approximate 1-month period in the spring of 2005, the *hawaladar* was involved in moving $100,000 out of and $80,000 into Afghanistan. The *hawaladar* estimates that $1 billion leaves Afghanistan per month. Such a figure implies large profits from the opium economy, but certainly large sums of money unrelated to the opium economy also regularly leave the country.

The *hawaladar* owns a home in the US that he purchased with a mortgage, and has invested in at least three properties and a number of water wells in Afghanistan. During the course of the study, the *hawaladar* was considering investing in a venture of buying sugar in Brazil and exporting it to Herat (so as to avoid Pakistani taxes). He is also interested in investing in a private university in Afghanistan and actively discusses the venture in an apparent attempt to recruit investors.

2. *The* Hawaladar*'s Clients*

The questionnaire addressed the following issues: gender, residence and employment in the US and Afghanistan; the amount transferred in the previous year, the motivation for and length of time transferring; the recipient and purpose of the transfer; and whether or not the individual transferring owns property in Afghanistan. Certain categories of the survey questionnaire (e.g., employment in Afghanistan, reason for transfer, and recipient) offered standardized responses that are italicized in the appended tabulation document, but in some instances, the respondent checked a category of response and/or provided more information. Instances such as those account for tallies of data subsets that supersede 76 or the number of valid complete questionnaires. In a few instances, blank responses result in tallies slightly less than 76.

The survey indicated that a large number of Afghan women (43% of the sample) utilize the *hawala* system and that prior to leaving the country, the *hawaladar*'s clients resided in locations scattered throughout the country with the notable exception of the southeastern "Pashtun belt" of the country. It also showed that the *hawaladar*'s clients' remittances were directed to Kabul in greater frequency (93%) than migrants leaving the capital city (35%), indicating a trend toward the country's urbanization. Although the *hawaladar*'s clients currently reside in the US, Europe, and Australia, the survey indicates that the vast majority of his surveyed clientele live within driving distance from him. This may be the basis for the trust he felt in suggesting them as respondents, and may further underscore the dependence of the *hawala* system on personal interaction and exchanges as key ingredients in forming and sustaining the *hawaladar*'s client base. The questionnaire data indicate that 64% of those surveyed transfer less than $5,000 per year; approximately 25% transfer $5,000–10,000 per year; and 18% transfer up to $20,000 per year (one respondent transfers $20,000–40,000 per year). Forty-five percent of the surveyed clients have been transferring for less than 5 years, while 33% have been transferring for 5–8 years; and 20% have been transferring for 8–14 years.

Because the reason for transfer appears to be primarily for ordinary sustenance (68%), it can be concluded that cash remittances from the diaspora are at present not predominantly geared toward development or reconstruction endeavors. However, the questionnaire data indicate an approximate 11% incidence of investment through the *hawala* system. There is, therefore, latent potential to use the *hawaladar* as a kind of social bulletin board and/or funnel for economic development projects (see below).

The sketch profiles indicate that cash transactions with the *hawaladar* are embedded in larger sets of social relations (Polanyi, 1957). Within this sample, ethnicity is not the key variable in structuring the relationship between the *hawaladar* and his clients; rather, shared experiences as *mujahideen* and locally constructed friendship relationships and kinship ties appear to be the governing variables in the economic and social relationships between the *hawaladar* and his clients. An evolving and increasingly intertwined economic and social relationship between the *hawaladar* and his clients was evinced during the course of the study and is indicated in profile number 8 (see Appendix 2) where joint investment in houses and wells between the *hawaladar* and a customer is indicated. Such incidents of coinvestment with clients were regularly mentioned by the *hawaladar* during the course of the study. All of those contacted value the *hawaladar* as a trusted private banker who can make loans and is willing to discuss at great length each aspect of all transactions, including cash transfers to Afghanistan. For reasons including convenience and providing an opportunity to display hospitality, participants in the informal meetings expressed appreciation that the *hawaladar* makes "house calls."

These selected clients value the *hawaladar*'s credit and flexibility, that is, his ability to advance money and his willingness to negotiate each transaction. The participants also expressed appreciation for the lack of paperwork in and the consistent reliability of *hawala* transactions. Some participants maintain and use a bank account concurrent with engagement of the *hawala* system, which indicates the simultaneity of formal and informal economic institutions.

B. Social Remittances

Social remittances are "the ideas, behaviors, identities, and social capital" (Levitt, 1998) that flow from host to home countries. Within social remittances, this study is concerned with knowledge transfer.

1. Knowledge Production, Consumption, and Transfer

Data from the *hawaladar*'s clients indicate that the skill sets produced in Afghanistan have generally not been applied in diaspora settings. For example, of the three individuals who identified themselves as medical doctors in Afghanistan, only one is practising in the US. Furthermore, none of the six individuals who were teachers in Afghanistan are practising that trade in the US. Afghanistan is a predominantly rural place with

agricultural activities accounting for 80% of productive labor in the country (Hosain, 2005); none of the 12 farmers in Afghanistan are engaged in that activity in the US.

It is difficult to quantify what kind and to what extent the radical Islamic education and terrorist training that Afghans acquired in Afghanistan and as refugees in Pakistani *madrassas* have been carried to and/or advanced in the US. For example, Jalal Wardak is a Soviet-trained Afghan pilot who appears to have been unable to practise his advanced aeronautical skills in the US and instead divided his time between driving a taxi cab in Washington, DC and flying military jets for the Taliban (Anonymous, 2000). The experiences of Mr. Wardak capture at once the difficulties of transferring secular technical expertise into the US diaspora, the antidevelopment nature of some sets of technical skills acquired in Afghanistan in the service of radicalized Islamic forces, and the pattern of impermanent or circular migration between Afghanistan and diaspora settings.

A different kind of example concerning the difficulty of transferring or the nontransferability of technical expertise and intellectual skills acquired in the US to the homeland is Abdul Jabar Sabit (Barker, 2005). Mr. Sabit claims a law degree from the US. He served as one of the many translators for the well-known American anthropologist of Afghanistan David Busby Edwards, and for a time functioned as the primary spokesman particularly on foreign affairs matters for the prominent Afghan *mujahideen* commander Gulbudeen Hekmatyar. Mr. Sabit has apparently been unable to formally deploy his skills as a lawyer, translator, or spokesman for the current regime in Afghanistan and instead acts as an informal *muhtasib*, or market inspector in Kabul. He has apparently taken it upon himself to apply Islamic regulations to the increasingly prominent vices of alcohol consumption and prostitution in the capital city, though to limited effect. It should be noted that the highest echelons of the current Afghan Government (ministerial and deputy-ministerial levels) are populated by Afghans with higher education training in the US and Europe. These appointments reproduce a historical pattern in which there are various degrees of disconnection between academic/professional training and bureaucratic assignments. A current expression of the longer-term theme is the Finance Minister, who holds a PhD in Political Science from Northwestern University.

The questionnaires and informal meetings reveal a few instances where individuals from the Afghan-American diaspora have acquired skills in the US that may have potential to be directly and productively transferred. Such individuals are involved in business, construction and construction management, heating/cooling, and flooring expertise. However, those participating in the informal meetings demonstrated no interest in resituating their businesses or skill sets in their homeland due to a perceived

lack of laws and consistently applied legal frameworks, and the prevailing insecurity of property and capital in Afghanistan.

The questionnaires indicate beauty salons and hair work have a high employment concentration (seven incidents) in the host country setting. A simple Google search will reveal thousands of stories about women's hair/beauty salon's and fashion, where Afghan women from the US and the West are transferring their skills and capital to Afghanistan. Nearly all of this web-based information focuses on Kabul. Notwithstanding the symbolic appeal of such ventures, this geographic concentration dilutes the relevance of such microenterprises for the development of the country as a whole.

2. Knowledge Organization and Application

This section describes two types of diaspora knowledge transfer organizations: a professional association and a philanthropic nonprofit organization focused on the reconstruction and development of Afghanistan. These examples demonstrate potential for the Afghan diaspora to contribute meaningfully to development in Afghanistan, though their effectiveness and scale suggest limited impact to date. Diaspora contributions may be further hampered by the market for translation and interpretation skills and services, which may lure skilled diaspora members away from their areas of expertise.

The Society of Afghan Engineers (SAE) is a US-based diaspora organization that has surmounted a number of common distinctions (e.g., distance, gender, generation, and social origin). SAE is

> a private nonprofit and nonpolitical corporation whose purpose is to foster international support and to encourage financial and technical assistance for the reconstruction and prosperity of Afghanistan. This Society was formed in 1993 by a group of Afghan engineers in Northern Virginia and surrounding areas who believe that they have a moral responsibility to help the grief-stricken people of Afghanistan (SAE, 2006).

SAE's structure includes a Board of Directors, Executive Committee, Technical Committees (Housing, Irrigation, and Power, Transportation, Manufacturing, and Industry, Natural Resources), and Administrative Committees (Planning, Publication, Translation, Membership, and Chapters).

Since its founding in 1993, SAE has grown to include branches in 11 US states, Canada, Germany, and Afghanistan. There are approximately 533 members and organization dues are $60 a year. The organization has held approximately eight annual conferences and a handful of smaller symposia. SAE's website serves primarily as a networking resource by listing members and their contact information, and as an archive of meetings, making available a number of conference proceedings and other engineering papers and reports. In terms of tangible, ground-level results in Afghanistan, SAE's achievements appear rather limited, with advertised results reduced to mere proposals that are well conceived but thus far appear not to have matured or been realized.[11] Possible reasons for its limited success in producing tangible ground-level results might include an inability to attract sufficient capital for proposed projects or to secure the initial consent and continued support of the Afghan Government for their planned work.

In terms of realized contributions to Afghanistan, Afghans4Tomorrow (A4T) (see Afghans4Tomorrow, 2006) is a creative, productive and promising organization of US-based diaspora Afghans dedicated to the development and reconstruction of the homeland. The organization is unique for a number of reasons, including what can be termed its "open door policy" of working with practitioners of a wide range of skill sets and types of expertise in a variety of regions and economic sectors. A4T engages other diaspora organizations, non-Afghan individuals and organizations, long-established aid and development organizations and more recently established international NGOs, and the Afghan Government (Brinkerhoff, 2004). A4T was established in 1999 for the benefit of all Afghans, i.e., those in diaspora settings and those in Afghanistan.

Its development and reconstruction services primarily target young Afghan professionals for contributions and involvement. A4T creatively organizes its various activities to mobilize Afghans and non-Afghans in ways that allow for flexible and personally tailored contributions toward larger goals. For example, rather than requiring long-term, rigidly formalized commitments that might require an interested party to quit or take an extended leave of absence from his or her job to participate in a project in Afghanistan, A4T allows and arranges for short-term stints (e.g., during vacation periods) so that the person in question would not have to renege on current commitments to contribute to a project in Afghanistan (Brinkerhoff, 2004). Sample A4T initiatives include the Seeds for Afghanistan project that partners with the NGO Physiotherapy and Rehabilitation Support for Afghanistan; new school construction in Bustan with specialized roofing achieved in partnership with Engineers Without Borders–International; and Microsoft Office computer software training for the Ministry

of Finance staff (Brinkerhoff, 2004). A4T's organizational structure includes departments of Agriculture, Commerce, Education, Energy, Health and Human Services, Housing and Urban Development, Land Management, Transportation, Finance, and Treasury. Its webpage includes multiple useful links including World Bank's Directory of Expertise and the United Nations Development Programme's Donor Assistance Database for Afghanistan.

The US military and multiple nonmilitary government organizations are arguably among the largest employers of educated and skilled diaspora Afghans (both directly and through contractors). In particular, the US Department of Defense (especially its Defense Language Institute) and the Voice of America have attracted large numbers of educated and skilled Afghans (personal communications with Voice of America employees). A recent job advertisement indicates that bilingual Afghan-Americans can make $146,000 per year translating (Torres Company, 2006), while Afghan-Americans with advanced technical degrees (e.g., engineering, computer programming) often enter NGO and Afghan government service at local wage rates and in many cases outside their area of expertise. For example, members of the Society of Afghan Engineers have encountered this (personal communication).

Beyond mere language skills, some of these diaspora Afghans have advanced training and expertise that might be more usefully applied to development and reconstruction projects. During the course of the study, the *hawaladar* introduced the investigator to an Afghan working for the US Department of State. This individual was very well educated, fluent in at least Pashto, Persian, and English, and a highly skilled computer programmer. He indicated his primary responsibility to be creating "user friendly software so diplomats from places like South America can learn how to greet Afghans and order food in restaurants with a few mouse clicks, like a video game." In another example, an Afghan with a PhD from Michigan State University in Wildlife Management (an acquaintance of the author) now translates for the National Security Agency. This pattern of skill devaluation and language redeployment seems at odds with the international community's goals for the country.

SAE has successfully organized engineering knowledge among the Afghan diaspora in the US and in other host country settings. It has exposed Afghans with various forms of engineering expertise to each other and provided a number of networking opportunities for this community. A4T serves as a model for integrating multiple forms and sub-types of knowledge and expertise relevant to the development and reconstruction of Afghanistan. It has demonstrated a capacity to subsume agricultural, engineering, medical, and computer skills under creatively constructed

initiatives that are framed to incorporate contributions of Afghans and non-Afghans, government, private organizations, and individuals. The potential impacts of SAE and A4T for Afghanistan's reconstruction may be reduced by the siphoning of highly skilled Afghans away from these and other development-centered diaspora organizations by US government agencies for language-specific purposes.

V. CONCLUSIONS AND RECOMMENDATIONS

This study has focused on a limited set of remittance transfers from the Afghan diaspora in the US, and provides suggestive information regarding the potential of brain waste within the Afghan diaspora in the US.

The in-depth review of one *hawaladar*'s business confirms the relatively small annual transfer amounts and their predominant sustenance orientation (68%). On the other hand, the study does imply greater potential for *hawaladar* networks to contribute to development, beyond these individual remittances. *Hawaladar* activities are predicated on regular economic exchanges that involve mutual trust, informality, and flexibility. *Hawala* transactions generate social relationships that could evolve to include joint investments between *hawaladar*s and clients. The *hawaladar* engaged for this study has a network of clients that are not united by common ethnicity. In fact, this *hawaladar* is a non-Pashtun who identifies most of his clients as Pashtuns. This *hawaladar* maintains friendship relations with a number of his clients, and has jointly invested with some of them. The social ramifications of his business relationships are likely replicated among other *hawaladar*s with different clienteles.

*Hawaladar*s are, therefore, nexuses of economic transactions among individuals forming a social and communicative grouping, however loose. *Hawaladar*-centered associations are grafted on to other forms of economic community and social capital. *Hawaladar*s have the potential to link local diaspora communities and resources with localities and projects in Afghanistan. They could also be engaged at the consumption end of commodity trajectories, for example, by helping to advertise and market the products of Afghan orchards and vineyards, especially dried and fresh fruits and nuts and perhaps even wine, particularly within diaspora communities that originally invested in the ventures. More generally, they may have an important role to play in disseminating information and pooling resources for development and reconstruction purposes.

Knowledge transfer from the Afghan-American diaspora may be hampered by the replication of social patterns of division and enclaving. Domestic divisions based upon location/region, ethnicity, class, gender, and ideology continue to pervade Afghan

communities and structure intra- and intercommunity relations in diaspora settings. That said, the Society for Afghan Engineers has managed to bridge some of these divisions—at least in principle—though social integration in actual project application is unknown. On the other hand, A4T appears inclusive and relatively more effective in engaging individual diaspora members, especially among youth. SAE has the potential to contribute professional skills with little evidence of effectiveness, while A4T represents lay enthusiasm, albeit with more visible results on the ground.

Estimates from the Afghan Physicians Association of America confirm significant brain waste among skilled Afghans in the US, which may be exacerbated beyond the medical profession by the lure of lucrative salaries for translation and interpretation.

ENDNOTES

1 The 100,000 figure, usually qualified by "about/around," regularly appears during the course of conversation with Afghans in the US. The same number is commonly used by American analysts of Afghans and Afghanistan, again qualified with "roughly" or something to that effect.

2 Many of these form the Afghan Physicians Association in America, an organization said to be irreconcilably fractured between east and west coast groups (Nassery, 2003).

3 The 2000 US Census indicates that 21.6% of Afghan families were below the poverty level.

4 Among themselves, Afghans openly discuss these creative engagements of international migration agencies and bureaucracies. I witnessed this in an overt and intensive expression during fieldwork in Peshawar, Pakistan in the second half of the 1990s.

5 This statement is informed by personal communications within the Afghan diaspora community.

6 Lack of data prohibits Afghanistan from being included in the United Nations Human Development Report, but the basic indicator of literacy is indexed, and in 2001 approximately 36% of the population over the age of 15 were deemed literate (UNDP, 2003).

7 There are exceptions (see Brinkerhoff, 2004; Brainard and Brinkerhoff, 2004). Nassery (2003) also discusses the youth exception.

8 Maimbo (2003) does benefit from interviews with *hawaladars* in Afghanistan.

9 Unless otherwise noted, sources of information on the hawaladar and his business are from personal communications.

10 The resulting survey data can be found in Appendix 1.

11 These include, for example, (i) establishing a technical committee, (ii) reforming construction permit and management systems, (iii) introduction of new construction materials, (iv) training technical personnel, (v) rehabilitation and reconstruction of Kabul University, (vi) new city planning and construction, (vii) reconstruction of existing and construction of future roadway systems in Afghanistan, (viii) introduction of standard contractual documents in construction industries, (ix) rehabilitation and reconstruction of existing development projects, and (x) help with future development projects.

12 General occupation categories are taken from the US Office of Migration Statistics.

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APPENDIX 1: SURVEY DATA

A. Gender

Gender	Absolute Numbers	%
Male	43	56.6
Female	33	43.4
Total	76	100.0

B. Residence in Afghanistan

Province	Numbers in Each	Absolute Numbers	%
Kabul	28	28	42.4
Parwan	12	12	18.2
Nangrahar	4	4	6.1
Baghlan, Balkh, Bamiam	3	9	13.6
Farah, Faryab, Ghazni, Kunar, Kundooz	2	10	15.2
Jowzjan, Laghman, Paktiya	1	3	4.5
Total	50	66	100.0

C. Current Residence in the US

Residence	Absolute Numbers	%
California	4	5.0
Florida	2	2.6
Georgia	1	1.3
Maryland	4	5.0
Michigan	1	1.3
New York	2	2.6
Pennsylvania	2	2.6
Tennessee	1	1.3
Texas	1	1.3
Virginia	56	71.8
Washington, DC	1	1.3
West Virginia	1	1.3
Other	2	2.6
Total	78	100.0

D. Occupations[12] in Afghanistan and the US

Occupation Category	In Afghanistan Number	In US Number
Business	4	
Government	40	
Farming	12	
Executive and Managerial		6 (includes 5 business owners)
Professional and Technical	8	3 (includes 1 translator)
Sales		4
Administrative Support	4	2
Farming, forestry and fisheries	1	
Operators, fabricators, and laborers	1	4
Precision production, craft, and repair	4	7
Service (driver/transportation, retail)	4	
Bank/bank teller	2	
Beauty Salon		7
Child care		1
Food stores (includes 1 butcher)	1	9
Restaurant		3
Media/entertainment	1	
Real Estate		8
Retail		1
Taxi driver	2	7
Gas station/car repair		2
Public services (health education)	2	3
Military/Police/Security	3	
No occupation/not working outside home		
Homemakers	2	2
Students or Children	21	
Retirees		
Unemployed	1	4
Unknown		1
Total	57	74

E. Amount Transferred in 2005

Amount	Number	%
$800–1,000	1	1.6
$1,000–2,000	12	19.7
$2,000–3,000	7	11.5
$3,000–4,000	14	23.0
$4,000–5,000	5	8.2
$5,000–7,000	3	4.9
$7,000–10,000	7	11.5
$10,000–15,000	9	14.7
$15,000–20,000	2	3.3
$20,000–40,000	1	1.6
Total	61	100.0

F. Length of Remittance Transfer

Duration in years	Number	%
1 up to 2	14	19.4
2 up to 5	19	26.4
5 up to 8	24	33.3
8 up to 10	6	8.3
10 up to 14	8	11.1
14 and above	1	1.4
Total	72	100.0

APPENDIX 2: CLIENT SKETCH PROFILES

A. Profile 1

Age/Gender	43-year-old male
Ethnicity/Other	Panjsheri
Occupation	Auto mechanic
Arrival in US	1989
Remittance destination/recipients	Sends money to Islamabad and Kabul for his family
Remittance purpose	Living expenses
Remittance amounts	A few hundred dollars every few weeks
Use of formal system	Doesn't have a checking account, deals all in cash
Relation to *hawaladar*	Has an account ("*mumra*") with *hawaladar*
Value of *hawala*	Trust in *hawaladar* and the system
Other	*Jihad* experience with Northern Alliance doesn't want family here in US because it is corrupt/culturally polluted (*fased*)

B. Profile 2

Age/Gender	45-year-old male
Ethnicity/Other	Pashtun from Wardak
Occupation	Translator (Pashto and Dari) for State Department; pursuing degree in construction management
Remittance destination/recipients	Transfers to Kabul and Pakistan
Remittance purpose	Emergencies, mainly
Remittance amounts	Use of system down from $2,000 to $1,000 per month
Use of formal system	Has a US checking account
Value of *hawala*	Likes the flexibility and informality (constant bargaining; every stage of transaction can be negotiated) of the *hawala* system

C. Profile 3

Age/Gender	40-year-old male
Ethnicity/Other	From the east of the country near Jalalabad (*Mashriqi*); Arab background; speaks Pashto
Occupation	Works for US patent office
Remittance purpose	Sends money for investment
Use of formal system	Understands and apparently uses formal banking system, but not for his "small amounts" transferred to Afghanistan
Relation to *hawaladar*	Has credit from *hawaladar* and currently owes him money
Other	Married; no children; lives in possibly subsidized housing

D. Profile 4

Age/Gender	40-year-old male
Ethnicity/Other	Mohmand Pashtun from Jalalabad
Occupation	Works for State Department on short-term contract teaching conversational Pashto to officials and wants to go to the Defense Language Institute in Monterey, California
Remittance destination/recipients	Family in Kabul and Peshawar
Remittance amounts/purpose	"Moderate amounts for needs"
Value of *Hawala*	Flexibility is key virtue
Relation to *Hawaladar*	Serves as accountant and sometimes surrogate for *hawaladar*

E. Profile 5

Age/Gender	45-year-old male
Ethnicity/Other	Non-Pashtun from south of Ghazni
Occupation	Restaurant owner
Remittance recipients/purpose	Only sends for family needs (father retired pharmacist; family owns orchards)
Value of *hawala*	Likes the familiarity ("*ashna*") of the system
Relation to *hawaladar*	Irregular user
Other	*Jihadi* (Northern Alliance) at age 17 when moved to Kabul

F. Profile 6

Age/Gender	50-year-old male from Panjsher
Occupation	Works for an air conditioning–heating/cooling company
Arrival in US	1988
Other	*Jihadi* experience
	Has extensive tales of illegal travel to or through Central Asia, Iran, England, and India before coming to US
	Fantasy about opening air conditioning–heating cooling company in Kabul dampened with engagement with practicalities (insecurity of proper legal framework for life and property security)

G. Profile 7

Age/Gender	50-year-old male from Badakhshan
Ethnicity/Other	Mawlawi Sahib, an honorific religious title, implies religious knowledge
Occupation	Construction worker
Remittance destination/recipients	At time of meeting $200 directed toward helping immediate relatives in Kabul and Badakhshan
Relation to *hawaladar*	Uses system irregularly
	The *hawaladar* extended a $1,000 loan to this client to help him through a period just after an auto accident that prevented him from working
Other	*Jihad* experience

H. Profile 8

Age/Gender	35-year-old married male
Ethnicity/Other	From northern Laghman, born in Herat, raised in Kabul
Occupation	Spent 3.5 years in Russia (learned Russian well) where he learned hardwood flooring trade Currently an apprentice for that craft
Arrival in US	1999
Remittance purpose	Investment in land north of Kabul and in many wells
Remittance amounts	A $1,200 transaction at end of meeting, $700 of which was for a well
Use of formal system	Banks deprive people of playing the black market, in so many words
Value of *hawala*	Appreciates *hawala*'s reliability, its lack of paperwork, and the fact that the system works in dollars (not local currency)
Relation to *hawaladar*	Regular user of *hawala* system; coinvestor in wells and houses

I. Profile 9

Age/Gender	55-year-old female from Kabul
Occupation	Provides child care for the landowner of the townhouse where she rents a room
	Works at both Wendy's and Kentucky Fried Chicken, in a managerial capacity at one of them (this is surprising because she seemed to have extremely limited capacity in English), for approximately 40 hours per week (walks to both)
Remittance amounts, destination, purpose	Small amounts directed to children in Kabul
Relation to *hawaladar*	Regular user
Other	Has husband, sister, and mother living nearby in Maryland; trying to become a US citizen so she can bring her children here

Diaspora Mobilization Factors and Policy Options

Jennifer M. Brinkerhoff[a]

I. INTRODUCTION

The potential gains from migration illustrated in the three cases should be clear. Diaspora members offer unique advantages in their efforts to contribute to the homeland. Recipients of knowledge transfer/exchange in both the People's Republic of China (PRC) and the Philippines note the advantages of diaspora-specific contributions deriving from the absence of language and culture barriers, and more specifically, their ability to better understand, and thus, more effectively adapt foreign approaches and technology to the homeland context. In short, where knowledge exchange is concerned, diaspora members can act as important interlocutors between the technology and its originating context and the homeland recipients and culture. In the Philippine case, beneficiaries also noted the greater potential, vis-à-vis other foreign nationals, to persuade diaspora members to extend their stays and contributions. Beyond economic and career incentives, diaspora contributions may be framed, sometimes primarily, as philanthropy. The Filipino diaspora's philanthropic orientation yields direct assistance to particular regions, hometowns, and schools, as well as more general service contributions, such as medical missions and teacher training. Diaspora philanthropy yielded an estimated $218 million in formal remittance transfers in 2003. The Afghan case underscores the importance of diasporas' contributions to household sustenance through remittances, the potential of remittances for productive investment, and the potential for knowledge transfer/exchange and diaspora philanthropy.

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This chapter builds from the three case studies to further illustrate the factors conducive to diaspora mobilization and contributions, and to link these to a broader discussion of policy options and implications. Following is an overview of each of the three cases, highlighting government actions with respect to skilled migration, characteristics of the skilled diaspora, diaspora contributions, and study findings. The cases reinforce the identified factors conducive to diaspora contributions. Building on these discussions, we next turn to policy options, situating selected examples from the cases into a broader framework of homeland national strategies, associated policies, and probable outcomes for diaspora members and the homeland. A summary table illustrates these and highlights how various strategies and their policies may serve to counter expected losses due to brain drain. The study concludes with additional policy implications.

II. OVERVIEW OF THE CASES

A. People's Republic of China

1. Government Responses to Skilled Migration

Among the three countries' governments, that of the PRC is by far the most proactive in both recognizing diaspora potential and seeking to harness it. The PRC Government has arguably been at the forefront of moving beyond the brain drain perspective to view knowledge exchange as dynamic and to acknowledge the "stored brainpower" that skilled emigration represents. The bidirectional orientation of knowledge transfer, or knowledge exchange, is captured in the "dumbbell" metaphor, where professionals maintain deep connections in both the host- and homeland, utilizing these to exchange knowledge between them.

The PRC Government manifests its proaction vis-à-vis knowledge exchange through institutional structures, policies, program activities, and official websites. In addition to its central agencies addressing overseas Chinese professionals (OCPs), the central Government instituted a system of interministerial meetings on returned overseas students to explore supportive policy options. However, these efforts would be more effective if they were better coordinated.

Policies center on incentives targeted to skilled OCPs. Many policies focus on providing high-quality working and living conditions during OCP returns, including

national-level benefits such as support for purchasing a car, and local government benefits such as priority phone installation. Some local governments even issue cash incentives, such as Guangzhou (US$12,000 equivalent for those who stay long term), or seed money for research activities and housing. Other policies seek to liberalize freedom of movement for OCPs in the PRC, including entry and exit.

Still other policies emphasize prestige: the PRC Government acknowledges and publicizes the achievements of returning OCPs to encourage more to come back (including 939 awards at special conferences in 1991, 1997, and 2003). Social status of OCPs is also highlighted as most OCP delegations are received by high-ranking officials. Finally, the Government aims to offer OCPs opportunities for economic returns and career development (e.g., through collaborative projects). In fact, Biao notes an evolution in the Government's framing when soliciting diaspora contributions, from an emphasis on patriotism to one of investment opportunities as it increasingly seeks to solicit transnational business ventures. Beyond government policies, knowledge-user institutes offer special packages addressing funding, housing, and research facilities.

Programs range from those that are merely funded to those that require active participation of government officials. Funded programs include short-term visits, collaborative research projects, OCP research projects conducted in the PRC, and contractual professorial and research chairs in the sciences. Program activities focus on diaspora networking, including visiting delegations, business venture conventions, scientific conferences, and industrial parks targeted to OCP-initiated ventures. The PRC Government also takes a lead in matching technical needs to diaspora knowledge resources, for example, through the Ministry of Science and Technology's newspaper, *Science and Technology News*, which publicizes knowledge institutes' technical challenges, which are then disseminated to OCP associations through the e-newsletter of the State Council Overseas Chinese Affairs Office.

Associations beyond the Government also seek to match needs with diaspora skills and knowledge, for example, the Overseas Talents Serving the Homeland program of the Chinese Association for Science and Technology. Under this program, local branches of the Association work through the national association to solicit assistance from OCP associations. While websites seek to make these connections as well, Biao's review suggests that fewer better organized and coordinated websites might be more productive than today's plethora of competing and underutilized websites.

2. Characteristics of the Skilled Diaspora

Biao distinguishes different generations of skilled migrants, including those who left before and after the reform movement initiated in 1978. Focusing on the latter group, he reviews the expanding opportunities for studying abroad and notes the dramatic decline in return starting in the 1980s, and most notably after 1989 when several receiving countries granted permanent residence to PRC students and scholars. Most OCPs reside in North America.

Research reveals mixed findings on the impact of the 1989 Tian'anmen Square movement on motivations to return and contribute. It seemed that in the early aftermath, surveyed diaspora members cited the status of political freedoms and human rights as deterrents to return, while in later years, quality of life and professional opportunities became more important. Since diasporas are not homogeneous groups, it is likely that the prioritization among these factors will vary among OCPs.

While his survey findings may be indicative of the activities of only one professional association, Biao's study suggests a correlation between those OCPs who join overseas ethnic professional associations and those who maintain contact with the homeland with at least one visit per year and weekly phone calls. He also notes a correlation between OCP age and duration of emigration and stability of connection to the homeland and enthusiasm for short-term return. This contrasted with those who were younger and saw themselves still in the process of accumulating knowledge and experience. Participants in overseas professional associations and those in contact with the PRC Government for purposes of knowledge transfer/exchange, including awardees, appear to be predominantly male.

Biao reviews the prolific OCP associations with emphases ranging from Chinese-language schools and other cultural organizations to OCP associations. In contrast to apparent divisions within the Afghan diaspora community (below), and possibly the Chinese diaspora more generally, only 5% of surveyed OCPs reported participation in clan associations. Like the Government, OCP associations are also proactive in seeking to match technology/knowledge needs in the homeland to OCP knowledge and skills, for example, organizing delegations to the PRC, and inviting Chinese scholars for knowledge exchange in the hostland. The Government of the PRC has now recognized the importance and strategic advantage of OCP associations, now relying on these associations to facilitate broader communication with the diaspora as opposed to its embassies.

3. Knowledge Transfer/Exchange Processes

Biao distinguishes between knowledge and information, emphasizing the social nature of knowledge exchange in terms of fostering understanding. Several surveyed OCPs mention the importance of learning how to think, not just accessing new technology, emphasizing the importance of professional norms and socio-cognitive networks for knowledge development.

Despite the PRC's forethought and initiative with respect to policies and programs supportive of diaspora knowledge transfer and exchange, 83% of surveyed OCPs still cited personal contacts as the most important ingredient for their engagement in knowledge transfer/exchange to the homeland. In fact, Biao's deeper examination of two knowledge-user institutes reveals that personal contacts and informal networks are used both to initiate independent knowledge transfer/exchange activities and to facilitate access to more formal opportunities through government policies and programs. Biao also finds that while OCPs may not always work as long hours or be perceived as equally committed as other expatriate specialists, their contributions may be more efficient and effective given the absence of language and cultural barriers.

4. Findings

Biao's findings suggest that many OCPs remain unaware of the PRC Government's impressive proaction, yielding more symbolic than operational outcomes. In addition, Biao finds that these policies (and programs) tend to ignore the large numbers of overseas students in favor of more established professionals and scholars, ignoring the possibility of cultivating allegiance for future contributions. Also with respect to framing, the study suggests that policy and programmatic incentives can lead to the attraction of under- or mis-motivated and/or unqualified OCPs, such as "conference worms." Biao recommends that the PRC recast its policies and programs to ensure that it sufficiently capitalizes on broader industrial and technical networks rather than rely on OCPs alone. The PRC's efforts seem to be exclusively focused on science and technology, ignoring potential contributions in the social sciences and through diaspora philanthropy.

The study also finds that homeland policy frameworks beyond those directly relating to diaspora knowledge transfer/exchange are important. For example, regulations on labor exports and mobility could very well be interfering with long-term investment in transnational business ventures, as well as particular industries such as information technology (IT).

B. Philippines

1. Government Actions Related to Skilled Migration

Like the PRC Government, the Philippine Government has come to recognize the economic importance of its overseas nationals. However, rather than seeking to attract Filipinos back—whether for short- or long-term skills exchange—the Government has responded to this recognition with an explicit strategy to export its labor. This policy was initiated in 1974 as a means of easing domestic unemployment and stabilizing dollar reserves, and continues today. Approximately 7.7 million Filipinos were working overseas in 2003, with significant brain drain implications for the Philippines. These include the migration of a large share of the most productive age group (25–44) and the most educated. Overseas employment of Filipinos was greater than domestic employment in 2004. On the other hand, the country benefits from the remittances it receives from overseas workers, estimated at over 10% of gross domestic product in 2003.

While the Philippines experienced early innovation and success (1980s and 1990s) with knowledge exchange with its diaspora, these formal government- and United Nations-sponsored programs have been discontinued. The Science and Technology Advisory Council sought to encourage overseas Filipino scientists to engage in knowledge exchange. Only one active chapter remains, in Japan, which implements training programs, organizes meetings around specific research topics, maintains a database of Filipino researchers, and awards research grants to science majors in the Philippines.

UNDP's Transfer of Knowledge Through Expatriate Nationals (TOKTEN) program (1988–1994), administered jointly by the Department of Foreign Affairs and UNDP, funded short-term knowledge transfer visits of skilled overseas Filipinos. The program was discontinued when its government champion, the head of the Department of Foreign Affairs, left this post. Successful examples yielded benefits for solar energy, the tilapia industry, and irrigation systems in the Philippines.

Also with support from the Department of Foreign Affairs, the Department of Science and Technology developed its own knowledge transfer program called the *Balik* Scientist program. From 1994 to 1999 the program supported short- and long-term assignments for 84 overseas Filipino scientists, who benefited 23 academic institutions, 22 hospitals, 12 government agencies, 11 private sector companies, and a range of government programs.

2. Characteristics of the Skilled Diaspora

On their part, overseas Filipinos and their associations have long been initiating knowledge transfer activities, including teacher training, special training events, and short-term consultancies. Key informants noted that overseas Filipino consultants are preferred to other foreign nationals in that they have better understanding of the Philippine context, are thus better able to effectively adapt foreign approaches and technology to the Philippine context, and might be persuaded to extend their stays.

Returned overseas workers have organized a federation, the Overseas Filipinos Federation, Inc., which organizes business seminars to help other returning migrants, especially those who had been working in semiskilled professions, though member organizations of the Federation (e.g., cooperatives, small enterprises, and entrepreneurial clubs) often lack the capital to launch self-sustaining ventures. The Asian Institute of Technology Filipino Alumni Association is an example of knowledge transfer, where members have consulted to local governments in the Philippines on their local development plans.

Those members of overseas Filipino professional organizations who responded to the survey indicated a stronger willingness to contribute than their demonstrated donations, investments, and consultancies. Most assistance is channeled to the migrants' hometown, school, or family. Some associations expressed interest in business and trade with the Philippines.

3. Knowledge Transfer Processes

Diaspora contributions are both demand- and supply-driven. Demand-driven contributions occur when a Philippine institution or community solicits assistance for an identified need, usually financial or material. Demand-driven contributions often do not require an actual visit to the country. Among those surveyed, those who had received requests from beneficiaries noted that these came primarily from Philippines-based nongovernment organizations.

Supply-driven contributions, on the other hand, originate with the diaspora organization or member, based on that organization's needs assessment, typically informed by newspaper accounts and published research. Needs are also identified in conversation with Filipino delegates to international professional conferences. These activities typically concern knowledge transfer specific to the diaspora's professional orientation. Diaspora organizations often formally promote their programs to potential

beneficiaries and other diaspora members through brochures, direct mail, websites, and listservs. Most activities have centered on education and health.

Sample diaspora associations and related knowledge-transfer activities include those that are primarily oriented to knowledge transfer, business development, and philanthropy, though several are multifaceted. Regarding knowledge transfer, the Philippine Institute for Certified Public Accountants provides continuing education seminars in the Philippines to promote the growth and development of the Philippine accountancy profession; and the Brain Gain Network of engineers, scientists, and high-technology organizations seeks to reconnect expatriate Filipinos with counterparts in the Philippines for the purpose of knowledge exchange. As for business development efforts, the Philippines-Canada Trade Council promotes trade and business relations through networking and referral; the Massachusetts Institute of Technology-Philippine Emerging Start-ups Open implements an annual competition of business plans and feasibility studies for investment in the Philippines; and Global Entrepreneurs Network-Philippines implements a similar activity.

A purely philanthropic association, a regional club called the Greater American Siquijor Association, implements a broad range of assistance programs from sending books and toiletries to medical missions and youth leadership seminars. Several professional associations combine knowledge transfer with philanthropy. For example, the University of the Philippines Medical Alumni Society in America hosts an annual medical mission for poor patients and encourages members to use vacation time to give back; and the Association of Filipino Teachers implements a large-scale teacher training program in cooperation with the Government's Commission on Filipinos Overseas, which matches proposals to needs and produces required materials (overseas Filipino teachers cover their own expenses). The Commission on Filipinos Overseas also oversees Link to Philippine Development, a philanthropic program that encourages contributions of money, materials, and expertise.

4. Findings

The Government continues an explicit labor export strategy and has rhetorically acknowledged the potential contributions of overseas Filipinos in its Medium-Term Philippine Development Plan 2004–2010. However, to date, it has not developed a proactive and integrated policy to harness potential gains from Filipinos who remain overseas. Policies and programs are mainly focused on facilitating return. For example, the Government implements a return migration and socioeconomic reintegration program,

and has passed a Dual Nationality Act. In response, some actors have initiated their own efforts. For example, professional associations in the Philippines have made efforts to dissuade members from migrating prior to providing a minimum period of service in the homeland (e.g., the Philippine Medical Association and associations of specialist doctors).

Much room remains for the Government to initiate its own policies and programs, both with regard to encouraging diaspora knowledge exchange, and for encouraging and capitalizing on existing diaspora philanthropy (which totaled $218 million in formal remittance transfers in 2003). Opiniano and Castro also note the continuing performance of the Philippine economy and consequent poor quality of life as additional incentives to migrate, and as disincentives for return, skills transfer, and investment.

C. Afghanistan

Hanifi's study of the Afghan diaspora differs from the others in its emphasis on informal remittance transfer and data from a *hawaladar*'s clientele. He highlights the diverse identities within Afghanistan as well as within its diaspora, calling attention to the need to contextualize considerations of diaspora contributions in a broader regional context and noting challenges deriving from these sometimes competing identities. While not explicitly discussed by Hanifi, Afghanistan is a relatively newly established state overwhelmed with the general reconstruction process. Therefore, the Government of Afghanistan has not initiated any formal policies and programs with respect to harnessing diaspora contributions, whether for the short or long term. However, much of the Government, service sectors, and industry are populated by returned Afghans responding to calls from donor organizations, attracted by business opportunities, or motivated by humanitarian and/or cultural identity motivations.

1. Characteristics of the Skilled Diaspora

Hanifi begins by distinguishing two waves of Afghan migration to the United States (US), each with implications for brain drain and brain waste, as well as for potential contributions to the homeland. The first wave (1980–1996) consisted of many educated and middle- to upper-class men accompanied by their families, as well as some *jihadist* or *mujahideen* militants. Credential transfer proved problematic for many of the skilled doctors. Those from the merchant class tended to found their own businesses, including many Afghan restaurants. The second wave (1996–2001) consisted essentially of refugees from the Taliban regime and hence included a much higher proportion of

women and children. Migrants from the second wave tended to have lower levels of education and resources, resulting in a higher reliance on public assistance.

The Afghan diaspora in the US tends to replicate identity divisions found in the homeland, with further community distinctions made by geographic residence in the US (notably a disconnect between the two largest populations, northern California and northern Virginia). Hanifi finds some evidence of ethnic enclaving in larger urban areas of settlement. Community is formed to some degree around mosques, though these are not often Afghan-specific and frequently carry religious and cultural overtones deriving from Saudi and Pakistani origins. Afghan-specific community building occurs around Afghan national and religious holidays, life celebrations, and sports events. The diaspora also effectively, and somewhat prolifically, accesses the Internet to build intracommunity solidarity, though these cyber-grassroots organizations (Brainard and Brinkerhoff, 2004) tend to reinforce identity divisions, with a large incidence of separate websites and discussion boards for different identity groups.

2. Diaspora Contributions

Members of the Afghan diaspora remit a sizable amount of total revenue to Afghanistan, estimated at an average of $1,500 annually per person, for a total of approximately $75 million a year from the US and Canada alone (Afghanistan Investment Support Agency, 2004). Hanifi's study finds that one *hawaladar*, alone, transfers between $1.3 million and $1.4 million annually to Pakistan and Afghanistan. The transfer system is based on trust and personal relations, and also relies on a network of operators, with one each in Kabul and Pakistan, who may then rely on their own delivery networks. The *hawaladar* system may also be used to transfer money out of Afghanistan, sometimes in large sums and sometimes by high officials. Some of this out-transfer may be the result of the opium industry. In addition to his money transfer business, the *hawaladar* has invested in Afghanistan and sometimes solicits coinvestors from among his clients.

The primary purpose of remittances appears to be ordinary sustenance (68%), though 11% of those surveyed indicated transfer for investment as well. Despite identity divisions in the general diaspora population, the *hawaladar*'s client-base does not reflect such divisions. Clients value the *hawaladar* system for its flexibility, reliance, and personal touch.

Hanifi finds that among the *hawaladar*'s client base, some brain waste appears to have occurred, and of those who have acquired transferable skills in the US, few express interest in repatriating due to a perceived absence of supportive legal frameworks and

their enforcement. Brain waste may also be the result of the market for Afghan language speakers and translators. While some knowledge transfer has occurred, it seems to reflect a modal US employment area—beauty salons.

Other knowledge transfer occurs through professional associations and philanthropic organizations. Hanifi profiles one of each, revealing challenges and limited impact. The Society of Afghan Engineers appears to have surmounted identity divisions within the diaspora, though its impact has been limited, with evidence mainly of proposals rather than completed projects. On the other hand, Afghans4Tomorrow has managed an inclusive and flexible approach to facilitating diaspora knowledge transfer, particularly in the areas of education and agriculture, in partnership with other actors on the ground. Its approach is highly responsive to identified needs, emerging opportunities, and the particular skills base of participating diaspora members (see Brinkerhoff, 2004). Hanifi finds that knowledge transfer is hampered by the replication of identity divisions found in the homeland, though he provides some evidence that these can be overcome.

III. CONDUCIVE FACTORS

Especially taken together, the three cases conform to and reinforce the identified factors conducive to diaspora mobilization for contributions to the homeland. Mobilization capacity, opportunity structures, and motivation to act will each be discussed in turn.

A. Mobilization Capacity

1. Characteristics of the Diaspora/Migrants

The capacity for diaspora contributions resides first and foremost in the individual diaspora members. As Iredale (2001) points out, profession does matter. The cases confirm that knowledge transfer/exchange and philanthropy are frequently associated with the diaspora members' profession. For example, knowledge exchange in the PRC is specific to the scientific professions of OCPs, and diaspora philanthropy in the Philippines is primarily in the health and education sectors, reflecting the professions of a majority of the diaspora. Capacity and motivation to contribute are also related to age and professional development. Younger OCPs are less inclined to consider even short-term return, viewing themselves as still in the process of knowledge and skills development.

General characteristics of diaspora segments may also be more or less conducive to mobilizing for homeland contributions. Biao's study focused almost exclusively on the highly skilled Chinese diaspora. Not surprisingly, this case more than the others emphasized the importance of social capital in the hostland (i.e., cognitive social and professional networks) for the development of knowledge and skills. If Lowell et al. (2004) are correct in their hypothesis that the highly skilled, while remitting relatively less than the average of their compatriots, are more productive in their investments, then we might expect more productive investments coming from the first wave of Afghan migrants as opposed to the second. That first wave, consisting of greater numbers of the merchant and professional classes, is also the likely source of most of the knowledge exchange, investment, and philanthropic activity to date. In fact, Afghans4Tomorrow is largely staffed by this diaspora wave and its subsequent generation.

2. Social Networks/Social Capital

The three cases demonstrate the importance of community solidarity to enhancing the ability of diasporas to mobilize for contributions to the homeland. Certainly, individuals contribute through remittances, which do not always require participation from overseas compatriots. On the other hand, the volume of remittances may be enhanced when diasporas have access to *hawala* systems, and productive investments may be increased when these remittances are pooled or coordinated, whether by a *hawaladar* or a diaspora organization.

Beyond remittances for household benefit, the cases confirm that bonding social capital within the diaspora, as evidenced by diaspora organizations (e.g., ethnic professional associations, and philanthropic organizations), enhances the likelihood of diaspora contributions, whether for productive investment, knowledge transfer/exchange, or philanthropy. For example, the PRC case suggests a correlation between those OCPs who join overseas ethnic professional associations and those who maintain contact with the homeland. Many Filipino diaspora associations facilitate knowledge transfer, for example, the Asian Institute of Technology Filipino Alumni Association, and the Science and Technology Advisory Council of Japan. Such associations also facilitate and promote flexible opportunities, for example, for overseas Filipino workers (OFWs) to use vacation time to give back. This is similarly true of the Society of Afghan Engineers and Afghans4Tomorrow. Interestingly, the Afghan case demonstrates that bonding social capital within the diaspora may be counterproductive if it inhibits cross-identity group coordination, or worse, actively counters it. There is evidence of

some bridging social capital within the diaspora and the Afghan case may suggest it is more likely among professionals and younger generations.

Strong ties that bridge individuals between the home- and hostland may also be crucial to increasing the volume and effectiveness of knowledge exchange. The PRC case highlights the importance of bonding social capital between OCPs and individuals from receiving knowledge institutes (83% of surveyed OCPs cited personal contacts as the most important factor in their participation in knowledge exchange). Such bonding social capital is important for both informal exchange and for facilitating access to formal opportunities offered by government and knowledge institutes. In short, the bonding social capital is instrumental in cultivating and enhancing the impact of bridging social capital.

3. Intermediary Organizations

The cases also confirm the essential role of intermediary organizations in facilitating and maximizing diaspora contributions. In the PRC, the intermediary role is enacted by several types of actors. Government examples include the Ministry of Science and Technology, which facilitates the matching of local needs to diaspora skills through the dissemination of its *Science and Technology News* to OCP associations; and the many websites at national and local government levels. Nongovernment associations in the PRC may also play an intermediary role, such as Overseas Talents Serving the Homeland program of the Chinese Association for Science and Technology. OCP associations, like other diaspora organizations, play a critical role for knowledge exchange with the PRC, for example, promoting matching by organizing delegations and inviting PRC scholars for knowledge exchange in the hostland. In fact, the PRC Government increasingly relies on OCP associations for broader communication with the diaspora.

Filipino diaspora organizations play similar roles. In addition to the Science and Technology Advisory Council of Japan, the Brain Gain Network seeks to connect overseas Filipino professionals with homeland counterparts. While some Filipino nongovernment organizations have directly solicited assistance from OFW associations, more commonly OFW associations act as intermediaries by conducting their own needs assessments, networking with Filipinos at professional conferences, and promoting their philanthropic programs to potential beneficiaries. In Afghanistan, the Society of Afghan Engineers and Afghans4Tomorrow play intermediary roles, and, like some of their Filipino counterparts, also initiate the design of philanthropic projects that draw upon diaspora skills and knowledge.

The cases also confirm the contributions of information technology (IT). IT facilitates matching, both through the maintenance of diaspora databases, e.g., The Science and Technology Advisory Council of Japan, and information dissemination, such as the PRC's Ministry of Science and Technology newsletter, the PRC's many government webpages, and Overseas Filipino association webpages and e-news. Through IT, knowledge transfer projects can be proposed, designed, and vetted, as seen on the webpages of the Society of Afghan Engineers and Afghans4Tomorrow.

B. Opportunity Structures

As for opportunity structures, from the sending country perspective, the PRC study suggests that coordination across agencies is important for both framing incentives and ideas, and for ensuring shared goals. While the Government promotes interagency competition, within knowledge-user institutes it may be better to integrate efforts. The Government's proactive strategy directly solicits diaspora contributions and provides structure and opportunities for those already inclined to contribute through interpersonal connections.

On the other hand, the Philippine Government provides minimal support for encouraging diaspora contributions, focusing its efforts more toward return and reintegration and continuing labor export. The case underscores the importance of government commitment and champions, especially for knowledge transfer. Successful experiences were discontinued rather than nurtured and expanded in large part because of a change of leadership at the Department of Foreign Affairs.

Diaspora members from all three countries indicated that democracy and development in the homeland are key influences on their propensity to not only return but also contribute from overseas. In the case of the PRC, Biao cites evidence that the 1989 Tian'anmen Square movement impacted OCPs' incentives to return, at least in the years immediately following. In subsequent years, OCP concerns have turned more toward quality of life and professional opportunities. Opiniano and Castro emphasize the continuing weak performance of the Philippine economy and consequent poor quality of life as additional incentives to migrate, and disincentives for return, skills transfer, and investment. As for Afghanistan, few surveyed diaspora members expressed interest in repatriating due to a perceived absence of supportive legal frameworks and their enforcement.

Opportunities structures in the hostland are also highlighted in the three cases. Interestingly, some PRC OCPs noted surprise at the outdated technology and facilities

they found in the UK, compared to what was available to them in the PRC. They nevertheless emphasized the value of socio-cognitive networks and understanding as being invaluable to effectively capitalizing on advantages in the hostland. The Afghan case demonstrated evidence of brain waste in the hostland, which would prevent access of these individuals to such cognitive social and professional networks, inhibiting the maintenance and further development of their knowledge and skills base. Part of this challenge was attributed to a credentialing problem, particularly with respect to medical doctors. On the other hand, with respect to the Afghan diaspora, those from the merchant class seem to have found a ready home for their entrepreneurial skills in the US, founding many small businesses, including restaurants, food stores, and beauty salons. Such employment and success likely enhance remittance flows and in the case of beauty salons has led to some knowledge transfer and investment.

C. Motivation to Act

Just as characteristics of the diaspora and individual members impact their capacity to contribute, so do they influence their motivations. The PRC Government has perceived a shift of interests within the diaspora and has reframed its outreach accordingly: away from patriotism toward opportunities for investment, profit, and career development. In the Philippines, most assistance appears to be philanthropic in orientation, channeled primarily to migrants' hometown, school, or family, though among those surveyed, some interest in business opportunities was expressed. Among Afghan-Americans, some segments are interested in business opportunities and investment, while others, such as youth and first generation Americans, stress identity concerns that inform philanthropic tendencies.

IV. POLICY OPTIONS

As reviewed in Chapter 1, from the perspective of home country governments, there are three broad policy options for addressing skilled migration: migration management, the diaspora option (Meyer et al., 1997), and democracy and development (see Lowell et al, 2004). The diaspora option includes more specific strategies of remittance capture, diaspora networking, and diaspora integration (Gamlen, 2005). Kapur and McHale (2005) develop their own typology, including: control policies, or efforts to prevent skilled migration; compensation policies that would share the "spoils of emigration" with those remaining in the homeland; creation policies that focus on creating human

capital in home- and hostland; and connection policies, which seek to strengthen economically valuable diasporic interactions and enhance the possibility of return. The first three correspond to migration management, as discussed in Chapter 1. The second has elsewhere been referred to as a "brain drain tax" (Padarath et al., 2003). Creation strategies suggest increasing training opportunities in both developing and industrialized countries (the latter most notably in the health care professions) (Patel, 2003; Schrecker and Labonte, 2004).

While these policy approaches remain important issues regarding skilled migration, the focus on this discussion is on connection policies or, more broadly defined, the diaspora option, which seeks to engage diasporas for remittance capture, diaspora networking, and diaspora integration (see Gamlen, 2005). Finally, policies for democracy and development remain the backdrop for both brain drain prevention and the realization of migration gains.

These policies constitute a core element of the opportunity structures that may either enable and promote diaspora contributions, or prevent and discourage them. More specifically, these policies may afford diaspora members access to power resources, may be neutral in this regard, or may pose significant barriers. As discussed in Chapter 1, diaspora contributions are facilitated when diaspora members have access to five types of power resources (Uphoff, 1989; 2005): economic, social (social status based on social roles or on complying with socially valued criteria), political (ability to influence the exercise of authority), moral (perceived legitimacy of actions), and informational.[1]

Table 5.1 summarizes these policy options, the power access they may afford, and their potential outcomes. The latter include likely gains or losses to the homeland, as well as a more specific assessment of whether or not these policy options are likely to counter the losses identified by Özden and Schiff (2005). While the table incorporates examples from the three case studies, it is important to note that the study authors did not set out to specifically investigate these options and their use in the respective countries. Few examples are noted for Afghanistan. As noted above, in a relatively newly established state overwhelmed by the general reconstruction process, the Government of Afghanistan has not initiated any formal policies and programs with respect to harnessing diaspora contributions, whether for the short or long term.

Migration management includes the more conventional policy options focusing on preventing migration and making it more costly. On the other hand, it may also include an explicit labor export strategy, as in the case of the Philippines. In the first instance, if skilled migration can be prevented, then all of the losses of positive externalities identified by Özden and Schiff (2005) are countered. The impact on

migrants' access to economic power is mixed. Returned migrants will face gains from return incentives and reintegration programs; while new migrants face taxation or, especially under labor export, a gain in terms of job training and overseas employment. Social/moral resources are also in play to endorse either the choice of return or remaining in country, or, in the case of labor export, praise for serving through migration and subsequent remittances.

Remittance capture entails not only increasing the volume and productivity of remittances, but also policies that seek specifically to encourage diaspora "foreign" direct investment. The PRC's support for industrial parks to nurture and host OCP business ventures is one example. Through these policies, potential migrants may expand their access to economic power through the reduction in remittance transfer fees and through potential gains through investment opportunities. Their social power might also be enhanced among recipients of remittances, especially when this occurs at community levels and with government matching. Outcomes for moral power might be mixed depending on the design and control of productive programs. This strategy can counter losses of tax revenue and public service provision externalities (when investments are supportive of public services) as it yields the following potential outcomes for home countries and recipient households: increases in total remittances and investments, household savings, productive investments including support for entrepreneurship, and education investments. While the government may expend some resources for matching programs, it may further gain through productive investments, a strengthened financial sector, and greater access to foreign currency.

The diaspora networking strategy encompasses program activities that provide intermediary functions, in addition to programs and policies that incentivize and facilitate knowledge exchange, business/investment, and diaspora philanthropy. The PRC case exhibits both types of policies, first, through its government websites and the Ministry of Science and Technology's newsletter distributed to OCPs; and second, through visiting delegations, business venture conventions, and scientific conferences. In the Philippines, OFW associations promote competitions and offer prizes for business development plans and feasibility studies for investment in the Philippines. Both cases confirm the importance of diaspora associations and the opportunity they represent for facilitating a diaspora networking strategy.

The first set of policies enables the second, which in turn facilitates knowledge exchange/transfer, foreign direct investment, and diaspora philanthropy. Together, potential positive outcomes may counter the shortage of key skills, the absence of spillover productivity of other workers, lost tax revenues, and the loss to public debate

and policy and institution influence. On their part, diaspora members may benefit through greater potential access to economic opportunities, political contributions, and informational resources deriving from intermediary activities. Depending on the components of specific policies, they may benefit economically through enhanced quality of life and career opportunities during short-term knowledge transfer/exchange activities; socially/morally, such as through the PRC's recognition programs, and Filipino diaspora associations' awards and cash prizes for business development plans; and informationally, as they gain access, for example, to information related to investment opportunities.

As for the diaspora integration strategy, policies include extending citizen rights and general diaspora outreach, such as the organization of diaspora summits, and diplomatic visits to diaspora communities and organizations. For example, the Government of the Philippines offers dual citizenship to its diaspora members; and the PRC Government disseminates newsletters and appeals to OCP associations. More than other resources, these policies extend moral resources to the diaspora by legitimizing them as homeland contributors and influencers. This, in turn, may facilitate moral resources when they engage in direct activities in the homeland. As a result of diaspora integration policies, the homeland may benefit by a greater diaspora propensity to contribute through remittances, foreign direct investment, knowledge transfer/exchange, and diaspora philanthropy. Diaspora integration can also counter the loss to public debate and policy and institution influence that may derive from skilled migration; and it may counter other losses given the expected increase in other types of contributions.

Finally, democracy and development policies seek to address the causes of migration (e.g., lack of basic freedoms, constraints on research and development and educational institutions, and economic opportunities more generally). When the features of democracy and development are absent from the homeland, diasporas may find themselves powerless with respect to Uphoff's (1989, 2005) resources, and the likelihood of their contributions to the homeland is lessened. This is evidenced in all three cases, to varying degrees. As the cases demonstrate, the absence of different characteristics related to democracy and development does not prevent all diaspora members from contributing, nor does it prevent all types of potential contributions.

V. POLICY IMPLICATIONS

One common theme throughout these policy options is the need to focus on giving diaspora members access to information resources. As the PRC case study demonstrates, even when a government is proactive in its diaspora networking and integration strategies, if diaspora members are not made aware of these opportunities, their potential can be dramatically limited. This challenge suggests that without some integration strategy, i.e., for outreach to the diaspora, other policy options may be inefficient and possibly ineffective altogether.

Uphoff's (1989, 2005) power resources at once facilitate mobilization of potential contributions and represent important incentives to mobilize. However, these motives alone—economic, social, political, moral, and informational—do not sufficiently highlight the potential driver of identity expression discussed in Chapter 1. Arguably, identity expression may be most relevant to philanthropic contributions, as other gains (e.g., economic and political) are less explicit. In reality, the drivers for most diaspora members to mobilize and contribute to the homeland are complex and interactive. For example, identity expression may be closely tied to social and moral resources vis-à-vis the homeland *or* the hostland diaspora community, and the social and moral outcomes in these two communities may be at odds. This may be the case for the Egyptian Copt diaspora, some of whose members have been criticized for endangering the quality of life of Copts still residing in Egypt (Rowe, 2001; Ibrahim, 1998). Identity expression is also likely to play an important role for those who may seemingly be driven primarily for economic purposes. The choice of these individuals to invest in the homeland may be based on their perceived competitive advantage in terms of cultural and language understanding and contacts; and/or it may be driven by a win-win objective: help the homeland *and* make a profit. Why else, it might be considered, would the *hawaladar* introduced in Chapter 4 be interested in investing in a private university in Afghanistan?

These complex and interactive drivers along with the findings recorded in Table 5.1, suggest that countries seeking to minimize drain and maximize gain from their diasporas would do well to target their policies to highlight these resource outcomes. For example, the PRC Government has shifted its focus away from patriotism toward framing diaspora contributions as economic/business opportunities. While this may be an appropriate strategy given the evolving orientation of its diaspora, identity expression may still be an important driver for many, and the Government might consider highlighting that alongside other benefits.

Beyond these summary frameworks, the findings of the cases themselves suggest additional policy implications. For example, the Philippine case reveals that the Government has no proactive or integrated policy for remittance capture or diaspora engagement. While labor export strategy may be yielding the benefits it seeks, its only other policy focus is on facilitating return. The case suggests that with a more proactive and coordinated policy regime, the homeland could tap far greater potential diaspora contributions than currently manifested for productive remittances, other investments and business development, knowledge transfer/exchange, and philanthropy. On its part, the Afghanistan case confirms the importance of the *hawala* system for potentially maximizing remittances and implies some potential for such systems to overcome interidentity group tensions and facilitate joint investments.

The PRC case highlights the importance of outreach and dissemination beyond those who might be inclined to actively seek related information. This confirms the general findings above with respect to information resources and diaspora outreach. The case also suggests that care should be taken to ensure longer-term commitments and support and better targeting, i.e., to avoid "conference worms." For example, careful framing of opportunities and strategic design of related programs could deter those who may be less committed, or weed them out of subsequent program stages.

Homeland governments might also consider nurturing diaspora commitment among those members who may be relatively young and less experienced, such as students, but who may develop important capacity for contributions in the long run. Several governments are proactively cultivating these connections among diaspora youth. For example, the governments of Israel, Mexico, Republic of Korea, and Taipei,China all offer intensive summer programs targeting diaspora teenagers and college-age youth for learning culture and language. In Mexico, participants meet with top officials, including, former President Vicente Fox, confirming his statement that he "considers Mexican Americans to be part of the country" (Ly, 2004).

Finally, related to a democracy and development strategy, Biao finds that regulations on labor exports and mobility may need further modification to incentivize or at least not interfere with long-term investment in transnational business ventures.

This latter finding is related to much broader policy regimes and implications. In its recently released report, the Global Commission on International Migration (2005) highlights three "Cs" with respect to migration policy: coherence, capacity, and coordination. The report emphasizes that policy related to migration is uncoordinated and often contradictory, not only at the international level, but at the national level as well. The challenges and opportunities presented by migration cannot be addressed by

national policy alone; they require regional and global frameworks. While it is beyond the scope of this research to explore the possibilities for such frameworks, a consideration of policy implications would not be complete without acknowledging this reality.

Home governments have much to gain from their diasporas, as the three cases and broader analyses attest. The possibility of migration drains remains. Freedom of movement may eventually be accepted as a basic human right. Several actors in the migration arena are now promoting a rights-based approach to migration policy. For example, the International Labour Organization adopted a rights-based plan of action at its 2004 Conference (see ILO, 2004). Such developments suggest that coercive policy measures to prevent migration—skilled or otherwise—are likely to face a great deal of scrutiny in the future. Furthermore, statistics on migration necessarily reflect only what can be counted and observed; informal and illegal immigration may be quite significant, suggesting that many migration management policies are limited in their effectiveness.

In any case, the disproportionate availability of labor across regions and countries is increasingly recognized, and supports Kapur's and McHale's (2005) call for creation policies to enhance human capital in both home- and hostland. Receiving countries are not expected to forgo all migration controls, but economic pressures will likely lead to significant liberalization of immigration policies. Such policy reforms may exacerbate brain drain in sending countries. These findings further underscore the Global Commission's findings that policy coherence and coordination at national and international levels, as well as capacity building to support enforcement, are essential to maximizing gains and minimizing drains for sending countries.

This volume has sought to inform the content of home country national policy frameworks in order to promote more comprehensive and strategic approaches to maximizing migration gains. It is also consistent with calls for creation policies—inclusive of those that would address transnational credentialing, and highlights the importance of the democracy and development strategy, to which many actors beyond the home government can contribute, including diasporas themselves (see, for example, Brinkerhoff, 2005; 2006). If such policy frameworks and supportive strategies can be achieved and implemented, perhaps in the future questions of migration drain will seem less and less salient.

ENDNOTE

1 While Uphoff (1989, 2005) includes physical power (i.e., coercion or violence, depending on perceived legitimacy of applied physical force), this study presupposes the legitimacy and sovereignty of home governments, making diaspora access to physical power irrelevant to the productive contributions sought by these governments.

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Table 5.1 Policy Options, Power Access, and Potential Outcomes

Strategy and Policy	Examples of Access	Power Outcomes	Potential Homeland	Potential Drain that may be Countered
Migration Management				
• Taxation • Return/repatriation • Reintegration • Creation policies • Immigration regulation • International Agreements	• Philippines: return and reintegration policies and programs	• Economic: loss through taxation, gain through return incentives and reintegration, and job training • Social/Moral: potential gain for the skilled who remain behind (e.g., professional associations in the Philippines seek to dissuade members from migrating prior to providing a minimum period of service to the homeland) • Proaction for information dissemination among potential migrants may be required	• Reduction in skilled migration • Economic gains through taxation • Public expenditure for return and reintegration programs and creation policies and programs • Increase in targeted skills areas through creation policies	Counters migration drains: • Brain drain of skills and knowledge *at time of departure* • Skills shortage • Spillover productivity of other workers • Public service provision • Tax revenues • Public debate and policy and institution influence
Labor export • Professional training to respond to global labor market demand • Liberal labor movement policies	• Philippines: development strategy	• Economic: gain in job training and overseas employment opportunities • Social: migration may become an expectation for family and community	• Potential incentive for investment in education owing to perceived opportunities abroad ("beneficial brain drain") • Unemployment relief (e.g., more Filipinos employed overseas than domestically) • Potential for remittances (e.g., gains in the Philippines of approximately 10% of gross domestic product in 2003)	• If job training maintains requisite skills for home economy, then skills shortage
Remittance Capture (including investment leveraging)				
• Regulatory reforms • Tax-free investment opportunities • Matching • Remittance-backed bonds • Foreign currency accounts	• PRC: Industrial parks for OCP business ventures	• Economic: reduction in transfer costs, potential gains through investment opportunities • Social: potential prestige among recipients, especially with matching	• Increase in total remittances and investments • Household savings • Productive investments, including entrepreneurship	• Tax revenues • Public service provision (if related productive investments)

Strategy and Policy	Examples of Access	Power Outcomes	Potential Homeland	Potential Drain that may be Countered
Remittance Capture (including investment leveraging)				
• Investment tax breaks • Exemption from import tariffs on capital goods		• Moral: could be mixed depending on design and control of contributions • Proaction for information dissemination among potential migrants may be required	• Education investments • Public expenditure for matching • Potential gain through productive investments • Strengthened financial sector • Greater access to foreign currency	• Tax revenues • Public service provision (if related productive investments)
Diaspora Networking				
• Program activities that provide intermediary functions	• PRC: MoST publication of knowledge institutes' technical challenges, disseminated to OCP associations; government websites	• Information • May lead to potential economic opportunities • May lead to political contributions	• Knowledge exchange/transfer, possibly for public service provision, or to inform policies and institutions more generally • Potential foreign direct investment • Potential diaspora philanthropy	• Shortage of key skills • Spillover productivity of other workers • Tax revenues • Public debate and policy and institution influence
• Programs and policies that incentivize knowledge exchange, business/ investment, and diaspora philanthropy	• PRC: diaspora visiting delegations, business venture conventions, scientific conferences, industrial parks targeted to OCP-initiated ventures	• Economic: quality of life incentives (e.g., support for purchasing a car, priority phone installation, cash incentives, seed money for research activities, freedom of movement in and out of the country); opportunities for economic returns and career development • Social/moral: returned OCP awards program (e.g., 939 awards at special conferences in 1991, 1997, and 2003); delegations received by high-ranking officials • Information: gains through program activities, though may require proactive information dissemination re: existence of these programs	• Knowledge transfer as above • Potential foreign direct investment • Diaspora philanthropy	• Shortage of key skills • Spillover productivity of other workers • Tax revenues • Public service provision • Public debate and policy and institution influence

Strategy and Policy	Examples of Access	Power Outcomes	Potential Homeland	Potential Drain that may be Countered
	• Philippines: OFW associations promote competitions and offer prizes for business development plans and feasibility studies for investment	• Economic: cash prizes and potential to realize winning proposals • Social/Moral: award and recognition		
Diaspora Integration				
• Extension of citizen rights (e.g., voting) • General diaspora outreach • Organization of diaspora summits Diplomatic visits to diaspora communities and organizations	• PRC: dissemination of government newsletters and appeals to OCP associations • Philippines: offers dual nationality	• Moral: legitimates diaspora members as homeland contributors and influencers	• Greater propensity for remittance capture, foreign direct investment, knowledge exchange, and diaspora philanthropy	• Public debate and policy and institution influence • Potentially others through enhanced likelihood to contribute
Democracy and Development				
• Addressing the causes of migration (e.g., lack of basic freedoms, constraints on R&D and educational institutions, economic opportunities more generally)	• PRC: Some evidence that the 1989 Tian'anmen Square incident impacted OCPs' incentives to return, at least in the immediate following years; subsequent concerns about economic freedoms • Philippines: economic performance and consequent poor quality of life cited by migrants • Afghanistan: few among the surveyed migrants expressed interest in repatriating due to a perceived absence of supportive legal frameworks and their enforcement	• Economic, social, political, informational, and possibly moral powerlessness	• General reduction if not absence of potential diaspora contributions	None.