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MIGRATION OF HIGHLY SKILLED INDIANS: CASE STUDIES OF IT AND HEALTH PROFESSIONALS

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Binod Khadria

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MIGRATION OF HIGHLY SKILLED INDIANS: CASE STUDIES OF IT AND HEALTH PROFESSIONALS

Binod Khadria*

Abstract

This paper describes the results of two specific primary surveys, one of IT professionals in the city of Bangalore and their role in making the city a corridor for international mobility of Indian professionals, and the second survey of health professionals (doctors and nurses) in the city of New Delhi. In these surveys, highly skilled Indians were asked about their motivations for emigrating, their experiences abroad, their reasons for coming back to India and their perception of their current situation. These surveys were carried out as a supplement to a study on estimating the stocks, flows and international mobility of human resources in science and technology (HRST) in India. The results of that work are reported in STI Working Paper 2004/7 (Khadria 2004).

The findings of both case studies show that young IT professionals as well as the medical professionals want to go abroad mainly to gain professional experience, which they think will be highly valued in India when they come back. In addition, they are encouraged by higher earnings, perks and high quality of life in the host country. However, unlike the IT professionals as well as most doctors, the majority of prospective nurses want to settle down abroad permanently, because they hardly perceive their career prospects to be bright in India. Amongst the doctors, only some are prepared to settle down abroad permanently if they get a chance. The fact that none of the respondent professionals in Bangalore gave priority to the idea of settling down abroad highlights a unique aspect behind Bangalore becoming a “corridor” for migration (outward and inward) of Indian HRST, which is not the case with health professionals from New Delhi. The IT professionals in Bangalore feel that they have growing opportunities for their career growth in India in general and Bangalore in particular.

This study was done by an Indian consultant for the OECD, as part of the programme of work of the OECD Centre for Co-operation with Non-members (CCNM) and the Economic Analysis and Statistics Division (EAS) of the Directorate for Science, Technology and Industry (DSTI). The OECD wishes to thank the National Science Foundation (United States) for its generous support which has facilitated this work and the work on HRST in general.

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The author would like to acknowledge the research assistance provided by his graduate students Narender Thakur, Perveen Kumar, Geeta Verma, Basant Potnuru, Sridhar Bhagavatula, Durgesh Rai and Kripabar Baruah in carrying out two painstaking primary field surveys in the cities of Bangalore and New Delhi that form the basis of this study. The study could not have been carried out without the co-operation of the many IT professionals and IT agencies in Bangalore, and the doctors, nurses and hospital administrators in New Delhi who were approached for interviews. The incisive comments and detailed queries made by Martin Schaaper of the OECD in course of the preparation of this Working Paper helped improve the focus and presentation of the study considerably. The responsibility for all the remaining shortcomings, however, lies with the author.

MIGRATION DES INDIENS HAUTEMENT QUALIFIÉS : ÉTUDES DE CAS CONCERNANT DES PROFESSIONNELS DES TECHNOLOGIES DE L'INFORMATION ET DE LA SANTÉ

Binod Khadria*

Résumé

Ce document présente les résultats de deux enquêtes de terrain, dont l'une est consacrée aux professionnels des technologies de l'information de la ville de Bangalore et au rôle qu'ils jouent en faisant de la ville une porte d'accès à la mobilité internationale pour les professionnels indiens, et l'autre aux professionnels de santé (médecins et infirmières) de la ville de New Delhi. Les enquêteurs ont interrogé des Indiens hautement qualifiés sur les raisons qui les avaient amenés à émigrer, leur expérience à l'étranger, les raisons de leur retour en Inde et la perception qu'ils avaient de leur situation actuelle. Ces enquêtes venaient compléter une étude sur l'estimation des effectifs, des flux et de la mobilité internationale des ressources humaines consacrées à la science et à la technologie (RHST) en Inde. Les résultats de ces travaux figurent dans le document de travail STI 2004/7 (Khadria, 2004).

Les deux études de cas montrent que les jeunes professionnels des technologies de l'information et de la santé souhaitent partir à l'étranger pour y acquérir une expérience professionnelle dont ils pensent qu'elle sera particulièrement appréciée à leur retour en Inde. En outre, ils sont encouragés par la perspective de salaires plus élevés, d'avantages divers et d'une bonne qualité de la vie dans le pays d'accueil. À l'inverse des spécialistes des technologies de l'information et de la plupart des médecins, la majorité des infirmières souhaitent s'installer définitivement à l'étranger, car leurs perspectives de carrière en Inde ne leur paraissent pas brillantes. Parmi les médecins, seuls quelques-uns sont prêts à s'installer à l'étranger s'ils en ont la possibilité. L'idée de s'installer à l'étranger n'était une priorité pour aucun des professionnels interrogés à Bangalore ; il s'agit d'une caractéristique propre à Bangalore, qui devient une porte d'accès à la mobilité (en direction et en provenance de l'étranger) des RHST indiennes, ce qui n'est pas le cas de New Delhi pour les professionnels de la santé. Les spécialistes de l'informatique de Bangalore pensent avoir de plus en plus de possibilités de carrière en Inde en général et à Bangalore en particulier.

Cette étude a été réalisée par un consultant indien auprès de l'OCDE, dans le cadre du programme de travail du Centre pour la coopération avec les non-membres (CCNM) et de la Division des analyses économiques et des statistiques (EAS) de la Direction de la science, de la technologie et de l'industrie (DSTI). L'OCDE remercie la *National Science Foundation* (États-Unis) de tout le soutien qu'elle a apporté à ce projet, ainsi qu'aux travaux sur les RHST en général.

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L'auteur tient à remercier ses étudiants diplômés Narender Thakur, Perveen Kumar, Geeta Verma, Basant Potnuru, Sridhar Bhagavatula, Durgesh Rai et Kripabar Baruah, pour l'aide qu'ils lui ont apportée dans la réalisation minutieuse des deux études de terrain qui ont été conduites à Bangalore et New Delhi et qui constituent le fondement de cette étude. Celle-ci n'aurait pu voir le jour sans la coopération des nombreux professionnels des technologies de l'information et des agences d'informatique de Bangalore, ainsi que des médecins, des infirmières et du personnel hospitalier administratif de New Delhi avec lesquels l'auteur a pris contact pour des entretiens. Les commentaires incisifs formulés par Martin Schaaper, de l'OCDE, durant la rédaction de ce document de travail, ont beaucoup contribué à en améliorer l'orientation et la présentation. C'est à l'auteur, cependant, qu'incombe la responsabilité de toutes les imperfections qui pourraient subsister.

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1. Introduction

The relation between brain drain and the exodus of health professionals, such as doctors and nurses, dates back to the early 1960s when large scale immigration of doctors from the United Kingdom to the United States came into focus. The vacuum in the supply of health personnel created in the UK health sector was partly filled by immigration of Asian doctors in general and Indians in particular. Variations in the supply and demand of human resources in various other professions over the last 40 years across the developed and the developing countries have led to waves of migration and return migration with subsequent changes in the supply of human resources in science and technology (HRST), and changes in the policies regarding their mobility across countries. Indeed, the skilled health workers, particularly the doctors and nurses, have continued to be on the centre-stage of this international migration of HRST in one continent or the other, although changes in technology and lowering of barriers between countries have brought about large scale movement of professionals in new areas like information technology as well. India has received the utmost attention in the last years so far as the out-migration of IT professionals is concerned.

STI Working Paper 2004/7 (Khadria 2004) reports on the results of a comprehensive study to estimate data on stocks and flows of human resources in science and technology (HRST) in India, and their migration overseas and/or return to India. Part of this study were two case studies that focus on two particular kinds of migration of highly skilled people, namely the return migration of information technology (IT) professionals to India, and the changing response of Indian doctors and nurses to the world demand for health workers. These two case studies form the subject of this Working Paper, which would best be read in conjunction with STI Working Paper 2004/7.

The case studies were carried out by means of two specific primary surveys – one of IT professionals in the city of Bangalore and their role in making the city a “corridor” for international mobility of Indian IT professionals (section 2), and the other of health professionals (doctors and nurses) in the city of New Delhi (section 3).

2. A case study of the role of return migrants in the development of Bangalore as a corridor for international mobility of IT professionals

2.1 *The case study of Bangalore: rationale for selection and methodology*

Focusing on return migration to India, this section presents the results of a field study that was conducted in the city of Bangalore in the month of November 2002. The field survey in Bangalore was intended to tap the experiences of return migrants in the host countries, particularly in terms of the gains derived as well as the difficulties faced by them during their stay abroad vis-à-vis their motivational expectations, and plans after return to India. The focal point of this entire exercise, however, was on identifying the role and importance of return migrants in the development of the city of Bangalore as a “corridor” for movement of IT professionals internationally.

The selection of Bangalore for the study of return migrants is primarily based on the popular perception that the city is in the process of developing as ‘a gateway to new global frontiers’ and harbinger of a new global labour force that works in cyberspace (Stremlau, 1996, pp. 154-58). Further, a survey conducted by the National Association of Software and Service Companies (NASSCOM, 1995) covering the headquarters of the top 200 software companies in India revealed that “68 companies were located in Bombay, 56 in Bangalore and 30 in New Delhi. The remaining one-quarter of the companies were distributed among Hyderabad, Madras, Calcutta and Pune”. Besides, Bangalore has another major distinction of being located in a state, namely Karnataka, which has a long history of support for science

and higher learning, and a flourishing tradition of engineering and technology through the establishment of several apex institutions, *e.g.* Bharat Electronics Limited (BEL, 1956), Hindustan Aeronautics Limited (HAL, 1960) and the Indian Institute of Science (IISc). Encouraged by this popular support for engineering and technology, and enriched by the development of professionalism, Bangalore has emerged as the key location for software development in India. Considering this, the so-called 'Silicon Valley of India' became an obvious choice for conducting this field survey.

For conducting the field survey, a very specific kind of population, comprising *all* skilled return migrants, had to be identified. Since no statistics are available about return migrants in India, this task could not have been accomplished even in Bangalore. To make the survey feasible though, a two-step process was adopted. As a first step, using informal contacts, some professionals were approached by e-mail and telephone. At the second stage, the willing respondents were interviewed. While approaching or contacting the respondent return migrants in Bangalore, care was taken to cover diverse types of software companies so as to make the sample as representative as possible.

Primary information was sought on a comprehensive questionnaire, designed by the author and his team (see Annex 1). The questionnaire contained 48 major items, each with some sub-items, distributed under five different headings, namely:

- Personal information;
- Information on out-migration;
- Information on return migration;
- Impact of return migration;
- Relationship with and involvement in diaspora associations.

The questionnaire was used to interview 45 respondents, mostly belonging to the field of information technology. Besides having written accounts of the responses noted down by the interviewers, several interviews were also tape-recorded for in-depth analysis later on. Nevertheless, as is clear from the sample design and the sample size, no statistical significance should be sought in this survey, the evidence presented here is purely anecdotic.

2.2 Results from the survey

The sample for the field survey consisted of 39 males and 6 females. The composition of the sample is skewed in favour of married professionals, as 35 out of 45 respondents are married, constituting just over three-fourths of the sample, and the remaining 10 are unmarried. Out of the 45 respondents, 21 were born in Karnataka, of which Bangalore is the capital, and 21 in other states. One respondent was born abroad, while two respondents did not report the place of birth in the written questionnaire, possibly due to oversight.

The age profile of the sample shows that almost two-thirds of the respondents (*i.e.* 30 out of 45) are between 25 and 35 years old. As we move further on the age ladder, the number of respondents goes down substantially, and the lower (20-25 years) and upper (45-50) extreme class intervals have only one respondent each. The conclusion is that returning IT professionals to Bangalore are mostly young, with a mean age of 33 years.

The breakdown by educational qualification reveals that out of 45 respondents, 20 are graduates, followed by an equal number of postgraduates. Four respondents have research degrees at the PhD level.

One of the returned migrants reported that he had gone abroad after completing a three-year diploma course from the National Institute of Information Technology (NIIT) – a well-reputed institution at the diploma granting level in the field of computer education.

All the respondents have graduated from within India and almost half of them received their degrees from Karnataka state itself, except the sole foreign-born candidate who was educated abroad. Thirteen respondents have done their post graduation in India and five have done this abroad. But unlike graduation and post-graduation, out of four research degree holders only one respondent has done his PhD in India and the remaining three abroad. The notable point here is that all the respondents who did their post-graduation or PhD degrees abroad had also received foreign fellowships.

The respondents' answers substantiated the fact that students in professional courses like engineering and IT are lured into foreign institutions more by the assurance of financial assistance than either the quality of education or its 'brand' name. In contrast to the common misnomer in India that most of the brain drain from India is taking place from the apex institutions of national/international reputations such as the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Indian Institutes of Science (IISc) or Regional Engineering Colleges (RECs), our sample shows that out of 45 respondents only two are from the category of IITs/IIMs/IISc and the majority of them (24) have completed their graduation from other state- and central-government universities and colleges, both private and public. But this is not true for post-graduation and research, wherein out of thirteen respondents, six have done their post-graduation at IITs/IIMs/IISc and one at REC. The lone research-degree holder respondent has been awarded his doctorate from one of the apex institutions of management in India, the IIM. The scenario emerging may be partly explained in terms of the fact that in a profession like IT, higher education (post-graduation and research) is a very costly affair, particularly in terms of the opportunity cost to the students, and most students are unwilling to pursue further higher studies unless compensatory financial packages are offered.

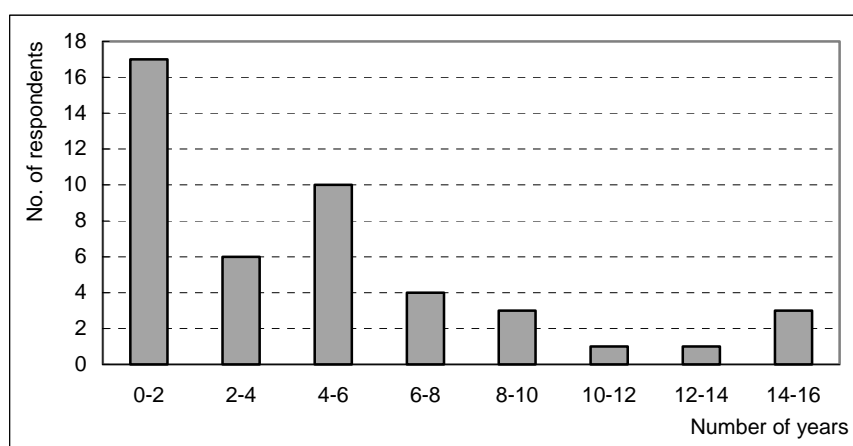
Table 1 shows that the United States is the most favoured destination for Indian highly skilled IT workers, as out of 56 total destinations for the 45 emigrants from India, 36 were to the United States. Several pull factors account for this choice, including better infrastructure in the professional establishments and favourable immigration policies for granting visas to IT professionals. The United Kingdom is found to be the second most sought after destination, particularly because of the traditional bond between the two countries and a close resemblance in their education systems and because of the conducive immigration policy of the British government in admitting S&T personnel. Due to the anticipated shortfall of skilled professionals in general and of IT professionals in particular in the twenty-first century, not only the traditional receiving countries like the United Kingdom, but also Germany, France, Japan, Belgium, Denmark, Ireland, Korea and Singapore have started opening their markets to Indian professionals (Khadria 2001). Despite having been a traditional destination country for Indian migrants of all types (*i.e.* skilled, semi-skilled and unskilled), Canada is not represented adequately in the sample from Bangalore, as there is only one returned migrant who could be approached. Most of the returnees in the Bangalore sample have been to the United States and to European countries and only a very small proportion has been to Asian and African countries.

Table 1. Countries of sojourn of return migrants

	No. of respondents
United States	36
United Kingdom	7
Germany	4
France	3
Belgium, Canada, Ghana, Hong Kong, Malaysia, Switzerland	1
Total	56

The distribution of return migrants in terms of years of stay in the host countries reveals that more than one third (38%) of the return migrants had gone overseas for a very short period, *i.e.* less than two years (see Figure 1). This temporary, short duration migration may be explained by the fact that the majority of the returned migrants had gone abroad on an assignment or project entrusted to them by their employers in Bangalore. Three out of every four respondents had stayed in the host countries for less than six years. Only three respondents had stayed overseas for 14-16 years, reflecting a low representation of long-term migrants in the sample. The average span of residence abroad for the entire sample comes out to be 4.6 years.

Figure 1. Length of stay abroad of return migrants (in years)



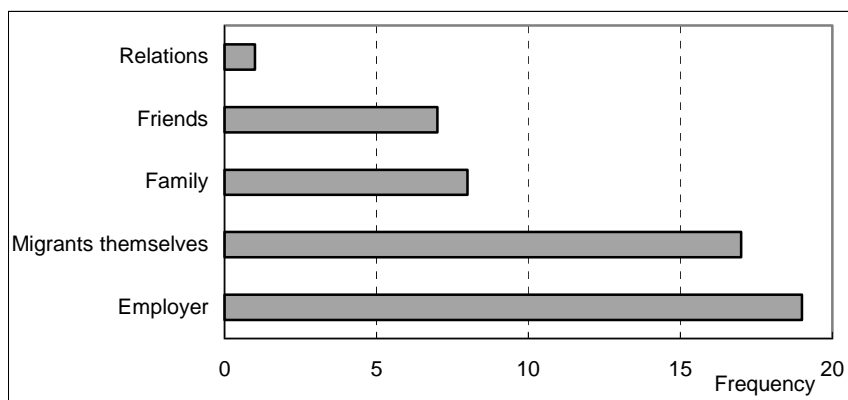
Concerning the return migration, almost half of the respondents have started working in Bangalore only a few years back (see Table 2). Three out of every four in the total sample have worked in Bangalore for less than 6 years, while only 12 respondents have stayed and worked in Bangalore for more than 6 years.

Table 2. Employment length of return migrants in Bangalore (in years)

	0-2	2-4	4-6	6-8	8-10	10-12
No. of respondents	19	6	8	6	4	2

It is clear from Figure 2 that employers have been the most important motivators for out-migration of professionals from Bangalore. They have allowed their skilled employees to avail the offers/opportunities of lucrative professional assignments (called “projects”) abroad, particularly in the United States. Another important source of emigration for professionals from India is the willingness of the respondents themselves, for they are found to be highly desirous of getting on to the greener pastures. The role of closely related people, including family, friends and relatives, does not seem to be very significant in precipitating the emigration of highly skilled workers.

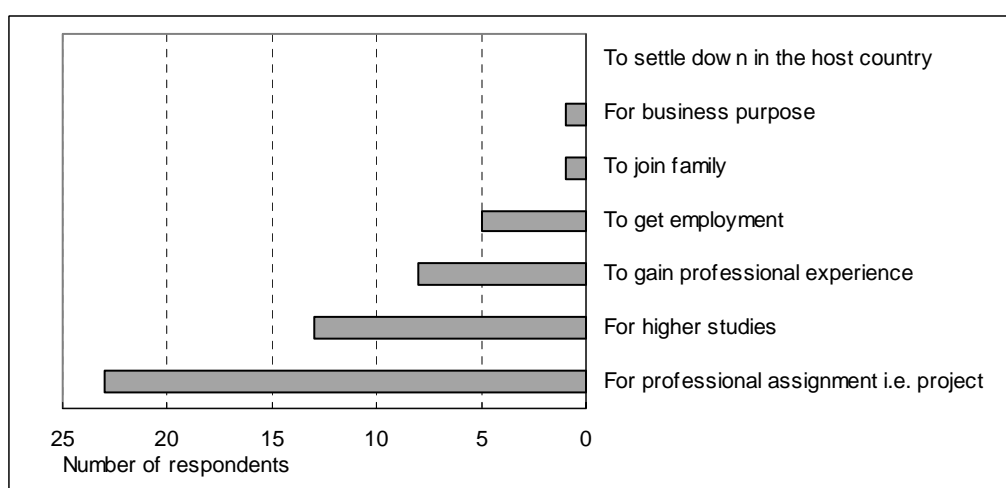
Figure 2. Sources of motivation for emigration



Note: The frequencies add up to more than the number of respondents, because some respondents chose more than one variable of motivation.

Figure 3 provides the distribution of motivational factors behind out-migration, though from a different perspective. This figure shows that almost half of the respondents (23 out of 45) went abroad mainly to grab the opportunity to work on project assignments, which were available to them through their employers in India. Eight respondents stated that one of their latent purposes behind going abroad was to gain professional experience, because, to them, work-experience abroad was of comparatively high value in India. Thirteen returnees stated that their purpose for going abroad was to get additional higher education in the host country, although only nine of them were successful in doing so. A very striking point that emerges from this figure is that not a single respondent had gone abroad to settle down permanently. Assuming that this follows from a true expression of returnees' intent in going abroad, it may lead the reader to conclude that the emigration of IT professionals from India was more of a temporary phenomenon aimed at fulfilling the short term gains and were preoccupied to come back. Of course, this result is biased by the fact that many of those willing to settle abroad may actually have done so, and therefore fall outside the scope of the target population.

Figure 3. Purposes of going abroad



For identifying the push and pull factors behind the out-migration of returned professionals, the respondents were asked to select and explain the role of various factors, some of which have been included in the questionnaire. The responses have been recorded on a five-point scale, provided to the respondents,

to weight the relative importance of each factor. Weights were given to each factor according to the following pattern: weight 1 for the factor(s) that played an extremely important role in the out-migration of the respondent; weight 2 for the factor(s) playing a moderately important role; and weight 3 for factor(s) considered important but not having enough intensity/capacity to make substantial alteration in the decision to go abroad. Weights 4 and 5 have been given to the respondents in order not to eliminate the unimportant factors from the list.

Figure 4 provides a list of nine factors along with their preference ranking in terms of weights given to each factor. The first three weights, as discussed above, are indicative of the “selection” response while the last two (weights 4 and 5) indicate the “rejection” response. “Votes” for answer ‘1’, ‘2’ or ‘3’ were added up, without weighting them first.¹

The figure shows that the largest number of respondents (38) expressed that the most important factor in their decision-making about going abroad was ‘to gain experience that would later be highly valued in India’. Most of the respondents stated that since developed countries had an edge in technological advancement and were professionally more accomplished, they decided to cross the border and expose themselves to qualitatively better experiences there. Thirty-four respondents stated to have been lured by ‘better income prospects in the host country’. The third important pull factor for out-migration has been ‘better quality of life in the host country’, as 32 of the respondents found it quite important in their decision for emigration. ‘Better employment opportunities in the host country’ has been stated as the fourth important factor in the decision making for out migration. The other two pull factors, namely ‘higher education’ and ‘expectations of better business opportunities in the host country’ attracted 18 votes from the respondents and played a less significant role.

Figure 4. Motivating factors for out-migration of return migrants

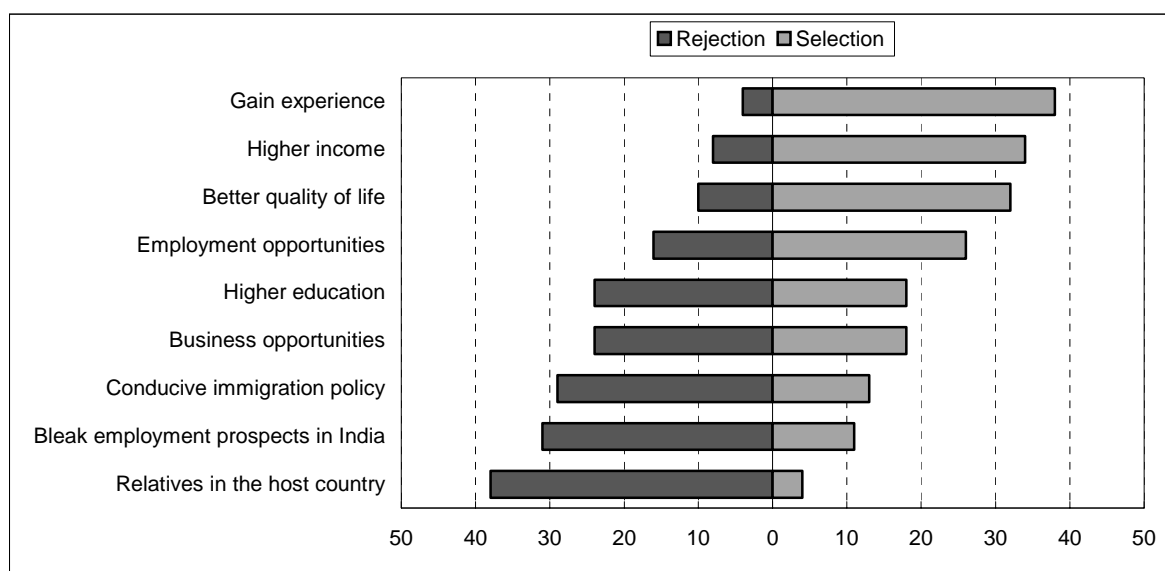


Table 3 presents the earnings of the respondent returnees when they were abroad. One of the major drawbacks of this earning profile is that it is based on the lump sum estimates of incomes as verbally revealed by the respondents themselves. Besides, this earning profile reflects the past emoluments, which the respondents were getting when they were working abroad. Therefore, to get a standard estimate of earnings abroad in the current period, these amounts need to be adjusted by various rates of inflation.

1. Weighting the answers was tried on some questions, but it did not significantly alter the results.

Despite these drawbacks, the earning profile shown in the table provides valuable information, which may be useful in analysing the sample from a comparative perspective. The table shows that one-third of the respondents had a total annual income between USD 40 000 and USD 60 000, while eleven respondents were getting below USD 40 000 per annum. Eight respondents reported their annual earnings in the host country between USD 60 000 and USD 80 000, and seven respondents were getting USD 80 000 to USD 100 000 per annum. Only one respondent reported that his total income during his stay abroad was more than USD 100 000 per annum. Three respondents were unwilling to report their income to the investigators, but it was felt during their interviews that their income in the host country might have been very high. The average annual earning of 42 respondents comes out to be USD 55 000.

Table 3. Earning profile overseas (in thousands of USD)

	0-20	20-40	40-60	60-80	80-100	100-120	No response
No. of respondents	4	7	15	8	7	1	3

Figure 5 depicts the role of catalytic agents that played a vital role in bringing the Indian expatriate professionals back home. It is apparent from the figure that the respondents themselves have been the most important motivating agents of return migration, as 29 of them emphasised that they have come back at their own initiative. The specific causes of their decision to come back will be discussed later. Family has been found as the second major motivational factor behind return migration of professionals. Nine respondents highlighted that it was their employers who called them back. The roles of another two agents, 'friends' and 'relatives', were only secondary and not decisive.

Figure 5. Return migration of professionals: the catalytic agents

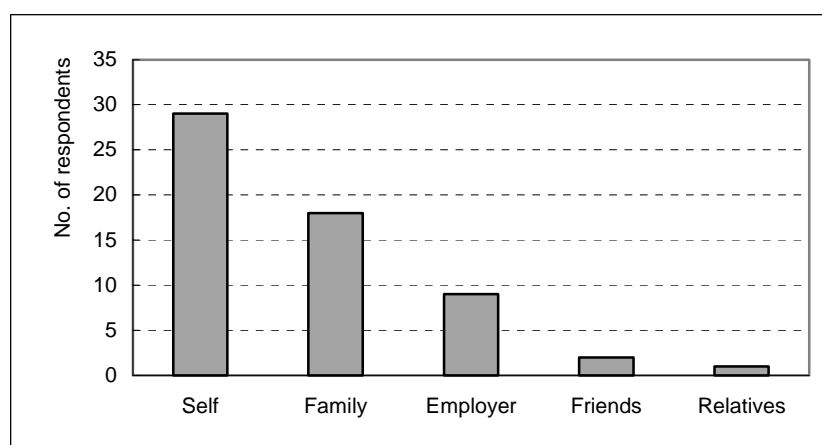


Figure 6 contains a list of twelve factors that motivated the respondents to come back to India. As before, weights 1 to 3 indicate that a factor was important, while weights 4 and 5 suggest that a factor was not an important motivation to return. The figure shows that 'family' has been the most important motivating factor in coming back, as 27 respondents have given it first rank. One of the respondents, for example, explained that his parents were getting older and nobody was there to look after them in India, and so he did not have any other option but to come back. Just over half of the respondents identified the 'recognition of India as a major emerging IT power in the world' and the consequent increase in 'employment opportunities' in India, particularly in the IT sector, as the major motivators to come back. Eighteen respondents had decided to come back due to 'higher real earnings' in India. They were of the opinion that despite getting higher nominal wages abroad their real earnings were not so high, particularly because of the high cost of living abroad as compared to India. 'Expectations of better business and entrepreneurial opportunities in India' attracted one-third of the respondent returnees to India.

Besides these pull factors, several push factors were also identified by the respondents as causes of their return migration. Nine responses named ‘the fear of ethnic/racial problems in the host country’ as a major push to leave the host country and return home. An equal number of respondents experienced ‘negative attitude of the employer towards immigrant employees’ though some of them did not directly confront such problems during their stay abroad. For most of them, it was the fear psychosis of discrimination that pushed them back towards their home country. Six respondents returned due to the ‘recession in the host country’, and the consequent ‘increase in unemployment in the host country’ also discouraged six respondents from staying abroad.

Figure 6. Motivating factors in return migration to India

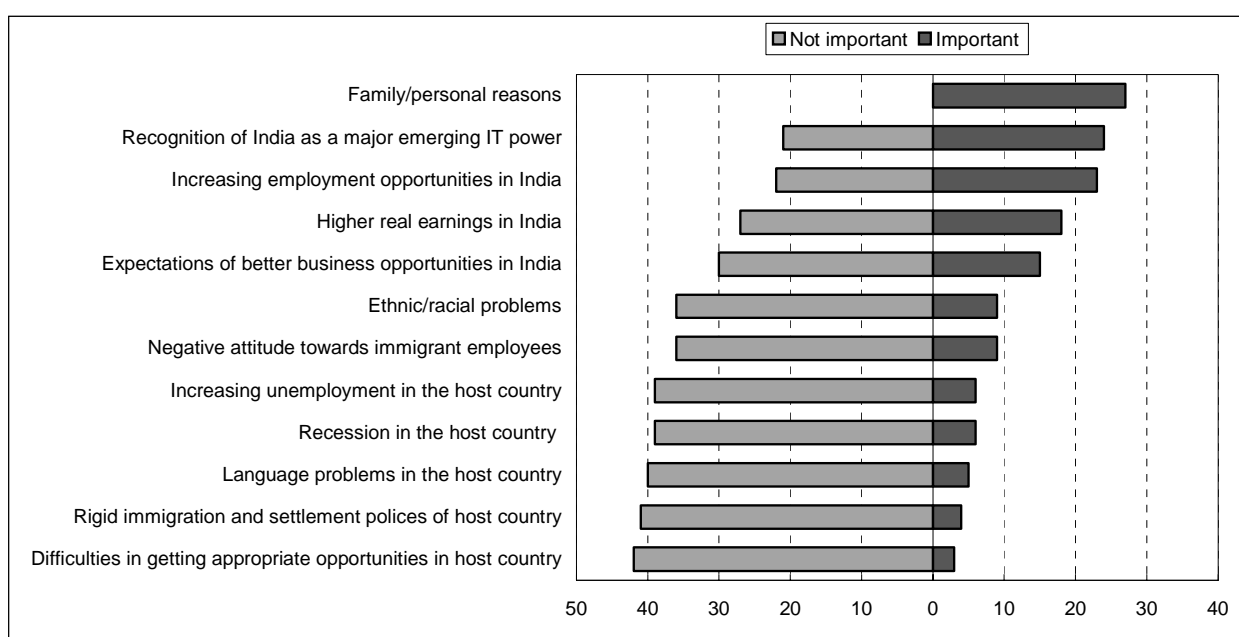


Figure 7 is an extension of Figure 6, focusing on identifying the enticing factors in return of migrants back to India, specifically to the city of Bangalore. It contains a list of 12 factors which have played a crucial role in alluring return migrants towards Bangalore and make the city a ‘corridor’ for migration of IT and other professionals, both inward and outward. During the field survey, the respondents were asked to identify, select and explain the significance of ten clearly stated options covering a wide range of important factors including political, economic, social, educational and health factors in their decision to select Bangalore. Besides the specified options, two other factors, namely ‘family in Bangalore’, and ‘climate of Bangalore’ were also identified during the interviews as important factors that attracted them to the ‘Silicon Valley of India’.

It is evident from the figure that ‘abundant employment opportunities’ in Bangalore, particularly in the IT sector, have allured a large proportion of the respondents to this ‘cyber city’ of India, for as many as 36 respondents have accepted the significance of this factor in their choice of Bangalore as the ‘corridor’ for their return from abroad. An equal number of respondents stated that availability of ‘better infrastructure in comparison to other major cities of India’ like New Delhi, Bombay, Hyderabad, Pune, etc. have lured them to Bangalore. ‘Availability of experts in the concerned sector’, *i.e.* the IT sector, has been attributed importance by 31 respondents, as an allurements in Bangalore. Thirty-one respondents have asserted that comparatively ‘better remuneration packages’ are available in Bangalore, particularly in the IT sector, which is a very important incentive to work. Twenty-nine respondents have identified the role of ‘health facilities’ as an important determinant for selecting Bangalore as a destination for their return from

abroad. Affinity to the local society, language and culture have also played an extremely important role in attracting return migrants to Bangalore, as 27 respondents have agreed that they had decided to stay in Bangalore because of its 'peace-loving' and 'multilingual' society, and of course a 'truly cosmopolitan culture'. Twenty-seven respondents have recognised the 'emerging state government support' for newly emerging professions, like IT, as one of the important reasons to come back to Bangalore. 'Increasing scope for self-employment' in Bangalore is also cited by 25 of the respondents as an important motivation for return to Bangalore and start their own establishments.

However, only a few of the respondents have actually started their self-employment programme. Twenty-six respondents have mentioned the role of a well-built communication network and easy access to these facilities as an important factor. A little over half of the respondents have expressed that availability of and access to a large number of qualitatively 'better educational institutions for their children', and Bangalore as a 'safe abode' for them and their coming generations also encouraged them to pursue their professional career in Bangalore. Eighteen respondents have decided to select Bangalore as their working residence because of family reasons, as 21 respondents were born and brought up in Karnataka State. Bangalore, the capital city of the state, was therefore a natural choice for these returning migrants. One-third of the respondents have cited the 'climate of Bangalore' as an important deciding factor for the selection of Bangalore in returning back from abroad.

Figure 7. Bangalore as a "corridor" for return migration: the enticing factors

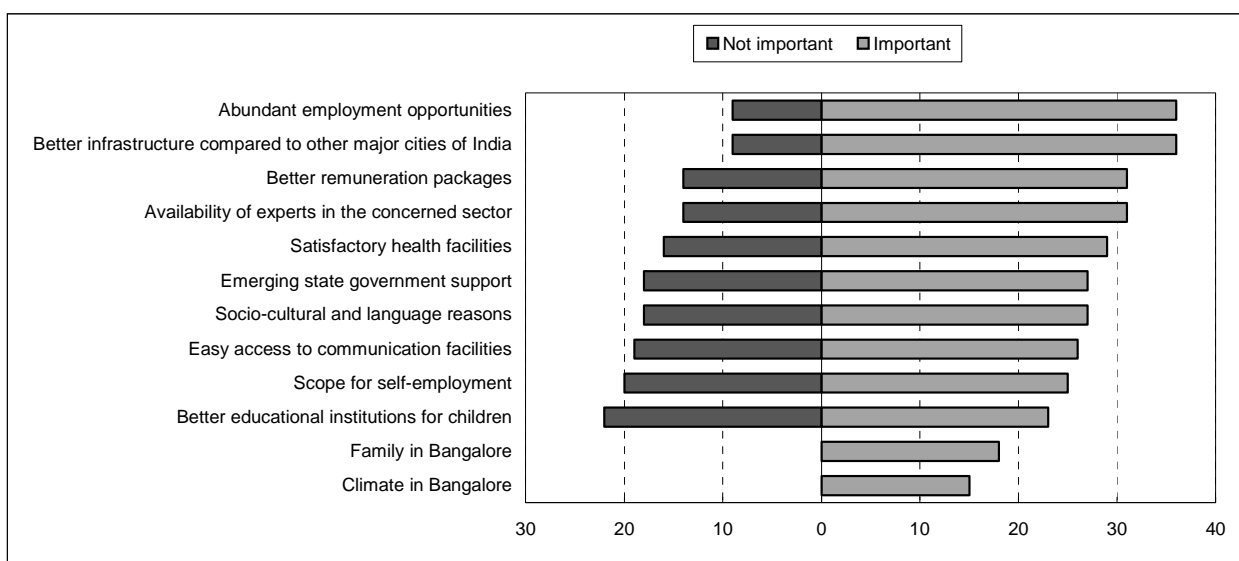


Table 4 provides the annual earnings profile of the respondent return migrants in Bangalore. It is evident from the figures in each cell that as we move up the earnings ladder, the frequency of respondents goes down substantially. Out of 45 respondents, only four have reported to be earning more than USD 21 000 per year. This may not seem much, but taking purchasing power into account raises this number to 108 000 PPP dollars. Five respondents have told that their annual earnings did not exceed USD 4 000, or 22 000 when expressed in dollar PPPs. Twelve respondents reported their annual earnings between USD 4 000 and USD 8 000 per annum (22 000 - 43 000 in PPPs), followed by an equal number of respondents whose annual earnings were reported between USD 8 000 and USD 12 000 per annum (43 000 - 65 000 PPP). Eight respondents were found to earn between USD 12 000 and USD 21 000 per year (65 000 - 108 000 PPP). The average annual income of 41 respondents came out to be USD 11 000 per annum, 59 000 in PPPs. The remaining four respondents in the sample refused to provide the estimates of their annual earnings.

When comparing return migrants' *current income* in Bangalore with their *earlier income* abroad, nineteen respondents stated that their current annual income was 'much lower than before', followed by ten other respondents who said that it was 'lower than before'. Eight respondents did not perceive any significant difference between the two earning profiles. Contrary to this, seven respondents expressed that in Bangalore they were in a comparatively better financial position. One respondent did not give a reply to this question.

Table 4. Earnings profile of return migrants in Bangalore

Thousand rupees per annum	Thousand USD per annum	Thousand PPP per annum	Number of respondents
0-200	0-4	0-22	5
200-400	4-8	22-43	12
400-600	8-12	43-65	12
600-800	12-16	65-87	3
800-1000	16-21	87-108	5
1000-2000	21-25	108-130	1
1200-1400	25-29	130-151	1
1400-1600	29-33	151-173	1
1600-1800	33-37	173-195	0
1800-2000	37-41	195-216	1

It was noted that a large number of respondents, while abroad, had not sent any significant amounts of money back home to their families residing in India. Out of the 45 returnees, 24 said that they had sent remittances to their families while they were working abroad, but not 'on a regular basis'. Most had sent intermittently and a few of them had sent money only once or twice during their entire period of stay abroad. A large chunk of these remittances was spent by their family members on meeting the day-to-day expenses at home, except a few 'who spent the money on buildings, buying a house, purchase of land, etc'. The amount of remittances was also not quite large, mainly because a large number of return migrants had gone abroad for a short span of time and could not accumulate large amounts of money.

Table 5 provides an estimate of the foreign-earned money invested by returnees in Bangalore. The table shows that twelve returnees (one-fourth of the respondents) each invested below USD 10 000², and another ten invested between USD 10 000 and USD 20 000 each. The amounts of investment in Bangalore by another eight respondents were between USD 20 000 and USD 30 000 each. Only three respondents invested more than USD 30 000 each.

Table 5. Investment of foreign-earned money in Bangalore by returnees

In 1000s of rupees	In 1000 USD	In 1000 PPP	Number of respondents
0 – 500	0 – 10	0 – 54	12
500 – 1 000	10 – 20	54 – 108	10
1 000 – 1 500	20 – 30	108 – 162	8
1 500 and above	30 and above	162 and above	3
No response			12

2. The conversion into USD (with exchange rates) probably gives a good estimate of the value of the savings, because this money was earned abroad. The conversion into PPP, on the other hand, gives a better idea what the investment is worth in India.

Further analysis of investment/expenditure by return migrants in Bangalore reveals that 'housing' got the highest priority, as 25 respondents reported to have spent a major portion of their foreign earnings/savings in purchasing/construction of shelter. 'Durable consumption goods' including electronic appliances and furniture got the next major part of their investment/expenditure, as 20 respondents mentioned it. Fourteen respondents revealed that a major share of their earnings abroad was invested in the education of their own children or those of their direct family. For example, one of the respondents has been bearing all the expenses of his younger brother currently studying in the Indian Institute of Technology in Mumbai (IITM). Five respondents have invested a huge proportion of their foreign earnings in business and three others in the stock market. It is to be noted here that almost all the respondents have invested/spent their money in more than one category of items.

While enquiring about the awareness of respondents regarding any incentive programme(s) or policies of central or state government(s) aimed at getting back to the country the Indian expatriate professionals abroad, *i.e.* NRIs (non-resident Indians) and PIOs (persons of Indian origin), only 11 respondents have responded positively. The remaining 34 respondents denied having any information, whether before returning to India or afterwards, about any state-sponsored incentive programme or policy to promote the return migration of IT professionals to India in general and to Bangalore in particular. Even of the 11 respondents, who were aware of the incentive programmes and policies, very few could actually get any help from these in and after their return to Bangalore. The incentives, as told by the respondents, were offered mostly in terms of tax rebates, housing facilities and financial assistance in establishing business in Bangalore. It leads us to conclude that official efforts to get the nation's talent back (if it is assumed to turn brain drain into brain gain) are not sufficient.

On the state of job-satisfaction in their present employment/business in Bangalore, 41 return migrants responded positively, and almost all of them displayed the same impression. Greater professional autonomy, world class institutional infrastructure, conducive working environment, a truly cosmopolitan culture of the city, and a large number of opportunities for career advancement have been enumerated as some of the most important factors in keeping their morale high in the present professional set-up in Bangalore. The remaining four respondents, who reacted negatively on the job-satisfaction in their present employment, cited bureaucratic hassles in getting the work done as the most prevalent problem in Bangalore. Besides, quite a few have expressed that 'dignity of labour' is not upheld in India, unlike in most developed countries. There is a lack of healthy professional ethics and practice amongst people.

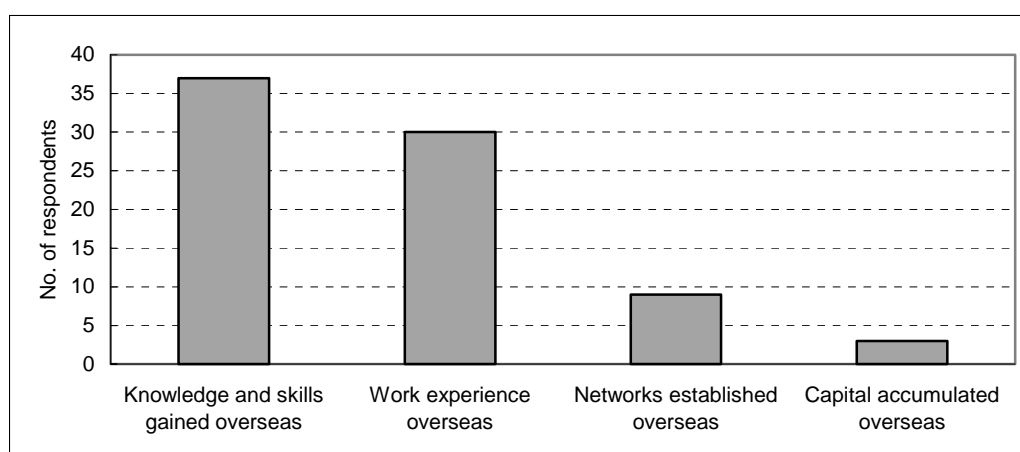
When asked about the difficulties and problems in adjusting to the present working conditions in Bangalore, as many as 32 respondents explicitly expressed that they did not face any major hurdle in adjusting to their present working organisational climate. The background of respondents and their earlier exposure to India and its culture helped them a lot in adjusting back in Bangalore after their return from abroad. This finding, however, may seem a bit out of place to some who believe that after having accustomed to a more advanced socio-cultural set-up, it becomes a little difficult to re-adjust in a comparatively closed and traditional society. As if to satisfy such apprehensions, 13 respondents mentioned some problems in their re-adjustment in Bangalore. The major adjustment problems faced by them were caused due to the lethargic administrative procedures, inefficient handling of the day-to-day professional concerns, relatively unhealthy business ethics, poor research facilities (especially in academics) and poor work culture.

Twenty-five respondents revealed that they had tried to motivate their friends and colleagues and some relatives as well to return to India. However, not all of them were successful in this endeavour. Generation of a fairly large number of good employment opportunities, and many more lucrative opportunities for self-employment, especially in India's IT sector, a sense of feeling at home consequent to a socially comfortable and easy life – were the inducements that were cited by these respondents to their friends and colleagues abroad.

For analysing the impact of return migration in Bangalore, the respondents were asked to react on the role of returnees in certain areas of development, *e.g.* in the economic domain, particularly in terms of remittances and prospective economic avenues in Bangalore, knowledge and skills gained overseas and their implications back home, development of physical infrastructure in India including Bangalore, development of education and other social services, etc.

When reacting to the question, ‘which of the following do you consider the most important to your current work/business in Bangalore’, thirty-seven respondents accepted that the ‘knowledge and skills gained overseas through higher education and on-the-job training’ is highly useful for their current jobs in Bangalore (see Figure 8). Two-thirds of the respondents expressed that the opportunity to work abroad helped equip themselves with the recent and most appropriate technologies. Only nine respondents recognised the ‘role of professional networks established overseas’ in their current jobs in Bangalore. They asserted that these networks helped them in providing information on several professional issues like technology, management, outsourcing, etc. Only three respondents recognised the importance of ‘(financial) capital accumulated overseas’ in their current occupation in Bangalore. Interestingly, these three respondents had not stayed abroad for a very long time. Rather, it was the nature of their job and the remuneration packages overseas that helped them in earning a huge sum of money in a comparatively short span of time.

Figure 8. Gains from return migration



Note: The frequencies add up to more than the number of respondents because some respondents chose more than one variable of motivation.

All the respondents except one acknowledged the ‘contribution of skills, experience, knowledge, and ideas’ which they have gained while working abroad, in their present employment/business in Bangalore. A majority of them have elaborated that their experience helps them a lot while interacting with the clients, for most of the clients are from the United States and European countries. It helps them in acquiring technological innovations and coping with the rapid technological changes, improving management practices, and, above all, confidence building. Respondents from the academic world considered that it is the exposure to different work cultures and a sound academic base, which is of paramount importance and very useful in their current positions. As an exception to this, one respondent, a returned civil engineer from Malaysia, uttered in despair that “in no way the knowledge, skills and experience gained there helped me in my present position, because all that I do here is completely different from the nature of the job and work culture over there”. He revealed that due to the economic downturn he lost his job in the host country and as a consequence came back to India, where he could not utilise his experience because of his failure in getting a good job in the concerned field. In his present occupation in Bangalore, he however expressed satisfaction, particularly because of increasing income prospects in the future. This apart, it has been

expressed by almost all the respondents that their experiences abroad are well recognised and valued by their employers and by colleagues as well. They receive more attention from their superiors and colleagues, who 'listen to them carefully on important matters'. Additionally, employers and colleagues do not hesitate in assigning them important professional responsibilities.

2.3 *Qualitative observations by the respondents*

When the respondents were asked to speak on the "positive and negative feelings" after coming back home to India, all of them expressed that positive feelings substantially outweigh the negatives. 'Physical proximity to the family as well as to the nation' and an independent environment were reported as the most important positive feelings. Several of them expressed their satisfaction on the development of Bangalore as a cosmopolitan city with an increasing number of employment opportunities in almost every emerging field.

Quite a few expressed that while working abroad they sometimes felt a sense of alienation from the surrounding society and its closed cultural facets, sometimes leading even to racial diatribes. Being back home, they ceased to feel alienated from the people around them. Rather, they started feeling as essential parts of a progressive Indian social system. Some of them felt that the climate of Bangalore was very pleasant and they liked it very much. So, for them, being in Bangalore was in itself a positive aspect of their return to India. Furthermore, the emergence of Bangalore as the 'Silicon Valley of India' made them feel proud about it and they wanted to become a part of it.

On the negative aspects of their life in Bangalore, the respondents were unhappy about the government's apathy and delay in reacting to the issues, concerns and developments taking place in the global economic scenario and its failure in controlling corruption, particularly in public offices. A heavy load of growing vehicular traffic, the disastrous state of pollution, especially in the metropolitan cities, Bangalore being no exception, nearly uncontrolled population growth and a poor state of infrastructure were stated as the major causes of their pessimism. 22% of the respondents, however, still believed that since these types of problems were in any case not going to be removed altogether in the near future, they saw no reason to feel entirely pessimistic about returning to the home country on such grounds.

Thirty-five returnees expressed their desire to re-emigrate, but only if they got a very lucrative job offer from overseas. Since a major part of the sample was formed by professionals who went overseas on their employers' initiative, they expressed that they would certainly take a foreign trip if the employing authority, *i.e.* the companies, made the arrangements again. One such respondent was to catch a flight to the United Kingdom on his company's assignment on the day he was interviewed in Bangalore for this study. Amongst the choices of preferred destinations for foreign working trips, the United States came out as the most preferred choice, followed by the United Kingdom and Australia. Other European countries, namely France and Germany, were also mentioned among the list of preferred destination countries. Canada and Singapore were also listed high in the preference list, though by only a few respondents.

Thirty-nine respondents stated confidently that they would not settle down abroad permanently. It was expressed by most of these respondents that since they were getting world-class facilities at their work place in Bangalore, enjoying the healthy environment of the city and were very optimistic about India's place in the future world, they saw no point in leaving the home ground for permanent settlement elsewhere. To them it is an added advantage to be in close proximity to their families. Two respondents expressed the view that if they got a favourable opportunity, they might think about emigrating permanently. Four respondents expressed their inability to say anything with confidence at the moment on their decision to go abroad for permanent settlement and left everything to the circumstances both at home and overseas.

When the respondents were asked about their ‘active involvement in the development process’ of India, more than half (25 out of 45 returnees) responded positively. A majority of them felt that ‘relevant education’ is absolutely necessary for the development of society. Furthermore, to make education accessible to the masses, educational infrastructure needs to be built by providing adequate funds. It was also expressed that besides governmental efforts, private hands also had an important role to play in this nation-building endeavour. They urged that people should contribute generously for the uplifting of the masses. These respondents reported that they were contributing to the societal cause through several organisations and NGOs working on environmental issues, education of poor children and other social services.

3. A case study of migration abroad of Indian doctors and nurses

3.1 *The case study of health workers: rationale for selection and methodology*

This section focuses on the out-migration of health workers (interchangeably called medical professionals), especially of doctors and nurses, from India to developed economies. It also highlights the issue of some foreign educated (mainly in Russia) returning doctors, which has given rise to the controversy regarding the official recognition of their educational credentials for practicing medicine in India. A case study was conducted in New Delhi because of its unique position in medical education, extensive institutional infrastructure, large-scale emigration of medical professionals – particularly from the All India Institute of Medical Sciences – and an easy access to the target population. The sample for the present study was selected from premier institution-cum-hospitals of medical education in New Delhi, namely All India Institute of Medical Sciences (AIIMS), Maulana Azad Medical College, Jayprakash Narayan Hospital, Safdarjung Hospital, Kalawati Saran Children’s Hospital and Lady Hardinge Medical College. These institutions/hospitals were selected considering their high quality of medical facilities, diversity of students and diverse courses and areas of specialisation. From these institutions, a total number of 82 professionals including 34 doctors and 40 nurses were approached and interviewed. In addition, 8 recently returned fresh medical graduates from CIS countries (mainly Russia) were also interviewed.

The questionnaire contained several items that sought information on the following dimensions (see Annex 2):

1. Personal information including information on education;
2. Information about the decision to go abroad and the major motivational forces for their out-migration;
3. Perception of the prospective migrants about the quality of education abroad, on-the-job training and prospects for employment/professional growth.

3.2 *The case study of doctors: data presentation and analysis*

This section focuses on the prospective migration of doctors and tries to find out the causes of their emigration and their perception about their professional status in the host country. It provides a detailed analysis of the information sought from the sample of 34 qualified doctors during the field survey. Out of the 34 respondent doctors, 29 were male and 5 were female. The distribution in terms of marital status shows that a large majority (30) of them were unmarried. All the respondent doctors were between 20 and 30 years of age, showing that the prospective migrants are quite young. It has been observed during the field survey that the ‘inclination to go abroad’ was stronger amongst the doctors belonging to the age group 25-30 years.

The respondent doctors came from different states of India, thus making our sample more or less representative of India as a whole. The highest number (6) were from New Delhi, followed by five from Punjab (the state from which migration takes place in a large scale, mostly to Canada, the United States and the United Kingdom), four doctors belonged to Madhya Pradesh and three doctors each came from Assam, Bihar, Karnataka and Uttar Pradesh. It was also observed that most of the doctors completed their last educational degree in New Delhi, which proves that New Delhi is amongst the favourite choices of place for medical education in the country.

Twenty-two responding doctors had completed their graduation degrees and were pursuing their post-graduation, while twelve respondents had already completed their post-graduation and were working on an internship at the time of the interview.

The All India Institute of Medical Sciences (AIIMS) stands at the first rank in terms of prospective emigration of doctors, with fifteen doctors in the sample. An earlier study conducted in 1992 to analyse the extent of brain drain during the period 1956-80 from this apex institution of medical sciences reported a very high rate of out-migration of 56% of graduating doctors. The second major chunk of the sample is drawn from Maulana Azad Medical College, New Delhi with eleven doctors interviewed from this institute. The remaining eight respondent doctors completed their degrees from seven different institutions. A further 27 respondents have got their degrees from institutions established in New Delhi, while the remaining seven respondents got them from outside of New Delhi. Most of the respondent doctors viewed that the “medical profession is a well respected profession and is full of innumerable opportunities for serving the society.”

When asked about the sources of inspiration for emigration, the total of the first three weights³, as given in Figure 9, shows that 24 respondents wanted to go abroad mainly because of self-motivation. Twenty-three respondents said that they were given inspiration from their overseas friends. An equal number of respondents mentioned that their teachers/mentors/senior doctors inspired them to go abroad, at times by those who had already left the home country.⁴ Fifteen respondents admitted that their friends in India have been motivating them. Family and relatives have also been cited by ten and seven respondents respectively, as important motivators for their decisions to go abroad.

3. See the section on IT professionals for an explanation of the ranking system.

4. Four respondent doctors had contacts with ‘Maulana Azad Medical College Old Students Association (MAMCOSA)’ and three had ties with ‘AIIMSONIANS of America’ through the Internet, while three others mentioned that they were influenced by their ‘seniors’ (doctors) through the AIIMS Students Union. However, all of them confirmed the role medical associations played in providing a platform to grapple with professional problems, supplying valuable information related to various jobs and educational openings in various countries, as well as the socio-cultural support.

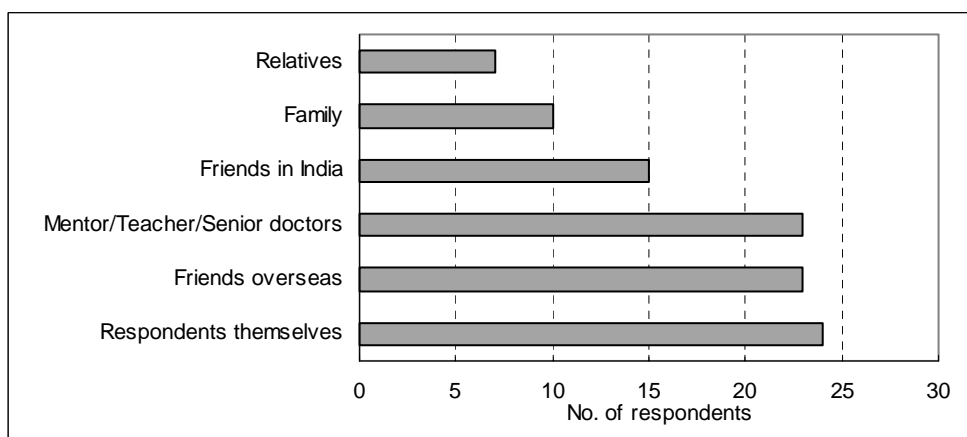
Figure 9. Source of inspiration for emigration for doctors

Figure 10 highlights the purpose of out-migration as stated by the respondent doctors. It shows that 29 doctors are planning to go abroad “to get jobs with better training opportunities.” Moreover, 18 respondents stressed that it was the most important factor in their decision-making for out-migration. The next important factor is the desire “to ensure rapid progress in the medical profession”, of which 28 respondents spoke in favour. Seventeen respondents expressed that their purpose was “to obtain a specific kind of training not easily available in India.” Sixteen respondents wanted “to move abroad for getting good employment opportunities” in the host countries, while fifteen respondents mentioned that their purpose for going abroad was to get “medical experience not easily available in India”. “Permanent settlement in the host country” was selected by eleven respondents as one of the important purposes for their out-migration. A small number of respondents stated that they would leave for abroad even if they could only get some project or research assignments. The forgoing discussion shows that “to get a job with better training opportunities overseas” and “to progress at a comparably faster pace in the professional career” were the most important considerations behind the intentions of out-migration of most of the doctors. These two broadly stated purposes lead us to conclude that after having had the education and on-the-job training in well reputed institutions of medical education in India, doctors are still sceptical about their future professional growth within India, and they strongly feel that experience in foreign hospitals is highly valued in the Indian labour market for health workers.

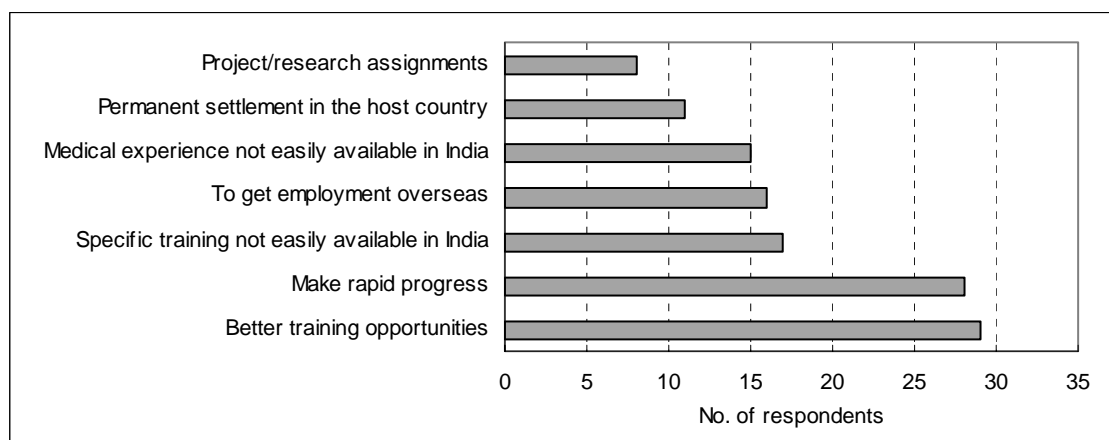
Figure 10. Purpose of intended out-migration of doctors

Figure 11 enlists 16 factors, which have helped the respondent doctors in choosing their favourite destination abroad. “Higher education” in the host country stands at the top of the list, since – except for

one – all the respondents consider this an important factor (‘extremely important’ for 19, ‘moderately important’ for 8, and ‘less important’ for 6 respondents). The responding doctors feel that if they have to make rapid advancements in their professional career, they would certainly need better academic exposure and better professional infrastructure, which they feel is “not easily available in India”. The total of ‘selection response’ category (*i.e.* weight 1, 2 and 3) shows that “better income prospects overseas” is an important pull factor for 24 respondent doctors, of which for 13 it is an “extremely important” one. “Availability of experts in the concerned field”, *i.e.* in the medical profession in the host country has been mentioned as another important cause for out-migration of doctors. Comparatively “better quality of day-to-day life in the host country” weighted as an important factor by 24 respondents. For 19 respondents, “experience in the host country” is an important pull factor for their out-migration because of its relatively high value in India, the home country. Eighteen respondents stated that they want to move overseas because of “a large number of lucrative employment opportunities in the medical profession”. An equal number of respondents consider that they “would be having exposure to better infrastructure abroad” required for the profession. Around one-third of the respondents thought that in India real earnings were quite low when compared with several other countries, even despite having the same educational and professional qualification. Fourteen respondents have cited “bleak employment prospects” in India as a major push factor for the emigration of doctors to developed nations. “Satisfactory health facilities overseas” (11 respondents), “conducive immigration and settlement policies of the prospective destination countries” (8), “scope for self employment” (8), “access to qualitatively better school education for their children” (4) and “proficiency in the English language” (4) have been reported as some other important considerations for out-migration.

Figure 11. Motivating factors for out-migration of doctors

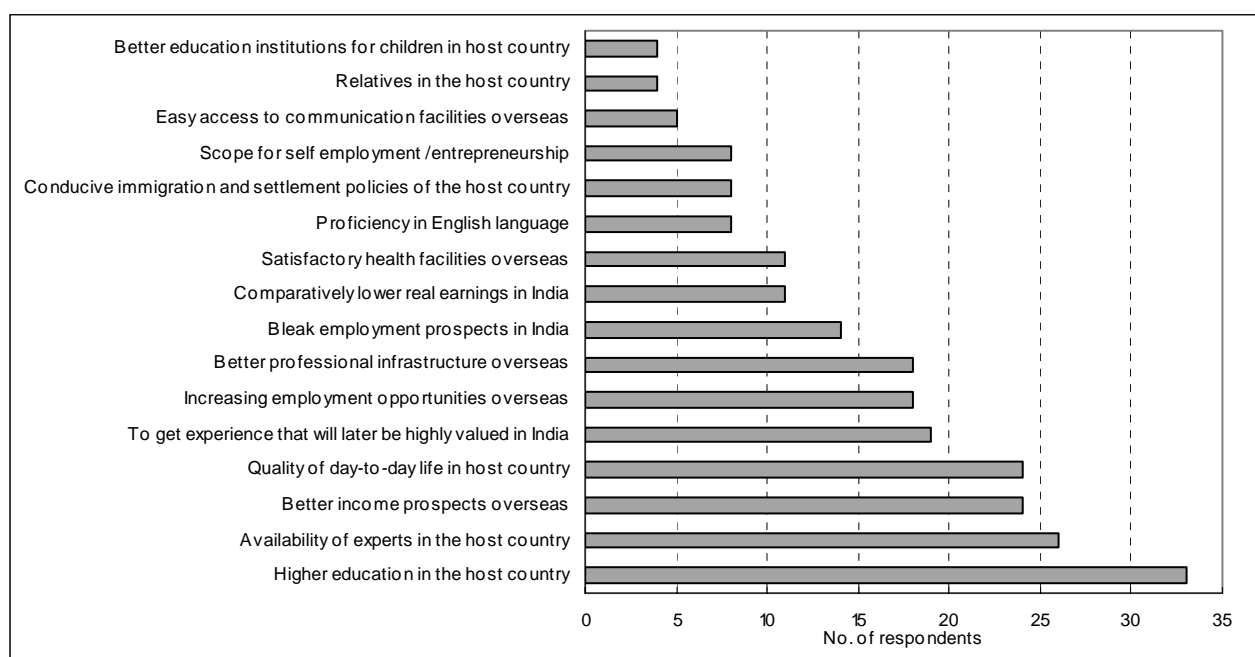
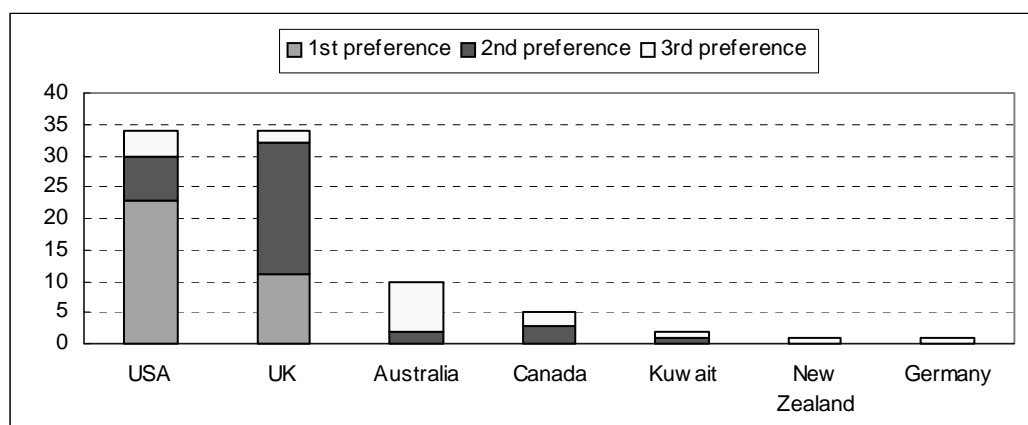


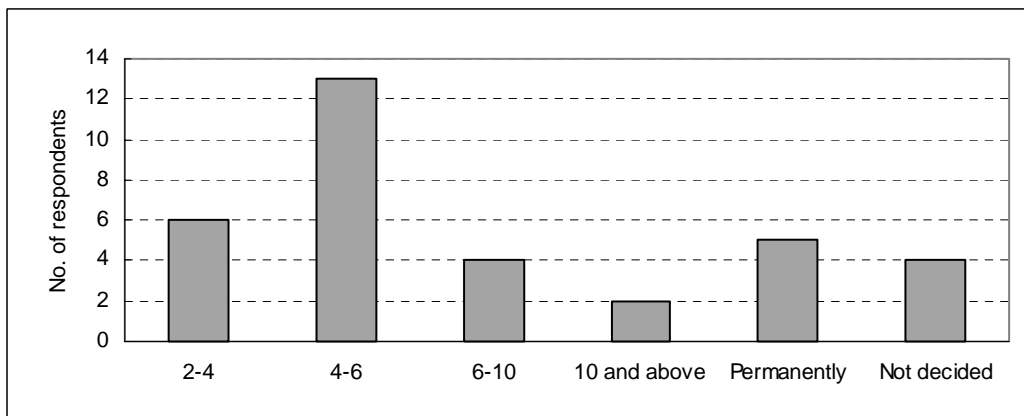
Figure 12 shows that The United States is the favourite destination for medical professionals, as 23 respondents have given it first preference. For seven doctors, the United States is the second choice, while for the remaining four it is third choice. The United Kingdom has come out as the second preferred destination, with 11 doctors giving it the first preference, 21 second preference, and the remaining two third preference. Australia has emerged as the third preferred destination, followed by Canada, Kuwait, New Zealand and Germany.

Figure 12. Preferred destination countries for out-migration of doctors

It may be observed that the medical professionals in the sample had sufficient information about their destination country and the pre-requisites for making their entry possible. Twenty-one of them have even passed certain necessary eligibility tests. The remaining thirteen candidates have not appeared for any such test but are planning to sit for one in the coming year. Professionals who are going to the United States and Canada were very specific in their choices of institutions/hospitals to which they had applied. In contrast, doctors who were planning to go to the United Kingdom were not specific about the hospitals they wished to join; they pointed out that that it was only after clearing the second-stage test of the two-tier process that they would be allowed to apply for specific institutions in the United Kingdom.

Cardiology and internal medicine are the most preferred specialisations for the prospective migrant doctors to be pursued in the host country. It was observed during the fieldwork that, as an area of specialisation, internal medicine was the most preferred specialisation for those with the United States as destination, while surgery was the preferred specialisation for those intending to go to the United Kingdom. However, due to the recently amended favourable immigration policy of the British Government and consequently easy access, a large number of doctors prefer to go to the United Kingdom.

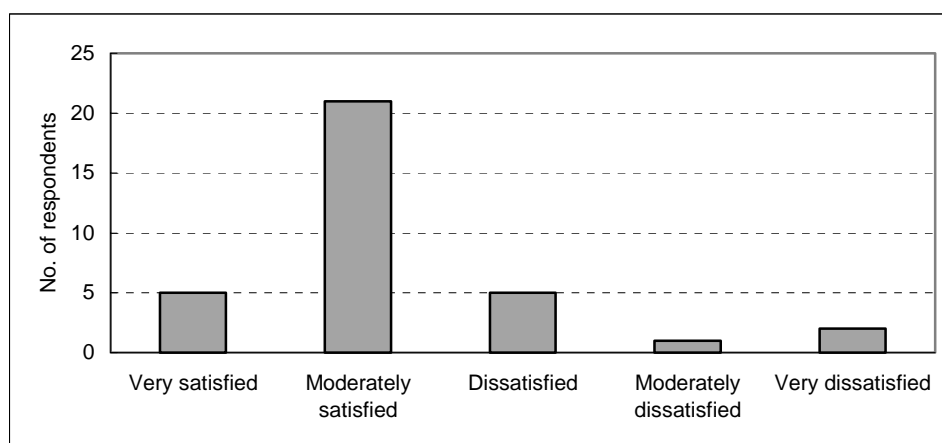
Figure 13 shows the distribution of respondents by intended duration of stay overseas after their planned migration takes place. Thirteen respondents want to move overseas for 4-6 years while four respondents reported that they could stay overseas for more than a period of 6 years. Five respondents expressed their willingness to leave the home country for permanent settlement overseas. Four respondents mentioned that they have not yet decided about their length of stay abroad.

Figure 13. Prospective duration of stay overseas

A large majority of doctors (28 out of 34) are hopeful that their career growth would be “faster than in India” in the host country, while five respondents mentioned that it would be “almost the same as in India”. Contrarily, one respondent did not expect the professional growth to be faster overseas than in India.

On the intended career choices, the majority of the doctors (15 respondents) expressed their desire to pursue a career in the field of medical research. Ten responding doctors desired to be in public health services, followed by six respondents willing to start their professional career as private practitioners. A career in ‘administration’ of medical services and other international organisations like WHO, figured as the career choice of three doctors.

When the respondent doctors were asked to rate the quality of medical education and training in India, slightly more than three-fourth of the total sample reflected a sense of satisfaction. Figure 14 shows five respondents to be “very satisfied” while another twenty-one respondents were “moderately satisfied” with the kind of education and training being provided in the Indian health sector. The remaining eight respondents expressed their dissatisfaction on the state of education and training in the medical field.

Figure 14. Doctors’ perceptions about the quality of medical education and training in India

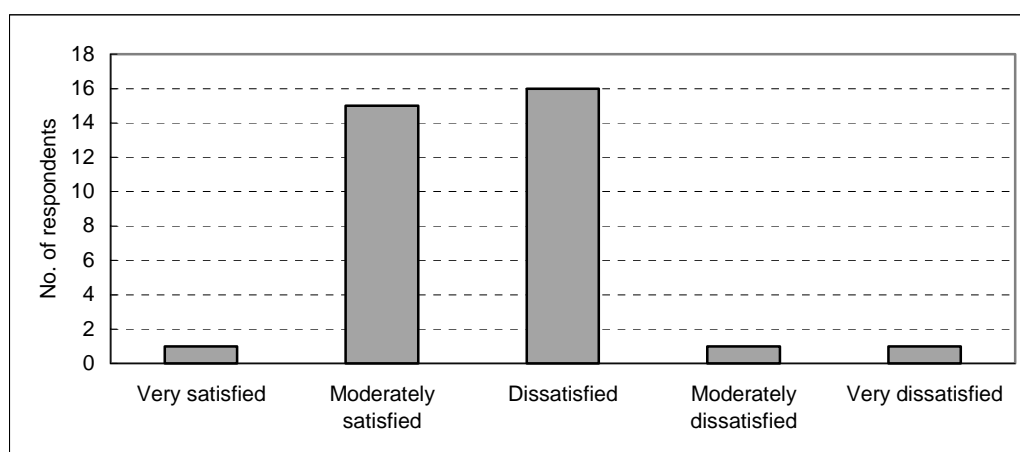
A majority of the respondent doctors (20) feel that if one is educated in United States or the United Kingdom, one’s professional career growth would be faster in India in comparison to the India-educated doctors. On the contrary, six respondents were of the view that the future of foreign educated doctors is not

bright in India, while another seven have expressed their inability to say anything in concrete terms on the future of foreign educated doctors in India.

When asked about their prospective contribution in the development of the nation after their return from abroad, the respondents have mentioned many diverse ways of contributing. All the respondents have noble intentions about their prospective contributions in the nation's development. Some of them mentioned that they would contribute by sending remittances back home, getting involved in charity work by improving medical facilities, or by providing information, training and consultancy to those medical organisations which are working in rural areas. They can also provide their services through tele-medicine. A few respondents mentioned that capacity building of 'fellow doctors' to provide the latest medical treatment to the masses in India could be one way of contributing to national development. Nine respondents said that they would come back to India and provide their service for the cause of India's betterment. Speaking on the impact of large-scale emigration of highly skilled professionals from India on India's national development, eight respondents expressed it would have a negative impact because of the loss of human capital. Eight respondents however, were of the view that it would not have any adverse impact because of India's large pool of skilled professionals and educational capacity to fill the gaps caused by emigration. A view was also expressed by some that the emigration of skilled human capital from India would be checked mainly by creating better opportunities for training and work in the concerned sectors within the country.

The respondent doctors were given a five-point scale to weight the level of satisfaction with their present salary package that they were getting in their respective institutions/hospitals. Figure 15 shows that 16 respondents expressed satisfaction at the moderate level and above, while the other 18 respondents were not satisfied. The respondents have come out with different explanations, but the most notable point was that considering the educational qualification and the rigorous training they had, their remunerations were quite low. Moreover, in India, the private sector offers much more lucrative jobs in the medical profession than the public sector. Therefore, the public sector should also provide compatible salaries to the medical professionals.

Figure 15. Level of satisfaction with present salary in India



When the respondents were asked to react on a hypothetical possibility that if a handsome remuneration package was offered, would you move beyond your most favoured destination countries, 12 doctors answered positively, while the remaining 22 doctors showed no intention of changing their preferences only on a monetary account. Ten of them said that "quality of education and training (experience) are more important than money". Besides, quality of life, environment, professional freedom, and above all, the scope for pursuing a career in the chosen area of specialisation were more important

considerations in such a decision. When asked about the expected monetary returns in the host country, all of the respondents, except one, were hopeful of getting what they expected. Their argument was that there were plenty of employment opportunities overseas in the field of health services, and so they saw no reason to be sceptical about the size of the remuneration packet they would be offered in the destination country.

Furthermore, the respondents were asked about the difficulties faced by the medical professionals (especially doctors) while pursuing their career in India. A large number of respondent doctors made the point that to get into medical education was very difficult in India mainly due to limited number of seats and the consequently tough competition. The policy that a number of places are reserved based on one's caste⁵ (henceforth referred to as reservation policy) in the institutions of higher education, including medical education, was cited as one of the major drawbacks of the admission system, which resulted in the lowering down of the standard of education and the quality of professionals as well. Lack of proper training facilities, low quality of medical infrastructure, lack of proper guidance, bleak employment opportunities and lack of qualitative research endeavours were highlighted as some of the crucial hurdles in the advancement of the medical profession in India. When respondents were asked to anticipate the difficulties while pursuing their medical career overseas, most of the respondents felt that socio-cultural problem and racial bias could be the most severe problems overseas which they might have to face abroad. They also voiced the fear of becoming 'second-class citizens' in the host country.

3.3 *The case study of nurses: data presentation and analysis*

This section presents the information related to nurses and their perception about out-migration overseas. The entire sample has been drawn from one medical institution of New Delhi, *i.e.* Kalawati Saran Children's Hospital. The analysis is based on the information provided by 40 nurses responding through a field survey.

60% of the sample (24 nurses) is above 30 years of age. Three of them are in their late forties, and they all desire to move overseas because their immediate family members, including children, are staying abroad. Fifteen nurses aged between 25-30 years of age constitute 38% of the sample. Only one respondent nurse is below 25 years. In comparison to the nurses, prospective emigrant doctors are quite young with an average age of 25 year while the average age of respondent nurses is 33 years. Furthermore, 35 nurses (88%) are married.

Around half of the nurses in the sample (18 nurses) are from Kerala, and one-fourth (10 nurses) are from New Delhi. The other twelve respondent nurses are from eight states – three each from Haryana and Uttar Pradesh, two each from Tamil Nadu and Maharashtra, and one each from Bihar and Himachal Pradesh.

Most of the nurses (32) have completed a diploma in nursing. Four nurses only have a graduation degree, while another four have done both a diploma and a graduation degree. It was understood during the survey that in the nursing profession, a diploma is considered an essential qualification, and if it is accompanied by a degree in nursing, upward mobility in the nursing career becomes easier.

5. In India, there is a Constitutional requirement of positive discrimination or affirmative action in education/employment whereby a quota of 22.5% of all admissions in government institutions of education/of all government jobs are exclusively offered to (reserved for) applicants belonging to some designated minorities listed as Scheduled Castes and Scheduled Tribes.

Eleven nurses (more than one-fourth of the sample) belong to the pre-1990 vintage of education, and they now have more than thirteen years of work experience each. Twenty-six nurses completed their education during the 1990s, and only three respondents completed their education after the year 2000.

The highest number of nurses (10) in the sample are from Lady Hardinge Medical College, New Delhi. One reason for this is the fact that the Kalawati Saran Children's Hospital is itself affiliated to the college. This is followed by the Kerala University (4 nurses) and the Indira Gandhi National Open University at New Delhi (4 nurses). Some of the respondents mentioned that they preferred to have their diplomas as well as degrees in nursing from the Indira Gandhi National Open University, as it helped in their professional career growth to have completed their last educational degree from an institution based in New Delhi.

Twenty-seven nurses have been planning for one to two years to move overseas, and some of them have also qualified necessary tests like the TOEFL (Test of English as a Foreign Language). Five nurses were planning their out-migration for the last 6 years, but were waiting for the right opportunities of better training facilities abroad and better income prospects. Family location is one of the important factors, which is forcing them to stay back, as moving overseas involves movement of the entire family. Five nurses said they have been planning for out-migration only for the last 3-4 years, but have not been able to move for various reasons. A further seventeen nurses mentioned that they would migrate in 1-2 years, as certain eligibility tests needed to be met before going abroad. While fifteen nurses said they would take at least 3-4 year for migrating, eight nurses could not say anything on this issue.

Out of the 40 nurses, 11 respondents have passed the required tests (like TOEFL) to get into the hospitals overseas, while 29 nurses have not passed any tests yet.

Figure 16 reflects the motivating factors that have inspired the nurses' decisions for intended out-migration. "Friends overseas" is a strong factor that helped 20 nurses in taking this decision, apart from the self-motivation of 27 nurses. Family and friends in India are also decisive motivating factors for 16 nurses each, and 8 nurses said that they are going abroad to get employment on the advice of senior nurses, who have been abroad for some time. Some nurses sought the help of consultants, who have come to play an important role in influencing the decision of out-migration.

Figure 16. Source of inspiration for emigration for nurses

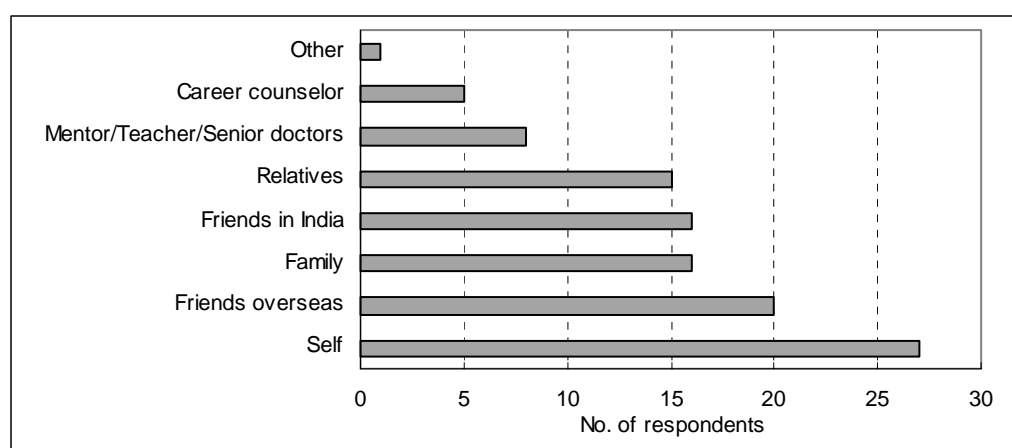


Figure 17 describes the purpose behind the intended out-migration of the respondent nurses. Out of 40 respondent nurses, 31 mentioned that "to get a job with better training opportunities" has been the main purpose to go abroad. They think they can always come back to India after a certain period of foreign training, which would be of value in Indian hospitals. Nineteen nurses want to move overseas because they

want to progress faster in their medical career, which is not possible and feasible in India due to the reservation policies and caste-based politics in the job market (see Footnote 5). They also discussed the problems faced by them due to outdated medical facilities, which emerges as very important factor. They mentioned that careers in India are stagnant, education and training facilities are not good for nurses and pay packets are also not attractive. One respondent nurse said that she would be going abroad for her research assignment.

Figure 17. Purpose of intended out-migration of nurses

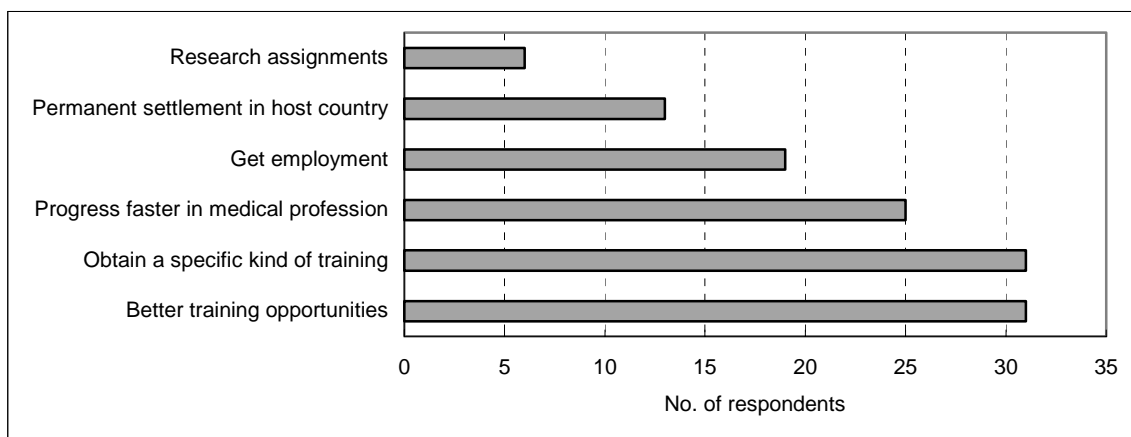


Figure 18 enlists 16 important factors behind the selection of the destination country. Twenty-six nurses mentioned that “better income prospects overseas” was the most important factor, followed by the “quality of day-to-day life overseas” (25 nurses). This implies that respondent nurses preferred those countries that offered good life for their families. These choices and factors are quite different from those of the doctors who want to move out mainly for better work facilities and training opportunities abroad. “Better infrastructure facilities in the destination country” is the third most important factor for nurses. Sixteen nurses out of 40 mentioned that “to gain a specific kind of training that would be highly valued in India” they would move overseas. One of the other specific factors is that 17 respondent nurses are looking for “better school and education for their children” (first preference by nine nurses, second and third preferences by four nurses each). It is also to be noted here that only eight respondent nurses mention that they foresee “bleak or low employment opportunities in India.” Therefore, one may draw a conclusion that respondent nurses want to move to those countries which have better opportunities and support for their families in terms of better infrastructure facilities, day-to-day life style, schools for children, etc., apart from better income prospects overseas.

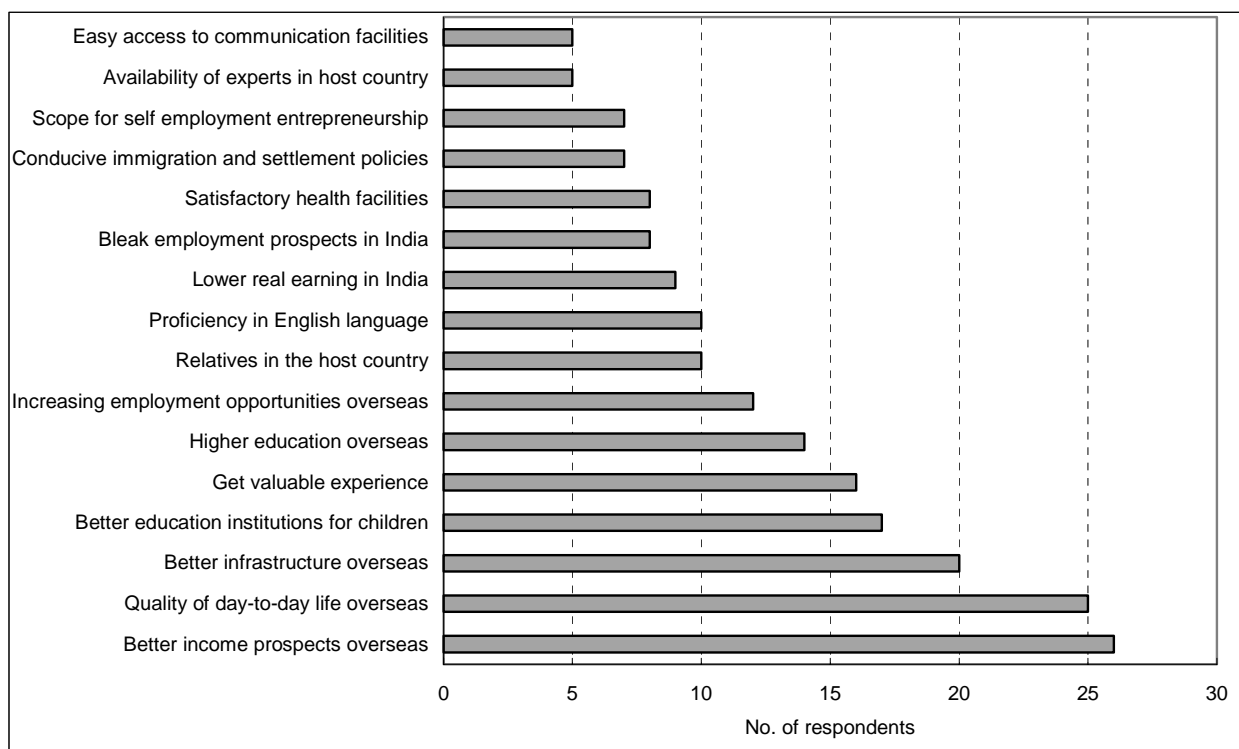
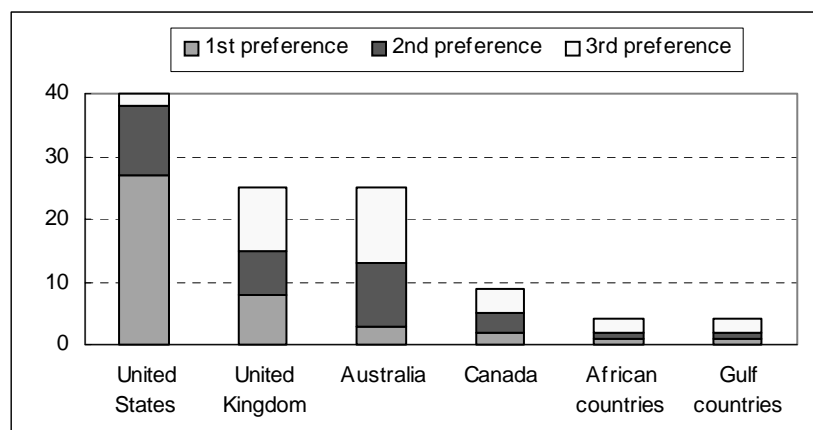
Figure 18. Motivating factors for out-migration of nurses

Figure 19 details the distribution of nurses by their favourite destination countries. Forty nurses were quite clear about their destination countries and had a specific choice for a particular country. The United States is their first choice (all 40 nurses choosing it in their first three preferences), followed by the United Kingdom (25, with 8 in first preference), both are chosen because of abundant employment opportunities. Third choice was Australia (25, with 3 in first preference) because of its climate and newly emerging employment opportunities, specifically after the IT boom. Nine nurses (with 2 in first preference) also considered Canada as a destination country. Some nurses have a liking for Switzerland, Germany and Malaysia (not in the figure). There was also a clear inclination towards African countries (4, with 1 in first preference) and Gulf countries (4, with 1 in first preference). The latter in particular are attractive because of the high pay packets generally offered in these countries.

Figure 19. Preferred destination countries for out-migration of nurses

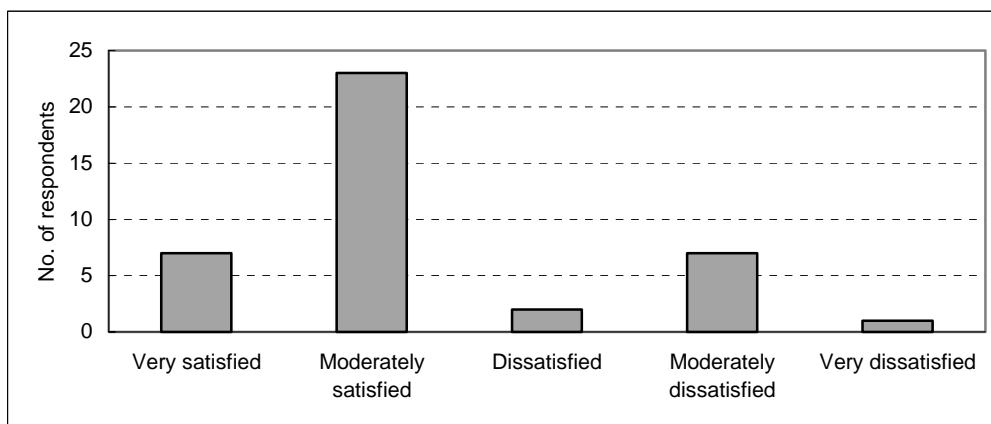
Out of 40 nurses, 23 had a specialisation in paediatric nursery, mainly due to the sample selection from Kalawati Saran Hospital, which is a children’s hospital. All the nurses mentioned that they have a higher chance of career growth in the host country overseas because their specialisation was valued highly there.

Concerning their intended duration of stay, 25 nurses want to stay abroad for more than 4 years, and some of them wish to settle down abroad permanently if given a chance. Only five nurses mentioned that they would come back in 1-2 years, because they “want to serve the nation” with knowledge and training acquired abroad.

The breakdown of nurses by their perceptions about the relative career growth abroad as compared to in India shows that 39 nurses perceive that career growth is faster overseas. They also say that reservation policies and monotonous/pre-determined career paths are proving to be barriers in their career enhancement in India, whereas these factors are not there abroad where equal opportunity would allow them to be judged by their knowledge and competency.

Figure 20 reveals the perceptions of nurses about the education, training and experience provided by medical institutions in India. Twenty-three nurses mentioned that they are ‘moderately satisfied’ with the facilities, while seven mentioned that they are ‘very satisfied’. Nine nurses are ‘dissatisfied’, the reason being absence of high quality training facilities for nurses and an absence of opportunities to attend any training programme to learn more about new research and technologies. One nurse is ‘very dissatisfied’ because of the reservation policies. Overall, 30 nurses were satisfied with the training provided and 10 were dissatisfied.

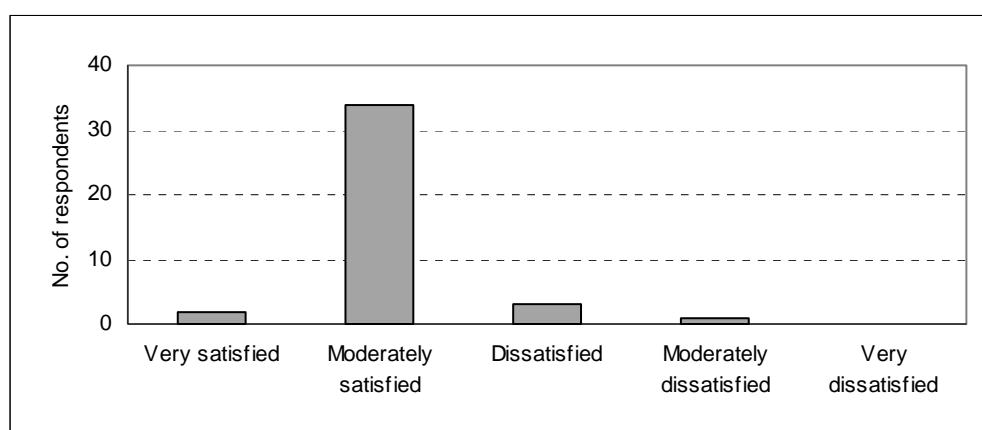
Figure 20. Level of satisfaction with education, training and experience in India



Reflecting on the perceptions of nurses about foreign credentials of nurses in India, according to seventeen respondents, foreign educated and trained nurses have a “very good” future in hospitals in general and private hospitals in particular. Ten nurses said that there were no differences between foreign and Indian credentials, because ultimately it was a matter of quality of hands-on training, whether it was overseas or in India. They also mentioned that Indian nurses are in high demand overseas, proving that Indian nurses are not behind foreign-educated nurses. Furthermore, they felt that the Indian health sector was progressing very fast, and therefore there would be more demand for nurses. However, eleven out of the forty nurses mentioned that it was very difficult to pursue a nursing career in India, as limited opportunities were available for career growth.

Figure 21 lists the level of monetary satisfaction derived by the nurses from their present salary in India. Thirty-four respondent nurses were “moderately satisfied” with the present salary levels, but only two were “very satisfied.” Three nurses were “dissatisfied,” and one was “moderately dissatisfied” with the present salary. They mentioned that salaries were very low in government hospitals as compared to the services rendered by them, in terms of high workload and long working hours.

Figure 21. Level of satisfaction with present salary in India



Random questions to nurses

When the nurses were asked about their awareness of possible difficulties that they might have to face overseas, 22 nurses confirmed this. The respondents mentioned that they might have to face a number of problems of adjustment to the new culture, such as accommodation, food, racial discrimination and language problems. Apart from these, disruption of family life, change of climate, new life style and effective economic and penal disincentives linked to performance failure were also some other possible difficulties of which they were aware.

They also mentioned some of the facilities being provided by the foreign hospitals, for example accommodation, handsome pay packets, chances of further training for career enhancement and insurance (social security). However, the respondents considered that further training facility and income were the most favourable facilities offered abroad. They were mostly confident about receiving good future earnings in the host country with the only exception of one respondent, who was sceptical about the net benefits in case she was to take the services of foreign placement agencies which are charging high fees, sometimes exorbitantly.

When the nurses were asked about their contribution to the national development if they would not come back, they mentioned that they could do so in various ways. One of the important ways was through charity, *i.e.* donations in both cash and kind. The latter could include books, equipments, etc., particularly for the benefit of the children back in India. Some of the nurses mentioned that they would like to participate in knowledge sharing from abroad. However, twelve nurses could not answer this question. They mentioned that though it was difficult for them to tell what exactly they could do, they surely wanted to contribute to the nation’s development. Most importantly, seven of the forty nurses mentioned that they would definitely come back to their home country, India.

Most respondents mentioned that after coming back they would serve the nation through better knowledge and service-experience gained abroad, and that they would also be involved in some charity work. They further emphasised that their enriched knowledge would be their main contribution in the national development of India.

When asked “what do you think about the situation when more and more skilled out-migration is taking place from India?”, the respondents said that out-migration would take place in the future as well, because it would not depend on their migration decisions only, but also on the government policies related to education, employment, reservation, etc. They also argued that if one had to minimise migration, we ought to provide world-class training and other facilities with good income prospects to the next generation of highly-skilled Indians. If we fail to do this all, migration of future generations would also occur.

3.4 Foreign-educated returning Indian doctors

Recently, the Medical Council of India (MCI) has made it mandatory for every overseas-qualified doctor to pass an examination before starting their career of medicine in India, particularly those returning from the Commonwealth of Independent States (CIS) countries – mainly Russia – a decision which, though contested, was later upheld by the Supreme Court of India after a few hearings. To understand the perception of the returnee doctors about this decision of the Indian government, as well as the quality of education they received abroad in these countries, eight returning doctors were interviewed informally. Out of these eight doctors, four were educated in Russia, two in Belarus, and two in the Ukraine. Of the eight doctors, three came from New Delhi and one each from Uttar Pradesh, Assam, Punjab, West Bengal and Haryana. All were unmarried, comprising seven males and one female.

Motivating factors to go overseas for medical education

Most of the doctors (6) responded that ‘family’ was the main inspiring and motivating factor, as the best of medical education facilities were available abroad. “Friends in India”, and “relatives” got the next highest scores. Thus, it is clear that family has been the main factor behind their going abroad. However, the interviewees observed that the most important factor was their failure to get admission into any good medical college/institution in India.

Purpose of going abroad for getting a medical degree

Almost all doctors (7) responded that higher education was the main factor. The second important reason for going abroad was to get a job with better training opportunities. For one doctor it was relatively easier to have access to high-standard medical education in the CIS countries than in India. One doctor also put forth the view that the average quality of medical education in Russia was much better than the average in India, which motivated him to go there.

Important factors in choosing the destination

Almost all doctors (7) responded that quality of the medical education was the first important consideration in choosing the host country. Two of them said that ‘the bleak employment prospect in India’ was the first important factor for them. One (the lone female) doctor said that she had ‘relatives in the host country’, and that the ‘quality of day-to-day life’ too were very important factors. ‘Better infrastructure overseas’, ‘availability of experts in the concerned medical field’ in the host country were second most important factors for two doctors. Concerning the third important factor, it was ‘bleak employment prospects in India’ for two returning doctors, ‘relatives in the host country’ for another two and ‘quality of day-to-day life’ for another three. They mentioned that conducive immigration policies also helped them in choosing these countries for their medical education.

Favourite destination countries

All respondent doctors (8) went abroad in 1995 and returned in 2001-2002. The first preferred destination for five doctors was Russia, while for one respondent it was the United Kingdom. Two respondents said that the United States and South Korea were their favourite destinations, respectively. As

a second preferred destination, five doctors preferred Russia, while for one doctor it was the United Kingdom. For another two doctors, it was the United States and South Africa respectively. As a third preferred destination, some doctors opted for the United Kingdom, Australia and Fiji. For three doctors, their third preferred destinations were Russia, South Africa and Ireland respectively. Irrespective of these preferred destinations though, all the doctors had finally gone to the CIS countries. Out of the eight doctors, four had not qualified in any admission test of medical education in their preferred countries.

Present area of specialisation

When asked about their specialisation, three of them said they were general physicians, while others had diplomas in internal medicine, surgery, orthopaedic surgery, etc. As far as demand for their specialisation in India was concerned, almost all the doctors sounded optimistic, except for one who was holding a negative view of the situation, mentioning that his degree could best be utilised in the position of medical officer in India.

Difficulties in pursuing medical education in India

While four doctors said that there was no specific difficulty, the other four stressed difficulties arising from a limited number of seats, made worse by the reservation policies, tough competition, a lack of standardised quality higher education across the various institutions and rampant corruption – difficulties which forced them to go abroad for medical education.

Jobs expected before coming to India

The expected jobs mentioned were those of medical officer and private practitioner. Two of the doctors were also hopeful of becoming consultants to various hospitals in India. As far as other career choices were concerned, public health services, community medicine and medical administration were the expected preferred jobs for four of the doctors. When asked about their professional growth in India compared to other countries, four doctors said it was slower in India, and two said it was more or less the same. Almost all doctors were 'very much satisfied' with the kind of education/training they got overseas and only one was 'moderately satisfied'. Six doctors also added that there was no discrimination in job offers being made to them abroad.

Perceptions about MCI's decision to introduce compulsory qualifying test for foreign-educated doctors

Almost all returning doctors strongly opposed this decision with the argument that such a test was not adequate to judge the skill and quality of a doctor, as hands-on experience was also important in the making of a good doctor. Six doctors responded that there should not be any discriminatory policy against them, once MCI had recognised the foreign medical colleges from which they graduated. One of the doctors was of the view that this screening test should be conducted only after completion of an internship in India and should not pre-empt the permission to get registered for an internship. Two of them said that the entrance test should be conducted not only for those who got their medical education abroad, especially from Russia, but also for those who got medical degrees from any private institution in India.

The doctors educated in India and covered in this sample survey were also asked to give their reaction to the MCI's decision of making it mandatory for every overseas-qualified doctor to pass certain examination before starting his/her internship/career in medicine in India. Diverse opinions were expressed by these India-educated doctors. 85% of the respondents (29 doctors) supported the MCI's decision. They said that it was a good decision and every foreign educated doctor should qualify the test before starting his/her professional career in India. Ten respondents suggested that MCI should publish a list of institutions abroad whose credentials are reputed and reliable. A few of them agreed with the policy, but felt that it should be implemented only after some qualitative modifications were incorporated.

Credentials of foreign-educated doctors in India

As far as credentials of foreign-educated doctors were concerned, the eight returning doctors said that if MCI recognised their degree, they would have similar credentials as doctors educated in India, and so their future would be similar to those of Indian doctors.

Expected monetary returns in India and quid pro quo

The doctors said they would get expected monetary returns in India if allowed to practice. However, three were not sure about the returns, particularly because of the uncertainty of being allowed to enter the profession in India due to MCI's decision. When asked about their potential contribution to India's development, four doctors responded by saying that they would undertake charity work and also provide scholarships to needy students; one doctor said he would contribute through activities of non-governmental organisations and another was of the opinion that he would serve the rural masses.

This survey reflects the awareness, perception and anxiety of foreign-educated doctors who want to serve in the home country, but are not allowed to pursue their medical career in India automatically. They are quite sure about their future, career growth and monetary prospects in the Indian medical profession if allowed to work. They seem to be very committed but their being barred from working in India raises many questions and contradictions between highly skilled migration being looked at as brain-drain on the one hand and qualified returnees from abroad not considered as a brain-gain. One really needs to understand and resolve these contradictions and the dilemmas arising from them.

4. Concluding remarks

Bangalore has an important role in promoting the out and in-migration of professionals, including IT professionals and others from different fields like teaching, management, medicine and architecture, etc. During the IT-boom of the late 1990s and the beginning of 21st century, rapid economic growth in Bangalore led to the development of other economic activities. For example, during the Bangalore field-survey, some architects said they had gained in terms of higher wage-rates triggered by the IT-boom in Bangalore. Similarly, in the case of medical professionals, a Commission on Graduates of Foreign Nursing Schools (CGFNS) Test Centre was opened in September 2001 in Bangalore. This initiative had been taken to better coordinate the out-migration of nurses (Hindustan Times, 2003). Already, four rounds of tests have been held for the selection of nurses for out-migration, the last one being scheduled on 12 March 2003. In each round as many as 1500 nurses appeared for the examination. Estimates show that there is a shortage of 100 000 nursing personnel in US hospitals and this shortage has been projected to quadruple in the next few years.

The findings of both case studies show that young IT professionals as well as the medical professionals want to go abroad mainly to gain professional experience, which they think will be highly valued in India when they come back. In addition, they are encouraged by higher earnings, perks and high quality of life in the host country. However, unlike the IT professionals as well as most doctors, the majority of prospective nurses want to settle down abroad permanently, because they hardly perceive their career prospects to be bright in India. Amongst the doctors, only some are prepared to settle down abroad permanently if they get a chance. The fact that none of the respondent professionals in Bangalore gave priority to the idea of settling down abroad highlights a unique aspect behind Bangalore becoming a "corridor" for migration (outward and inward) of Indian HRST, which is not the case with health professionals from New Delhi. The IT professionals in Bangalore feel that they have growing opportunities for their career growth in India in general and Bangalore in particular. The other interviewed professionals (such as academics) in Bangalore also found themselves comfortable in the cosmopolitan city of Bangalore, though they believe New Delhi has better career prospects in academics.

The prospective returnee doctors from the CIS countries foresee a fast growing medical/health sector in India as the trigger behind their intentions to come back. However, eventually they perhaps would change their mind because they are directly dependent on the demand for medical services from people, who are largely poor in India and therefore unable to pay adequately for the services. In contrast, the IT professionals can feel confident about returning through the corridors like Bangalore because of their (a) dependence on a fast growing IT sector/companies, and (b) ease of re-migrating abroad through the corridor, and thus participate in circulatory migration.

After the wave of migration of doctors, IT personnel and nurses from India, the latest turn is of teachers. Newspapers show significant advertisements at regular intervals for the positions of teachers for countries like the United States, the United Kingdom, New Zealand, Australia, etc. An organisation called "Recruiting New Teachers (RNT)" says that over the next 10 years the United States would need to hire two million teachers, because half of their teachers would retire during this period. These countries prefer Indian teachers because of the perception that Indians have good fluency in English and have received quality higher education.

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ANNEX 1: QUESTIONNAIRE ON THE RETURN MIGRATION OF SKILLED PROFESSIONALS IN BANGALORE

The present questionnaire has been designed to seek primary information on some selective aspects (both personal and professional) of return migrants, the persons who have come back from overseas after spending some time there. The information that is sought is related to the return migrants, their experience in the host country, the gains and the difficulties during their stay abroad, etc. It also focuses on the factors which have attracted the return migrants to India in general and to Bangalore in particular. This questionnaire is part of a study, which is being conducted to estimate the stocks and flow data on HRST (Human Resources in Science and Technology) in India developed through higher education, on-the-job training etc. Changes therein due to their migration overseas and return to India are also being estimated for looking into the policy concerning international migration of HRST from and to India.

More specifically, the motive for choosing Bangalore for the purpose is to analyse the interaction between return migrants and the development of particular professional infrastructure in the city, which is now in the process of becoming a “corridor” for international mobility (out-migration as well as return) of Indian professionals. Keeping this in mind, the respondents are requested to fill in each item of the questionnaire with due care and a sense of responsibility. The information provided by the respondents will be kept fully confidential and will be used for the aforesaid purpose of research only.

Sample survey of returned professionals in Bangalore

Date of interview conducted:

Interviewer's name:

I. Personal information

1. Name of the Respondent
2. Sex: Male/Female
3. Date and Place of Birth
4. Age
5. Official Address (including telephone number, fax number, e-mail address)
6. Marital Status: Unmarried/Married
7. Educational Qualification (Graduation and above)
 - Degree (please specify graduation/postgraduation/other)/Diploma
 - Country/State
 - Name of the Institution
 - Year of Completion

8. If you have got any scholarship/fellowship during your studies, please furnish the details.

- Name of the fellowship & Awarding Institution
- Year of Award
- Course of Study
- Period

II. Information on out-migration

1. When did you move overseas?
2. In which country/countries have you stayed/lived/worked?
3. For how many years you have stayed overseas?
4. Who has inspired/motivated you to go abroad? Please tick the appropriate option(s).
 - a) Family
 - b) Friends in India/abroad
 - c) Relatives
 - d) Your teacher
 - e) Senior colleague
 - f) Yourself
 - g) Career Counsellor
 - h) Any Other (please specify)
5. What was your purpose for going abroad? Please tick the appropriate option(s).
 - a) For higher studies
 - b) To get employment
 - c) To gain professional experience
 - d) For permanent settlement in the host country
 - e) Project/Research assignments
6. On what kind of visa you have gone abroad? Please tick the appropriate option(s).
 - a) Tourist
 - b) Student
 - c) Employment
 - d) Any other (please specify)
7. Which factors have helped you in decision making to go abroad?
Please give scales to the following options according to your preference order as follows: Extremely important (1); Moderately Important (2); Less Important (3); Not Important (4); Not at all important (5).
 - a) Better employment opportunities in the host country
 - b) Expectations of better business opportunities in the host country
 - c) Conducive immigration policy of the host country
 - d) Relatives in the host country
 - e) Better Income Prospects in the host country
 - f) Quality of day to day life
 - g) To gain experience that would later be highly valued in India
 - h) Higher Education
 - i) Better employment prospects in India
 - j) Any other (please specify)

Please explain your first three preferences of rank-order.

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

8. Please furnish the following information regarding your working experience and on-the-job-training in the host country.

a) Place of work (Country/State)

b) Profession/Occupation

c) Type of Industry/Firm (Private/Public/Semi-government/Self-employed)

d) Designation/Nature of Job

e) Total emoluments per Annum (in USD/Rs)

f) Total Number of years in the firm/occupation

9. What is your current resident status overseas? Please tick the appropriate option.

a) Still keep the permanent resident status

b) Lost permanent resident status

c) Never had permanent resident status

d) Any other (Please specify)

III. Information about return migration

1. When did you return to India?

2. Who has influenced/inspired/motivated you to come back to India?

Please tick the appropriate option.

a) Family

b) Friends

c) Relatives

d) Mentor/Your teacher

e) Yourself

f) Career Counsellor

g) Any Other (Please specify)

3. What has motivated you to come back in India?

Please give scales to the following options according to your preference order as follows: Extremely important (1); Moderately important (2); Less Important (3); Not Important (4); Not at all important (5)

a) Recession in the host country

b) Increasing unemployment in the local labour market overseas

c) Negative attitude of the employers towards immigrant employees

d) Language problems in the host country

e) Ethnic/racial problems

f) Rigid immigration and settlement policies

g) Difficulties in getting a good/appropriate job overseas

h) Expectation of better business/entrepreneurial opportunities

i) Increasing employment opportunities in India in concerned sector

j) Recognition of India as a major IT power in the global world

k) Higher real earnings in India

l) Any other (Please specify)

Please explain your first three preferences of rank-order.

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

4. What influenced your decision to select Bangalore after coming back from abroad?

Please give scales to the following options according to your preference order as follows: Extremely important (1); Moderately Important (2); Less Important (3); Not Important (4); Not at all important (5).

- a) Better infrastructure in comparison with other major cities of India
- b) Availability of experts in the concern sector(s)
- c) Abundant employment opportunities
- d) Better remuneration packages
- e) Accessibility to qualitatively better educational institutions for children
- f) Scope for self employment/entrepreneurship
- g) Socio- Cultural or Language reasons
- h) Easy access to communication facilities
- i) Satisfactory health facilities
- j) Emerging state government support
- k) If any other (please specify)

Please explain your first three preferences of rank-order.

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

5. Please furnish the following information regarding your working experience and on-the-job-training in India/Bangalore.

- a) State/City
- b) Profession/Occupation
- c) Type of Industry/Firm (Private/Public/Semi-government/Self-employed)
- d) Designation/Nature of Job
- e) Total emoluments per Annum (in USD/Indian Rs)
- f) Total Number of years in the firm/occupation

6.1 Were you aware of any incentive programme or policies of central/state government before coming back to India? YES/NO

6.2. If YES, please write the name of these programmes

6.3 Did you receive any assistance from these incentive programmes/policies? YES/NO

6.4 If YES, what kind of assistance did you receive from these programmes/policies?

- a) Research fund/business starting fund
- b) Bank loan/financial support
- c) Personnel support
- d) Facility/equipment
- e) Other support (please specify)

7.1 Are you satisfied with your present employment/business in Bangalore/India? YES/NO

7.2 If you are satisfied, what are the most satisfactory factors in terms of your employment/business?

8.1 After your return have you had any problems in adjusting to the working conditions in Bangalore/India? YES/NO

8.2 If yes, what are the major problems?

9. In what ways do you think the existing incentive programmes may prove to be more attractive for Indian emigrants working overseas?

10. Have you ever motivated anyone to return to India? YES/NO

If yes, please explain.

IV. *Impact of return migration*

1. Which of the following do you consider the most important to your current work/business in Bangalore?

- a) Knowledge and skills gained overseas
- b) Work experience overseas
- c) Network established overseas
- d) Capital accumulated overseas
- e) Others (please specify)

2. How much is your current annual income compared with earlier income (before return)?

- a) Much lower than before
- b) Lower than before
- c) Not much change
- d) Higher than before
- e) Much higher than before

3. Do you find the skills, experience, knowledge, and ideas you gained abroad useful in your present position? Please provide explanation in detail.

3.1 If yes, explain

3.2 If no, explain

3.3 Can you give us an example on how you used your skill, experience, knowledge, and ideas gained overseas to contribute to your institute/company/business?

4. Do your employer and colleagues value your skills, experience, knowledge and ideas gained overseas?

YES/NO

If yes, explain

If no, explain

5. When you were abroad, did you send remittances to your family members on a regular basis?

If yes, how were the remittances used?

6. How much capital, you earned overseas, have been/can be invested in Bangalore?

- a) Up to Rs. 500 000
- b) Rs. 500 000 – Rs.1 000 000
- c) Rs. 1 000 000 – Rs. 1 500 000
- d) Rs.1 500 000 and above

7. Which of the following best describes the major expenditure/investment after your return to Bangalore?
- a) Housing related expenditure (building material/purchasing a house/flat)
 - b) Durable consumption goods (electronic appliance, furniture, etc)
 - c) Other consumption goods
 - d) Providing support to other family members
 - e) Investment on business
 - f) Investment on stock market
 - g) Other expenditures, specify
8. Do you see you or your family much better off than before you went to overseas? YES/NO
Yes. Explain
No. Explain
9. Do you see your ideas having an impact on people around you (e.g. extended family members and relatives)? YES/NO
If yes, explain in what way:
No. Explain why not
10. Have you kept your contacts overseas after your return? YES/NO
If yes, explain in what way and with whom
If no, explain
11. What are the most positive and negative feelings you have about your return?
Positive:
Negative:
12. Do you have any plan to go abroad again? YES/NO
If yes, please write the name of preferred destination countries.
If no, please specify the de motivating factors
13. Given a chance, would you settle down abroad permanently?
14. Have you ever thought of actively taking part in the development process of India?
YES/NO
If Yes, please explain how.
15. Do you think that the next generation would receive the same benefits that you did while working abroad? YES/NO
If yes, please explain.

V. *Relationship with and involvement in diaspora associations*

1. Please write the name and address of the Diaspora's Association with whom you were associated/known overseas.

2. In what manner, these associations are helping to the Indian Migrants? Please tick the appropriate option(s).

- a) Provide a common platform to contact other Indians
- b) To share ideas and thoughts on various issues concerning Asian Indians
- c) To provide a platform to grapple with professional problems
- d) Provide valuable Information related to various jobs, occupations and educational programmes overseas.
- e) Provide valuable information on various developments regarding educational, employment and investment policy concerns at home which may be helpful for the return migrants.
- f) Any other, please specify.

3. Were you a member of any Diaspora Association(s)? YES/NO

If yes, please write the name and address of the association mentioning important activities.

4. Have you ever taken any help from any of the Diaspora Association(s) in India/abroad?

YES/NO

If yes, what kind of help did you take and when?

5. How often you used to attend the meetings of Diaspora Association(s)?

- a) Regularly
- b) Sometimes
- c) Never Attended

6. Have you ever served as an office bearer or a board member for the Diaspora Association(s) YES/NO

If yes, please mention about the post(s) and the responsibilities

Thank you for your co-operation.

ANNEX 2: QUESTIONNAIRE FOR THE STUDY OF OUT-MIGRATION OF HEALTH PROFESSIONALS (DOCTORS AND NURSES) FROM INDIA

The present questionnaire has been designed to collect first-hand information on some selected aspects of medical graduates (doctors and nurses) who are planning to go abroad from India. The major concentration of the items in the questionnaire is on seeking some pertinent information on the prospective immigrants, their knowledge and the perception of the destination countries, particularly in terms of the quality of education, on-the-job-training, employment opportunities, working environment and monetary and non-monetary gains and their perception, knowledge and thinking on the same aspects in the Indian context.

This questionnaire is part of a study which is being conducted to estimate the stocks and flow data of HRST (Human Resources in Science and Technology) in India developed through higher education, on-the-job-training etc. Changes therein, due to their migration overseas are also being estimated for the purpose of looking into the policy concerning international migration of HRST from India. The selection of medical professionals in New Delhi is aimed at looking into the phenomenon of out-migration of doctors, nurses, etc. from India. Keeping this in mind, the respondents are requested to fill in each item of the questionnaire with due care and a sense of responsibility. The information provided by the respondents will be kept fully confidential and will only be used for the aforesaid purpose of research.

Sample survey of doctors in New Delhi

I. *Personal information*

1. Name of the Respondent:

2. Sex: Female Male

3. Date and Place of Birth:

4. Age:

5. Marital Status: Unmarried Married

6. Official Address if any (including telephone number, fax number, e-mail address):

7. Educational Qualification (Graduation and above)

Degree/Diploma/Specialisation	Country/State	Name of the Institution	Year of Completion
Graduation			
P.G.			
Other			

8. If you have got any scholarship/fellowship during your studies, please furnish the details in the following table.

Name of the Fellowship & Awarding Institution	Year of award	Course of Study	Period

9. What were the motivating factors which helped you in choosing this medical profession?
Please tick the most appropriate option.

- Service to the nation
- A well respected career
- Your special aptitude
- Desire to go abroad

II. Decision making about migration

1. Since when you are thinking about going abroad?
2. When are you planning to go abroad?
3. What are your preferred destination(s)? Please write down three most preferred countries.
4. Have you qualified the required tests/examinations for entering into the country?

Yes

No

If Yes, which ones?

5. What are your favourite institutions or hospitals abroad where you wish to study or work?
Please write down the name of at least four institutions/hospitals.

6. When did you come to know about these institutions and how?

7. What is your specialisation?

8. Do you foresee great demand of this particular stream/specialisation in India?

Yes

NO

If No, where this can be best utilised? _____

Do you really think, this specialisation has high demand in the health sector of foreign country?

Please rank the questions no. 9-11 on a 5 point scale according to your preference order, where 1-extremely important; 2-very important; 3-moderately important; 4-not very important and 5-not at all important.

9. Who has inspired/motivated you to go abroad?

- Family
- Friends in India
- Friends Overseas
- Relatives
- Mentor/Your teacher/Senior Doctor
- Yourself
- Career Counsellor
- Any other (please specify)

10. What is your purpose for going abroad?

- To get a job with better training opportunities
- To obtain a specific kind of training not easily available in India
- To get medical experience not easily available in India
- To progress faster in medical profession
- To get employment
- For permanent settlement in the host country
- Project/Research assignments
- Any other (please specify)

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

11. What are the important factors which have helped you in choosing the most favourite destination abroad? Please comment on first three options chosen by you.

- Better income prospects overseas
- Bleak employment prospects in India
- Relatives in the host country
- Quality of day to day life
- To gain experience that would later be highly valued in India
- Higher Education
- Increasing employment opportunities overseas
- Proficiency in English Language
- Conducive immigration and settlement policies
- Lower real earnings in India
- Better infrastructure overseas
- Availability of experts in the concern sector(s) of the host country
- Accessibility to qualitatively better educational institutions for children
- Scope for self employment/entrepreneurship
- Easy access to communication facilities
- Satisfactory health facilities
- If any other (please specify)

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

12. If you are going for higher education/on the job training/employment, for how long do you plan to stay in the host country?

Less than one year

1-2 years

3 years

More than 3 years.

13.1. Are you in touch with any Diaspora/Medical Student association? If yes, please write the name and address of the association(s) including its major activities

13.2 What kind of help is provided/expected by the association to you? Please tick appropriate option(s).

Arranging accommodation overseas

In finding out the suitable University/Institution abroad

In providing a platform to grapple with professional problems

In supplying valuable information related to various jobs, occupations and educational programmes overseas

Social and cultural support

Information related to specific destination abroad

Information related to Employment opportunity

Any other (please specify)

14. Which kind of visa would be obtained by you for abroad?

15. Are there any particular difficulties in pursuing a medical career or getting medical training in India?

Yes

No

If Yes, what kind of difficulties

16. Are you aware about the difficulties that you might have to face in host country?

If Yes, Please write down some of them.

III. *Expectations of prospective emigrants*

1. For how many years do you intend to stay overseas?

2. What specialisation do you hope/prefer to pursue?

3. What kind of job do you expect to take before leaving for abroad?

Medical Officer

Private Practitioner

Medical Assistant

Consultant

Any other (please specify)

4. What other career choice(s) do you have in mind?

Community Medicine

Medical Research

Public Health

Medical Administration

Any other (please specify)

5. What are your expectations about your professional growth abroad as compared to India? Please tick the appropriate option.

- More quickly abroad
- Less quickly abroad
- Almost the same rate of growth in both the countries

6. What do you think about the education, training and experience you are getting in this profession in India? Please tick on the appropriate option.

- Very Satisfied
- Moderately Satisfied
- Dissatisfied
- Moderately Dissatisfied
- Very Dissatisfied

7. Do you think the proportion of outstandingly good doctors is higher among Asians than among others groups of migrants? Yes No

8. What can be the percentage of Indian doctors according to your knowledge?

9. What is your perception about a hypothetical situation where two doctors with comparable qualifications and experience, one of them is educated in India and other overseas, apply for the same job in the same establishment abroad? Please tick the appropriate option and supplement it with explanation.

- Two applicants will be offered the job without discrimination.
- The applicant educated in host country will have higher chances of selection.
- The Indian doctor will have higher chance of selection.

10. How many applications have you filled to get a job or admission overseas so far? Please furnish the name of the institutions wherever you have applied.

11. What do you think about the decision of Medical Council of India which made it mandatory for every overseas-qualified doctor to pass certain examinations before starting his/her career in medicine in India?

12. How do you perceive the credentials of foreign educated doctors and their future in India?

13. If you come back to homeland after few years, how could you invest or contribute to the development of the nation?

14. How can you contribute to the development of nation if you do not plan to come back to the home country?

15. What can be the impact of this decision on next generations when more and more skilled professionals are moving out of the country?

17. Do you think that you will be able to get expected monetary returns in the new country?

- YES
- NO
- Cannot say

18. To what extent are you satisfied with your present rate of salary?

- Very Satisfied
- Moderately Satisfied
- Dissatisfied
- Moderately Dissatisfied
- Very Dissatisfied

19. If a handsome remuneration package is offered, can you move beyond your most favoured destination countries? YES NO

If No, please explain the reason

20. If you want to share anything please write it down here.

Thank you for your co-operation

Sample survey of nurses in New Delhi

I. *Personal information*

1. Name of the Respondent:

2. Sex: Female Male

3. Date and Place of Birth:

4. Age:

5. Marital Status: Unmarried Married

6. Official Address (including telephone number, fax number, e-mail address)

7. Educational Qualification (Graduation and above)

Degree/Diploma/Specialisation	Country/State	Name of the Institution	Year of Completion
Graduation			
P.G.			
Other			

8. If you have got any scholarship/fellowship during your studies, please furnish the details in the following table.

Name of the Fellowship & Awarding Institution	Year of award	Course of Study	Period

9. What were the motivating factors which helped you in choosing this profession? Please tick the most appropriate option.

- Service to the nation
- A well respected career
- Your special aptitude
- Desire to go abroad

II. Decision making about migration

1. Since when you are thinking about going for abroad?
2. When are you planning to go abroad?
3. What are your preferred destination(s)? Please write down three most preferred countries.
4. Have you qualified the required tests/examinations for entering into the country?

Yes

No

If Yes, which ones?

5. What are your favourite institutions or hospitals abroad where you wish to study or work?
6. When did you come know to about these institutions and how?

Please rank the questions no. 7-9 on a 5 point scale according to your preference order, where 1-extremely important; 2-very important; 3-moderately important; 4-not very important and 5-not at all important.

7. Who has inspired/motivated you to go abroad?

- Family
- Friends in India
- Friends Overseas especially other Nurses
- Relatives
- Mentor/Your teacher/Senior Doctor
- Yourself
- Career Counsellor
- Any other (please specify)

8. What is your purpose for going abroad?

- To get a job with better training opportunities
- To obtain a specific kind of training not easily available in India
- To progress faster in medical profession
- To get employment
- For permanent settlement in the host country.

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

9. What are the important factors which have helped you in choosing the most favourite destination abroad? Please comment on first three options chosen by you.

- Better Income Prospects overseas
- Bleak employment prospects in India
- Relatives in the host country
- Quality of day to day life
- To gain experience that would later be highly valued in India
- Higher Education
- Increasing employment opportunities overseas
- Proficiency in English Language
- Conducive immigration and settlement policies
- Lower real earnings in India
- Better infrastructure overseas
- Availability of experts in the concern sector(s) of the host country
- Accessibility to qualitatively better educational institutions for children
- Scope for self employment/entrepreneurship
- Easy access to communication facilities
- Satisfactory health facilities
- If any other (please specify)

Explanation of Rank 1

Explanation of Rank 2

Explanation of Rank 3

10. If you are going for higher education/on the job training/employment, for how long do you plan to stay in the host country?

- Less than one year
- 1-2 years
- 3 years
- More than 3 years.

11.1. Are you in touch with any Diaspora/Overseas Nurse (medical) association? If yes, please write the name and address of the association(s) including its major activities.

11.2. What kind of help is provided/expected by the association to you? Please tick appropriate option(s).

- Arranging accommodation overseas
- In finding out the suitable University/Institution abroad
- In providing a platform to grapple with professional problems
- In supplying valuable information related to various jobs, occupations and educational programmes overseas
- Social and cultural support
- Information related to specific destination abroad
- Information related to Employment opportunity
- Any other (please specify)

12. Which kind of visa would be obtained by you for go abroad?

13. Are there any particular difficulties in pursuing a medical career or getting medical training in India?

Yes

No

If Yes, what kind of difficulties?

14. Are you aware about the difficulties which you might have to face overseas? If Yes, Please write down some of them.

III. Expectations of prospective emigrants

1. For how many years do you intend to stay overseas?

2. What is your specialisation?

3. Does this specialisation highly valued in health sector of host country?

4. Do you have any problem while communicating with patients?

YES

NO

5. What other career choice(s) do you have in mind?

Community Medicine

Medical Research

Public Health

Medical Administration

Any other (please specify)

6. What are your expectations about your professional growth abroad as compared to India? Please tick the appropriate option.

More quickly abroad

Less quickly abroad

Almost the same rate of growth in both the countries

7. What do you think about the education, training and experience you are getting in this profession in India? Please tick on the appropriate option.

Very Satisfied

Moderately Satisfied

Dissatisfied

Moderately Dissatisfied

Very Dissatisfied

8. Do you know anything about the facilities being provided by the foreign hospitals to the nurses?

Yes

No

If Yes, Please write the name of some of the facilities.

9. What is your perception about a hypothetical situation where two nurses with comparable qualifications and experience, one of them is educated in India and the other overseas, apply for the same job in the same establishment abroad? Please tick the appropriate option and supplement it with explanation.

Two applicants will be offered the job without discrimination.

The applicant educated in host country will have higher chances of selection.

The Indian nurse will have a higher chance of selection.

10. How many applications have you filled to get a job overseas so far? Please supply the name of the institutions where you have applied.

11. How do you perceive the credentials of foreign educated/trained Nurses and their future in India?
12. How can you contribute to the development of nations if you do not plan to come back to the home country?
13. If you come back after few years, how would you invest or contribute to the development of the nation?
14. What can be the impact of this decision on next generations when more and more skilled professionals are moving out of the country?
15. To what extent are you satisfied with your present rate of salary?
Very Satisfied
Moderately Satisfied
Dissatisfied
Moderately Dissatisfied
Very Dissatisfied
16. If a handsome remuneration package is offered, can you move beyond your most favoured destination countries? YES NO
If No, please explain the reason
17. Do you think that you will be able to get expected monetary returns in the new country?
YES/NO/Cannot say
18. Comments

Thank you for your co-operation.
