

2008

Migration/mobility and vulnerability to HIV among male migrant workers: Maharashtra 2007-08

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Kumar, K. Anil, Shalini Bharat, Niranjan Saggurti, Ravi K. Verma, Anrudh K. Jain, Saumya RamaRao, Kanchan Mukherjee, Ajay Kumar Singh, and Suvakanta N. Swain. 2008. "Migration/mobility and vulnerability to HIV among male migrant workers: Maharashtra 2007–08." New Delhi: Tata Institute of Social Sciences (TISS) and Population Council.

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**MIGRATION/MOBILITY AND
VULNERABILITY TO HIV AMONG
MALE MIGRANT WORKERS**

**Maharashtra
2007-08**

Migration/mobility of at-risk individuals, particularly the relocation of individuals or frequent visits to other areas for economic opportunity, has been viewed as a strong co-factor in raising HIV prevalence in India. However, little is known in India about the patterns of mobility of at-risk populations, the nature and extent of the interaction among such groups, and the implications of such migration for the HIV epidemic. This lack of understanding has been an impediment in planning effective HIV prevention programmes for these vulnerable populations.

Research to understand the patterns and drivers of migration and mobility of male migrant workers and sex-workers and to examine the links between migration/mobility and HIV risk was conducted in four high HIV prevalence states of India, namely Andhra Pradesh, Karnataka, Tamil Nadu, and Maharashtra. This report presents the findings from the male migrant workers study on volume and patterns of migration and their linkages with HIV risk. The study among male migrant workers in Maharashtra was implemented by the Tata Institute of Social Sciences, in Mumbai and the Population Council, in New Delhi. The report was reviewed by the team at the International Center for Research on Women (ICRW), in New Delhi.

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The Population Council seeks to improve the well-being and reproductive health of current and future generations around the world. The Council's biomedical, public health, and social scientists identify and evaluate responses to the most important population, health, and development issues. Work is focused on three program areas: HIV and AIDS; Poverty, Gender, and Youth; and Reproductive Health.

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Suggested citation: Tata Institute of Social Sciences (TISS) and Population Council. 2008. Migration/Mobility and Vulnerability to HIV among Male Migrant Workers: Maharashtra. Mumbai: TISS.



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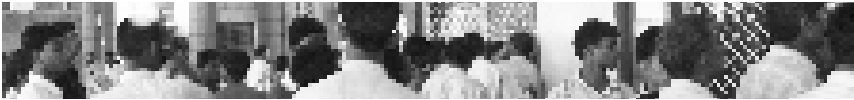
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FOREWORD

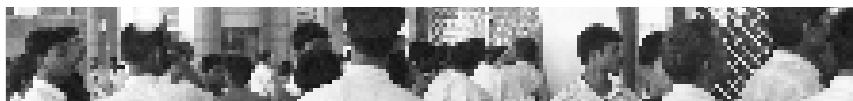
There is a growing recognition of the importance of migration in the spread of HIV infection. However, empirical research in this area has been negligible. Although intrastate and inter-state migration of men is common in India, little is known about their patterns of migration

and the links of such mobility to HIV infection. Consequently, it has not been possible to design programs to prevent the spread of HIV infection in this vulnerable population group.

During November, 2006 - November, 2007, the Population Council undertook a study to examine the patterns of male migration and its links with HIV risk. The goal was to provide evidence to inform the design and implementation of HIV interventions for male migrant workers. The study was undertaken in collaboration with the Tata Institute of Social Sciences, Karnataka Health Promotion Trust, the Annamalai University and TNS India Pvt Ltd. It was conducted in 21 destination districts of four high HIV prevalence states namely Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh.

Ethnographic and survey research methods were employed to collect data on the volume, patterns, and routes of migration, and sexual risk behaviors. Data were collected from over 12,000 male migrant workers. Support provided by Avahan, Avahan's partner NGOs, the National AIDS Control Organisation, State AIDS Control Societies, other international and national organizations, and most importantly from the study participants themselves, was invaluable in conducting this study.

The study documents the volume and patterns of mobility of male migrants within and across districts and across states. It examines the social dynamics within the contract system that employs these men as laborers with the objective of exploring opportunities for implementing programs for the prevention of HIV infection in this vulnerable population. It documents the sexual risk behaviors and addictive behaviors of male migrants. The study shows that there is a clear need for implementing interventions to prevent HIV infection in migrant workers. A majority of these men report symptoms of sexually transmitted infections. They have multiple sexual partners. They report having sex with sex workers and with other women. A notable proportion



report the use of alcohol in conjunction with risky sexual behaviors. Furthermore, their self perception of HIV risk is low and few use condoms. A significant proportion of the men report having sex with women at the worksite indicating the need to provide HIV prevention interventions at the worksite for both men and women. They also report having sex with non-marital partners in the place of origin indicating the need for implementing interventions to prevent HIV infection before they migrate.

The study shows that in a majority of male workers, movement is facilitated by contractors in various occupations. These workers often move within the contract systems along with their male peers. The patterns of mobility within contract systems vary by state. However, there is a hierarchical structure within the system that connects individual workers to the industrial establishments at the state and national levels via groups of contractors. These findings signify that the contract system could provide an important entry-point for implementing HIV prevention interventions for male migrant workers.

This pioneering research study provides important evidence that should be used at both the national and state levels for the design and implementation of program strategies for the prevention of HIV infection in male migrant workers and their partners at the place of origin as well as at the place of destination. This important research-based evidence is valuable for the national and state-level AIDS control organizations of the government to inform the design of policies and implementation of programs. The research findings are also relevant for NGOs and others engaged in programs for the prevention and control of HIV and AIDS.

Dr. Saroj Pachauri MD, PhD.
Regional Director
South and East Asia
Population Council

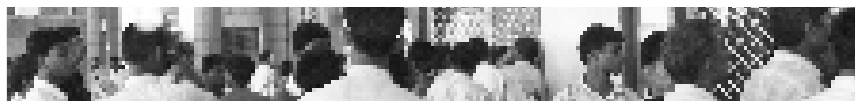
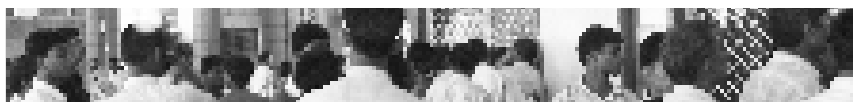


Table of Contents

Acknowledgements	i
Executive Summary	1
I. INTRODUCTION	7
II. STUDY DESIGN AND METHODS	10
2.1 <i>Identification of study areas</i>	
2.2 <i>Characteristics of study districts</i>	
2.3 <i>Quantitative data collection procedure</i>	
2.4 <i>Degree of mobility</i>	
2.5 <i>Definitions of other key variables</i>	
III. PATTERNS OF MIGRATION/MOBILITY	19
3.1 <i>Patterns of mobility</i>	
3.2 <i>Routes of mobility</i>	
3.3 <i>Mobility characteristics</i>	
IV. PROFILE OF RECENT MALE MIGRANTS	31
4.1 <i>Socio-economic and demographic background of recent male migrants</i>	
4.2 <i>Occupations of recent male migrants</i>	
4.3 <i>Exposure to mass media, sex-related materials, and substance use</i>	
V. PATTERNS OF SEXUAL BEHAVIOUR AND VULNERABILITY TO HIV	37
5.1 <i>Sexual behaviour of recent male migrants by background characteristics</i>	
5.2 <i>Migration/mobility characteristics and sexual behaviour</i>	
5.3 <i>Non-use or inconsistent use of condoms in sex with different sexual partners</i>	
5.4 <i>Symptoms of STIs and perception of HIV risk</i>	
5.5 <i>Sexual behaviour along migration routes</i>	
5.6 <i>Knowledge of HIV transmission and prevention</i>	
VI. PROGRAM IMPLICATION AND RECOMMENDATION	51
6.1 <i>Role of contractors/facilitators</i>	
6.2 <i>Connectivity to native place</i>	
6.3 <i>Focus on places of origin</i>	
6.4 <i>Recommendations</i>	
SELECT BIBLIOGRAPHY	57
TABLES	63





ACKNOWLEDGEMENTS

The study on Migration/Mobility and Vulnerability to HIV among Male Migrant Workers was successfully completed during 2007-08. The efforts of a number of individuals who were involved in the study are acknowledged.

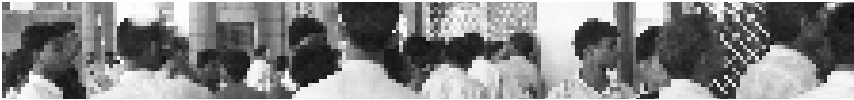
First of all, we are grateful to the Bill & Melinda Gates Foundation for its support for the study through Avahan, its India AIDS Initiative. We are thankful to Mr. Ashok Alexander, Dr. Gina Dallabetta, Dr. Aparajita Bhalla, Mr. Hari Menon, from the Avahan, it's India AIDS initiative of the Bill & Melinda Gates Foundation for their active support and involvement at all stages of the project. However, the views expressed herein are those of the authors and do not necessarily reflect the official policy or position of the Bill & Melinda Gates Foundation and Avahan.

We would like to acknowledge the support of the members of the Technical Advisory Committee (TAC) for their overall guidance in the smooth conduct of the study. The contributions of the members: Dr. Prem Saxena, Dr. P. M. Kulkarni, Dr. Tarun K Roy, Dr. R. R. Gangakhedkar, Dr. Rohini Pande, Dr. Gurumurthy Rangaiyan, Dr. Arvind Pandey, Dr. Rajatashuvra Adhikary, Dr. Shiva S. Halli, Dr. Tobi Saidel, and Dr. Shalini Bharat, were helpful both through their direct involvement in TAC meetings and through interactions with individual members during the various stages of the project. Special thanks are due to Dr. Saroj Pachauri for chairing the Technical Advisory Committee and for guiding us at each stage of the project.

We would like to acknowledge the contribution and support of the research team at the International Center for Research on Women (ICRW) for their review and feedback to the study report.

We thank all the experts who participated in a series of workshops that were organized to prepare qualitative research tools, undertake training of the research teams, plan qualitative data analysis, prepare questionnaires, sample design, and the tabulation plan for the report.

We are thankful to our consultants Dr. Pertti J. Pelto, Senior Anthropologist and Mr. Zaheer Ahmad Khan for their assistance. Special thanks to Mr. V. L. Thomas, Executive Assistant at the



Population Council for his excellent administrative support throughout the study as well as expert assistance in creating the tables, graphs, and formatting the report.

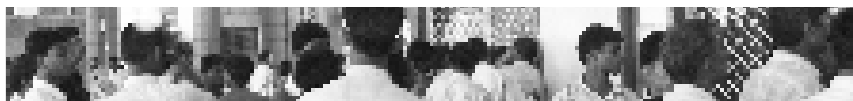
We would like to convey our special thanks to Dr. Ajay K. Khera, Mr. Aslam Naved, and Ms. Lakshmi Murthy from the National AIDS Control Organization (NACO) and the authorities from Maharashtra State AIDS Control Society (MSACS) and Mumbai District AIDS Control Society (MDACS) for their help in facilitating data collection and interpretation.

We thank Mr. Virupax Ranebennur from FHI and Dr. Michele Andina, Dr. Pramod Nigudkar, Mr. Sudipta Mandal from Pathfinder International for their support with data collection in Maharashtra.

We acknowledge the contribution of Mr. Hormazd N. Sethna, Research Officer for his interest and hard work in implementation of the study. We appreciate and acknowledge the untiring efforts of our field research team that included Mr. Shams, Mr. Madan More, Mr. Santosh Vardhan, Mr. Rajiv D. Bobade, Mr. Prashant V. Lonarkar, Mr. Girish D. Giradkar, Mr. Yogesh J. Sabane, Mr. Monishkumar Muley, Mr. Devendra V. Sorte, Mr. Rajesh Kumar Pathak, Mr. Rajit Ram Verma, Mr. Rajaram Jaiswal, Mr. Arvind Kumar Singh, Mr. Bhagwat Singh, Mr. Virendra Kumar Singh, Mr. Ajay Sharma, Mr. Dipak Mallick, Ms. Purna Chandra Das, and Mr. Brijlal Patel.

We thank Prof. S. Parasuraman, Director of the Tata Institute of Social Sciences (TISS) for his continued interest and for providing institutional support for the study. We gratefully acknowledge the administrative, accounts, library and other staff at TISS for their ongoing cooperation during the project period.

Most importantly, we are immensely grateful to the participants of this study who have, without hesitation, given their time and narrated their experiences and views regarding mobility and vulnerability to HIV risk.



EXECUTIVE SUMMARY

Among Indian states, Maharashtra registers a large and increasing volume of migration, especially in-migration from other Indian states. HIV prevalence in Maharashtra is one of the highest among Indian states. The objective of this research is to study the pattern and

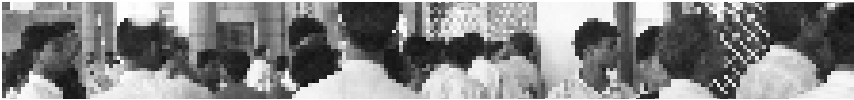
drivers of mobility among male migrants in order to examine the contexts that determine and influence their interface with high-risk activities.

The specific objectives of the study are:

1. to understand the patterns and drivers of migration/ mobility of men who migrate for the purpose of work in the state of Maharashtra;
2. to describe the characteristics of vulnerable sub-populations among migrant men;
3. to examine the determinants of high-risk sexual behaviour among the sub-populations of migrant men with particular emphasis on the role of mobility in determining the sexual risk behaviour.

The study was conducted in five high HIV-prevalence districts of Maharashtra: Thane, Mumbai, Nagpur, Pune, and Nashik. For the selected districts, district-level characterization mapping was done to identify the male migrant worker areas in each district and to estimate the number of male migrant workers and the types of occupations in each district. This information was used to select the study sites in each district. This research used both qualitative and quantitative methods. The qualitative phase of the study was based on key informant interviews, geographical and route mapping for mobile and migrant populations, in-depth interviews, and focus group discussions.

From the five selected districts in the state, 119 key informant interviews, 224 in-depth interviews, and 13 focus group discussions were conducted during the qualitative phase of the study. Mobility maps were drawn for all migrants selected for the in-depth interviews. For the quantitative phase, 11,606 male migrants were contacted from whom 3,062 eligible migrants were selected for individual interviews. The

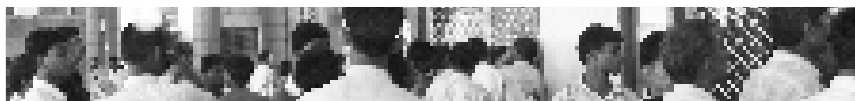


sample selection criteria sought to ensure that the focus is on recent and mobile migrants in the selected districts.

Factory work (47 percent), construction work (28 percent), daily-wage labour (5 percent), stone cutting (5 percent), and *hamali* (loading and un-loading) labour (4 percent) are the five major occupational groups across the five districts of Maharashtra selected for the study. Over half (57 percent) of recent male migrants in the selected districts are youth aged 18-24 years, and 87 percent are below 30 years. About 90 percent of the study sample is literate and 80 percent of the respondents have a secondary education or higher. A majority (80 percent) of respondents are Hindu. Among the respondents selected for the study, 53 percent earn an income between Rs 2001 and 3000 per month. Nearly 4 percent (107 out of 3062) of the male migrants live alone at the current place of residence. Close to 75 percent of recent male migrants in the study districts live alone or in a group of co-workers or friends. Of those respondents who are currently married, 33 percent live with their wives.

The male migrants predominantly come from Uttar Pradesh (38 percent), Bihar (15 percent), Madhya Pradesh (13 percent), Chhattisgarh (6 percent), and Karnataka (3 percent). A lesser volume of migration is reported from Jharkhand, Andhra Pradesh, Orissa, West Bengal, and Rajasthan. International migration from neighbouring countries such as Nepal and Bangladesh is also considerable, especially to Thane and Mumbai. Inter-district migration was considerable, making up 12 percent of the total in-migration into the five study districts. The districts of Maharashtra sending the most male migrants to the five study districts are Gondia (13 percent), Latur (9 percent), Bhandara (7 percent), Nanded (6 percent), and Akola (6 percent). Pune and Nagpur attract the largest number of inter-district migrants, with 199 of the 368 inter-district migrants moving to Pune and 97 to Nagpur.

A vast majority (94 percent) of the respondents interviewed in Maharashtra moved to two places in the last two years. Only about 3 percent of the respondents in Maharashtra state reported that their first move for work was facilitated by a contractor, with no large inter-district variation. This is a noteworthy finding as the common belief is that labour migration is largely facilitated by contractors. In many industrial



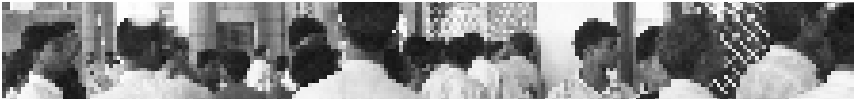
areas the labour contractor has an indirect role in facilitating the migration. When new workers are required, contractors who supply labour to the industries send some of their current workers back to their native places to recruit more workers. The role of contractors is more visible in occupations such as construction work, loading, and unloading.

Better work opportunities (80 percent) and subsequently higher income (59 percent) were the two major pull factors (reasons for moving to the current location) responsible for the respondents moving to their current place of work. The major push factors (reasons for leaving the place of origin or previous place of work) were low wages (44 percent), unemployment and debt (29 percent each), and poverty (23 percent) at the native place or at the previous place of work.

The present study demonstrates strong connectivity with the native place among male migrant workers in Maharashtra. Some 37 percent of the respondents reported returning to their native place once a year. A similar proportion (38 percent) reported visiting their native place a few times (2-4 times) a year. About 69 percent of respondents said that it had been at least four months since their last such visit.

Among currently unmarried migrant workers interviewed, 23 percent said that they had had sex with any partner (a sex worker or non-sex worker, including male or *hijra* [local term for eunuch partners]) during the past 12 months. Seventeen percent reported having had sex with sex workers, and 10 percent reported sex with non-sex workers. Among currently married migrants, only 11 percent reported having had sex with any partner other than their wife. Reported sexual activity among currently married migrants is lower than among unmarried migrants both with sex workers (7 percent) and non-sex workers (5 percent). The most frequently reported partners are sex workers (18 percent among migrants aged 20-24 years and 29 percent among those aged 25-29 years); the extent of sexual activity with non-sex workers is also considerable (9 and 17 percent respectively in the above-mentioned age groups).

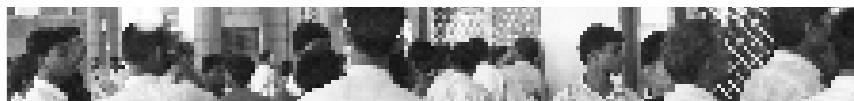
Lower levels of income do not always prevent male migrants from seeking sex. Unmarried respondents with a monthly income of Rs. 2000



or less reported a considerably higher level of sexual activity with all types of partners than those with higher income. This trend holds also for currently married respondents. However, the difference in the extent of sexual activity reported across income groups is much less among currently married migrants than among the unmarried men. Type of occupation can influence the opportunities available to engage in sexual activity. In the study sample, stone cutters show the highest sexual activity for any type of sex partner among respondents who are not currently married (37 percent report having had sex with a sex worker in the last year, 21 percent with a non-sex worker, and 50 percent with any type of partner). Among currently married men in this occupation, sex with sex workers (10 percent) and any partner (16 percent) is higher as compared to men in other occupations. A high level of sexual activity is also reported among *hamalis* (39 percent) and construction workers (25 percent) for both currently unmarried and married male migrants. Among currently married men, construction workers reported higher sexual activity with non-sex workers (10 percent) as compared to other occupational groups.

Some 51 percent of respondents reported *gupt rog* (local term meaning “secret sexual illness”) symptoms, while 36 percent reported STI-like symptoms. Yet only 19 percent of the respondents said that they perceive themselves at moderate/ high risk for contracting HIV. Migrants moving to three or more places in the past two years reported the highest rate of *gupt rog* symptoms (85 percent), 68 percent reported STI-like symptoms, and 39 percent perceived themselves at high/moderate risk for HIV. Respondents who are currently under contract reported considerably higher levels of *gupt rog* and STI-like symptoms (70 and 55 percent respectively). Also perception of high/moderate risk of HIV infection is higher among those under contract (31 percent) as compared to those not under contract (17 percent). Overall the extent of knowledge of male migrants related to routes of HIV transmission and means of prevention is very low, though with considerable inter-district variations.

The fact that there are several significant migrant-sending states spread over India, and over 30 sending districts from within Maharashtra state assumes importance in two contexts. First, the study shows clearly that these male migrants, married or otherwise, retain strong connectivity to



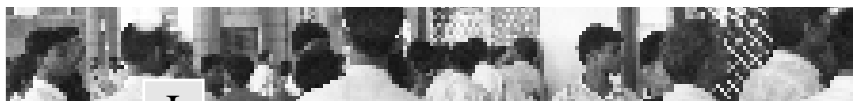
their native villages. Second, the study clearly indicates high levels of sexual activity among migrants; the level of high-risk sexual activity also is significant.

Male migrants perceive that their risk of acquiring HIV infection is low, and their knowledge about HIV transmission and prevention is exceptionally low. Migrants' lack of knowledge may also be seen from the large extent of inconsistent condom use among men who engage in high-risk sexual encounters. It is therefore essential to scale up existing HIV/AIDS programmes and to introduce new programmes to address the high level of HIV vulnerability among male migrants in Maharashtra. The knowledge about HIV is low even in big cities like Mumbai and Thane should be a compelling reason to recognise how such a situation can result in faster spread of the epidemic. In some occupations, for instance among construction workers, about 35 percent of migrants have been under contract at one time or another; indicating the possible extent of coverage if any interventions are to be implemented through contractors.

Given the availability of facilities such as video parlours in some districts which act as hubs for recruiting sex partners, programme planners should target both male migrants and the sex workers they visit. The nature and extent of "hidden sex" in selected districts requires further exploration. The study also found that construction workers frequently engage in both frequent and unpaid sex. This finding requires serious consideration in programme design.

The finding that connectivity to native place is strong among male migrants in Maharashtra makes it imperative to study the situation in the sending districts regarding HIV prevalence and spread. The indication from this study is clear: in the context of high-risk sexual behaviour (among both married and unmarried migrants) and the low levels of knowledge, condom use, and risk perception, the chances of sending households and districts becoming areas of high HIV prevalence are great. It is also necessary to explore further the sexual behaviour pattern in sending areas to obtain further insights into the possible routes of HIV transmission.





I

INTRODUCTION

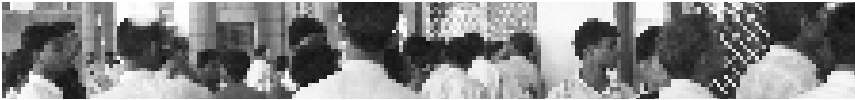
Among Indian states, Maharashtra registers a large volume of migration, especially in-migration from other Indian states. According to the 1991 Census the volume of migration in Maharashtra was 24 million, of which more than 16 million (65 percent) were in-migrants.

The 2001 Census showed that the volume of migration in the state is 42 million, an increase of 75 percent between the two censuses. While the 1991 Census recorded 16 million as in-migrants, in 2001 the number of in-migrants more than doubled, reaching 33 million. Such a large extent of migratory movement along with considerable short-term mobility can have significant implications for the spread of HIV in the state as well as in the states of migrants' origin.

HIV prevalence in Maharashtra is one of the highest among Indian states. The National AIDS Control Organization (NACO) estimated that in 2005 the prevalence rate in antenatal care (ANC) sites of the state was 1.25 percent and that in STD clinics was 10.4 percent, while the corresponding national level figures are 0.88 percent and 5.66 percent respectively (NACO 2006). In 2005, the state accounted for 12.3 percent of all full-blown AIDS cases in India, second only to Tamil Nadu.

According to the NACO estimates, 23 districts in Maharashtra have a prevalence rate greater than 1 percent in ANC sites and seven districts have HIV prevalence higher than 10 percent in STD clinics. Among the high prevalence areas are Mumbai, Thane, Pune, Nashik, and Nagpur, the five districts where this study was carried out. In all five districts, the prevalence rate was higher than 1 percent among antenatal clinic attendees and in three of them (Mumbai, Nagpur, and Pune) the prevalence rate in STD clinics was higher than 10 percent.

The latest available information on HIV prevalence from NACO showed that in 2006, the prevalence rate in Maharashtra among those aged 15-49 years is 0.74 percent, which is the fifth highest among Indian states. Estimated All-India adult prevalence of HIV is 0.36 percent; the prevalence rate among males accounts for 61 percent of all HIV cases.

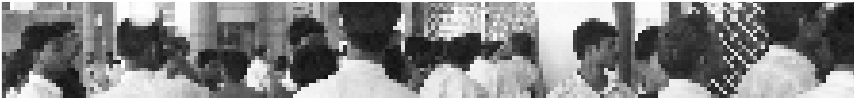


Migration and mobility of individuals could influence the concentration and geographical spread of the disease in the future. As most recent data indicate, a significant proportion of new infections occurs among married women whose husbands are infected with HIV. Studies have found that migrant men are a major source contributing to the spread of HIV to rural areas where the volume of male out-migration for employment is high (Vemuri 2004; UNAIDS 2006). A study in Mumbai found that about 67 percent of the clients visiting the Lamington road and Falkland road red-light areas are migrants or visitors from other districts or states (Anil Kumar 2005).

The India AIDS Initiative, Avahan, supported by the Bill & Melinda Gates Foundation, has placed special emphasis on high-risk populations including female sex-workers to check the spread of the HIV/AIDS epidemic. As part of this effort, the initiative proposed a study on male migrant workers, who are considered as a “bridge population” for HIV transmission from urban to rural communities (Decosas et al., 1995; Chandrasekaran et al., 2006). Examination of the district-level male migration data of the 2001 Census showed that a district's volume of migration has a strong positive association with HIV prevalence among ANC clinic attendees and STD clinic attendees in an ecological analysis (Population Council, 2007). However, without sufficient knowledge about the patterns of movement of male migrants and the nature and extent of their interaction with female sex workers and HIV vulnerability, it is not possible to design intervention programs to reduce risk behaviour of migrant men. The present study was therefore undertaken by the Population Council in partnership with the Tata Institute of Social Sciences (TISS) to answer some of the questions about patterns of migration and mobility among male migrant workers and their interactions with female sex workers in Maharashtra as they relate to the HIV epidemic.

Some of the questions that the study addresses are:

- What types of occupations are migrant men engaged in within the high in-migration districts?
- Which are the districts and states of origin for male migrant workers?

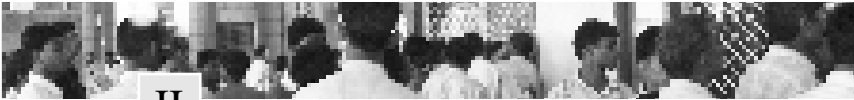


- What are the men's routes of mobility/migration, and how long do they stay in each place?
- What is their connection to their places of origin? What are the reasons that they move/migrate?
- How do they behave sexually where they are living now and how did they behave along their migration route?
- What are their condom-use patterns?
- How do their degree of mobility and other factors relate to their HIV vulnerability and risk?
- What are the structures and dynamics of the migration of male workers (especially in terms of labour contractors)?

The specific objectives of the study are:

1. to understand the patterns of and factors driving the migration/mobility of men who move from their places of origin for the purpose of work in the state of Maharashtra;
2. to describe the characteristics of vulnerable sub-populations among migrant men;
3. to examine the determinants of high-risk sexual behaviour among the sub-populations of migrant men with particular emphasis on the role of mobility in determining such behaviour.





II

STUDY DESIGN AND METHODS

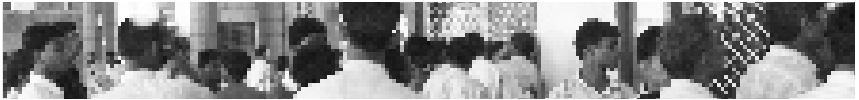
The cross-sectional study design involved the following major steps and engaged both qualitative and quantitative methods as outlined below:

1. Identification of major destination districts, including intermediate destination points of concentrations of male migrant workers,
2. Profiling of destination sites, including intermediate destination sites within each selected district using qualitative research methods; and
3. Gathering of quantitative data at the destination, including data on intermediate destination points.

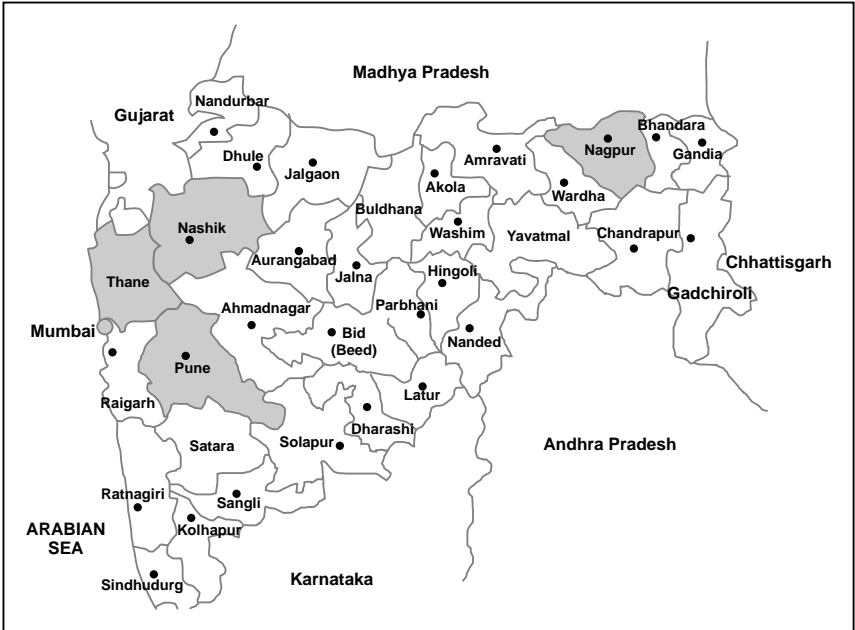
The field work was carried out during October 2006 to August 2007 in two phases: qualitative and quantitative. Before the initiation of field work, Census 2001 data were analysed to identify the districts (also referred to as 'study areas' in the report) that attracted male migrants during 1991-2001. Migrant men from the top five study districts identified in the census data analysis were then characterized using primarily qualitative data followed by quantitative survey.

2.1 Identification of study areas

Major destination and intermediate points were identified using the analysis of Census 2001 data. The 2001 Census of India, like previous censuses, collected information on migration for all individuals by place of birth and last residence. Data on last residence, along with details such as duration of stay at the current residence, provided useful insights for identification of major destination areas for male migrant workers. The top five destination districts in Maharashtra were selected for this study, namely Thane, Mumbai, Pune, Nagpur, and Nashik (Map 1). These districts have a large concentration of migrant workers, as indicated by the census analysis and confirmed by key informants and anecdotal evidence. As noted earlier, these districts also have high HIV prevalence rates. Selected districts also cover a diversity of industrial sectors and occupational groups, along with a varied geography.

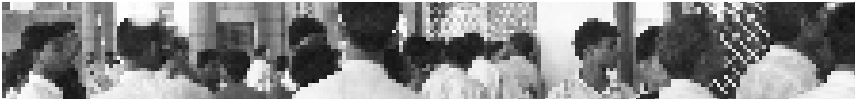


Map 1 : Study districts in Maharashtra



Census 2001 data indicate the population of Maharashtra state as about 97 million with a female-male ratio of 922 (per 1000). Also 57.6 percent of the population live in rural areas. Census data show that 12.6 percent of the total state population (10.4 percent of males and 15.4 percent of females) were born in a district of the state other than the district of enumeration. The data also show that 8.0 percent of the total population of Maharashtra (8.8 percent of males and 7.2 percent of females) were born in a state of India other than Maharashtra.

Thane district has a population of 8.1 million with a sex ratio of 858, second lowest among the selected districts. The majority of the population (73 percent) lives in urban areas. Approximately 10 percent of the population are inter-district migrants, while nearly 25 percent were born in another state.



Mumbai district has a population of 12 million, and the lowest sex ratio (809) of all five selected districts. Mumbai is entirely urban. Inter-district migrants make up 16 percent of Mumbai's population, while 26.5 percent of the population were born in a state other than Maharashtra.

Nagpur district has a population of 4 million, with a sex ratio of 932. Sixty-four percent of the population live in urban areas and the remaining 36 percent in rural areas. Inter-district migrants constitute 11 percent of Nagpur's population, and 11 percent of the population were born in a state other than Maharashtra.

The population of Pune district is 7 million, and the sex ratio is 919. Almost three-fifths of the population (58 percent) live in urban areas. Inter-district migrants make up 20 percent of the total district population, while only 8 percent of Pune district's population were born outside Maharashtra.

The 2001 Census reports Nashik district's population as 5 million, with a sex ratio of 927. Sixty-one percent of the district population reside in rural areas. This is different from the other four selected districts where urban population outnumbers the rural population. Inter-district migrants constitute 12 percent of the total population of the district, while only 3 percent of the total district reported being born in a state other than Maharashtra.

Census 2001 data for Maharashtra show that there are over 6 million male migrant workers in the state. Just over 7 percent who state work/employment as the reason for migration have been residing in the current place of enumeration for less than one year, with 2.8 percent reporting inter-district migration and 2.5 percent reporting inter-state migration. Also, 22.4 percent who state work/employment as the reason for migration have been residing in the current place for 1-4 years, with 6.5 percent reporting inter-district migration and 9 percent reporting inter-state migration. This shows that nearly 30 percent of male migrants in Maharashtra who report work/employment as their reason for migration are fairly recent migrants (duration less than five years).



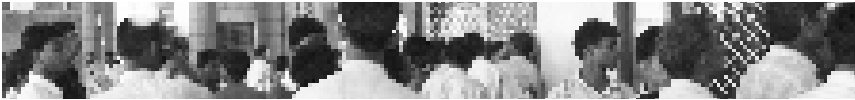
2.2 Characteristics of study districts

The first phase of research after the census data analysis and district selection was a profiling of selected districts. The purpose was to map sites within each district where male migrant workers either work or reside, estimate the number of men working at each site, the types of occupations they are engaged in, their places of origin, existence of HIV programs, and the local economy of the site. Rural, urban, and industrial areas were identified, along with occupational categories. To obtain this information, discussions were held with officials of various government departments, NGO functionaries, police officials, and heads of professional associations. In addition, at each identified site, interviews were conducted with individuals knowledgeable about male migrant workers such as labour union leaders, local association leaders, contractors, industry security men, and NGO staff. This information was used to select the study sites in each district.

Site selection criteria for each district included:

- High volume of male in-migration
- Evidence of HIV-related high-risk activity
- Diverse occupations of migrants
- Rural/Urban/Industrial setting
- Proximity to highways and railway stations

The district-level descriptions helped to identify 72 small and large male migrant worker sites and included construction labourers, industrial labourers (loom industry, steel industry, coal industry, garment factory, other small industries like pottery, leather, farzan/ snacks, etc.), daily wage workers, stone cutters,abela (musical instrument) workers, hamalis, jewelry craftsmen, matadi workers, drivers of LMV (e.g., rickshaws) and HMT (e.g., tractors, and trucks), etc. Of the 72 sites profiled, 37 were selected for the study. These lists of sites were used to prepare a list of primary sampling units (PSUs) with each PSU covering an estimated 5,000 male migrant workers. PSUs were formed by combining small areas or by segmenting the large areas such that each PSU has approximately 5,000 male migrant workers. A total of 55 such PSUs (referred to as 'study sites') were selected randomly for both qualitative and quantitative research.

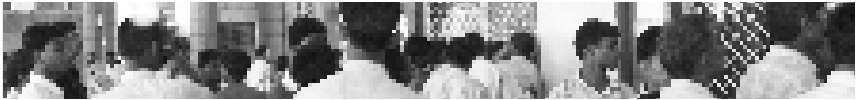


The qualitative data were gathered in three stages. Firstly, a description of study sites within each district was generated through interviews with local key informants (including migrant men) to map the physical locations for migrant men and locations where men access video parlours and sex workers, and to develop a profile of migrant men working or residing in different locations and their mobility patterns. Secondly, in-depth interviews were conducted with selected migrant men to generate individual mobility maps and information on their life style and sexual behaviours. Thirdly, group interviews were held with migrant men based on occupational groupings and/or places of origin to understand group mobility and the facilitating factors.

The purpose of this qualitative research was two-fold: (1) to identify individual, community, and structural factors which determine the migration of male workers and influence their sexual risk and vulnerabilities; and (2) to inform the sampling frame within each PSU for the quantitative survey. A total of 356 interviews, including key informant interviews (119), in-depth interviews (224), and focus group discussions (13), were carried out in the five study districts. All interviews were conducted with purposive selection of respondents to cover individuals from a range of occupations in which migrant men engaged in each study district. All interviews were conducted after taking written or verbal (if the respondent was not willing to sign or could not read/write) informed consent from study participants.

Key informant interviews were conducted with two different kinds of informants. The first group consisted of persons working in the field of HIV/AIDS, and experts who have an in-depth knowledge of migration patterns and the relationship between migration and HIV vulnerability, to gather information based on their research or based on their close interactions with mobile and migrant groups. The other group included prominent persons within the migrant population, older migrants, social workers, and labour contractors.

After gaining an understanding of each selected site and characteristics of male migrants, the selected types of migrant men were interviewed in-depth to understand the process of their migration or mobility and its linkage with sexual behaviours. With all the in-depth interviews, the mobility route mapping was done to understand the dynamics of the



migration patterns. Through this exercise, information was elicited on the movement of migrants and mobile persons from one setting to another. Further, this permitted identification of pre- and post-mobility characteristics of individuals and groups and how these influence risk behaviours. The route mapping exercise specifically focused on identifying aspects that directly correlate with a person's mobility and/or migration and how the process of movement per se determines vulnerability to HIV.

Group discussions were conducted with mobile and migrant groups that represent the selected patterns of mobility and migration. Eight to ten migrant men belonging to a particular skilled occupation or place of origin were interviewed to understand the dynamics of group mobility and associated characteristics.

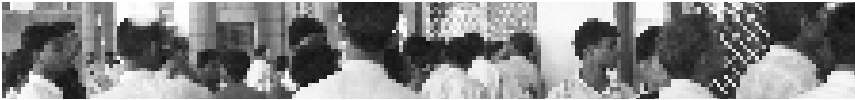
The qualitative data were gathered by a team of 12 experienced and specially trained male investigators. The information from key informants, in-depth interviews, and mobility maps were collected in Hindi/Marathi (both are common languages used in Maharashtra). These interviews were translated into English, and coded with the help of Atlas.ti, a computer-based text-search program (Muhr, 1997).

2.3 Quantitative data collection procedure

The purpose of the survey research was to examine quantitatively the relationship between migration/mobility-related factors and sexual risk behaviour of men. For this purpose, a male migrant worker was defined as an "eligible respondent" and included in the study if he

- a) Had moved to current place for work in the previous two years
- b) Had visited two or more places for the purpose of work in the previous two years.

The study was confined to consenting male migrant workers 18 years of age and above.



2.3.1 *Sample size*

To examine the relationship between degree of mobility and sexual risk behaviour among recent male migrants, it was decided to conduct 3,000 interviews from the selected districts of Maharashtra, which is sufficient to estimate the sexual risk behaviours according to the degree of their mobility. A total of 11,606 men were approached at selected PSUs and screened for eligibility as defined above for detailed survey. Thus, 26.4 percent ($n=3,062$) of men contacted from the male migration study sites had moved to the current destination in the last two years and visited at least two places for work in the last two years.

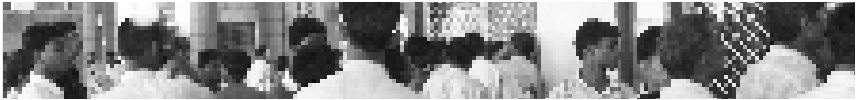
2.3.2 *Sampling design*

In each PSU, the study adopted two types of sampling procedures for selecting migrant men. Male migrant workers who could be located in residential colonies (either organized labour colonies or illegally occupied land where small hutments were made for living) were selected using a two-stage systematic sampling procedure. First, a sketch of the area was drawn on paper and the lanes, small pockets, and areas within each larger area were listed. The sub-lanes or small areas were selected systematically from the lists in the first stage. In the second stage, the required number of houses was systematically selected after the number of intervals was determined.

For the selection of migrants at the workplace, a facility-based procedure was used. If the facility listed their male migrant workers, the lists were used to select the men for interview systematically. Otherwise, men were selected from the areas where they work or loiter.

The selected men were screened to collect information on age, place of birth, duration of residence in the current location, number of places to which they had moved for work in their lifetime, and number of places to which they had moved for work in the past two years. This information was used to estimate the extent of male migration in each district.

The survey instrument included: a socioeconomic and demographic profile, questions concerning the man's living conditions, media exposure, lifestyle, support services, migration/mobility history, his



connection to his place of origin, his sexual behaviour, including sexual activities with sex workers, with a regular or casual partner, and with his spouse if he was married, his current and past condom use, sexually transmitted infections, and knowledge of and risk perception concerning HIV/AIDS.

Men who were eligible on the basis of the screening tool were asked to give consent to participate in the extended version of interview. Those eligible for individual interviews were surveyed using a structured interview schedule.

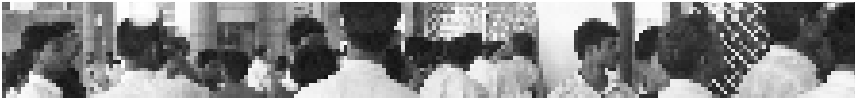
Quantitative surveys in all study areas were carried out by 18 trained and experienced male interviewers. Interviewers were specially trained in the ethical conduct of interviews. Data quality was ensured through a supervisory structure that provided regular feedback in the field and also ensured data cleaning in the office and, if needed, revisits to the field. Data processing operations carried out included data editing, entry, quality checks, cleaning, and tabulation. Statistical Package for Social Sciences (SPSS) was used for data consistency checks and analysis.

2.4 Degree of mobility

Because this study did not compare migrant and non-migrant men, a variable “degree of mobility” was constructed with two categories: migration to two locations or to three or more locations. The other indicators of mobility used in the study are: stayed overnight away from home while at current place in the last one month (no, yes); commutes between work place and residence but did not stay overnight away from home in the last month (no, yes); and moved into current place under contract (no, yes).

2.5 Definitions of other key variables

Measures of sexual risk behaviours were derived from responses to items in the interview schedule. Respondents were asked to indicate their exposure to sex behaviour in their life time (ever) and in the last 12 months (present). The types of sex behaviour included sex with a sex worker and sex with either a regular or casual un-paid sex partner in the



last 12 months. In addition, respondents were asked to indicate the number of their sexual partners in the past 12 months, and the response was coded as one or more pre- and extramarital sex partners or no partner in the past 12 months. Questions were asked about whether the respondent had had sex with sex workers or other partners in each of the places they had moved to in the past two years, and in their place of origin. This response provided a count of the number of places where men had had sex in the past two years and were tabulated by respondents' type of occupation and contractual system.

In further analysis to measure HIV program coverage among men with work contracts, all migrants were divided into the following groups: men who were never under contract, men under contract at their first move but not currently under contract, men currently under contract but not under contract at their first move, and men under contract on both occasions. The last three categories of this variable were combined to create two categories (ever contracted, never contracted) to determine the percentage of men who might be covered by the HIV-prevention program if the contract systems were to be targeted, and the respondents were cross-tabulated by their socio-demographic and economic characteristics.





III

PATTERNS OF MIGRATION/ MOBILITY

Responses to the screening questionnaire from the men recruited for the study (N = 11,606) generated an estimate of the number of recent male migrants in each district.

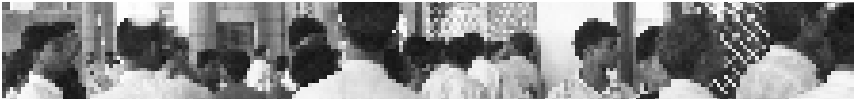
Slightly more than one-fourth of the men interviewed using the screening tool were found to be living in their current location for less than two years and had moved to at least two different locations in the past two years (see Table 1). This subpopulation, referred to as “recent male migrants” in the report, is larger in Nashik, Pune, and Mumbai than in Thane and Nagpur Districts. Most of these men are 18 to 29 years old. Men in this age group tend to be more mobile than others.

Following the administration of the screening schedule, men who moved to at least two locations in the past two years for work and whose current location is not their native district were selected for a comprehensive interview on mobility and HIV vulnerability. Of the 11,606 men screened during the sampling procedure, 3,062 were found eligible for the in-depth survey questionnaire. The information presented below refers to this subpopulation of recent male migrants.

3.1 *Patterns of mobility*

Twelve percent of male migrants migrated within Maharashtra. The remaining 88 percent of the male migrants are inter-state migrants, and the states that are most connected to Maharashtra in terms of migration (see Table 1a) are:

- **Uttar Pradesh** (37.5 percent): Allahabad, Azamgarh, Bahraich, Ballia, Balrampur, Barabanki, Basti, Deoria, Faizabad, Fatehpur, Ghazipur, Gonda, Gorakhpur, Jaunpur, Kanpur, Kushinagar, Mau, Pratapgarh, Rae Bareli, Sant Kabir Nagar, Sidharth Nagar, Sultanpur, Varanasi
- **Bihar** (15.4 percent): Araria, Aurangabad, Bhagalpur, Buxar, Gaya, Gopalganj, Kathihar, Madhubani, Munger, Muzaffarpur, Nalanda, Patna, Purnia, Samastipur, Siwan
- **Madhya Pradesh** (13.1 percent): Balaghat, Jabalpur, Mandla, Raisen, Rewa, Satna, Sidhi



- **Chhattisgarh** (5.9 percent): Bilaspur, Dantewada, Durg, Rajnandgaon
- **Karnataka** (3 percent): Belgaum, Bijapur, Gulbarga

The other states and districts accounting for at least 1 percent of male migrants to Maharashtra are:

- **Jharkhand** (2.8 percent): Deogarh, Giridih, Godda, Hazaribaug, Palamau, Ranchi
- **Andhra Pradesh** (2.7 percent): Guntur, Krishna, Mehbubnagar
- **Orissa** (2.4 percent): Baleshwar, Cuttack, Kalahandi, Puri
- **West Bengal** (2.1 percent): Haora, Hugli, Nadiya, Puruliya
- **Rajasthan** (1.9 percent): Jaipur, Jaisalmer, Kota

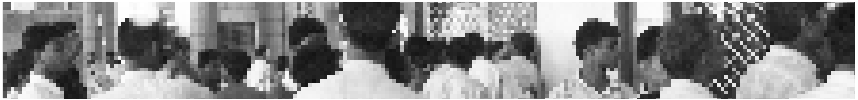
The five study districts of Maharashtra attracted migrants from 33 districts within the state.

Out of the 3,062 eligible respondents interviewed, 368 (12 percent) reported their place of origin being within Maharashtra state (see Table 1b). The districts of Maharashtra sending the most male migrants to the five study districts are Gondia (13 percent), Latur (9 percent), Bhandara (7 percent), Nanded (6 percent), and Akola (6 percent). Pune and Nagpur attract the largest number of inter-district migrants, with 199 of the 368 inter-district migrants moving to Pune, and 97 to Nagpur. Mumbai (16) and Thane (19) districts attract the fewest inter-district migrants.

The districts most connected to the five study districts are as follows:

- **Thane district:** Nanded, Parbhani, Ratnagiri, Jalgaon, Nagpur
- **Mumbai district:** Nagpur, Latur, Pune, Satara
- **Nagpur district:** Gondia, Bhandara, Chandrapur, Amravati, Wardha
- **Pune district:** Latur, Akola, Beed, Nanded, Usmanabad
- **Nashik district:** Ahmadnagar, Dhule, Jalgaon, Jalna, Raigarh

Besides a large inter-state and inter-district male migration, the data have revealed some of the important patterns of intra-district male migration/mobility. An illustrative case from Thane district where people

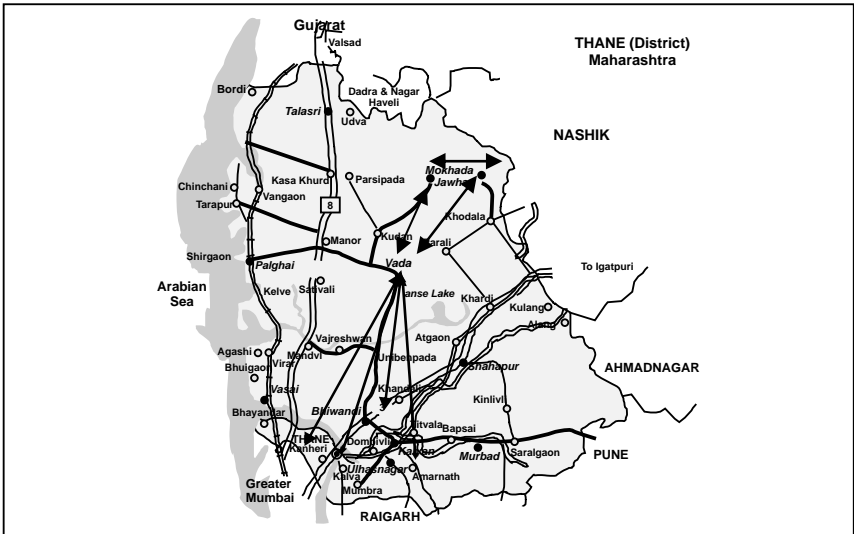


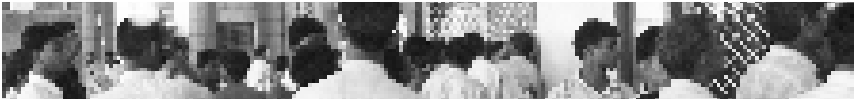
from neighbouring talukas move to a place called 'Vada' to engage in brickmaking work is shown in Box 1 and Map 2.

Box 1: An example of intra-district mobility-Thane district

The brick-making industry has its own local enterprise in the Vada taluka. Local contractors hire people from within the district (even if from different talukas). Local farmers often run into debt when they do not get a sufficient yield of crop. So the brick manufacturing contractors give them loans to pay off their debt. As a way to repay these loans, the farmers work as bonded labourers for the contractors after the completion of the monsoon and farming season. All the brick manufacturing contractors and their bonded labourers come from Thane district. The bonded labourers stay in temporary shelters at the worksites where the bricks are manufactured. They come to the worksites with other members of their family who also help in the work and thus to repay the loan. Once a week they travel to the nearby village marketplace to purchase their weekly provisions and also for entertainment. The bricks manufactured in this way are then sold to construction contractors, who provide their own trucks for transporting the bricks to the work site.

Map 2 : Illustration of intra-district mobility in Vada taluka (Thane district)

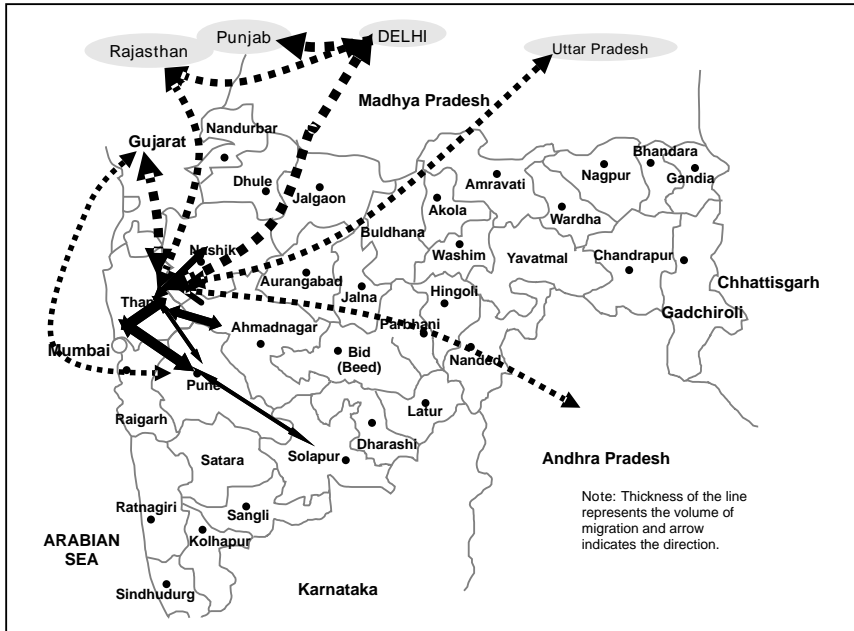




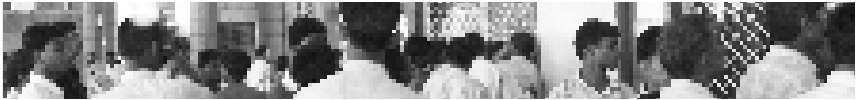
3.2 Routes of mobility

Data on the current place and previous two places were used to construct common mobility routes for migrant men. These routes of mobility are presented visually in the maps. The thickness of the line represents the volume of male migrant workers and arrows indicate the direction of mobility. The dotted lines indicate inter-state movements, and the solid lines indicate inter-district movements within the state.

Map 3 : Routes of mobility of recent male migrant workers currently in Thane District

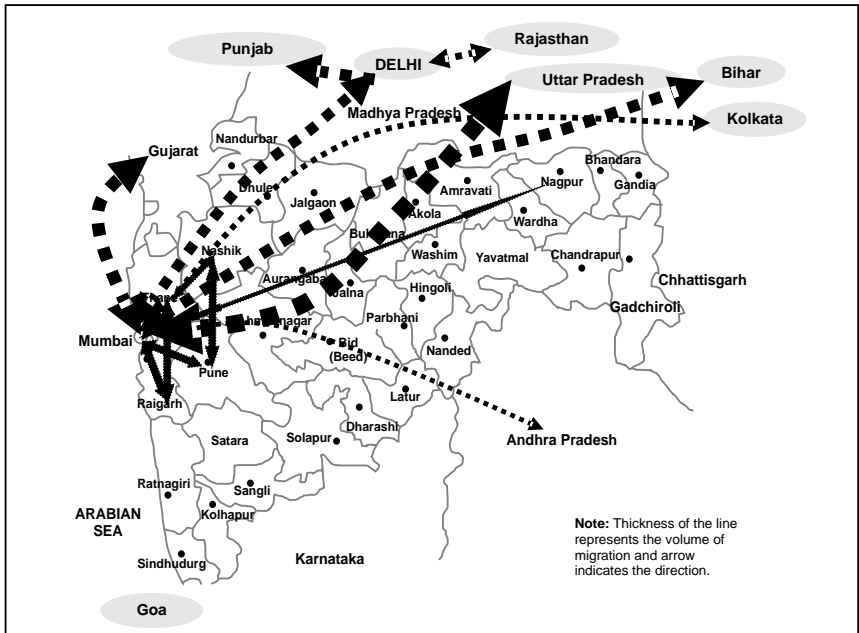


Map 3 indicates that the mobility of recent male migrant workers in Thane district was largely inter-state. During the past two years, two-thirds of the recent male migrants made work-related moves to the states of Delhi, Punjab, Gujarat, Rajasthan, and Uttar Pradesh. The map also suggests two strong patterns of recent male migrant

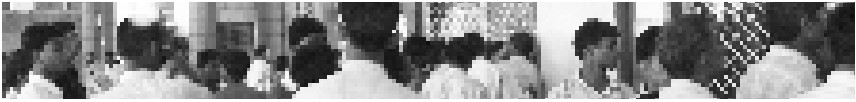


movement: one is between Thane, Delhi, and Punjab; the other between Thane and Gujarat. About one-fourth of the recent male migrant workers who moved between districts in Maharashtra went to Mumbai, Pune, Ahmednagar, and Nashik.

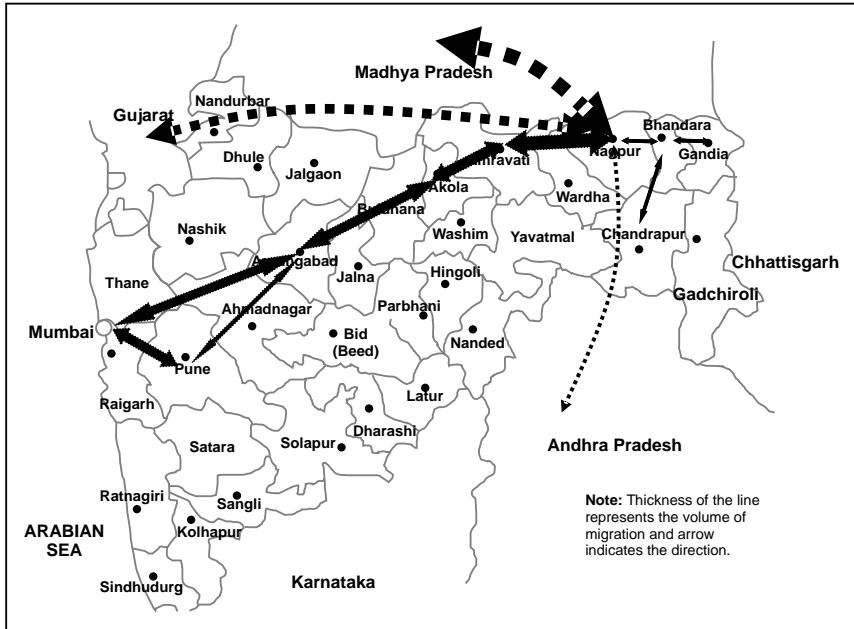
Map 4 : Routes of mobility of recent male migrant workers currently in Mumbai district



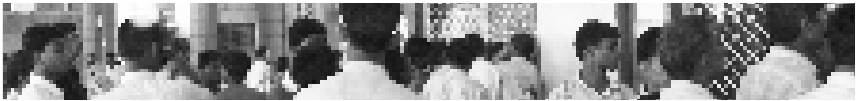
Almost three-fourths of the recent male migrant workers in Mumbai district reported inter-state mobility for work purposes (Map 4). The majority of these men went to the states of Uttar Pradesh, Bihar, Delhi, Rajasthan, and Gujarat. The strong pattern of inter-state mobility is a unique characteristic among male migrants in Mumbai. Men travel to those states (in some cases their places of origin) especially during specific seasons to work in agriculture.



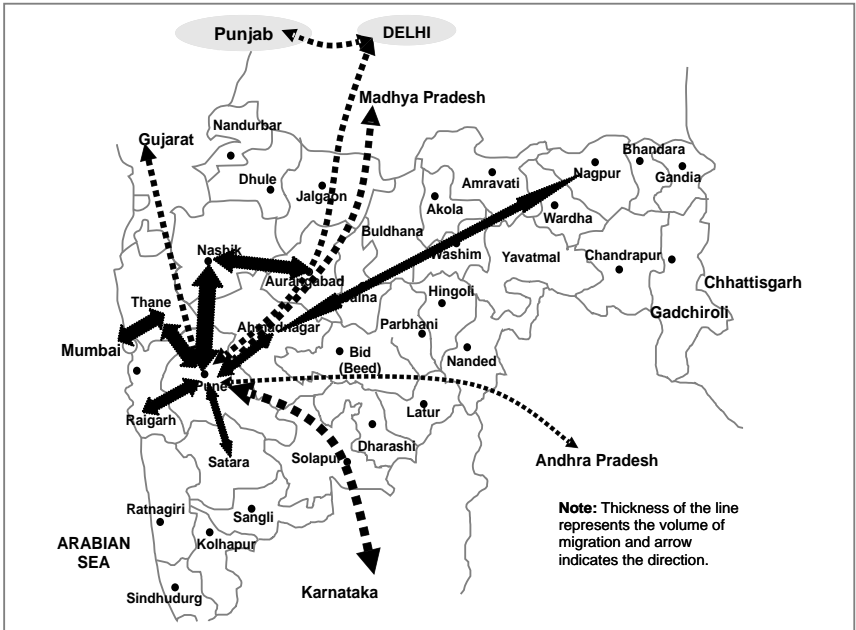
Map 5 : Routes of mobility of recent male migrant workers currently in Nagpur district



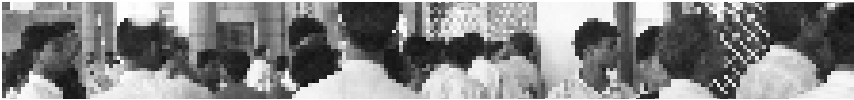
Map 5 suggests that almost two-fifths of the recent male migrant workers in Nagpur district moved to the neighbouring districts of Bhandara, Gondia, Chandrapur, Amravati, and Akola for work purposes. The map also suggests that recent male migrant workers moved along the route from Nagpur to Amravati, Akola, Aurangabad, Mumbai, and Pune. About one-fourth of the recent male migrants came from or moved to the states of Madhya Pradesh and Gujarat.



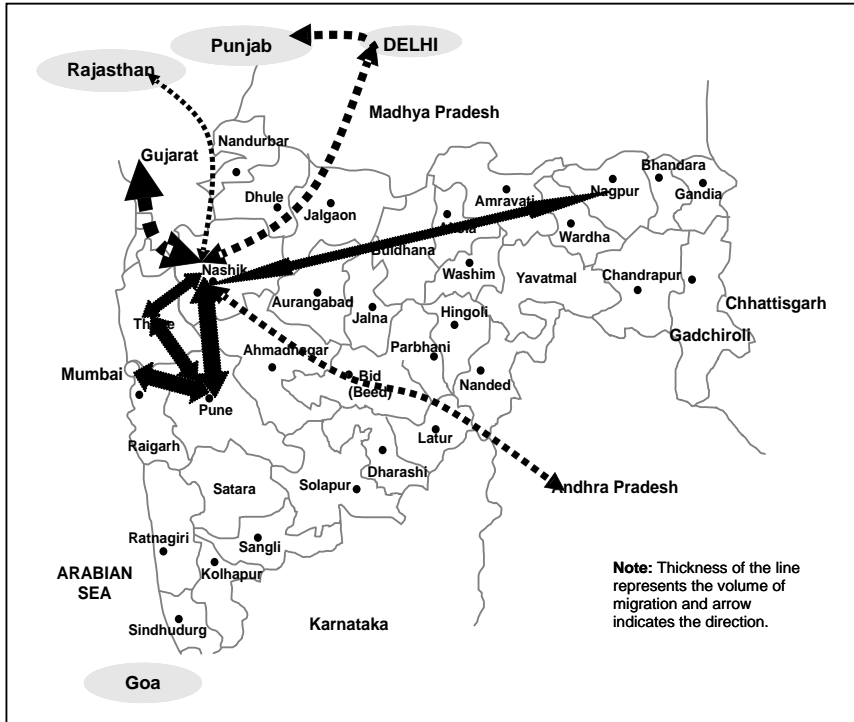
Map 6 : Routes of mobility of recent male migrant workers currently in Pune district



Half of the recent male migrants in Pune reported that they had been to the districts of Nashik, Aurangabad, Raigarh, Thane, and Mumbai (Map 6). The states to which recent male migrants went for work in the past two years include Karnataka, Madhya Pradesh, Delhi, Punjab, and Gujarat. The map suggests a strong inter-district movement among recent male migrants in Pune rather than inter-state movement.



Map 7 : Routes of mobility of recent male migrant workers currently in Nashik district



Map 7 indicates that one-third of the recent male migrant workers in Nashik moved to the states of Gujarat, Delhi, Punjab, and Andhra Pradesh; and a similar percentage have moved to the districts of Pune, Mumbai, Thane, and Nagpur within Maharashtra state. The map also suggests that a strong connectivity in work options for men exists between the districts of Nashik, Thane, and Mumbai and the state of Gujarat.



3.3 *Mobility characteristics*

The survey collected information from recent male migrant workers on their mobility routes, patterns, reasons, and facilitators. Varying patterns of mobility are found among men who travel for work. Their pattern of mobility varies from changing workplaces every few months to staying for years in one place. Some men spend a few nights per month away from their regular residence for work, while others commute on a regular basis between their places of residence and their places of work.

A vast majority (94 percent) of recent male migrants moved to two or fewer places in the last two years (Table 2). A possible explanation for low mobility is that inter-state migrants make up 88 percent of the total migrants interviewed in the five study districts. Also, job avenues within districts of Maharashtra could be restricting movement of migrants, especially in the case of inter-state migrants who may not necessarily have to leave the current district to seek employment.

One-third of the recent male migrants reported staying away from home overnight for work at least once in the last month. Staying away from home overnight was least prevalent among respondents in Mumbai (13 percent) and most among respondents in Nashik district (55 percent). About half of respondents reported having to commute daily between residence and work. Among those who commute to work, a large fraction (68 percent) commute only a short distance within the same city or block.

Table 3 presents data on the “pull factors” (reasons for coming to the current place) and “push factors” (reasons for leaving the place of origin or previous place of work). Better work opportunities (80 percent) and subsequently better income (59 percent) were the two major reasons for coming to the current place of work, as mentioned by the respondents (Figure 1).

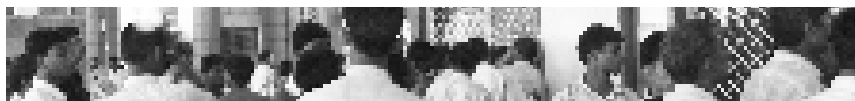
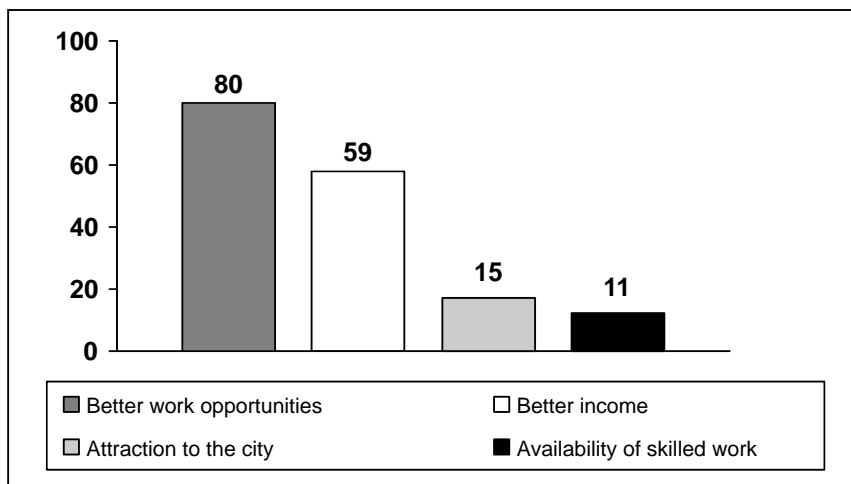


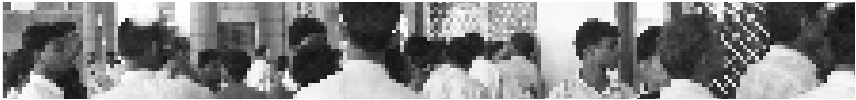
Figure 1 : Reasons for moving to the current place (pull factors), Maharashtra state, India, 2007



Attraction to the city was the third largest pull factor at 15 percent for the state, reported mainly in Thane (30 percent) and Mumbai (31 percent) districts. Availability of skilled work is an important pull factor in Thane district (27 percent), particularly in loom work (in Bhiwandi) and in the steel rolling mills and other industrial factories of Wada-Kudus and Boisar.

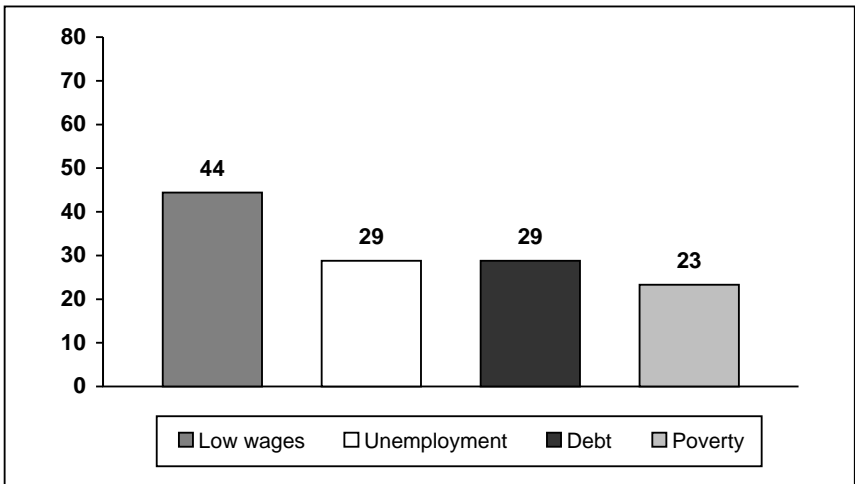
Movement of the contractor was also cited as a pull factor in Nashik district (23 percent), among labourers employed in road construction work in Chandwad block. The role of economic factors in facilitating male migration is evident from the following response from a key informant:

“Ninety nine percent of people come to earn livelihood. Because there is no work available back home, we come here. Here we are able to arrange for our livelihood with ease, because it takes just 15 days to learn how to operate a loom and earn a decent pay.” (Key informant, 32 year old, married respondent STD telephone booth operator from Eastern Uttar Pradesh, in Bhiwandi, Thane district. Education: Maulana)



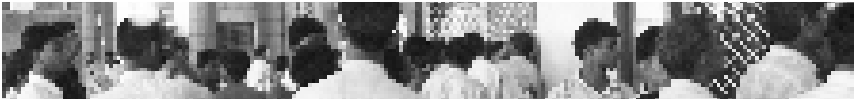
The major push factors observed were low wages (44 percent), unemployment and debt (29 percent each), and poverty (23 percent) at the native place or at the previous place of occupation (Table 3 and Figure 2). These factors force men to leave their places of origin and previous places of employment and come to the current place in search of employment. The role of these push factors is fairly consistent across the five districts.

Figure 2 : Reasons for leaving previous place (push factors), Maharashtra state, India, 2007



The following quotation from an in-depth interview in the Kurkumbh site of Pune district aptly illustrates the various factors influencing a male migrant's mobility, as well as his connectivity to the native place:

"My family stays in Jhumri village in Jharkhand. I left home 4 years ago in search of work. I first went to Kalyan, Thane district, where I worked as a construction worker for one year. I came here to Kurkumbh, Pune district, two months ago. I was brought here by a contractor along with ten other people. The same contractor took me and nine other people to Mumbai, where we worked for one year. After that work was over I returned to my village in Jharkhand and



helped do some farming work. Whenever my work is over, I return to my village and get involved in farm work. I have not returned home since coming to Kurkumbh two months ago. My village is 1400 km from Mumbai. One has to change transport at many places to reach my village from here. I will go to my village during the farming season. I am not very happy with work here and like to stay back at the village but the wages out there are very low.” (This in-depth respondent in Kurkumbh, Pune district, is a construction worker. He is 25 years old and married, and has a 6th standard education. He comes from Jhumri Dongri Village of Jharkhand.)

The above case also illustrates male migrants' mobility resulting from unstable work conditions, gaps in work, and changes in work status, factors that also influence connectivity with native place. The quote below from an in-depth interview in Malegaon block of Nashik district illustrates the facilitators of migration and the connectivity of male migrants to their native place:

“I have been working here for the past 5 years. I came here with my cousin brother (son of my father's brother)... My village is Sitamarhi in Pratapghar district in the state of Uttar Pradesh. There are 13 members in my family. I have 8 brothers and 3 sisters. I am the eldest in the family. My father does agriculture work. My family owns about 20 bigha of land, on which my family is dependent. Two of my sisters are married and they stay with their in-laws. My younger brothers and sister are studying currently. After my 10th education, I started working in the farms. I used to get about Rs 600 per month. This money I used to give to my family. I worked in the village for 2 years. Once, my cousin brother who was working here came to the village and that's when I was accompanied to come here... I stay with his family and eat also with them. I work here in theloom. I get a salary of Rs 3200 out of which I give Rs 1000 to my cousin for food and lodging... I go to my village only once a year. I stay in my village for about 1-2 months. There I work in the agriculture field and take rest at home. I also meet my relatives and friends.” (The in-depth respondent is a loom worker in Malegaon block of Nashik district. He is 23 years old, single, with a 10th standard education.)



IV

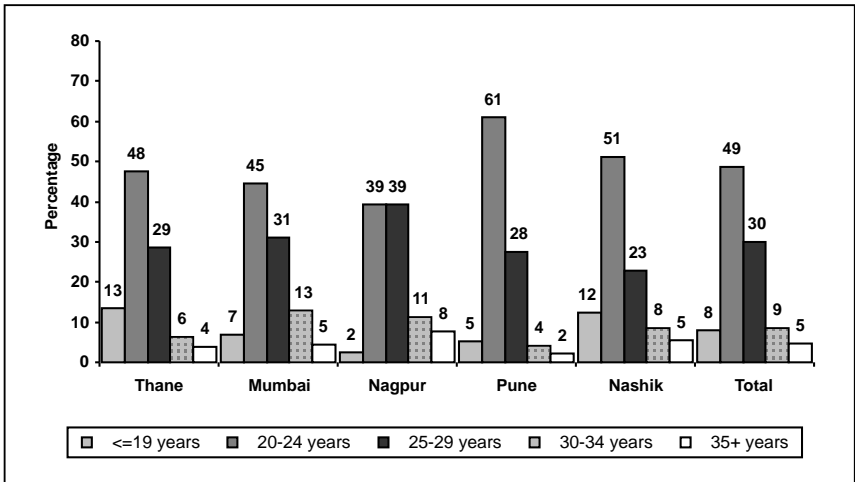
PROFILE OF RECENT MALE MIGRANTS

4.1 Socio-economic and demographic background of recent male migrants

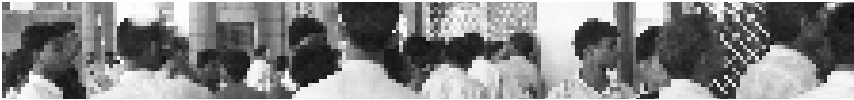
4.1.1 Socio-demographic characteristics

Over half (57 percent) of recent male migrants in the selected districts are in the age group of 18-24 years (Table 4). More than four-fifths of the migrant men interviewed in the survey are below 30 years of age (Figure 3). Age distribution of migrants is similar across the study districts.

Figure 3: Age distribution of male migrant workers in study districts, Maharashtra state, India, 2007



About 90 percent of the respondents were literate, with 60 percent reporting a secondary level education. Literacy among recent male migrants is highest in Nagpur (96 percent) and lowest in Mumbai (81 percent). A large majority (83 percent) of the respondents belong to Hindu religion. More than one-third (36 percent) belong to scheduled castes or tribes. Half of the respondents are currently married, only



one-third of whom reported that their wife is living with them in the current destination area. There are variations across the five districts, with only 6 percent of currently married migrants in Nashik and Mumbai districts and 88 percent in Nagpur district reporting living with their wife. The notable feature is the very high level of separation from wives, reported in Thane, Mumbai, and Nashik districts.

4.1.2 Living arrangements

About three-fourths of the respondents in the study districts live alone or with a group of co-workers or friends, while 7 percent live with relatives, and 16 percent live with their wife. Thane, Mumbai, Pune, and Nashik follow the trend showing higher proportions of recent male migrants living alone or with friends (varying from 80 to 94 percent). However, Nagpur shows a different pattern, with half of the respondents reporting living with their wife, while 38 percent live alone or with friends. A possible explanation for this exception to the general pattern is that a large majority of the migrants interviewed in Nagpur are from the neighbouring states of Madhya Pradesh and Chhattisgarh and another 15 percent are from the districts of Maharashtra, making it easier to bring their family along with them.

4.2 Occupations of recent male migrants

The large majority of migrant men in Maharashtra reported working in factories (47 percent) and at construction sites (28 percent). Other types of occupations in which mobile recent male migrants are engaged include daily wage work (5 percent), stone cutting (5 percent), *hamali* (loading and un-loading) labour (4 percent), and hawkers (4 percent) (Figure 4).

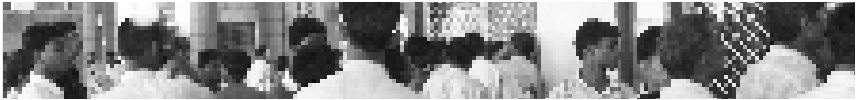
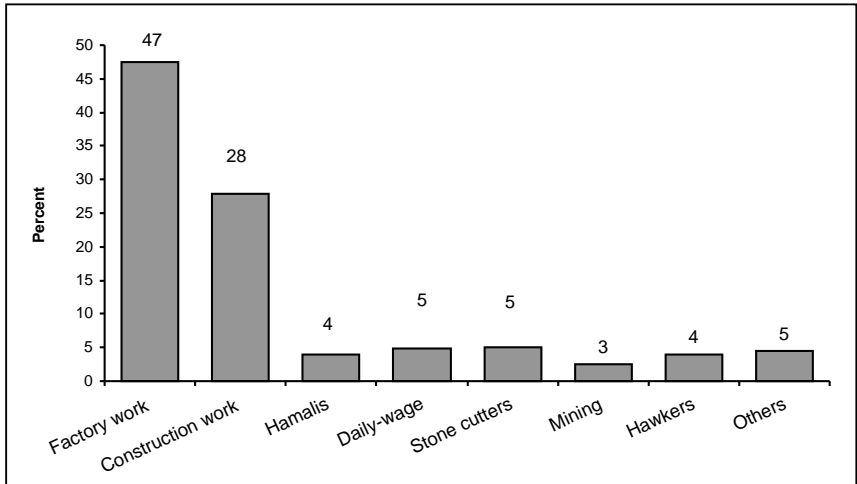
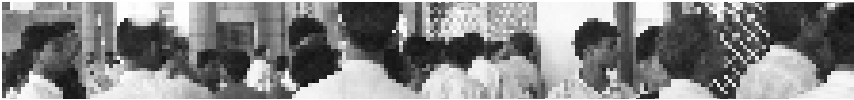


Figure 4 : Occupational categories of surveyed recent male migrants, Maharashtra state, India, 2007



There are inter-district variations in the relative importance of occupational categories (see Table 5). Though factory work is a major occupational category in all five districts, its relative importance is particularly remarkable in Thane district (85 percent), followed by Mumbai (45 percent) and Nashik (42 percent) districts. Factory work included the following sub-categories:

- Loom workers
 - e.g., Bhiwandi (Thane district) and Malegaon block (Nashik district)
- Jeans/garment factory workers
 - e.g., Ulhasnagar-Camp No. 5 (Thane district)
- Industrial labourers
 - e.g., Wada-Kudus and Boisar (Thane district), Kanhan and Hingana (Nagpur district), Bhosari and Chakan (Pune district), and Nashik and Sinnar blocks (Nashik district)



- Small industry (including leather, pottery, farzan/ snacks etc.)
 - e.g., Dharavi (Mumbai district)
- Steel industry
 - e.g., Mazgaon-Darukhana, Sewri-Kolsa Bandar, Kurla-Tar Gully (Mumbai district)

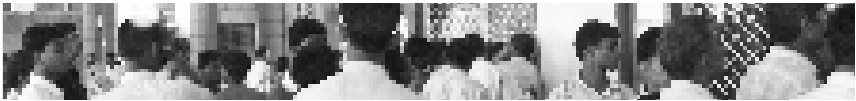
Construction work is on-going in all five study districts, with 28 percent of all male migrant labourers interviewed being employed in construction. However, Nashik (51 percent) and Pune (43 percent) districts show the largest concentrations of construction labourers while Thane district (7 percent) shows the lowest. Since Thane district has both rural and urban areas, there are large areas of undeveloped rural and farm land. Most of the construction takes place in the urban areas (Bhiwandi and Shahpur) or around the MIDC belt (Boisar). Construction labour was found in the following sites of each district:

- Thane district - Bhiwandi, Shahpur, and Boisar
- Mumbai district - Powai and Andheri
- Nagpur district - Kalamna, Kanhan, and Hingana
- Pune district - Kurkumbh (Industrial area construction) and Bhosari
- Nashik district - Chandwad (road construction)

4.3 Exposure to mass media, sex-related materials, and substance use

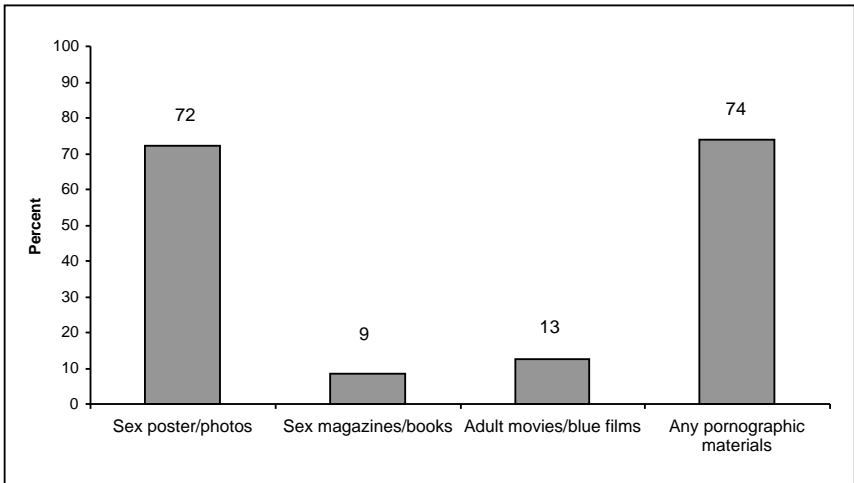
Radio (AM and FM) appears to be the most frequently accessed form of media, with 84 percent of respondents reporting having listened to the radio during the last month (Table 6). Television (67 percent) is the second most utilised form of media. Exposure to radio and television is higher in Nagpur, Pune, and Nashik districts than in Thane and Mumbai.

About three-fourths (72 percent) of all respondents reported having seen a sex-related poster or photograph in the past month. Male migrants' exposure to other sex-related materials which can have an influence on sexual behaviour includes having seen/read sex-related magazines/books (9 percent) and having watched adult movies or blue films (13 percent) (Figure 5). Unlike the overall exposure to media, exposure to sex-related materials is greater in Thane, Mumbai, and



Nashik. Four out of five recent male migrants in each district reported seeing at least one form of sex-related material within the last month.

Figure 5 : Percentage of recent male migrants surveyed who reported that they were exposed to sex-related materials in the month prior to the survey, Maharashtra state, India, 2007



Alcohol is the most commonly used substance among respondents across the study districts. About 45 percent of respondents reported drinking alcohol in the month prior to the survey (Figure 6). More than one-third reported consuming *desi-daru* and toddy in the last month, while 20 percent consumed beer or foreign liquor during the same period. Consumption of *desi-daru* and toddy is significantly higher in Nagpur (62 percent) and Pune (54 percent) than in the other three districts. Consumption of beer and foreign liquor is lower in Nagpur (13 percent) and Nashik (15 percent) than in the rest of the districts. Injecting drug use (0.1 percent overall) is reported mainly in Nashik district (0.3 percent) and Thane district (0.2 percent).

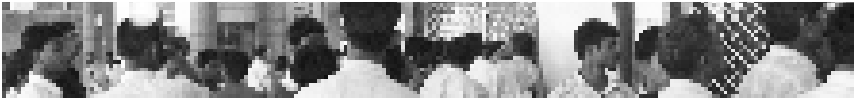
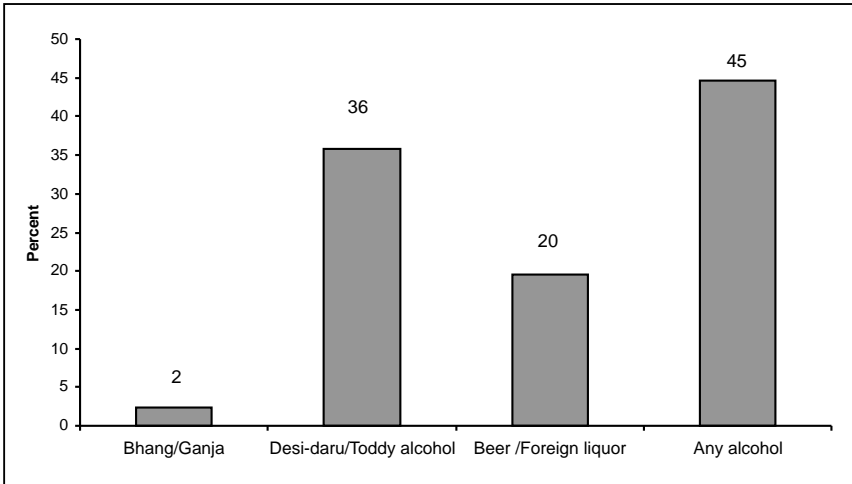
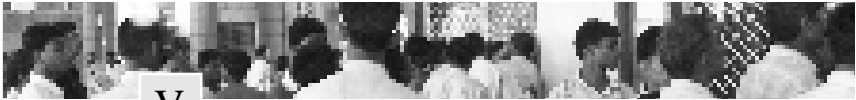


Figure 6 : Percent of recent male migrants reporting having used various substances in the past month, Maharashtra state, India, 2007





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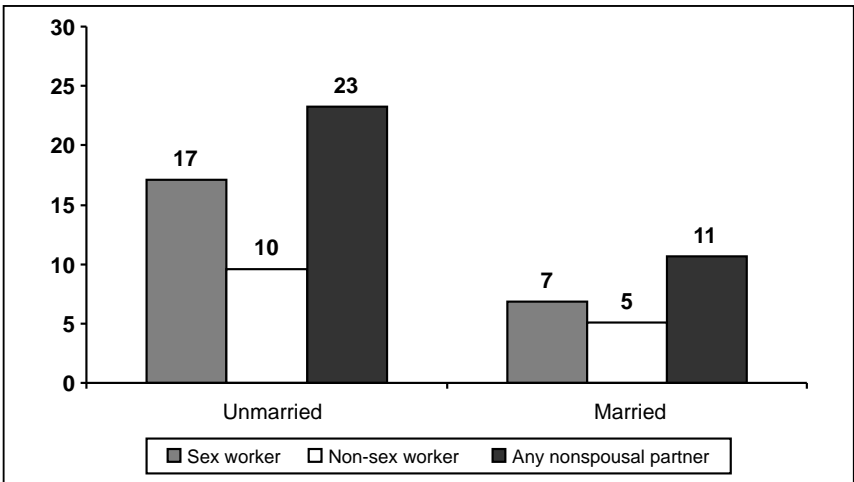
PATTERNS OF
SEXUAL BEHAVIOUR
AND VULNERABILITY
TO HIV

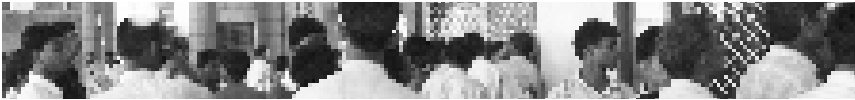
5.1 Sexual behaviour of recent male migrants by background characteristics

Table 7 presents data on sexual behaviour separately for currently married and not currently married

migrant men (including those who are unmarried and widowed/divorced/separated). Among respondents who are currently unmarried, 23 percent said that they had sex with female partners during the past 12 months (Figure 7). While 17 percent reported having had sex with sex workers, about 10 percent reported sex with non-sex workers. Among currently married migrants, only 11 percent reported having had sex with any partner other than their wife. Reported sexual activity among currently married migrants is lower both with sex workers (7 percent) and with non-sex workers (5 percent).

Figure 7 : Percentage of recent male migrant workers reporting non-marital sex by type of sex partner and current marital status, Maharashtra state, India, 2007





Among not currently married migrant workers, the percentage having sex increases with age for all partner types. No differences are noticed in sexual behaviour according to education. Men with incomes of Rs. 2000 or less reported a considerably higher level of sexual activity with all types of partners than those with higher income. This trend holds also for respondents who are currently married.

Among currently married respondents, extramarital sexual behaviour was reported to be higher among men below age 30 than among men above 30 years of age. No differences are noticed in sexual behaviour according to education or income.

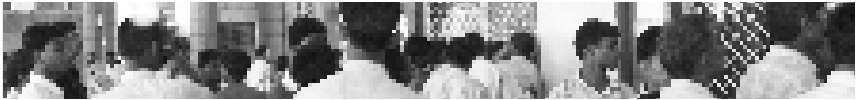
Significant variations occur in migrant workers' sexual behaviour across study districts. Relatively high proportions of recent male migrant workers (irrespective of their marital status) in Nagpur, Pune, and Thane reported non-marital sex compared to men in other study districts. Sexual activity among male migrants is the highest in Nagpur district, for both currently unmarried (48 percent) and currently married (18 percent) respondents. The extent of sexual activity among currently unmarried men is high also in Pune district (36 percent). Mumbai and Nashik reported the least sexual activity among both currently married and unmarried migrants.

A significantly higher proportion of men working as hamalis (loading/unloading), stone cutters, and in construction work reported having had non-marital sex as compared with men in other occupations.

Men exposed to pornography reported higher percentages of non-marital sex than those who were not exposed. Similarly, high proportions of recent male migrants who drink alcohol reported non-marital sex than men who do not.

Twice as many married men are living without their wives in their current location (1,023) as are living with their wives (504). The sexual behaviour of married men did not differ in the presence or absence of their wife.

Patterns of sexual behaviour were also explored during the qualitative phase of the study. Extramarital sex with both sex workers and non-sex



workers was reported by some of the respondents; especially significant indications came from the many key informants.

“There are video parlours scattered all around Bhiwandi, which form the epicentres for MSM and commercial sex activity. These video parlours have arrangements where people interested in watching the video could sit at tables in the front, while the back area is left open and unobstructed for people to have sex. Alternatively, the video parlours also serve as meeting places where people can ‘break the ice’ while watching the video and then go elsewhere together for sexual activity.” (Key Informant, Bhiwandi, Thane district. Mid-20’s, single, HIV/AIDS outreach worker of an NGO.)

Engaging in high-risk sexual activity in other places when family members are not at home is commonly noted in the qualitative data. As one of the respondents said:

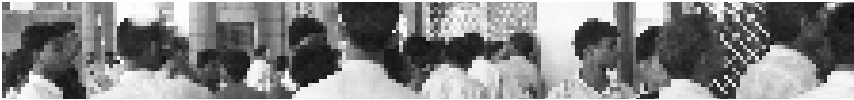
“I first visited a prostitute in Salamatpura which is located in Nayagaon. I was all alone since my brothers and father had gone back home. Then my uncle’s son came and told me to accompany him to Salamatpura. I was feeling scared of being seen by someone who will inform my folks. But after that day I got over the fear. Then I became a regular visitor, but there was no fixed time. Whenever I felt I used to go there.” (In-depth respondent, loom worker, Bhiwandi, Thane district. From Sant Kabir Nagar district, Uttar Pradesh, 34 years old, illiterate, married)

The qualitative data also indicate that the wives of some migrant workers engaged in sex with other men. As one of the key informant says:

“Sometimes, wives of night shift workers make use of the absence of their husbands during the night to indulge in sex trade.” (Key informant, Bhiwandi, Thane district. Mid-20’s, single, HIV/AIDS outreach worker for an NGO)

Engaging in high-risk sexual activities at construction sites was reported both by workers and by their supervisors and contractors.

“At the earlier construction site, a 16 year old girl was working. She had an attractive figure and appeal. The contractor there would often invite her to his room and used to have relations with her. He would provide her money in lieu of that and also relaxed her working hours.



Gradually, the people working there also started looking at her in a lustful manner, because they knew that this girl is like that and the girl started accepting money for her services. So soon, the girl turned very rich but the workers got poorer. Then one day, the girl developed AIDS. When the workers working on the site learned about this, all of them ran away to their respective villages. So it is wrong to assume that AIDS is caused by going to the prostitutes. AIDS can happen to anyone. Therefore it is better to have physical relations only with one life partner, your spouse.” (Focus group respondent, Chandwad block, construction workers, Nashik district. From Madhya Pradesh.)

Homosexual activities were reported in some of the sites, especially in factories where work is carried out in both day and night shifts. Homosexual activity may take place at the work place or at the place of residence.

“We have sex amongst ourselves. This has been going on since the last one year. One day he was asleep and I touched him slightly and he did not say anything so I mounted him. From that day we started a sexual relationship. We normally indulge in sex in the evenings or early mornings between 4-6 AM. And if there is no one in the room then we do it as and when we like. There is no fixed time. He is my sex partner. He is from UP and his age is 22 years.” (In-depth respondent, loom worker, Bhiwandi, Thane district. 30 years old, illiterate, unmarried, from Gaya district, Bihar)

However, in the quantitative data, the extent of reported homosexual activity is low; only 15 of the 3,062 migrants interviewed (0.5 percent) said that they had ever engaged in homosexual activity.

Sex with multiple partners was reported in some in-depth interviews, as illustrated by the following example from Nagpur district.

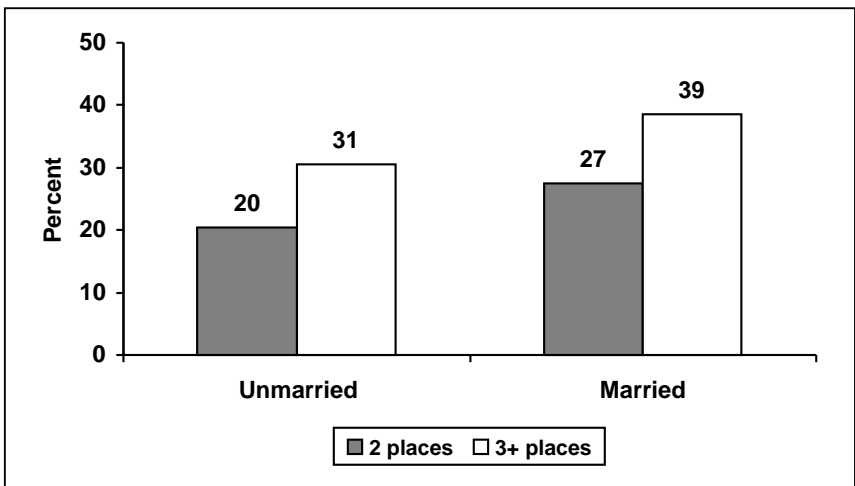
“I have good knowledge about sex. I am married. Also after marriage I know about sex very well and my regular sexual partner is my wife. Before marriage I used to go to sex worker. But after marriage within a time I stopped these sexual activities. Now I have sex with only my wife. Before marriage I visited a sex worker and had a girl friend as my sex partner. How many sexual partners I had, I don't know. Many partners were irregular.” (In-depth respondent, truck driver, Nagpur district. 25 years old, married, 7th standard education, from Gondia district, Maharashtra)



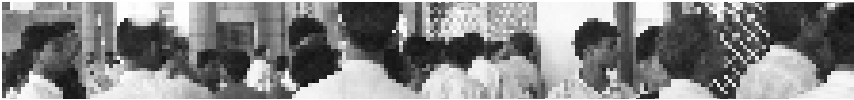
5.2 Migration/mobility characteristics and sexual behaviour

Table 8 presents information on the linkages between mobility-related characteristics and sexual behaviour. Among currently unmarried male migrants, a higher proportion of those who moved to three or more places reported sex with non-marital sex partners than did men who moved to only two places (Figure 8).

Figure 8 : Percentage of recent male migrants reporting non-marital sex by degree of mobility and current marital status, Maharashtra state, India, 2007



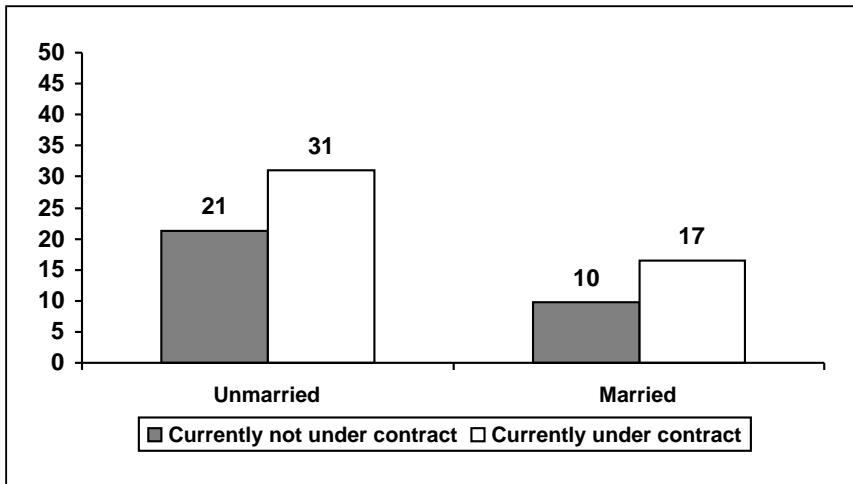
Respondents who are not currently married and have moved to three or more places in the past two years show the highest sexual activity with sex workers (30 percent) and with any partner (42 percent) in the past year (Table 8). By contrast, among currently married migrants, those who are less mobile reported a higher level of sexual activity across all types of sex partners (7 percent with sex workers, 5 percent with non-sex workers, and 11 percent with any partner).

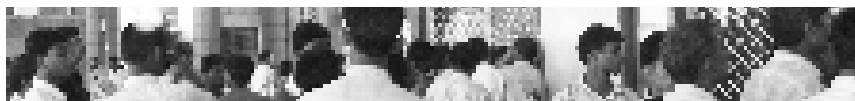


Respondents who stayed away from home overnight at least once in the past month reported lower sexual activity as compared to men who did not. On the other hand, migrants who commute between home and their work place reported consistently higher sexual activity with all types of sex partners, irrespective of their marital status.

Men currently under contract reported consistently higher sexual activity with all types of sex partners regardless of current marital status (Figure 9). Among currently unmarried men, 31 percent of those who are currently under contract reported that they had sex compared to 21 percent among those who are not under contract. Similarly, among currently married men, the extent of sexual activity is higher among those who are under contract (17 percent).

Figure 9 : Percentage of recent male migrants reporting non-marital sex by their contract-employment status and current marital status, Maharashtra state, India, 2007

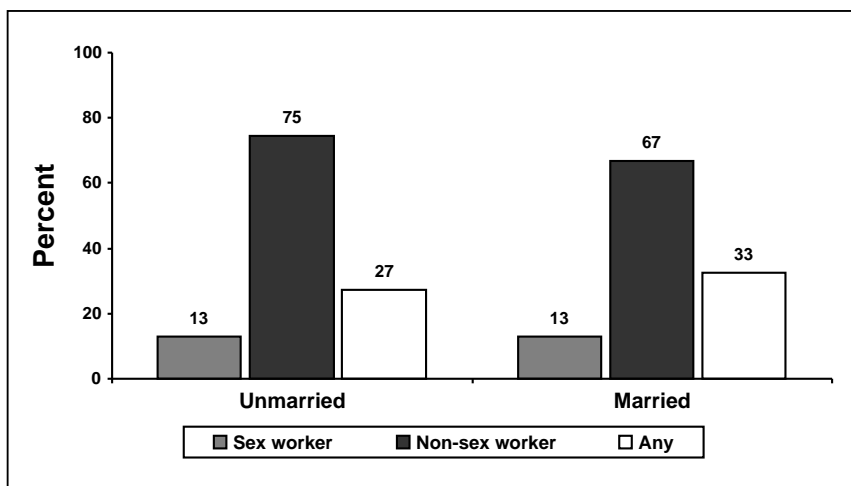




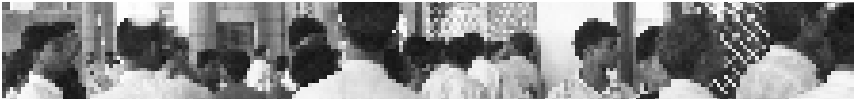
5.3 *Non-use or inconsistent use of condoms in sex with different sexual partners*

The association between mobility and condom use is presented in Table 9. Overall, non-use or inconsistent condom use increases with the increase in migrants' degree of mobility. The extent of non-use and inconsistent condom use is higher when the partner is a non-sex worker (Figure 10).

Figure 10 : Percentage of recent male migrants reporting inconsistent condom use, according to their type of sex partner and their current marital status, Maharashtra state, India, 2007



The extent of non-use or inconsistent condom use is higher among men who are currently under contract irrespective of their marital status. While 22 percent of currently unmarried men and 19 percent of currently married men who are under contract reported no or inconsistent condom use, the corresponding percentages for those who are not under contract are 30 and 37 respectively (Table 9).

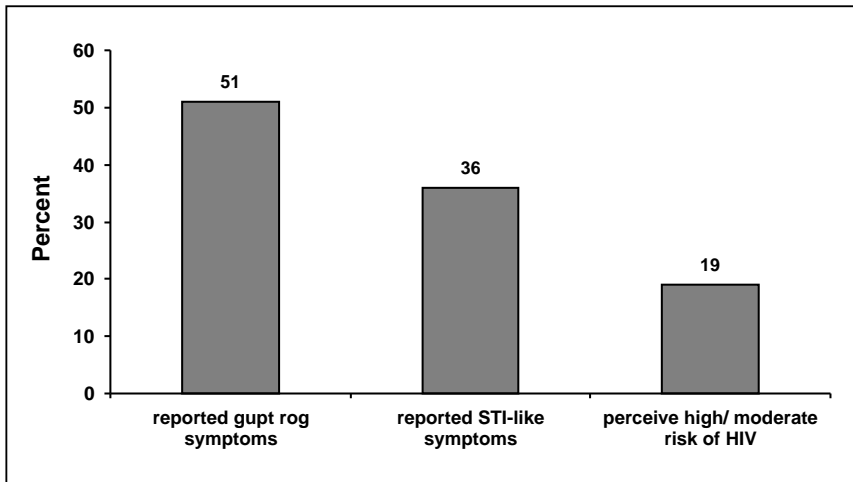


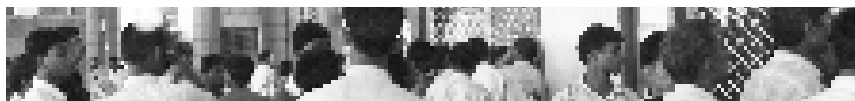
5.4 Symptoms of STIs and perception of HIV risk

Of the 3,037 respondents for whom information is available, more than half (51 percent) reported *gupt rog* (secret illness) symptoms, while 36 percent reported STI-like symptoms (Table 10 and Figure 11). Yet, only 19 percent of the respondents said that they perceive themselves at moderate/high risk for contracting HIV infection.

Migrants moving to three or more places in the past two years reported the highest percentage of *gupt rog* symptoms (85 percent), while 68 percent reported STI-like symptoms and 39 percent perceived a high/moderate risk for HIV infection. Whether or not the respondent stayed away from home overnight in last month did not significantly alter the extent of *gupt rog* or STI-like symptoms. A higher proportion of migrants who stayed away overnight perceived a high/moderate risk for HIV.

Figure 11 : Percentage of recent male migrants reporting *gupt rog* and STI-like symptoms in the last 12 months, and perceived high/moderate risk of getting HIV, Maharashtra state, India, 2007





Respondents who commute between their residence and work place reported considerably higher levels of *gupt rog* and STI-like symptoms. They were also more likely to perceive a high/moderate risk for HIV (26 percent) as compared to those who do not commute (13 percent). Respondents who are currently under contract reported a considerably high level of *gupt rog* and STI-like symptoms (70 and 55 percent respectively). Perception of high/moderate risk for HIV infection is also higher among those under contract (31 percent versus 17 percent).

5.5 Sexual behaviour along migration routes

Table 11 presents information on the number of places where migrant men had non-marital sex along their migration route. As noted earlier, a majority of male migrants reported no sex outside marriage. Most of the men in all age groups who reported sexual activity engaged in sex at only one place (Figure 12). The possibility of having sex at multiple locations is slightly higher among those aged 20-24 years as compared to men in other age groups.

Across occupational groups, 25 percent or more of male migrants reported having had sex at only one place, with the highest percentage being reported among stone cutters. Also, the share of those who engaged in sex at two or more places is higher among stone cutters and construction workers. Among respondents who have always been under contract, 40 percent had sex outside of marriage in at least one place along their migration route.

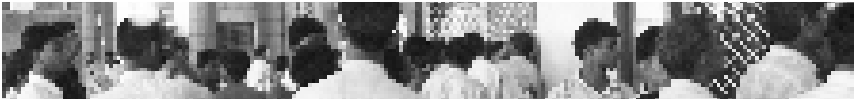
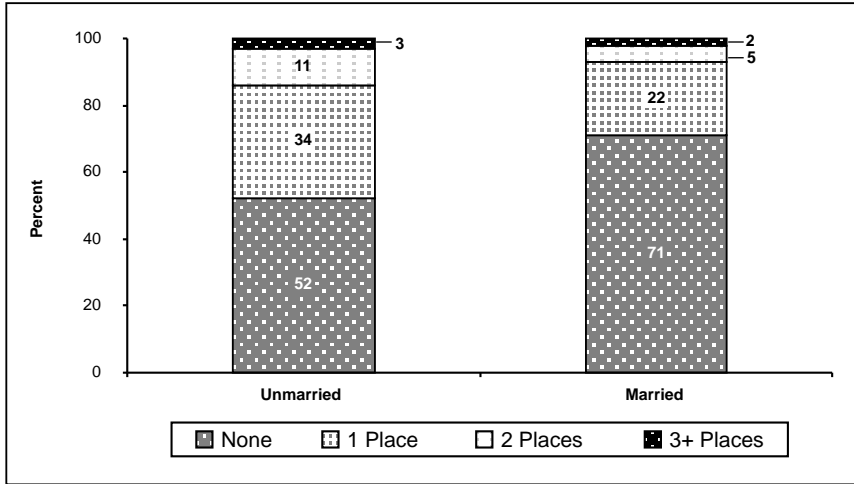


Figure 12 : Number of places in which recent male migrants had non-marital sex along their migration route by current marital status, Maharashtra state, India, 2007



Further analysis was carried out to identify the locations in which recent male migrants have had non-marital sex. The results indicate that 34 percent of migrant men reported that they have had non-marital sex in their places of origin (Table 12). Men's sexual behaviour in their places of origin is much more than in men's places of destination. Ten percent of all respondents had sex in places of origin as well as in at least one of the three places in which they had lived in the last two years.

Differences in non-marital sex along migration routes were evident between currently married and unmarried men. Substantial proportions of men engaged in stone cutting (41 percent), construction (36 percent), and industrial (34 percent) work reported sex in their place of origin (Figure 13).

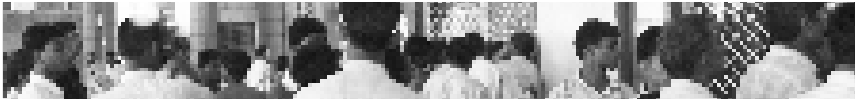
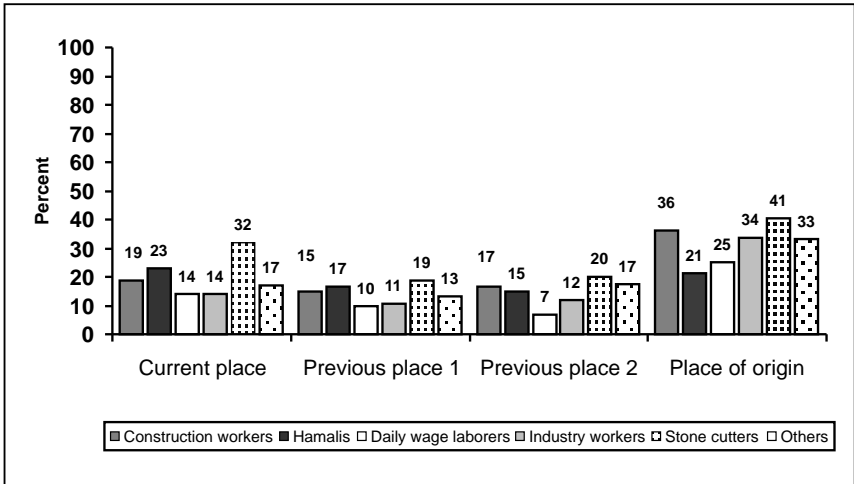


Figure 13 : Percentage of recent male migrants who reported non-marital sex at their current place or along their migration route by occupational status, Maharashtra state, India, 2007



5.6 Knowledge of HIV transmission and prevention

Indicators of knowledge among male migrant workers about HIV transmission and prevention is presented in Table 13. A large fraction (48 percent) of the respondents reported that having sex with an HIV-positive person is a route of infection for HIV. A smaller proportion reported that sex without condoms (31 percent) can lead to HIV infection. Sex with sex workers (27 percent), sex with multiple partners (25 percent), and use of infected needles (22 percent) are the other ways identified by the study respondents (Figure 14). There are considerable variations by district in the level of knowledge about these routes of transmission. While in Mumbai and Thane, sex with someone HIV-positive, sex with multiple partners, and sex with sex workers are perceived as the most important routes, the extent of knowledge reported in the other three districts is considerably lower.

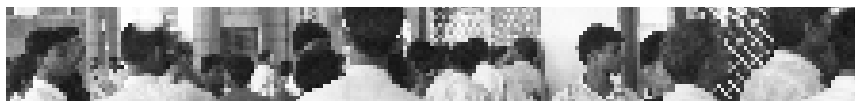
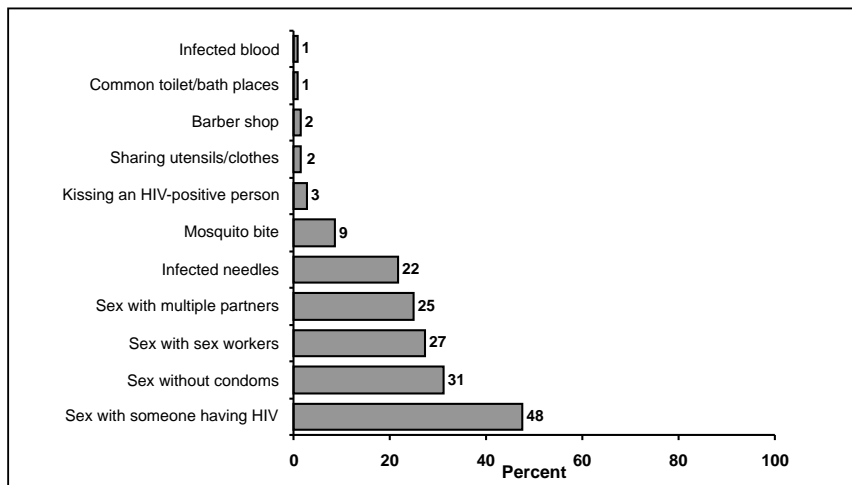


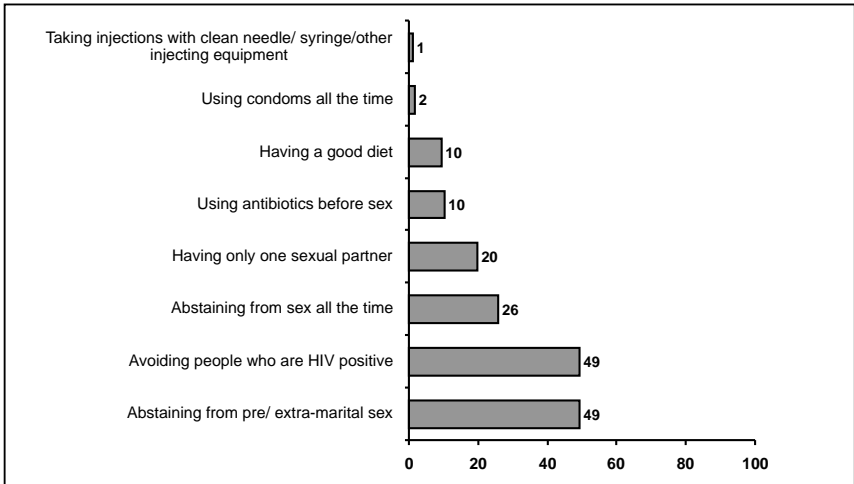
Figure 14 : Percentage of recent male migrants surveyed, by their answers to the question *How can HIV infection be prevented?*, Maharashtra state, India, 2007



Abstaining from pre/extra-marital sex and avoiding people who are HIV-positive (both 49 percent) are the most commonly perceived ways to prevent HIV transmission (Figure 15). Only 2 percent of migrant men perceived that consistent condom use can prevent HIV infection. Twenty percent men reported that having only one partner was a means to prevent infection. Knowledge about prevention of HIV is low in all five districts, particularly in Nagpur and Nashik.



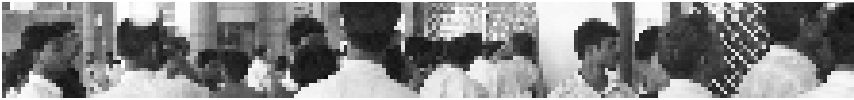
Figure 15 : Percentage of recent male migrants surveyed, by their answers to the question *How to protect from acquiring HIV?*, Maharashtra state, India, 2007



Knowledge about HIV/AIDS was also explored during the qualitative phase. Migrants' knowledge and perceptions can be illustrated by the following responses:

“People of this place have very less knowledge of HIV. Whatever they know is through TV or the HIV/AIDS awareness camp which is held once a year at Kalyan Naka. But I don't know about these people who run the camp. I am myself very less informed about HIV, so what can I say about others? But I will say that neither any NGO nor the Maharashtra Government have ever done anything about this matter here in Ghunghat Nagar.” (Key informant, 32 year old, married respondent, STD telephone booth operator from Eastern Uttar Pradesh, in Bhiwandi, Thane district. Education: Maulana)

“AIDS is caused due to sex with prostitutes without condom. If a man uses condom while having sex he cannot get infected. This is always advertised on TV and radio, and also the women at Grant Road carry condoms. Friends also say the same thing. If you have nirodh you cannot get infected by AIDS. AIDS can be cured if one goes to doctor

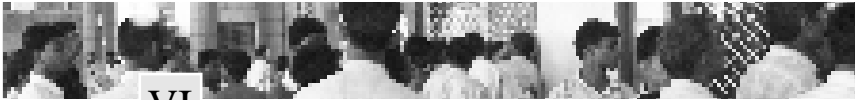


immediately.” (In-depth respondent, Mazgaon-Darukhana, industrial worker, Mazgaon, Mumbai district. 30 years old, 6th standard education, married, from Sidharth Nagar district of Uttar Pradesh)

“I have heard about AIDS from people and also through radio. But what causes this disease? I am not aware. I do not have much knowledge about it. I do not know whether it is black or white.” (In-depth interview, Sewri Kolsa Bandar, steel industry worker, Mumbai district. 28 years old, 3rd standard education, married, from Sidharth Nagar district of Uttar Pradesh)

“I have heard about HIV/AIDS. What is the difference between these two, I am not aware. None of my acquaintance has died of HIV/AIDS. It happens due to sex with prostitutes. To save oneself from these one should not go to a prostitute and in case one does go he should use condom.” (In-depth interview, construction worker, Kurkumbh, Pune district. 25 years old, married, 6th standard education, from Village Jhumri Dongri in Jharkhand)





VI

PROGRAM IMPLICATIONS AND RECOMMENDATIONS

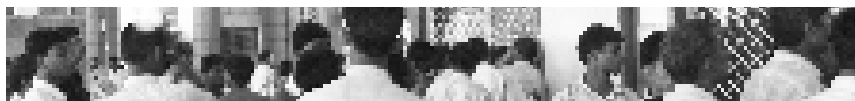
6.1 Role of contractors/facilitators

Only about 3 percent of migrant respondents in Maharashtra state reported that their first move for work was facilitated by a contractor, with no large inter-district variation. This is an

interesting feature as the common belief is that labour migration is by and large facilitated by contractors. While large proportions of the migration were not facilitated by contractors in Maharashtra, variations are found according to occupation. About 35 percent of construction workers and 16 percent of industrial workers have been under contract at one time or another, indicating the possible extent of programme coverage if interventions are implemented through contractors (Table 14). Among men who are engaged in loom work, migration in most cases was facilitated by relatives or migrants from their native place. At the same time, in many industrial areas labour contractors play a role, sometimes indirect, in facilitating migration. When new workers are required, contractors who supply labour to the industries send some of their current workers back to their native places to recruit more workers. The role of contractors is more visible in occupations like construction work.

There are examples from the qualitative phase on the role of contractors in facilitating mobility:

“Two years back I had gone to Surat and Vadodara in Gujarat in connection with work. We were 15-20 workers and stayed in a godown. Our labour contractor had arranged free mess for us and also there were no charges for stay. The owner provided everything free. I was paid Rs 200 after each day's work. After completion of work at Surat we stayed there for a week and then went to Vadodara for work. There were 15 of us and we hired kholi (room) for stay. The contractor arranged the food and accommodation. Then last year I had gone to Bhusawal in connection with railway work. My contractor also undertakes railway jobs. There were 15 of us and we stayed in the railway shed. The owner provided the accommodation and mess. We worked there for 15-20 days. The owner also undertakes work in Mumbai. But there is nothing fixed, I don't work for only one contractor. Many contractors come to the Naka in the morning and take workers as per their requirement.” (In-depth



interview respondent, industrial worker, from Mazgaon, Mumbai. 30 years old, 6th standard education, married, from Iqbal Nagar village in Sidharth Nagar district, Uttar Pradesh)

Another respondent from Nagpur highlighted the role of both family members and contractors in obtaining employment for male migrants:

"In my village, I was working as a Mistri. I worked as a Mistri for about 14 years under a contractor. I was receiving an amount of Rs. 50-60 a day. I was not able to manage my family with this as I was the only earning member. My mother and father were earlier working as labour in a farm. I did not want to do that work. I told them to take rest, and started to go for work. After marriage, I was not able to manage my family due to money problems. Once I went to my brother-in-law's house at Nagpur and he told me that many opportunities for work were available there. With his help I got work as an operator in J.K. Towers. I work here under a contractor. Here I earn Rs. 120 per day. I work up to 8 hours with half an hour of lunch break. Seven days there is day shift and the next seven days one has to do night shift. Work starts from 8.00 a.m. to 4.00 p.m. Overtime work for 4 hours can earn additional Rs 60. I receive payment once in a month, while in my village I used to get payment every week." (Male migrant, industrial worker, in Hingana, Nagpur. 28 years old, 5th standard education, married, from Dudhara, Samai, Dist. Parshiwani)

Many key informants from all the selected districts discussed the role of relatives and those already working in the district in facilitating migration:

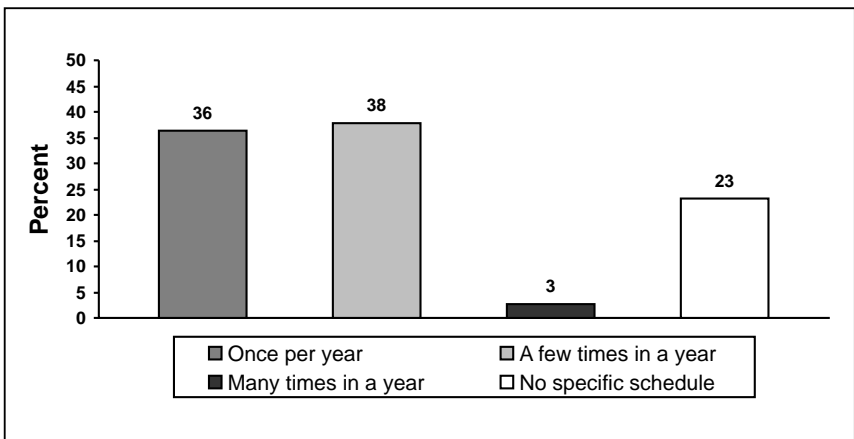
"All workers come here along with someone who has already been working here. Family or friends contact and ties with older workers help a new worker in getting job as also in settling down. If a friend has been working here already, the newcomer does not have any difficulty in finding a job. Their mother tongue is Bhojpuri. But they all know Hindi and have no problems here." (Key informant from Sewri Kolsa Bandar, 35 years old, married, 12th standard education, restaurant and STD booth owner, from Mumbai district, Maharashtra)



6.2 Connectivity to native place

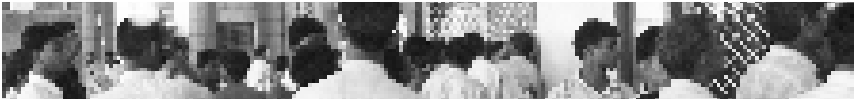
The present study shows that male migrant workers in Maharashtra maintain strong connectivity with their native place. About 36 percent of the respondents reported returning to their native place once a year. A similar proportion reported visiting their native place a few times

Figure 16 : Frequency of migrants' visits to their native place, Maharashtra state, India, 2007



(2-4 times) a year. Only 3 percent returned home many times in a year, and 23 percent said they had no specific schedule for returning to their native place; this proportion is higher among male migrants in Mumbai and Thane. Some 69 percent of respondents said that it had been at least four months since they had last visited their native place.

"I go back to Basti, U.P. once per year. I would stay there for about one month at a time before returning to Mumbai. I usually go home in the monsoon season or if there is a festival or marriage in my native village. I travel alone and not with any group. The distance to my native place from Mumbai is about 3000km. I travel by train to go to my native place." (In-depth interview, daily wage worker at construction site, Andheri, Mumbai. 32 years old, illiterate, married, from Basti district, Uttar Pradesh)



Distance from native place, monthly income, whether or not family members or friends still reside in the native place, and occupational or seasonal reasons (e.g., farming during the monsoon seasons, weddings or religious festivals) determine how often male migrants return to their place of origin.

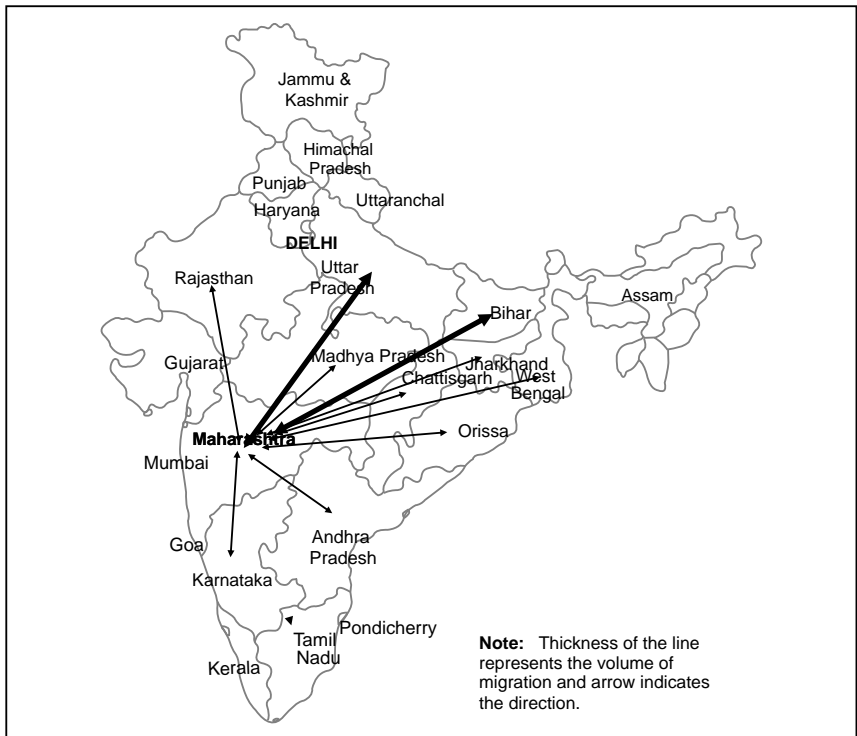
A number of noteworthy features of migrants' patterns of sexual behaviour have significant implications for programmes aimed at reducing risk. The major facilitator of mobility as found from this study is migrants themselves. The better opportunities in the selected study districts, combined with lack of livelihood opportunities at the place of origin, compel people to migrate mostly alone. Even many of those who are married have never brought their wives to their current location because living conditions are inadequate and they cannot afford better houses and other amenities.

6.3 *Focus on places of origin*

Section III identified many significant sending states and districts from which most of the male migrants come to the selected districts. As Map 8 shows, the states most closely connected to migration to Maharashtra are Uttar Pradesh, Bihar, Madhya Pradesh, Chhattisgarh, and Karnataka. Other states such as Andhra Pradesh, Gujarat, Punjab, Orissa, Rajasthan, Tamil Nadu, Uttaranchal, and West Bengal also send male migrants to Maharashtra, though to a lesser extent.

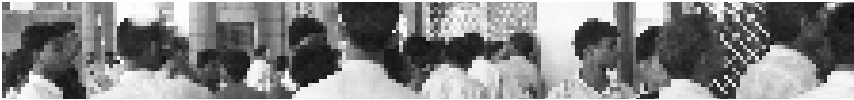


Map 8 : Map of India showing connectivity between Maharashtra and other states



In addition, migration from districts within Maharashtra to the study districts is also significant, contributing to 12 percent of the volume of recent migration. This finding also has programme implications in the context of HIV risk reduction. The major sending districts within Maharashtra are Akola, Bhandara, Gondia, Latur, and Nanded.

The fact that there are several significant migrant-sending states spread over India, and over 30 sending districts from within Maharashtra state assumes importance in two contexts. First, the study shows clearly that these male migrants, married or otherwise, retain strong connectivity to



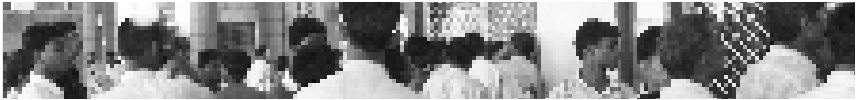
their native villages. Second, the study clearly indicates high levels of sexual activity among migrants; the level of high-risk sexual activity also is significant.

6.4 Recommendations

Male migrants perceive that their risk of acquiring HIV infection is low. This is coupled with the fact that, despite migrants' exposure to modern medicine, knowledge about HIV transmission and prevention is exceptionally low. Migrants' lack of knowledge may also be seen from the large extent of inconsistent condom use among men who engage in high-risk sexual encounters. It is therefore essential to scale up existing HIV/AIDS programmes and to introduce new programmes to address the high level of HIV vulnerability among male migrants in Maharashtra. That knowledge about HIV is low even in big cities like Mumbai and Thane should be a compelling reason to recognise how such a situation can result in faster spread of the epidemic. In some occupations, for instance among construction workers, about 35 percent of migrants have been under contract at one time or another, indicating the possible extent of coverage if interventions are to be implemented through contractors.

Given the availability of facilities such as video parlours in some districts which act as hubs for recruiting sex partners, programme planners should target both male migrants and the sex workers they visit. The nature and extent of "hidden sex" in selected districts requires further exploration. The study found that construction workers frequently engage in both frequent and unpaid sex. This finding requires serious consideration in programme design.

The finding that connectivity to native place is strong among male migrants in Maharashtra makes it imperative to study the situation in the sending districts regarding HIV prevalence and spread. The indication from this study is clear: in the context of high-risk sexual behaviour (among both married and unmarried migrants) and the low levels of knowledge, condom use, and risk perception, the chances of sending households and districts becoming areas of high HIV prevalence are great. It is also necessary to explore further the sexual behaviour pattern in sending areas to obtain further insights into the possible routes of HIV transmission.



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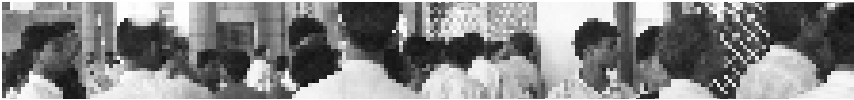
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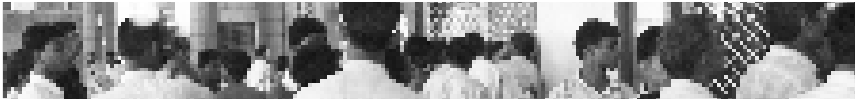
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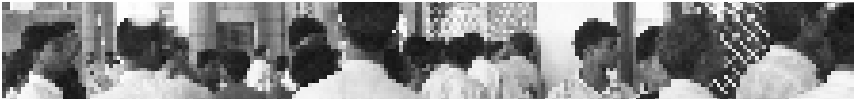
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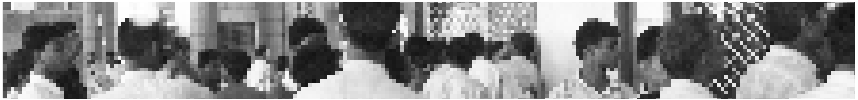
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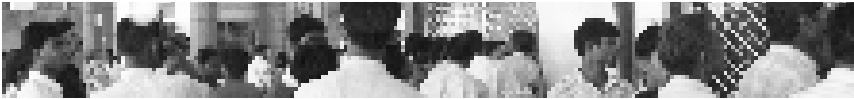
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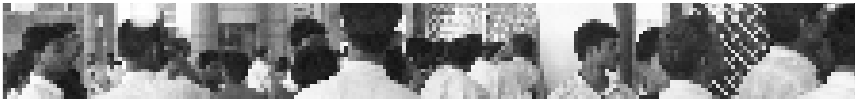


Table 1 : Migration/mobility of men by selected background characteristics, Maharashtra state, India, 2007

Characteristic	Number of locations respondent moved to since leaving his place of origin for the first time		Number of locations respondent moved to in the past two years		N
	1+	2+	1+	2+	
District					
Thane	38.9	27.3	24.4	22.5	2738
Mumbai	49.1	34.9	33.2	30.7	1973
Nagpur	46.7	31.7	19.6	19.1	3252
Pune	55.6	39.4	30.9	29.4	2077
Nashik	52.9	39.7	40.3	38.8	1566
Residence					
Urban	46.7	30.9	30.1	27.8	7177
Rural	49.2	38.1	24.2	23.9	4429
Age group					
≤19	40.6	31.8	28.9	25.1	985
20–24	59.8	40.3	32.4	31.7	4695
25–29	49.4	34.6	28.7	27.2	3369
30–34	31.4	24.7	22.7	19.4	1366
35+	19.6	16.3	12.4	12.1	1191
Total	47.7	33.7	27.9	26.4	11606



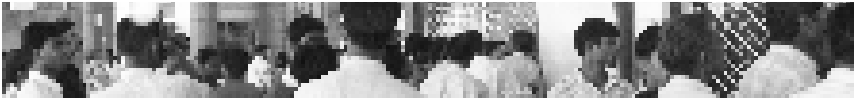


Table 1a : Inter-state migration to Maharashtra among recent male migrants*, Maharashtra state, India, 2007

Sending Places (states)	Districts (Maharashtra)					Total %	Total N
	Thane	Mumbai	Nagpur	Pune	Nashik		
Andhra Pradesh	1.3	0.5	0.5	0.3	10.9	2.7	82
Assam	0.2	--	--	--	--	--	1
Bihar	13.5	15.7	8.7	18.4	20.9	15.4	471
Chhattisgarh	0.2	--	22.5	4.1	2.3	5.9	180
Delhi	0.2	--	--	--	--	--	1
Gujarat	0.2	0.8	0.5	--	--	0.3	9
Haryana	--	--	0.5	--	--	0.1	3
Jharkhand	1.6	2.1	--	2.0	8.6	2.8	87
Karnataka	0.8	3.5	--	10.2	0.8	3.0	93
Madhya Pradesh	2.1	2.0	34.2	10.8	15.8	13.1	400
Maharashtra	3.1	2.6	15.6	32.6	6.1	12.0	368
Nepal	0.5	--	--	--	--	0.1	3
Orissa	3.7	1.3	1.0	4.4	1.3	2.4	72
Punjab	0.2	--	2.6	--	--	0.6	17
Rajasthan	1.6	7.2	0.3	0.2	0.2	1.9	58
Tamil Nadu	0.2	0.2	0.2	0.3	--	0.2	5
Uttar Pradesh	68.6	59.8	13.0	13.9	32.6	37.5	1149
West Bengal	2.1	4.3	0.5	2.8	0.7	2.1	63
Total %	100.0	100.0	100.0	100.0	100.0	100.0	--
Total N	611	606	616	603	608		3044

* "Recent male migrants" in this and following tables are those men who are older than 18, whose birthplace is not where they currently reside, who moved to current location in the last two years, and have also moved to two or more locations in the same period.



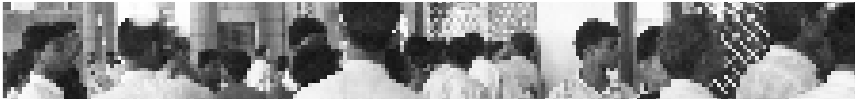


Table 1b : Inter-district migration (within Maharashtra) to the five study districts among recent male migrants, Maharashtra state, India, 2007

Sending Places (districts of Maharashtra)	Districts (Maharashtra)					Total %	Total N
	Thane	Mumbai	Nagpur	Pune	Nashik		
Ahmadnagar	--	--	--	3.0	24.3	4.1	15
Akola	--	--	1.0	9.5	5.4	6.0	22
Amravati	--	6.3	4.1	4.0	--	3.5	13
Aurangabad	--	--	--	1.5	5.4	1.4	5
Beed	--	--	--	9.5	--	5.2	19
Bhandara	--	--	20.6	2.5	2.7	7.0	26
Buldhana	--	--	--	7.5	2.7	4.3	16
Chandrapur	--	--	5.2	--	--	1.4	5
Dhule	--	--	1.0	--	10.8	1.4	5
Gadchiroli	--	--	2.1	0.5	--	0.8	3
Gondia	5.3	--	49.5	--	--	13.3	49
Hingoli	--	--	--	5.0	5.4	3.2	12
Jalgaon	10.5	6.3	--	--	8.1	1.6	6
Jalna	--	--	--	--	8.1	0.8	3
Kolhapur	5.3	6.3	--	2.5	--	1.9	7
Latur	5.3	12.5	--	15.6	--	9.2	34
Nagpur	10.5	18.8	4.1	2.5	5.4	4.3	16
Nanded	15.8	--	1.0	9.5	--	6.2	23
Nashik	5.3	6.3	1.0	1.0	--	1.4	5
Parbhani	15.8	--	--	1.5	--	1.6	6
Pune	--	12.5	1.0	--	2.7	1.1	4
Raigarh	5.3	--	--	--	8.1	1.1	4
Ratnagiri	10.5	6.3	--	--	--	0.8	3
Sangli	--	6.3	--	0.5	--	0.5	2
Satara	--	12.5	--	2.0	5.4	2.2	8
Solapur	5.3	6.3	--	4.0	--	2.7	10
Osmanabad	--	--	--	8.0	2.7	4.6	17
Wardha	--	--	4.1	1.5	2.7	2.2	8
Washim	--	--	--	5.5	--	3.0	11
Yavatmal	5.3	--	5.2	2.5	--	3.0	11
Total %	100.0	100.0	100.0	100.0	100.0	100.0	--
Total N	19	16	97	199	37	--	368



Table 2 : Mobility-related characteristics of recent male migrants by district , Maharashtra state, India, 2007

Characteristics	Thane	Mumbai	Nagpur	Pune	Nashik	Total
Number of places changed in the last two years						
2	95.1	96.9	94.0	84.9	99.3	94.0
3+	4.9	3.1	6.0	15.1	0.5*	5.9
Stayed overnight away from home for work in the last month						
No	55.0	87.3	71.6	71.3	45.4	66.1
At least once	45.0	12.7	28.2	28.7	54.6	33.9
Commutes between residence and work						
No	63.6	75.9	6.2	0.5	93.4	47.9
Yes	36.4	24.1	93.8	99.5	6.6	52.1
Whether the first move was facilitated by contractor						
No	99.3	98.2	98.0	93.2	98.2	97.4
Yes	0.5	1.8	2.0	6.8	1.8	2.6
How often do you visit your native place						
Once per year	41.4	28.8	45.1	26.7	39.7	36.4
A few times a year	25.4	37.2	35.3	62.3	28.8	37.8
Many times a year	1.3	0.5	5.1	0.7	5.6	2.7
No specific schedule	31.9	33.5	14.5	10.3	25.8	23.1
Time since last visit to native place						
less than one month	1.8	0.3	8.3	10.8	1.3	4.5
1-2 months	7.2	3.5	21.9	20.8	4.5	11.7
3-4 months	11.8	11.8	16.5	22.1	10.6	14.6
4+ months	79.2	84.3	53.3	46.4	83.6	69.3
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Total N	611	606	616	603	608	3044



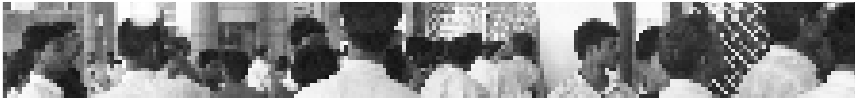


Table 3 : Reasons for migration/ mobility among recent male migrants, Maharashtra state, India, 2007

Reasons	Thane	Mumbai	Nagpur	Pune	Nashik	Total
Reasons for moving to the current place						
Better income	53.4	64.9	79.1	67.7	31.7	59.4
Better work opportunities	93.0	81.0	88.8	91.2	44.7	79.8
Long-term work contract	5.7	1.7	0.3	0.7	1.5	2.0
Contractor moves	2.5	3.5	0.5	3.5	22.7	6.5
Attraction to the city	29.5	30.5	3.2	2.8	11.0	15.4
Known place	4.4	2.1	2.1	0.2	2.6	2.3
Family move	1.3	0.7	0.5	0.2	0.3	0.6
Availability of skilled work	26.8	18.0	0.3	--	11.0	11.2
Reasons for leaving previous place						
Poverty	45.7	31.7	12.3	2.3	24.5	23.3
Low wages	56.0	63.7	26.8	25.4	50.5	44.4
Family pressure	12.4	13.2	2.3	5.5	7.6	8.2
Floods	2.0	2.3	0.8	0.2	0.5	1.1
Unemployment	49.8	46.0	7.1	6.5	34.9	28.8
Debt	49.8	46.0	7.1	6.5	34.9	28.8
Fed-up with work	12.1	11.2	3.4	1.3	7.2	7.1
Drought	2.9	5.4	1.8	0.5	1.5	2.4
Others	--	--	--	--	--	--
Total N	611	606	616	603	608	3044



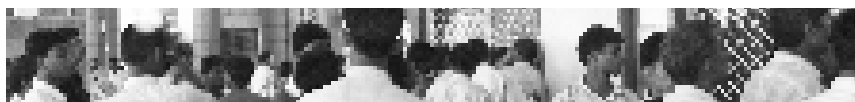


Table 4 : Socio-demographic characteristics and living arrangements of recent male migrants, Maharashtra state, India, 2007

Characteristics	Thane	Mumbai	Nagpur	Pune	Nashik	Total
Age						
<=19 years	13.4	6.9	2.4	5.1	12.3	8.0
20-24 years	47.6	44.6	39.4	61.0	51.0	48.7
25-29 years	28.6	31.0	39.3	27.5	22.9	29.9
30-34 years	6.4	13.0	11.2	4.1	8.4	8.6
35+ years	3.9	4.5	7.6	2.2	5.4	4.7
Education						
Illiterate	10.1	19.3	4.2	5.8	13.3	10.5
Primary	7.5	12.0	11.5	8.8	6.7	9.3
Secondary	60.7	60.4	60.4	54.7	64.3	60.1
High School+	21.6	8.3	23.9	30.7	15.6	20.0
Religion						
Hindu	72.7	75.7	89.9	87.4	89.1	83.0
Non-Hindu	27.3	24.3	10.1	12.6	10.9	17.0
Caste¹						
SC/ ST	30.8	38.8	38.6	29.5	40.3	35.6
Others	69.2	61.2	61.4	70.5	59.7	64.4
Marital status						
Currently married	53.8	59.4	56.3	39.3	48.4	51.5
Unmarried	46.2	40.6	43.7	60.7	51.6	48.5
Whether wife staying with respondent among currently married men						
Yes	17.4	5.7	87.9	46.6	5.7	33.0
No	82.6	94.3	12.1	53.4	94.3	67.0
Income (Rs.)						
<= 2000	6.8	4.0	32.5	1.5	1.8	9.4
2001 - 3000	48.3	48.3	57.4	52.4	57.4	52.8
3001+	45.0	47.8	10.1	46.1	40.8	37.9
Living arrangement at current location						
Living alone/in a group	80.3	93.2	37.7	78.4	93.6	76.5
Living with relatives	10.8	3.5	12.2	4.3	4.0	7.0
Living with wife	8.9	3.3	49.9	17.2	2.5	16.4
Type of house						
Pucca	19.5	15.9	3.1	18.6	1.3	13.6
Semi-pucca	64.2	59.7	59.6	14.5	79.9	55.7
Kacha	16.3	24.3	37.3	56.9	18.8	30.7
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Total N	611	606	616	603	608	3044

¹ SC/ST = Scheduled classes/scheduled tribes.

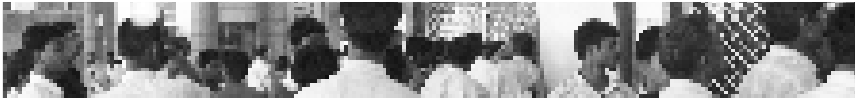


Table 5 : Occupational distribution of recent male migrants, Maharashtra state, India, 2007

Type of occupation	Thane	Mumbai	Nagpur	Pune	Nashik	Total
Factory worker	84.6	44.8	30.1	35.6	41.9	47.4
Construction worker	7.3	16.6	21.9	42.8	50.3	27.8
Hamali	1.8	2.3	9.3	6.2	0.3	4.0
Daily wage labourer	5.0	13.2	0.6	--	5.6	4.9
Stone cutter	--	--	11.9	12.8	--	5.0
Mining	0.2	--	12.4	0.2	--	2.6
Hawker	0.8	3.8	12.2	2.3	0.3	3.9
Driver	--	--	0.3	--	0.5	0.2
Artist/ Designer	--	0.2	--	--	--	0.0
Salaried Pvt.	0.2	--	--	--	0.3	0.1
Contractor	0.2	0.3	--	0.2	0.5	0.2
Other	--	18.8	1.3	--	0.2	4.0
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Total N	611	606	616	603	608	3044



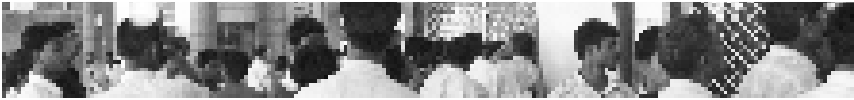


Table 6 : Exposure of recent male migrants to mass media, sex-related materials, and substance use, Maharashtra state, India, 2007

Exposure in the last month	Thane	Mumbai	Nagpur	Pune	Nashik	Total
Media exposure						
Newspaper/ Magazines	70.7	44.9	61.5	40.3	47.5	53.1
Movies in cinema halls/ video parlours	69.6	37.5	56.7	62.0	52.7	55.7
Television	57.7	41.6	87.3	80.1	69.0	67.2
Radio/ FM	78.9	73.4	93.2	96.4	76.6	83.7
Sex-related materials exposure						
Poster/ Photos	88.9	83.8	54.5	58.0	75.7	72.2
Magazines/ Books	12.5	5.9	4.2	11.3	8.6	8.5
Adult movies/ Blue Films	17.8	4.8	16.2	15.6	8.6	12.6
% seen at least one of the above	90.0	83.8	58.1	60.2	77.5	73.9
Substance use						
Bhang/ Ganja	4.1	2.8	1.0	2.2	2.0	2.4
Injecting drugs	0.2	0	0	0	0.3	0.1
Desi-daru/ Toddy alcohol	21.7	20.6	61.5	54.3	20.8	35.8
Beer/ Foreign liquor	27.0	20.3	12.9	22.4	14.8	19.5
Any alcohol	37.7	27.4	64.7	61.8	31.6	44.6
Total N	611	606	616	603	608	3044



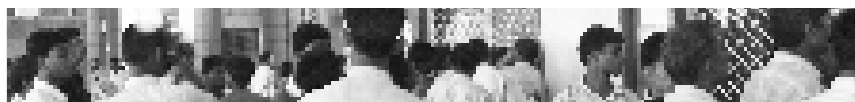


Table 7 : Sexual behaviour of recent male migrants by background characteristics and current marital status, Maharashtra state, India, 2007

Characteristics	Unmarried				Married			
	Sex worker	Non-sex worker	Any partner*	N	Sex worker	Non-sex worker	Any partner*	N
Age group (for unmarried sample)								
<=24 years	15.5	8.7	21.2	1314	-	-	-	-
25+ years	29.5	17.9	40.4	156	-	-	-	-
Age group (for married sample)								
<=29 years	-	-	-	-	8.5	5.9	12.9	1130
30+ years	-	-	-	-	2.8	3.3	5.5	397
Education								
Illiterate	11.0	5.5	14.2	127	4.6	4.1	7.7	194
Primary	24.0	12.5	30.2	96	6.4	6.9	12.2	188
Secondary	17.2	10.5	24.7	892	7.3	4.5	10.8	937
High School+	17.1	8.0	21.3	362	7.3	6.9	11.7	247
Income level								
<= Rs.2000	29.7	16.6	37.2	145	7.9	5.8	12.2	139
Rs.2001-3000	15.3	9.3	21.7	859	5.8	5.1	9.6	739
Rs.3001+	16.6	8.1	22.2	469	7.8	5.0	11.8	679
District								
Thane	11.7	6.0	16.0	282	7.3	4.6	10.7	328
Mumbai	5.7	2.4	7.7	246	3.3	1.1	4.4	360
Nagpur	36.4	21.9	48.3	269	11.2	9.2	17.6	347
Pune	26.2	13.1	35.5	366	8.9	9.3	16.5	237
Nashik	3.5	3.8	6.4	314	3.7	2.4	5.8	294
Type of occupation								
Construction worker	16.4	14.0	25.3	415	4.9	9.8	12.6	429
Hamali	26.9	17.3	38.5	52	7.1	5.7	11.4	70
Daily wage labourer	15.4	6.4	19.2	78	5.6	4.2	8.5	71
Industry worker	13.0	5.9	17.5	746	8.1	2.7	10.1	693
Stone cutter	37.1	21.4	50.0	70	10.4	5.2	15.6	77
Other	30.4	9.6	33.9	115	5.9	3.6	8.1	221
Exposure to pornography								
No	9.7	6.9	14.8	318	4.0	5.0	8.0	476
Yes	19.1	10.4	25.6	1159	8.1	5.1	11.9	1090
Alcohol consumption								
No	6.2	3.8	9.3	923	3.6	1.1	4.5	757
Yes	35.3	19.4	46.7	552	10.0	9.0	16.7	803
Wife at current destination								
Yes	--	--	--	--	6.7	6.2	11.9	504
No	--	--	--	--	7.1	4.8	10.6	1023
TOTAL	17.1	9.6	23.3	1477	6.8	5.1	10.7	1566

* Any partner = Either sex worker or non-sex worker.



Table 8 : Sexual behaviour of recent male migrants by migration/ mobility characteristics and current marital status, Maharashtra state, India, 2007

Migration/ mobility characteristics	Unmarried				Married			
	Sex worker	Non-sex worker	Any partner*	N	Sex worker	Non-sex worker	Any partner*	N
No. of places changed during last 2 years								
2	15.9	8.8	21.7	1346	7.0	5.2	11.0	1509
3+	30.4	18.4	41.6	125	1.8*	1.8*	3.6*	56
Stayed away from home overnight while at current location in the last month								
No	19.5	10.8	25.9	925	6.8	5.9	11.2	1086
Yes	13.0	7.6	18.8	552	6.9	3.3	9.6	479
Commutes between residence and work								
No	6.1	3.0	8.5	667	5.3	2.8	7.5	786
Yes	26.1	15.1	35.5	809	8.4	7.5	14.1	774
Currently under contract								
No	15.5	9.3	21.2	1158	6.4	4.3	9.7	1323
Yes	22.9	10.7	31.0	319	9.1	9.5	16.5	243
Currently not under contract, but entered through contract								
No	17.2	9.3	23.1	1425	6.9	4.9	10.7	1528
Yes	12.8	19.1	27.7	47	3.2	16.1	16.1	31
Total	17.1	9.6	23.3	1477	6.8	5.1	10.7	1566

* Any partner = Either sex worker or non-sex worker.

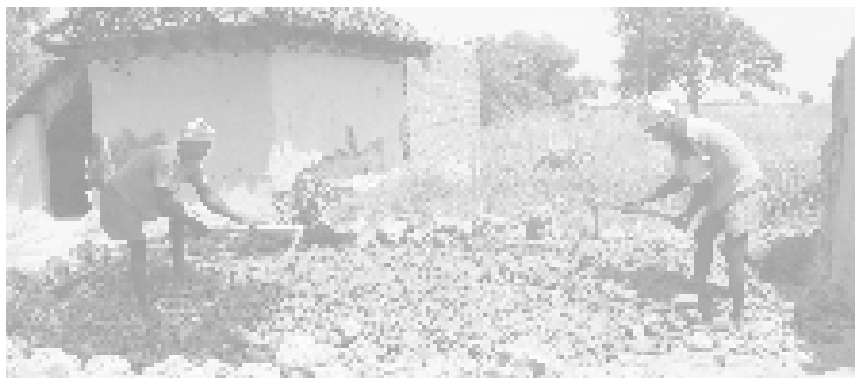




Table 9 : Non-use or inconsistent use of condoms during sex with different sexual partners among recent male migrants by current marital status, Maharashtra state, India, 2007

Migration/ mobility characteristics	Unmarried			Married		
	Sex worker	Non-sex worker	Any partner*	Sex worker	Non-sex worker	Any partner*
No. of places changed during last 2 years						
2	13.6	76.6	27.4	13.2	66.2	32.3
3+	8.1	65.2	27.5	0.0	-	50.0
Stayed away from home overnight while at current location in the last month						
No	12.9	70.7	25.9	13.7	68.9	36.4
Yes	12.5	84.2	31.0	11.8	57.1	22.2
Commutes between residence and work						
No	22.0	93.7	37.7	16.7	73.7	32.1
Yes	11.0	71.9	25.4	10.8	64.3	32.7
Currently under contract						
No	14.0	77.8	29.5	16.5	72.7	36.5
Yes	9.7	64.5	22.1	0.0	50.0	18.9
Currently not under contract, but entered through contract						
No	12.3	75.6	27.0	13.2	68.6	32.3
Yes	16.7	50.0	27.3	0.0	40.0	40.0
Total	12.7	74.6	27.4	13.1	67.1	32.5

* Any partner = Either sex worker or non-sex worker.



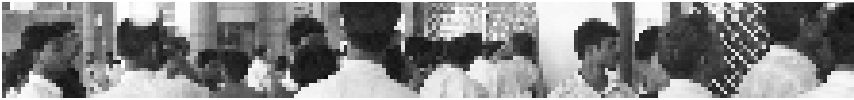


Table 10 : Percentage of recent male migrants who reported *gupt rog and STI-like symptoms** in the last 12 months and perceived high/ moderate risk of becoming infected with HIV by migration/ mobility characteristics, Maharashtra state, India, 2007**

Migration/ mobility characteristics	<i>gupt rog</i> symptoms	STI-like symptoms	perceive high/ moderate risk of HIV	N
No. of places changed during last 2 years				
2	49.0	33.8	17.7	2855
3+	85.3	67.6	38.7	181
Stayed away from home overnight while at current location in the last month				
No	51.4	36.0	16.6	2011
Yes	50.3	34.9	22.0	1031
Commute between residence and work				
No	29.0	15.9	12.7	1453
Yes	71.3	53.8	26.1	1583
Currently under contract				
No	46.7	31.3	16.7	2481
Yes	70.1	54.8	31.4	562
Currently not under contract, but entered through contract				
No	50.7	35.4	18.5	2953
Yes	62.8	41.0	20.9	78
Total %	51.1	35.7	18.5	--
Total N	--	--	--	3044

* *Gupt rog* symptoms: *swapna dosh*, *dhat*, lack of erection, bent penis, premature/early ejaculation, poor quantity of semen, poor quality of semen, *garmi*, *phoda/phunsi*, swelling in groin area, itching in genital area, frequent painful urination.

** STI like symptoms: *garmi*, *phoda/phunsi*, swelling in groin area, itching in genital area, frequent painful urination.





Table 11 : Percent distribution of number of places where recent male migrants had non-marital sex along their migration route, Maharashtra state, India, 2007

Profile	Sex with other women in number of places*					Total %	Total N
	None	1 place	2 places	3 places	4 places		
Age group							
<=19 years	75.1	19.6	3.3	2.0	--	100.0	245
20-24 years	53.9	33.5	10.1	2.2	0.3	100.0	1482
25-29 years	63.2	25.2	7.7	3.3	0.7	100.0	910
30-34 years	76.0	19.8	3.8	0.4	--	100.0	263
35+ years	82.6	13.2	3.5	0.7	--	100.0	144
Education							
Illiterate	70.4	23.7	4.7	1.2	--	100.0	321
Up to primary	63.0	25.7	7.4	2.5	1.4	100.0	284
Up to secondary	60.6	28.4	8.3	2.5	0.3	100.0	1830
High school+	59.6	28.9	9.0	2.3	0.2	100.0	609
Current Marital Status							
Unmarried	51.6	33.6	11.4	3.0	0.5	100.0	1477
Married	71.2	22.2	4.8	1.6	0.2	100.0	1566
Type of occupation							
Construction worker	59.0	26.9	10.4	3.2	0.5	100.0	844
Hamali	63.9	25.4	9.8	0.8	--	100.0	122
Daily wage labourer	66.4	26.8	5.4	1.3	--	100.0	149
Industry worker	63.8	28.8	5.8	1.6	0.1	100.0	1440
Stone cutter	45.6	33.3	17.0	3.4	0.7	100.0	147
Other	63.1	24.1	8.0	3.6	1.2	100.0	336
Under contract system anytime							
Never under contract	64.1	26.8	6.9	1.9	0.4	100.0	2456
First time work under contract but now not under contract	51.8	31.3	13.3	3.6	--	100.0	498
First time work not under contract but is now under contract	61.1	22.2	5.6	5.6	5.6	100.0	18
Under contract in both first time work and now	41.7	40.0	11.7	6.7	--	100.0	60
Total %	61.7	27.7	8.0	2.3	0.3	100.0	3044

* Based on men's sexual behaviour information at their current location, previous two locations, and place of origin.



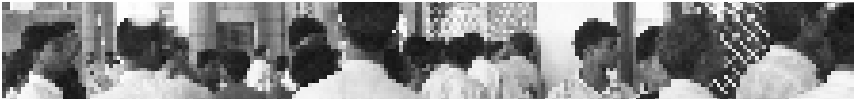


Table 12 : Percentage of recent male migrants who reported non-marital sex along their migration routes, Maharashtra state, India, 2007

Profile	Current place (CP)	Previous place 1 (P1)	Previous place 2 (P2)	Place of origin	% had sex in place of origin & one of the three places (CP, P1, P2)	Total sample
Age group						
19-24 years	19.1	14.1	18.7	36.8	10.7	1727
25-29 years	17.3	12.4	13.3	34.3	12.0	910
30-34 years	7.2	7.3	6.8	22.8	5.7	263
35+ years	4.9	5.7	9.5	14.2	3.5	144
Income (Rs)						
<3000	17.5	13.4	17.3	32.5	10.1	1883
3001-5000	15.9	10.9	10.2	35.2	10.2	1098
5001+	16.0	18.8	25.0	51.1	18.0	50
Type of occupation						
Construction worker	18.8	14.7	16.7	36.2	12.9	846
Hamali	23.0	16.7	14.7	21.3	7.4	122
Daily wage labourer	14.1	9.6	7.0	25.3	6.7	149
Industry worker	13.9	10.6	12.0	33.8	8.7	1443
Stone cutter	32.0	18.6	19.8	40.6	18.4	147
Other	16.9	13.0	17.4	33.3	9.8	337
Current Marital Status						
Unmarried	23.3	16.6	23.3	41.1	14.1	1477
Married	10.7	8.8	9.5	27.0	6.7	1566
Whether wife staying with respondent among currently married men						
Yes	11.9	10.6	13.7	26.5	6.7	504
No	10.2	7.9	7.0	27.1	6.6	1053
Under contract system anytime						
Never under contract	15.0	11.2	12.7	32.0	9.0	2456
First time work under contract but now not under contract	24.9	17.8	21.7	41.4	16.1	498
First time work not under contract but is now under contract	16.7	23.5	25.0	46.2	16.7	18
Under contract in both first time work and now	25.0	27.1	25.7	47.5	11.7	60
Total %	16.9	12.6	14.7	33.9	10.3	3044



Table 13 : HIV transmission and prevention knowledge among recent male migrants by district, Maharashtra state, India, 2007

	Thane	Mumbai	Nagpur	Pune	Nashik	Total
How does a man get infected with HIV?						
Sex with multiple partners	43.2	28.4	18.2	14.3	20.7	25.0
Sex without condoms	31.4	18.5	45.8	27.5	32.2	31.1
Sex with someone having HIV	73.6	70.1	25.0	25.5	43.4	47.5
Sex with sex workers	44.0	31.2	18.0	13.6	29.9	27.4
Infected blood	1.5	0.7	1.0	0.2	0.7	0.8
Infected needles	24.5	9.9	41.6	21.9	11.0	21.8
Barber shop	0.3	--	6.8	1.0	--	1.6
Kissing an HIV-positive person	3.3	1.0	0.5	1.7	7.2	2.7
Common toilet/bath places	1.3	--	0.2	0.2	3.0	0.9
Sharing utensils/clothes	3.6	--	0.2	0.8	4.9	1.9
Mosquito bite	14.1	8.7	3.7	6.1	10.7	8.7
How can HIV infection be prevented?						
Having only one sexual partner	37.2	22.6	9.9	20.9	8.7	19.8
Using condoms all the time	4.3	2.8	1.3	0.2	0.5	1.8
Taking injections with clean needle/ syringe/other injecting equipment	1.0	0.5	2.1	1.3	1.2	1.2
Abstaining from pre/ extra-marital sex	66.9	49.5	42.5	40.5	46.9	49.3
Not visiting female sex workers	--	--	--	--	--	--
Using antibiotics before sex	22.9	9.9	11.4	4.3	2.5	10.2
Avoiding people who are HIV-positive	63.3	69.3	30.7	31.3	51.3	49.2
Having a good diet	13.7	7.8	3.9	3.0	19.1	9.5
Abstaining from sex all the time	23.1	16.5	38.6	17.1	32.9	25.7
N	611	606	616	603	608	3044





Table 14 : Percentage of recent male migrants under contract system either for the first time for work or currently, Maharashtra state, India, 2007

Type of occupation	Never under contract	First time work not under contract but is now under contract	First time work under contract but now not under contract	Under contract in both first time work and now	Total %	% anticipated program coverage of migrant men, if implemented through contract systems	Total N
Construction worker	65.2	27.9	0.6	6.3	100.0	34.8	846
<i>Hamali</i>	99.2	0.8	--	--	100.0	0.8	122
Daily wage labourer	98.0	0.7	1.3	--	100.0	2.0	149
Industry worker	83.7	15.4	0.5	0.4	100.0	16.3	1443
Stone cutter	99.3	--	--	0.7	100.0	0.7	147
Other	86.9	11.9	1.2	--	100.0	13.1	337
Total	81.0	16.4	0.6	2.0	100.0	19.0	3044



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