



सत्यमेव जयते
Ministry of Health and Family Welfare
Government of India



National AIDS Control Organisation
Ministry of Health & Family Welfare
Government of India

TECHNICAL REPORT

PROGRAMMATIC MAPPING AND POPULATION SIZE ESTIMATION (PMPSE) OF HRGs

ROUND 1



@ NACO, MoHFW, GoI, 2024

All rights reserved

You may copy, redistribute, and adapt the publication for non-commercial purposes, provided the publication is appropriately cited. In any use of this publication, there should be no suggestion that NACO endorses any specific organization, products, or services. The use of NACO logo is not permitted. If you adapt the publication, then you must license your work allowing copy, redistribute and adapt the work for non-commercial purposes. If you create a translation of this publication, you should add the following disclaimer: “This translation was not created by the NACO. NACO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition.”

General disclaimers

NACO has made every effort to ensure the accuracy of data and verify the information contained in this publication. However, errors and omissions excepted. The publication is being distributed without warranty of any kind, either expressed or implied.

Maps, if any used in this publication, are only to provide visual impressions on the given indicator. These are not for scale and must not be constructed or used as a “Legal Description” of any State/UT/district.

Suggested citation

National AIDS Control Organisation. Technical Report: Programmatic Mapping and Population Size Estimation (PMPSE) of HRGs: Round 1, New Delhi: NACO, Ministry of Health & Family Welfare, Government of India; 2024

For additional information on PMPSE 2020-22: Technical Report, please contact:

Surveillance & Epidemiology: Strategic Information Division
National AIDS Control Organization (NACO)
Ministry of Health & Family Welfare, Government of India
6th and 9th Floor, Chanderlok Building
36, Janpath, New Delhi-110001



सत्यमेव जयते
Ministry of Health and Family Welfare
Government of India



National AIDS Control Organisation
Ministry of Health & Family Welfare
Government of India

TECHNICAL REPORT

PROGRAMMATIC MAPPING AND POPULATION SIZE ESTIMATION (PMPSE) OF HRGs

ROUND 1

National AIDS Control Organisation and All India Institute of Medical Sciences
Ministry of Health & Family Welfare, Government of India



सत्यमेव जयते

वी. हेकाली झिमोमी, भा.प्र.से.
अपर सचिव एवं महानिदेशक
V. Hekali Zhimomi, IAS
Additional Secretary & Director General

75
आज़ादी का
अमृत महोत्सव



Foreword



राष्ट्रीय एड्स नियंत्रण संगठन
स्वास्थ्य और परिवार कल्याण मंत्रालय
भारत सरकार
National AIDS Control Organisation
Ministry of Health & Family Welfare
Government of India

India's HIV epidemic is primarily concentrated among specific population groups, including Female Sex Workers (FSW), Men who have Sex with Men (MSM), Hijra/Transgender (H/TG) people, and People who Inject Drugs (PWID). These groups, referred to as High-Risk Groups (HRG) under the National AIDS and STD Control Programme (NACP), experience significantly higher rates of HIV infection compared to the general population. The HIV prevalence among these high-risk groups is 9–43 times that of the national adult prevalence.

Given the high prevalence of HIV/AIDS epidemic among HRGs in India, mapping and population size estimation is a crucial initiative under NACP to inform both epidemiological and programmatic aspects. In 2020, NACO adopted the method of community-led Programmatic Mapping and Population Size Estimation (PMPSE) to periodically estimate the size for HRGs. The first round for PMPSE was implemented in 2020-22 through the fully domestically funded Integrated and Enhanced Surveillance & Epidemiology (ISE) Framework of NACP.

The first round of PMPSE was conducted in 651 districts across 32 States/UTs and estimated around 9.96 lakh FSW, 3.51 lakh MSM, 96.2 thousand H/TG people and 2.89 lakh PWID. PMPSE estimates for PWID and H/TG people are significantly higher compared to previous estimates. Specifically, in eight north-eastern and northern states, PMPSE estimates for PWIDs are between 2 to 10 times higher than earlier figures. Also, for the first time, PMPSE has not only quantified the presence of network operators but also demonstrated that a segment of the key population (approximately 14% of FSWs, 7% of MSM, and 8% of H/TG people) can only be reached via these operators.

India's PMPSE is the world's largest size estimation initiative of its kind for HRGs. This activity has provided crucial new data of programmatic importance for designing and expanding preventive services for HRGs across various States/UTs in India. I am confident that the evidence presented here will be utilized by all stakeholders to enhance programmatic responses contributing to the achievement of the 2030 goal of ending the AIDS epidemic as a public health threat.

(V. Hekali Zhimomi)

6th Floor, Chandralok Building, 36 Janpath, New Delhi-110001 Tel. : 011-23325331 Fax : 011-23351700
E-mail : dgoffice@naco.gov.in

अपनी एचआईवी अवस्था जानें, निकटतम सरकारी अस्पताल में मुफ्त सलाह व जाँच पाएँ
Know your HIV status, go to the nearest Government Hospital for free Voluntary Counselling and Testing

लता गणपति, भा.प्र.से.
संयुक्त सचिव

Latha Ganapathy, IAS
Joint Secretary



भारत सरकार
स्वस्थ एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली-110011
Government of India
Ministry of Health & Family Welfare
Nirman Bhawan, New Delhi – 110011

Preface

National AIDS and STD Control Programme (NACP) of the Government of India has adopted Programmatic Mapping and Population Size Estimation (PMPSE) method to periodically estimate the size for HRGs. PMPSE is an established method to provide local area estimates serving both the epidemiological and programmatic needs. Implemented primarily by peer educators and outreach workers of NGOs/CBOs-led targeted interventions under the supervision of district-level Community Advisory Boards, PMPSE of HRGs under NACP is truly 'of the community, by the community, for the community'.

This report, organized into four chapters, outlines the methods and results of the first round of PMPSE conducted from 2020 to 2022. Chapter 1 offers an introduction to PMPSE within the context of NACP, along with an overview of this document. Chapter 2 details the methodology employed. Chapter 3 presents the findings divided into four sections, each dedicated to Female Sex Workers (FSW), Men who Have Sex with Men (MSM), People who Inject Drugs (PWID), and Hijra/Transgender (H/TG) people respectively. Finally, Chapter 4 summarizes the main points of the report.

PMPSE estimated a total of 9,95,499 (9,02,277–10,88,712) FSWs, 3,51,020 (3,13,860–3,88,175) MSM, 2,88,717 (2,53,025–3,24,408) PWIDs, and 96,193 (85,206–1,07,174) H/TG individuals. In addition to quantifying the presence of network operators, PMPSE highlighted that a segment of the key population (approximately 14% of FSWs, 7% of MSM, and 8% of H/TG individuals) can be accessed solely through these operators. This new evidence is critical for designing and scaling prevention services for HRG.

This report's data results from meticulous efforts by Strategic Information and Prevention (Targeted Interventions) at NACO and SACS. PMPSE implementation through targeted interventions projects was directly led by SACS Project Directors and anchored by DISHA/DAPCUs at the district level, with assistance from Technical Support Units. Their dedicated ownership guaranteed that the findings are timely, credible and actionable. We extend our heartfelt gratitude to all stakeholders for their support and collaboration.

The HIV/AIDS epidemic in India remains concentrated, with high-risk groups (HRGs) being disproportionately impacted compared to the general population. We are confident that this report will be an essential resource for policymakers and program managers informing efficient resource allocations and consequent designing of HIV/AIDS-related services for HRGs, ultimately contributing to India's goal of ending AIDS as a public health threat by 2030.


(Latha Ganapathy)

Room No. 145, 'A' Wing, Nirman Bhawan, New Delhi-110011

Tel. (O) : 011-23063809, E-mail : g-latha@nic.in



डॉ. शोभिनी राजन

मुख्य चिकित्सा अधिकारी (एसएजी)

Dr. Shobini Rajan, M.D. (Pathology)

Chief Medical Officer (SAG)

Tel. : +91-11-23731810, 43509956

Fax : +91-11-23731746

E-mail : shobini@naco.gov.in



Message

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
राष्ट्रीय एड्स नियंत्रण संगठन
9वां तल, चन्द्रलोक बिल्डिंग,
36, जनपथ, नई दिल्ली-110 001

Government of India
Ministry of Health & Family Welfare
National AIDS Control Organisation
9th Floor, Chandralok Building,
36, Janpath, New Delhi - 110 001

India's HIV epidemic is primarily concentrated among the high risk groups including female sex workers (FSW), men who have sex with men (MSM), hijras/transgender persons (H/TG), and injecting drug users (IDUs). Estimating these population groups is essential for understanding the epidemic's scope, creating effective policy, and scaling up of the program. Aligning with the changing dynamics of high-risk behaviors, programmatic requirement, and resources available, NACO has formulated the Operational Manual for conducting the Programmatic Mapping and Population Size Estimation (PMPSE). This exercise of mapping and population size estimation of the HRGs is implemented with the active engagements of the communities and front line team of peer educators and outreach workers under the leadership of Project Directors of State AIDS Control Societies.

The PMPSE exercise was undertaken during the year 2020-22 in 651 districts across 32 States/UTs. HRGs operating in the physical spaces or through network operators were largely covered typology wise for estimation. Even though COVID-19 pandemic had impacted implementation of the exercise initially, however, the committed engagement of all stakeholders and leadership of SACS had led to completion of the exercise in time. The PMPSE exercise provided critical insights into the population sizes and distribution patterns of high-risk groups (HRGs) across India. We remain committed to continuously improving our PMPSE methods and integrating these insights into our prevention strategies to combat HIV and AIDS more effectively. Based on the learnings and findings of the PMPSE Round I, now we will proceed with Community Led PMPSE Round II.

I sincerely appreciate the hard work and dedication of all involved in this critical exercise, as it will significantly contribute to the strategic planning and implementation of interventions under the National AIDS and STD Control Program.


(Dr. Shobini Rajan)



Message

On behalf of UNAIDS, I would like to congratulate the National AIDS Control Organisation, Ministry of Health and Family Welfare (NACO, MOHFW) for undertaking the programmatic mapping and population size estimation (PMPSE) of key populations, in programme mode, for the first time across 656 districts in 32 States/Union Territories in India. The PMPSE was implemented in 2020-22 during the COVID-19 pandemic and its recovery period. This is particularly notable, and here, I would like to also acknowledge all State AIDS Control Societies, field personnel and all who participated and supported this initiative and helped overcome the challenges caused by the COVID-19 pandemic to complete the exercise.

PMPSE provides critical information on the location and size of the key population groups of female sex workers, men having sex with men, transgender people, and people who inject drugs in physical venues and operating via network operators. This information, coupled with the available evidence on HIV incidence and prevalence from HIV estimations and Surveillance exercises, provides the national HIV prevention programme with key insights to be able to further prioritize and plan interventions by geography and population group and monitor coverage of essential services to reduce incidence further. I would like to encourage all stakeholders to review this report, which provides a detailed analysis of the findings at national and State/Union Territory from the PMPSE 2020–2022 round.

As the world fast approaches the 2025 targets towards the 2030 Sustainable Development Goal of “ending the AIDS epidemic as a public health threat”, UNAIDS looks to India to continue to lead the way and provide an example for other countries on evidence-informed granular level planning, monitoring and resource allocation. The next couple of years are crucial, and there is a great opportunity to be able to build on the gains made and fast-track where needed to achieve the targets and goals as outlined in the National AIDS and STD Control Programme phase V (2021-2026). UNAIDS remains committed to supporting the NACO leadership in their endeavours with the Joint Team on AIDS, PEPFAR, and community partners.



David Bridger

UNAIDS Country Director for India



National AIDS Control Organisation
India's response to HIV & Sexually Transmitted Infections
Ministry of Health and Family Welfare, Government of India
www.naco.gov.in



Dr. Chinmoyee Das
Public Health Specialist, Grade-I
Head, Strategic Information
c.das@gov.in



Government of India
Ministry of Health & Family Welfare
National AIDS Control Organisation
6th & 9th Floor, Chandralok Building,
36 Janpath, New Delhi – 110 001
Tel.: 011-43509994

Acknowledgement

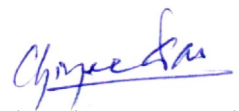
The first round of Programmatic Mapping and Population Size Estimation was implemented in 651 districts across 32 States/UTs during the year 2020-22 by National AIDS Control Organisation (NACO) under the Ministry of Health and Family Welfare, Government of India. NACO extends its gratitude to all stakeholders for their invaluable support and timely efforts in ensuring the successful implementation of this surveillance round.

Leadership to the surveillance and epidemiology under NACP is provided by Ms. V. Hekali Zhimomi (Addl. Secretary & DG, NACO, MoHFW, GoI), Dr. Sanjay Mehendale (Former Addl. DG, ICMR and Co-Chair, TRG-S&E) and Shri Nikhil Gajraj (Joint Secretary, NACO, MoHFW, GoI). We place on record our sincere gratitude to the leadership for their continuous advice and support, enabling a continuously evolving system. NACP's Technical Working Group (S&E), under the Chairpersonship of Dr. DCS Reddy (Former HoD, Community Medicine, BHU, UP), and Co-Chairpersonship of Dr. Shobini Rajan (CMO-SAG, NACO) was instrumental in reviewing and recommending the method and findings of the first round. Late Prof. Arvind Pandey (Former Director, ICMR NIMS, New Delhi), Dr. Shashi Kant (Former Head, CCM, AIIMS, New Delhi), Mx. Abhina Aher (USAID), Dr. S.K. Singh (former Director IIPS & Chair, Expert Group) and Dr. Shajy Isac provided and ensured technical rigour.

Programmatic context and support have been provided by Dr. Anoop Kumar Puri (DDG, NACO), Dr. Uday Bhanu Das (Sr. CMO-SAG, NACO), Dr. Shobini Rajan (CMO-SAG, NACO), Dr. Bhawani Singh Kushwaha (Deputy Director, NACO), and Dr. Sai Prasad Bhavsar (Deputy Director, NACO). Ethics Committee under the chairpersonship of Dr. Srikant P. Tripathy reviewed and approved the ethical considerations. We place on record our sincere thanks to NACO's leadership and senior experts for providing vision, insight and support towards the development of PMPSE guidelines. The core team comprising Dr. Pradeep Kumar (NACO), Dr. Shantanu Purohit (NACO), Dr. Subrata Biswas (NACO) and Dr. Nidhi Priyam (NACO) developed this report. Ms. Shreena Ramanathan, Mr. Lalit Singh Kharayat, Dr. Akhilesh Srivastava, Ms. Jyotsna Pal, and Mr. Shajan Mathew (UNAIDS, India) supported developing the report. The report was reviewed by the Regional Institutes (Surveillance & Epidemiology) and SACS SIMU & Prevention officials. We appreciate all of them for helping in developing the report.

The SIMU & Prevention team at SACS members under the leadership of their Project Directors coordinated with all stakeholders ensuring successful and smooth implementation, led the site-level training, and took leadership for troubleshooting of various operational aspects at the State level. NACO acknowledges the contribution of Project Directors of SACS, SST & CAB members, and all stakeholders in the successful implementation of the first round of PMPSE.

Last but not least, the credit for successful implementation goes to our TI site personnel for timely completion of this activity, while adhering to the best possible quality standards. NACO sincerely thanks all the field personnel engaged in this activity for their contribution to the first round of PMPSE among the HRG population.


(Dr. Chinmoyee Das)

Contents

Acronyms	xvii
Executive Summary	1
Chapter 1: Introduction	7
1.1 Background	7
1.2 PMPSE Implementation Design	8
Chapter 2: Methodology	10
2.1 Operational Definition of HRGs	10
2.2 Implementation Steps of the Community-Led PMPSE	11
2.3 Geographic Coverage	12
2.4 Data Collection Tools	18
2.5 Ethical Consideration and Respondent Protection Measures	18
2.6 Data Confidentiality	19
2.7 Data Management	19
2.8 Monitoring and Supervision	20
2.9 Consolidation of Results and Review	20
Chapter 3: PMPSE Findings	22
3.1 Female Sex Workers	22
3.1.1 Profile of Key Informants Interviewed	22
3.1.2 Profile of Network Operators	25
3.1.3 Profile of Interviewers	26
3.1.4 Hotspot Coverage and Operational Duration	27
3.1.5 Types of Hotspots	28
3.1.6 Peak Days and Peak Times of Maximum FSW Presence	30
3.1.7 Estimated Size of the FSW Population	32
3.2 Men Who Have Sex with Men	35
3.2.1 Profile of Key Informants Interviewed	35
3.2.2 Profile of Network Operators	38

3.2.3	Profile of Interviewers	39
3.2.4	Hotspot Coverage and Operational Duration	40
3.2.5	Types of Hotspots	41
3.2.6	Peak Days and Times of Maximum MSM Presence	43
3.2.7	Estimated Size of the MSM Population	45
3.3	Injecting Drug Users	48
3.3.1	Profile of Key Informants Interviewed	48
3.3.2	Profile of Network Operators	51
3.3.3	Profile of Interviewers	52
3.3.4	Hotspot Coverage and Operational Duration	53
3.3.5	Types of Hotspots	54
3.3.6	Peak Days and Times of Maximum IDU Presence	56
3.3.7	Estimated Size of the IDU Population	58
3.4	Hijra/Transgender People	62
3.4.1	Profile of Key Informants Interviewed	62
3.4.2	Profile of Network Operators	65
3.4.3	Profile of Interviewers	66
3.4.4	Hotspot Coverage and Operational Duration	67
3.4.5	Types of Hotspots	68
3.4.6	Peak Days and Times of Maximum H/TG People Presence	70
3.4.7	Estimated Size of the H/TG Population	71
Chapter 4:	Discussion	75
Annexure 1:	District Fact Sheets	76
	Andhra Pradesh	76
	Arunachal Pradesh	80
	Assam	83
	Bihar	87
	Chandigarh	91
	Chhattisgarh	92
	Delhi	96
	Goa	99
	Gujarat	100
	Haryana	105
	Himachal Pradesh	109

Jammu & Kashmir	112
Jharkhand	115
Karnataka	118
Kerala	123
Madhya Pradesh	126
Maharashtra	134
Manipur	139
Meghalaya	142
Mizoram	144
Nagaland	146
Odisha	148
Puducherry	153
Punjab	155
Rajasthan	159
Sikkim	165
Tamil Nadu	166
Telangana	171
Tripura	175
Uttar Pradesh	177
Uttarakhand	190
West Bengal	192

Annexure 2: List of Contributors	196
---	------------

Acronyms

ADG	Assistant Director General
AD	Assistant Director
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ART	Antiretroviral Treatment
BSD	Basic Service Division
CAB	Community Advisory Board
CL	Community Liaison
CLW	Cluster Link Worker
CST	Care, Support and Treatment
CBO	Community-Based Organization
DD	Deputy Director
DDG	Deputy Director General
DAPCU	District AIDS Prevention and Control Unit
DRP	District Resource Person
FSW	Female Sex Worker
GD	Group Discussion
HIF	Hotspot Information Format
HIV	Human Immunodeficiency Virus
HRG	High-Risk Group
HSS	HIV Sentinel Surveillance
H/TG	Hijra/Transgender People
ICF	Informed Consent Form
IDU	Injecting Drug User
JD	Joint Director
KII	Key Informant Interview
KP	Key Population
LWS	Link Worker Scheme

PMPSE	Programmatic Mapping and Population Size Estimation
MPSE	Mapping and Population Size Estimation
MSM	Men who have Sex with Men
M&E	Monitoring and Evaluation
MTA	Mid-Term Appraisal
NACO	National AIDS Control Organization
NACP	National AIDS and STD Control Programme
NORMS	National Online Reporting Monitoring System
NGO	Non-Governmental Organization
NSP	National Strategic Plan
NOW	Network Operator
ORW	Outreach Worker
PE	Peer Educator
PD	Project Director (State AIDS Control Society)
PIS	Participant Information Sheet
PLHIV	People Living with HIV
PM	Project Manager
PO	Programme Officer
PSE	Population Size Estimation
RFA	Rapid Field Assessment
SACS	State AIDS Control Society
SIMU	Strategic Information Management Unit
SOP	Standard Operating Procedure
SSC	State Steering Committee
STD	Sexually Transmitted Disease
SWG	State Working Group
TAG	Technical Advisory Group
TE-SPIR	Technical Expert – Strategic Planning, Information and Research
TI	Targeted Interventions
TOT	Training of Trainers
TSU	Technical Support Unit
UT	Union Territory
VIF	Village Information Format

Executive Summary

Mapping and population size estimation (MPSE) exercises are crucial for understanding epidemic patterns and developing effective policies and programmes. These estimates help assess programmatic needs, plan targeted interventions, set targets and budget, allocate resources and support advocacy efforts. Additionally, MPSE data informs policy decisions and provides critical inputs for epidemiological models to monitor key HIV indicators. The National AIDS Control Organization (NACO) undertakes MPSE of high-risk groups (HRGs) periodically. The evolution of size estimation activities for HRGs under the National AIDS and STD Control Programme (NACP) in India has progressed through systematic advancements across its phases. During NACP II in the early 2000s, State AIDS Control Societies (SACS) initiated mapping studies to understand HRG distribution and size, laying foundational work despite varied methodologies. NACP III, starting in 2007, introduced standardized methods for mapping HRGs, covering 17 States and including populations like female sex workers (FSWs), men who have sex with men (MSM), injecting drug users (IDUs), migrants and truckers. A significant milestone was the 2013 size estimation for hijras/transgender (H/TG) people. Under NACP IV, the focus shifted to regular 'site re-validations' to monitor HRG numbers and set targets. Recommendations from the 2016 mid-term appraisal, expert consultations, and the National Strategic Plan (2017–2024) emphasized updating and systematizing MPSE methods. Additionally, a white paper commissioned by NACO specifically recommended integrating MPSE into the Targeted Intervention (TI) programme, aiming for biennial updates to enhance strategic planning and intervention effectiveness.

In view of the recommendations, the TI guidelines were revamped, and during 2020–22, the community-led PMPSE exercise was undertaken in 651 districts across 32 States/UTs. HRGs, including FSWs, MSM, IDUs and H/TGs operating through physical venues and those linked to network operators, were mapped to estimate

the population sizes. The PMPSE was implemented by outreach workers, peer educators and programme officers associated with the TI programme. PMPSE was conducted in both TI/LWS and non-TI catchment areas. Also, some non-TI districts were covered based on the vulnerability assessment. Rapid field assessments (RFA) were carried out at the hotspots and key informant interviews were conducted with HRGs, community gatekeepers and other stakeholders at each identified hotspot. Information about population size, peak days, peak times and hotspot-network operator overlap was gathered during the key informant interviews. Furthermore, HRGs linked with network operators were mapped and the number of those residing in link worker villages were also estimated. Quality assurance measures included spot checks during data collection and 10% back-checks afterwards. All data collected was entered into the online (NORMS) portal by the M&E personnel at the TIs. The programme officers then cross-checked at each level using Excel for further analysis and programme planning.

The PMPSE exercise estimated around 9,95,499 (9,02,277–10,88,712) FSWs, 3,51,020 (3,13,860–3,88,175) MSM, 96,193 (85,206–1,07,174) H/TG people and 2,88,717 (2,53,025–3,24,408) IDUs. These estimates specifically pertain to the physical venues and network operators reached under PMPSE in concurrence with the approved community-led PMPSE protocol. Below are the findings for each of the HRGs covered under PMPSE.

Female Sex Workers

In India, FSWs remain a pivotal focus in HIV prevention and intervention efforts, given their heightened vulnerability. As solicitation methods shift from physical to virtual and network-based, understanding their population size and mapping their locations becomes crucial for implementing tailored care, support and treatment services. Among FSWs, the

PMPSE exercise was implemented across 32 States/UTs. A total of 1,34,677 key informant interviews were conducted at 43,579 FSW hotspots during the RFA. On average, three interviews were conducted at each hotspot, two of which were conducted with the HRGs as mandated in the protocol. The majority of these interviews were conducted by the outreach workers (93.3%).

Nationally, the estimated total FSWs population was around 9,95,499 (9,02,277-10,88,712), including 7,71,375 from 43,579 hotspots, 1,38,935 associated with 10,718 network operators and 85,189 from the 16,095 link worker villages. The majority of the FSWs (60%) were estimated from six States, including Karnataka (1,53,337), Andhra Pradesh (1,19,367), Maharashtra (95,352), Delhi (88,399), Telangana (75,381) and Tamil Nadu (60,755). Nationally, one-fourth of the estimated FSWs were below the age of 25 years. However, in States like Sikkim (86.6%) and Arunachal Pradesh (56.8%), a higher proportion of FSWs were below the age of 25 years.

A significant proportion of the FSW hotspots where PMPSE was conducted were being covered by the TI programme (68.6%). New or previously uncovered FSW hotspots were also identified during PMPSE, which was around 31.4%. Nationally, over half of the FSW hotspots were home-based (55.1%), followed by 16.1% street-based locations and 5.9% brothel-based.

Furthermore, 10,718 network operators were mapped during PMPSE who were noted to be linked with the FSWs. Most of the network operators were females (83.8%) and belonged to the age category of 28 to 37 years (47.7%), followed by those in the 38 to 47 years age group (35.5%).

As indicated by the key informants and network operators, a significant overlap between hotspots and network operators was observed during the PMPSE exercise. Nationally, around 30% of the FSWs visit multiple hotspots within the district. Similarly, around 28% of the estimated FSWs were associated with more than one network operator, and a similar proportion also visited physical venues for solicitation.

Men who have Sex with Men

Since the inception of the NACP, MSM has been a central focus of the TI programme. As social landscapes evolve and digital avenues redefine interactions, precise MPSE of the MSM population at physical venues and virtual applications is necessary for designing targeted interventions. Among MSM, the PMPSE at the physical venues was implemented across 31 States/UTs. A total of 55,922 key informant interviews were conducted at the 17,967 MSM hotspots. Among these, 73.3% (40,983) interviews were conducted with HRGs. An average of three interviews were conducted at each of the hotspots. As mandated in the protocol, two of these interviews were with the HRGs, except in the case of Andhra Pradesh, Arunachal Pradesh and Puducherry. At the national level and across States/UTs, the implementation of PMPSE was primarily carried out by outreach workers (91.8%).

Nationally, the estimated total size of the MSM population was around 3,51,020 (3,13,860-3,88,175), including 3,16,742 from 17,967 hotspots, 23,734 associated with 1,660 network operators and 10,544 from the 5,587 link worker villages. A significant number of MSM were estimated in Karnataka (45,631) and Maharashtra (40,187), followed by Tamil Nadu (38,284), Gujarat (34,299), Delhi (27,026), and Andhra Pradesh (22,060). Collectively, these six States account for three-fifths of the total estimated size of the MSM population nationwide. Around 32.5% of the estimated MSM were below the age of 25 years nationwide.

It was observed that 64.4% of the hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 35.5% were either newly identified or previously uncovered. Nationally, 14.5% of the MSM hotspots were street-based, while another 14.4% were situated near bus stands, followed by 11.9% home-based. Around 18% of hotspots were located in parks or marketplaces, 9.4% were identified in old or vacant buildings or abandoned/dilapidated structures, and 5% were in proximity to railway stations.

Furthermore, a total of 1,660 network operators associated with MSM were mapped during PMPSE. Most network operators mapped were males (92.8%), followed by H/TG (5.3%). The majority of the network operators interviewed were young, with the largest proportion falling within the age category of 28 to 37 years (43.2%), followed by those in the age group of 18 to 27 years (35.3%). More than 100 network operators were mapped in the States of Maharashtra (383), Karnataka (198), Madhya Pradesh (161), Tamil Nadu (148) and Delhi (110).

A significant overlap between physical venues and network operators was observed during PMPSE. Nationally, 30% of the MSM estimated from the link worker villages visited nearby urban areas for engaging in high-risk behaviours. Similarly, a little more than one-fourth of the MSM were noted to visit multiple hotspots. Further, around 28.5% of the MSM associated with network operators were linked to more than one network operator and around 36.5% also visited physical hotspots for solicitation.

Injecting Drug Users

IDUs in India have been established as the most infected and affected population at risk of exposure to HIV in the country. Therefore, addressing HIV risk among IDUs is critical, and precisely mapping and estimating the size and locations of IDU populations is vital for implementing effective targeted interventions. Among IDUs, PMPSE was implemented across 32 States/UTs. A total of 54,221 key informant interviews were conducted at the 17,288 IDU hotspots. Among these, 71.9% (38,968) of the interviews were conducted with HRGs. At each of the hotspots, on average, three interviews were conducted. Two of these interviews were with the HRGs, except in the case of Andhra Pradesh and Assam. The implementation of PMPSE was primarily carried out by the outreach workers (89.5%) nationally and across States/UTs.

Nationally, the estimated total size of the IDU population was around 2,88,717 (2,53,025-3,24,408), including 2,67,333 from 17,288 hotspots, 10,178 associated with 953 network operators and 11,206 from 2,349 link worker villages. A significant number of IDUs were estimated in Punjab (45,098), Uttar Pradesh (35,412), Delhi (32,481), Assam (26,156) and Manipur

(24,985). These five States accounted for more than half of the estimated IDU population at the national level. Out of the total estimated IDUs at the hotspots, 2.9% were females. Around 37.4% of the estimated IDUs were below the age of 25 years nationwide.

It was observed that 58.3% of the hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 41.7% were either newly identified or previously uncovered. Nationally, 23.7% of the IDU hotspots were identified in old or vacant buildings and abandoned/dilapidated structures, followed by 14.1% in home-based settings, 13.7% on the streets, while another 7.1% were located in parks, and 5.1% in market places. Hotspots located under the bridge accounted for 4.6%, while 3.1% were reported near bus stops and 2.8% at railway stations.

During PMPSE 2020-22, a total of 953 network operators associated with IDUs were mapped across the different States/UTs. The majority of these network operators were males (96.2%), and a small proportion were females (3.7%). Over half of the network operators mapped were in the age category of 28 to 37 years (51.9%), followed by those in the age group of 38 to 47 years (24%) and 18 to 27 years (18.7%). More than 100 network operators were mapped in the States/UTs of Punjab (162), Jammu & Kashmir (133), Assam (105) and Madhya Pradesh (102).

Considerable overlap between hotspots and network operators was noted during PMPSE 2020-22. Approximately a little more than one-fourth of the estimated IDUs (28%) were noted to visit multiple hotspots within the district. Similarly, around 39.8% of the IDUs associated with network operators were linked with other network operators as well and about 43.5% visited physical hotspots for solicitation. Among IDUs estimated in the link worker villages, 45% visited nearby urban areas to engage in high-risk behaviours.

Hijra/Transgender People

In the context of HIV/AIDS in the country, people who self-identify as hijra/transgender individuals are among the population groups at highest risk of HIV. They rank second in prevalence nationwide (HSS, 2021), following IDUs. Among H/TG people, PMPSE was implemented across 30 States/UTs. A total of

20,775 key informant interviews were conducted at the 6,585 H/TG hotspots. Among these, 73.3% of the interviews were conducted with HRGs (15,231). At each of the hotspots, on average, three interviews were conducted. Two of these interviews were with the HRGs, except in the case of Andhra Pradesh. At the national level, the implementation of PMPSE was primarily carried out by the outreach workers (89.9%).

Nationally, the total estimated size of the H/TG population was around 96,193 (85,206-1,07,174), including 87,385 from 6,585 hotspots, 7,767 associated with 720 network operators and 1,041 from 886 link worker villages. A significant number of H/TG people were estimated in Delhi (17,907), Karnataka (10,926), Maharashtra (10,323), Uttar Pradesh (9,846), and Tamil Nadu (9,211). These five States accounted for more than half of the estimated H/TG nationally. Few H/TG people were identified in the rural areas compared to the urban areas. Around 30.5% of the estimated H/TG people were below the age of 25 years nationwide.

It was observed that 58.1% of the hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 41.9% were either newly identified or previously uncovered. Nationally,

32.8% of the H/TG hotspots were home-based, 11.8% were street-based, 10% were located near bus stands, 6.5% were in marketplaces, 5.5% were near highways, 5% were in abandoned areas, 4.5% were in parks, and 4.1% were near railway stations.

Furthermore, a total of 720 network operators associated with H/TG people were mapped across the different States/UTs. The majority of these network operators were H/TG persons (88.7%), followed by males (9.4%). Over half of the network operators mapped were in the age category of 28 to 37 years (49.7%), followed by those in the age group of 18 to 27 years (20.2%). More than 100 network operators were mapped in the States of Karnataka and Uttar Pradesh.

A significant overlap between hotspots and network operators was observed during PMPSE. Nationally, 44.5% of the estimated H/TG people in link worker villages visited nearby urban areas to engage in high-risk behaviours. Similarly, a little more than one-fourth of the estimated H/TG people (25.9%) were noted to visit multiple hotspots within the district. Approximately 21.5% of the estimated H/TG people were associated with more than one network operator and around 42.7% also visited physical hotspots.

Table 1: Nationally adjusted estimated size of the HRG population, PMPSE (HRGs), 2020-22

HRG population	Hotspots	Network operators	Link worker villages	Total adjusted estimated size
Female sex workers	7,71,375 (6,78,152-8,64,588)	1,38,935	85,189	9,95,499 (9,02,277-10,88,712)
Men who have sex with men	3,16,742 (2,79,582-3,53,898)	23,734	10,544	3,51,020 (3,13,860-3,88,175)
Injecting drug users	2,67,333 (2,31,641-3,03,024)	10,178	11,206	2,88,717 (2,53,025-3,24,408)
Hijra/transgender people	87,385 (76,398-98,366)	7,767	1,041	96,193 (85,206-1,07,174)

Table 2: State/UT wise adjusted estimated size, PMPSE (HRGs), 2020-22

State/UT	Female sex workers	Men who have sex with men	Injecting drug users	Hijra/transgender people
Andhra Pradesh	1,19,367 (1,02,886-1,35,848)	22,060 (18,565-25,555)	1,332 (1,060-1,604)	5,364 (4,419-6,309)
Arunachal Pradesh	6,941 (6,264-7,618)	901 (810-991)	5,143 (4,677-5,608)	140 (112-168)
Assam	39,721 (34,891-44,550)	16,667 (14,545-18,789)	26,156 (22,963-29,348)	2,481 (2,186-2,777)
Bihar	11,682 (11,020-12,344)	2,376 (2,236- 2,517)	4,585 (4,250-4,921)	846 (775- 918)
Chandigarh	3,333 (2,997-3,668)	2,569 (2,306-2,832)	1,908 (1,701-2,115)	164 (142-185)
Chhattisgarh	18,375 (16,859- 19,891)	2,889 (2,630- 3,148)	3,923 (3,535- 4,310)	1,118 (990-1,246)
Delhi	88,399 (87,811-88,987)	27,026 (24,985-29,068)	32,481 (29,447-35,515)	17,907 (16,188-19,626)
Goa	5,040 (4,305-5,776)	3,339 (2,787-3,891)	302 (247-356)	132 (116-148)
Gujarat	37,118 (33,445-40,792)	34,299 (30,661-37,938)	779 (637-920)	2,605 (2,396-2,814)
Haryana	17,668 (16,084-19,251)	8,022 (7,205-8,839)	19,025 (17,193-20,856)	1,435 (1,275-1,594)
Himachal Pradesh	13,210 (11,888- 14,533)	1,252 (1,081- 1,423)	3,662 (3,214-4,109)	258 (223- 293)
Jammu And Kashmir	4,634 (3,899- 5,369)	677 (548- 805)	10,162 (8,022-12,302)	614 (531-696)
Jharkhand	11,860 (10,568- 13,152)	1,742 (1,494- 1,991)	779 (641-916)	483 (421- 544)
Karnataka	1,53,337 (1,40,576-1,66,098)	45,631 (41,397- 49,864)	4,331 (3,771-4,890)	10,926 (9,836-12,016)
Kerala	16,623 (14,316- 18,922)	13,836 (11,647- 16,021)	3,276 (2,628-3,922)	2,604 (2,167-3,036)
Madhya Pradesh	53,455 (47,189-59,721)	18,085 (15,782-20,387)	11,919 (10,446-13,392)	1,614 (1,424-1,803)
Maharashtra	95,352 (88,080- 1,02,622)	40,187 (37,261-43,113)	1,096 (910-1,282)	10,323 (9,250- 11,396)
Manipur	5,662 (4,484-6,839)	1,507 (1,258-1,755)	24,985 (20,447-29,523)	468 (395-541)
Meghalaya	3,297 (2,756-3,837)	344 (252-435)	3,175 (2,715-3,634)	110 (85-135)
Mizoram	1,434 (1,256-1,611)	841 (717-965)	10,397 (8,928-11,867)	-
Nagaland	2,246 (1,766- 2,726)	1,239 (1,051-1,426)	16,802 (14,137-19,468)	82 (62- 102)
Odisha	24,620 (21,529-27,712)	5,977 (5,261-6,694)	4,526 (3,918-5,134)	7,209 (6,277-8,141)
Puducherry	2,514 (2,197-2,832)	2,489 (2,179- 2,798)	21 (13- 28)	203 (177-229)
Punjab	27,304 (24,301- 30,307)	8,045 (7,015- 9,075)	45,098 (40,325-49,872)	1,316 (1,167- 1,464)

Continued

Continued

State/UT	Female sex workers	Men who have sex with men	Injecting drug users	Hijra/transgender people
Rajasthan	21,034 (19,196-22,871)	7,351 (6,512- 8,190)	3,024 (2,711- 3,336)	2,126 (1,883-2,369)
Sikkim	732 (635- 828)	-	821 (713 – 929)	-
Tamil Nadu	60,775 (54,633-66,917)	38,284 (33,927-42,641)	115 (92- 138)	9,211 (7,734- 10,687)
Telangana	75,381 (68,300-82,461)	16,427 (15,282-17,573)	816 (657-974)	995 (919-1,072)
Tripura	6,242 (5,750-6,734)	876 (808-944)	6,500 (5,953-7,047)	159 (154-164)
Uttar Pradesh	40,480 (37,075-43,885)	19,668 (17,776-21,561)	35,412 (31,670-39,155)	9,846 (8,880-10,813)
Uttarakhand	7,213 (6,387-8,040)	2,883 (2,647-3,119)	3,835 (3,407-4,264)	321 (293-349)
West Bengal	20,452 (18,937- 21,968)	3,532 (3,234- 3,830)	2,334 (1,997-2,670)	5,134 (4,731-5,538)
India	9,95,499 (9,02,277-10,88,712)	3,51,020 (3,13,860-3,88,175)	2,88,717 (2,53,025-3,24,408)	96,193 (85,206-1,07,174)

Chapter 1

Introduction

1.1 Background

Indian HIV epidemic is predominantly concentrated among key populations at higher risk, such as female sex workers (FSW), men who have sex with men (MSM), hijras/transgender (H/TG) people, and injecting drug users (IDUs).¹ These populations are often marginalized and face stigma due to their behaviours, which are sometimes illegal or criminalized. Consequently, accurately enumerating these key populations presents a considerable challenge. However, conducting mapping and population size estimation (MPSE) exercises is crucial for understanding the scale and patterns of the epidemic, enabling the formulation of effective policies and programmes. Programmatic needs can be assessed across different locations by estimating population sizes, which facilitates the planning and implementation of targeted prevention, care and treatment interventions. Moreover, MPSE data aids in setting targets, budgeting and resource allocation, supporting advocacy efforts and mobilizing resources for HIV interventions. Additionally, these estimates play a vital role in informing policy decisions, enabling timely interventions to mitigate the burden of the disease. MPSE also provides critical inputs for epidemiological models like Spectrum, which monitor

key HIV indicators at national and sub-national levels to evaluate the response to the epidemic.²

The evolution of size estimation activities for high-risk groups (HRGs) under the National AIDS and STD Control Programme (NACP) in India has been marked by systematic advancements and adaptations across different phases. In the initial phase of NACP II, which commenced in the early 2000s, targeted interventions (TI) were introduced to mitigate HIV transmission among HRGs. However, the absence of standardized methodologies for estimating HRG sizes prompted the initiation of mapping studies by State AIDS Control Societies (SACS) between 2002 and 2005. Though varied in methodology and coverage, these studies laid the groundwork for understanding the distribution and size of HRGs, primarily in urban areas.

With the onset of NACP III in 2007, a more structured approach to HRG size estimation was introduced. This phase witnessed the systematic mapping of core HRGs and bridge populations across different States, utilizing standardized methods and involving trained HRG members in participatory mapping exercises. This comprehensive effort, which initially covered 17 States, expanded over time and provided official size

¹ National AIDS Control Organization (2023). Sankalak: Status of National AIDS response (fifth edition, 2023), New Delhi: NACO, Ministry of Health & Family Welfare.

² National AIDS Control Organization (2019). White Paper on Mapping and Population Size Estimation of High-Risk Groups for HIV in India. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.

estimates for various HRGs and bridge populations, including FSWs, MSM, IDUs, single male migrants and long-distance truckers. Furthermore, in 2013, a significant milestone was achieved with a large-scale size estimation exercise specifically targeting hijras/transgender people in 17 States, highlighting a growing recognition of diverse populations at risk of HIV transmission.³

Subsequently, under NACP IV, size estimation activities shifted focus towards regular 'site re-validations' in TI areas, facilitated by Technical Support Units (TSUs). These exercises aimed to assess changes in HRG numbers, set annual targets and measure programmatic progress. In 2016, the mid-term appraisal (MTA)⁴ of the NACP IV highlighted the need to upgrade methods, tools and guidelines for MPSE of HRGs and their validation. This recommendation was reaffirmed in the expert consultations on HIV Surveillance and Estimations in India (2016 and 2018) and India's National Strategic Plan (2017-2024),⁵ further emphasizing the importance of regular updates of MPSE for strategic planning, costing, monitoring, reporting and evaluation. Accordingly, National AIDS Control Organization (NACO) commissioned a White Paper on MPSE of HRG population in India. The paper described the prevalent methods and their strengths and limitations, traced the evolution of size estimation under NACP, and provided recommendations for periodically undertaking population size estimation in India. The key recommendation from an implementation perspective was to integrate MPSE into the Targeted Intervention programme of NACP, aiming to repeat the exercise biennially. This strategic

approach aims to provide periodic insights for programme planning, facilitating course correction and re-calibration of interventions when necessary.²

1.2 PMPSE Implementation Design

In line with the recommendations of the white paper, under the NACP IV revamped TI guidelines, a two-pronged strategy has been adopted for programmatic mapping and population size estimation (PMPSE) across different States/UTs in the country. The first strategy focuses on deriving working estimates by analysing existing mapping and coverage data on HRGs at the State, district, and sub-district levels, undertaken by Strategic Information and Management Unit (SIMU) of NACO with necessary adjustments and extrapolations.

The second strategy comprises two components: Community-led PMPSE and TSU-led mid-course correction. The community-led PMPSE approach involves rapid field assessment (RFA) in mapping hotspots to estimate the number of HRG population associated with these hotspots, carried out by community peers and institutional structures like TSU. The primary objective is to provide local area estimates of the HRGs for effective programme planning. A sub-component within this methodology of strategy 2 allows for mid-course correction in districts where discrepancies in data between size estimates and programme reach are identified during programme implementation.⁶

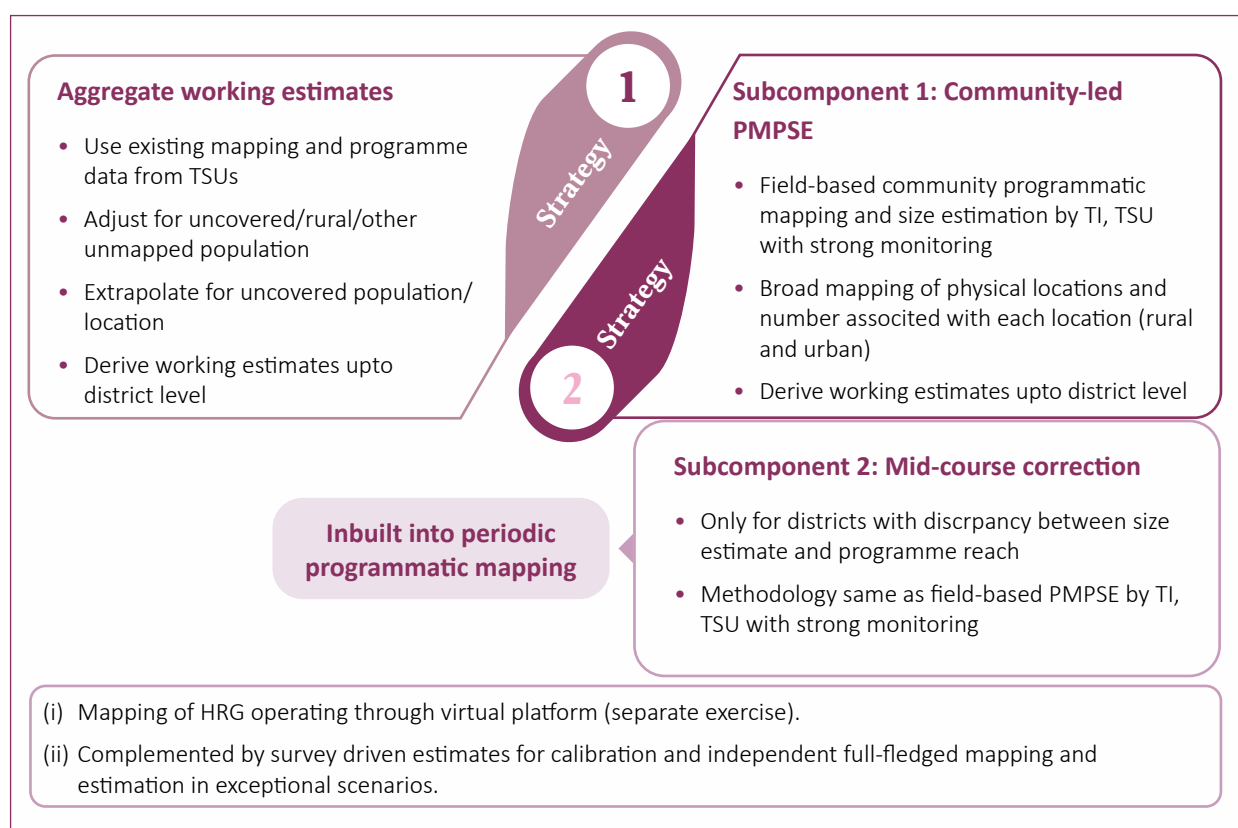
³ National AIDS Control Organization (2020). Programmatic Mapping and Population Size Estimation (PMPSE) of High-Risk Groups: Operational Manual. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.

⁴ National AIDS Control Organization (2016). Mid-term appraisal of National AIDS control programme Phase IV, New Delhi: NACO, Ministry of health and family welfare, Government of India.

⁵ National AIDS Control Organization (2022). Strategy Document: National AIDS and STD Control Programme Phase-V (2021-26). New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.

⁶ National AIDS Control Organization. Revamped and Revised Elements of for HIV Prevention and Care Continuum among Core Population. Strategy Document. New Delhi: NACO, Ministry of Health and Family Welfare, Government of India.

Figure 1.1: Two-pronged strategy for MPSE under revised TI guidelines of NACP-IV



The community-led PMPSE was implemented during 2020 and 2022. The PMPSE provided updated size estimates for HRGs (FSW, MSM, IDU and H/TG) across 651 districts nationwide. Except for the UTs of Andaman and Nicobar Islands, Dadra and Nagar Haveli and Daman and Diu, the PMPSE was implemented in all States/UTs in the country. NACO constituted a Technical Advisory Group (TAG) comprising senior staff from NACO, regional public health institutes and development partners to guide the proposal, guidelines, technical issues, and strategies to ensure smooth implementation of PMPSE. A National Working Group (NWG) comprising

members from an interdisciplinary and inter-agency team from within NACO and different development partners was set up; this team worked on methodology and operational guidelines.

This report presents the key findings from the PMPSE conducted in 2020-22. Chapters 1 and 2 provide the background and methodological overview, while Chapter 3 presents the findings categorized by HRG typologies. Subsequently, Chapter 4 delves into the discussion section, followed by annexures with district fact sheets.

Chapter 2

Methodology

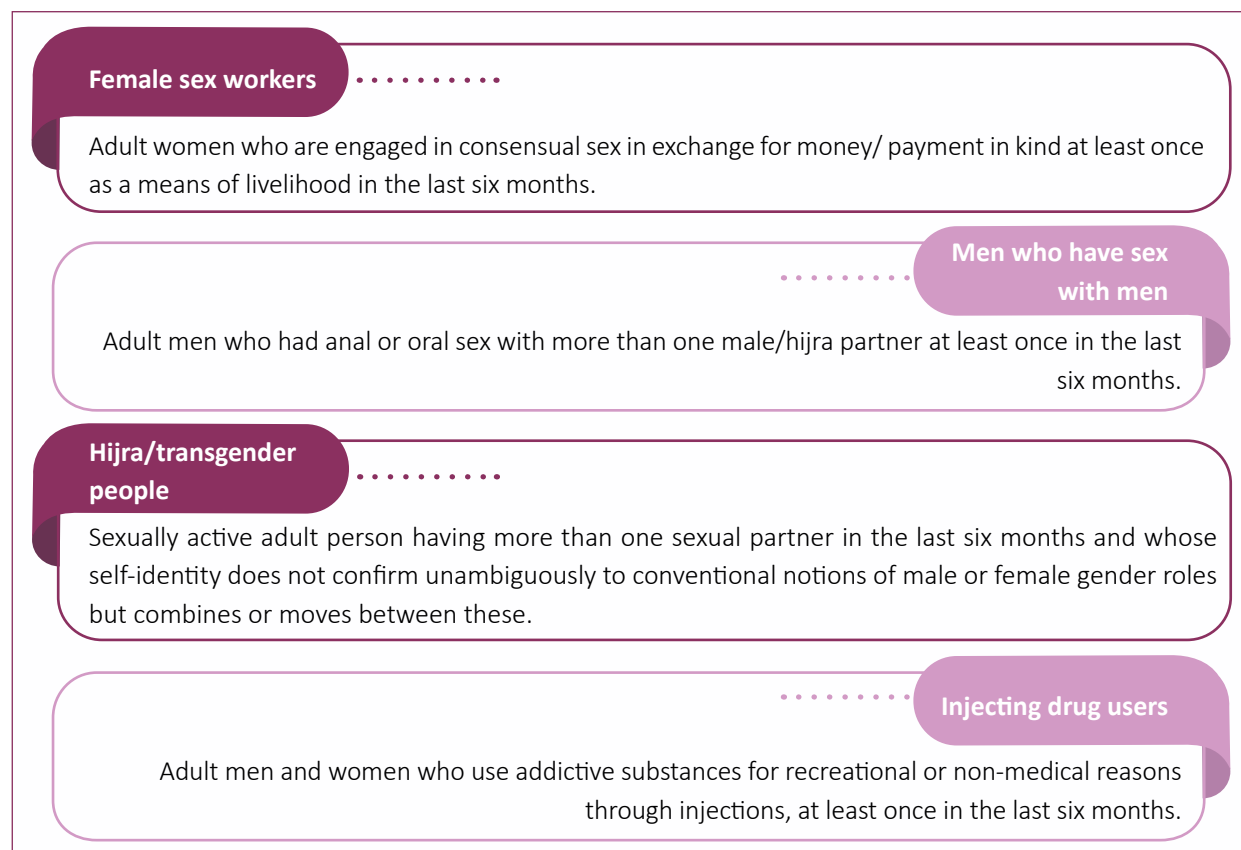
The primary goal of the PMPSE exercise is to estimate the size of the HRG population in the identified geographical locations, providing crucial insights for planning the intervention design, target-setting and allocation of resources across various States/UTs. This chapter outlines the essential methodological aspects of the PMPSE conducted within the revamped TI model of the NACP across all States/UTs in India, focusing on four key HRGs: female sex workers, men

who have sex with men, hijra/transgender people and injecting drug users.

2.1 Operational Definition of HRGs

The operational definition used for the PMPSE exercise for the HRGs is as follows:

Figure 2.1: Operational definitions

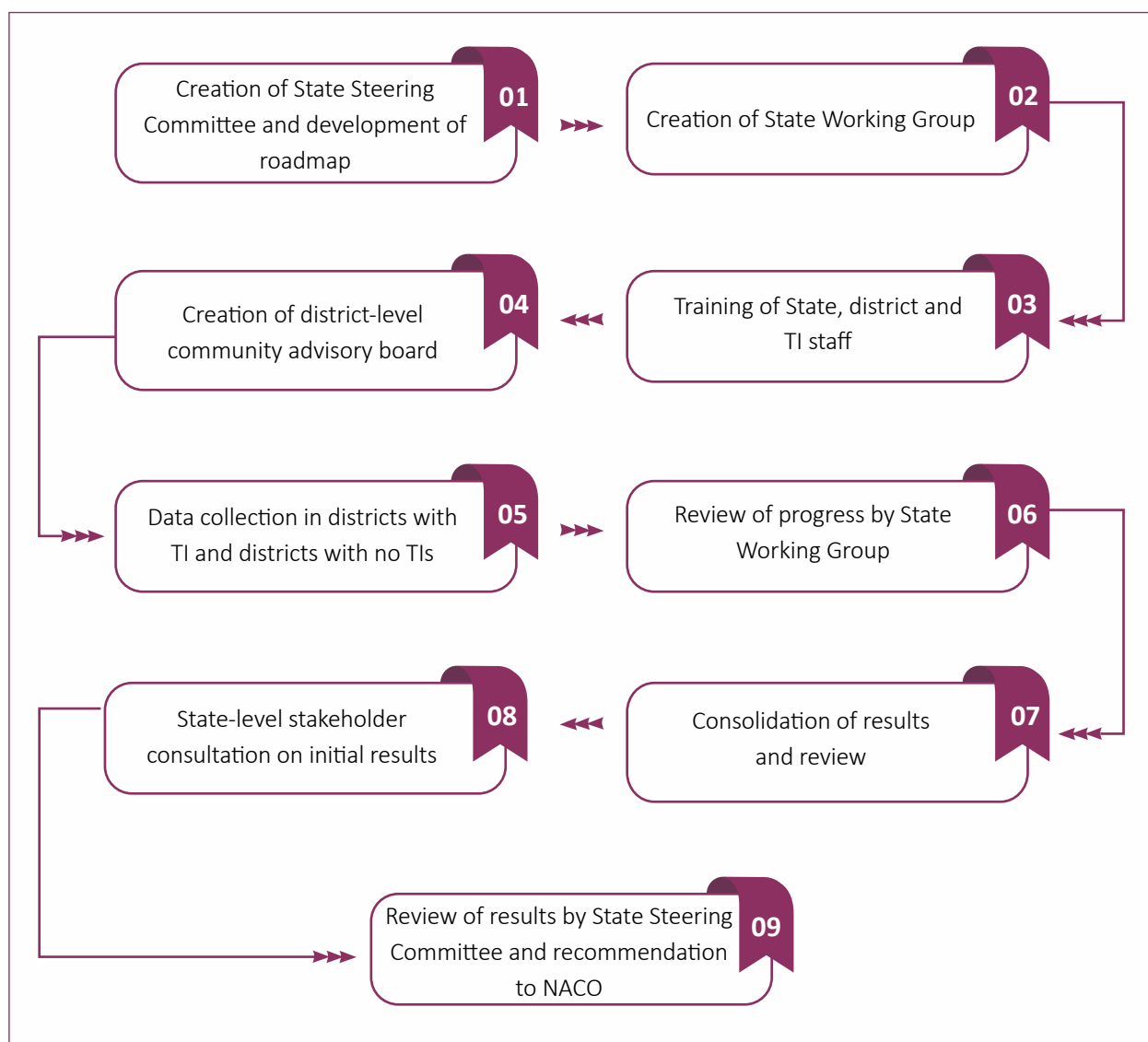


In addition to the HRGs, the mapping efforts were extended to include ‘people with whom a group of HRGs are linked’, known as network operators (NO). The networks among the different typologies may be organized and used for different purposes such as socializing, soliciting clients, seeking sexual/injecting partners for sharing/exchange of information (about sites, availability of drugs), etc. Throughout the document, there will be repeated references to HRGs in physical venues and HRGs operating through network operators.

2.2 Implementation Steps of the Community-Led PMPSE

At the national level, the PMPSE began with the national training of trainers. Participants included Joint Directors-TI, Team Leaders-TSU/Technical Expert-TI, Technical Expert-SPIR, and community representatives who were trained on the technical and operational aspects of PMPSE including data management using the NORMS (National Online Reporting & Monitoring System) portal. This was followed by regional training of trainers where all TSU-POs and staff from TI and SIMU divisions of the States/UTs and community representatives were trained.

Figure 2.2: Implementation steps



In the States/UTs, the PMPSE was initiated with the establishment of the state steering committees under the chairpersonship of the SACS Project Director. The Steering Committee comprised representatives from programme divisions and community members who played a pivotal role in overseeing the implementation in the State, as well as reviewing results and providing feedback to NACO. Following detailed deliberation, the Steering Committee formulated a roadmap outlining the formation of a State Working Group and other processes for implementing PMPSE in the State. Communication was then disseminated to all stakeholders, outlining plans and timelines and articulating expectations from SACS.

The State Working Group, constituted under the leadership of Additional Project Director SACS, involved members from various divisions, including Targeted Interventions, Basic Services, Care Support and Treatment, Monitoring and Evaluation and Technical Support Unit. This Working Group shouldered responsibilities for operational planning, management, monitoring, data review, supportive supervision and troubleshooting during the field activities under community-led PMPSE. Weekly meetings were conducted to review progress, and decisions were made promptly based on prevailing circumstances. Geographical coverage for the PMPSE exercise was determined based on the type of districts, including those with or without targeted interventions for FSW/MSM/Hijra/TG/IDUs and/or LWS.

Training played a pivotal role in preparing State, district and TI staff for their roles in the PMPSE process. After their creation, the State Steering Committee and State Working Group conducted sensitization sessions to engage stakeholders and sought their input on the roadmap. Subsequent field staff training, conducted by individuals previously trained in national and regional TOTs, covered technical and operational aspects of implementing the community-led PMPSE. Special emphasis was placed on RFA and the development of micro plans for fieldwork, which were then finalized by teams and shared with the State Working Group.

Community advisory boards (CABs) were established across the 651 districts, which were responsible for engaging the community and other relevant stakeholders in districts and addressing community concerns. This was a mandatory step before the initiation of PMPSE. The objective of CAB is meaningful engagement

and involvement of community members, timely identification, and redressal of any adverse events (AEs) related to the community engagement process in the surveying district. The key functions of the CAB during the PMPSE are categorized into three phases: before the initiation of data collection, during data collection, and after data collection. These functions focus on reviewing and addressing community concerns and AEs and providing guidance to the PMPSE team.

Data collection commenced in districts with TIs/LWS and districts without TIs/LWS, involving group discussions (GDs) and key informant interviews (KIIs) in both TI catchment and non-TI catchment areas. The process was closely monitored by TSU-POs, with the support of community liaisons in non-TI catchment areas. The State Working Group periodically reviewed progress, and a second meeting of the State Steering Committee appraised the progress, addressing any critical issues encountered during fieldwork.

Consolidation and review of results followed the completion of the data collection phase. The CAB and State Working Group undertook reviews, and the IT-enabled data collection system supported data analysis. State-level stakeholder consultations were conducted, including TSU-POs and select CAB members, presenting summarized data with a focus on unexpected results. Stakeholder inputs were considered to explain or resolve discrepancies, documenting plausible explanations where necessary. The State Steering Committee made a formal recommendation to NACO regarding the estimated population size of all HRGs.

2.3 Geographic Coverage

All districts with targeted interventions were included in the PMPSE, while those districts without targeted interventions or link worker schemes were included based on vulnerability assessment. This assessment was based on the following criteria: HIV positivity, prevalence trends, PLHIV burden as per ART coverage, size of HRGs in the district, and some other factors, including high tourist influx, presence of highways, local festivals, etc. After the categorization of districts as high or low, as per the operational guidelines, all the highly vulnerable districts were included for the PMPSE and 25% of the low vulnerable districts based on random selection. The State/UT and HRG-wise coverage details are provided in the tables below.

Table 1.1: State/UT wise number of hotspots covered during PMPSE (HRGs), 2020-22

State	Female sex workers	Men who have sex with men	Injecting drug users	Hijra/transgender people
Andhra Pradesh	3,593	856	147	265
Arunachal Pradesh	570	125	407	51
Assam	2,034	858	1,145	197
Bihar	516	101	215	58
Chandigarh	131	106	82	15
Chhattisgarh	929	189	222	102
Delhi	291	851	1,249	667
Goa	248	122	22	9
Gujarat	1,580	1,505	83	117
Haryana	1,326	738	1,535	151
Himachal Pradesh	913	153	346	33
Jammu And Kashmir	303	59	617	46
Jharkhand	846	157	61	43
Karnataka	8,771	2,810	479	860
Kerala	1,519	863	370	273
Madhya Pradesh	2,841	1,188	784	129
Maharashtra	3,273	1,189	64	477
Manipur	341	107	1,409	59
Meghalaya	116	16	142	8
Mizoram	116	83	653	-
Nagaland	211	102	1,194	13
Odisha	2,113	618	401	717
Puducherry	101	98	8	21
Punjab	1,296	542	1,915	90
Rajasthan	1,155	575	224	203
Sikkim	75	-	58	-
Tamil Nadu	2,516	1,629	14	677
Telangana	1,624	292	64	32
Tripura	691	126	653	9
Uttar Pradesh	2,412	1,468	2,392	944
Uttarakhand	421	188	213	33
West Bengal	707	170	120	286
India	43,579	17,967	17,288	6,585

Table 1.2: State/UT wise number of network operators mapped during PMPSE (HRGs), 2020-22

State/UT	Female sex workers	Men who have sex with men	Injecting drug users	Hijra/transgender people
Andhra Pradesh	148	39	1	9
Arunachal Pradesh	-	-	-	-
Assam	182	89	105	43
Bihar	39	15	21	12
Chandigarh	44	16	6	1
Chhattisgarh	68	8	22	5
Delhi	2,845	110	22	56
Goa	5	2	-	2
Gujarat	81	-	-	-
Haryana	221	42	73	6
Himachal Pradesh	27	4	4	1
Jammu And Kashmir	52	10	133	7
Jharkhand	-	-	-	-
Karnataka	2,718	198	12	115
Kerala	107	55	16	1
Madhya Pradesh	617	161	102	38
Maharashtra	1,291	383	4	46
Manipur	32	-	14	-
Meghalaya	10	4	-	5
Mizoram	-	-	-	-
Nagaland	18	1	36	-
Odisha	190	24	46	91
Puducherry	13	4	-	-
Punjab	285	63	162	8
Rajasthan	233	63	26	51
Sikkim	-	-	-	-
Tamil Nadu	372	148	-	59
Telangana	568	76	-	18
Tripura	38	4	34	6
Uttar Pradesh	384	97	87	105
Uttarakhand	62	13	10	2
West Bengal	68	31	17	33
India	10,718	1,660	953	720

Table 1.3: State/UT wise number of villages covered during PMPSE (HRGs), 2020-22

State/UT	Female sex workers	Men who have sex with me	Injecting drug users	Hijra/transgender people
Andhra Pradesh	1,598	370	1	53
Arunachal Pradesh	-	-	-	-
Assam	-	-	-	-
Bihar	400	215	120	2
Chandigarh	-	-	-	-
Chhattisgarh	266	99	15	33
Delhi	-	-	-	-
Goa	-	-	-	-
Gujarat	1,075	995	-	134
Haryana	-	-	-	-
Himachal Pradesh	-	-	-	-
Jammu And Kashmir	-	-	-	-
Jharkhand	-	-	-	-
Karnataka	1,179	583	1	23
Kerala	-	-	-	-
Madhya Pradesh	1,146	109	3	5
Maharashtra	2,388	469	2	183
Manipur	696	213	846	-
Meghalaya	46	1	29	1
Mizoram	197	55	172	-
Nagaland	-	-	-	-
Odisha	957	458	9	175
Puducherry	-	-	-	-
Punjab	596	238	742	11
Rajasthan	-	-	-	-
Sikkim	-	-	-	-
Tamil Nadu	2,042	1,113	1	134
Telangana	1,264	323	1	19
Tripura	271	61	144	-
Uttar Pradesh	1,171	216	211	15
Uttarakhand	-	-	-	-
West Bengal	803	69	53	98
Grand Total	16,095	5,587	2,350	886

Field Implementation

The data collection approach is different in districts with and without TIs/LWS. The following illustration (Figures 2.2 and 2.3) describes the fieldwork scenarios in both cases. The data collection in districts having TI coverage was undertaken by staff of TIs, including

community peer educators/outreach workers, under direct monitoring of TSU-PO with support from members of the CAB, including the District AIDS Prevention and Control Units (DAPCU). At each hotspot, after obtaining informed consent, information was collected from at least 2-3 key informants in the

prescribed data formats to characterize the hotspots in terms of nature as well as the size of the HRG population associated with the hotspot. A group discussion was also conducted with the key informants to reach a consensus on the estimated size. One hotspot information format (HIF) was completed for each hotspot visited. In the case of the presence of more than one HRG population, one HIF was filled for each of the HRG populations. However, in districts

without TIs, the data collection was undertaken by the TSU-PO with support from the community liaison.

In the case of districts with LWS, the district cluster link workers (CLWs) collected data for each of the villages covered during the past 3 years. Additionally, 30% of the villages covered under LWS were revisited by District Resource Persons (DRP) and supervisors as part of the validation of data collected by the CLWs.

Figure 2.3: Community-led PMPSE for districts with or without targeted interventions

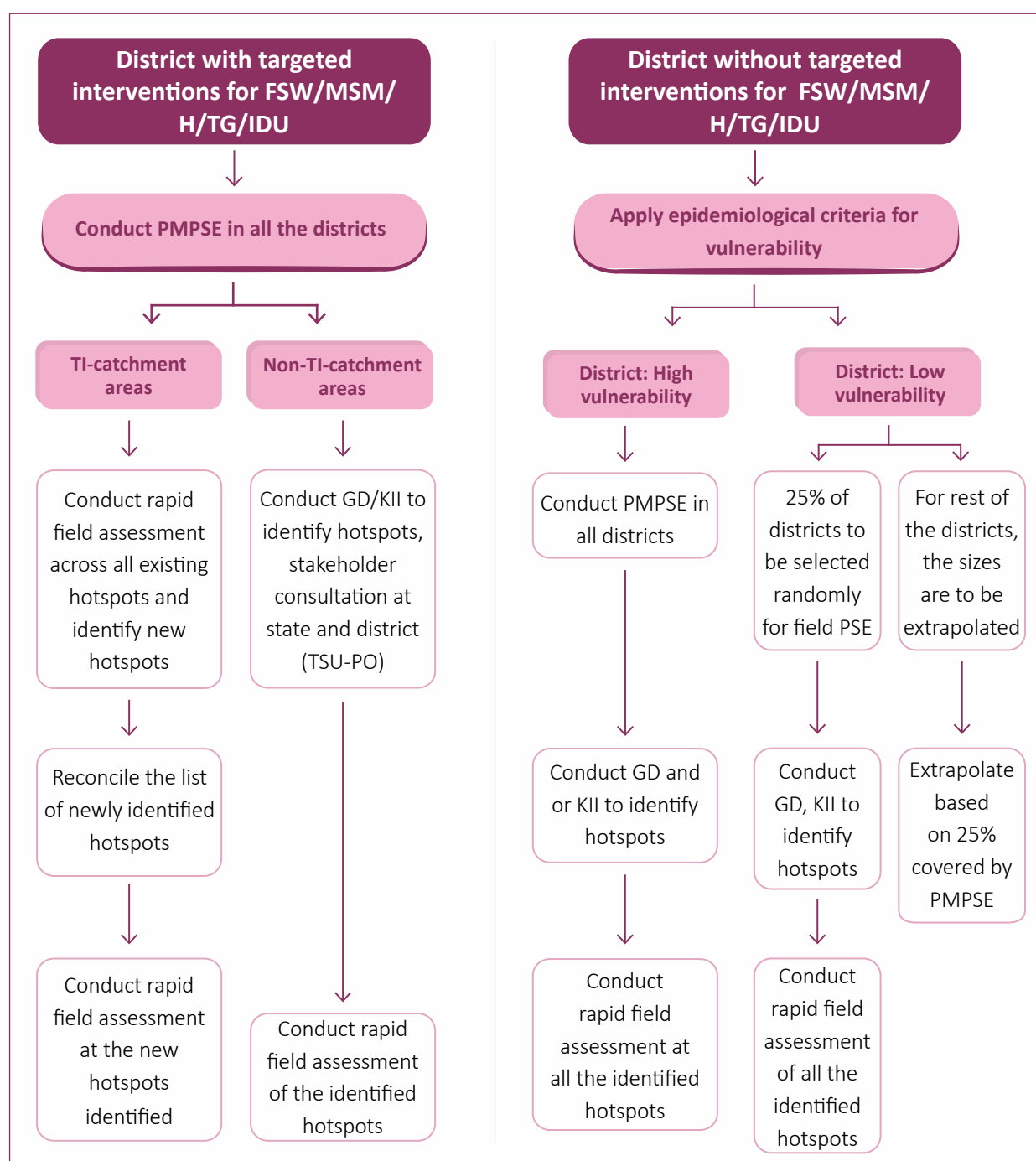
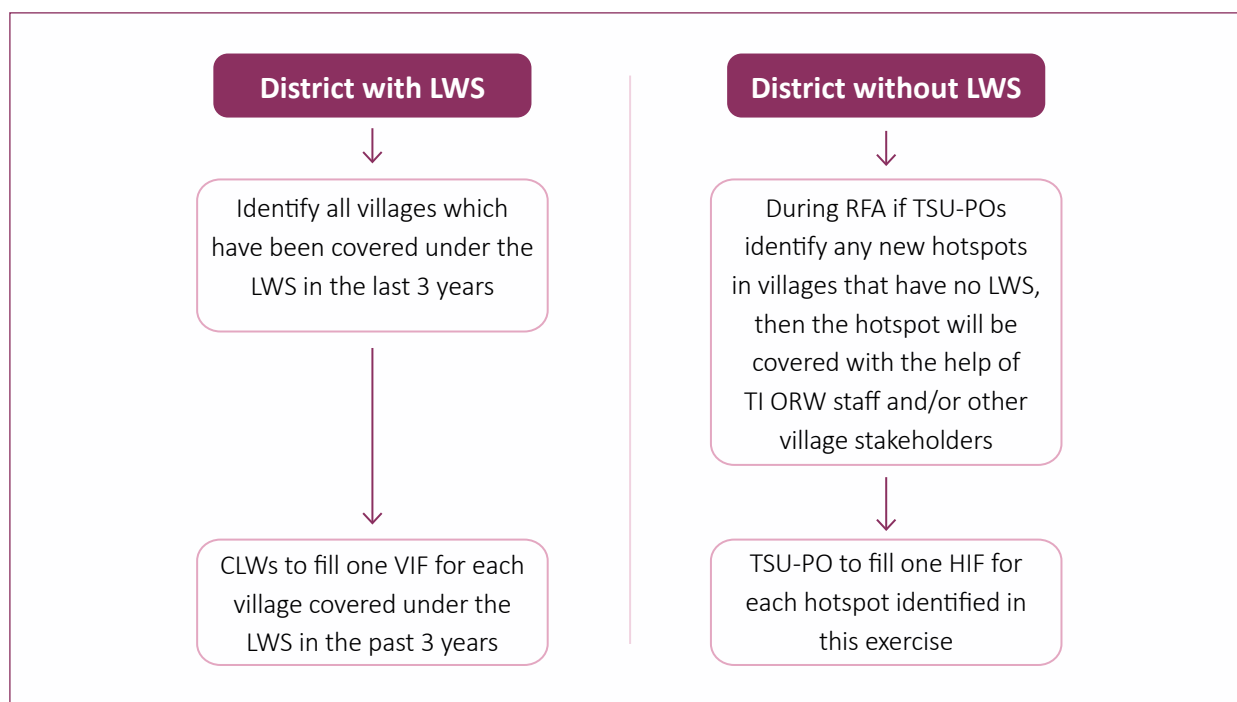


Figure 2.4: Community-led PMPSE for districts with or without Link Worker Scheme (LWS)



The TSU-PO ensured that each hotspot in the district was visited and HIF was filled. Therefore, in addition to the existing hotspots, a comprehensive list of new/uncovered hotspots in the district was generated after conducting a minimum of 10-15 KIIs and GD. The information collected in the KIIs and GD mainly included the location of the hotspot, community stakeholders, influencers and facilitating factors at the hotspot. Potential challenges in access to the study

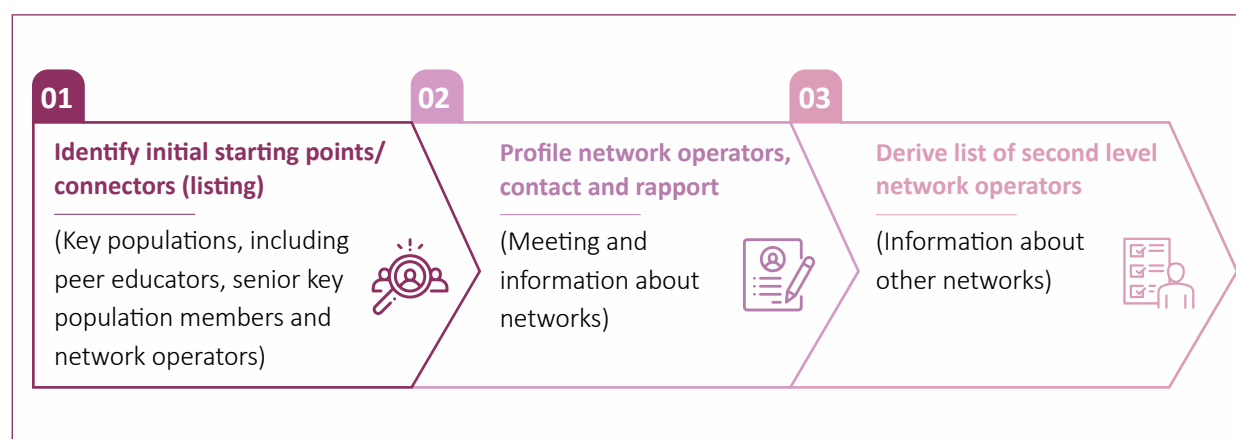
population were also comprehended during GDs. The final listing and cross-checking with the existing hotspots covered by the TI was undertaken during weekly reconciliation meetings, following which the RFA was planned and conducted by the TSU-PO. A similar process was adopted for the non-TI areas, as depicted in Figures 2.2 and 2.3 on field scenarios.

Furthermore, considering the evolving operational dynamics of HRGs in recent years, transitioning from hotspot-based locations to operator-managed networking, a multistage approach was employed to identify networks and network operators, as depicted in Figure 2.5. These network operators were interviewed during PMPSE to ascertain the size of the HRGs associated with them. Hence, data on size estimates were collected from three sources: existing and new physical hotspots, network operators and villages covered under the LWS. Additional details on the field implementation can be accessed from the operational manual available at https://naco.gov.in/sites/default/files/p-MPSE%20Report_Revised_23-10-2020.pdf.

Type of key informants

HRG, community leaders, pimp, drug peddlers, *paanwalas*, counsellors, ORWs, staff from de-addiction centers, Swadhar homes, massage parlour owners, TI project coordinators, MSJE NGO lead, and other relevant gatekeepers/community leaders

Figure 2.5: Multistage approach for mapping of network operators



2.4 Data Collection Tools

The data collection for PMPSE was undertaken using two sets of tools:

- ❖ Qualitative data collection tools, including themes and guides, were used to conduct KIIs and GDs to identify potential hotspots where HRGs congregate. The tool has two parts: i) identification sheet and ii) themes and guides. The first part of the tool is common across all groups. The second part varies and encompasses two main areas of inquiry: risk behaviours and geographic location and access to the study population. Within the tool, for each area of inquiry, space is provided to take notes and additional sheets may be used if necessary for recording information from the KIIs and GDs.
- ❖ To determine the population size of the HRGs at both physical venues (including hotspots and link worker villages) and those linked with network operators, data was recorded using specific formats, including the hotspot information format, village information format and network operator format. Each format begins with an identification section, followed by a profile section where information about the size of the HRG is recorded. Lastly, information on other spots is noted for new hotspot listings. In the case of network operators, the last section lists other known network operators.

2.5 Ethical Consideration and Respondent Protection Measures

Considering the sensitivity of the locations and populations involved, PMPSE 2020–22 implemented the necessary measures to safeguard respondents throughout the exercise. Ethical clearance for the exercise was taken from the NACO ethics committee and informed consent in local languages was obtained to respect the key informants' freedom in deciding whether to participate in the PMPSE exercise.

The training placed significant emphasis on sensitizing TSU-PO, TI and LWS personnel about the data collection process. The data collection was completely unlinked and anonymous. None of the tools (Hotspot/Network/Village information format) had any identifying information of the key informants. Only the consent form contained the name and signature, but it was not linked to any PMPSE documents or data.

To address the adverse events, community involvement was operationalized through "community preparation" as a means of safeguarding community interests and ensuring community monitoring mechanisms in PMPSE. CAB is comprised of HRG community members, members from SACS and other stakeholders. Their role was to safeguard

community interests and concerns and help address/resolve any adverse events that occurred during the implementation of PMPSE. During the data collection phase, community members were also engaged as community liaisons (CL) to facilitate fieldwork and alleviate the concerns of respondents' groups about participation in PMPSE.

A system for adverse events management was established. Any event or situation that could affect or cause harm (mental, social, or physical) to anyone involved in the PMPSE, compromise the quality of data or adherence to PMPSE guidelines was considered an adverse event. The system was put in place to facilitate quick reporting of such events to local stakeholders and community structures to facilitate a timely resolution. Corrective actions were taken immediately with active engagement of community structures (CAB, State Working Group, State Steering Committee) to facilitate immediate resolution of issues.

2.6 Data Confidentiality

All field personnel involved under PMPSE signed the data confidentiality agreement to uphold the protocol's confidentiality standards. The PMPSE data were anonymous and could not be linked to any respondent. All documents were uniquely labelled with respondent numbers and none of the tools recorded any identification of the key informants. Consent forms, the only document with respondent signatures, were kept separately and could not be linked to any other PMPSE documents or data. All safeguards to avoid the collection of any identifiers were taken.

Access to study data was restricted to limited authorized personnel based on their role in PMPSE. All paper records were maintained in closed folders or envelopes and handed over to the designated person, TSU TE-TI. The documents were marked as 'confidential' and subscribed with only the name of TSU TE-TI. Electronic files were protected with layers of passwords at various levels. Programme officers could only access the data for assigned TIs, while SACS officials were able to review the data and progress reports. The system also had a provision for deactivating login IDs in case a person leaves the job or there is prolonged inactivity of IDs.

2.7 Data Management

The data for the entire PMPSE exercise was systematically captured in a web portal designed to facilitate quality assurance, aggregation, fact sheet generation and dissemination. This online system, developed with scalability, robustness and security in mind, utilized the latest web technologies. Managed through a secure centralized server, the portal offered various modules, including Role Management, which defined specific functions for different roles within the system. This role-based and geographic level-based authorization ensured that users, such as TI programme managers or State-level administrators, could access and manage data only within their designated areas.

Users accessed the web portal through internet browsers like Microsoft Edge, Chrome, Internet Explorer 11, Safari, etc., featuring a responsive user interface for easy navigation on both computers and mobile devices. Another crucial module was Master Data Management, where the system loaded master data, including targeted interventions, districts, blocks, and city/town/villages, ensuring uniformity by using Census 2011 data. User Management assigned unique usernames and passwords to all users, with a National Administrator creating national level and State Admin users. TI admin users, responsible for entering and managing data, received credentials through email and SMS and accessed the system's form through the menu.

The portal's functionalities included viewing, creating, editing and deleting records for HIFs, VIFs or network operator formats. Validations were incorporated to prevent invalid entries, and each hotspot was assigned a unique serial number within the TI for easy reference. The data could be exported to Excel sheets for verification against hard copies, and TI programme managers were advised to ensure regular data entry, correctness, and completeness. It was recommended that laptops or computers be used at the TI office or DIC for data entry, prioritizing privacy and logging out after completion. In case of issues, support or clarifications, TI admins could contact the designated Programme Officer or State Admin, escalating concerns to the national admin if necessary.

2.8 Monitoring and Supervision

The implementation of PMPSE involved a comprehensive monitoring and supportive supervision structure to ensure the high-quality execution of the exercise. The first layer of supervisors were the TSU-POs, who guided peer educators and outreach workers during the community-led PMPSE. The supervisory team, comprising members from SACS, TSU, the State Working Group, the State Steering Committee, and the national team, conducted periodic field visits to monitor and support the fieldwork by TI personnel and TSU-POs. Special State monitoring teams were formed to ensure the collection of high-quality data.

Supervisors utilized a predefined checklist to assess adherence to PMPSE procedures, focusing on key informants' selection and estimating minimum and maximum numbers based on days of the week and times of the day. The supervisory team took necessary actions to enhance data collection quality and reported observations using a predefined tool in the PMPSE web portal. The online monitoring system in the portal continuously tracked the progress of field activities, triggering alerts for unusual findings during the data collection process, such as higher-than-expected numbers in specific hotspots.

The monitoring modalities included supportive supervision, spot checks during data collection, and back-checks after the completion of data collection. Spot checks involved observing data collection from key informants at hotspots, ensuring adherence to the methodology, and providing guidance to community peer educators and outreach workers. Back-checks involved random visits to a proportion of selected hotspots/network operators, comparing results with estimates generated by field staff, and repeating fieldwork if significant variances were found. The planning ensured that each hotspot/network operator was visited only once and achieved wider coverage.

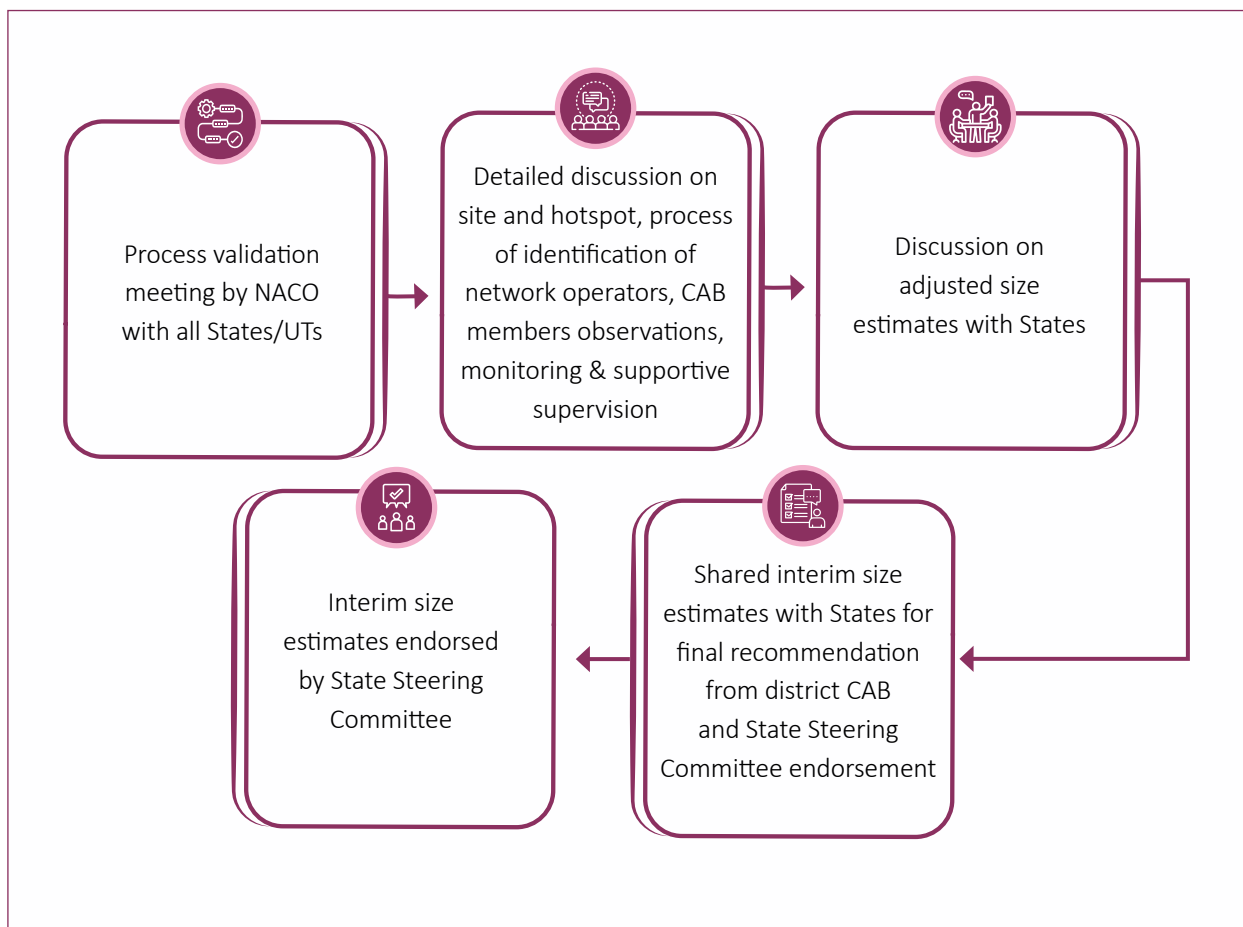
There were no back-checks in districts without a TI, where TSU-POs led PMPSE.

The pace of implementation was monitored, and any delays were escalated to TSU-POs and, if necessary, to the State Working Group. Continuous online monitoring and weekly reconciliation meetings at the district level facilitated the de-duplication of hotspots and systematic extension of services in newly identified hotspots, ensuring efficient coverage and service delivery.

2.9 Consolidation of Results and Review

After the completion of data collection, CAB meetings were conducted in each of the districts to review and recommend the data for review by the State Working Group. Next, the Working Group reviewed and prepared to share the data with State-level stakeholders. This was followed by State-level stakeholder consultation, in which all TSU-PO and selected CAB members participated. The summarized data was presented and reviewed with a specific focus on unexpected results. Plausible explanations were documented, and where required, estimates were further worked out considering the HRG network and dynamics. The overall process, findings, and challenges were presented to the State Steering Committee for review, guidance, and recommendation. The committee, after review, finalized and made recommendations to NACO on the estimated population size of the HRGs. Upon receipt of data, NACO followed a systematic process of review for estimation of the size of the HRG population after 'mobility adjustment' between physical venues and network operators. The process adopted for size estimation is illustrated in Figure 2.6. It was ensured that data consolidation was comprehensive, transparent and reflective of the stakeholder's diverse perspectives and insights at all levels.

Figure 2.6: Process of arriving at the size estimation



Chapter 3

PMPSE Findings

This chapter highlights the primary outcomes of the PMPSE exercise, which is categorized into four sections corresponding to the different high-risk groups (FSWs, MSM, IDUs and H/TG people). Within each group, the profiles of key informants and network operators are initially presented, followed by hotspot characteristics and the adjusted estimated population size nationally and at the State/UT level.

3.1 Female Sex Workers

In India, FSWs remain a pivotal focus in HIV prevention and intervention efforts, given their heightened vulnerability. As solicitation methods shift from physical to virtual and network-based, understanding their population size and mapping their locations becomes crucial for implementing tailored care, support and

treatment services. The key findings from the PMPSE of FSWs are detailed in the following sections.

3.1.1 Profile of Key Informants Interviewed

Among FSWs, the PMPSE exercise was implemented across 32 States/UTs. Across the States/UTs, a total of 1,34,677 KIIs were conducted at 43,579 FSW hotspots. Among these, 73.5% (98,923) of the interviews were with HRGs, and 13% were with community gatekeepers (17,931) and other stakeholders (17,823). The national and State/UT wise distribution of key informants is presented in Figures 3.1 and 3.2. Except for Andhra Pradesh and Chandigarh, an average of three KIIs were conducted at each hotspot. Two of these interviews were with the HRGs as per the prescribed protocol (Table 3.1).

Figure 3.1: Distribution of the profiles of key informants interviewed at the FSW hotspots, PMPSE (HRGs), 2020–22 (in %)

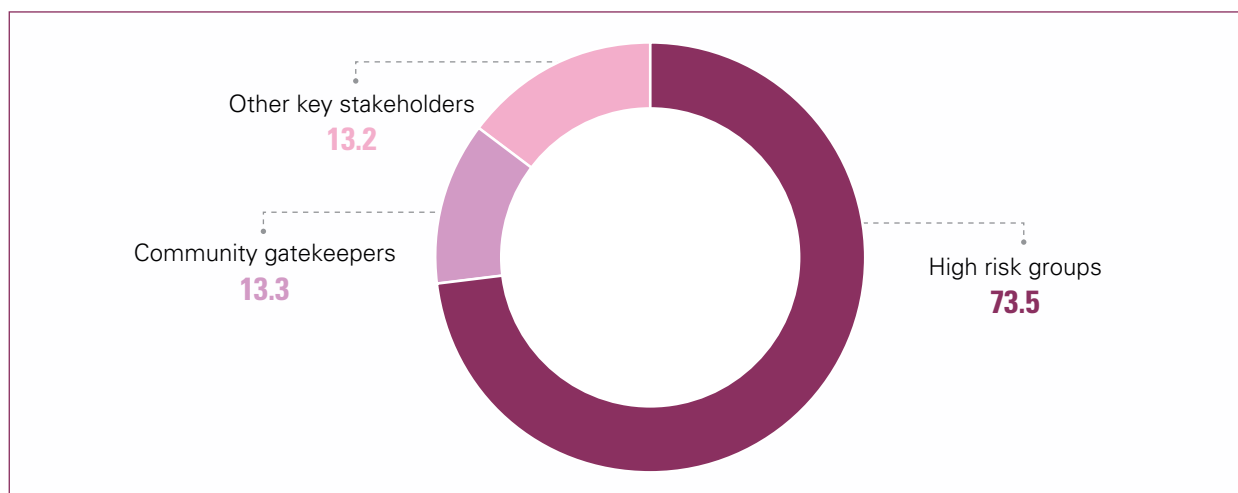


Figure 3.2: State/UT wise distribution of the profile of key informants interviewed at the FSW hotspots, PMPSE (HRGs), 2020–22

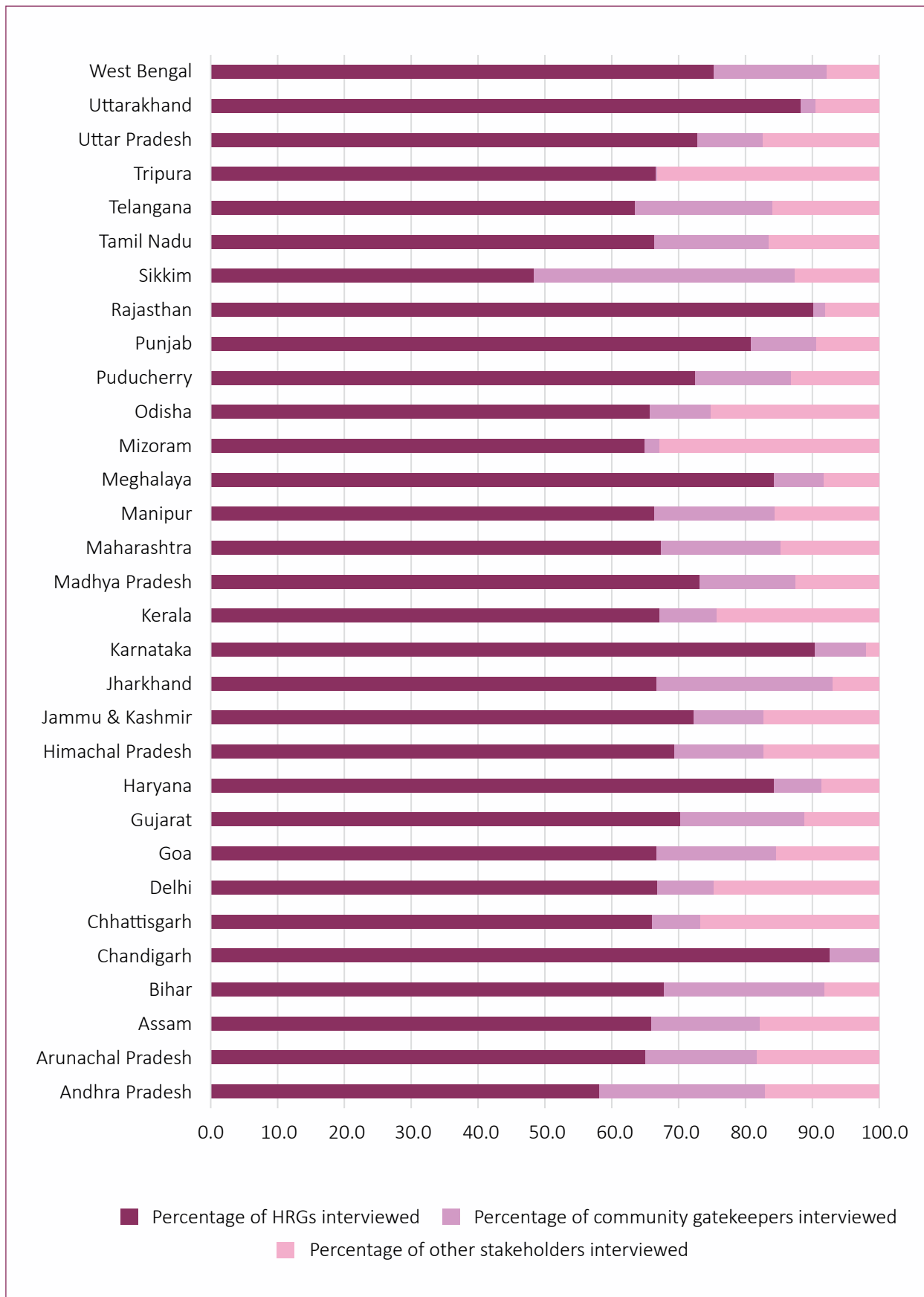


Table 3.1: Profile of key informants interviewed at the FSW hotspots, PMPSE (HRGs) 2020-22

State/UT	Number of hotspots	Total number of interviews	Average number of interviews per hotspot	Key informants interviewed					
				HRGs		Community gatekeepers		Other key stakeholders/ informants	
				Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed
Andhra Pradesh	3,593	9901	2.7	1.6	58.1	0.6	24.8	0.4	17.1
Arunachal Pradesh	570	1753	3.0	2.0	65.0	0.5	16.7	0.5	18.3
Assam	2,034	6294	3.0	2.0	65.9	0.5	16.3	0.5	17.8
Bihar	516	1597	3.0	2.1	67.8	0.7	24.1	0.2	8.1
Chandigarh	131	352	2.6	2.5	92.6	0.2	7.4	0.0	0.0
Chhattisgarh	929	2787	3.0	2.0	66.1	0.2	7.2	0.8	26.8
Delhi	291	885	3.0	2.0	66.8	0.2	8.5	0.7	24.7
Goa	248	759	3.0	2.0	66.7	0.5	17.9	0.4	15.4
Gujarat	1,580	5179	3.2	2.3	70.2	0.6	18.7	0.3	11.1
Haryana	1,326	4024	3.0	2.6	84.3	0.2	7.1	0.2	8.6
Himachal Pradesh	913	2803	3.0	2.1	69.4	0.4	13.3	0.5	17.3
Jammu & Kashmir	303	905	2.9	2.2	72.3	0.3	10.4	0.5	17.3
Jharkhand	846	2618	3.0	2.1	66.7	0.8	26.3	0.2	7.0
Karnataka	8,771	26539	3.0	2.7	90.3	0.2	7.7	0.0	2.0
Kerala	1,519	4630	3.0	2.0	67.1	0.2	8.6	0.7	24.3
Madhya Pradesh	2,841	8829	3.1	2.3	73.1	0.4	14.4	0.3	12.4
Maharashtra	3,273	12,237	3.7	2.5	67.4	0.6	17.8	0.5	14.7
Manipur	341	1083	3.18	2.1	66.3	0.5	18.1	0.5	15.6
Meghalaya	116	387	3.34	2.8	84.2	0.2	7.5	0.2	8.3
Mizoram	116	359	3.09	2.0	64.9	0.0	2.2	1.0	32.9
Nagaland	211	679	3.22	2.2	69.5	0.1	5.9	0.7	24.6
Odisha	2,113	6468	3.06	2.0	65.7	0.2	9.2	0.7	25.1
Puducherry	101	312	3.0	2.2	72.4	0.4	14.4	0.4	13.1
Punjab	1,296	4092	3.1	2.6	80.9	0.3	9.7	0.3	9.4
Rajasthan	1,155	3472	3.0	2.7	90.2	0.0	1.7	0.2	8.1
Sikkim	75	310	4.1	2.0	48.4	1.6	39.0	0.5	12.6
Tamil Nadu	2,516	8932	3.5	2.4	66.3	0.6	17.2	0.5	16.5
Telangana	1,624	5185	3.1	2.0	63.4	0.6	20.7	0.5	15.9
Tripura	691	2075	3.0	2.0	66.7	0.0	0.1	1.0	33.2
Uttar Pradesh	2,412	7613	3.1	2.3	72.8	0.3	9.8	0.5	17.4
Uttarakhand	421	1340	3.1	2.8	88.2	0.0	2.3	0.3	9.5
West Bengal	707	2459	3.4	2.6	75.2	0.5	17.0	0.2	7.8
India	43,579	1,34,677	3.0	2.3	73.5	0.4	13.3	0.4	13.2

3.1.2 Profile of Network Operators

During the PMPSE 2020-22, a total of 10,718 network operators associated with FSWs were mapped across various States/UTs. The majority of these network operators were females (83.8%), followed by males (15.7%). Nearly half of the network operators were in the age category 28 to 37 years (47.7%), with the next

largest group being 38 to 47 years old (35.5%). States with a large number of mapped network operators included Delhi (2,845), Karnataka (2,718), Maharashtra (1,291), Madhya Pradesh (617) and Telangana (568). In contrast, fewer network operators were mapped in Nagaland (18), Puducherry (13), Meghalaya (10), and Goa (5) (Table 3.2).

Table 3.2: Profile of network operators associated with FSWs, PMPSE (HRGs), 2020-22

State/UT	No. of network operators mapped	Gender (%)			Age (%)			
		Female	Male	H/TG	18-27 years	28-37 years	38-47 years	48+ years
Andhra Pradesh	148	89.1	10.1	0.6	10.1	53.3	31.0	5.4
Arunachal Pradesh	-	-	-	-	-	-	-	-
Assam	182	87.9	12.0	-	21.4	58.2	18.6	1.6
Bihar	39	61.5	38.4	-	2.5	38.4	41.0	17.9
Chandigarh	44	70.4	25.0	-	-	-	-	13.6
Chhattisgarh	68	79.4	20.5	-	22.0	55.8	11.7	10.3
Delhi	2,845	84.3	15.5	0.1	14.3	50.8	29.3	5.4
Goa	5	-	100.0	-	-	20.0	80.0	-
Gujarat	81	33.3	66.6	-	18.5	60.4	19.7	1.2
Haryana	221	68.3	31.6	-	27.1	37.5	-	5.4
Himachal Pradesh	27	77.7	22.2	-	3.7	37.0	51.8	7.4
Jammu & Kashmir	52	92.3	7.6	-	3.8	32.6	53.8	9.6
Jharkhand	-	-	-	-	-	-	-	-
Karnataka	2,718	86.6	12.7	0.55	4.2	44.6	43.1	7.9
Kerala	107	48.6	50.4	0.93	0.9	19.6	34.5	44.9
Madhya Pradesh	617	90.9	9.0	-	11.5	51.8	30.4	6.2
Maharashtra	1,291	82.1	17.4	0.46	5.0	43.3	42.6	8.9
Manipur	32	100.0	-	-	-	18.7	81.2	-
Meghalaya	10	100.0	-	-	-	20.0	60.0	20.0
Mizoram	-	-	-	-	-	-	-	-
Nagaland	18	88.8	11.1	-	22.2	44.4	33.3	-
Odisha	190	67.3	30.0	2.63	9.4	54.7	30.0	5.8
Puducherry	13	46.1	53.8	-	-	23.0	53.8	23.1
Punjab	285	97.5	2.1	0.35	2.8	50.8	31.5	14.7
Rajasthan	233	78.5	21.4	-	13.3	49.7	26.1	10.7
Sikkim	-	-	-	-	-	-	-	-
Tamil Nadu	372	83.8	15.5	0.5	4.0	38.1	43.2	14.5
Telangana	568	93.4	6.3	0.1	5.1	63.0	29.5	2.3
Tripura	38	89.4	10.5	-	5.2	26.3	52.6	15.8
Uttar Pradesh	384	81.2	17.4	1.3	9.1	45.3	33.5	12.0
Uttarakhand	62	70.9	27.4	1.6	8.0	58.0	32.2	1.6
West Bengal	68	27.9	72.0	-	1.4	52.9	36.7	8.8
India	10,718	83.8	15.7	0.4	8.9	47.7	35.5	7.7

3.1.3 Profile of Interviewers

At the national level, outreach workers (93.3%) primarily implemented the PMPSE at the FSW hotspots, followed by peer educators (4.3%) and programme officers (2.4%). However, variations were observed in some of the States. Notably, in Uttarakhand, programme

officers of the TSU covered more than half (58.9%) of the FSW hotspots. Similarly, TSU programme officers handled 27.4% of hotspots in Jammu & Kashmir and 14.7% in Puducherry. While in Bihar and Nagaland, peer educators conducted data collection in more than 20% of the FSW hotspots (Table 3.3).

Table 3.3: Profile of interviewers covering FSW hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Key informant interviews conducted by (%)		
		Outreach workers	Peer educators	Programme officers
Andhra Pradesh	3,593	95.7	1.3	2.9
Arunachal Pradesh	570	81.0	18.9	0.0
Assam	2,034	88.4	11.2	0.3
Bihar	516	77.7	22.2	0.0
Chandigarh	131	99.2	0.7	0.0
Chhattisgarh	929	84.9	12.9	2.5
Delhi	291	96.5	3.4	0.0
Goa	248	93.5	6.4	0.0
Gujarat	1,580	89.7	3.8	7.1
Haryana	1,326	88.3	4.2	8.3
Himachal Pradesh	913	98.2	1.6	0.1
Jammu & Kashmir	303	72.2	7.9	27.4
Jharkhand	846	91.2	6.8	2.0
Karnataka	8,771	97.7	1.7	0.5
Kerala	1,519	98.9	0.6	0.4
Madhya Pradesh	2,841	97.4	1.7	0.8
Maharashtra	3,273	91.0	7.9	1.1
Manipur	341	85.9	11.4	3.0
Meghalaya	116	83.6	16.3	0.0
Mizoram	116	96.5	2.5	0.8
Nagaland	211	77.7	21.3	1.2
Odisha	2,113	91.3	8.5	0.1
Puducherry	101	87.1	-	14.7
Punjab	1,296	96.3	3.6	0.0
Rajasthan	1,155	93.9	2.5	3.7
Sikkim	75	100.0	-	0.0
Tamil Nadu	2,516	94.2	2.8	3.1
Telangana	1,624	94.5	5.3	0.1
Tripura	691	99.8	0.1	0.0
Uttar Pradesh	2,412	95.6	1.0	3.4
Uttarakhand	421	61.2	2.6	58.9
West Bengal	707	85.1	1.1	16.1
India	43,579	93.3	4.3	2.4

3.1.4 Hotspot Coverage and Operational Duration

During PMPSE, basic information about the hotspots was collected, including details such as TI coverage, the duration the hotspot has been operational, the type of hotspot, and the peak days and peak times when the maximum number of HRGs are present at the hotspots.

It was noted that 68.6% of the hotspots covered in PMPSE were already being covered by the TI programme, while the remaining (31.4%) were either newly identified or previously uncovered. A significant proportion of these new or uncovered hotspots were identified in Himachal Pradesh (70.4%), Jammu &

Kashmir (69%), Haryana (57%), Assam (56.9%), Odisha (56.1%), Uttarakhand (55.1%), Uttar Pradesh (54.9%), Rajasthan (50.3%), Punjab (43.8%), and Bihar (43%).

Among the hotspots where PMPSE was implemented, over half had been active for more than three years, 16.1% operational for one to two years and 15.7% operational for two to three years. In West Bengal (94.4%) and Nagaland (88.6%), a significant majority of the hotspots had been active for more than 3 years. Similarly, in Delhi, Chhattisgarh, Goa, Gujarat, Maharashtra, Kerala, Rajasthan and Tripura, more than 60% of the hotspots had been active for more than three years (Table 3.4).

Table 3.4: FSWs hotspot characteristics, PMPSE (HRGs) 2020-22

State/UT	Number of hotspots	Hotspot coverage (%)		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Andhra Pradesh	3,593	82.7	17.3	6.9	5.4	3.1	13.0	13.7	57.7
Arunachal Pradesh	570	80.9	19.1	5.9	9.4	9.8	25.2	17.0	32.4
Assam	2,034	43.1	56.9	4.9	4.7	8.5	20.2	22.4	39.1
Bihar	516	57.0	43.0	0.5	7.3	11.0	25.1	9.5	46.3
Chandigarh	131	100.0	0.0	-	-	-	-	-	-
Chhattisgarh	929	74.5	25.5	3.3	5.2	5.7	13.7	12.1	59.7
Delhi	291	78.7	21.3	4.1	5.1	10.6	12.0	7.2	60.8
Goa	248	71.8	28.2	8.0	12.9	3.2	5.6	2.0	68.1
Gujarat	1,580	89.2	10.8	2.0	2.4	2.0	6.9	12.3	74.0
Haryana	1,326	43.0	57.0	1.2	4.6	4.5	24.2	28.0	37.2
Himachal Pradesh	913	29.6	70.4	2.0	3.4	5.1	19.9	26.1	43.2
Jammu & Kashmir	303	31.0	69.0	0.3	3.9	17.4	31.3	27.0	19.8
Jharkhand	846	98.2	1.8	0.3	1.5	32.6	19.3	5.7	40.3
Karnataka	8,771	75.7	24.3	4.5	8.7	6.6	17.1	18.5	44.3
Kerala	1,519	87.3	12.7	1.4	3.0	4.1	13.8	16.3	61.0
Madhya Pradesh	2,841	66.9	33.1	6.7	8.2	5.4	19.9	21.0	38.4
Maharashtra	3,273	67.6	32.4	5.6	3.9	4.3	13.2	11.7	60.9
Manipur	341	89.7	10.0	5.2	6.4	8.8	17.8	4.9	56.6
Meghalaya	116	78.4	21.6	12.0	2.5	15.5	4.3	7.7	57.7
Mizoram	116	98.3	0.9	4.3	0.8	2.5	17.2	20.6	54.3
Nagaland	211	97.2	2.8	1.4	0.4	0.9	2.8	5.6	88.6
Odisha	2,113	43.9	56.1	12.16	14.3	6.8	13.9	9.8	42.8
Puducherry	101	76.2	23.8	4.95	16.83	2.9	15.8	1.9	57.4
Punjab	1,296	56.3	43.8	2.0	4.3	2.9	14.1	20.6	55.9
Rajasthan	1,155	49.7	50.3	4.9	4.7	3.9	11.0	15.5	59.8

State/UT	Number of hotspots	Hotspot coverage (%)		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Sikkim	75	98.7	1.3	-	6.6	5.3	18.6	13.3	56.0
Tamil Nadu	2,516	80.2	19.8	4.4	7.1	4.1	16.8	11.01	56.2
Telangana	1,624	80.8	19.2	8.7	4.2	4.9	20.5	10.4	51.0
Tripura	691	74.5	25.5	11.7	4.4	4.9	6.6	8.6	63.5
Uttar Pradesh	2,412	45.1	54.9	5.1	4.9	4.4	20.6	22.5	42.2
Uttarakhand	421	44.9	55.1	0.2	6.4	4.9	15.6	15.2	57.4
West Bengal	707	83.6	16.4	1.5	0.2	1.4	1.4	0.8	94.4
India	43,579	68.6	31.4	5.0	6.2	5.8	16.1	15.7	50.7

3.1.5 Types of Hotspots

In addition to TI coverage, the hotspots were categorized based on their geographical settings, determining the typology of sex work among FSWs. Nationally, more than half of the hotspots were home-based (55.1%), followed by 16.1% street-based locations and 5.9% brothel-based. Another 4.3% of the hotspots were situated in lodges/dhabas/hotels. Additionally, 1% to 4% of the hotspots were situated near public places or facilities such as bus stops, parks, marketplaces, public toilets or highways. Some hotspots were also identified in old or vacant buildings, abandoned/dilapidated structures, and near railway tracks (Table 3.5).

Similar to the national trend, the majority of the hotspots at the State/UT level were either home-based or street-based. In Tripura (96.5%), Uttarakhand (84%), Nagaland (83.8%), Madhya Pradesh (76.6%) and Punjab (75.1%), over three-fourths of the hotspots were home-based. Similarly, in Jammu & Kashmir

(71.9%), Himachal Pradesh (68.5%), Manipur (68.3%), Assam (67.2%), Uttar Pradesh (66.8%), Andhra Pradesh (64.3%), Haryana (63.2%), Rajasthan (62.6%), Meghalaya (62%), Arunachal Pradesh (61.4%), and Maharashtra (60%), over three-fifths of the hotspots were home-based. Conversely, in West Bengal (75.3%) and Delhi (31.2%), a significant proportion of the hotspots were brothel-based. Additionally, a notable proportion of hotspots were bar-based in Maharashtra (9.3%) and Sikkim (5.3%). In Goa, Arunachal Pradesh, Bihar, Himachal Pradesh, Kerala, Manipur and Sikkim, 10% to 18% of the hotspots were lodge/dhaba/hotel-based. Over half of the hotspots were street-based in Mizoram (58.6%). Similarly, around 20% to 35% of the hotspots in Chhattisgarh, Delhi, Goa, Gujarat, Jharkhand, Karnataka, Odisha, Puducherry, Tamil Nadu and Telangana were street-based. In Tamil Nadu, a significant proportion of the hotspots were situated near bus stands (28.4%). Spa-based hotspots were observed mainly in Puducherry (4%) and Gujarat (2.5%) (Table 3.5).

Table 3.5: Types of FSW hotspots, PMPSE (HRGs) 2020-22

State/UT	Number of hotspots	Types of hotspots (%)																
		Brothel	Home	Bar	Lodge/dhaba/hotel	Street	Railway station	Bus stand	Park	Marketplace	Cinema	Under the bridge	Public toilet	Highway	Spa	Massage parlour	Abandoned area	Others
Andhra Pradesh	3,593	5.5	64.3	0.0	0.8	17.7	0.9	2.3	0.3	1.2	0.6	0.8	0.3	2.1	-	-	1.3	1.0
Arunachal Pradesh	570	-	61.4	1.7	10.0	9.1	1.1	0.3	0.5	0.8	-	1.9	0.1	2.4	-	-	10.0	0.8
Assam	2,034	0.3	67.2	0.2	6.3	12.0	-	0.3	0.1	2.1	0.1	0.1	0.0	0.5	-	0.0	0.6	9.1
Bihar	516	8.9	50.3	0.3	10.8	8.3	-	3.4	-	6.0	0.3	0.7	-	1.3	-	-	2.5	2.9
Chandigarh	131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chhattisgarh	929	0.2	58.1	0.1	3.0	31.5	0.2	1.2	0.8	2.0	0.1	0.7	-	0.4	-	-	0.3	0.9
Delhi	291	31.2	1.3	-	1.0	34.7	1.3	6.5	9.6	3.7	0.3	3.0	-	3.4	-	-	3.0	0.3
Goa	248	-	35.4	0.4	18.1	27.8	-	3.6	2.8	3.2	-	0.8	1.6	-	-	1.0	1.2	2.4
Gujarat	1,580	13.8	40.8	-	3.0	27.0	0.5	1.8	1.0	3.1	0.1	0.1	-	3.1	2.5	0.0	0.1	2.0
Haryana	1,326	2.1	63.2	0.8	3.9	8.3	0.7	0.9	2.4	2.0	0.0	0.8	0.0	3.7	0.6	0.0	4.5	5.3
Himachal Pradesh	913	-	68.5	0.1	13.6	7.8	0.1	1.7	0.6	3.4	-	0.3	-	-	-	-	1.1	2.4
Jammu & Kashmir	303	0.3	71.9	-	8.9	2.9	0.9	2.3	1.9	2.9	-	0.9	-	3.6	0.7	1.0	0.9	0.3
Jharkhand	846	0.3	48.4	-	8.1	28.8	2.2	0.7	0.2	2.2	0.1	0.8	-	1.8	-	-	2.0	3.9
Karnataka	8,771	4.5	50.3	0.1	2.1	19.8	-	5.4	1.3	3.5	0.9	0.7	0.9	2.2	-	0.0	5.1	1.7
Kerala	1,519	0.2	57.8	-	11.7	8.1	1.5	7.8	1.1	1.2	0.4	0.9	0.3	0.9	0.1	0.0	4.4	2.7
Madhya Pradesh	2,841	2.2	76.6	0.0	2.2	8.3	0.6	1.9	0.5	1.9	0.0	0.2	0.2	1.7	0.4	0.0	1.4	1.0
Maharashtra	3,273	11.6	60.0	9.3	4.9	6.9	0.3	1.0	0.0	1.0	-	0.0	0.0	0.2	0.0	0.7	0.0	3.2
Manipur	341	0.2	68.3	0.2	16.7	4.9	-	0.5	0.2	1.4	0.2	0.2	-	-	-	-	2.0	4.4
Meghalaya	116	-	62.0	-	7.7	10.3	-	0.8	-	12.0	-	-	-	6.0	-	1.0	-	-
Mizoram	116	-	37.0	-	2.5	58.6	-	-	-	0.8	-	-	-	0.8	-	-	-	-
Nagaland	211	-	83.8	2.3	5.6	1.4	0.4	-	-	0.4	0.4	-	0.9	-	-	-	0.4	3.7
Odisha	2,113	0.4	50.4	0.0	9.0	21.8	0.9	1.4	0.9	5.5	0.1	1.1	0.0	2.1	0.2	0.0	3.6	1.6
Puducherry	101	2.9	42.5	-	2.9	34.6	-	-	2.9	-	-	0.9	-	1.9	4.0	-	4.9	1.9
Punjab	1,296	7.4	75.1	-	2.7	4.9	0.6	1.3	0.4	1.3	-	0.2	-	0.1	0.3	0.0	0.8	4.0
Rajasthan	1,155	16.3	62.6	-	7.5	9.6	0.1	1.0	0.7	-	-	0.1	0.3	0.5	0.3	-	0.5	-
Sikkim	75	-	38.6	5.3	12.0	12.0	-	-	1.3	1.3	-	4.0	2.6	-	-	3.0	5.3	14.6
Tamil Nadu	2,516	7.7	19.8	0.0	2.1	25.7	2.6	28.4	1.9	3.8	1.3	1.1	0.8	1.9	0.0	0.0	0.2	1.8
Telangana	1,624	2.8	34.9	0.1	2.5	33.6	1.6	7.1	0.6	2.7	0.8	0.3	0.7	1.1	-	-	0.7	9.9
Tripura	691	-	96.5	-	0.1	1.0	0.1	0.2	-	0.7	-	0.1	-	0.2	-	-	0.5	0.1
Uttar Pradesh	2,412	2.4	66.8	0.2	2.6	14.3	1.4	1.5	1.5	3.1	0.1	0.8	0.0	1.8	0.3	0.0	0.5	1.8
Uttarakhand	421	-	84.0	-	7.6	2.3	-	0.2	0.7	0.9	-	0.7	-	0.4	-	-	0.9	1.9
West Bengal	707	75.3	5.0	-	5.2	11.3	0.7	0.4	0.5	0.2	-	0.1	-	0.8	-	-	-	-
India	43,579	5.9	55.1	0.8	4.3	16.1	0.9	4.2	0.9	2.5	0.4	0.6	0.3	1.6	0.2	0.0	2.1	2.6

3.1.6 Peak Days and Peak Times of Maximum FSW Presence

During the PMPSE exercise, key informants were asked about the day of the week when the maximum number of FSWs could be found at the hotspots. It was noted as a multiple-response question, and key informants did not specifically pick any particular day for FSWs'

presence at hotspots. Approximately 27.9% of the key informants mentioned that FSWs were available on all seven days. Generally, FSWs' presence at the hotspots remained throughout the day. However, afternoons and evenings emerged prominently as peak times for FSWs availability at the hotspots nationwide and across States/UTs (Tables 3.6 and 3.7).

Table 3.6: Peak days for the FSW hotspot, PMPSE (HRGs) 2020-22

State/UT	Number of hotspots	Peak days for the hotspot (%)							
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	All days
Andhra Pradesh	3,593	35.6	38.3	38.0	35.1	36.4	41.3	50.7	9.9
Arunachal Pradesh	570	25.7	28.0	31.9	30.7	40.1	72.6	80.0	16.1
Assam	2,034	49.7	45.6	49.2	47.7	51.0	65.8	71.4	29.2
Bihar	516	62.9	52.5	60.4	46.5	56.9	51.9	60.6	32.7
Chandigarh	131	86.2	80.1	80.1	77.1	78.6	78.6	59.5	45.0
Chhattisgarh	929	31.5	34.9	42.3	33.1	37.0	33.0	53.6	16.4
Delhi	291	83.8	75.9	85.9	74.2	78.6	84.5	77.6	62.2
Goa	248	68.9	64.1	78.2	65.3	64.9	82.2	87.1	48.3
Gujarat	1,580	64.3	58.8	59.1	56.2	54.9	53.1	46.9	25.8
Haryana	1,326	75.1	70.9	73.0	72.2	75.9	79.1	73.5	57.0
Himachal Pradesh	913	66.3	61.0	60.4	60.0	64.1	66.9	63.4	43.3
Jammu & Kashmir	303	89.7	89.1	87.4	81.1	77.2	91.0	72.6	67.9
Jharkhand	846	42.4	40.9	39.3	35.3	39.8	39.7	41.3	12.4
Karnataka	8,771	33.3	27.9	27.8	27.7	26.5	25.2	28.6	5.9
Kerala	1,519	71.4	63.5	64.9	63.0	60.1	64.1	50.3	27.8
Madhya Pradesh	2,841	58.8	55.9	63.0	54.9	59.0	53.7	54.1	33.5
Maharashtra	3,273	68.1	68.9	68.4	63.8	70.0	69.2	71.8	48.8
Manipur	341	58.6	46.0	46.6	36.0	44.2	52.2	38.4	18.1
Meghalaya	116	57.7	53.4	55.1	55.1	56.9	81.0	73.2	43.1
Mizoram	116	11.2	13.7	13.7	7.7	50.8	72.4	88.7	6.0
Nagaland	211	29.8	27.9	38.3	25.5	34.1	81.5	68.2	18.9
Odisha	2,113	31.7	36.1	45.4	29.5	39.5	36.8	47.1	14.6
Puducherry	101	69.3	57.4	54.4	56.4	46.5	60.4	76.2	31.6
Punjab	1,296	75.6	73.6	75.9	74.7	76.4	82.5	75.3	62.8
Rajasthan	1,155	73.5	67.1	68.4	66.1	65.6	70.6	76.4	51.8
Sikkim	75	16.0	12.0	17.3	21.3	49.3	65.3	68.0	10.6
Tamil Nadu	2,516	62.8	52.2	63.9	53.8	49.0	66.6	55.5	27.4
Telangana	1,624	44.8	55.1	54.1	46.1	44.8	53.2	52.9	15.2
Tripura	691	80.7	74.1	70.9	63.8	65.9	62.8	56.7	45.1
Uttar Pradesh	2,412	68.2	68.0	70.1	65.2	68.0	71.1	69.9	53.9
Uttarakhand	421	65.8	60.3	69.1	55.5	62.7	66.2	63.1	42.2
West Bengal	707	69.7	71.2	71.0	73.5	73.8	87.2	90.8	61.5
India	43,579	52.6	50.0	52.5	48.1	50.0	53.5	54.5	27.9

Table 3.7: Peak time for the FSW hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Peak timing (%)				
		Morning	Afternoon	Evening	Night	All 24 hours
Andhra Pradesh	3,593	24.4	53.8	60.7	39.3	3.9
Arunachal Pradesh	570	6.6	28.0	74.9	81.5	0.3
Assam	2,034	24.6	47.3	84.3	41.0	7.0
Bihar	516	29.4	63.9	66.2	39.1	14.7
Chandigarh	131	55.7	86.2	45.8	12.9	4.5
Chhattisgarh	929	23.7	49.8	66.2	24.3	3.3
Delhi	291	17.5	47.4	55.3	32.3	2.0
Goa	248	26.6	72.9	83.4	59.2	11.6
Gujarat	1,580	26.4	86.9	39.3	15.3	3.9
Haryana	1,326	33.4	74.3	48.8	33.6	13.2
Himachal Pradesh	913	36.4	67.3	60.0	25.0	15.4
Jammu & Kashmir	303	27.7	70.9	71.9	47.1	15.8
Jharkhand	846	21.5	54.6	62.1	31.4	3.5
Karnataka	8,771	21.8	59.3	36.9	11.7	1.9
Kerala	1,519	66.0	68.9	69.5	24.1	7.7
Madhya Pradesh	2,841	29.7	67.9	56.7	27.0	7.1
Maharashtra	3,273	23.7	67.4	54.5	29.9	9.9
Manipur	341	31.0	66.2	75.9	24.0	7.6
Meghalaya	116	39.6	39.6	81.9	56.9	12.0
Mizoram	116	12.9	8.6	71.5	87.0	0.8
Nagaland	211	16.1	25.1	70.1	69.6	4.2
Odisha	2,113	20.6	45.1	63.2	29.0	1.8
Puducherry	101	66.3	76.2	81.1	56.4	32.6
Punjab	1,296	50.4	71.6	46.3	12.8	5.5
Rajasthan	1,155	46.7	72.4	68.1	34.2	19.3
Sikkim	75	20.0	53.3	82.6	36.0	9.3
Tamil Nadu	2,516	41.8	55.7	75.9	39.3	6.9
Telangana	1,624	32.8	62.8	66.0	35.2	3.3
Tripura	691	63.5	79.4	31.4	2.6	0.2
Uttar Pradesh	2,412	23.4	70.9	47.8	31.3	9.7
Uttarakhand	421	19.9	77.6	33.4	5.7	0.9
West Bengal	707	32.5	74.2	90.9	61.8	27.0
India	43,579	29.3	62.0	56.3	28.2	6.4

3.1.7 Estimated Size of the FSW Population

Nationally, the estimated total population of FSWs was around 9,95,499 (9,02,277-10,88,712), including 7,71,375 (6,78,152-8,64,588) from 43,579 hotspots, 1,38,935 associated with 10,718 network operators and 85,189 from the 16,095 link worker villages. Notably, Karnataka (1,53,337) and Andhra Pradesh (1,19,367) had the highest estimated number of FSWs, followed by Maharashtra (95,352), Delhi (88,399), Telangana (75,381) and Tamil Nadu (60,755). Combined, these six States represent three-fifths of the total estimated FSW population nationwide (Table 3.8).

Nationally, nearly one-fourth of the estimated FSWs were below the age of 25 years. However, in some of the States, a significant majority of the FSWs were young. In Sikkim (86.6%), Arunachal Pradesh (56.8%), Nagaland (48.4%), Mizoram (40.3%), Rajasthan (39.4%), Assam (38.7%), Chandigarh (36.7%) and Chhattisgarh (36.6%), a notable proportion of FSWs were below the age of 25 years. Conversely, less than 10% of the FSWs in Kerala were below 25 years of age.

In addition to collecting information about the population size, the key informants were asked about the FSWs associated with the hotspots who visit or work in other hotspots within the district. Approximately 29.5% of the FSWs were noted to visit other hotspots within the district. At the State/UT level, a higher proportion of FSWs, around 40% in Sikkim, Telangana, Mizoram, Meghalaya, Nagaland and Andhra Pradesh, were observed to visit other hotspots. In contrast, less than 15% of FSWs visited other hotspots in Manipur, Tripura and Kerala.

Additionally, network operators were also asked whether FSWs associated with them maintained contact with other network operators or visited physical hotspots for solicitation. Around 28% of the FSWs were linked to other network operators, and a similar proportion also visited physical hotspots for solicitation. In Assam (54.6%), Gujarat (55.3%), Goa (58.3%), Meghalaya (58%) and Manipur (80.8%), over half of the FSWs were linked to other network operators. Similarly, in Kerala (50%), Himachal Pradesh (52.6%), Uttarakhand (58.9%), Meghalaya (62.3%), Manipur (66.9%), and Goa (90.9%), a significant proportion of FSWs associated with network operators were noted to visit physical hotspots for solicitation.

During PMPSE, information regarding the presence of HRGs in the link worker villages was collected. Essential details such as village type, population, administrative division (block/mandal/tehsil), and coverage by LWS were documented, along with the minimum and maximum number of HRGs in each village. Furthermore, data was collected regarding whether the HRGs in the village also visit nearby urban areas to engage in high-risk behaviours.

Nationally, 78.5% of the villages covered during PMPSE were covered by LWS. At the State/UT level, the LWS coverage ranged from 70 to 95%, except in Tamil Nadu (49.2%), Uttar Pradesh (58.3%), Odisha (59.5%), and Tripura (64.2%). Universal LWS coverage was noted in Bihar, Chhattisgarh and Mizoram. Nationally, 28% of the FSWs visited nearby urban areas to engage in high-risk behaviours. In contrast, over half of the FSWs in Punjab, Uttar Pradesh and Meghalaya, as well as a striking 81.3% in Manipur, were noted to visit urban areas to engage in high-risk behaviours (Table 3.8).

Table 3.8: Adjusted estimated size of FSWs at hotspots associated with network operators and in link worker villages, PMPSE (HRGs) 2020-22

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	FSWs who go to the other hotspot (%)	FSWs below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	FSW who go to other NO (%)	FSWs who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		FSWs who go to nearby urban areas (%)
Andhra Pradesh	3,593	1,02,512 (86,032-1,18,993)	42.3	28.8	148	861	40.9	35.4	1,598	80.5	15,994	24.0	1,19,367 (1,02,886-1,35,848)
Arunachal Pradesh	570	6,941 (6,264-7,618)	35.5	56.8		-			-		-		6,941 (6,264-7,618)
Assam	2,034	38,634 (33,804-43,463)	32.5	38.6	182	1087	54.6	48.3	-		-		39,721 (34,891-44,550)
Bihar	516	9,253 (8,590-9,915)	18.9	25.2	39	320	7.2	36.3	400	100.0	2,109	5.0	11,682 (11,020-12,344)
Chandigarh	131	3,051 (2,715-3,386)	34.9	36.7	44	282	56.0	43.9	-	-	-	-	3,333 (2,997-3,668)
Chhattisgarh	929	17,008 (15,491-18,524)	36.4	36.6	68	422	36.6	39.8	266	100.0	945	29.5	18,375 (16,859- 19,891)
Delhi	291	7,539 (6,951-8,127)	18.9	23.2	2,845	80,860	10.5	2.7	-	-	-	-	88,399 (87,811-88,987)
Goa	248	5037 (4,301- 5,772)	35.4	32.4	5	4	58.3	90.9	-	-	-	-	5,040 (4,305-5,776)
Gujarat	1,580	29,999 (26,325-33,673)	25.1	19.0	81	1,592	55.3	28.7	1,075	84.0	5,527	29.0	37,118 (33,445-40,792)
Haryana	1,326	16,171 (14,587-17,754)	29.9	25.1	221	1,497	36.8	28.0	-	-	-	-	17,668 (16,084-19,251)
Himachal Pradesh	913	13,083 (11,760-14,406)	37.4	27.1	27	128	44.6	52.6	-	-	-	-	13,210 (11,888- 14,533)
Jammu And Kashmir	303	4,239 (3,504-4,974)	24.0	22.4	52	395	19.4	30.9	-	-	-	-	4,634 (3,899- 5,369)
Jharkhand	846	11,860 (10,568-13,152)	26.5	27.3	-	-	-	-	-	-	-	-	11,860 (10,568- 13,152)
Karnataka	8,771	1,14,171 (1,01,410-1,26,932)	27.4	22.7	2,718	19,975	42.1	37.2	1,179	80.8	19,191	20.6	1,53,337 (1,40,576-1,66,098)
Kerala	1,519	16,055 (13,748-18,355)	27.5	9.5	107	568	44.7	50.0	-	-	-	-	16,623 (14,316- 18,922)
Madhya Pradesh	2,841	46,054 (39,788-52,320)	27.1	24.1	617	4,651	40.1	36.0	1,146	72.0	2,750	30.4	53,455 (47,189-59,721)

Continued

Continued

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	FSWs who go to the other hotspot (%)	FSWs below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	FSW who go to other NO (%)	FSWs who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		FSWs who go to nearby urban areas (%)
Maharashtra (including Mumbai)	3,273	76,014 (68,743-83,285)	25.5	17.2	1,291	10,637	19.2	25.3	2,388	75.8	8,700	26.8	95,352 (88,080- 1,02,622)
Manipur	341	5,343 (4,166- 6,521)	15.2	18.5	32	40	80.8	66.9	696	95.1	279	81.3	5,662 (4,484-6,839)
Meghalaya	116	2,963 (2,422- 3,503)	40.6	33.7	10	61	58.0	62.3	46	95.7	273	53.8	3,297 (2,756-3,837)
Mizoram	116	1,065 (887- 1,242)	52.5	40.3	-	-	-	-	197	99.0	369	45.9	1,434 (1,256-1,611)
Nagaland	211	2,139 (1,659- 2,619)	43.6	48.4	18	107	7.8	11.6	-	-	-	-	2,246 (1,766- 2,726)
Odisha	2,113	21,820 (18,729- 24,912)	34.2	33.9	190	980	27.6	47.3	957	59.5	1,820	15.8	24,620 (21,529-27,712)
Puducherry	101	2,427 (2,110- 2,744)	32.3	25.9	13	87	21.2	43.7	-	-	-	-	2,514 (2,197- 2,832)
Punjab	1,296	22,696 (19,693- 25,698)	25.8	28.0	285	2133	43.3	43.3	596	92.4	2,475	52.0	27,304 (24,301- 30,307)
Rajasthan	1,155	19,156 (17,318-20,993)	35.0	39.4	233	1878	27.9	44.1	-	-	-	-	21,034 (19,196-22,871)
Sikkim	75	732 (635-828)	61.9	86.6	-	-	-	-	-	-	-	-	732 (635- 828)
Tamil Nadu	2,516	47,452 (41,310 - 53,594)	24.1	17.1	372	3091	42.8	38.7	2,042	49.2	10,232	11.8	60,775 (54,633-66,917)
Telangana	1,624	61,900 (54,819- 68,980)	43.0	20.3	568	3390	41.8	46.6	1,264	124.7	10,091	27.6	75,381 (68,300-82,461)
Tripura	691	5,490 (4,998-5,982)	9.1	24.1	38	159	23.1	44.3	271	64.2	593	8.9	6,242 (5,750-6,734)
Uttar Pradesh	2,412	35,315 (31,909- 38,720)	24.0	24.4	384	3,021	30.1	36.6	1,171	58.3	2,144	52.6	40,480 (37,075-43,885)
Uttarakhand	421	7,094 (6,268- 7,921)	31.0	16.9	62	119	40.0	58.9	-	-	-	-	7,213 (6,387-8,040)
West Bengal	707	18,165 (16,650- 19,681)	14.4	11.7	68	590	6.0	34.2	803	91.4	1,697	20.8	20,452 (18,937- 21,968)
India	43,579	7,71,375 (6,78,152-8,64,588)	29.5	24.2	10,718	1,38,935	29.2	28.0	16,095	78.5	85,189	28.3	9,95,499 (9,02,277-10,88,712)

3.2 Men Who Have Sex with Men

Since the inception of the NACP, MSM have been a central focus of the Targeted Interventions programme. As social landscapes evolve and digital avenues redefine interactions, precise MPSE of the MSM population at physical venues and virtual applications is necessary for designing targeted interventions. The key findings from the PMPSE of MSM are detailed in the following sections.

3.2.1 Profile of Key Informants Interviewed

Among MSM, the PMPSE at the physical venues was implemented across 31 States/UTs. A total of 55,922 KIIs were conducted at the 17,967 MSM hotspots. Among these, 73.3% (40,983) interviews were conducted with HRGs, 14.7% with other stakeholders (8,231) and 12% with community gatekeepers (6,708). The national and State/UT wise distribution of key informants is presented in Figures 3.3 and 3.4. Except for Puducherry, an average of three interviews were conducted at each MSM hotspot. Two of these interviews were with the HRGs, except in Andhra Pradesh, Arunachal Pradesh and Puducherry, following the prescribed protocol (Table 3.9).

Figure 3.3: Distribution of the profile of key informants interviewed at the MSM hotspots, PMPSE (HRGs), 2020-22 (in %)

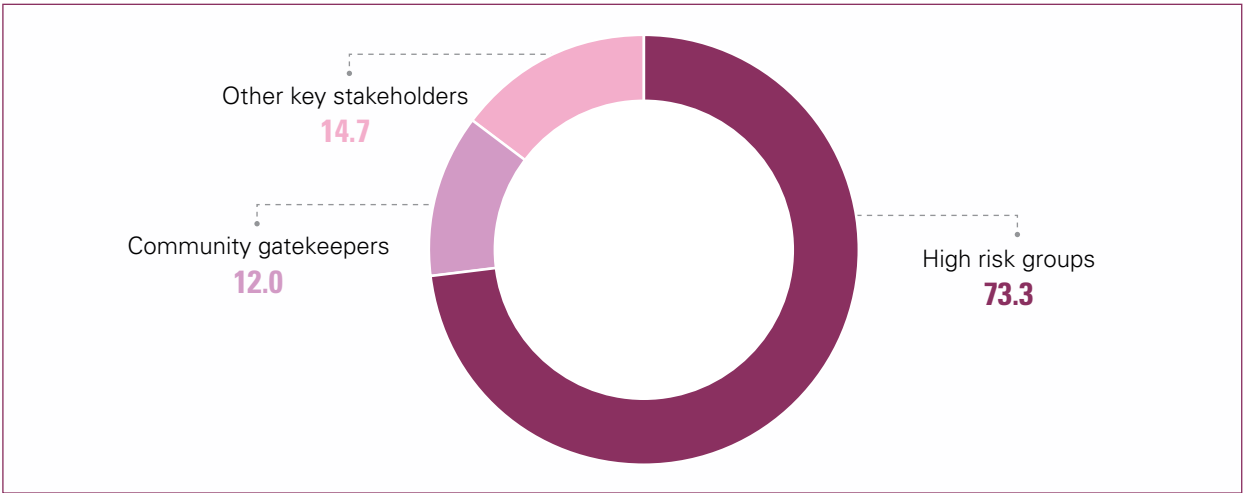


Figure 3.4: State/UT wise distribution of the profile of key informants interviewed at the MSM hotspots, PMPSE (HRGs), 2020-22

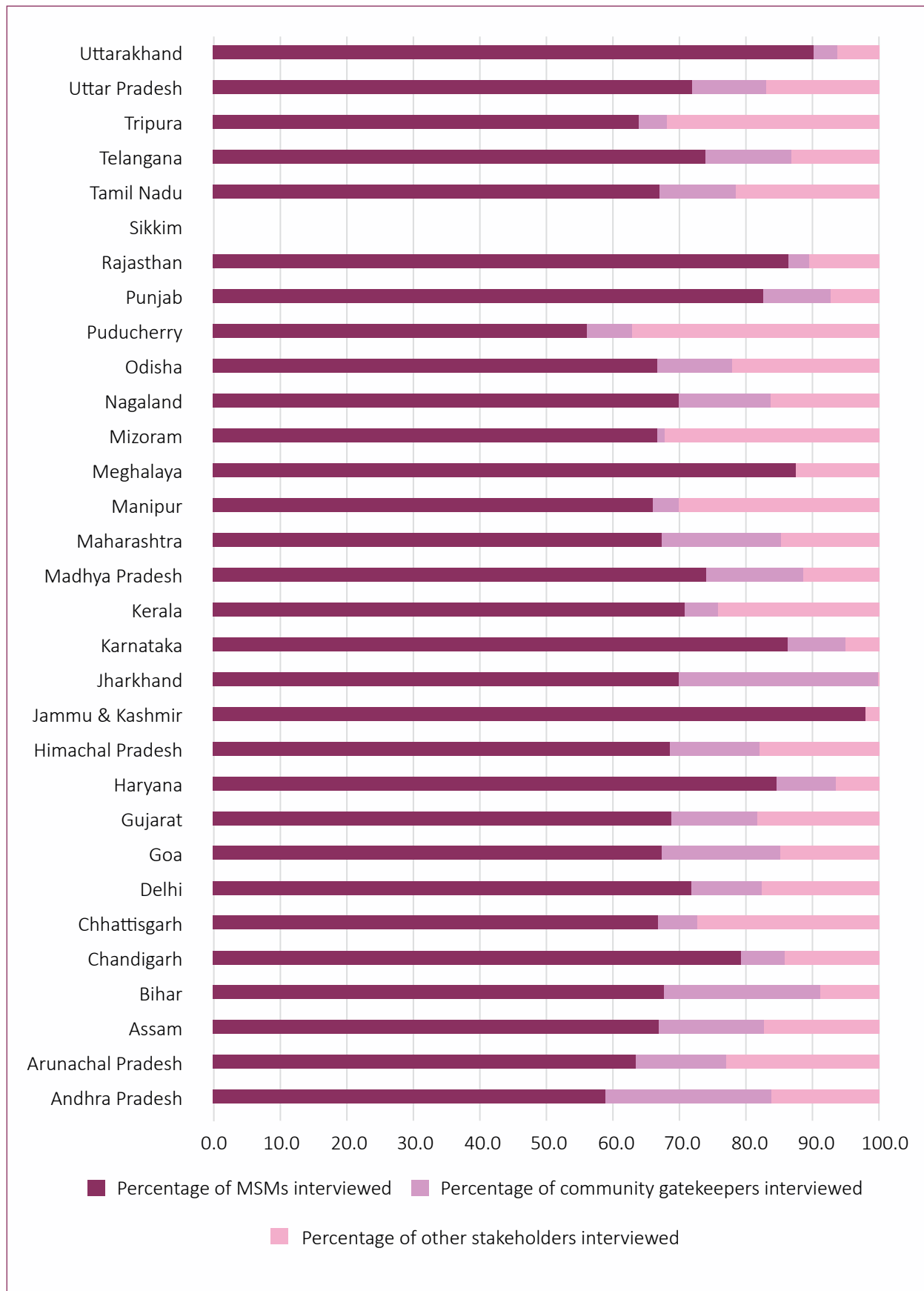


Table 3.9: Profile of key informants interviewed at the MSM hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Total number of interviews	Average number of interviews per hotspot	Key informants interviewed				Other key stakeholders/ informants		
				HRGs		Community gatekeepers		Average number per hotspot	Percentage interviewed	Percentage interviewed
				Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed			
Andhra Pradesh	856	2583	3.0	1.8	59.0	0.7	24.9	0.4	16.1	16.1
Arunachal Pradesh	125	375	3.0	1.9	63.5	0.4	13.6	0.6	22.9	22.9
Assam	858	2585	3.0	2.0	67.0	0.4	15.7	0.5	17.3	17.3
Bihar	101	328	3.2	2.2	67.7	0.7	23.5	0.2	8.8	8.8
Chandigarh	106	324	3.0	2.4	79.3	0.2	6.5	0.4	14.2	14.2
Chhattisgarh	189	567	3.0	2.0	66.8	0.1	5.8	0.8	27.3	27.3
Delhi	851	2556	3.0	2.2	71.8	0.3	10.6	0.5	17.6	17.6
Goa	122	377	3.0	2.1	67.4	0.5	17.8	0.4	14.9	14.9
Gujarat	1,505	4817	3.2	2.2	68.8	0.4	12.9	0.5	18.3	18.3
Haryana	738	2218	3.0	2.5	84.6	0.2	8.8	0.2	6.5	6.5
Himachal Pradesh	153	462	3.02	2.1	68.6	0.4	13.4	0.5	18.0	18.0
Jammu & Kashmir	59	177	3.0	2.1	69.5	0.0	0.6	0.9	29.9	29.9
Jharkhand	157	472	3.01	2.1	69.9	0.9	29.9	0.0	0.2	0.2
Karnataka	2,810	8453	3.01	2.6	86.3	0.2	8.6	0.1	5.1	5.1
Kerala	863	2646	3.07	2.2	70.8	0.1	5.1	0.7	24.1	24.1
Madhya Pradesh	1,188	3726	3.14	2.3	74.0	0.4	14.5	0.3	11.5	11.5
Maharashtra	1,272	12237	3.74	2.5	67.4	0.6	17.86	0.5	14.77	14.77
Manipur	107	333	3.11	2.1	66.1	0.1	3.9	0.9	30.0	30.0
Meghalaya	16	56	3.50	3.1	87.5	-	0.0	0.4	12.5	12.5
Mizoram	83	249	3.00	2.0	66.7	0.0	1.2	0.9	32.1	32.1
Nagaland	102	319	3.13	2.2	69.9	0.4	13.8	0.5	16.3	16.3
Odisha	618	1868	3.02	2.0	66.6	0.3	11.2	0.6	22.1	22.1
Puducherry	98	205	2.09	1.2	56.1	0.1	6.8	0.7	37.1	37.1
Punjab	542	1704	3.14	2.6	82.6	0.3	10.0	0.2	7.3	7.3
Rajasthan	575	1730	3.0	2.6	86.4	0.0	3.1	0.3	10.5	10.5
Sikkim	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	1,629	5732	3.5	2.4	67.0	0.4	11.5	0.7	21.5	21.5
Telangana	292	895	3.0	2.3	74.0	0.3	12.8	0.4	13.2	13.2
Tripura	126	396	3.1	2.0	63.9	0.1	4.3	1.0	31.8	31.8
Uttar Pradesh	1,468	4574	3.1	2.2	71.9	0.3	11.2	0.5	16.9	16.9
Uttarakhand	188	589	3.1	2.8	90.2	0.1	3.6	0.2	6.3	6.3
West Bengal	170	547	3.2	2.6	80.3	0.2	7.9	0.3	11.9	11.9
India	17,967	55,922	3.1	2.3	73.3	0.3	12.0	0.4	14.7	14.7

3.2.2 Profile of Network Operators

During PMPSE 2020-22, a total of 1,660 network operators associated with MSM were mapped across the different States/UTs. The majority of these network operators were males (92.8%), followed by H/TG (5.3%). Most of the network operators mapped were young, with the largest proportion falling within the age category of 28 to 37 years (43.2%), followed

by those in the age group of 18 to 27 years (35.3%). Notably, more than 100 network operators were mapped in the States of Maharashtra (383), Karnataka (198), Madhya Pradesh (161), Tamil Nadu (148) and Delhi (110). In contrast, less than 10 network operators were mapped in Chhattisgarh, Goa, Jammu and Kashmir, Himachal Pradesh, Meghalaya, Nagaland, Puducherry and Tripura.

Table 3.10: Profile of network operators associated with MSM, PMPSE (HRGs), 2020-22

State/UT	No. of network operators mapped	Gender (%)			Age (%)			
		Female	H/TG	Male	18-27 years	28-37 years	38-47 years	48+ years
Andhra Pradesh	39	-	5.1	94.8	43.5	30.77	2.5	23.0
Arunachal Pradesh	-	-	-	-	-	-	-	-
Assam	89	1.1	-	98.8	40.4	58.4	1.1	-
Bihar	15	-	-	100.0	6.6	66.6	26.6	-
Chandigarh	16	-	6.2	93.7	31.2	62.5	6.2	-
Chhattisgarh	8	-	-	100.0	12.5	62.5	25.0	-
Delhi	110	1.8	10.0	88.1	50.9	41.8	2.7	4.5
Goa	2	-	-	100.0	-	50.0	-	50.0
Gujarat	-	-	-	-	-	-	-	-
Haryana	42	4.8	2.3	92.8	61.9	35.7	2.3	-
Himachal Pradesh	4	25.0	-	75.0	25.0	75.0	-	-
Jammu & Kashmir	10	-	80.0	20.0	20.0	30.0	40.0	10.0
Jharkhand	-	-	-	-	-	-	-	-
Karnataka	198	3.0	16.6	80.3	26.2	46.4	21.2	6.0
Kerala	55	7.3	3.6	89.0	14.5	36.3	34.5	14.5
Madhya Pradesh	161	1.2	4.3	94.4	28.5	47.8	18.6	4.9
Maharashtra	383	1.3	1.5	97.1	46.2	34.4	16.1	3.1
Manipur	-	-	-	-	-	-	-	-
Meghalaya	4	-	-	100.0	50.0	50.0	-	-
Mizoram	-	-	-	-	-	-	-	-
Nagaland	1	-	-	100.0	-	100.0	-	-
Odisha	24	-	8.3	91.6	16.6	37.5	41.6	4.1
Puducherry	4	-	-	100.0	25.0	50.0	25.0	-
Punjab	63	-	4.7	95.2	60.3	28.5	9.5	1.5
Rajasthan	63	1.6	1.5	96.8	25.4	52.3	14.2	7.9
Sikkim	-	-	-	-	-	-	-	-
Tamil Nadu	148	1.4	3.3	95.2	32.4	45.9	16.8	4.7
Telangana	76	2.6	1.3	96.0	11.8	60.5	22.3	5.2
Tripura	4	-	-	100.0	50.0	25.0	25.0	-
Uttar Pradesh	97	1.0	1.0	97.9	24.7	42.2	17.5	15.4
Uttarakhand	13	-	15.3	84.6	61.5	30.7	7.6	-
West Bengal	31	-	9.6	90.3	19.3	48.3	22.5	9.6
India	1,660	1.7	5.3	92.8	35.3	43.2	15.9	5.5

3.2.3 Profile of Interviewers

At the national level, the implementation of PMPSE was primarily carried out by the outreach workers (91.8%), followed by peer educators (4.7%) and programme officers (3.4%), as outlined in the protocol. However, there were notable variations in certain States. In Jammu & Kashmir, peer educators and programme officers contributed equally (22% each) to the data

collection alongside outreach workers. Similarly, in Manipur and Meghalaya, peer educators managed data collection at 21.5% and 31.2% of hotspots, respectively. Meanwhile, in West Bengal (38.8%) and Uttarakhand (31.3%), programme officers conducted data collection at more than 30% of the hotspots (Table 3.11).

Table 3.11: Profile of interviewers covering MSM hotspots, PMPSE (HRGs), 2020-22

State/UT	Key informant interviews conducted by (%)		
	Outreach workers	Peer educators	Programme officers
Andhra Pradesh	94.5	0.4	5.0
Arunachal Pradesh	93.6	4.8	1.6
Assam	98.6	0.8	0.5
Bihar	94.0	5.9	0.0
Chandigarh	100.0	-	0.0
Chhattisgarh	89.4	8.4	2.1
Delhi	99.1	0.8	0.0
Goa	90.1	9.8	0.0
Gujarat	88.4	3.4	8.1
Haryana	87.9	3.3	8.6
Himachal Pradesh	98.6	1.3	0.0
Jammu & Kashmir	55.9	22.0	22.0
Jharkhand	92.3	6.3	1.2
Karnataka	93.2	5.8	0.9
Kerala	89.1	9.8	1.0
Madhya Pradesh	99.0	0.5	0.4
Maharashtra	85.0	13.5	1.4
Manipur	73.8	21.5	4.6
Meghalaya	68.7	31.2	0.0
Mizoram	100.0	-	0.0
Nagaland	100.0	-	0.0
Odisha	94.0	5.9	0.0
Puducherry	85.7	3.0	11.2
Punjab	91.1	8.8	0.0
Rajasthan	93.7	4.0	2.2
Sikkim	-	-	-
Tamil Nadu	94.9	1.5	3.5
Telangana	90.7	7.8	1.3
Tripura	100.0	-	0.0
Uttar Pradesh	92.0	1.9	6.0
Uttarakhand	61.7	6.9	31.3
West Bengal	41.7	19.4	38.8
India	91.8	4.7	3.4

3.2.4 Hotspot Coverage and Operational Duration

In this round of PMPSE, basic information about the hotspots was collected, including details such as TI coverage, duration since the hotspot has been operational, hotspot type, and peak days and peak times when the maximum number of MSM are present at the hotspots.

It was observed that 64.4% of the MSM hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 35.5% were either newly identified or previously uncovered. Notably, no new or uncovered areas were identified in Mizoram, Nagaland, Manipur and Chandigarh. Conversely, a significant proportion of new or uncovered hotspots

were identified in Himachal Pradesh (72.5%), Haryana (68.4%), West Bengal (61.1%), Uttar Pradesh (59.0%), Assam (57.8%), Odisha (56.8%) and Punjab (53.7%).

At the national level, among the MSM hotspots where PMPSE was implemented, over half (55%) had been active for more than three years, 14.6% operational for two to three years, and 13.9% operational for one to two years. In Mizoram and Chandigarh, more than 90% of the hotspots had been active for more than three years. Similarly, over 70% of hotspots in Gujarat, Nagaland, Tamil Nadu, Telangana and Uttarakhand had been active for more than three years. In contrast, 31.9% of hotspots in Gujarat and 14.2% in Tripura had been operational for less than three months (Table 3.12).

Table 3.12: MSM hotspot characteristics, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Andhra Pradesh	856	78.3	21.6	9.7	4.6	2.3	8.8	14.0	60.4
Arunachal Pradesh	125	87.2	12.8	5.6	2.4	7.2	10.4	20.8	53.6
Assam	858	42.0	57.8	6.5	7.3	10.2	30.7	16.2	28.0
Bihar	101	69.3	30.6	-	1.9	12.8	16.8	11.8	56.4
Chandigarh	106	99.0	0.9	0.9	1.8	0.4	2.8	1.9	91.1
Chhattisgarh	189	84.1	15.8	4.2	1.0	0.5	16.9	29.3	47.2
Delhi	851	75.3	24.6	13.9	6.7	4.1	4.8	4.3	66.2
Goa	122	57.3	42.6	31.9	5.7	1.6	2.6	4.1	54.1
Gujarat	1,505	88.6	11.3	1.7	1.9	1.2	5.5	9.8	79.0
Haryana	738	31.5	68.4	1.6	6.7	4.4	22.4	30.7	34.0
Himachal Pradesh	153	27.4	72.5	4.5	11.1	9.1	18.9	32.0	24.1
Jammu & Kashmir	59	66.1	33.9	1.6	11.8	10.1	22.3	32.2	22.3
Jharkhand	157	87.9	12.1	-	3.1	24.8	7.0	-	64.9
Karnataka	2,810	56.7	43.2	6.1	7.6	10.6	13.3	13.7	48.4
Kerala	863	81.2	18.6	2.5	4.2	4.6	8.1	12.1	68.5
Madhya Pradesh	1,188	69.7	30.3	6.5	6.0	4.9	23.2	20.9	38.2
Maharashtra	1,272	64.3	35.5	2.9	6.2	4.7	15.0	14.3	56.8
Manipur	107	98.1	1.8	-	9.3	6.5	18.6	14.9	50.4
Meghalaya	16	81.2	18.7	-	-	-	-	31.2	68.7
Mizoram	83	100.0	-	-	-	-	-	2.4	97.5
Nagaland	102	100.0	-	-	2.9	0.9	16.6	8.8	70.5
Odisha	618	43.2	56.8	10.03	14.4	4.5	15.5	11.0	44.5

Continued

Continued

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Puducherry	98	83.6	16.3	3.0	9.1	1.0	13.7	16.3	57.1
Punjab	542	46.1	53.7	1.8	4.4	3.1	19.5	15.0	55.7
Rajasthan	575	54.2	45.4	3.1	4.5	5.9	14.6	22.0	49.9
Sikkim	-	-	-	-	-	-	-	-	-
Tamil Nadu	1,629	82.2	17.7	3.4	4.8	4.2	7.6	9.6	69.9
Telangana	292	85.2	14.7	5.1	5.4	4.7	5.1	7.5	71.9
Tripura	126	80.1	19.4	14.2	3.9	3.1	15.0	6.3	57.1
Uttar Pradesh	1,468	40.6	59.0	4.9	4.2	3.8	20.5	21.7	45.5
Uttarakhand	188	54.7	45.2	0.5	2.1	3.7	10.6	10.1	72.8
West Bengal	170	38.8	61.1	0.5	8.2	8.8	15.2	14.7	52.3
India	17,967	64.4	35.5	5.1	5.7	5.5	13.9	14.6	55.0

3.2.5 Types of Hotspots

During PMPSE, the MSM hotspots were also categorized according to their geographical settings. Nationally, 14.5% of the MSM hotspots were street-based, while another 14.4% were situated near bus stands, followed by 11.9% home-based. Around 18% of hotspots were located in parks or marketplaces, 9.4% were identified in old or vacant buildings or abandoned/dilapidated structures, and 5% were in proximity to railway stations. Hotspots along highways accounted for 5.7%, while 3.2% were reported to be situated under bridges. Spa or massage parlour-based hotspots comprised less than 1% of the total (Table 3.13).

Similar to the national trend, across the States/UTs, the MSM hotspots were predominantly street or home-based, followed by those near parks, marketplaces or railway stations. In the north-eastern States, including Mizoram (100%), Nagaland (73.5%), Tripura (69.8%), Arunachal Pradesh (50.4%) and Assam (40.8%), the majority of the MSM hotspots were home-based. In Jharkhand (30.6), Andhra Pradesh (23.2%) and Uttarakhand (23.9%), nearly one-fourth of the hotspots were street-based. Conversely, a significant proportion of hotspots in Meghalaya (37.5%), Jharkhand (29.3%), Himachal Pradesh (28.1%) and Odisha (23.1%) were situated around marketplaces. Similarly, MSM hotspots located in parks were observed mainly in Delhi (26.6%), Chandigarh (25.5%) and Rajasthan (24.9%).

Table 3.13: Types of MSM hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Type of hotspot (%)																
		Brothel	Home	Bar	Lodge/dhaba/hotel	Street	Railway station	Bus stand	Park	Marketplace	Cinema	Under the bridge	Public toilet	Highway	Spa	Massage parlour	Abandoned area	Others
Andhra Pradesh	856	1.1	10.9	-	1.6	23.2	9.2	14.5	4.7	5.6	2.2	4.3	0.3	8.8	-	-	6.8	4.6
Arunachal Pradesh	125	0.0	50.4	1.6	14.4	8.0	0.0	0.0	2.4	12.8	0.0	0.8	0.0	0.8	-	-	8.8	-
Assam	858	0.1	40.8	0.2	2.9	18.3	1.3	2.8	4.4	12.6	0.0	1.2	0.1	0.5	0.5	0.5	10.4	2.7
Bihar	101	0.0	15.8	-	10.9	5.9	15.8	7.9	8.9	19.8	0.0	1.0	0.2	2.0	-	-	1.0	8.9
Chandigarh	106	0.0	15.1	-	1.9	11.3	1.9	10.4	25.5	10.4	0.9	0.9	0.6	2.8	-	-	12.3	0.9
Chhattisgarh	189	0.0	10.6	-	1.6	19.6	5.8	7.9	14.8	19.0	0.0	4.2	0.6	1.6	-	-	4.2	4.8
Delhi	851	0.2	3.1	-	0.1	11.3	3.9	14.0	26.6	4.9	1.5	4.1	1.8	6.7	-	-	5.8	-
Goa	122	0.0	0.0	0.8	12.3	13.1	3.3	15.6	9.0	14.8	1.6	2.5	0.2	3.3	-	2.5	11.5	7.4
Gujarat	1,505	0.5	3.9	-	1.5	19.0	4.1	11.9	8.8	14.0	1.8	3.9	1.0	9.4	0.1	-	2.1	8.6
Haryana	738	0.1	15.0	-	0.5	13.7	4.2	6.6	14.5	4.5	0.0	2.3	0.2	14.0	0.1	0.1	13.1	9.5
Himachal Pradesh	153	0.0	30.1	0.7	7.2	9.2	0.7	8.5	0.7	28.1	0.0	1.3	0.0	2.0	-	-	11.1	0.7
Jammu & Kashmir	59	0.0	61.0	-	0.0	1.7	1.7	3.4	3.4	10.2	0.0	0.0	0.8	8.5	-	-	1.7	-
Jharkhand	157	0.0	11.5	-	10.2	30.6	6.4	1.3	5.1	29.3	0.0	3.2	0.1	0.0	-	-	1.9	-
Karnataka	2,810	0.1	4.9	0.9	1.5	12.5	3.5	19.5	8.5	7.6	2.2	2.5	0.7	6.4	0.0	0.1	16.7	5.8
Kerala	863	0.2	0.6	1.3	4.9	15.5	5.2	20.4	4.4	4.3	3.7	3.9	0.4	4.4	-	1.0	16.5	9.4
Madhya Pradesh	1,188	0.0	11.0	0.2	1.2	21.5	3.4	8.8	10.4	5.8	0.8	3.5	0.9	3.8	0.3	-	10.5	10.2
Maharashtra	1,272	0.0	8.0	0.3	1.4	13.1	8.3	17.1	6.0	7.0	1.7	2.2	1.7	4.7	0.2	0.1	3.4	9.7
Manipur	107	0.0	18.7	-	0.9	0.9	0.0	0.0	1.9	0.9	0.0	0.0	0.0	0.0	0.9	54.2	0.9	20.6
Meghalaya	16	0.0	25.0	-	0.0	12.5	0.0	0.0	0.0	37.5	0.0	0.0	0.0	0.0	-	-	25.0	-
Mizoram	83	0.0	100.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	0.0	-
Nagaland	102	0.0	73.5	-	0.0	17.6	1.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	-	-	1.0	3.9
Odisha	618	0.0	10.2	0.8	2.4	11.5	4.9	6.8	1.3	23.1	0.5	4.4	0.0	7.3	-	-	23.3	3.2
Puducherry	98	0.0	0.0	6.1	1.0	14.3	1.0	9.2	2.0	1.0	1.0	9.2	0.2	7.1	-	-	20.4	25.5
Punjab	542	0.0	22.3	-	0.7	18.6	3.7	10.3	15.9	4.6	0.6	0.9	0.0	3.7	0.4	0.2	10.1	7.7
Rajasthan	575	0.0	10.4	0.2	1.7	11.0	7.1	17.9	24.9	7.5	0.7	4.2	0.6	2.1	0.2	-	3.7	2.6
Sikkim	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	1,629	0.4	1.5	0.4	1.4	11.3	6.2	37.8	4.1	5.8	2.5	4.0	0.5	4.8	-	0.1	7.8	6.8
Telangana	292	1.4	6.8	0.3	2.7	6.5	10.6	15.4	5.1	9.6	3.1	5.5	0.8	5.8	-	-	12.0	7.5
Tripura	126	0.0	69.8	-	0.0	0.0	2.4	7.1	5.6	4.8	0.0	1.6	0.1	0.0	3.2	3.2	0.0	1.6
Uttar Pradesh	1,468	0.0	21.4	0.1	2.0	11.2	5.2	4.8	11.6	13.7	0.5	4.5	0.2	6.5	0.1	0.3	6.0	9.9
Uttarakhand	188	0.0	15.4	-	4.8	23.9	4.3	3.7	11.2	6.4	0.0	5.3	0.1	12.2	-	-	8.0	3.7
West Bengal	170	0.0	5.3	-	0.0	15.3	18.2	13.5	8.8	10.6	1.8	1.2	0.2	0.6	-	2.4	7.1	13.5
India	17,967	0.2	11.9	0.4	2.0	14.5	5.0	14.4	9.2	9.1	1.4	3.2	0.6	5.7	0.1	0.5	9.4	6.8

3.2.6 Peak Days and Times of Maximum MSM Presence

During the PMPSE exercise, key informants were asked about the day of the week when the maximum number of MSM could be found at the hotspots. It was noted as a multiple-response question, and key informants specifically mentioned Saturdays and Sundays as the days when maximum MSMs were

available at the hotspots. Approximately 31% of the key informants indicated that MSM were available at the hotspots every day of the week. Generally, the presence of MSM at the hotspots remained consistently high throughout the week. However, evenings and nighttime emerged as prominent peak times for MSM availability at the hotspots nationwide and across States (Tables 3.14 and 3.15).

Table 3.14: Peak days for the MSM hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Peak days of the hotspot							
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	All days
Andhra Pradesh	856	30.3	39.2	32.9	27.5	40.7	46.1	64.02	12.0
Arunachal Pradesh	125	19.2	19.2	26.4	25.6	42.4	78.4	62.40	9.6
Assam	858	40.7	40.2	42.3	41.6	51.2	68.7	81.35	34.5
Bihar	101	53.4	43.5	49.5	44.5	41.5	47.5	53.47	19.8
Chandigarh	106	74.5	73.5	71.7	70.7	70.7	87.7	94.3	63.2
Chhattisgarh	189	27.5	25.4	39.6	28.5	33.3	38.6	68.7	16.4
Delhi	851	45.9	44.8	42.6	43.9	51.7	75.2	80.4	24.9
Goa	122	59.0	56.5	77.0	61.4	63.9	80.3	75.4	46.7
Gujarat	1,505	52.2	48.3	46.9	47.6	50.8	58.6	67.4	25.7
Haryana	738	62.8	61.5	62.2	63.8	67.2	76.6	81.5	54.8
Himachal Pradesh	153	37.9	42.4	44.4	37.2	42.4	52.2	50.3	18.3
Jammu & Kashmir	59	83.0	66.1	62.7	64.4	64.4	71.1	86.4	54.2
Jharkhand	157	22.2	28.6	32.4	17.8	29.3	38.2	63.0	1.7
Karnataka	2,810	40.5	35.6	37.5	38.4	38.1	39.6	60.2	19.7
Kerala	863	43.5	42.7	42.2	41.3	63.2	71.7	88.4	34.1
Madhya Pradesh	1,188	45.8	40.8	51.4	42.8	44.5	48.7	64.2	24.5
Maharashtra	1,272	59.2	56.9	56.9	58.2	58.8	65.0	78.0	39.7
Manipur	107	15.8	63.5	14.0	61.6	19.6	79.4	56.0	12.5
Meghalaya	16	87.5	87.5	81.2	81.2	81.2	100.0	93.7	75.0
Mizoram	83	18.0	18.0	19.2	18.0	36.1	81.9	87.9	18.0
Nagaland	102	43.1	37.2	35.2	33.3	44.1	86.2	74.5	24.5
Odisha	618	27.8	30.9	36.7	26.0	34.3	37.8	44.3	11.1
Puducherry	98	50.0	54.0	40.8	42.8	59.1	76.5	90.8	34.6
Punjab	542	66.0	68.0	66.9	72.5	67.1	76.7	77.1	56.4
Rajasthan	575	72.0	65.0	63.4	62.6	65.0	70.6	79.4	53.2
Sikkim	-	-	-	-	-	-	-	-	-
Tamil Nadu	1,629	61.3	56.6	63.8	56.9	61.1	79.0	75.2	38.5
Telangana	292	40.7	52.0	47.2	51.3	48.9	64.0	66.4	23.6
Tripura	126	87.3	92.0	84.9	87.3	85.7	83.3	81.7	78.5
Uttar Pradesh	1,468	49.9	55.4	52.3	53.1	60.8	59.2	74.1	40.7
Uttarakhand	188	61.7	52.6	59.0	51.6	56.3	64.8	88.8	51.0
West Bengal	170	29.4	31.7	35.2	38.2	53.5	74.1	85.8	23.5
India	17,967	48.4	47.4	48.4	47.0	51.7	60.2	71.3	31.1

Table 3.15: Peak time for the MSM Hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Peak timing (%)				
		Morning	Afternoon	Evening	Night	All 24 hours
Andhra Pradesh	856	17.0	31.3	74.6	59.3	3.6
Arunachal Pradesh	125	4.0	36.8	89.6	68.8	0.8
Assam	858	15.3	32.7	91.2	45.5	8.3
Bihar	101	20.7	45.5	71.2	35.6	4.9
Chandigarh	106	19.8	60.3	95.8	35.8	2.8
Chhattisgarh	189	12.1	15.3	76.1	52.3	1.0
Delhi	851	0.8	3.8	43.6	92.8	0.4
Goa	122	7.3	12.3	88.5	78.6	-
Gujarat	1,505	36.2	44.8	72.2	49.0	9.1
Haryana	738	21.0	32.2	63.8	60.5	10.5
Himachal Pradesh	153	20.2	54.9	72.5	36.6	9.1
Jammu & Kashmir	59	10.1	32.2	84.7	88.1	8.4
Jharkhand	157	8.8	21.6	85.9	49.0	-
Karnataka	2,810	16.4	43.6	66.5	28.6	3.0
Kerala	863	8.5	17.8	78.3	80.4	4.0
Madhya Pradesh	1,188	12.4	17.2	73.9	65.8	3.4
Maharashtra	1,272	20.7	35.4	78.8	69.9	9.7
Manipur	107	3.7	44.8	88.7	36.4	0.9
Meghalaya	16	6.5	25.0	75.0	100.0	6.2
Mizoram	83	9.4	30.1	80.7	74.7	4.8
Nagaland	102	37.2	22.5	83.3	60.7	-
Odisha	618	25.4	26.7	63.7	37.5	3.5
Puducherry	98	12.2	16.3	58.1	94.9	8.1
Punjab	542	31.0	45.5	75.0	43.7	5.3
Rajasthan	575	32.5	46.4	71.65	60.3	15.1
Sikkim	-	-	-	-	-	-
Tamil Nadu	1,629	17.9	26.0	83.5	77.5	7.9
Telangana	292	14.3	47.6	69.5	49.3	6.8
Tripura	126	22.2	37.3	78.5	58.7	-
Uttar Pradesh	1,468	11.5	20.5	72.7	52.3	3.7
Uttarakhand	188	10.1	14.3	42.5	76.0	3.1
West Bengal	170	0.5	18.2	78.8	68.2	0.5
India	17,967	17.8	31.3	72.8	56.6	5.5

3.2.7 Estimated Size of the MSM Population

Nationally, the estimated total size of the MSM population was around 3,51,020 (3,13,860-3,88,175), including 3,16,742 (2,79,582-3,53,898) from 17,967 hotspots, 23,734 associated with 1,660 network operators and 10,544 from the 5,587 link worker villages. Notably, a significant number of MSM were estimated in Karnataka (45,631) and Maharashtra (40,187), followed by Tamil Nadu (38,284), Gujarat (34,299), Delhi (27,026) and Andhra Pradesh (22,060). Together, these six States account for 60% of the total estimated size of the MSM population nationwide. Around 32.5% of the estimated MSM were below the age of 25 years nationwide. However, in some of the States, a significant majority of the MSM were below 25 years of age, including Arunachal Pradesh (71.1%), Jammu & Kashmir (65.9%), Nagaland (58.6%) and Mizoram (54.4%).

In addition to gathering information about the size of the MSM population, the key informants were also asked about the MSM associated with the hotspots who also engage in work or visit other hotspots within the district. Approximately a little more than one-fourth of the MSM were noted to visit other hotspots within the district. However, compared to the national estimate, in Nagaland (64.1%), Mizoram (50.8%), Andhra Pradesh (47.1%) and Chhattisgarh (40.5%), a significant proportion visited other hotspots. In contrast, less than 20% of the MSM population visited other hotspots in Tripura, Bihar, Delhi and Gujarat.

Additionally, network operators were asked whether MSM associated with them were also in contact/linked with other network operators and if they also visited

physical hotspots for solicitation. Around 28.5% of the MSM were associated with other network operators, and around 36.5% also visited physical hotspots for solicitation. In Himachal Pradesh (80.3%), Chhattisgarh (79.5%), Puducherry (70.6%), Uttarakhand (67.9%), Goa (66.9%), Chandigarh (63.2%), Assam (51.6%) and Meghalaya (50.9%), majority of the MSM were linked to other network operators. Similarly, in Chhattisgarh (100%), Uttarakhand (91.2%), Kerala (76.8%), Chandigarh (58.3%), Goa (61.5%), Himachal Pradesh (60%) and Odisha (52.5%), majority of the MSM associated with network operators were also noted to visit physical hotspots for solicitation.

During PMPSE, data regarding the presence of HRGs in the link worker villages was also collected. Essential details such as village type, population, administrative division (block/mandal/tehsil), and coverage by LWS were collected, along with the minimum and maximum number of HRGs in each village. Additionally, data on whether the HRGs in the village also visit nearby urban areas to engage in high-risk behaviours was collected.

Nationally, 77% of the villages covered during PMPSE were covered by LWS. At the State/UT level, the LWS coverage ranged from 77 to 100%, except for Tripura (67.2%), Telangana (61.1%), Odisha (59.3%), Tamil Nadu (57.3%) and Uttar Pradesh (55.5%). Nationally, 30% of the MSM in the link worker village were known to visit nearby urban areas to engage in high-risk behaviours. At the State/UT level, over half of the MSM in Manipur (67.2%), Uttar Pradesh (65.4%), Punjab (65.2%) and Tripura (54.1%) were noted to visit urban areas for engaging in high-risk behaviours. Conversely, in Bihar, less than 1% of the MSM were observed to be visiting nearby urban areas (Table 3.16).

Table 3-16: Estimated size of MSM population at hotspots, associated with network operators and in link worker villages, PMPSE (HRGs) 2020-22

State/UT	Hotspot			Network operators					Link worker villages			Total adjusted estimated size
	Number of hotspots	Adjusted size estimate at hotspots	MSM who go to the other hotspot (%)	MSM below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	MSM who go to other NO (%)	MSM who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village	
Andhra Pradesh	856	21,084 (17,589- 24,579)	47.1	34.8	39	307	20.3	18.4	370	90.2	669	22,060 (18,565-25,555)
Arunachal Pradesh	125	901 (810- 991)	36.1	71.1	-	-	-	-	-	-	-	901 (810-991)
Assam	858	16,127 (14,005- 18,248)	36.5	42.7	89	540	51.6	35.3	-	-	-	16,667 (14,545-18,789)
Bihar	101	1,857 (1,717- 1,997)	14.6	23.0	15	145	12.7	32.1	215	100.0	374	2,376 (2,236- 2,517)
Chandigarh	106	2,428 (2,165- 2,691)	36.3	40.6	16	141	63.2	58.3	-	-	-	2,569 (2,306-2,832)
Chhattisgarh	189	2,814 (2,555- 3,073)	40.5	43.2	8	-	79.5	100.0	99	100.0	75	2,889 (2,630- 3,148)
Delhi	851	24,442 (22,400- 26,484)	16.7	42.4	110	2,584	45.2	44.9	-	-	-	27,026 (24,985-29,068)
Goa	122	3,331 (2,779- 3,883)	38.3	24.7	2	8	66.9	61.5	-	-	-	3,339 (2,787-3,891)
Gujarat	1,505	29,989 (26,351- 33,628)	19.1	24.1	-	-	-	-	995	87.7	4310	34,299 (30,661-37,938)
Haryana	738	7,762 (6,945- 8,579)	31.4	34.8	42	260	38.6	21.1	-	-	-	8,022 (7,205-8,839)
Himachal Pradesh	153	1,242 (1,071- 1,413)	39.1	30.3	4	10	80.3	60.3	-	-	-	1,252 (1,081- 1,423)
Jammu And Kashmir	59	587 (458- 715)	35.8	65.9	10	90	30.3	33.3	-	-	-	677 (548- 805)
Jharkhand	157	1,742 (1,494- 1,991)	27.3	22.7	-	-	-	-	-	-	-	1,742 (1,494- 1,991)
Karnataka	2,810	42,648 (38,414- 46,881)	24.9	29.0	198	1,925	48.2	40.8	583	79.2	1058	45,631 (41,397- 49,864)
Kerala	863	13,653 (11,464- 15,838)	30.9	29.2	55	183	44.0	76.8	-	-	-	13,836 (11,647- 16,021)
Madhya Pradesh	1,188	16,854 (14,551- 19,156)	28.9	30.1	161	1,132	42.0	39.0	109	77.0	99	18,085 (15,782-20,387)

Continued

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	MSM who go to the other hotspot (%)	MSM below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	MSM who go to other NO (%)	MSM who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		MSM who go to nearby urban areas (%)
Maharashtra (including Mumbai)	1,272	30,846 (27,920- 33,772)	30.3	33.7	383	8,738	8.07	32.1	469	86.7	603	24.8	40,187 (37,261-43,113)
Manipur	107	1,409 (1,160- 1,657)	29.3	28.8	-	-	-	-	213	99.0	98	67.2	1,507 (1,258-1,755)
Meghalaya	16	321 (229- 413)	21.9	39.3	4	21	50.9	49.5	1	100.0	1	0.00	344 (252-435)
Mizoram	83	739 (615- 863)	50.8	54.4	-	-	-	-	55	100.0	102	46.2	841 (717-965)
Nagaland	102	869 (681- 1,056)	64.1	58.6	1	370	0.00	29.1	-	-	-	-	1,239 (1,051-1,426)
Odisha	618	5,285 (4,569- 6,002)	33.8	30.5	24	101	25.6	52.5	458	59.3	591	19.2	5,977 (5,261-6,694)
Puducherry	98	2,309 (2,000- 2,619)	39.3	46.4	4	180	70.6	18.1	-	-	-	-	2,489 (2,179- 2,798)
Punjab	542	7,431 (6,401- 8,461)	37.3	39.6	63	408	44.3	43.2	238	93.2	206	65.2	8,045 (7,015- 9,075)
Rajasthan	575	6,949 (6,109- 7,788)	39.1	45.2	63	402	28.3	49.2	-	-	-	-	7,351 (6,512- 8,190)
Sikkim	-	-	-	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	1,629	33,362 (29,005- 37,718)	24.4	29.6	148	3,274	41.3	39.1	1113	57.3	1648	20.2	38,284 (33,927-42,641)
Telangana	292	14,704 (13,559- 15,850)	38.2	19.3	76	1,238	42.0	48.2	323	61.6	485	35.0	16,427 (15,282-17,573)
Tripura	126	796 (729- 864)	19.0	26.9	4	33	16.1	39.4	61	67.2	47	54.1	876 (808-944)
Uttar Pradesh	1,468	18,384 (16,492- 20,276)	23.4	30.4	97	1,182	27.2	31.9	216	55.5	103	65.4	19,668 (17,776-21,561)
Uttarakhand	188	2,875 (2,640- 3,111)	30.3	42.7	13	8	67.9	91.2	-	-	-	-	2,883 (2,647-3,119)
West Bengal	170	3,003 (2,705- 3,301)	32.9	46.0	31	454	33.7	36.7	69	100.0	75	44.7	3,532 (3,234- 3,830)
India	17,967	3,16,742 (2,79,582-3,53,898)	26.63	32.5	1,660	23,734	28.5	36.5	5,587	77.0	10,544	30.1	3,51,020 (3,13,860-3,88,175)

3.3 Injecting Drug Users

IDUs in India have been established as the most infected and affected population at risk of exposure to HIV in the country. Therefore, addressing HIV risk among IDUs is critical, and precisely mapping and estimating the size and locations of IDU populations is vital for implementing effective targeted interventions. The key findings from the PMPSE of IDUs are detailed in the following sections.

3.3.1 Profile of Key Informants Interviewed

Among IDUs, PMPSE was implemented across 32 States/UTs. A total of 54,221 KIIs were conducted at 17,288 IDU hotspots. Among these, 71.9% (38,968) of the interviews were conducted with HRGs, 19.1% with other stakeholders (10,381) and 9.0% with community gatekeepers (4,872). The national and State/UT wise distribution of key informants is presented in Figures 3.5 and 3.6. At each of the hotspots, on average, three interviews were conducted. Two of these interviews were with the HRGs except in the case of Andhra Pradesh and Assam (Table 3.17).

Figure 3.5: Distribution of the profile of key informants interviewed at the IDU hotspots, PMPSE (HRGs), 2020-22 (in %)

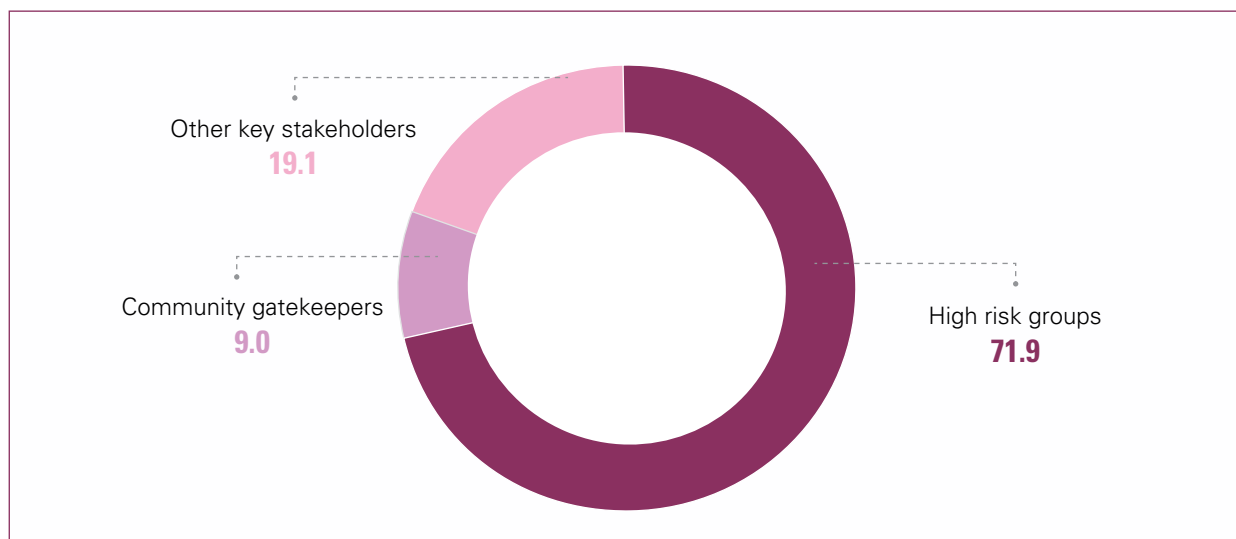


Figure 3.6: State/UT wise distribution of the profile of key informants interviewed at the IDU hotspots, PMPSE (HRGs), 2020-22

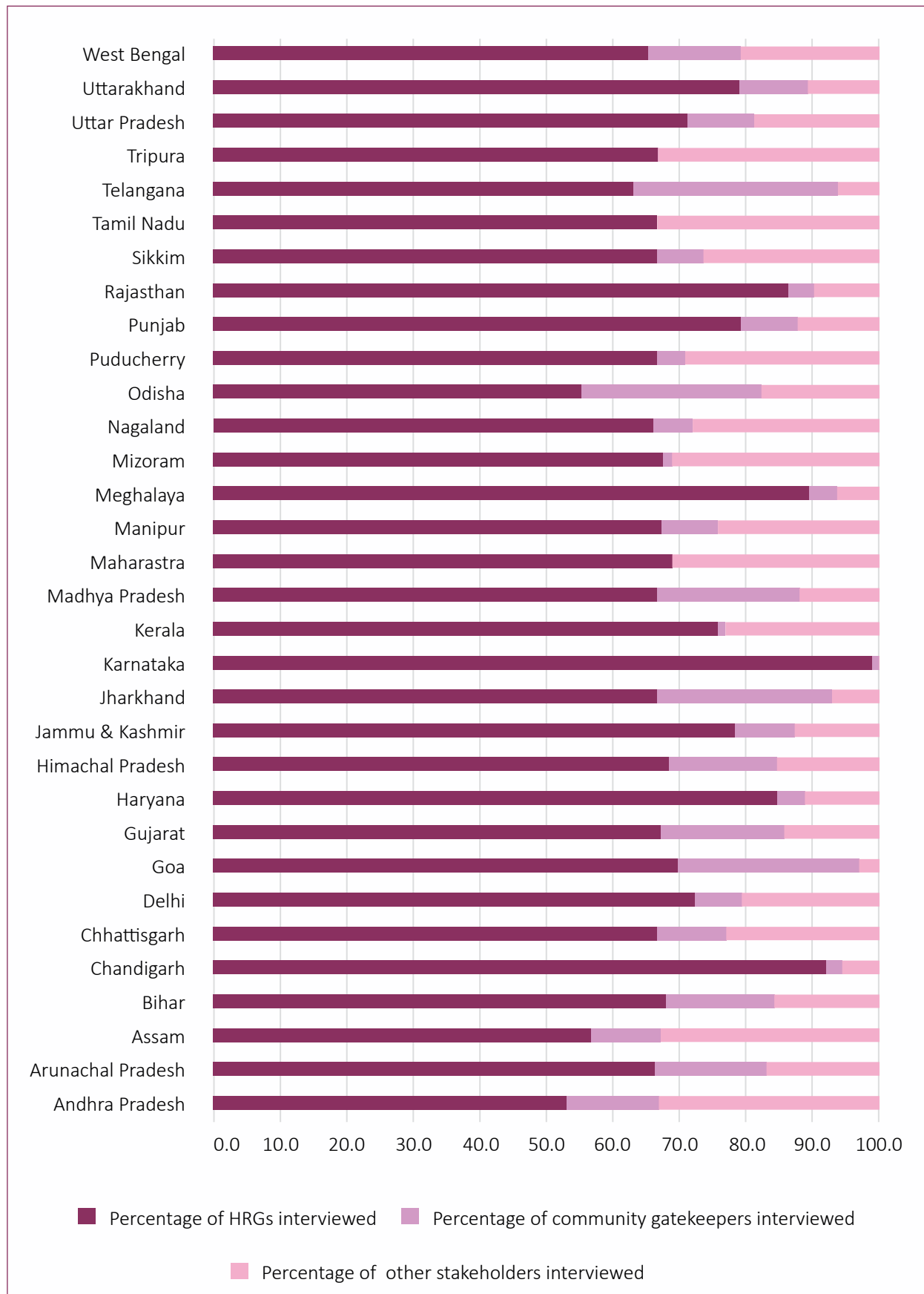


Table 3.17: Profile of key informants interviewed at the hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Total number of interviews	Average number of interviews per hotspot	Key informants interviewed				Other key stakeholders/ informants		
				HRGs		Community gatekeepers		Average number per hotspot	Percentage interviewed	Percentage interviewed
				Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed			
Andhra Pradesh	147	441	3.00	1.6	53.1	0.4	13.8	0.9	33.1	33.1
Arunachal Pradesh	407	1,221	3.00	2.0	66.3	0.5	16.8	0.5	17.0	17.0
Assam	1,145	3,474	3.03	1.7	56.7	0.3	10.5	1.0	32.8	32.8
Bihar	215	652	3.03	2.1	67.9	0.4	16.3	0.4	15.8	15.8
Chandigarh	82	251	3.06	2.8	92.0	0.0	2.4	0.1	5.6	5.6
Chhattisgarh	222	666	3.00	2	66.7	0.3	10.4	0.6	23.0	23.0
Delhi	1,249	3,867	3.10	2.2	72.3	0.2	7.1	0.6	20.7	20.7
Goa	22	66	3.00	2.1	69.7	0.8	27.3	0.0	3.0	3.0
Gujarat	83	259	3.12	2.1	67.2	0.5	18.5	0.4	14.3	14.3
Haryana	1,535	4,630	3.02	2.6	84.6	0.1	4.2	0.3	11.2	11.2
Himachal Pradesh	346	1,061	3.07	2.1	68.4	0.5	16.2	0.4	15.4	15.4
Jammu & Kashmir	617	1,869	3.03	2.4	78.3	0.2	8.9	0.3	12.7	12.7
Jharkhand	61	183	3.00	2	66.7	0.7	26.2	0.2	7.1	7.1
Karnataka	479	1,437	3.00	3.0	98.9	0.0	1.0	0.0	0.1	0.1
Kerala	370	1,129	3.05	2.3	75.8	0.0	1.1	0.7	23.1	23.1
Madhya Pradesh	784	2,442	3.11	2.1	66.6	0.6	21.4	0.3	12.0	12.0
Maharashtra	64	193	3.02	2.1	68.9	0.0	0.0	0.9	31.1	31.1
Manipur	1,409	4,310	3.06	2.1	67.2	0.2	8.5	0.7	24.2	24.2
Meghalaya	142	473	3.3	3.0	89.4	0.1	4.2	0.2	6.3	6.3
Mizoram	653	1,995	3.0	2.1	67.5	0.0	1.4	0.9	31.1	31.1
Nagaland	1,194	3,927	3.2	2.2	66.0	0.2	6.0	0.9	28.0	28.0
Odisha	401	1,500	3.7	2.1	55.3	1.0	27.0	0.6	17.7	17.7
Puducherry	8	24	3.0	2	66.7	0.1	4.2	0.8	29.2	29.2
Punjab	1,915	6,328	3.3	2.6	79.2	0.2	8.5	0.4	12.3	12.3
Rajasthan	224	672	3.0	2.6	86.3	0.1	3.9	0.2	9.8	9.8
Sikkim	58	174	3.0	2	66.7	0.2	6.9	0.7	26.4	26.4
Tamil Nadu	14	45	3.2	2.1	66.7	0.0	0.0	1.0	33.3	33.3
Telangana	64	192	3.0	1.9	63.0	0.9	30.7	0.1	6.3	6.3
Tripura	653	1,959	3.0	2.0	66.7	0.0	0.1	1.0	33.2	33.2
Uttar Pradesh	2,392	7,714	3.2	2.3	71.2	0.3	10.0	0.6	18.8	18.8
Uttarakhand	213	707	3.3	2.6	78.9	0.3	10.3	0.3	10.7	10.7
West Bengal	120	360	3.0	2.0	65.3	0.4	13.9	0.6	20.8	20.8
India	17,288	54,221	3.1	2.3	71.9	0.2	9.0	0.6	19.1	19.1

3.3.2 Profile of Network Operators

During PMPSE 2020-22, a total of 953 network operators associated with IDUs were mapped across the different States/UTs. The majority of these network operators were males (96.2%), and a small proportion were females (3.7%). Over half of the network operators mapped were in the age category of 28 to 37 years (51.9%), followed by those in the age group of 38

to 47 years (24%) and 18 to 27 years (18.7%). Notably, more than 100 network operators were mapped in the States/UTs of Punjab (162), Jammu & Kashmir (133), Assam (105) and Madhya Pradesh (102). In contrast, fewer network operators were mapped in the State of West Bengal (17), Kerala (16), Manipur (14), Karnataka (12), Uttarakhand (10), Himachal Pradesh (4) and Maharashtra (4) (Table 3.18).

Table 3.18: Profile of network operators who were mapped, PMPSE (HRGs), 2020-22

State/UT	No. of network operators mapped	Gender (%)			Age (%)			
		Female	Male	H/TG	18-27 years	28-37 years	38-47 years	48+ years
Andhra Pradesh	V	-	100.0	-	-	-	-	-
Arunachal Pradesh	0	-	-	-	-	-	-	-
Assam	105	-	100.0	-	46.6	44.7	8.5	-
Bihar	21	-	100.0	-	19.0	19.0	42.8	19.0
Chandigarh	6	-	-	-	-	-	-	-
Chhattisgarh	22	-	100.0	-	27.2	59.0	13.6	-
Delhi	22	22.7	77.2	-	4.5	72.7	18.1	4.5
Goa	0	-	-	-	-	-	-	-
Gujarat	0	-	-	-	-	-	-	-
Haryana	73	8.2	91.7	-	12.3	45.2	35.6	6.8
Himachal Pradesh	4	25.0	75.0	-	-	100.0	-	-
Jammu & Kashmir	133	1.5	98.5	-	18.8	56.3	22.5	2.3
Jharkhand	0	-	-	-	-	-	-	-
Karnataka	12	8.3	91.6	-	-	58.3	33.3	8.3
Kerala	16	-	100.0	-	6.2	12.5	68.7	12.5
Madhya Pradesh	102	7.8	92.1	-	18.6	42.1	26.4	12.7
Maharashtra	4	-	100.0	-	-	-	25.0	75.0
Manipur	14	7.1	92.8	-	-	35.7	50.0	14.3
Meghalaya	0	-	-	-	-	-	-	-
Mizoram	0	-	-	-	-	-	-	-
Nagaland	36	8.3	91.6	-	-	50.0	41.6	8.3
Odisha	46	2.1	97.8	-	4.3	52.1	32.6	10.9
Puducherry	0	-	-	-	-	-	-	-
Punjab	162	4.3	95.6	-	14.8	74.0	10.4	0.6
Rajasthan	26	3.8	96.1	-	7.6	46.1	46.1	-
Sikkim	0	-	-	-	-	-	-	-
Tamil Nadu	0	-	-	-	-	-	-	-
Telangana	0	-	-	-	-	-	-	-
Tripura	34	-	100.0	-	52.9	44.1	2.9	-
Uttar Pradesh	87	-	100.0	-	14.9	44.8	32.1	8.0
Uttarakhand	10	-	100.0	-	10.0	50.0	40.0	-
West Bengal	17	-	100.0	-	17.6	52.9	23.5	5.9
India	953	3.7	96.2	-	18.7	51.9	24.0	5.4

3.3.3 Profile of Interviewers

At the national level, the implementation of PMPSE was primarily carried out by the outreach workers (89.5%), followed by peer educators (6.4%) and programme officers (4%), as outlined in the protocol. However, there were notable variations in certain States. In Chandigarh, Goa, Maharashtra and Telangana, data collection was conducted exclusively by the outreach

workers. Conversely, in Kerala, alongside outreach workers (40.5%), both peer educators (32.4%) and programme officers (27%) contributed to the data collection. Similarly, in Jammu & Kashmir, TSU programme officers managed data collection at 26.9% of hotspots. Meanwhile, in Puducherry, programme officers collected data at all the hotspots in the district (Table 3.19).

Table 3.19: Profile of interviewers, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Key informant interviews conducted by (%)		
		Outreach workers	Peer educators	Programme officers
Andhra Pradesh	147	95.2	4.7	-
Arunachal Pradesh	407	78.6	21.3	-
Assam	1,145	87.3	12.2	0.4
Bihar	215	83.2	15.8	0.9
Chandigarh	82	100.0	-	-
Chhattisgarh	222	96.8	-	3.1
Delhi	1,249	91.2	8.4	0.2
Goa	22	100.0	-	-
Gujarat	83	93.9	3.6	2.4
Haryana	1,535	87.6	3.2	9.1
Himachal Pradesh	346	98.5	1.4	-
Jammu & Kashmir	617	65.1	7.9	26.9
Jharkhand	61	95.0	-	4.9
Karnataka	479	99.1	-	0.8
Kerala	370	40.5	32.4	27.0
Madhya Pradesh	784	98.6	0.5	0.8
Maharashtra	64	100.0	-	-
Manipur	1,409	85.1	13.0	1.7
Meghalaya	142	85.9	12.6	1.4
Mizoram	653	89.2	10.4	0.3
Nagaland	1,194	85.3	12.8	1.8
Odisha	401	98.5	1.5	-
Puducherry	8	-	-	100.0
Punjab	1,915	97.6	2.0	0.3
Rajasthan	224	83.9	9.3	6.7
Sikkim	58	86.2	13.7	-
Tamil Nadu	14	92.8	-	7.1
Telangana	64	100.0	-	-
Tripura	653	99.8	0.1	-
Uttar Pradesh	2,392	95.7	0.2	4.0
Uttarakhand	213	73.2	-	26.7
West Bengal	120	71.6	5.8	22.5
India	17,288	89.5	6.4	4.0

3.3.4 Hotspot Coverage and Operational Duration

During PMPSE 2020-22, basic information about the hotspots was collected, including details such as TI coverage, duration since the hotspot has been operational, hotspot type, and peak days and peak times when the maximum number of IDUs are present at the hotspots.

It was observed that 58.3% of the IDU hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 41.7% were either newly identified or previously uncovered. Notably, all hotspots in Puducherry were either new or uncovered. Conversely, the majority of the hotspots in Sikkim (100%), Telangana (98.4%), Mizoram (97.1%) Chandigarh (96.3%), Gujarat (95.2%), Jharkhand

(95.1%), Karnataka (94.6%), Nagaland (92.4%) and Maharashtra (92.2%) were covered by the TI programme.

Nationally, among the IDU hotspots where PMPSE was implemented, 44.1% had been active for more than three years, 21.1% were operational for one to two years, and 18.1% were operational for two to three years. In Chandigarh, Nagaland and Sikkim more than 80% of the hotspots had been active for more than three years. Similarly, over 60% of hotspots in Andhra Pradesh, Bihar, Madhya Pradesh, Meghalaya, Nagaland, Odisha, Tamil Nadu and West Bengal had been active for more than three years. In contrast, 37.5% of hotspots in Puducherry and 20% in Jammu & Kashmir had been operational for less than a year (Table 3.20).

Table 3.20: IDUs Hotspot characteristics, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Andhra Pradesh	147	73.5	26.5	-	-	-	19.0	18.3	62.5
Arunachal Pradesh	407	77.6	22.4	8.6	10.8	8.3	20.1	23.3	28.7
Assam	1,145	44.2	55.8	8.7	5.7	6.6	22.7	26.9	29.0
Bihar	215	75.8	24.2	5.5	0.9	1.4	20.9	9.3	61.8
Chandigarh	82	96.3	3.7	3.6	1.2	-	4.8	1.2	89.0
Chhattisgarh	222	69.8	30.2	5.4	8.5	9.4	17.1	15.7	43.6
Delhi	1,249	49.8	50.2	14.1	12.8	10.0	16.8	9.9	36.1
Goa	22	77.3	22.7	4.5	13.6	9.0	4.5	18.1	50.0
Gujarat	83	95.2	4.8	3.6	16.8	16.8	6.0	25.3	31.3
Haryana	1,535	20.6	79.4	0.5	2.5	3.5	32.7	26.9	33.5
Himachal Pradesh	346	17.1	82.9	4.0	7.8	6.6	28.6	24.2	28.6
Jammu & Kashmir	617	35.0	65.0	0.8	6.6	19.9	34.5	16.3	21.7
Jharkhand	61	95.1	4.9	4.9	-	11.4	42.6	1.6	39.3
Karnataka	479	94.6	5.4	4.3	1.4	7.1	35.7	27.9	23.3
Kerala	370	67.8	32.2	1.0	3.5	3.2	13.78	8.6	69.7
Madhya Pradesh	784	65.9	34.1	4.5	3.9	5.7	17.4	14.9	53.3
Maharashtra	64	92.2	7.8	1.5	-	3.1	20.3	32.8	42.1
Manipur	1,409	87.0	12.9	5.6	5.8	4.2	18.3	15.9	49.9
Meghalaya	142	64.8	35.2	14.7	4.9	5.6	10.5	3.5	60.5
Mizoram	653	97.1	2.9	0.4	1.8	3.9	8.1	11.0	74.5
Nagaland	1,194	92.4	7.6	2.9	0.7	0.5	5.0	4.6	86.1
Odisha	401	51.4	48.6	6.2	3.2	1.5	9.9	15.9	63.0

Continued

Continued

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Puducherry	8	0.0	100.0	-	-	37.5	37.5	25.0	-
Punjab	1,915	49.0	51.0	3.1	3.9	6.0	23.3	23.5	39.9
Rajasthan	224	29.5	70.5	5.3	11.6	17.8	15.1	11.1	38.8
Sikkim	58	100.0	0.0	1.7	-	-	-	5.1	93.1
Tamil Nadu	14	78.6	21.4	-	7.1	7.1	7.1	14.2	64.2
Telangana	64	98.4	1.6	3.1	-	3.1	26.5	40.6	26.5
Tripura	653	56.5	43.5	18.0	17.7	10.7	28.9	17.4	7.0
Uttar Pradesh	2,392	47.2	52.8	1.9	3.8	5.8	23.4	21.3	43.4
Uttarakhand	213	53.5	46.5	3.2	8.4	10.3	37.5	16.4	23.9
West Bengal	120	73.3	26.7	2.5	5.0	10.8	5.8	12.5	63.3
India	17,288	58.3	41.7	4.9	5.3	6.3	21.1	18.1	44.1

3.3.5 Types of Hotspots

During PMPSE, the IDU hotspots were also classified according to their geographical settings. Nationally, 23.7% of the IDU hotspots were identified in old or vacant buildings and abandoned/dilapidated structures, followed by 14.1% in home-based settings, 13.7 street-based, while another 7.9% were located in parks, and 5.1% in market places. Hotspots located under the bridge accounted for 4.6%, while 3.1% were reported near bus stops and 2.8% at railway stations (Table 3.21).

Similar to the national trend, across the States/UTs, the IDU hotspots were predominantly located in deserted areas in Arunachal Pradesh, Assam, Chandigarh, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Manipur, Odisha, Rajasthan, Punjab, Tamil Nadu, Tripura and Uttarakhand. However, in Mizoram and Nagaland, 66.1% and 80.3% of the hotspots respectively were home-based. Additionally, a notable proportion of the street-based hotspots were noted in Assam, Meghalaya and Telangana (Table 3.21).

Table 3.21: Types of IDU hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Type of hotspot (%)													Others			
		Brothel	Home	Bar	Lodge/dhaba/hotel	Street	Railway station	Bus stand	Park	Marketplace	Cinema	Under the bridge	Public toilet	Highway		Spa	Massage parlour	Abandoned area
Andhra Pradesh	147	-				17.0	7.4	8.8	5.4	2.7	0.6	1.3	41.5	2.7	-	-	2.7	9.5
Arunachal Pradesh	407	-	13.0	0.2	1.2	4.6		0.7	0.7	3.9	0.2	10.0	0.4	3.6	-	-	53.5	7.3
Assam	1145	-	13.1	0.0	0.3	30.6	2.9	1.5	1.0	12.0	0.1	4.0	0.1	1.6	-	-	26.7	5.4
Bihar	215	-	0.4	-	-	15.8	10.7	9.3	4.6	22.3	0.9	9.3	1.8	0.9	-	-	4.6	19.0
Chandigarh	82	-	6.1	-	-	12.2	2.4	2.4	0.4	6.1			6.1	1.2	-	-	32.9	
Chhattisgarh	222	-	1.8	-	0.4	9.4	2.7	1.8	6.7	1.8		6.7	3.6	3.1	-	-	5.8	55.8
Delhi	1249	-	2.3	-	0.6	20.4	4.0	4.5	28.4	3.5	0.6	8.1	6.8	0.8	-	-	19.0	0.5
Goa	22	-		-	-		4.5	4.5	4.5	9.0		9.0			-	-	18.1	50.0
Gujarat	83	-	8.4	-	-	8.4	4.8	1.2	8.4	7.2	1.2	13.2	14.4	1.2	-	-	13.2	18.0
Haryana	1535	-	3.8	-	0.2	11.7	2.5	3.9	9.1	2.3		3.0	1.1	3.9	-	-	32.2	25.8
Himachal Pradesh	346	-	8.6	-	2.6	22.5	1.1	3.1	3.4	7.8		14.4	4.9	1.4	-	-	28.0	1.7
Jammu & Kashmir	617	-	-	-	0.6	6.3	0.6	5.3	11.5	5.6	0.1	8.1	3.0	1.9	-	-	27.0	29.5
Jharkhand	61	-	-	-	-	-	3.2	4.9	6.5	8.2		9.8		4.9	-	-	54.1	8.2
Karnataka	479	0.6	8.5	1.2	1.6	7.9	4.3	5.4	11.4	7.1	4.8	5.2	3.5	2.7	-	-	18.5	16.7
Kerala	370	0.2	2.7	0.5	1.3	15.4	3.5	4.5	3.2	3.5	1.6	7.5	0.2	0.2	-	0.2	41.0	13.7
Madhya Pradesh	784	-	5.9	-	0.6	23.4	2.3	5.3	7.7	5.3	0.6	5.9	4.5	4.2	-	0.1	9.9	23.6
Maharashtra	64	-	1.56	-		18.7	10.9	1.5	7.8	6.2	1.5	17.1	10.9		-	-	6.2	17.1
Manipur	1409	-	10.5	0.0	4.0	8.1	-	2.3	4.4	3.3	0.1	2.7	1.6	0.6	-	-	24.7	37.1
Meghalaya	142	-	23.9		3.5	40.1	-	4.2	0.7	14.0	-		1.4		-	-	4.9	7.04
Mizoram	653	-	66.1	0.1	0.6	26.4	-	0.3	1.3	0.6	-	0.3	0.4	0.7	-	-	0.1	2.6
Nagaland	1194	0.3	80.3	0.3	0.3	6.4	-	0.6	0.5	1.5	0.0	0.4	1.1	0.9	-	-	5.4	1.4
Odisha	401	-	2.9	0.5	0.2	3.9	1.7	3.4	1.0	12.7	0.5	4.2	0.7	2.7	-	-	45.8	19.2
Puducherry	8	-	-	-	-	12.5	12.5	-	25.0	-	-	12.5			-	-		37.5
Punjab	1915	0.6	14.2	0.1	0.4	9.9	3.3	3.1	11.2	1.9	0.0	1.4	0.5	2.4	0.0	0.1	29.7	20.5
Rajasthan	224	-	4.9		0.8	18.7	9.8	7.1	12.0	2.2	-	4.9	2.6	2.2	-	-	25.0	9.3
Sikkim	58	-	-	-	-	-		-	3.4	3.4	-		5.1	1.7	-	-	5.1	81.0
Tamil Nadu	14	-	-	-	-	-	7.1	-	14.2	-	-	14.2	-	-	-	-	42.8	21.4
Telangana	64	-	-	-	3.1	31.2	14.0	18.7	12.5	3.1	1.5	6.2	-	3.1	-	-	4.6	1.5
Tripura	653	-	5.9	-	-	7.2	0.7	0.6	0.3	7.2	-	3.6	0.9	0.9	-	-	53.9	18.5
Uttar Pradesh	2392	-	4.2	0.04	0.2	12.5	5.3	2.8	8.7	7.2	0.2	6.0	2.2	3.2	-	-	18.2	28.6
Uttarakhand	213	-	0.9	-	0.4	2.8	2.8	2.3	9.3	7.0	0.9	11.7	2.3	1.8	-	-	34.7	22.5
West Bengal	120	-	4.1	-	0.8	10.8	3.3	2.5	3.3	10.0	0.8	5.0		3.3	-	-	41.6	14.1
India	17,288	0.1	14.1	0.1	0.8	13.7	2.8	3.1	7.9	5.1	0.3	4.6	2.4	2.1	0.0	0.0	23.7	18.5

3.3.6 Peak Days and Times of Maximum IDU Presence

During the PMPSE 2020-22 exercise, key informants were asked about the day of the week when the maximum number of IDUs could be found at the hotspots. It was noted as a multiple-response question, and key informants specifically mentioned Saturdays and Sundays as the days when maximum

IDUs were available at the hotspots. Over half of the key informants indicated that IDUs were available at the hotspots every day of the week. Generally, the presence of IDUs at the hotspots remained consistently high throughout the week. However, Morning and evening time emerged as prominent peak times for IDUs' availability at the hotspots nationwide and across States (Tables 3.22 and 3.23).

Table 3.22: Peak days for the IDUs hotspots, PMPSE (HRGs), 2020–22

State/UT	Number of hotspots	Peak days for the hotspot (%)							
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	All days
Andhra Pradesh	147	27.2	17.6	19.7	13.6	20.4	84.3	70.0	2.7
Arunachal Pradesh	407	61.4	58.4	57.9	57.9	63.1	80.3	91.4	48.4
Assam	1145	73.6	62.7	67.3	63.6	63.0	74.7	78.8	51.7
Bihar	215	68.8	62.3	65.1	58.1	69.3	61.4	61.8	46.0
Chandigarh	82	90.2	86.5	89.0	85.3	90.2	97.5	92.6	81.7
Chhattisgarh	222	53.1	54.9	58.1	47.7	52.7	54.5	73.4	42.3
Delhi	1249	56.6	47.4	48.9	47.8	51.0	54.3	63.8	34.9
Goa	22	27.2	9.0	27.2	13.6	45.4	54.5	77.2	4.5
Gujarat	83	65.0	61.4	49.4	60.2	61.4	51.8	63.8	32.5
Haryana	1535	82.5	80.2	81.1	81.1	83.3	86.6	93.0	77.2
Himachal Pradesh	346	73.7	66.7	70.2	67.0	66.7	73.7	78.6	58.3
Jammu & Kashmir	617	90.7	88.4	87.0	85.7	86.8	91.0	89.9	77.6
Jharkhand	61	59.0	62.3	60.6	57.3	60.6	44.2	34.4	34.4
Karnataka	479	27.5	24.0	36.7	25.2	36.3	38.4	59.0	18.1
Kerala	370	53.2	45.4	45.4	46.7	60.5	75.6	83.5	31.8
Madhya Pradesh	784	70.7	53.8	64.2	57.6	63.1	56.6	71.3	38.6
Maharashtra	64	95.3	93.7	93.7	93.7	95.3	96.8	96.8	93.7
Manipur	1409	67.2	50.3	56.0	52.4	54.7	65.2	66.3	36.6
Meghalaya	142	82.3	74.6	78.1	72.5	77.4	93.6	76.0	68.3
Mizoram	653	39.9	34.3	34.0	34.9	44.7	72.1	84.9	26.8
Nagaland	1194	45.0	27.7	28.2	26.1	30.0	66.6	66.5	16.1
Odisha	401	71.0	72.8	75.0	71.5	74.5	76.8	83.2	55.1
Puducherry	8	37.5	50.0	50.0	25.0	50.0	100.0	50.0	-
Punjab	1915	82.5	75.5	76.2	77.0	76.3	80.6	80.9	67.0
Rajasthan	224	69.2	66.0	53.5	52.6	68.3	67.4	59.3	45.5
Sikkim	58	37.9	31.0	29.3	32.7	50.0	82.7	65.5	17.2
Tamil Nadu	14	7.1	57.1	42.8	14.2	14.2	100.0	50.0	7.1
Telangana	64	98.4	100.0	98.4	96.8	98.4	96.8	96.8	92.1
Tripura	653	67.0	57.5	59.8	55.2	62.3	59.5	52.8	40.7
Uttar Pradesh	2392	76.3	75.2	71.9	71.2	77.6	73.8	80.6	65.0
Uttarakhand	213	66.6	62.4	75.5	67.1	77.4	67.1	78.8	58.6
West Bengal	120	82.5	80.8	83.3	82.5	85.0	83.3	98.3	80.0
India	17,288	68.1	60.8	62.5	60.3	64.5	71.5	76.2	50.1

Table 3.23: Peak time for the IDUs hotspots, PMPSE (HRGs), 2020–22

State/UT	Number of hotspots	Peak timing (%)				
		Morning	Afternoon	Evening	Night	All 24 hours
Andhra Pradesh	147	41.5	8.1	61.9	68.7	0.6
Arunachal Pradesh	407	43.0	49.3	86.0	71.9	16.9
Assam	1145	55.7	36.0	82.7	31.0	5.5
Bihar	215	62.3	28.3	66.0	19.0	0.4
Chandigarh	82	82.9	80.4	67.0	52.4	39.0
Chhattisgarh	222	82.8	40.0	60.3	16.6	3.6
Delhi	1249	65.7	21.0	49.6	36.3	5.2
Goa	22	18.1	22.7	59.0	50.0	4.5
Gujarat	83	57.8	45.7	55.4	32.5	1.2
Haryana	1535	50.9	46.1	65.9	41.7	15.5
Himachal Pradesh	346	33.2	42.4	73.4	28.6	12.4
Jammu & Kashmir	617	58.0	60.1	70.1	11.0	7.2
Jharkhand	61	34.4	42.6	86.8	-	-
Karnataka	479	22.9	45.0	45.7	11.9	4.5
Kerala	370	30.2	27.3	68.1	59.4	2.4
Madhya Pradesh	784	81.1	33.9	64.9	31.6	9.4
Maharashtra	64	84.3	53.1	78.1	68.7	40.6
Manipur	1409	74.8	36.8	78.3	14.4	4.5
Meghalaya	142	69.0	30.2	56.3	39.4	4.2
Mizoram	653	41.5	36.2	72.7	55.9	8.7
Nagaland	1194	50.4	33.7	69.4	34.3	3.6
Odisha	401	66.8	15.4	64.0	36.9	0.2
Puducherry	8	87.5	75.0	87.5	-	-
Punjab	1915	71.5	46.7	59.2	18.0	11.5
Rajasthan	224	71.4	39.7	63.3	41.0	18.7
Sikkim	58	31.0	46.5	68.9	25.8	1.7
Tamil Nadu	14	7.1	14.2	78.5	71.4	-
Telangana	64	90.6	6.2	9.3	31.2	3.1
Tripura	653	75.1	53.4	29.2	3.2	1.8
Uttar Pradesh	2392	70.4	17.7	61.2	25.8	4.1
Uttarakhand	213	51.1	23.4	77.0	26.7	6.5
West Bengal	120	91.6	55.0	31.6	0.8	-
India	17,288	61.4	35.8	64.3	29.5	7.3

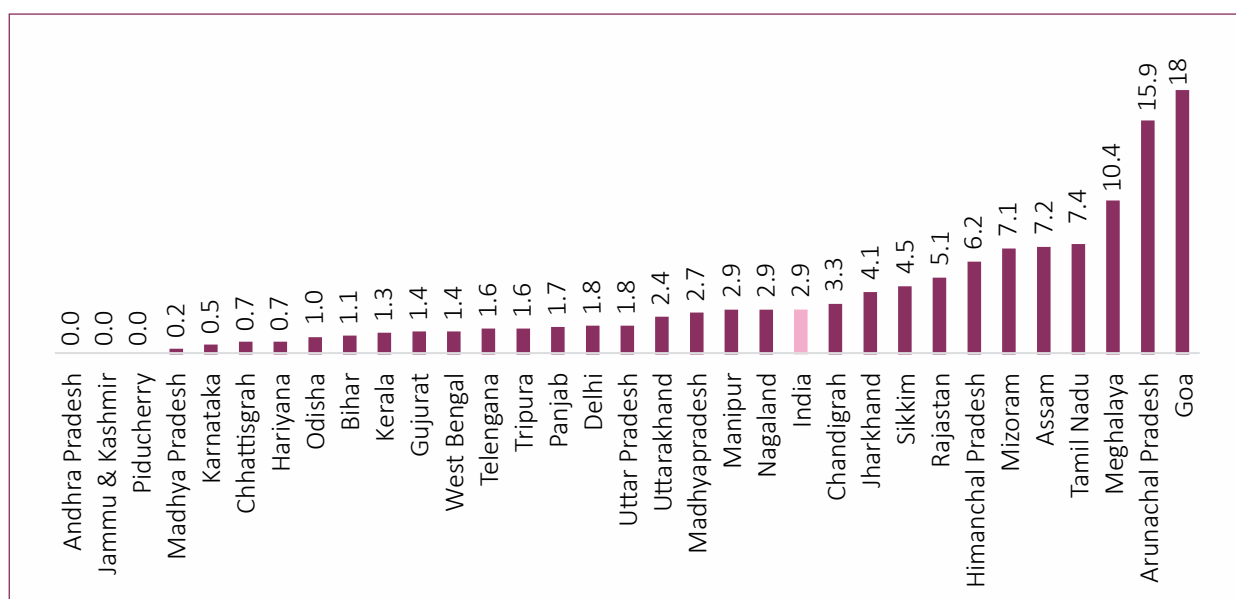
3.3.7 Estimated Size of the IDU Population

Nationally, the total estimated size of the IDU population was around 2,88,717 (2,53,025-3,24,408), including 2,67,333 (2,31,641-3,03,024) from 17,288 hotspots, 10,178 associated with 953 network operators and 11,206 from 2,349 link worker villages. A significant number of IDUs were estimated in Punjab (45,098), Uttar Pradesh (35,412), Delhi (32,481), Assam (26,156) and Manipur (24,985). These five

States accounted for more than half of the estimated IDU population at the national level.

Nationally, females constituted 2.9% of the total IDUs at the hotspots. This percentage was higher in some States, with Goa at around 18%, Arunachal Pradesh at 15.9% and Meghalaya at 10.4%. Additionally, in Rajasthan, Himachal Pradesh, Mizoram, Assam and Tamil Nadu, more than 5% of the estimated IDUs were females (Figure 3.7).

Figure 3.7: State/UT wise percentage distribution of the female injecting drug users at IDU hotspots, PMPSE (HRGs), 2020-22



Around 37.4% of the estimated IDUs were below the age of 25 years nationwide. However, in some of the States, over half of the IDUs were below 25 years of age, including Goa (82.5%), Arunachal Pradesh (61.2%), Tripura (67.7%), Sikkim (52.1%), and Meghalaya (50.4%). Conversely, in Bihar (16.1%), Telangana (13.2%) and Maharashtra (12.4%), the proportion of younger IDUs was lower than other States/UTs.

In addition to collecting data on population size, key informants were also asked about IDUs associated with the hotspot who either work or visit other hotspots within the district. Approximately a little more than one-fourth of the estimated IDUs (28%) were noted to visit other hotspots within the district. Contrary to the national estimate, in Andhra Pradesh (71.1%), Goa (52.4%) and Karnataka (51.2), more than half of the IDUs visited other hotspots. In contrast, fewer IDUs in Tripura (18.3%), Maharashtra (17.7%), Delhi (15.8%) and Bihar (14.6%) visited other hotspots.

Additionally, network operators were asked whether IDUs associated with them were also in contact/linked with other network operators and if they also visited physical hotspots for solicitation. Around 39.8% of the network operators stated that IDUs in their networks were also associated with other network operators, and around 43.5% visited physical hotspots for solicitation. In Assam (56.2%), Haryana (51.2%), Himachal Pradesh (56.7%), and Punjab (54.9%), more

than half of the estimated IDUs were associated with other network operators. Similarly, in Chandigarh (68.8%), Chhattisgarh (56.8%), Jammu & Kashmir (51.9%), Tripura (50.7%) and Uttarakhand (61.9%), the majority of the IDUs associated with network operators also visit physical hotspots for solicitation.

During PMPSE 2020-22, data regarding the presence of HRGs in the link worker villages was also collected. Essential details about the village, population, administrative block/mandal/tehsil, and coverage by LWS were collected, along with the minimum and maximum number of HRGs in each village. Additionally, data on whether the HRGs in the village also visit nearby urban areas to engage in high-risk behaviours was collected.

Nationally, 90.1% of the link worker villages included in PMPSE were covered by LWS. At the State/UT level, the LWS coverage ranged from 70 to 100%, with the exceptions of Maharashtra (50%) and Uttar Pradesh (49.2%). Nationally, 45% of the IDUs visited nearby urban areas to engage in high-risk behaviours. At the State/UT level, over half of the estimated IDUs in Manipur, Meghalaya, Punjab and Uttar Pradesh visited nearby urban areas for the same purpose. Conversely, in Bihar, none of the IDUs were reported to be visiting nearby urban areas to engage in high-risk behaviours (Table 3.24).

Table 3.24: Estimated size of IDUs at hotspots, associated with Network Operators and in Link worker villages, PMPSE (HRGS), 2020-22

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	IDU who go to the other hotspot (%)	IDU below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	IDU who go to other NO (%)	IDU who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		IDU who go to nearby urban areas (%)
Andhra Pradesh	147	1292 (1,020-1,564)	71.1	45.8	1	40	-	-	-	-	-	-	1,332 (1,060-1,604)
Arunachal Pradesh	407	5143 (4,677-5,608)	36.1	61.2	-	-	-	-	-	-	-	-	5,143 (4,677-5,608)
Assam	1,145	25293 (22,101-28,485)	36.5	48.7	105	862	56.2	42.9	-	-	-	-	26,156 (22,963-29,348)
Bihar	215	4235 (3,899-4,570)	14.6	16.1	21	186	11.6	44.4	120	100.0	165	0.0	4,585 (4,250- 4,921)
Chandigarh	82	1871 (1,664-2,078)	36.3	39.3	6	37	43.2	68.8	-	-	-	-	1,908 (1,701-2,115)
Chhattisgarh	222	3718 (3,331-4,105)	40.8	47.4	22	199	47.4	56.8	15	100.0	6	93.3	3,923 (3,535- 4,310)
Delhi	1,249	31743 (28,709-34,777)	15.8	37.5	22	738	39.2	42.9	-	-	-	-	32,481 (29,447-35,515)
Goa	22	302 (247-356)	52.4	82.5	-	-	-	-	-	-	-	-	302 (247-356)
Gujarat	83	779 (637-920)	19.5	28.5	-	-	-	-	-	-	-	-	779 (637-920)
Haryana	1,535	18412 (16,580-20,243)	31.4	39.1	73	613	51.2	46.7	-	-	-	-	19,025 (17,193-20,856)
Himachal Pradesh	346	3650 (3,202-4,097)	46.0	46.5	4	12	56.7	47.4	-	-	-	-	3662 (3,214-4,109)
Jammu And Kashmir	617	8797 (6,658-10,937)	35.8	41.1	133	1365	36.6	51.9	-	-	-	-	10,162 (8,022-12,302)
Jharkhand	61	779 (641-916)	27.3	46.3	-	-	-	-	-	-	-	-	779 (641-916)
Karnataka	479	4015 (3,455-4,574)	51.2	45.0	12	316	1.2	0.0	1	100.0	0	-	4,331 (3,771-4,890)
Kerala	370	3018 (2,370-3,664)	27.4	20.8	16	258	36.6	33.3	-	-	-	-	3,276 (2,628-3,922)
Madhya Pradesh	784	10808 (9,335-12,281)	33.5	25.7	102	1103	30.9	36.5	3	100.0	8	66.6	11,919 (10,446-13,392)

Continued

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	IDU who go to the other hotspot (%)	IDU below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	IDU who go to other NO (%)	IDU who also visit physical hotspots (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		IDU who go to nearby urban areas (%)
Maharashtra (including Mumbai)	64	1072 (886-1,258)	17.7	12.4	4	17	0.0	0.0	2	50.0	7	0.0	1,096 (910-1,282)
Manipur	1,409	23198 (18,660-27,737)	24.3	34.4	14	107	39.5	43.5	846	96.5	1,679	53.8	24,985 (20,447-29,523)
Meghalaya	142	2962 (2,502-3,421)	21.9	50.4	-	-	-	-	29	100.0	213	56.5	3,175 (2,715-3,634)
Mizoram	653	9871 (8,402-11,341)	38.0	27.7	-	-	-	-	172	98.8	526	48.6	10,397 (8,928-11,867)
Nagaland	1,194	16448 (13,782-19,113)	49.1	43.1	36	354	18.9	12.6	-	-	-	-	16,802 (14,137-19,468)
Odisha	401	4094 (3,487-4,702)	33.8	31.7	46	426	33.1	37.2	9	77.7	6	70.3	4,526 (3,918-5,134)
Puducherry	8	21 (13-28)	78.9	82.2	-	-	-	-	-	-	-	-	21 (13-28)
Punjab	1,915	35045 (30,272-39,818)	27.7	40.0	162	2,049	54.9	48.0	742	93.5	8,004	49.2	45,098 (40,325-49,872)
Rajasthan	224	2839 (2,527-3,152)	40.0	29.0	26	184	19.3	36.7	-	-	-	-	3,024 (2,711-3,336)
Sikkim	58	821 (713-929)	-	52.1	-	-	-	-	-	-	-	-	821 (713-929)
Tamil Nadu	14	114 (91-137)	29.5	41.1	-	-	-	-	1	100.0	1	-	115 (92-138)
Telangana	64	816 (657-974)	48.0	13.2	-	-	-	-	1	100.0	-	-	816 (657-974)
Tripura	653	5885 (5,338-6,433)	18.3	67.7	34	277	24.6	50.7	144	71.5	337	43.9	6,500 (5,953-7,047)
Uttar Pradesh	2,392	34375 (30,632-38,118)	23.4	22.9	87	911	25.8	28.2	211	49.2	126	63.8	35,412 (31,670-39,155)
Uttarakhand	213	3835 (3,407-4,264)	30.3	37.1	10	0	18.7	61.9	-	-	-	-	3,835 (3,407-4,264)
West Bengal	120	2083 (1,746-2,419)	28.3	43.0	17	123	36.2	33.9	53	96.2	128	44.2	2,334 (1,997-2,670)
India	17,288	2,67,333 (2,31,641-3,03,024)	28.0	37.4	953	10,178	39.8	43.5	2,349	90.1	11,206	45.0	2,88,717 (2,53,025-3,24,408)

3.4 Hijra/Transgender People

In the context of HIV/AIDS in the country, people who self-identify as hijra/transgender individuals are among the population groups at highest risk of HIV. They rank second in prevalence nationwide (HSS, 2021), following IDUs. Among H/TG people, PMPSE was implemented across 30 States/UTs. The key findings from the PMPSE of H/TG people are detailed in the following sections.

3.4.1 Profile of Key Informants Interviewed

Across the States/UTs, a total of 20,775 KIIs were conducted at the 6,585 H/TG hotspots. Among these, 73.3% of the interviews were conducted with HRGs (15,231), 15.6% with other stakeholders (3,240) and 11.1% with community gatekeepers (2,304). The national and State/UT wise distribution of key informants is presented in Figures 3.8 and 3.9. At each of the hotspots, on average, three interviews were conducted. Two of these interviews were with the HRGs, except in the case of Andhra Pradesh (Table 3.25).

Figure 3.8: Distribution of the profile of key informants interviewed at the H/TG hotspots, PMPSE (HRGs), 2020-22 (in %)

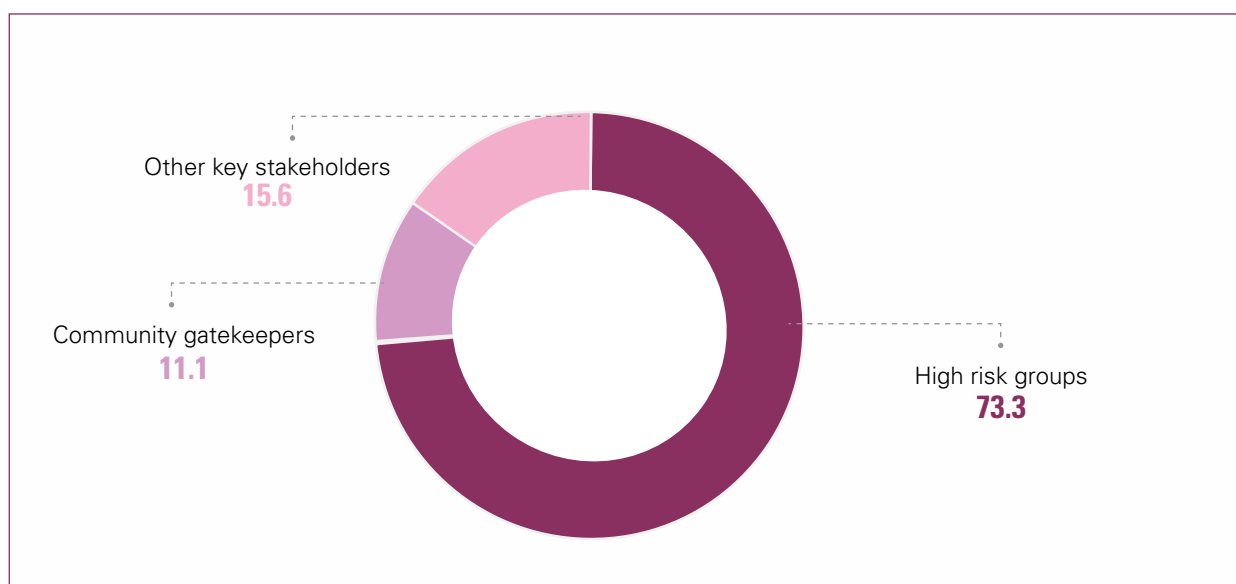


Figure 3.9: State-wise distribution of the profile of key informants interviewed at the H/TG hotspots, PMPSE (HRGs), 2020-22

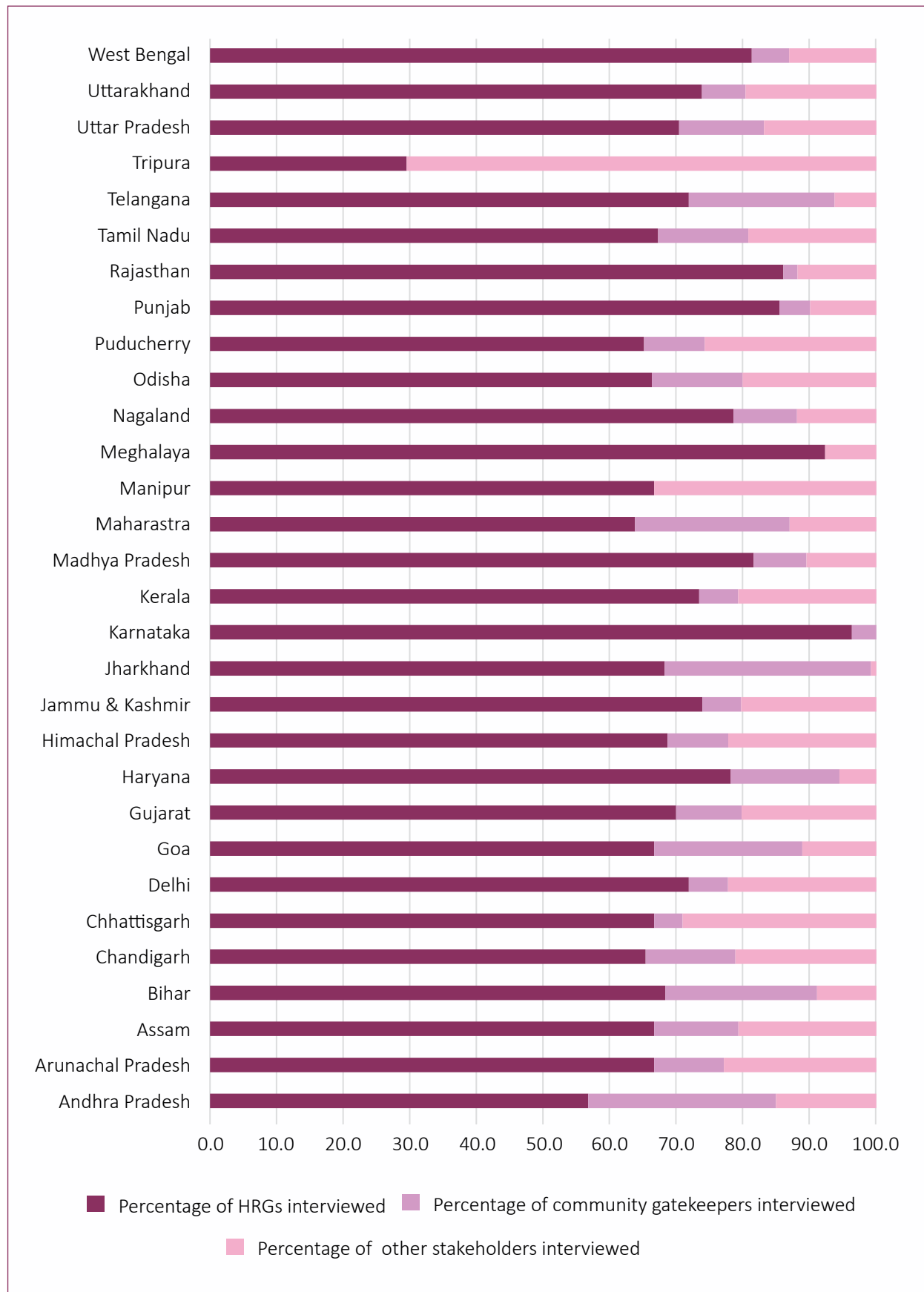


Table 3.25: Profile of key informants interviewed at the H/TG hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Total number of interviews	Average number of interviews per hotspot	Key informants interviewed					
				HRGs		Community gatekeepers		Other key stakeholders/informants	
				Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed	Average number per hotspot	Percentage interviewed
Andhra Pradesh	265	798	3.0	1.7	56.8	0.8	28.2	0.4	15.0
Arunachal Pradesh	51	153	3.0	2.0	66.7	0.3	10.5	0.6	22.9
Assam	197	594	3.0	2.0	66.7	0.3	12.6	0.6	20.7
Bihar	58	180	3.1	2.1	68.3	0.7	22.8	0.2	8.9
Chandigarh	15	52	3.4	2.3	65.4	0.4	13.5	0.7	21.2
Chhattisgarh	102	306	3.0	2.0	66.7	0.1	4.2	0.8	29.1
Delhi	667	2,064	3.0	2.2	71.9	0.1	5.9	0.6	22.2
Goa	9	27	3.0	2.0	66.7	0.6	22.2	0.3	11.1
Gujarat	117	386	3.3	2.3	69.9	0.3	9.8	0.6	20.2
Haryana	151	453	3.0	2.3	78.1	0.4	16.3	0.1	5.5
Himachal Pradesh	33	99	3.0	2.1	68.7	0.2	9.1	0.6	22.2
Jammu & Kashmir	46	138	3.0	2.2	73.9	0.1	5.8	0.6	20.3
Jharkhand	43	129	3.0	2.0	68.2	0.9	31.0	0.0	0.8
Karnataka	860	2,540	2.9	2.8	96.3	0.1	3.7	0.0	0.0
Kerala	273	820	3.0	2.2	73.4	0.1	5.9	0.6	20.7
Madhya Pradesh	129	391	3.0	2.5	81.6	0.2	7.9	0.3	10.5
Maharashtra	477	1,533	3.2	2.1	64.5	0.6	21.3	0.4	14.2
Manipur	59	177	3.0	2.0	66.7	-	0.0	1.0	33.3
Meghalaya	8	26	3.2	3.0	92.3	-	0.0	0.2	7.7
Mizoram									
Nagaland	13	42	3.2	2.5	78.6	0.3	9.5	0.3	11.9
Odisha	717	2183	3.0	2.0	66.3	0.4	13.6	0.6	20.1
Puducherry	21	66	3.1	2.0	65.2	0.2	9.1	0.8	25.8
Punjab	90	282	3.1	2.7	85.5	0.1	4.6	0.3	9.9
Rajasthan	203	609	3.0	2.6	86.0	0.0	2.1	0.3	11.8
Sikkim									
Tamil Nadu	677	2,504	3.7	2.5	67.3	0.5	13.5	0.7	19.2
Telangana	32	96	3.0	2.2	71.9	0.6	21.9	0.1	6.3
Tripura	9	61	6.7	2.0	29.5	-	0.0	4.7	70.5
Uttar Pradesh	944	2,943	3.1	2.2	70.4	0.4	12.7	0.5	16.9
Uttarakhand	33	107	3.2	2.4	73.8	0.2	6.5	0.6	19.6
West Bengal	286	1,016	3.5	2.9	81.3	0.2	5.6	0.4	13.1
India	6,585	20,775	3.1	2.3	73.3	0.3	11.1	0.4	15.6

3.4.2 Profile of Network Operators

During PMPSE 2020-22, a total of 720 network operators associated with H/TG people were mapped across the different States/UTs. The majority of these network operators were H/TG persons (88.7%), followed by males (9.4%), and a small proportion were females (1.8%). Nearly half of the network operators mapped were in the age category of 28 to 37 years (49.7%), followed by those in the age group of 18 to 27 years (20.2%) and 38 to 47 years (19.5%). In the

majority of the States/UTs, less than 10 network operators were mapped including Andhra Pradesh (9), Punjab (8), Jammu & Kashmir (7), Tripura (6), Chhattisgarh (5), Meghalaya (5), Uttarakhand (2), and one each from Chandigarh, Himachal Pradesh and Kerala. Conversely, more than 100 network operators were mapped in the States of Karnataka (115) and Uttar Pradesh (105), followed by Odisha (91), Tamil Nadu (59), Delhi (56) and Rajasthan (51) where 50 or more network operators were mapped (Table 3.26).

Table 3.26: Profile of H/TG network operators who were mapped, PMPSE (HRGs), 2020-22

State/UT	No. of network operators mapped	Gender (%)			Age (%)			
		Female	Male	H/TG	18-27 years	28-37 years	38-47 years	48+ years
Andhra Pradesh	9	-	-	100.0	33.3	66.6	-	-
Arunachal Pradesh	-	-	-	-	-	-	-	-
Assam	43	4.6	6.9	88.3	20.9	67.4	11.6	-
Bihar	12	-	8.3	91.6	16.6	50.0	25.0	8.3
Chandigarh	1							
Chhattisgarh	5	-	-	100.0	80.0	20.0	-	-
Delhi	56	-	1.7	98.2	7.1	8.9	21.4	62.5
Goa	2	-	-	100.0	-	100.0	-	-
Gujarat	-	-	-	-	-	-	-	-
Haryana	6	-	-	100.0	33.3	66.6	-	-
Himachal Pradesh	1	-	-	100.0	-	-	100.0	-
Jammu & Kashmir	7	42.8	42.8	14.2	28.5	42.8	14.2	14.3
Jharkhand	-	-	-	-	-	-	-	-
Karnataka	115	0.8	0.8	98.2	23.4	61.7	10.4	4.3
Kerala	1							
Madhya Pradesh	38	5.2	26.3	68.4	10.5	34.2	39.4	15.8
Maharashtra	46	-	2.1	97.8	19.5	60.8	6.5	13.0
Manipur	-	-	-	-	-	-	-	-
Meghalaya	5	-	80.0	20.0	80.0	20.0	-	-
Mizoram	-	-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-	-	-
Odisha	91	-	5.4	94.5	29.6	50.5	17.5	2.2
Puducherry	-	-	-	-	-	-	-	-
Punjab	8	12.5	-	87.5	-	62.5	12.5	25.0
Rajasthan	51	1.9	17.6	80.3	23.5	54.9	17.6	3.9
Sikkim	-	-	-	-	-	-	-	-
Tamil Nadu	59	1.6	1.6	96.6	25.4	49.1	23.7	1.7
Telangana	18	11.1	-	88.8	5.5	66.6	22.2	5.6
Tripura	6	-	-	100.0	16.6	33.3	33.3	16.7
Uttar Pradesh	105	-	20.0	80.0	13.3	52.3	25.7	8.6
Uttarakhand	2	-	100.0	-	50.0	-	50.0	-
West Bengal	33	-	18.1	81.8	15.1	30.3	45.4	9.1
India	720	1.8	9.4	88.7	20.2	49.7	19.5	10.4

3.4.3 Profile of Interviewers

At the national level, the implementation of PMPSE was primarily carried out by the outreach workers (89.9%), followed by peer educators (5.4%) and programme officers (4.6%), as outlined in the protocol. A similar

trend was observed across all States/UTs, except in Uttarakhand and West Bengal, where outreach workers and programme officers implemented PMPSE, each covering nearly 50% of hotspots. (Table 3.27).

Table 3.27: Profile of interviewers, PMPSE (HRGS), 2020-22

State/UT	Number of hotspots	Key informant interviews conducted by (%)		
		Outreach workers	Peer educators	Programme officers
Andhra Pradesh	265	95.0	0.7	4.1
Arunachal Pradesh	51	96.0	3.9	-
Assam	197	97.9	2.0	-
Bihar	58	79.3	17.2	3.4
Chandigarh	15	100.0	-	-
Chhattisgarh	102	94.1	4.9	0.9
Delhi	667	99.7	0.3	-
Goa	9	55.5	44.4	-
Gujarat	117	86.3	-	13.6
Haryana	151	93.3	5.3	1.3
Himachal Pradesh	33	96.9	3.0	-
Jammu & Kashmir	46	63.0	15.2	21.7
Jharkhand	43	88.3	2.3	9.3
Karnataka	860	93.1	6.4	0.4
Kerala	273	86.8	13.1	-
Madhya Pradesh	129	99.2	-	0.7
Maharashtra	477	77.9	21.1	0.8
Manipur	59	61.0	33.9	5.0
Meghalaya	8	50.0	50.0	-
Mizoram	-	-	-	-
Nagaland	13	92.3	7.6	-
Odisha	717	96.0	3.9	-
Puducherry	21	76.1	-	23.8
Punjab	90	91.1	7.7	1.1
Rajasthan	203	98.0	0.9	0.9
Sikkim	-	-	-	-
Tamil Nadu	677	95.8	1.3	2.8
Telangana	32	93.7	6.2	-
Tripura	9	100.0	-	-
Uttar Pradesh	944	90.4	1.9	7.6
Uttarakhand	33	45.4	3.0	51.5
West Bengal	286	44.0	10.8	45.1
India	6,585	89.9	5.4	4.6

3.4.4 Hotspot Coverage and Operational Duration

During PMPSE 2020-22, basic information about the hotspots was collected, including details such as TI coverage, duration since the hotspot has been operational, hotspot type, and peak days and times when the maximum number of H/TG people are present at the hotspots.

It was observed that 58.1% of the hotspots where PMPSE was implemented were already covered by the TI programme, while the remaining 41.9% were either newly identified or previously uncovered. However, there were considerable variations across States/UTs. In Chandigarh (93.3%), Goa (88.9%), Kerala (89.4%), Maharashtra (80.3%), Tamil Nadu (81.7%) and Telangana (90%), more than 80% of the hotspots

were covered by the TI programme. However, no new hotspots were identified in Manipur, Meghalaya and Nagaland. In contrast, a large number of new or uncovered hotspots were identified in Bihar, Himachal Pradesh, Uttarakhand and Tripura.

Nationally, among the hotspots where PMPSE was implemented, 56.7% had been active for more than three years, 13.4% had been operational for one to two years, and 11% were operational for two to three years. In several of the States/UTs, more than 60% of the hotspots had been active for more than three years including Andhra Pradesh, Arunachal Pradesh, Chandigarh, Goa, Gujarat, Himachal Pradesh, Jharkhand, Kerala, Maharashtra, Manipur, Nagaland, Puducherry, Punjab, Tamil Nadu, Telangana and Uttarakhand (Table 3.28).

Table 3.28 : Table 3.28 H/TG hotspot characteristics, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Andhra Pradesh	265	79.6	20.4	7.9	5.2	3.7	9.0	10.5	63.4
Arunachal Pradesh	51	78.4	21.6	17.6	-	3.9	1.9	9.8	66.6
Assam	197	43.1	56.9	10.6	2.5	3.5	23.8	21.8	37.5
Bihar	58	24.1	75.9	-	6.9	8.6	41.3	10.3	32.7
Chandigarh	15	93.3	6.7	6.6	-	-	-	26.6	66.6
Chhattisgarh	102	79.4	20.6	8.8	4.9	2.9	10.7	-	46.0
Delhi	667	52.3	47.7	8.4	9.7	12.8	19.4	5.5	43.9
Goa	9	88.9	11.1	11.1	-	-	-	-	88.8
Gujarat	117	75.2	24.8	0.8	4.2	0.8	3.4	5.1	85.4
Haryana	151	41.7	58.3	2.6	3.3	3.3	15.8	17.8	-
Himachal Pradesh	33	15.2	84.8	3.0	6.0	3.0	12.1	15.1	60.6
Jammu & Kashmir	46	32.6	67.4	-	10.8	-	15.2	28.2	34.7
Jharkhand	43	76.7	23.3	-	-	16.2	4.6	-	79.0
Karnataka	860	66.3	33.7	10.9	6.8	11.2	9.3	4.3	57.3
Kerala	273	89.4	10.6	5.8	3.3	2.9	4.4	7.3	76.1
Madhya Pradesh	129	38.8	61.2	0.7	-	1.5	26.3	26.3	45.7
Maharashtra	477	80.3	19.7	0.4	1.0	2.1	6.9	9.4	80.0
Manipur	59	100.0	0.0	-	13.5	6.7	8.4	5.0	66.1
Meghalaya	8	100.0	0.0	-	-	25.0	-	25.0	50.0
Mizoram	-	-	-	-	-	-	-	-	-
Nagaland	13	100.0	0.0	-	-	-	7.6	15.3	76.9

Continued

Continued

State/UT	Number of hotspots	Hotspot coverage		Operational since (%)					
		Currently covered by TI	Currently not covered by TI	<3 months	3-6 months	7-11 months	1-2 years	2-3 years	3+ years
Odisha	717	40.4	59.6	13.3	6.8	5.1	14.5	11.9	48.1
Puducherry	21	66.7	33.3	-	4.7	-	14.2	14.2	66.6
Punjab	90	57.8	42.2	5.5	2.2	-	7.7	17.7	66.6
Rajasthan	203	39.9	60.1	1.9	2.4	5.9	15.2	14.7	59.6
Sikkim	-	-	-	-	-	-	-	-	-
Tamil Nadu	677	81.7	18.3	1.9	7.8	4.1	16.8	6.7	62.4
Telangana	32	90.6	9.4	6.2	3.1	3.1	6.2	3.1	78.1
Tripura	9	0.0	100.0	33.3	11.1	44.4	11.1	-	-
Uttar Pradesh	944	36.0	64.0	2.9	2.8	2.7	13.6	18.4	59.3
Uttarakhand	33	21.2	78.8	-	3.0	-	21.2	9.0	66.6
West Bengal	286	45.5	54.5	1.7	2.8	9.7	16.0	17.8	51.7
India	6,585	58.1	41.9	5.9	5.1	5.8	13.4	11.0	56.7

3.4.5 Types of Hotspots

During PMPSE 2020-22, the hotspots were also categorized based on their geographical settings. Nationally, 32.8% of the H/TG hotspots were home-based, 11.8% were street-based, 10% were located near bus stands, 6.5% were in marketplaces, 5.5% were near highways, 5% were in abandoned areas, 4.5% were in parks, and 4.1% were near railway stations (Table 3.21).

Similar to the national trend, the H/TG hotspots across the States/UTs were predominantly home-based as noted in Chandigarh (86.6%), Madhya Pradesh

(77.5%), Punjab (58.8%), Rajasthan (55.6%), Jammu & Kashmir (54.3%), Uttar Pradesh (52.4%), Himachal Pradesh (51.5%), Gujarat (49.5%), Haryana (46.3%), Nagaland (46.1%), and Arunachal Pradesh (45.1%). However, in Assam (30.9%), Jharkhand (37.2%), and Nagaland (30.7%), more than 30% of the hotspots were street-based. Additionally, a notable proportion of the hotspots in Tamil Nadu (37.3%), Assam (28.4%), and Kerala (27.4%) were located near bus stands. In Tripura, 33.3% of the hotspots were located in marketplaces. Notably, 55.9% and 22.2% of the H/TG hotspots in Manipur and Goa, respectively, were based in massage parlours (Table 3.29).

Table 3.29: Types of H/TG hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Type of hotspot (%)															Others	
		Brothel	Home	Bar	Lodge/dhaba/hotel	Street	Railway station	Bus stand	Park	Marketplace	Cinema	Under the bridge	Public toilet	Highway	Spa	Massage parlour		Abandoned area
Andhra Pradesh	265	0.7	11.7	0.3	2.2	29.0	10.1	9.0	3.7	3.7	1.1	3.7	1.5	15.0	-	-	5.2	2.2
Arunachal Pradesh	51	-	45.1	1.9	13.7	-	-	-	-	19.6	-	1.9	-	3.9	-	1.9	11.7	-
Assam	197	-	11.1	0.5	-	30.9	6.6	28.4	1.0	17.2	-	-	1.5	1.0	-	-	1.0	0.5
Bihar	58	8.6	29.3	-	8.6	-	5.1	3.4	1.7	8.6	-	6.9	-	3.4	-	-	1.7	22.4
Chandigarh	15	-	86.6	-	-	13.3	-	-	-	-	-	-	-	-	-	-	-	-
Chhattisgarh	102	-	8.8	-	-	25.4	7.8	7.8	14.7	12.7	-	6.8	1.9	5.8	-	0.9	4.9	1.9
Delhi	667	-	17.9	-	0.7	12.2	4.5	12.5	21.5	4.6	0.7	4.3	3.0	7.9	-	-	6.7	2.8
Goa	9	-	-	11.1	11.1	11.1	11.1	-	22.2	11.1	-	-	-	-	-	22.2	-	-
Gujarat	117	0.8	49.5	-	-	6.8	4.2	5.1	5.1	5.1	-	-	7.6	7.6	-	-	1.7	5.9
Haryana	151	-	46.3	-	0.6	19.8	1.9	3.3	10.6	2.6	-	1.3	1.3	7.2	-	-	-	4.6
Himachal Pradesh	33	-	51.5	-	3.0	6.0	-	15.1	3.0	15.1	-	-	-	3.0	-	-	-	3.03
Jammu & Kashmir	46	-	54.3	-	-	-	-	4.3	8.6	4.3	-	2.1	4.3	8.6	-	-	10.8	2.1
Jharkhand	43	-	13.9	2.3	6.9	37.2	13.9	-	2.3	13.9	4.6	4.6	-	-	-	-	-	-
Karnataka	860	0.1	14.5	0.3	1.5	10.3	12.2	9.5	4.1	5.3	1.2	0.7	4.3	10.9	0.8	0.1	5.0	28.6
Kerala	273	-	1.8	0.3	1.0	8.0	6.9	27.4	7.3	5.1	1.4	2.1	1.0	12.8	-	-	12.0	12.0
Madhya Pradesh	129	-	77.5	-	-	5.43	2.3	3.8	0.7	2.3	-	0.7	-	-	-	-	1.5	5.4
Maharashtra	477	2.7	29.1	0.2	2.3	18.2	7.96	7.1	3.9	5.2	0.42	2.3	3.5	8.8	-	-	2.1	5.8
Manipur	59	-	11.8	-	-	1.6	-	-	3.3	-	-	-	-	-	1.6	55.9	-	25.4
Meghalaya	8	-	37.5	-	12.5	25.0	-	-	-	25.0	-	-	-	-	-	-	-	-
Mizoram		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nagaland	13	-	46.1	-	-	30.7	-	-	-	15.3	-	-	-	-	-	-	-	7.6
Odisha	717	-	10.1	0.8	2.3	13.3	6.8	6.4	2.2	18.8	0.5	6.2	0.5	11.0	-	-	17.4	3.0
Puducherry	21	-	14.2	19.0	-	14.2	-	4.7	4.7	-	-	4.7	-	9.5	-	-	23.8	4.7
Punjab	90	-	58.8	-	-	11.1	2.2	3.3	8.8	-	-	2.2	-	4.4	-	-	-	8.8
Rajasthan	203	-	55.6	0.4	0.9	6.9	3.9	5.9	7.3	7.8	1.4	0.4	2.4	0.9	-	-	0.4	4.9
Sikkim		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	677	0.7	10.3	0.8	2.8	10.1	6.3	37.3	3.2	4.1	0.8	3.4	2.9	5.7	-	-	5.4	5.4
Telangana	32	-	6.2	3.1	12.5	-	12.5	12.5	6.2	6.2	6.2	-	6.2	6.2	-	-	15.6	6.2
Tripura	9	-	66.6	-	-	-	-	-	-	33.3	-	-	-	-	-	-	-	-
Uttar Pradesh	944	-	52.4	-	0.8	5.9	1.8	1.5	3.1	7.6	0.2	1.5	0.7	2.2	-	0.2	0.9	20.6
Uttarakhand	33	-	42.4	-	3.0	12.1	-	-	3.0	18.1	-	-	-	-	-	-	3.0	18.1
West Bengal	286	2.4	26.2	-	2.1	20.9	9.4	7.6	3.8	8.3	0.3	0.3	0.3	0.7	-	-	2.4	14.6
India	6,585	0.4	32.8	0.3	3.7	11.8	4.1	10.0	4.5	6.5	0.6	2.2	1.8	5.5	0.1	0.5	5.0	9.1

3.4.6 Peak Days and Times of Maximum H/TG People Presence

During the PMPSE 2020-22 exercise, key informants were asked about the day of the week when maximum number of H/TG people could be found at the hotspots. It was noted as a multiple-response question, and key informants mentioned Fridays, Saturdays and Sundays as the days when maximum H/TG people were available

at the hotspots. More than 40% of the key informants indicated that H/TG people were available at the hotspots every day of the week. Generally, the presence of H/TG people at the hotspots remained consistently high throughout the week. However, evenings and nights emerged as prominent peak times for the availability of H/TG people at the hotspots nationwide and across States/UTs (Tables 3.30 and 3.31).

Table 3.30: Peak days for the H/TG hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Peak days for the hotspot (%)							
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	All days
Andhra Pradesh	265	36.6	43.0	37.7	34.7	38.4	54.7	68.3	15.0
Arunachal Pradesh	51	27.4	23.5	29.4	27.4	60.7	92.1	62.7	19.6
Assam	197	71.0	72.5	71.5	73.1	74.1	80.7	89.8	67.0
Bihar	58	56.9	53.4	58.6	55.1	63.7	63.7	46.5	32.7
Chandigarh	15	33.3	33.3	33.3	80.0	66.6	93.3	80.0	26.6
Chhattisgarh	102	19.6	24.5	28.4	27.4	26.4	40.2	75.4	17.6
Delhi	667	68.5	59.5	62.8	60.1	76.4	77.6	78.5	51.1
Goa	9	44.4	55.5	55.5	44.4	88.8	77.7	77.7	33.3
Gujarat	117	69.2	70.9	69.2	68.3	68.3	77.7	82.9	54.7
Haryana	151	58.2	59.6	56.9	57.6	88.0	72.8	85.4	54.9
Himachal Pradesh	33	69.7	75.7	69.7	72.7	81.8	60.6	72.7	57.5
Jammu & Kashmir	46	67.3	65.2	65.2	63.0	69.5	80.4	91.3	58.7
Jharkhand	43	41.8	39.5	53.4	41.8	51.1	44.1	76.7	13.9
Karnataka	860	68.9	64.1	65.4	65.5	67.4	69.7	78.6	52.0
Kerala	273	53.4	43.9	45.4	46.8	64.4	87.5	89.0	41.0
Madhya Pradesh	129	43.4	41.8	43.4	39.5	44.9	74.4	79.8	33.3
Maharashtra	477	62.4	62.8	60.8	65.6	67.5	69.1	83.0	48.8
Manipur	59	18.6	81.3	20.3	76.2	18.6	98.3	62.7	18.6
Meghalaya	8	87.5	87.5	87.5	87.5	87.5	100.0	100.0	87.5
Mizoram									
Nagaland	13	38.4	38.4	38.4	30.7	61.5	76.9	61.5	30.7
Odisha	717	34.1	36.5	41.70	36.9	37.6	43.6	54.8	19.8
Puducherry	21	66.6	52.3	71.43	47.6	52.3	66.6	90.4	47.6
Punjab	90	64.4	65.5	66.67	77.7	65.5	77.7	78.8	61.1
Rajasthan	203	65.5	63.0	66.01	62.5	61.5	62.5	70.4	52.7
Sikkim									
Tamil Nadu	677	65.5	60.7	64.55	58.2	60.5	80.0	72.5	39.1
Telangana	32	34.3	59.3	34.38	34.3	34.3	56.2	62.5	21.8
Tripura	9	55.5	44.4	33.33	33.3	44.4	55.5	33.3	33.3
Uttar Pradesh	944	53.9	60.2	57.84	56.7	82.3	57.2	64.6	48.9
Uttarakhand	33	75.7	78.7	78.79	78.7	75.7	78.7	93.9	75.7
West Bengal	286	47.5	48.6	54.20	48.9	56.2	74.1	81.8	38.4
India	6,585	56.2	56.0	56.70	55.5	63.4	67.6	73.6	42.6

Table 3.31: Peak time for the H/TG hotspots, PMPSE (HRGs), 2020-22

State/UT	Number of hotspots	Peak timing (%)				
		Morning	Afternoon	Evening	Night	All 24 hours
Andhra Pradesh	265	18.8	29.0	67.5	69.4	4.1
Arunachal Pradesh	51	13.7	39.2	94.1	60.7	7.8
Assam	197	36.5	60.4	79.7	23.3	5.5
Bihar	58	27.5	56.9	74.1	25.8	15.5
Chandigarh	15	73.3	20.0	86.6	80.0	-
Chhattisgarh	102	18.6	10.7	51.9	64.7	0.9
Delhi	667	11.3	15.1	31.9	89.8	7.9
Goa	9	-	-	88.8	100.0	-
Gujarat	117	31.6	49.5	86.3	48.7	16.2
Haryana	151	35.7	32.4	74.8	74.8	23.1
Himachal Pradesh	33	51.5	60.6	72.7	54.5	36.3
Jammu & Kashmir	46	23.9	50.0	82.6	54.3	10.8
Jharkhand	43	11.6	32.5	95.3	51.1	-
Karnataka	860	27.4	50.7	78.1	37.6	13.0
Kerala	273	12.8	11.3	76.9	82.0	2.2
Madhya Pradesh	129	17.8	19.3	79.0	55.8	9.3
Maharashtra	477	20.5	23.9	58.0	74.0	5.4
Manipur	59	-	23.7	98.3	32.2	-
Meghalaya	8	25.0	37.5	100.0	75.0	25.0
Mizoram						
Nagaland	13	53.8	53.8	76.9	46.1	7.6
Odisha	717	22.7	28.3	65.8	32.7	2.7
Puducherry	21	38.1	33.3	52.3	100.0	28.5
Punjab	90	25.5	36.6	71.1	54.4	10.0
Rajasthan	203	23.1	32.5	79.3	27.5	9.3
Sikkim						
Tamil Nadu	677	19.7	19.6	73.5	79.1	3.9
Telangana	32	9.3	62.5	65.6	37.5	-
Tripura	9	33.3	33.3	33.3	-	-
Uttar Pradesh	944	25.8	35.8	60.8	41.9	7.9
Uttarakhand	33	15.1	24.2	57.5	57.5	12.1
West Bengal	286	17.1	25.8	81.1	61.5	5.2
India	6,585	22.1	31.0	67.1	56.2	7.5

3.4.7 Estimated Size of the H/TG Population

Nationally, the total estimated size of the H/TG population was around 96,193 (85,206-1,07,174), comprising 87,385 (76,398-98,366) from 6,585 hotspots, 7,767 associated with 720 network operators and 1,041 from 886 link worker villages. A

significant number of H/TG people were estimated in Delhi (17,907), Karnataka (10,926), Maharashtra (10,323), Uttar Pradesh (9,846), and Tamil Nadu (9,211). These five states accounted for more than half of the estimated H/TG people at the national level. Compared to urban areas, few H/TG people were identified in the rural areas.

Around 30.5% of the estimated H/TG people were below the age of 25 years nationwide. However, in some of the states, a significant majority of the IDUs were young and below 25 years of age including Arunachal Pradesh (75.8%), Meghalaya (71.2%), Puducherry (73.5%), Tripura (51%), Chandigarh (48.4%), Chhattisgarh (47.9%) and Jammu & Kashmir (46.8%). Conversely, in Bihar, Goa and Gujarat, the proportion of younger H/TG people was lower than that of other States/UTs.

In addition to collecting data on population size, key informants were also asked about H/TG people associated with the hotspot who either work or visit other hotspots within the district. Approximately a little more than one-fourth of the estimated H/TG people (25.9%) were noted to visit other hotspots within the district. Contrary to the national estimate, Maharashtra (79.4%), Nagaland (66.1%), Puducherry (63%), Chandigarh (61%), Andhra Pradesh (52.7%), and Telangana (50.8%), a higher proportion of H/TG people visited other hotspots. In contrast, in Jharkhand (18.4%), West Bengal (17.9%), Kerala (17%) and Delhi (16.9%), fewer H/TG people visited other hotspots (Table 3.32).

Additionally, network operators were asked whether H/TG people associated with them were also in contact/linked with other network operators and if they also visited physical hotspots for engaging in high-risk behaviours. Around 21.5% of the network operators stated that H/TG people in their networks were also associated with other network operators, and around 42.7% visited physical hotspots to engage in high-risk behaviours. In Assam (55.4%), Meghalaya

(50.2%), and Haryana (42.6%), the majority of the network operators mentioned that H/TG people associated with them were also linked to other network operators. Similarly, in Chhattisgarh (85.3%), Goa (82.9%), Meghalaya (56.1%), Maharashtra (53.7%), Telangana (49.8%), and Delhi (47.2%), majority of the H/TG people associated with network operators also visit physical hotspots.

During PMPSE 2020-22, data regarding the presence of HRGs in the link worker villages was also collected. Essential details about the village, population, administrative block/mandal/tehsil, and coverage by LWS were collected, along with the minimum and maximum number of HRGs in each LW village. Additionally, data on whether the HRGs in the village also visit nearby urban areas to engage in high-risk behaviours.

Nationally, 85.7% of the villages (886) included in PMPSE 2020-22 were covered by LWS. At the State/UT level, the LWS coverage ranged from 68.4 to 100%. As mentioned previously, 1,041 H/TG people were estimated from the link worker villages. More than 200 H/TG people were estimated in Maharashtra and Odisha, while more than 150 were estimated in Gujarat and West Bengal. Notably, at the national level, 44.5% of the H/TG people visited nearby urban areas to engage in high-risk behaviours. At the State/UT level, more than half of the estimated H/TG people in Andhra Pradesh and Gujarat visited nearby urban areas to engage in high-risk behaviours. Conversely, in Odisha, 27.2% of the H/TG people were visiting nearby urban areas.

Table 3.32: Estimated size of H/TG people at hotspots associated with network operators and in link worker villages

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	H/TG who go to the other hotspot (%)	H/TG below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	H/TG who go to other NO (%)	H/TG who also visit physical hotspot (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		H/TG who go to nearby urban areas (%)
Andhra Pradesh	265	5,253 (4,308-6,198)	52.7	38.0	9	62	21.7	35.6	53	94.3	49	54.1	5,364 (4,419-6,309)
Arunachal Pradesh	51	140 (112-168)	42.6	75.8	-	-	-	-	-	-	-	-	140 (112-168)
Assam	197	2246 (1,951-2,542)	46.4	40.1	43	235	55.4	33.3	-	-	-	-	2,481 (2,186-2,777)
Bihar	58	756 (684-827)	22.8	17.8	12	89	9.1	27.7	2	100.0	1	*	846 (775-918)
Chandigarh	15	155 (133-176)	61.0	48.4	1	9	0.0	0.0					164 (142-185)
Chhattisgarh	102	1082 (954-1,210)	44.6	47.9	5	9	75.3	85.3	33	100.0	27	44.2	1,118 (990-1,246)
Delhi	667	16166 (14,447-17,886)	16.9	34.7	56	1,741	3.4	47.2	-	-	-	-	17,907 (16,188-19,626)
Goa	9	119 (103-135)	46.0	12.2	2	13	24.4	82.9	-	-	-	-	132 (116-148)
Gujarat	117	2,436 (2,227-2,645)	25.8	9.1	-	-	-	-	134	99.3	169	52.5	2,605 (2,396-2,814)
Haryana	151	1,410 (1,250-1,569)	26.9	27.1	6	25	42.6	39.7	-	-	-	-	1,435 (1,275-1,594)
Himachal Pradesh	33	251 (216-287)	43.5	24.4	1	7	53.8	38.5	-	-	-	-	258 (223- 293)
Jammu And Kashmir	46	551 (468-634)	32.4	46.8	7	63	39.6	31.7	-	-	-	-	614 (531-696)
Jharkhand	43	483 (421-544)	18.4	21.2	-	-	-	-	-	-	-	-	483 (421- 544)
Karnataka	860	10,017 (8,927-11,108)	23.5	28.9	115	894	28.6	26.1	23	82.6	15	52.2	10,926 (9,836-12,016)
Kerala	273	2,579 (2,160-3,029)	17.0	17.3	1	7	16.7	42.0	-	-	-	-	2,604 (2,167-3,036)
Madhya Pradesh	129	1,183 (993-1,373)	42.5	33.2	38	425	36.5	23.8	5	100.0	6	26.7	1,614 (1,424-1,803)

Continued

Continued

State/UT	Hotspot			Network operators				Link worker villages				Total adjusted estimated size	
	Number of hotspots	Adjusted size estimate at hotspots	H/TG who go to the other hotspot (%)	H/TG below 25 years of age (%)	No. of NO	Adjusted size estimate at NO	H/TG who go to other NO (%)	H/TG who also visit physical hotspot (%)	Number of villages	Currently covered under LWS	Adjusted size estimate in LWS village		H/TG who go to nearby urban areas (%)
Maharashtra (including Mumbai)	477	9,360 (8,288-10,433)	79.4	24.5	46	698	18.8	53.7	183	84.7	265	33.8	10,323 (9,250- 11,396)
Manipur	59	468 (395-541)	37.5	35.9	-	-	-	-	-	-	-	-	468 (395-541)
Meghalaya	8	67 (41-92)	38.3	71.2	5	42	50.2	56.1	1	100.0	1	*	110 (85-135)
Mizoram	-	-	-	-	-	-	-	-	-	-	-	-	-
Nagaland	13	82 (62-102)	66.1	35.3	-	-	-	-	-	-	-	-	82 (62- 102)
Odisha	717	6,550 (5,618-7,482)	36.1	32.1	91	459	22.7	45.5	175	78.3	200	27.2	7,209 (6,277-8,141)
Puducherry	21	203 (177-229)	63.0	73.5	-	-	-	-	-	-	-	-	203 (177-229)
Punjab	90	1,228 (1,080-1,377)	28.2	28.6	8	85	38.5	41.7	11	100.0	3	*	1,316 (1,167- 1,464)
Rajasthan	203	1,855 (1,611-2,098)	28.0	38.1	51	271	21.4	49.1	-	-	-	-	2,126 (1,883-2,369)
Sikkim	-	-	-	-	-	-	-	-	-	-	-	-	-
Tamil Nadu	677	8,287 (6,811-9,763)	37.9	34.0	59	827	35.0	39.2	134	70.1	97	44.0	9,211 (7,734- 10,687)
Telangana	32	787 (711-863)	50.8	41.8	18	193	20.4	49.8	19	68.4	15	64.9	995 (919-1,072)
Tripura	9	41 (36-46)	46.5	51.0	6	118	4.4	16.7	-	-	-	-	159 (154-164)
Uttar Pradesh	944	8,937 (7,971-9,903)	24.1	21.1	105	894	28.9	28.7	15	80.0	15	61.1	9,846 (8,880-10,813)
Uttarakhand	33	319 (291-347)	40.4	25.6	2	2	0.0	*	-	-	-	-	321 (293-349)
West Bengal	286	4,357 (3,953-4,760)	17.9	35.0	33	600	9.9	16.0	98	95.9	178	41.8	5,134 (4,731-5,538)
India	6,585	87,385 (76,398-98,366)	25.9	30.5	720	7,767	21.5	42.7	886	85.7	1,041	44.5	96,193 (85,206-1,07,174)

*Percentage not presented due to small estimated population size.

Chapter 4

Discussion

The commitment to evidence-driven programme planning and management has been central to India's national AIDS response. As the HRGs continue to carry the burden of the HIV epidemic in the country, the PMPSE estimates will guide the strategic actions towards closing the gap in prevention coverage and reaching out to the communities most affected and infected by HIV.

Conducted in 651 districts spanning 32 States/UTs, the PMPSE exercise (2020-2022) stands as one of the most extensive endeavours to date for estimating the size of the female sex workers, men who have sex with men, injecting drug users, and hijra/transgender people, under NACP of India. Integrated into the implementation framework of NACPs, the community-led PMPSE is recommended as the most feasible approach in the Indian context for estimating the size of the HRGs. During the different phases of the NACP, MPSE has evolved and expanded, making significant strides in informing programme planning and implementation, thus bolstering an evidence-based approach to the AIDS response nationwide.

During PMPSE 2020-22, while data collection primarily occurred at physical venues, a significant milestone was the mapping of 14,044 network operators associated/linked with/to the HRGs across various States/UTs. This presents an opportunity for the programme to engage with hidden populations who may not visit hotspots but rely on these networks for socializing, soliciting clients, seeking sexual or injecting partners or exchanging information about sites and availability of drugs. This could involve collaborating with the network operators

to disseminate information about HIV prevention, testing and treatment services.

Similarly, the identification of approximately 35% of new or previously uncovered hotspots during PMPSE highlights the dynamic nature of HIV transmission and underscores the importance of continuous surveillance efforts. Moving forward, the TI programme may focus on expansion in the newly identified areas by engaging with the local communities to tailor interventions and fostering new partnerships with local organizations to ensure sustainable and community-driven HIV prevention and care strategies.

Further to this, the large number of home-based hotspots across all four typologies indicates a clear shift in the operational dynamics of HRGs from visible to hidden. Therefore, outreach and interventions may pose challenges, necessitating innovative approaches by TI to effectively engage with the populations operating from home-based settings. Additionally, with around one-fourth of the estimated HRGs being below the age of 25 years, it is crucial to create a supportive environment that enables young HRG members to access services and timely treatment.

In conclusion, the integration of PMPSE into the national programme can significantly bridge gaps in coverage, allowing for more effective outreach to previously unreached populations. By identifying and addressing these gaps, the programme can ensure that essential services reach all high-risk groups, thereby enhancing overall intervention effectiveness. This comprehensive approach is a critical step toward achieving the ultimate goal of ending AIDS.

Annexure 1

District Fact Sheets

Andhra Pradesh

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anantapur	206	2,833 (2,456–3,209)	17	77	103	1,542	4,452 (4,075–4,828)
Annamayya	232	3,187 (2,658–3,715)	2	9	60	226	3,421 (2,893–3,949)
Bapatla	130	3,860 (3,522–4,198)	4	13	–	–	3,873 (3,535–4,211)
Chittoor	185	2,324 (1,967–2,680)	10	20	–	–	2,343 (1,987–2,700)
East Godavari	30	928 (764–1,092)	–	–	–	–	928 (764–1,092)
Eluru	32	776 (679–873)	–	–	115	772	1,548 (1,451–1,645)
Guntur	177	3,638 (2,923–4,353)	–	–	95	456	4,094 (3,379–4,809)
Kakinada	175	3,806 (3,207–4,405)	12	87	111	789	4,682 (4,083–5,280)
Konaseema	32	898 (774–1,023)	6	61	–	–	959 (835–1,084)
Krishna	365	12,992 (10,864–15,120)	37	218	108	2,227	15,437 (13,309–17,565)
Kurnool	332	13,202 (10,862–15,543)	15	66	159	4,006	17,274 (14,933–19,614)
Nandyal	393	26,502 (22,552–30,451)	17	86	–	–	26,587 (22,637–30,537)
Palnadu	124	3,320 (2,791–3,849)	–	–	–	–	3,320 (2,791–3,849)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Prakasam	114	3,548 (3,234–3,863)	4	48	107	233	3,829 (3,515–4,143)
Spsr Nellore	166	4,617 (3,891–5,342)	1	10	136	941	5,568 (4,842–6,293)
Sri Satya Sai	187	4,274 (3,673–4,875)	15	99	–	–	4,373 (3,773–4,974)
Srikakulam	85	1,224 (899–1,549)	1	17	132	495	1,736 (1,411–2,061)
Visakhapatnam	269	3,272 (2,789–3,755)	6	51	178	2,257	5,580 (5,097–6,064)
Vizianagaram	132	1,787 (1,336–2,239)	1	–	140	550	2,337 (1,886–2,789)
West Godavari	92	2,855 (2,166–3,544)	–	–	–	–	2,855 (2,166–3,544)
Y.S.R.	135	2,670 (2,024–3,316)	–	–	154	1,500	4,170 (3,524–4,816)
Andhra Pradesh	3,593	1,02,512 (86,032–1,18,993)	148	861	1,598	15,994	1,19,367 (1,02,886–1,35,848)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anantapur	33	377 (324–429)	1	3	–	–	379 (327–432)
Annamayya	57	841 (696–987)	1	10	3	22	873 (728–1,019)
Bapatla	9	111 (95–127)	1	11	–	–	122 (105–138)
Chittoor	33	227 (195–259)	–	–	–	–	227 (195–259)
East Godavari	2	152 (125–178)	–	–	–	–	152 (125–178)
Eluru	4	102 (91–113)	–	–	41	38	140 (129–151)
Guntur	24	669 (595–742)	–	–	55	54	723 (649–796)
Kakinada	27	416 (343–489)	–	–	5	8	432 (359–505)
Konaseema	18	681 (571–791)	–	–	–	–	681 (571–791)
Krishna	82	2,717 (2,371–3,063)	8	66	46	94	2,877 (2,531–3,223)
Kurnool	183	5,688 (4,791–6,584)	–	–	121	304	5,992 (5,095–6,888)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Nandyal	86	3,648 (2,976–4,319)	17	145	–	–	3,793 (3,121–4,464)
Palnadu	34	996 (851–1,141)	–	–	–	–	996 (851–1,141)
Prakasam	10	318 (277–359)	1	12	13	27	357 (317–398)
Spsr Nellore	22	506 (435–576)	–	–	9	13	519 (448–589)
Sri Satya Sai	15	256 (222–289)	4	33	–	–	289 (255–322)
Srikakulam	34	582 (446–718)	–	–	20	35	617 (481–753)
Visakhapatnam	88	1,204 (1,026–1,382)	–	–	1	–	1,204 (1,026–1,382)
Vizianagaram	33	449 (359–538)	3	7	3	5	460 (371–549)
West Godavari	20	464 (346–582)	1	12	–	–	476 (358–594)
Y.S.R.	42	683 (453–912)	–	–	53	69	752 (522–981)
Andhra Pradesh	856	21,084 (17,589–24,579)	39	307	370	669	22,060 (18,565–25,555)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Krishna	61	624 (513–735)	1	40	–	–	664 (553–775)
Spsr Nellore	26	277 (204–350)	–	–	–	–	277 (204–350)
Visakhapatnam	60	392 (304–480)	–	–	–	–	392 (304–480)
Andhra Pradesh	147	1,292 (1,020–1,564)	1	40	–	–	1,332 (1,060–1,604)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anantapur	12	175 (159–192)	3	5	–	–	181 (164–197)
Annamayya	3	22 (20–25)	–	–	–	–	22 (20–25)
Bapatla	4	52 (46–58)	–	–	–	–	52 (46–58)
East Godavari	4	62 (51–74)	–	–	–	–	62 (51–74)
Eluru	5	105 (91–118)	–	–	–	–	105 (91–118)
Guntur	5	72 (62–82)	–	–	9	4	76 (66–86)
Kakinada	32	582 (502–661)	4	38	2	2	622 (542–701)
Konaseema	2	37 (32–42)	–	–	–	–	37 (32–42)
Krishna	30	353 (302–404)	–	–	6	15	368 (317–419)
Kurnool	55	1,436 (1,179–1,692)	–	–	29	21	1,457 (1,200–1,713)
Nandyal	22	917 (695–1,139)	–	–	–	–	917 (695–1,139)
Palnadu	3	126 (105–148)	–	–	–	–	126 (105–148)
Prakasam	3	61 (52–69)	1	12	3	2	75 (66–84)
Spsr Nellore	11	218 (183–252)	–	–	2	3	221 (186–255)
Sri Satya Sai	1	31 (26–35)	–	–	–	–	31 (26–35)
Srikakulam	11	124 (101–147)	–	–	1	1	125 (102–148)
Visakhapatnam	39	632 (540–723)	–	–	–	–	632 (540–723)
Vizianagaram	7	99 (76–122)	–	–	–	–	99 (76–122)
West Godavari	5	60 (42–77)	1	6	–	–	66 (48–83)
Y.S.R.	11	90 (43–138)	–	–	1	1	91 (44–139)
Andhra Pradesh	265	5,253 (4,308–6,198)	9	62	53	49	5,364 (4,419–6,309)

Arunachal Pradesh

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Changlang	25	310 (271–349)	–	–	–	–	310 (271–349)
East Kameng	23	317 (285–349)	–	–	–	–	317 (285–349)
East Siang	23	293 (269–316)	–	–	–	–	293 (269–316)
Leparada	13	212 (196–229)	–	–	–	–	212 (196–229)
Lohit	67	602 (544–659)	–	–	–	–	602 (544–659)
Lower Dibang Valley	8	62 (57–68)	–	–	–	–	62 (57–68)
Lower Siang	17	268 (242–294)	–	–	–	–	268 (242–294)
Lower Subansiri	56	542 (471–613)	–	–	–	–	542 (471–613)
Namsai	74	788 (728–848)	–	–	–	–	788 (728–848)
Papum Pare	130	1,483 (1,310–1,657)	–	–	–	–	1,483 (1,310–1,657)
Siang	5	33 (30–35)	–	–	–	–	33 (30–35)
Tirap	10	197 (181–212)	–	–	–	–	197 (181–212)
Upper Siang	22	306 (286–326)	–	–	–	–	306 (286–326)
Upper Subansiri	32	385 (335–435)	–	–	–	–	385 (335–435)
West Kameng	26	505 (461–549)	–	–	–	–	505 (461–549)
West Siang	39	639 (598–680)	–	–	–	–	639 (598–680)
Arunachal Pradesh	570	6,941 (6,264–7,618)	–	–	–	–	6,941 (6,264–7,618)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Siang	18	219 (204–234)	–	–	–	–	219 (204–234)
Lower Subansiri	1	4 (3–4)	–	–	–	–	4 (3–4)
Namsai	5	24 (19–28)	–	–	–	–	24 (19–28)
Papum Pare	95	577 (511–642)	–	–	–	–	577 (511–642)
West Siang	6	78 (72–83)	–	–	–	–	78 (72–83)
Arunachal Pradesh	125	901 (810–991)	–	–	–	–	901 (810–991)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Changlang	16	210 (187–232)	–	–	–	–	210 (187–232)
East Kameng	15	237 (212–261)	–	–	–	–	237 (212–261)
East Siang	59	956 (867–1,045)	–	–	–	–	956 (867–1,045)
Leparada	6	47 (40–54)	–	–	–	–	47 (40–54)
Lohit	9	78 (67–89)	–	–	–	–	78 (67–89)
Lower Dibang Valley	2	11 (9–12)	–	–	–	–	11 (9–12)
Lower Siang	9	88 (78–98)	–	–	–	–	88 (78–98)
Lower Subansiri	10	149 (134–163)	–	–	–	–	149 (134–163)
Namsai	73	799 (742–856)	–	–	–	–	799 (742–856)
Papum Pare	109	1,282 (1,175–1,390)	–	–	–	–	1,282 (1,175–1,390)
Siang	3	29 (25–33)	–	–	–	–	29 (25–33)
Tirap	6	98 (90–105)	–	–	–	–	98 (90–105)
Upper Siang	9	78 (71–84)	–	–	–	–	78 (71–84)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Upper Subansiri	28	312 (266–357)	–	–	–	–	312 (266–357)
West Kameng	17	265 (244–287)	–	–	–	–	265 (244–287)
West Siang	36	506 (471–541)	–	–	–	–	506 (471–541)
Arunachal Pradesh	407	5,143 (4,677–5,608)	–	–	–	–	5,143 (4,677–5,608)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Siang	7	42 (38–47)	–	–	–	–	42 (38–47)
Namsai	3	9 (7–11)	–	–	–	–	9 (7–11)
Papum Pare	41	88 (67–110)	–	–	–	–	88 (67–110)
Arunachal Pradesh	51	140 (112–168)	–	–	–	–	140 (112–168)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Barpeta	105	2,179 (1,945–2,413)	1	4	–		2,183 (1,949–2,418)
Bongaigaon	64	1,695 (1,512–1,878)	–	–	–	–	1,695 (1,512–1,878)
Cachar	141	2,231 (1,979–2,484)	6	85	–	–	2,316 (2,063–2,568)
Chirang	22	525 (468–581)	–	–	–	–	525 (468–581)
Darrang	101	1,914 (1,691–2,136)	–	–	–	–	1,914 (1,691–2,136)
Dhemaji	81	965 (849–1,080)	15	117	–	–	1,081 (966–1,196)
Dhubri	88	1,709 (1,525–1,892)	4	24	–	–	1,733 (1,549–1,916)
Dibrugarh	221	2,481 (1,678–3,285)	–	–	–	–	2,481 (1,678–3,285)
Dima Hasao	17	256 (227–285)	–	–	–	–	256 (227–285)
East Karbi Anglong	90	2,143 (1,878–2,408)	16	113	–	–	2,256 (1,991–2,521)
Goalpara	53	1,482 (1,367–1,598)	6	46	–	–	1,529 (1,413–1,645)
Golaghat	97	1,002 (885–1,118)	9	16	–	–	1,018 (901–1,134)
Hailakandi	32	683 (622–743)	–	–	–	–	683 (622–743)
Hojai	26	742 (638–847)	–	–	–	–	742 (638–847)
Jorhat	41	747 (693–801)	21	93	–	–	841 (787–894)
Kamrup	49	1,822 (1,507–2,137)	1	10	–	–	1,832 (1,517–2,147)
Kamrup Metro	245	3,161 (2,710–3,612)	59	392	–	–	3,553 (3,102–4,004)
Lakhimpur	38	731 (636–826)	11	20	–	–	750 (655–845)
Majuli	77	634 (500–767)	–	–	–	–	634 (500–767)
Marigaon	88	907 (824–990)	12	47	–	–	954 (871–1,037)
Nagaon	81	2,004 (1,833–2,175)	10	62	–	–	2,066 (1,894–2,237)
Nalbari	54	2,521 (2,436–2,606)	1	11	–	–	2,532 (2,447–2,617)
Sivasagar	50	2,470 (2,261–2,678)	3	15	–	–	2,485 (2,277–2,693)
Sonitpur	97	1,559 (1,256–1,861)	6	32	–	–	1,591 (1,288–1,893)
Tinsukia	56	1,829 (1,689–1,969)	–	–	–	–	1,829 (1,689–1,969)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Udalguri	20	244 (194–293)	1	–	–	–	244 (194–293)
Assam	2,034	38,634 (33,804–43,463)	182	1,087	–	–	39,721 (34,891–44,550)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Barpeta	88	1,537 (1,371–1,704)	–	–	–	–	1,537 (1,371–1,704)
Bongaigaon	1	9 (8–10)	–	–	–	–	9 (8–10)
Cachar	31	434 (371–496)	–	–	–	–	434 (371–496)
Darrang	2	28 (25–30)	–	–	–	–	28 (25–30)
Dhemaji	7	78 (67–89)	–	–	–	–	78 (67–89)
Dhubri	8	93 (82–104)	1	7	–	–	100 (89–111)
Dibrugarh	145	2,078 (1,572–2,583)	–	–	–	–	2,078 (1,572–2,583)
East Karbi Anglong	9	127 (108–146)	6	8	–	–	136 (116–155)
Goalpara	35	496 (429–562)	1	3	–	–	499 (432–565)
Golaghat	45	425 (377–473)	5	7	–	–	432 (384–480)
Hailakandi	4	74 (65–82)	–	–	–	–	74 (65–82)
Jorhat	15	253 (219–287)	11	92	–	–	345 (311–379)
Kamrup	18	510 (365–654)	–	–	–	–	510 (365–654)
Kamrup Metro	227	2,994 (2,551–3,436)	49	306	–	–	3,300 (2,857–3,742)
Lakhimpur	14	187 (165–210)	–	–	–	–	187 (165–210)
Majuli	51	396 (322–470)	–	–	–	–	396 (322–470)
Marigaon	8	150 (139–161)	–	–	–	–	150 (139–161)
Nagaon	9	200 (187–213)	7	92	–	–	292 (279–304)
Nalbari	42	3,246 (3,113–3,380)	2	12	–	–	3,258 (3,124–3,392)
Sivasagar	50	2,000 (1,795–2,204)	–	–	–	–	2,000 (1,795–2,204)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sonitpur	33	620 (502–502)	6	15	–	–	635 (517–753)
Tinsukia	16	193 (171–215)	–	–	–	–	193 (171–215)
Assam	858	16,127 (14,005–18,248)	89	540	–	–	16,667 (14,545–18,789)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Barpeta	38	998 (875–1,121)	–	–	–	–	998 (875–1,121)
Cachar	96	1,659 (1,458–1,860)	–	–	–	–	1,659 (1,458–1,860)
Chirang	2	30 (25–35)	–	–	–	–	30 (25–35)
Darrang	18	287 (245–329)	–	–	–	–	287 (245–329)
Dhemaji	79	978 (876–1,080)	3	21	–	–	999 (897–1,100)
Dhubri	12	233 (208–259)	1	5	–	–	239 (214–264)
Dibrugarh	179	2,645 (2,145–3,144)	–	–	–	–	2,645 (2,145–3,144)
Dima Hasao	11	294 (273–315)	1	47	–	–	341 (320–362)
East Karbi Anglong	66	1,256 (1,027–1,484)	3	9	–	–	1,265 (1,036–1,494)
Goalpara	24	485 (425–546)	2	23	–	–	508 (448–569)
Golaghat	36	1,631 (1,476–1,785)	4	7	–	–	1,637 (1,482–1,792)
Hailakandi	37	839 (739–938)	–	–	–	–	839 (739–938)
Hojai	11	169 (145–193)	–	–	–	–	169 (145–193)
Kamrup	17	892 (687–1,098)	–	–	–	–	892 (687–1,098)
Kamrup Metro	256	5,273 (4,620–5,926)	67	490	–	–	5,763
Lakhimpur	24	418 (356–480)	–	–	–	–	418 (356–480)
Marigaon	10	588 (555–621)	–	–	–	–	588 (555–621)
Nagaon	54	1,748 (1,612–1,883)	17	236	–	–	1,983 (1,847–2,119)
Nalbari	54	1,545 (1,464–1,626)	–	–	–	–	1,545 (1,464–1,626)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sivasagar	44	1,473 (1,321–1,624)	–	–	–	–	1,473 (1,321–1,624)
Sonitpur	47	888 (714–1,063)	7	25	–	–	913 (738–1,087)
Tinsukia	16	845 (756–935)	–	–	–	–	845 (756–935)
Udalguri	14	121 (101–141)	–	–	–	–	121 (101–141)
Assam	1,145	25,293 (22,101–28,485)	105	862	–	–	26,156 (22,963–29,348)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Barpeta	19	111 (93–128)	–	–	–	–	111 (93–128)
Bongaigaon	2	16 (14–18)	–	–	–	–	16 (14–18)
Cachar	2	6 (3–8)	–	–	–	–	6 (3–8)
Darrang	3	43 (36–51)	–	–	–	–	43 (36–51)
Dhubri	1	12 (10–13)	1	10	–	–	22 (20–24)
East Karbi Anglong	8	100 (86–115)	3	9	–	–	109 (95–124)
Goalpara	2	65 (57–72)	–	–	–	–	65 (57–72)
Golaghat	4	19 (17–21)	–	–	–	–	19 (17–21)
Hojai	2	39 (35–43)	–	–	–	–	39 (35–43)
Kamrup	10	61 (47–74)	–	–	–	–	61 (47–74)
Kamrup Metro	127	1,250 (1,059–1,440)	36	190	–	–	1,440 (1,249–1,631)
Nagaon	4	87 (81–93)	2	20	–	–	108 (101–114)
Nalbari	6	298 (284–312)	1	5	–	–	303 (289–317)
Sivasagar	3	93 (89–97)	–	–	–	–	93 (89–97)
Sonitpur	2	33 (26–39)	–	–	–	–	33 (26–39)
Tinsukia	2	16 (13–18)	–	–	–	–	16 (13–18)
Assam	197	2,246 (1,951–2,542)	43	235	–	–	2,481 (2,186–2,777)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aurangabad	8	179 (170–188)	–	–	–	–	179 (170–188)
Begusarai	71	1,501 (1,391–1,610)	6	47	100	601	2,149 (2,039–2,258)
Bhojpur	25	565 (541–588)	3	25	0	0	590 (566–613)
Buxar	10	196 (181–211)	3	37	0	0	233 (218–248)
Darbhanga	36	133 (113–153)	–	–	100	491	624 (604–644)
Kaimur (Bhabua)	3	30 (19–41)	1	12	–	–	42 (31–53)
Lakhisarai	31	633 (584–584)	2	9	–	–	642 (593–691)
Nalanda	38	755 (709–709)	4	–	–	–	755 (709–800)
Patna	14	339 (315–363)	3	82	–	–	421 (398–445)
Purbi Champaran	61	1,060 (966–1,155)	2	18	–	–	1,078 (984–1,173)
Purnia	19	361 (320–403)	5	38	–	–	399 (358–441)
Rohtas	62	1,253 (1,169–1,337)	3	14	–	–	1,266 (1,182–1,350)
Saran	33	432 (397–467)	1	5	100	483	920 (885–955)
Sheikhpura	6	180 (169–191)	1	4	–	–	184 (173–195)
Sheohar	9	152 (140–164)	–	–	–	–	152 (140–164)
Sitamarhi	33	238 (232–244)	–	–	100	534	772 (766–778)
Siwan	34	744 (706–782)	3	–	–	–	744 (706–782)
Vaishali	23	502 (468–535)	2	29	–	–	531 (497–564)
Bihar	516	9,253 (8,590–9,915)	39	320	400	2,109	11,682 (11,020–12,344)

Continued

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Begusarai	12	234 (217–251)	–	–	7	14	248 (231–265)
Bhojpur	10	236 (223–249)	2	14	–	–	250 (237–263)
Buxar	5	86 (81–91)	4	52	–	–	138 (133–143)
Darbhanga	1	2 (2–2)	–	–	29	44	46 (46–46)
Kaimur (Bhabua)	1	12 (9–15)	–	–	–	–	12 (9–15)
Lakhisarai	8	103 (91–114)	–	–	–	–	103 (91–114)
Nalanda	5	93 (86–100)	1	–	–	–	93 (86–100)
Patna	21	508 (470–546)	2	53	–	–	561 (523–599)
Purbi Champaran	3	49 (44–54)	–	–	–	–	49 (44–54)
Purnia	1	21 (19–23)	–	–	–	–	21 (19–23)
Rohtas	1	24 (21–27)	3	16	–	–	39 (37–42)
Saran	4	9 (8–9)	–	–	86	172	181 (180–181)
Sheikhpura	3	54 (50–57)	–	–	–	–	54 (50–57)
Sheohar	7	120 (112–128)	–	–	–	–	120 (112–128)
Siwan	10	113 (103–123)	1	–	–	–	113 (103–123)
Vaishali	9	195 (182–209)	2	11	–	–	206 (192–219)
Bihar	101	1,857 (1,717–1,997)	15	145	215	374	2,376 (2,236–2,517)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aurangabad	6	180 (166–195)	–	–	–	–	180 (166–195)
Banka	–	–	–	–	–	–	–
Begusarai	15	286 (259–313)	2	9	4	5	300 (273–327)
Bhojpur	17	326 (302–350)	–	–	–	–	326 (302–350)
Buxar	13	266 (257–274)	4	63			329 (320–337)
Darbhanga	–	–	–	–	14	22	22 (22–22)
Kaimur (Bhabua)	38	747 (667–826)	7	83	–	–	829 (749–909)
Lakhisarai	16	245 (219–272)	1	6	–	–	251 (225–278)
Nalanda	26	361 (336–385)	3	–	–	–	361 (336–385)
Patna	59	1,323 (1,229–1,418)	2	25	–	–	1,348 (1,254–1,443)
Purbi Champaran	1	16 (14–17)	–	–	–	–	16 (14–17)
Purnia	1	10 (9–11)	–	–	–	–	10 (9–11)
Rohtas	8	228 (209–247)	–	–	–	–	228 (209–247)
Saran	0	0	–	–	41	49	49 (49–49)
Sheikhpura	2	42 (37–46)	–	–	0	0	42 (37–46)
Sitamarhi	1	20 (20–20)	–	–	61	89	109 (109–109)
Siwan	11	177 (168–186)	2	–	–	–	177 (168–186)
Vaishali	1	9 (8–10)	–	–	–	–	9 (8–10)
Bihar	215	4,235 (3,899–4,570)	21	186	120	165	4,585 (4,250–4,921)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aurangabad	2	19 (16–21)	–	–	–	–	19 (16–21)
Begusarai	8	64 (57–70)	–	–	–	–	64 (57–70)
Bhojpur	3	69 (66–72)	1	11	–	–	80 (77–83)
Buxar	8	99 (89–108)	3	37	–	–	136 (126–145)
Darbhanga	3	13 (11–15)	–	–	1	–	13 (11–15)
Kaimur (Bhabua)	3	36 (25–47)	1	15	–	–	50 (39–61)
Lakhisarai	1	17 (16–18)	–	–	–	–	17 (16–18)
Nalanda	2	26 (25–27)	–	–	–	–	26 (25–27)
Patna	2	55 (52–58)	–	–	–	–	55 (52–58)
Purbi Champaran	4	51 (47–56)	–	–	–	–	51 (47–56)
Purnia	1	18 (14–21)	1	4	–	–	22 (18–25)
Rohtas	2	31 (28–35)	–	–	–	–	31 (28–35)
Saran	3	15 (14–16)	3	16	–	–	31 (30–32)
Sheikhpura	1	11 (10–12)	–	–	–	–	11 (10–12)
Sheohar	–	–	1	7	–	–	7 (7–7)
Sitamarhi	–	–	–	–	1	1	1 (1–1)
Siwan	10	165 (153–177)	2	–	–	–	165 (153–177)
Vaishali	5	68 (61–74)	–	–	–	–	68 (61–74)
Bihar	58	756 (684–827)	12	89	2	1	846 (775–918)

Chandigarh

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chandigarh	131	3,051 (2,715–3,386)	44	282	–	–	3,333
Chandigarh	131	3,051 (2,715–3,386)	44	282	–	–	3,333 (2,997–3,668)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chandigarh	106	2,428 (2,165–2,691)	–	–	16	141	2,569 (2,306–2,832)
Chandigarh	106	2,428 (2,165–2,691)	–	–	16	141	2,569 (2,306–2,832)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chandigarh	82	1,871 (1,664–2,078)	6	37	–	–	1,908 (1,701–2,115)
Chandigarh	82	1,871 (1,664–2,078)	6	37	–	–	1,908 (1,701–2,115)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chandigarh	15	155 (133–176)	1	9	–	–	164 (142–185)
Chandigarh	15	155 (133–176)	1	9	–	–	164 (142–185)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Balod	21	180 (164–195)	2	3	–	–	182 (167–197)
Baloda Bazar	43	927 (848–1,006)	3	2	–	–	929 (850–1,009)
Bastar	105	1,741 (1,611–1,871)	5	31	–	–	1,772 (1,642–1,901)
Bemetara	7	135 (129–140)	–	–	–	–	135 (129–140)
Bilaspur	47	1,291 (1,146–1,436)	3	10	64	92	1,393 (1,248–1,538)
Dantewada	49	888 (778–999)	5	39	–	–	927 (816–1,037)
Dhamtari	26	592 (557–628)	5	14	–	–	606 (570–642)
Durg	33	691 (620–763)	–	–	98	386	1,077 (1,006–1,149)
Gariyaband	6	142 (134–150)	–	–	–	–	142 (134–150)
Gaurela–Pendra–Marwahi	6	66 (59–72)	1	3	–	–	69 (63–76)
Janjgir–Champa	25	376 (326–426)	2	17	–	–	392 (343–442)
Jashpur	46	778 (717–839)	5	28	–	–	806 (744–867)
Kabirdham	82	1,441 (1,344–1,538)	2	3	–	–	1,444 (1,347–1,541)
Kanker	43	920 (850–990)	–	–	–	–	920 (850–990)
Korba	32	554 (487–621)	7	26	–	–	580 (513–647)
Korea	27	507 (466–548)	2	13	–	–	520 (479–560)
Mahasamund	12	144 (131–157)	–	–	–	–	144 (131–157)
Mungeli	21	445 (396–494)	1	30	–	–	475 (426–524)
Raigarh	65	1,005 (898–1,113)	7	49	–	–	1,054 (946–1,161)
Raipur	131	2,368 (2,167–2,570)	6	36	63	322	2,726 (2,525–2,928)
Rajnandgaon	42	727 (679–776)	7	51	41	145	924 (875–972)
Surajpur	24	366 (324–409)	2	20	–	–	386 (344–429)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Surguja	36	723 (662–784)	3	49	–	–	772 (711–833)
Chhattisgarh	929	17,008 (15,491–18,524)	68	422	266	945	18,375 (16,859–19,891)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Balod	8	43 (38–48)	–	–	–	–	43 (38–48)
Baloda Bazar	5	73 (63–82)	–	–	–	–	73 (63–82)
Bastar	26	325 (251–369)	–	–	–	–	325 (251–369)
Bemetara	5	37 (33–40)	–	–	–	–	37 (33–40)
Bilaspur	24	367 (326–409)	5	–	40	1	368 (327–410)
Dhamtari	2	36 (34–38)	–	–	–	–	36 (34–38)
Durg	31	414 (386–443)	–	–	26	28	442 (414–471)
Gaurela–Pendra–Marwahi	4	66 (59–72)	–	–	–	–	66 (59–72)
Janjgir–Champa	3	51 (46–56)	–	–	–	–	51 (46–56)
Kanker	4	58 (53–62)	–	–	–	–	58 (53–62)
Korba	14	204 (178–230)	–	–	–	–	204 (178–230)
Korea	5	98 (93–102)	–	–	–	–	98 (93–102)
Raigarh	3	69 (65–73)	–	–	–	–	69 (65–73)
Raipur	31	602 (563–641)	–	–	17	26	628 (589–667)
Rajnandgaon	14	236 (217–254)	3	–	16	20	256 (237–274)
Surajpur	5	71 (64–78)	–	–	–	–	71 (64–78)
Surguja	5	66 (57–75)	–	–	–	–	66 (57–75)
Chhattisgarh	189	2,814 (2,555–3,073)	8	–	99	75	2,889 (2,630–3,148)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bilaspur	92	1,501 (1,373–1,628)	10	127	15	6	1,634 (1,507–1,761)
Durg	19	280 (220–339)	–	–	–	–	280 (220–339)
Gaurela–Pendra–Marwahi	7	73 (66–79)	2	21	–	–	94 (87–100)
Janjgir–Champa	1	15 (13–16)	–	–	–	–	15 (13–16)
Korba	23	491 (419–563)	6	15	–	–	506 (434–578)
Korea	30	550 (488–611)	3	20	–	–	570 (508–631)
Raigarh	11	232 (210–254)	–	–	–	–	232 (210–254)
Raipur	1	5 (4–5)	–	–	–	–	5 (4–5)
Surajpur	34	519 (488–549)	1	15	–	–	534 (503–564)
Surguja	4	55 (49–61)	–	–	–	–	55 (49–61)
Chhattisgarh	222	3,718 (3,331–4,105)	22	199	15	6	3,923 (3,535–4,310)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Balod	6	42 (38–46)	–	–	–	–	42 (38–46)
Baloda Bazar	2	14 (12–15)	–	–	–	–	14 (12–15)
Bastar	10	81 (65–97)	–	–	–	–	81 (65–97)
Bemetara	2	18 (17–20)	–	–	–	–	18 (17–20)
Bilaspur	14	138 (114–161)	3	–	7	–	138 (114–161)
Dhamtari	3	55 (51–59)	–	–	–	–	55 (51–59)
Durg	23	218 (203–233)	–	–	2	1	219 (204–234)
Gaurela-Pendra-Marwahi	1	4 (3–4)	–	–	–	–	4 (3–4)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Janjgir-Champa	1	8 (6–9)	–	–	–	–	8 (6–9)
Kanker	6	73 (68–78)	–	–	–	–	73 (68–78)
Korba	1	4 (2–5)	–	–	–	–	4 (2–5)
Korea	1	23 (22–23)	1	9	–	–	32 (31–32)
Raigarh	2	48 (45–51)	–	–	–	–	48 (45–51)
Raipur	20	235 (203–267)	–	–	22	25	260 (228–292)
Rajnandgaon	8	105 (89–121)	1	–	2	1	106 (90–122)
Surguja	2	18 (16–20)	–	–	–	–	18 (16–20)
Chhattisgarh	102	1,082 (954–1,210)	5	9	33	27	1,118 (990–1,246)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Central	94	3,109 (2,931–3,286)	353	9,152	–	–	12,261 (12,083–12,438)
East	0	0	370	11,309	–	–	11,309 (11,309–11,309)
New Delhi	12	223 (210–237)	81	1,987	–	–	2,210 (2,197–2,224)
North	35	617 (565–669)	176	6,403	–	–	7,020 (6,967–7,072)
North East	5	241 (229–254)	227	10,518	–	–	10,760 (10,747–10,772)
North West	14	189 (168–209)	366	11,139	–	–	11,327 (11,307–11,348)
Shahdara	–	–	79	2,648	–	–	2,648 (2,648–2,648)
South	16	481 (434–527)	298	5,375	–	–	5,856 (5,809–5,902)
South East	11	133 (110–156)	389	6,641	–	–	6,774 (6,752–6,797)
South West	54	1,407 (1,27–1,544)	161	5,625	–	–	7,032 (6,895–7,169)
West	50	1,140 (1,034–1,246)	345	10,064	–	–	11,203 (11,097–11,310)
Delhi	291	7,539 (6,951–8,127)	2,845	80,860	–	–	88,399 (87,811–88,987)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Central	115	3,678 (3,401–3,954)	7	345	–	–	4,023 (3,746–4,299)
East	79	2,145 (1,957–2,332)	14	382	–	–	2,526 (2,338–2,714)
New Delhi	45	1,143 (1,026–1,260)	–	–	–	–	1,143 (1,026–1,260)
North	60	2,171 (2,082–2,260)	12	136	–	–	2,307 (2,219–2,396)
North East	36	1,156 (1,041–1,271)	–	–	–	–	1,156 (1,041–1,271)
North West	150	4,194 (3,824–4,563)	10	223	–	–	4,416 (4,047–4,785)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Shahdara	34	991 (901–1,081)	1	28	–	–	1,019 (929–1,109)
South	107	2,264 (2,136–2,391)	33	242	–	–	2,506 (2,378–2,633)
South East	92	2,029 (1,825–2,233)	19	32	–	–	2,061 (1,857–2,265)
South West	59	2,304 (2,131–2,478)	–	–	–	–	2,304 (2,131–2,478)
West	74	2,369 (2,076–2,662)	14	1,196	–	–	3,565 (3,272–3,858)
Delhi	851	24,442 (22,400–26,484)	110	2,584	–	–	27,026 (24,985–29,068)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Central	195	3,884 (3,432–4,335)	–	–	–	–	3,884 (3,432–4,335)
East	56	1,692 (1,560–1,823)	6	298	–	–	1,989 (1,858–2,121)
New Delhi	43	864 (788–940)	–	–	–	–	864 (788–940)
North	85	2,108 (1,865–2,350)	–	–	–	–	2,108 (1,865–2,350)
North East	143	4,071 (3,547–4,595)	10	219	–	–	4,290 (3,766–4,814)
North West	124	3,215 (2,850–3,579)	3	164	–	–	3,378 (3,013–3,743)
Shahdara	123	3,052 (2,762–3,342)	1	23	–	–	3,075 (2,785–3,364)
South	119	3,324 (3,086–3,561)	–	–	–	–	3,324 (3,086–3,561)
South East	183	4,847 (4,460–5,233)	–	–	–	–	4,847 (4,460–5,233)
South West	47	1,430 (1,362–1,497)	–	–	–	–	1,430 (1,362–1,497)
West	131	3,259 (2,996–3,522)	2	36	–	–	3,295 (3,032–3,558)
Delhi	1,249	31,743 (28,709–34,777)	22	738	–	–	32,481 (29,447–35,515)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Central	73	1,275 (1,155–1,395)	3	125	–	–	1,400 (1,280–1,520)
East	44	806 (727–885)	2	50	–	–	856 (777–935)
New Delhi	72	1,291 (1,115–1,466)	–	–	–	–	1,291 (1,115–1,466)
North	60	1,646 (1,500–1,792)	10	231	–	–	1,877 (1,731–2,023)
North East	33	1,144 (1,049–1,239)	–	–	–	–	1,144 (1,049–1,239)
North West	88	1,945 (1,703–2,186)	4	89	–	–	2,034 (1,792–2,275)
Shahdara	16	352 (324–379)	–	–	–	–	352 (324–379)
South	54	1,186 (1,014–1,358)	–	–	–	–	1,186 (1,014–1,358)
South East	64	1,103 (934–1,272)	–	–	–	–	1,103 (934–1,272)
South West	40	2,353 (2,187–2,520)	1	50	–	–	2,403 (2,237–2,570)
West	123	3,066 (2,739–3,393)	36	1,196	–	–	4,262 (3,935–4,589)
Delhi	667	16,166 (14,447–17,886)	56	1,741	–	–	17,907 (16,188–19,626)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
North Goa	182	3,903 (3,309–4,497)	5	4	–	–	3,907 (3,313–4,501)
South Goa	66	1,133 (992–1,275)	–	–	–	–	1,133 (992–1,275)
Goa	248	5,037 (4,301–5,772)	5	4	–	–	5,040 (4,305–5,776)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
North Goa	70	1,939 (1,529–2,349)	2	8	–	–	1,947 (1,537–2,357)
South Goa	52	1,392 (1,250–1,534)	–	–	–	–	1,392 (1,250–1,534)
Goa	122	3,331 (2,779–3,883)	2	8	–	–	3,339 (2,787–3,891)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
North Goa	13	229 (199–260)	–	–	–	–	229 (199–260)
South Goa	9	72 (48–97)	–	–	–	–	72 (48–97)
Goa	22	302 (247–356)	–	–	–	–	302 (247–356)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
North Goa	6	95 (81–108)	–	–	–	–	95 (81–108)
South Goa	3	24 (22–27)	2	13	–	–	37 (35–40)
Goa	9	119 (103–135)	2	13	–	–	132 (116–148)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmadabad	142	1,929 (1,676–2,182)	–	–	88	454	2,383 (2,130–2,636)
Amreli	44	330 (290–371)	–	–	99	472	802 (762–843)
Anand	35	870 (761–979)	–	–	51	117	987 (878–1,096)
Arvalli	33	366 (313–418)	–	–	62	466	832 (779–884)
Banas Kantha	38	937 (759–1,115)	–	–	126	654	1,591 (1,413–1,769)
Bharuch	44	539 (448–630)	6	22	–	–	561 (470–652)
Bhavnagar	122	4,512 (4,223–4,801)	–	–	87	592	5,104 (4,815–5,393)
Botad	–	–	–	–	12	81	81 (81–81)
Chhotaudepur	44	453 (323–584)	–	–	88	601	1,054 (924–1,185)
Dang	1	9 (8–9)	–	–	–	–	9 (8–9)
Devbhumi Dwarka	15	795 (753–837)	–	–	–	–	795 (753–837)
Dohad	57	1,025 (846–1,203)	–	–	–	–	1,025 (846–1,203)
Gandhinagar	25	303 (230–377)	–	–	56	327	630 (557–704)
Gir Somnath	21	571 (528–614)	–	–	–	–	571 (528–614)
Jamnagar	23	653 (601–705)	–	–	–	–	653 (601–705)
Junagadh	34	494 (436–552)	–	–	–	–	494 (436–552)
Kachchh	48	934 (841–1,027)	–	–	114	222	1,156 (1,063–1,249)
Kheda	20	278 (257–298)	–	–	50	206	484 (463–504)
Mahesana	46	519 (448–589)	–	–	120	564	1,083 (1,012–1,153)
Morbi	16	279 (243–315)	–	–	–	–	279 (243–315)
Narmada	3	164 (147–181)	–	–	–	–	164 (147–181)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Navsari	53	677 (564–790)	–	–	–	–	677 (564–790)
Panch Mahals	30	330 (275–385)	–	–	–	–	330 (275–385)
Patan	48	475 (415–535)	–	–	–	–	475 (415–535)
Porbandar	15	393 (355–431)	–	–	–	–	393 (355–431)
Rajkot	50	957 (835–1,078)	–	–	–	–	957 (835–1,078)
Sabar Kantha	35	616 (560–673)	–	–	63	418	1,034 (978–1,091)
Surat	370	7,565 (6,535–8,596)	75	1,570	–	–	9,136 (8,105–10,166)
Surendranagar	13	278 (251–304)	–	–	–	–	278 (251–304)
Tapi	42	651 (604–697)	–	–	–	–	651 (604–697)
Vadodara	83	1,690 (1,519–1,860)	–	–	59	353	2,043 (1,872–2,213)
Valsad	30	409 (281–537)	–	–	–	–	409 (281–537)
Gujarat	1,580	29,999 (26,325–33,673)	81	1,592	1,075	5,527	37,118 (33,445–40,792)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmadabad	204	1,561 (1,152–1,970)	–	–	83	324	1,885 (1,476–2,294)
Amreli	61	472 (390–554)	–	–	98	680	1,152 (1,070–1,234)
Anand	70	1,212 (1,009–1,415)	–	–	58	238	1,450 (1,247–1,653)
Arvali	24	227 (189–265)	–	–	46	189	416 (378–454)
Banas Kantha	28	546 (466–625)	–	–	123	325	871 (791–950)
Bharuch	21	380 (318–441)	–	–	–	–	380 (318–441)
Bhavnagar	174	4,737 (4,270–5,204)	–	–	87	472	5,209 (4,742–5,676)
Botad	1	42 (38–45)	–	–	12	68	110 (106–113)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chhotaudepur	32	191 (134–248)	–	–	35	72	263 (206–320)
Dang	0	0 (0–0)	–	–	–	–	0 (0–0)
Devbhumi Dwarka	10	591 (567–614)	–	–	–	–	591 (567–614)
Dohad	28	519 (428–611)	–	–	–	–	519 (428–611)
Gandhinagar	5	87 (71–103)	–	–	54	208	295 (279–311)
Gir Somnath	29	487 (437–537)	–	–	–	–	487 (437–537)
Jamnagar	49	741 (682–800)	–	–	–	–	741 (682–800)
Junagadh	25	317 (292–341)	–	–	–	–	317 (292–341)
Kachchh	45	891 (796–985)	–	–	116	421	1,312 (1,217–1,406)
Kheda	28	368 (338–397)	–	–	67	429	797 (767–826)
Mahesana	38	543 (478–607)	–	–	117	534	1,077 (1,012–1,141)
Mahisagar	3	27 (22–32)	–	–	–	–	27 (22–32)
Morbi	13	338 (309–366)	–	–	–	–	338 (309–366)
Narmada	3	103 (93–112)	–	–	–	–	103 (93–112)
Navsari	26	285 (229–342)	–	–	–	–	285 (229–342)
Panch Mahals	22	256 (214–297)	–	–	–	–	256 (214–297)
Patan	83	923 (751–1,094)	–	–	–	–	923 (751–1,094)
Porbandar	20	437 (382–492)	–	–	–	–	437 (382–492)
Rajkot	51	1,500 (1,387–1,612)	–	–	–	–	1,500 (1,387–1,612)
Sabar Kantha	22	475 (432–518)	–	–	53	180	655 (612–698)
Surat	217	7,068 (6,340–7,796)	–	–	–	–	7,068 (6,340–7,796)
Surendranagar	34	622 (566–677)	–	–	–	–	622 (566–677)
Tapi	7	140 (133–148)	–	–	–	–	140 (133–148)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Vadodara	86	3,067 (2,770–3,364)	–	–	46	170	3,237 (2,940–3,534)
Valsad	46	840 (667–1,013)	–	–	–	–	840 (667–1,013)
Gujarat	1,505	29,989 (26,351–33,628)	–	–	995	4,310	34,299 (30,661–37,938)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmadabad	29	258 (214–302)	–	–	–	–	258 (214–302)
Surat	33	364 (290–438)	–	–	–	–	364 (290–438)
Vadodara	21	157 (133–181)	–	–	–	–	157 (133–181)
Gujarat	83	779 (637–920)	–	–	–	–	779 (637–920)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmadabad	15	204 (173–235)	–	–	15	14	218 (187–249)
Amreli	1	3 (2–3)	–	–	18	21	24 (23–24)
Anand	2	43 (38–47)	–	–	8	8	51 (46–55)
Arvali	–	–	–	–	1	8	8 (8–8)
Banas Kantha	2	24 (21–26)	–	–	8	7	31 (28–33)
Bharuch	3	47 (42–52)	–	–	–	–	47 (42–52)
Bhavnagar	2	11 (9–13)	–	–	26	33	44 (42–46)
Botad	–	–	–	–	–	–	–
Chhotaudepur	–	–	–	–	–	–	–
Dang	–	–	–	–	–	–	–
Devbhumi Dwarka	5	20 (19–21)	–	–	–	–	20 (19–21)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dohad	1	18 (11–24)	–	–	–	–	18 (11–24)
Gandhinagar	6	55 (42–68)	–	–	11	22	77 (64–90)
Gir Somnath	–	–	–	–	–	–	–
Jamnagar	6	14 (12–17)	–	–	–	–	14 (12–17)
Junagadh	–	–	–	–	–	–	–
Kachchh	8	97 (80–113)	–	–	25	12	109 (92–125)
Kheda	1	6 (6–7)	–	–	0	0	6 (6–7)
Mahesana	1	3 (2–4)	–	–	18	30	33 (32–34)
Mahisagar	1	8 (7–10)	–	–	–	–	8 (7–10)
Morbi	–	–	–	–	–	–	–
Narmada	1	9 (7–10)	–	–	–	–	9 (7–10)
Navsari	2	29 (25–32)	–	–	–	–	29 (25–32)
Panch Mahals	–	–	–	–	–	–	–
Patan	–	–	–	–	–	–	–
Porbandar	2	11 (9–13)	–	–	–	–	11 (9–13)
Rajkot	7	92 (83–102)	–	–	–	–	92 (83–102)
Sabar Kantha	–	–	–	–	4	14	14 (14–14)
Surat	32	1,351 (1,273–1,430)	–	–	–	–	1,351 (1,273–1,430)
Surendranagar	14	72 (58–85)	–	–	–	–	72 (58–85)
Tapi	–	–	–	–	–	–	–
Vadodara	5	321 (308–334)	–	–	–	–	321 (308–334)
Valsad	–	–	–	–	–	–	–
Gujarat	117	2,436 (2,227–2,645)	–	–	134	169	2,605 (2,396–2,814)

Continued

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ambala	110	762 (662–863)	10	31	–	–	793 (693–894)
Bhiwani	31	548 (490–605)	8	9	–	–	556 (499–614)
Charki Dadri	–	–	–	–	–	–	–
Faridabad	59	994 (909–1,079)	38	289	–	–	1,283 (1,199–1,368)
Fatehabad	98	1,051 (948–1,154)	8	83	–	–	1,134 (1,031–1,237)
Gurugram	77	1,695 (1,574–1,815)	31	323	–	–	2,017 (1,897–2,137)
Hisar	41	321 (285–357)	–	–	–	–	321 (285–357)
Jhajjar	31	219 (194–243)	2	12	–	–	231 (206–255)
Jind	53	565 (461–669)	0	0	–	–	565 (461–669)
Kaithal	100	1,066 (928–1,203)	6	51	–	–	1,117 (979–1,254)
Karnal	86	736 (656–815)	3	18	–	–	753 (674–833)
Kurukshetra	60	807 (721–893)	19	176	–	–	983 (896–1,069)
Mahendragarh	–	–	–	–	–	–	–
Mewat	28	664 (587–741)	–	–	–	–	664 (587–741)
Palwal	54	1,172 (1,051–1,293)	13	58	–	–	1,230 (1,109–1,351)
Panchkula	63	844 (767–920)	25	90	–	–	934 (857–1,010)
Panipat	54	650 (587–713)	5	24	–	–	673 (611–736)
Rewari	12	300 (276–325)	7	34	–	–	334 (310–359)
Rohtak	68	664 (601–726)	–	–	–	–	664 (601–726)
Sirsa	81	961 (891–1,031)	30	215	–	–	1,176 (1,106–1,246)
Sonipat	100	863 (809–916)	12	53	–	–	916 (862–969)
Yamunanagar	120	1,291 (1,188–1,393)	4	32	–	–	1,323 (1,220–1,425)
Haryana	1,326	16,171 (14,587–17,754)	221	1,497	–	–	17,668 (16,084–19,251)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ambala	74	346 (301–392)	4	2	–	–	348 (302–393)
Bhiwani	–	–	–	–	–	–	0
Charki Dadri	–	–	–	–	–	–	0
Faridabad	80	1,508 (1,386–1,631)	–	–	–	–	1,508 (1,386–1,631)
Fatehabad	8	45 (39–50)	–	–	–	–	45 (39–50)
Gurugram	42	956 (867–1,045)	–	–	–	–	956 (867–1,045)
Hisar	14	84 (73–95)	–	–	–	–	84 (73–95)
Jhajjar	13	81 (70–91)	1	2	–	–	82 (72–93)
Jind	56	578 (471–685)	0	0	–	–	578 (471–685)
Kaithal	79	890 (769–1,011)	4	38	–	–	928 (807–1,048)
Karnal	20	349 (314–384)	–	–	–	–	349 (314–384)
Kurukshetra	12	289 (269–308)	4	29	–	–	317 (298–337)
Mahendragarh	–	–	–	–	–	–	0
Mewat	1	11 (9–13)	–	–	–	–	11 (9–13)
Palwal	13	221 (195–247)	–	–	–	–	221 (195–247)
Panchkula	4	16 (15–18)	1	3	–	–	20 (18–21)
Panipat	70	488 (432–544)	–	–	–	–	488 (432–544)
Rewari	1	6 (5–6)	–	–	–	–	6 (5–6)
Rohtak	59	415 (373–456)	–	–	–	–	415 (373–456)
Sirsa	74	654 (595–713)	28	187	–	–	842 (783–900)
Sonipat	24	214 (202–226)	–	–	–	–	214 (202–226)
Yamunanagar	94	611 (559–664)	–	–	–	–	611 (559–664)
Haryana	738	7,762 (6,945–8,579)	42	260	–	–	8,022 (7,205–8,839)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ambala	106	975 (849–1,101)	6	42	–	–	1,017 (891–1,143)
Bhiwani	3	22 (19–25)	–	–	–	–	22 (19–25)
Charki Dadri	0	0	–	–	–	–	–
Faridabad	91	1,268 (1,152–1,384)	–	–	–	–	1,268 (1,152–1,384)
Fatehabad	159	1,975 (1,774–2,175)	–	–	–	–	1,975 (1,774–2,175)
Gurugram	21	366 (334–398)	–	–	–	–	366 (334–398)
Hisar	239	2,405 (2,108–2,701)	34	280	–	–	2,685 (2,389–2,981)
Jhajjar	51	521 (467–576)	–	–	–	–	521 (467–576)
Jind	49	474 (392–556)	–	–	–	–	474 (392–556)
Kaithal	72	733 (626–840)	3	27	–	–	760 (653–867)
Karnal	29	397 (339–455)	–	–	–	–	397 (339–455)
Kurukshetra	8	200 (178–223)	2	8	–	–	208 (186–230)
Mahendragarh	0	0	–	–	–	–	–
Mewat	39	829 (726–932)	–	–	–	–	829 (726–932)
Palwal	33	410 (368–452)	–	–	–	–	410 (368–452)
Panchkula	39	460 (425–495)	3	11	–	–	471 (436–506)
Panipat	48	631 (577–685)	–	–	–	–	631 (577–685)
Rewari	11	244 (236–253)	–	–	–	–	244 (236–253)
Rohtak	111	1,334 (1,227–1,440)	–	–	–	–	1,334 (1,227–1,440)
Sirsa	302	4,085 (3,828–4,341)	17	202	–	–	4,286 (4,030–4,543)
Sonipat	80	506 (440–571)	8	43	–	–	549 (483–615)
Yamunanagar	44	579 (516–642)	–	–	–	–	579 (516–642)
Haryana	1,535	18,412 (16,580 –20,243)	73	613	–	–	19,025 (17,193–20,856)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ambala	2	13 (12–14)	–	–	–	–	13 (12–14)
Faridabad	63	661 (588–734)	–	–	–	–	661 (588–734)
Gurugram	12	120 (104–137)	–	–	–	–	120 (104–137)
Hisar	12	65 (56–74)	–	–	–	–	65 (56–74)
Jhajjar	5	60 (56–65)	2	10	–	–	71 (66–75)
Jind	2	25 (23–27)	–	–	–	–	25 (23–27)
Kaithal	6	48 (39–56)	–	–	–	–	48 (39–56)
Karnal	2	27 (23–30)	–	–	–	–	27 (23–30)
Kurukshetra	–	–	2	8	–	–	8 (8–8)
Palwal	7	87 (72–101)	–	–	–	–	87 (72–101)
Panipat	10	68 (61–75)	2	7	–	–	75 (68–81)
Rewari	4	64 (61–67)	–	–	–	–	64 (61–67)
Rohtak	1	9 (8–10)	–	–	–	–	9 (8–10)
Sirsa	21	129 (116–141)	–	–	–	–	129 (116–141)
Yamunanagar	4	36 (32–40)	–	–	–	–	36 (32–40)
Haryana	151	1,410 (1,250–1,569)	6	25	–	–	1,435 (1,275–1,594)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bilaspur_HP	59	721 (658–784)	8	19	–	–	740 (678–803)
Chamba	78	958 (836–1,079)	5	35	–	–	992 (871–1,114)
Hamirpur	73	1,249 (1,193–1,304)	2	10	–	–	1,258 (1,203–1,314)
Kangra	140	1,858 (1,634–2,081)	–	–	–	–	1,858 (1,634–2,081)
Kullu	74	1,144 (1,043–1,244)	7	44	–	–	1,187 (1,087–1,287)
Mandi	127	1,516 (1,344–1,688)	3	17	–	–	1,533 (1,361–1,705)
Shimla	113	1,860 (1,632–2,087)	1	–	–	–	1,860 (1,632–2,087)
Sirmaur	68	1,144 (998–1,290)	–	–	–	–	1,144 (998–1,290)
Solan	66	1,618 (1,501–1,735)	–	–	–	–	1,618 (1,501–1,735)
Una	115	1,016 (919–1,113)	1	4	–	–	1,020 (922–1,117)
Himachal Pradesh	913	13,083 (11,760–14,406)	27	128	–	–	13,210 (11,888–14,533)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bilaspur_HP	2	17 (15–20)	–	–	–	–	17 (15–20)
Chamba	10	69 (61–77)	1	2	–	–	71 (64–79)
Hamirpur	39	323 (291–355)	1	4	–	–	327 (295–359)
Kangra	16	145 (130–160)	–	–	–	–	145 (130–160)
Kullu	7	72 (64–79)	2	3	–	–	75 (68–83)
Mandi	9	39 (34–44)	–	–	–	–	39 (34–44)
Shimla	40	318 (245–391)	–	–	–	–	318 (245–391)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sirmaur	6	109 (99–120)	–	–	–	–	109 (99–120)
Solan	9	34 (26–42)	–	–	–	–	34 (26–42)
Una	15	116 (107–125)	–	–	–	–	116 (107–125)
Himachal Pradesh	153	1,242 (1,071–1,413)	4	10	–	–	1,252 (1,081–1,423)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bilaspur	11	152 (138–165)	–	–	–	–	152 (138–165)
Chamba	8	104 (90–117)	–	–	–	–	104 (90–117)
Hamirpur	16	116 (104–127)	–	–	–	–	116 (104–127)
Kangra	33	443 (385–501)	–	–	–	–	443 (385–501)
Kullu	26	255 (224–286)	4	12	–	–	255 (224–286)
Mandi	11	73 (63–83)	–	–	–	–	73 (63–83)
Shimla	84	737 (611–863)	–	–	–	–	737 (611–863)
Sirmaur	12	293 (255–331)	–	–	–	–	293 (255–331)
Solan	38	763 (681–845)	–	–	–	–	763 (681–845)
Una	107	714 (650–778)	–	–	–	–	714 (650–778)
Himachal Pradesh	346	3,650 (3,202–4,097)	4	12	–	–	3,662 (3,214–4,109)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bilaspur_HP	4	26 (22–29)	–	–	–	–	26 (22–29)
Chamba	2	21 (18–24)	–	–	–	–	21 (18–24)
Hamirpur	3	37 (32–42)	1	7	–	–	44 (39–49)
Kangra	6	55 (46–64)	–	–	–	–	55 (46–64)
Kullu	2	15 (13–17)	–	–	–	–	15 (13–17)
Mandi	2	9 (8–10)	–	–	–	–	9 (8–10)
Shimla	4	22 (20–23)	–	–	–	–	22 (20–23)
Sirmaur	2	40 (33–47)	–	–	–	–	40 (33–47)
Solan	3	15 (13–16)	–	–	–	–	15 (13–16)
Una	5	12 (11–13)	–	–	–	–	12 (11–13)
Himachal Pradesh	33	251 (216–287)	1	7	–	–	258 (223–293)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anantnag	62	832 (725–938)	11	117	–	–	949 (842–1,055)
Badgam	9	56 (26–85)	–	–	–	–	56 (26–85)
Bandipora	1	11 (5–16)	–	–	–	–	11 (5–16)
Baramulla	10	192 (107–276)	2	11	–	–	202 (118–286)
Doda	4	72 (63–80)	–	–	–	–	72 (63–80)
Ganderbal	6	47 (19–76)	–	–	–	–	47 (19–76)
Jammu	26	486 (421–551)	8	43	–	–	529 (464–594)
Kathua	54	845 (744–946)	9	24	–	–	869 (768–970)
Kulgam	30	360 (314–406)	4	42	–	–	402 (356–448)
Kupwara	3	21 (11–30)	0	0	–	–	21 (11–30)
Poonch	2	42 (36–47)	1	11	–	–	52 (47–58)
Pulwama	11	91 (76–106)	0	0	–	–	91 (76–106)
Rajauri	10	196 (173–220)	3	22	–	–	218 (195–242)
Reasi	6	100 (86–113)	2	21	–	–	121 (108–134)
Samba	7	98 (85–112)	0	0	–	–	98 (85–112)
Shopian	16	226 (202–249)	4	44	–	–	270 (246–293)
Srinagar	31	298 (175–420)	2	21	–	–	319 (197–442)
Udhampur	15	269 (234–303)	6	39	–	–	308 (273–342)
Jammu & Kashmir	303	4,239 (3,504–4,974)	52	395	–	–	4,634 (3,899–5,369)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Badgam	7	44 (32–57)	–	–	–	–	44 (32–57)
Bandipora	1	9 (4–14)	–	–	–	–	9 (4–14)
Baramulla	2	30 (18–41)	–	–	–	–	30 (18–41)
Doda	0	0	–	–	–	–	–
Ganderbal	5	20 (11–28)	–	–	–	–	20 (11–28)
Jammu	22	193 (153–232)	4	36	–	–	228 (189–267)
Kupwara	2	15 (9–22)	–	–	–	–	15 (9–22)
Srinagar	19	268 (225–312)	6	54	–	–	322 (279–366)
Udhampur	1	8 (6–10)	–	–	–	–	8 (6–10)
Jammu & Kashmir	59	587 (458–715)	10	90	–	–	677 (548–805)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anantnag	56	670 (439–901)	7	162	–	–	832 (601–1,063)
Badgam	15	234 (143–325)	5	56	–	–	289 (198–380)
Bandipora	16	228 (132–323)	2	18	–	–	246 (151–341)
Baramulla	60	926 (611–1,240)	7	56	–	–	982 (667–1,297)
Doda	23	339 (282–395)	6	40	–	–	378 (322–435)
Ganderbal	12	173 (100–246)	4	39	–	–	212 (140–285)
Jammu	64	933 (739–1,127)	20	236	–	–	1,169 (975–1,363)
Kathua	65	982 (878–1,085)	24	265	–	–	1,247 (1,143–1,350)
Kishtwar	7	117 (95–140)	2	19	–	–	137 (114–159)
Kulgam	64	685 (593–778)	2	19	–	–	704 (612–797)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kupwara	25	421 (260–582)	3	–	–	–	421 (260–582)
Poonch	9	144 (125–163)	7	63	–	–	208 (189–226)
Pulwama	23	282 (212–352)	5	55	–	–	337 (267–407)
Rajauri	22	328 (275–380)	10	79	–	–	406 (354–459)
Reasi	19	303 (253–353)	5	47	–	–	350 (301–400)
Samba	16	319 (270–368)	4	50	–	–	370 (321–419)
Shopian	44	563 (488–638)	3	29	–	–	592 (517–667)
Srinagar	50	727 (415–1,038)	8	55	–	–	782 (470–1,093)
Udhampur	27	425 (346–503)	9	76	–	–	501 (422–580)
Jammu & Kashmir	617	8,797 (6,658–10,937)	133	1,365	–	–	10,162 (8,022–12,302)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Badgam	4	14 (11–16)	–	–	–	–	14 (11–16)
Ganderbal	1	4 (3–5)	–	–	–	–	4 (3–5)
Jammu	16	181 (153–208)	5	47	–	–	228 (200–255)
Kathua	5	56 (50–62)	1	7	–	–	63 (57–69)
Poonch	1	26 (24–29)	–	–	–	–	26 (24–29)
Rajauri	2	33 (28–38)	1	9	–	–	42 (37–47)
Samba	3	55 (50–61)	–	–	–	–	55 (50–61)
Srinagar	13	171 (140–201)	–	–	–	–	171 (140–201)
Udhampur	1	12 (9–14)	–	–	–	–	12 (9–14)
Jammu & Kashmir	46	551 (468–634)	7	63	–	–	614 (531–696)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bokaro	64	930 (810–1,050)	–	–	–	–	930 (810–1,050)
Chatra	33	430 (400–460)	–	–	–	–	430 (400–460)
Deoghar	101	847 (801–892)	–	–	–	–	847 (801–892)
Dhanbad	39	742 (665–820)	–	–	–	–	742 (665–820)
East Singhbhum	77	1,301 (1,152–1,450)	–	–	–	–	1,301 (1,152–1,450)
Garhwa	38	784 (701–867)	–	–	–	–	784 (701–867)
Giridih	77	736 (676–797)	–	–	–	–	736 (676–797)
Godda	29	447 (390–504)	–	–	–	–	447 (390–504)
Hazaribagh	35	505 (407–603)	–	–	–	–	505 (407–603)
Koderma	32	772 (723–821)	–	–	–	–	772 (723–821)
Latehar	9	167 (153–182)	–	–	–	–	167 (153–182)
Lohardaga	37	440 (373–506)	–	–	–	–	440 (373–506)
Pakur	71	597 (520–674)	–	–	–	–	597 (520–674)
Palamu	39	710 (635–784)	–	–	–	–	710 (635–784)
Ramgarh	6	101 (83–120)	–	–	–	–	101 (83–120)
Ranchi	46	781 (717–844)	–	–	–	–	781 (717–844)
Sahebganj	31	587 (527–646)	–	–	–	–	587 (527–646)
Saraikela Kharsawan	24	262 (221–302)	–	–	–	–	262 (221–302)
Simdega	28	287 (248–325)	–	–	–	–	287 (248–325)
West Singhbhum	30	436 (367–505)	–	–	–	–	436 (367–505)
Jharkhand	846	11,860 (10,568–13,152)	–	–	–	–	11,860 (10,568–13,152)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bokaro	21	203 (182–223)	–	–	–	–	203 (182–223)
Dhanbad	63	591 (479–702)	–	–	–	–	591 (479–702)
East Singhbhum	9	155 (136–174)	–	–	–	–	155 (136–174)
Giridih	24	214 (193–234)	–	–	–	–	214 (193–234)
Hazaribagh	8	55 (42–68)	–	–	–	–	55 (42–68)
Ranchi	3	48 (41–55)	–	–	–	–	48 (41–55)
West Singhbhum	29	477 (420–534)	–	–	–	–	477 (420–534)
Jharkhand	157	1,742 (1,494–1,991)	–	–	–	–	1,742 (1,494–1,991)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bokaro	25	308 (241–375)	–	–	–	–	308 (241–375)
East Singhbhum	19	268 (237–299)	–	–	–	–	268 (237–299)
Lohardaga	1	7 (5–8)	–	–	–	–	7 (5–8)
Ranchi	16	197 (159–234)	–	–	–	–	197 (159–234)
Jharkhand	61	779 (641–916)	–	–	–	–	779 (641–916)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bokaro	12	82 (70–93)	–	–	–	–	82 (70–93)
Chatra	1	7 (7–8)	–	–	–	–	7 (7–8)
Dhanbad	6	60 (51–68)	–	–	–	–	60 (51–68)
East Singhbhum	8	138 (124–153)	–	–	–	–	138 (124–153)
Giridih	12	134 (119–148)	–	–	–	–	134 (119–148)
Hazaribagh	2	37 (34–40)	–	–	–	–	37 (34–40)
Koderma	1	14 (6–22)	–	–	–	–	14 (6–22)
West Singhbhum	1	11 (10–11)	–	–	–	–	11 (10–11)
Jharkhand	43	483 (421–544)	–	–	–	–	483 (421–544)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bagalkot	211	5,062 (4,676–5,448)	202	2,824	98	1,870	9,756 (9,370–10,142)
Ballari	1,529	11,155 (10,334–11,976)	241	1,062	151	2,196	14,413 (13,592–15,235)
Belagavi	394	11,732 (11,012–12,451)	286	4,537	100	2,053	18,321 (17,602–19,041)
Bengaluru Rural	108	892 (769–1,015)	35	194	–	–	1,086 (963–1,209)
Bengaluru Urban	2,132	20,466 (17,324–23,608)	967	5,547	–	–	26,013 (22,871–29,155)
Bidar	121	2,855 (2,706–3,004)	29	488	–	–	3,343 (3,194–3,492)
Chamarajanagar	275	3,460 (2,974–3,947)	60	438	190	4,275	8,174 (7,687–8,660)
Chikballapur	268	3,325 (2,779–3,871)	57	272	100	515	4,111 (3,565–4,657)
Chikkamagaluru	152	2,188 (1,809–2,568)	42	273	–	–	2,461 (2,081–2,841)
Chitradurga	183	3,350 (3,058–3,642)	92	215	–	–	3,564 (3,272–3,856)
Dakshin Kannad	97	1,284 (1,177–1,391)	14	67	–	–	1,351 (1,244–1,458)
Davangere	179	4,143 (3,716–4,569)	64	278	–	–	4,421 (3,995–4,847)
Dharwad	107	2,110 (1,919–2,301)	8	44	–	–	2,154 (1,963–2,345)
Gadag	89	2,820 (2,660–2,981)	11	171	139	1,117	4,108 (3,947–4,268)
Hassan	138	1,324 (1,129–1,519)	8	19	135	1,489	2,832 (2,637–3,027)
Haveri	162	2,878 (2,624–3,131)	18	126	–	–	3,004 (2,751–3,257)
Kalaburagi	96	4,218 (3,918–4,518)	96	354	–	–	4,572 (4,272–4,871)
Kodagu	102	1,084 (984–1,184)	21	101	–	–	1,185 (1,085–1,285)
Kolar	236	4,325 (3,560–5,089)	77	247	–	–	4,571 (3,807–5,336)
Koppal	158	2,166 (1,962–2,371)	72	589	–	–	2,755 (2,551–2,960)
Mandya	105	1,540 (1,323–1,756)	20	126	130	4,384	6,049 (5,833–6,266)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Mysuru	484	4,371 (3,792–4,950)	55	202	–	–	4,573 (3,993–5,152)
Raichur	221	2,701 (2,395–3,007)	35	428	–	–	3,129 (2,823–3,435)
Ramanagara	55	540 (481–599)	11	61	–	–	601 (542–660)
Shivamogga	147	2,355 (2,036–2,674)	14	154	–	–	2,509 (2,190–2,828)
Tumakuru	460	2,499 (2,162–2,836)	–	–	–	–	2,499 (2,162–2,836)
Udupi	41	455 (390–519)	–	–	–	–	455 (390–519)
Uttar Kannad	323	3,228 (2,445–4,010)	83	528	–	–	3,755 (2,973–4,538)
Vijayapura	121	4,046 (3,833–4,258)	19	515	136	1,292	5,853 (5,640–6,065)
Yadgir	77	1,602 (1,464–1,741)	81	116	–	–	1,719 (1,580–1,857)
Karnataka	8,771	1,14,171 (1,01,410–1,26,932)	2,718	19,975	1,179	19,191	1,53,337 (1,40,576–1,66,098)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bagalkot	43	1,175 (1,098–1,252)	14	275	46	75	1,525 (1,448–1,602)
Ballari	400	2,903 (2,688–3,117)	42	335	33	37	3,275 (3,060–3,490)
Belagavi	147	2,355 (2,093–2,616)	10	300	90	163	2,817 (2,556–3,078)
Bengaluru Rural	60	645 (556–734)	–	–	–	–	645 (556–734)
Bengaluru Urban	173	4,226 (3,853–4,599)	1	6	–	–	4,232 (3,859–4,605)
Bidar	37	941 (872–1,010)	18	176	–	–	1,117 (1,048–1,186)
Chamarajanagar	149	2,203 (2,056–2,350)	3	14	113	74	2,291 (2,144–2,439)
Chikballapur	96	2,037 (1,613–2,461)	–	–	81	172	2,209 (1,785–2,633)
Chikkamagaluru	35	499 (414–584)	12	68	–	–	567 (482–652)
Chitradurga	49	704 (633–774)	5	38	–	–	741 (671–812)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dakshin Kannad	73	1,449 (1,331–1,567)	15	125	–	–	1,574 (1,456–1,692)
Davangere	41	976 (914–1,039)	7	19	–	–	995 (932–1,057)
Dharwad	59	1,980 (1,912–2,048)	–	–	–	–	1,980 (1,912–2,048)
Gadag	21	928 (861–995)	–	–	127	427	1,355 (1,288–1,422)
Hassan	39	424 (358–489)	–	–	34	17	441 (375–506)
Haveri	49	1,047 (935–1,159)	1	27	–	–	1,074 (962–1,185)
Kalaburagi	53	1,926 (1,734–2,119)	12	219	–	–	2,145 (1,953–2,338)
Kodagu	28	300 (277–322)	–	–	–	–	300 (277–322)
Kolar	77	1,613 (1,501–1,724)	–	–	–	–	1,613 (1,501–1,724)
Koppal	70	778 (694–861)	12	69	–	–	847 (763–930)
Mandya	51	814 (683–945)	1	8	4	1	822 (691–953)
Mysuru	203	1,894 (1,520–2,267)	–	–	–	–	1,894 (1,520–2,267)
Raichur	95	2,326 (2,154–2,499)	5	101	–	–	2,427 (2,255–2,600)
Ramanagara	39	651 (600–703)	13	107	–	–	758 (707–810)
Shivamogga	44	576 (471–680)	–	–	–	–	576 (471–680)
Tumakuru	462	2,683 (2,327–3,038)	–	–	–	–	2,683 (2,327–3,038)
Udupi	25	448 (381–514)	–	–	–	–	448 (381–514)
Uttar Kannad	45	308 (272–345)	–	–	–	–	308 (272–345)
Vijayapura	101	3,359 (3,207–3,511)	–	–	55	92	3,451 (3,299–3,603)
Yadgir	46	482 (406–558)	27	39	–	–	521 (444–597)
Karnataka	2,810	42,648 (38,414–46,881)	198	1,925	583	1,058	45,631 (41,397–49,864)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bengaluru Urban	411	2,730 (2,295–3,166)					2,730 (2,295–3,166)
Kolar	67	1,282 (1,158–1,406)	12	316	–	–	1,598 (1,474–1,722)
Tumakuru	1	2 (2–3)	–	–	–	–	2 (2–3)
Karnataka	479	4,015 (3,455–4,574)	12	316	1	–	4,331 (3,771–4,890)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bagalkot	12	329 (306–352)	1	22	5	5	356 (333–379)
Ballari	48	369 (341–397)	9	134	6	3	506 (478–534)
Belagavi	7	144 (128–159)	1	11	7	7	162 (146–178)
Bengaluru Rural	61	342 (300–384)	–	–	–	–	342 (300–384)
Bengaluru Urban	307	4,034 (3,692–4,376)	–	–	–	–	4,034 (3,692–4,376)
Bidar	7	163 (154–172)	2	25	–	–	188 (179–197)
Chamarajanagar	8	100 (91–108)	2	17	–	–	117 (108–125)
Chikballapur	7	46 (36–55)	–	–	–	–	46 (36–55)
Chikkamagaluru	6	69 (61–77)	4	20	–	–	88 (80–96)
Chitradurga	19	287 (263–310)	7	66	–	–	353 (330–376)
Dakshin Kannad	5	74 (63–85)	8	55	–	–	129 (118–140)
Davangere	4	135 (126–144)	8	7	–	–	142 (133–151)
Dharwad	2	13 (12–15)	–	–	–	–	13 (12–15)
Gadag	4	71 (57–85)	–	–	–	–	71 (57–85)
Haveri	2	59 (55–63)	1	33	–	–	92 (88–96)
Kalaburagi	50	848 (754–942)	2	24	–	–	872 (778–966)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kolar	55	564 (486–641)	50	353	–	–	917 (839–994)
Koppal	20	213 (188–238)	6	48	–	–	261 (236–286)
Mandya	12	154 (131–177)	–	–	–	–	154 (131–177)
Mysuru	34	243 (195–290)	–	–	–	–	243 (195–290)
Raichur	54	534 (461–608)	3	41	–	–	575 (502–649)
Ramanagara	10	88 (79–96)	3	22	–	–	110 (101–118)
Shivamogga	6	43 (35–51)	–	–	–	–	43 (35–51)
Tumakuru	46	326 (245–406)	–	–	–	–	326 (245–406)
Udupi	4	18 (15–22)	–	–	–	–	18 (15–22)
Uttar Kannad	8	46 (29–64)	–	–	–	–	46 (29–64)
Vijayapura	17	304 (283–325)	–	–	5	–	304 (283–325)
Yadgir	45	404 (341–467)	8	14	–	–	418 (355–481)
Karnataka	860	10,017 (8,927–11,108)	115	894	23	15	10,926 (9,836–12,016)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Alappuzha	109	755 (850–944)	14	–	–	–	850 (755–944)
Ernakulam	64	642 (806–970)	6	29	–	–	835 (671–999)
Idukki	56	601 (995–1,388)	5	79	–	–	1,074 (680–1,467)
Kannur	53	872 (922–972)	12	85	–	–	1,007 (957–1,057)
Kasaragod	90	626 (751–875)	9	–	–	–	751 (626–875)
Kollam	154	1,619 (1,821–2,023)	11	66	–	–	1,887 (1,685–2,089)
Kottayam	77	1,010 (1,149–1,287)	5	15	–	–	1,164 (1,025–1,302)
Kozhikode	138	1,512 (1,684–1,855)	3	14	–	–	1,698 (1,526–1,869)
Malappuram	104	608 (712–815)	5	21	–	–	733 (629–836)
Palakkad	94	809 (921–1,032)	–	–	–	–	921 (809–1,032)
Pathanamthitta	44	624 (735–845)	8	8	–	–	743 (632–853)
Thiruvananthapuram	390	2,133 (2,493–2,853)	22	230	–	–	2,723 (2,363–3,083)
Thrissur	61	806 (924–1,042)	–	–	–	–	924 (806–1,042)
Wayanad	85	1,131 (1,292–1,453)	7	21	–	–	1,313 (1,152–1,474)
Kerala	1,519	16,055 (13,748–18,354)	107	568	–	–	16,623 (14,316–18,922)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Alappuzha	85	936 (815–1,056)	3	24	–	–	960 (839–1,080)
Ernakulam	51	611 (460–761)	1	8	–	–	619 (468–769)
Kannur	71	1,284 (1,155–1,413)	5	28	–	–	1,312 (1,183–1,441)
Kasaragod	108	1,067 (890–1,244)	–	–	–	–	1,067 (890–1,244)
Kollam	60	1,060 (917–1,204)	–	–	–	–	1,060 (917–1,204)
Kottayam	42	1,103 (976–1,230)	2	24	–	–	1,127 (1,000–1,254)
Kozhikode	73	1,592 (1,138–2,046)	8	–	–	–	1,592 (1,138–2,046)
Malappuram	127	1,687 (1,390–1,983)	14	98	–	–	1,785 (1,488–2,081)
Palakkad	74	698 (581–815)	–	–	–	–	698 (581–815)
Pathanamthitta	33	802 (693–911)	–	–	–	–	802 (693–911)
Thiruvananthapuram	60	1,433 (1,186–1,679)	21	–	–	–	1,433 (1,186–1,679)
Thrissur	75	1,311 (1,200–1,422)	–	–	–	–	1,311 (1,200–1,422)
Wayanad	4	69 (63–74)	1	1	–	–	70 (64–75)
Kerala	863	13,653 (11,464–15,838)	55	183	–	–	13,836 (11,647–16,021)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Alappuzha	9	43 (36–51)	–	–	–	–	43 (36–51)
Ernakulam	67	719 (604–833)	–	–	–	–	719 (604–833)
Kannur	20	240 (211–268)	–	–	–	–	240 (211–268)
Kollam	11	134 (89–179)	–	–	–	–	134 (89–179)
Kozhikode	98	777 (664–890)	11	245	–	–	1,022 (909–1,135)
Malappuram	62	315 (271–359)	–	–	–	–	315 (271–359)
Thiruvananthapuram	103	790 (495–1,084)	5	13	–	–	803 (508–1,097)
Kerala	370	3,018 (2,370–3,664)	16	258	–	–	3,276 (2,628–3,922)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Alappuzha	6	33 (28–38)	–	–	–	–	33 (28–38)
Kannur	24	266 (223–309)	–	–	–	–	266 (223–309)
Kasaragod	13	154 (135–173)	–	–	–	–	154 (135–173)
Kollam	56	593 (550–635)	–	–	–	–	593 (550–635)
Kottayam	36	329 (274–384)	–	–	–	–	329 (274–384)
Kozhikode	18	277 (220–333)	–	–	–	–	277 (220–333)
Malappuram	36	263 (237–288)	–	–	–	–	263 (237–288)
Thiruvananthapuram	45	337 (195–478)	–	–	–	–	337 (195–478)
Thrissur	39	345 (298–391)	1	7	–	–	352 (305–398)
Kerala	273	2,597 (2,160–3,029)	1	7	–	–	2,604 (2,167–3,036)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agar Malwa	18	214 (244–273)	6	51	–	–	295 (265–324)
Alirajpur	45	680 (792–905)	12	204	–	–	996 (883–1,109)
Anuppur	3	43 (51–59)	–	–	–	–	51 (43–59)
Ashoknagar	32	313 (342–372)	2	9	–	–	352 (322–381)
Balaghat	87	1,609 (1,733–1,857)	25	253	115	284	2,270 (2,146–2,394)
Barwani	54	481 (569–657)	7	29	160	166	764 (676–851)
Betul	53	849 (944–1,038)	22	190	–	–	1,134 (1,039–1,228)
Bhind	40	96 (118–140)	12	29	80	106	253 (231–275)
Bhopal	105	1,308 (1,524–1,741)	16	186	–	–	1,710 (1,493–1,926)
Burhanpur	46	623 (678–732)	3	18	–	–	695 (641–750)
Chhatarpur	70	1,434 (1,570–1,707)	15	81	–	–	1,651 (1,515–1,787)
Chhindwara	188	2,756 (3,231–3,706)	22	44	140	324	3,599 (3,124–4,073)
Damoh	19	48 (99–149)	0	0	–	–	99 (48–149)
Datia	76	827 (1,034–1,240)	5	31	–	–	1,064 (857–1,271)
Dewas	58	858 (912–967)	12	41	–	–	954 (899–1,008)
Dhar	79	1,057 (1,217–1,376)	12	106	–	–	1,322 (1,163–1,482)
Dindori	0	0 (0–0)	–	–	–	–	0 (0–0)
East Nimar	13	251 (291–332)	2	12	–	–	303 (262–343)
Guna	33	496 (637–777)	6	48	–	–	684 (544–824)
Gwalior	69	890 (1,091–1,291)	9	133	–	–	1,223 (1,023–1,423)
Harda	5	62 (70–78)	3	12	–	–	82 (73–90)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Hoshangabad	51	924 (1,001–1,078)	17	145	–	–	1,146 (1,068–1,223)
Indore	175	3,031 (3,560–4,089)	75	825	–	–	4,385 (3,856–4,914)
Jabalpur	42	663 (792–921)	20	84	42	89	965 (836–1,094)
Jhabua	32	646 (718–791)	17	114	–	–	832 (760–905)
Katni	39	475 (530–586)	4	3	–	–	533 (477–589)
Khargone	37	682 (764–845)	1	30	–	–	794 (712–875)
Mandla	37	668 (749–831)	4	33	131	405	1,187 (1,105–1,269)
Mandsaur	33	796 (874–952)	13	143	73	567	1,584 (1,506–1,662)
Morena	45	591 (757–922)	14	91	–	–	848 (682–1,013)
Narsinghpur	30	443 (490–537)	2	14	–	–	504 (457–550)
Neemuch	36	723 (820–916)	11	35	–	–	855 (758–951)
Niwari	0	0 (0–0)	–	–	–	–	0 (0–0)
Panna	90	1,673 (1,886–2,100)	3	11	–	–	1,897 (1,684–2,110)
Raisen	119	1,570 (1,701–1,831)	43	225	–	–	1,925 (1,795–2,055)
Rajgarh	20	223 (260–296)	3	10	–	–	269 (233–306)
Ratlam	43	734 (815–896)	26	114	70	283	1,212 (1,131–1,293)
Rewa	61	1,162 (1,325–1,488)	10	68	–	–	1,393 (1,230–1,556)
Sagar	156	1,078 (1,597–2,116)	7	36	–	–	1,633 (1,114–2,152)
Satna	75	940 (1,082–1,223)	4	31	–	–	1,113 (971–1,254)
Sehore	22	311 (361–411)	8	86	–	–	447 (397–497)
Seoni	37	590 (653–717)	12	34	–	–	687 (623–750)
Shahdol	26	365 (424–482)	1	9	–	–	433 (374–491)
Shajapur	39	526 (650–775)	15	59	–	–	709 (585–834)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sheopur	35	519 (609–700)	8	124	–	–	733 (642–823)
Shivpuri	96	1,626 (1,920–2,214)	28	327	–	–	2,247 (1,952–2,541)
Sidhi	40	323 (400–477)	5	24	–	–	425 (348–501)
Singrauli	61	727 (892–1,058)	3	45	–	–	937 (772–1,103)
Tikamgarh	93	690 (837–984)	26	155	142	189	1,180 (1,033–1,328)
Ujjain	93	889 (1,012–1,134)	30	217	193	337	1,566 (1,444–1,688)
Umaria	18	229 (262–294)	1	–	–	–	262 (229–294)
Vidisha	67	1,078 (1,170–1,262)	15	89	–	–	1,259 (1,167–1,351)
Madhya Pradesh	2,481	46,054 (39,788–52,320)	617	4,651	1,146	2,750	53,455 (47,189–59,721)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agar Malwa	12	128 (109–148)	2	18	–	–	146 (127–166)
Alirajpur	15	178 (152–204)	–	–	–	–	178 (152–204)
Anuppur	1	3 (2–4)	–	–	–	–	3 (2–4)
Balaghat	9	171 (158–183)	3	36	–	–	207 (194–219)
Barwani	24	189 (168–210)	–	–	48	13	202 (181–223)
Betul	12	307 (285–329)	6	68	–	–	375 (353–397)
Bhind	9	32 (27–36)	3	7	24	31	69 (65–73)
Bhopal	45	932 (827–1,037)	3	61	–	–	993 (888–1,098)
Burhanpur	6	149 (136–161)	–	–	–	–	149 (136–161)
Chhatarpur	23	365 (305–425)	–	–	–	–	365 (305–425)
Chhindwara	43	552 (453–651)	3	8	1	3	564 (465–663)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Damoh	5	24 (13–35)	–	–	–	–	24 (13–35)
Datia	26	236 (183–289)	3	12	–	–	248 (195–301)
Dewas	15	253 (235–271)	2	18	–	–	271 (253–289)
Dhar	29	381 (325–436)	6	29	–	–	410 (354–465)
East Nimar	8	152 (129–175)	1	4	–	–	156 (133–179)
Guna	1	5 (4–6)	–	–	–	–	5 (4–6)
Gwalior	60	1,193 (930–1,457)	2	28	–	–	1,221 (957–1,485)
Harda	11	199 (177–222)	1	5	–	–	204 (182–227)
Hoshangabad	56	1,052 (964–1,139)	17	111	–	–	1,162 (1,075–1,250)
Indore	83	1,791 (1,550–2,033)	21	71	–	–	1,862 (1,621–2,104)
Jabalpur	65	883 (722–1,044)	24	269	–	–	1,152 (991–1,313)
Jhabua	6	169 (150–189)	2	26	–	–	195 (176–215)
Katni	19	156 (140–171)	–	–	–	–	156 (140–171)
Khargone	14	249 (227–271)	–	–	–	–	249 (227–271)
Mandla	0	0 (0–0)	–	–	–	–	0 (0–0)
Mandsaur	17	354 (314–394)	2	17	–	–	371 (331–410)
Morena	27	585 (470–700)	6	34	–	–	619 (504–734)
Narsinghpur	0	0 (0–0)	–	–	–	–	0 (0–0)
Neemuch	1	15 (10–20)	–	–	–	–	15 (10–20)
Niwari	0	0 (0–0)	–	–	–	–	0 (0–0)
Panna	19	308 (266–350)	–	–	–	–	308 (266–350)
Raisen	59	622 (579–665)	16	54	–	–	676 (633–719)
Rajgarh	2	21 (19–23)	–	–	–	–	21 (19–23)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ratlam	20	314 (273–355)	5	24	–	–	338 (296–379)
Rewa	30	630 (546–713)	–	–	–	–	630 (546–713)
Sagar	104	991 (833–1,148)	1	10	–	–	1,001 (843–1,158)
Satna	17	287 (234–339)	2	11	–	–	297 (245–350)
Sehore	6	74 (64–83)	1	12	–	–	86 (76–95)
Seoni	4	79 (70–88)	1	–	–	–	79 (70–88)
Shahdol	3	32 (24–39)	1	3	–	–	35 (27–42)
Shajapur	8	164 (137–190)	2	3	–	–	166 (140–193)
Sheopur	1	3 (1–5)	–	–	–	–	3 (1–5)
Shivpuri	12	310 (261–358)	6	96	–	–	406 (357–454)
Sidhi	12	49 (36–63)	1	2	–	–	51 (37–64)
Singrauli	7	66 (54–77)	1	4	–	–	69 (57–81)
Tikamgarh	90	518 (465–571)	6	23	1	1	542 (489–595)
Ujjain	38	660 (581–738)	1	5	35	51	716 (637–794)
Umaria	1	12 (11–13)	–	–	–	–	12 (11–13)
Vidisha	113	1,016 (930–1,102)	10	65	–	–	1,081 (995–1,167)
Madhya Pradesh	1188	16,854 (14,551–19,156)	161	1132	109	99	18,085 (15,782–20,387)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anuppur	10	85 (72–98)	1	5	–	–	90 (77–103)
Ashoknagar	26	185 (167–203)	2	22	–	–	206 (189–224)
Balaghat	–	–	–	–	–	–	–
Barwani	–	–	–	–	2	–	–
Betul	–	–	–	–	–	–	–
Bhind	2	11 (10–13)	2	12	–	–	23 (22–25)
Bhopal	95	1,569 (1,441–1,697)	14	82	–	–	1,651 (1,523–1,779)
Chhatarpur	40	483 (419–547)	4	124	–	–	607 (543–670)
Datia	1	6 (5–7)	1	7	–	–	13 (12–14)
Dhar	1	14 (11–16)	–	–	–	–	14 (11–16)
Guna	22	490 (374–607)	7	71	–	–	561 (445–678)
Gwalior	20	348 (272–425)	3	30	–	–	378 (302–455)
Hoshangabad	45	759 (682–837)	17	97	–	–	856 (779–934)
Indore	5	18 (14–21)	–	–	–	–	18 (14–21)
Jabalpur	70	1,495 (1,274–1,716)	15	289	1	8	1,793 (1,571–2,014)
Jhabua	1	32 (29–34)	–	–	–	–	32 (29–34)
Katni	17	169 (149–189)	–	–	–	–	169 (149–189)
Mandsaur	3	28 (25–32)	1	6	–	–	34 (30–37)
Narsinghpur	10	181 (163–199)	–	–	–	–	181 (163–199)
Neemuch	4	13 (9–16)	–	–	–	–	13 (9–16)
Panna	18	357 (298–417)	–	–	–	–	357 (298–417)
Rajgarh	1	18 (15–20)	–	–	–	–	18 (15–20)
Ratlam	31	361 (320–402)	4	15	–	–	376 (335–417)
Rewa	127	1,470 (1,282–1,657)	11	138	–	–	1,608 (1,420–1,796)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Satna	32	443 (373–513)	2	11	–	–	454 (385–524)
Sehore	16	232 (193–270)	4	114	–	–	346 (307–384)
Shahdol	25	259 (220–297)	1	12	–	–	271 (232–309)
Sheopur	47	496 (404–588)	–	–	–	–	496 (404–588)
Shivpuri	4	128 (116–139)	–	–	–	–	128 (116–139)
Sidhi	49	419 (342–495)	6	27	–	–	446 (369–523)
Singrauli	17	239 (211–267)	1	10	–	–	249 (221–277)
Ujjain	32	432 (391–473)	5	30	–	–	462 (421–503)
Umaria	2	20 (17–23)	1	–	–	–	20 (17–23)
Vidisha	11	53 (39–66)	–	–	–	–	53 (39–66)
Madhya Pradesh	784	10,808 (9,335–12,281)	102	1103	3	8	11,919 (10,446–13,392)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Alirajpur	2	13 (8–17)	1	1	–	–	14 (9–19)
Anuppur	–	–	1	6	–	–	6 (6–6)
Ashoknagar	2	5 (4–5)	–	–	–	–	5 (4–5)
Barwani	–	–	–	–	1	–	–
Bhind	–	–	1	3	–	–	3 (3–3)
Bhopal	5	236 (215–256)	2	16	–	–	252 (232–272)
Damoh	1	2 (1–2)	–	–	–	–	2 (1–2)
Datia	13	84 (69–98)	3	26	–	–	109 (95–124)
East Nimar	1	32 (24–39)	–	–	–	–	32 (24–39)
Guna	1	15 (14–16)	–	–	–	–	15 (14–16)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Gwalior	11	82 (62–102)	1	10	–	–	92 (72–112)
Indore	44	274 (215–333)	11	217	–	–	491 (432–551)
Jabalpur	7	178 (164–193)	1	19	–	–	197 (183–212)
Jhabua	1	6 (5–7)	–	–	–	–	6 (5–7)
Katni	2	18 (15–20)	1	15	–	–	33 (30–35)
Khargone	2	5 (4–5)	–	–	–	–	5 (4–5)
Morena	8	44 (35–52)	–	–	–	–	44 (35–52)
Neemuch	3	14 (10–17)	–	–	–	–	14 (10–17)
Rewa	1	9 (8–10)	1	24	–	–	33 (32–34)
Sagar	4	27 (24–30)	2	17	–	–	44 (41–47)
Satna	1	13 (9–17)	1	25	–	–	38 (34–42)
Sehore	1	4 (3–5)	–	–	–	–	4 (3–5)
Shahdol	1	3 (2–5)	1	–	–	–	3 (2–5)
Sheopur	1	11 (10–12)	–	–	–	–	11 (10–12)
Shivpuri	2	9 (6–11)	–	–	–	–	9 (6–11)
Sidhi	1	4 (2–6)	1	6	–	–	10 (7–12)
Singrauli	1	4 (4–5)	2	4	–	–	8 (8–9)
Tikamgarh	4	18 (15–20)	3	9	1	1	27 (25–30)
Ujjain	4	36 (30–41)	3	22	3	5	63 (57–68)
Umaria	1	5 (4–5)	1	5	–	–	10 (9–10)
Madhya Pradesh	129	1,183 (993–1,373)	38	425	5	6	1,614 (1,424–1,803)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmednagar	66	1,870 (1,680–2,061)	15	311	–	–	2,182 (1,991–2,372)
Akola	75	1,885 (1,701–2,068)	3	195	128	407	2,487 (2,303–2,670)
Amravati	124	2,309 (2,180–2,439)	751	5,896	136	1,381	9,587 (9,457–9,716)
Aurangabad	95	2,111 (1,976–2,246)	14	157	156	990	3,258 (3,123–3,393)
Beed	131	1,749 (1,573–1,925)	3	23	–	–	1,771 (1,596–1,947)
Buldhana	55	1,443 (1,332–1,553)	1	5	198	332	1,780 (1,669–1,890)
Chandrapur	25	1,002 (934–1,071)	32	359	114	112	1,473 (1,405–1,542)
Dhule	65	616 (584–648)	1	1	103	306	923 (891–955)
Gondia	69	742 (687–798)	7	68	–	–	810 (755–866)
Hingoli	23	821 (777–865)	5	35	–	–	855 (812–899)
Jalgaon	154	2,015 (1,846–2,183)	11	20	104	18	2,052 (1,884–2,221)
Jalna	37	273 (193–353)	17	85	90	296	654 (574–734)
Kolhapur	49	788 (634–942)	3	17	131	339	1,144 (990–1,298)
Latur	57	787 (688–887)	31	450	–	–	1,238 (1,139–1,337)
Nagpur	116	4,469 (4,126–4,812)	78	808	120	378	5,655 (5,312–5,997)
Nanded	85	852 (755–949)	81	530	102	478	1,860 (1,763–1,958)
Nandurbar	113	945 (846–1,044)	6	55	–	–	1,000 (901–1,099)
Nashik	135	748 (654–841)	4	52	99	433	1,233 (1,140–1,326)
Osmanabad	82	984 (868–1,100)	18	106	–	–	1,090 (974–1,206)
Parbhani	65	1,191 (1,083–1,298)	13	–	131	439	1,630 (1,522–1,737)
Pune	97	4,568 (4,231–4,906)	–	–	90	431	4,999 (4,662–5,337)
Raigad	51	2,435 (2,200–2,671)	4	27	83	191	2,653 (2,418–2,889)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ratnagiri	2	26 (23–28)	1	–	–	–	26 (23–28)
Sangli	68	1,943 (1,756–2,129)	24	6	160	304	2,252 (2,066–2,438)
Satara	25	234 (196–271)	9	–	90	349	583 (545–620)
Sindhudurg	25	99 (89–109)	4	9	–	–	108 (98–118)
Solapur	175	2,770 (2,424–3,116)	25	103	–	–	2,873 (2,527–3,220)
Thane	479	15,161 (13,476–16,845)	27	306	–	–	15,466 (13,781–17,151)
Wardha	53	674 (605–742)	53	639	180	1,123	2,436 (2,367–2,504)
Washim	9	462 (450–473)	4	8	173	393	863 (851–874)
Yavatmal	88	2,158 (1,970–2,345)	–	–	–	–	2,158 (1,970–2,345)
Mumbai	580	17,887 (16,206–19,569)	46	366	–	–	18,254 (16,572–19,935)
Maharashtra	3,273	76,014 (68,743–83,285)	1,291	10,637	2,388	8,700	95,352 (88,080–1,02,622)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmednagar	42	1,163 (1,071–1,254)	6	271	–	–	1,434 (1,342–1,525)
Akola	58	762 (707–816)	–	–	45	79	841 (786–895)
Amravati	45	1,416 (1,258–1,574)	152	3436	–	–	4,852 (4,694–5,010)
Aurangabad	24	975 (918–1,031)	6	239	1	1	1,215 (1,158–1,271)
Beed	7	88 (76–100)	–	–	–	–	88 (76–100)
Buldhana	4	91 (83–98)	–	–	17	15	106 (98–113)
Chandrapur	31	1,159 (1,075–1,242)	68	950	12	1	2,109 (2,025–2,193)
Dhule	34	384 (355–413)	1	–	65	94	478 (449–507)
Gondia	2	19 (16–22)	–	–	–	–	19 (16–22)
Hingoli	9	88 (81–96)	–	–	–	–	88 (81–96)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Jalgaon	66	791 (729–853)	–	–	14	1	792 (730–854)
Jalna	4	222 (222–222)	6	18	14	21	261 (261–261)
Kolhapur	40	617 (500–735)	0	–	20	26	643 (526–761)
Latur	42	533 (468–597)	29	430	–	–	963 (898–1,027)
Nagpur	99	5,863 (5,347–6,379)	–	–	42	52	5,915 (5,399–6,431)
Nanded	75	1,025 (938–1,112)	76	573	79	105	1,703 (1,616–1,790)
Nandurbar	56	383 (335–431)	–	–	–	–	383 (335–431)
Nashik	51	771 (642–901)	–	–	31	17	788 (659–918)
Osmanabad	35	393 (344–442)	11	43	–	–	436 (387–485)
Palghar	0	0 (0–0)	–	–	–	–	0 (0–0)
Parbhani	30	715 (656–774)	–	–	26	33	748 (689–807)
Pune	70	1,208 (972–1,444)	–	–	37	59	1,267 (1,031–1,503)
Raigad	11	151 (128–173)	–	–	–	–	151 (128–173)
Ratnagiri	20	418 (353–483)	–	–	–	–	418 (353–483)
Sangli	49	379 (305–453)	–	–	21	9	388 (314–462)
Satara	23	224 (202–247)	1	–	18	54	278 (256–301)
Sindhudurg	41	135 (117–153)	4	12	–	–	148 (130–165)
Solapur	50	1,195 (1,049–1,340)	–	–	–	–	1,195 (1,049–1,340)
Thane	71	3,705 (3,469–3,941)	5	165	–	–	3,870 (3,634–4,106)
Wardha	–	–	–	–	3	3	3 (3–3)
Washim	–	–	–	–	24	33	33 (33–33)
Yavatmal	100	1,535 (1,402–1,669)	–	–	–	–	1,535 (1,402–1,669)
Mumbai	83	4,441 (4,103–4,778)	18	2600	–	–	7,040 (6,703–7,377)
Maharashtra	1272	30,846 (27,920–33,772)	383	8,738	469	603	40,187 (37,261–43,113)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Jalgaon	1	11 (9–12)	–	–	–	–	11 (9–12)
Pune	15	177 (130–224)	–	–	–	–	177 (130–224)
Thane	2	170 (134–205)	–	–	–	–	170 (134–205)
Mumbai	46	715 (613–817)	4	17	–	–	732 (630–834)
Maharashtra	64	1,072 (886–1,258)	4	17	2	7	1,096 (910–1,282)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ahmednagar	7	192 (176–207)	–	–	–	–	192 (176–207)
Amravati	1	59 (57–61)	4	101	–	–	160 (158–162)
Aurangabad	5	171 (171–172)	–	–	–	–	171 (171–172)
Buldhana	1	23 (20–25)	–	–	–	–	23 (20–25)
Chandrapur	4	94 (88–100)	2	57	9	–	152 (146–158)
Gondia	3	55 (52–58)	–	–	–	–	55 (52–58)
Jalgaon	50	273 (239–307)	–	–	–	–	273 (239–307)
Kolhapur	35	277 (210–344)	3	27	16	25	329 (261–396)
Latur	5	65 (55–74)	4	45	–	–	110 (100–119)
Nagpur	12	466 (413–518)	4	65	2	1	532 (479–584)
Nanded	13	222 (201–243)	12	85	4	4	311 (290–332)
Nashik	9	126 (109–143)	–	–	–	–	126 (109–143)
Osmanabad	27	222 (190–254)	3	5	–	–	227 (195–259)
Pune	34	422 (349–495)	–	–	69	125	547 (474–620)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Raigad	21	271 (231–310)	–	–	–	–	271 (231–310)
Sangli	31	134 (121–148)	3	18	47	41	194 (180–207)
Satara	16	171 (147–196)	–	–	32	65	236 (212–261)
Solapur	23	303 (260–346)	–	–	–	–	303 (260–346)
Thane	99	2,443 (2,090–2,796)	5	12	–	–	2,455 (2,102–2,808)
Washim	–	–	–	–	4	4	4 (4–4)
Mumbai	81	3,372 (3,108–3,636)	6	283	–	–	3,655 (3,390–3,919)
Maharashtra	477	9,360 (8,288–10,433)	46	698	183	265	10,323 (9,250–11,396)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bishnupur	39	608 (647–686)	–	–	90	20	667 (628–706)
Chandel	21	220 (238–257)	–	–	32	4	242 (224–261)
Churachandpur	46	265 (706–1,148)	–	–	–	–	706 (265–1,148)
Imphal East	0	0 (0–0)	–	–	52	7	7 (7–7)
Imphal West	88	573 (751–930)	4	22	98	18	791 (612–970)
Jiribam	24	477 (574–671)	–	–	4	–	574 (477–671)
Kakching	9	200 (216–232)	8	7	15	36	259 (243–275)
Kamjong	0	0 (0–0)	–	–	40	2	2 (2–2)
Kangpokpi	54	711 (800–888)	–	–	56	4	804 (715–892)
Noney	0	0 (0–0)	–	–	–	–	–
Pherzawl	0	0 (0–0)	–	–	3	1	1 (1–1)
Senapati	0	0 (0–0)	–	–	35	–	–
Tamenglong	0	0 (0–0)	–	–	130	39	39 (39–39)
Tengnoupal	26	636 (785–934)	–	–	34	67	852 (703–1,001)
Thoubal	21	434 (523–612)	20	11	59	64	598 (509–687)
Ukhrul	13	43 (103–163)	–	–	48	17	120 (60–180)
Manipur	341	5,343 (4,166–6,521)	32	40	696	279	5,662 (4,484–6,839)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bishnupur	17	178 (151–205)	–	–	53	18	196 (169–223)
Chandel	–	–	–	–	2	2	2 (2–2)
Churachandpur	6	146 (109–182)	–	–	–	–	146 (109–182)
Imphal East	1	4 (2–7)	–	–	31	25	29 (27–32)
Imphal West	50	341 (269–412)	–	–	69	10	351 (279–422)
Jiribam	–	–	–	–	4	–	–
Kakching	9	257 (221–293)	–	–	3	3	260 (224–296)
Kangpokpi	10	115 (100–129)	–	–	2	2	117 (102–131)
Tamenglong	–	–	–	–	23	2	2 (2–2)
Tengnoupal	–	–	–	–	8	13	13 (13–13)
Thoubal	14	368 (308–428)	–	–	18	23	391 (331–451)
Manipur	107	1,409 (1,160–1,657)	–	–	213	98	1,507 (1,258–1,755)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bishnupur	138	2,528 (2,238–2,819)	–	–	71	14	2,542 (2,252–2,833)
Chandel	58	752 (641–862)	–	–	42	122	874 (763–984)
Churachandpur	60	1,280 (925–1,634)	–	–	92	245	1,525 (1,170–1,879)
Imphal East	295	5,493 (4,415–6,571)	7	63	75	137	5,693 (4,615–6,771)
Imphal West	303	4,363 (3,237–5,489)	–	–	95	74	4,437 (3,311–5,563)
Jiribam	27	406 (314–499)	–	–	12	–	406 (314–499)
Kakching	119	1,751 (1,361–2,140)	–	–	16	67	1,818 (1,428–2,207)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kamjong	42	356 (234–479)	–	–	43	68	424 (302–547)
Kangpokpi	47	783 (661–906)	–	–	58	25	808 (686–931)
Pherzawl	–	–	–	–	15	86	86 (86–86)
Senapati	19	512 (381–642)	–	–	36	3	515 (384–645)
Tamenglong	30	589 (512–665)	–	–	120	29	618 (541–694)
Tengnoupal	71	1,289 (1,021–1,558)	–	–	35	90	1,379 (1,111–1,648)
Thoubal	86	1,818 (1,605–2,030)	7	45	80	435	2,297 (2,085–2,510)
Ukhrul	114	1,279 (1,115–1,443)	–	–	56	284	1,563 (1,399–1,727)
Manipur	1409	23,199 (18,660–27,737)	14	107	846	1,679	24,985 (20,447–29,523)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bishnupur	17	181 (158–205)	–	–	–	–	181 (158–205)
Chandel	–	–	–	–	–	–	–
Churachandpur	–	–	–	–	–	–	–
Imphal East	–	–	–	–	–	–	–
Imphal West	42	287 (237–336)	–	–	–	–	287 (237–336)
Jiribam	–	–	–	–	–	–	–
Kakching	–	–	–	–	–	–	–
Kamjong	–	–	–	–	–	–	–
Kangpokpi	–	–	–	–	–	–	–
Noney	–	–	–	–	–	–	–
Pherzawl	–	–	–	–	–	–	–
Senapati	–	–	–	–	–	–	–
Tamenglong	–	–	–	–	–	–	–
Tengnoupal	–	–	–	–	–	–	–
Thoubal	–	–	–	–	–	–	–
Ukhrul	–	–	–	–	–	–	–
Manipur	59	468 (395–541)	–	–	–	–	468 (395–541)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Jaintia Hills	12	233 (268–303)	–	–	17	159	427 (392–462)
East Khasi Hills	28	527 (708–888)	10	61	–	–	768 (588–949)
Ri Bhoi	20	347 (431–514)	–	–	–	–	431 (347–514)
South Garo Hills	15	394 (487–581)	–	–	–	–	487 (394–581)
West Garo Hills	12	294 (344–395)	–	–	–	–	344 (294–395)
West Jaintia Hills	25	555 (639–722)	–	–	29	114	753 (669–836)
West Khasi Hills	4	73 (86–100)	–	–	–	–	86 (73–100)
Meghalaya	116	2,963 (2,422–3,503)	10	61	46	273	3,297 (2,756–3,837)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Khasi Hills	16	321 (229–413)	4	21	–	–	343 (251–434)
West Jaintia Hills	–	–	–	–	1	1	1 (1–1)
Meghalaya	16	321 (229–413)	4	21	1	1	344 (252–435)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Jaintia Hills	26	432 (371–493)	–	–	22	189	621 (560–682)
East Khasi Hills	57	1,550 (1,344–1,756)	–	–	–	–	1,550 (1,344–1,756)
Ri Bhoi	7	232 (171–293)	–	–	–	–	232 (171–293)
South West Khasi Hills	1	48 (45–50)	–	–	–	–	48 (45–50)
West Garo Hills	12	130 (101–158)	–	–	–	–	130 (101–158)
West Jaintia Hills	28	286 (226–345)	–	–	7	24	310 (250–369)
West Khasi Hills	11	285 (244–326)	–	–	–	–	285 (244–326)
Meghalaya	142	2,962 (2,502–3,421)	–	–	29	213	3,175 (2,715–3,634)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East Khasi Hills	5	50 (32–69)	5	42	–	–	92 (74–111)
Ri Bhoi	3	17 (10–23)	–	–	–	–	17 (10–23)
West Jaintia Hills	–	–	–	–	1	1	1 (1–1)
Meghalaya	8	67 (41–92)	5	42	1	1	110 (85–135)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aizawl	57	475 (567–658)	–	–	40	67	634 (542–725)
Champhai	8	65 (84–102)	–	–	44	88	172 (153–190)
Kolasib	15	106 (123–140)	–	–	32	107	230 (213–247)
Lawngtlai	5	18 (22–26)	–	–	9	13	35 (31–39)
Lunglei	8	54 (66–77)	–	–	20	65	131 (119–142)
Mamit	9	85 (104–122)	–	–	49	25	129 (110–147)
Saiha	8	24 (30–36)	–	–	–	–	30 (24–36)
Serchhip	6	59 (70–80)	–	–	3	4	74 (63–84)
Mizoram	116	1065 (887–1,242)	–	–	197	369	1,434 (1,256–1,611)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aizawl	77	661 (549–772)	–	–	–	–	661 (549–772)
Champhai	–	–	–	–	16	40	40 (40–40)
Kolasib	–	–	–	–	20	60	60 (60–60)
Lunglei	6	79 (66–91)	–	–	1	1	80 (67–92)
Mamit	–	–	–	–	17	1	1 (1–1)
Saiha	–	–	–	–	1	–	–
Mizoram	83	739 (615–863)	–	–	55	102	841 (717–965)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Aizawl	323	4,289 (3,547–5,030)	–	–	11	12	4,301 (3,559–5,042)
Champhai	64	1,276 (1,140–1,411)	–	–	39	116	1,392 (1,256–1,527)
Kolasib	39	994 (918–1,071)	–	–	19	86	1,080 (1,004–1,157)
Lawngtlai	23	427 (381–474)	–	–	6	30	457 (411–504)
Lunglei	81	1,063 (920–1,206)	–	–	32	171	1,234 (1,091–1,377)
Mamit	55	804 (677–931)	–	–	42	39	843 (716–970)
Saiha	33	545 (421–668)	–	–	12	45	590 (466–713)
Serchhip	35	474 (397–550)	–	–	11	27	501 (424–577)
Mizoram	653	9,871 (8,402–11,341)	–	–	172	526	10,397 (8,928–11,867)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Mon	45	525 (631–736)	–	–	–	–	631 (525–736)
Dimapur	44	360 (514–669)	1	1	–	–	516 (361–670)
Kiphire	8	31 (39–48)	–	–	–	–	39 (31–48)
Kohima	20	114 (152–190)	–	–	–	–	152 (114–190)
Mokokchung	51	257 (359–461)	14	98	–	–	458 (355–560)
Phek	12	46 (55–64)	–	–	–	–	55 (46–64)
Tuensang	15	208 (259–310)	3	7	–	–	266 (215–317)
Wokha	12	108 (116–123)	–	–	–	–	116 (108–123)
Zunheboto	4	11 (14–17)	–	–	–	–	14 (11–17)
Nagaland	211	2,139 (1,659–2,619)	18	107	–	–	2,246 (1,766–2,726)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dimapur	28	247 (198–296)	–	–	–	–	247 (198–296)
Kohima	34	253 (189–317)	–	–	–	–	253 (189–317)
Mokokchung	30	296 (226–366)	1	370	–	–	666 (596–736)
Tuensang	10	73 (69–77)	–	–	–	–	73 (69–77)
Nagaland	102	869 (681–1,056)	1	370	–	–	1,239 (1,051–1,426)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Mon	125	2,629 (2,089–3,170)	–	–	–	–	2,629 (2,089–3,170)
Dimapur	212	2,644 (2,123–3,164)	1	1	–	–	2,645 (2,125–3,165)
Kiphire	34	275 (240–310)	–	–	–	–	275 (240–310)
Kohima	106	1,390 (1,120–1,661)	–	–	–	–	1,390 (1,120–1,661)
Longleng	44	761 (707–815)	–	–	–	–	761 (707–815)
Mokokchung	145	2,353 (1,957–2,749)	31	346	–	–	2,699 (2,303–3,095)
Noklak	42	501 (449–552)	–	–	–	–	501 (449–552)
Peren	68	808 (664–953)	–	–	–	–	808 (664–953)
Phek	98	1,020 (890–1,149)	–	–	–	–	1,020 (890–1,149)
Tuensang	146	2,224 (2,022–2,426)	4	7	–	–	2,231 (2,029–2,433)
Wokha	121	1,122 (931–1,313)	–	–	–	–	1,122 (931–1,313)
Zunheboto	53	721 (590–851)	–	–	–	–	721 (590–851)
Nagaland	1194	16,448 (13,782–19,113)	36	354	–	–	16,802 (14,137–19,468)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dimapur	12	60 (44–76)	–	–	–	–	60 (44–76)
Mokokchung	1	22 (18–26)	–	–	–	–	22 (18–26)
Nagaland	13	82 (62–102)	–	–	–	–	82 (62–102)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anugul	30	506 (571–636)	2	10	–	–	581 (515–646)
Balangir	110	454 (588–723)	1	1	100	58	648 (513–782)
Baleshwar	118	1,412 (1,554–1,696)	–	–	–	–	1,554 (1,412–1,696)
Bargarh	12	163 (176–189)	1	–	–	–	176 (163–189)
Bhadrak	67	773 (885–997)	7	90	–	–	975 (863–1,087)
Boudh	13	147 (162–176)	–	–	–	–	162 (147–176)
Cuttack	85	526 (625–723)	13	76	–	–	701 (602–799)
Deogarh	12	185 (198–210)	–	–	–	–	198 (185–210)
Dhenkanal	61	526 (605–684)	–	–	–	–	605 (526–684)
Gajapati	48	506 (554–601)	–	–	–	–	554 (506–601)
Ganjam	60	437 (507–578)	10	9	211	355	872 (801–942)
Jagatsinghapur	48	309 (457–605)	–	–	–	–	457 (309–605)
Jajapur	103	966 (1,083–1,200)	2	3	–	–	1,086 (969–1,203)
Jharsuguda	27	99 (132–164)	–	–	–	–	132 (99–164)
Kalahandi	55	346 (396–445)	2	–	145	302	698 (648–747)
Kandhamal	99	851 (1,051–1,251)	13	88	–	–	1,139 (939–1,338)
Kendrapara	123	619 (744–870)	–	–	–	–	744 (619–870)
Kendujhar	112	1,069 (1,320–1,570)	4	27	–	–	1,347 (1,096–1,597)
Khordha	91	987 (1,084–1,182)	31	59	183	234	1,378 (1,280–1,475)
Koraput	147	1,257 (1,526–1,795)	6	10	–	–	1,537 (1,267–1,806)
Malkangiri	94	719 (843–966)	2	10	–	–	852 (729–976)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Mayurbhanj	142	1,304 (1,616–1,928)	4	–	–	–	1,616 (1,304–1,928)
Nabarangpur	62	425 (494–562)	7	1	–	–	494 (426–562)
Nayagarh	53	413 (442–470)	5	10	–	–	452 (424–480)
Nuapada	63	608 (679–751)	–	–	208	630	1,310 (1,238–1,381)
Puri	106	1,009 (1,151–1,294)	70	488	–	–	1,640 (1,497–1,782)
Rayagada	44	448 (504–559)	2	18	–	–	522 (466–577)
Sambalpur	12	131 (151–170)	–	–	–	–	151 (131–170)
Sonepur	15	167 (189–210)	–	–	–	–	189 (167–210)
Sundargarh	101	1,366 (1,537–1,708)	8	79	110	241	1,857 (1,686–2,028)
Odisha	2,113	21,820 (18,729–24,912)	190	980	957	1,820	24,620 (21,529–27,712)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anugul	7	43 (35–50)	–	–	–	–	43 (35–50)
Balangir	64	403 (344–462)	–	–	13	6	409 (350–468)
Baleshwar	22	256 (236–276)	–	–	–	–	256 (236–276)
Bargarh	2	30 (28–32)	–	–	–	–	30 (28–32)
Bhadrak	37	471 (401–541)	2	35	–	–	506 (436–576)
Boudh	2	39 (37–40)	–	–	–	–	39 (37–40)
Cuttack	16	108 (94–122)	–	–	–	–	108 (94–122)
Deogarh	7	107 (100–113)	–	–	–	–	107 (100–113)
Dhenkanal	29	157 (130–183)	–	–	–	–	157 (130–183)
Gajapati	19	140 (123–158)	1	2	–	–	142 (125–160)
Ganjam	35	132 (100–163)	2	4	206	278	413 (382–445)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Jagatsinghapur	10	100 (66–134)	–	–	–	–	100 (66–134)
Jajapur	15	128 (115–141)	1	2	–	–	130 (117–143)
Jharsuguda	1	2 (1–2)	–	–	–	–	2 (1–2)
Kalahandi	74	552 (478–626)	2	5	99	135	692 (618–766)
Kendujhar	39	328 (254–403)	–	–	–	–	328 (254–403)
Khordha	26	344 (318–371)	4	6	73	89	439 (413–465)
Koraput	27	161 (137–185)	–	–	–	–	161 (137–185)
Malkangiri	5	32 (26–37)	–	–	–	–	32 (26–37)
Mayurbhanj	27	298 (267–329)	–	–	–	–	298 (267–329)
Nabarangpur	8	44 (40–48)	–	–	–	–	44 (40–48)
Nayagarh	25	262 (241–283)	3	2	–	–	264 (243–285)
Nuapada	25	249 (216–283)	–	–	67	83	332 (299–366)
Puri	33	200 (166–233)	8	42	–	–	242 (208–275)
Rayagada	19	184 (162–207)	–	–	–	–	184 (162–207)
Sambalpur	3	19 (15–22)	–	–	–	–	19 (15–22)
Sonepur	17	217 (192–242)	–	–	–	–	217 (192–242)
Sundargarh	24	281 (246–315)	1	4	–	–	285 (250–319)
Odisha	618	5,285 (4,569–6,002)	24	101	458	591	5,977 (5,261–6,694)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anugul	2	13 (12–14)	–	–	–	–	13 (12–14)
Balangir	3	6 (5–7)	–	–	9	6	12 (11–13)
Bargarh	32	552 (515–589)	3	59	–	–	611 (574–648)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bhadrak	2	10 (8–12)	–	–	–	–	10 (8–12)
Cuttack	103	722 (550–893)	2	14	–	–	736 (564–907)
Dhenkanal	4	53 (47–59)	–	–	–	–	53 (47–59)
Jagatsinghapur	4	28 (19–36)	–	–	–	–	28 (19–36)
Jajapur	4	33 (27–40)	–	–	–	–	33 (27–40)
Jharsuguda	7	30 (21–38)	–	–	–	–	30 (21–38)
Kendrapara	1	3 (2–3)	–	–	–	–	3 (2–3)
Khordha	106	1,199 (970–1,427)	14	223	–	–	1,422 (1,193–1,650)
Koraput	1	12 (12–12)	–	–	–	–	12 (12–12)
Nabarangpur	3	26 (24–27)	–	–	–	–	26 (24–27)
Puri	79	696 (646–746)	27	129	–	–	825 (775–875)
Sambalpur	30	529 (471–587)	–	–	–	–	529 (471–587)
Sundargarh	20	185 (158–211)	–	–	–	–	185 (158–211)
Odisha	401	4,094 (3,487–4,702)	46	426	9	6	4,526 (3,918–5,134)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Anugul	57	1,029 (910–1,148)	3	17	–	–	1,046 (927–1,165)
Balangir	62	278 (225–331)	1	1	29	13	291 (238–344)
Baleshwar	13	123 (110–136)	–	–	–	–	123 (110–136)
Bargarh	4	50 (47–53)	1	14	–	–	63 (60–66)
Bhadrak	17	144 (118–169)	2	30	–	–	174 (148–199)
Boudh	2	40 (38–42)	–	–	–	–	40 (38–42)
Cuttack	39	328 (275–380)	17	143	–	–	471 (418–524)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Deogarh	7	124 (117–131)	–	–	–	–	124 (117–131)
Dhenkanal	44	306 (262–350)	3	29	–	–	335 (291–379)
Gajapati	21	167 (142–192)	2	4	–	–	171 (146–196)
Ganjam	61	293 (237–349)	12	58	118	152	503 (447–559)
Jagatsinghapur	15	143 (86–201)	–	–	–	–	143 (86–201)
Jajapur	17	137 (117–156)	2	7	–	–	143 (124–162)
Jharsuguda	7	40 (30–50)	–	–	–	–	40 (30–50)
Kalahandi	52	282 (211–352)	3	5	27	34	321 (251–392)
Kandhamal	10	95 (81–109)	1	2	–	–	97 (84–111)
Kendrapara	4	28 (24–32)	1	4	–	–	31 (27–35)
Kendujhar	43	403 (330–477)	–	–	–	–	403 (330–477)
Khordha	44	548 (497–600)	12	13	–	–	561 (510–612)
Koraput	24	133 (112–153)	2	1	–	–	134 (113–154)
Malkangiri	8	85 (73–97)	1	2	–	–	87 (75–99)
Mayurbhanj	17	183 (167–200)	2	22	–	–	205 (189–222)
Nabarangpur	11	62 (52–71)	–	–	–	–	62 (52–71)
Nayagarh	19	151 (138–164)	5	4	–	–	156 (143–168)
Nuapada	3	21 (19–23)	–	–	1	1	22 (20–24)
Puri	31	334 (294–373)	19	86	–	–	419 (380–459)
Rayagada	35	423 (375–471)	2	17	–	–	440 (392–488)
Sambalpur	13	139 (121–156)	–	–	–	–	139 (121–156)
Sonepur	5	64 (56–72)	–	–	–	–	64 (56–72)
Sundargarh	32	399 (353–444)	–	–	–	–	399 (353–444)
Odisha	717	6,550 (5,618–7,482)	91	459	175	200	7,209 (6,277–8,141)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Karaikal	22	546 (488–605)	4	21	–	–	567 (509–626)
Mahe	13	75 (58–92)	–	–	–	–	75 (58–92)
Pondicherry	48	1,304 (1,170–1,437)	9	66	–	–	1,370 (1,236–1,503)
Yanam	18	502 (393–610)	–	–	–	–	502 (393–610)
Puducherry	101	2,427 (2,110–2,744)	13	87	–	–	2,514 (2,197–2,832)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Karaikal	20	485 (432–539)	–	–	–	–	485 (432–539)
Mahe	11	126 (111–141)	–	–	–	–	126 (111–141)
Pondicherry	59	1,273 (1,115–1,431)	4	180	–	–	1,452 (1,294–1,610)
Yanam	8	425 (342–508)	–	–	–	–	425 (342–508)
Puducherry	98	2,309 (2,000–2,619)	4	180	–	–	2,489 (2,179–2,798)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Karaikal	–	–	–	–	–	–	–
Mahe	8	21 (13–28)	–	–	–	–	21 (13–28)
Pondicherry	–	–	–	–	–	–	–
Yanam	–	–	–	–	–	–	–
Puducherry	8	21 (13–28)	–	–	–	–	21 (13–28)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Karaikal	8	20 (15–26)	–	–	–	–	20 (15–26)
Mahe	5	52 (44–59)	–	–	–	–	52 (44–59)
Pondicherry	8	131 (118–145)	–	–	–	–	131 (118–145)
Yanam	–	–	–	–	–	–	–
Puducherry	21	203 (177–229)	–	–	–	–	203 (177–229)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Amritsar	98	2,101 (2,487–2,873)	11	130	145	373	2,990 (2,604–3,376)
Barnala	68	847 (951–1,055)	13	141	–	–	1,092 (988–1,196)
Bathinda	34	404 (511–618)	4	69	–	–	580 (473–687)
Faridkot	24	184 (197–209)	5	22	60	79	298 (285–310)
Fatehgarh Sahib	45	964 (1,085–1,205)	32	102	–	–	1,186 (1,066–1,307)
Firozpur	20	507 (533–559)	2	61	23	23	617 (591–643)
Gurdaspur	56	879 (997–1,114)	16	54	–	–	1,051 (933–1,168)
Hoshiarpur	86	1,257 (1,560–1,862)	17	154	–	–	1,714 (1,411–2,017)
Jalandhar	118	1,157 (1,430–1,703)	17	290	–	–	1,720 (1,446–1,993)
Kapurthala	45	726 (815–904)	12	14	–	–	829 (741–918)
Ludhiana	67	1,260 (1,469–1,677)	5	75	105	393	1,937 (1,729–2,146)
Mansa	122	1,780 (1,997–2,215)	19	88	–	–	2,085 (1,868–2,303)
Moga	84	1,206 (1,361–1,517)	8	78	100	1265	2,704 (2,548–2,859)
Nawanshahr	7	110 (125–140)	1	3	–	–	128 (112–143)
Pathankot	39	599 (731–862)	10	64	–	–	794 (663–926)
Patiala	111	1,632 (1,855–2,079)	49	229	–	–	2,085 (1,861–2,308)
Rupnagar	21	453 (500–547)	1	4	–	–	504 (457–551)
S.A.S Nagar	65	1,099 (1,264–1,430)	17	272	–	–	1,537 (1,371–1,702)
Sangrur	68	806 (919–1,032)	19	127	–	–	1,045 (932–1,158)
Sri Muktsar Sahib	52	517 (581–645)	19	126	67	220	927 (863–991)
Tarn Taran	66	1,206 (1,329–1,452)	8	31	96	122	1,482 (1,359–1,605)
Punjab	1,296	22,696 (19,693–25,698)	285	2,133	596	2,475	27,304 (24,301–30,307)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Amritsar	36	576 (494–657)	1	42	43	26	644 (562–725)
Barnala	28	327 (285–369)	2	19	–	–	345 (303–387)
Bathinda	5	93 (76–110)	–	–	–	–	93 (76–110)
Faridkot	10	30 (26–34)	–	–	35	29	59 (55–63)
Fatehgarh Sahib	9	103 (85–121)	–	–	–	–	103 (85–121)
Fazilka	0	0 (0–0)	–	–	–	–	–
Firozpur	2	58 (55–61)	–	–	9	17	75 (72–78)
Gurdaspur	28	504 (429–578)	6	12	–	–	515 (441–590)
Hoshiarpur	85	1,587 (1,314–1,859)	30	282	–	–	1,869 (1,596–2,142)
Jalandhar	46	491 (436–546)	–	–	–	–	491 (436–546)
Kapurthala	25	499 (418–580)	–	–	–	–	499 (418–580)
Ludhiana	29	384 (345–423)	–	–	46	27	411 (372–450)
Mansa	74	565 (494–635)	2	–	–	–	565 (494–635)
Moga	9	62 (53–71)	–	–	7	4	66 (57–75)
Nawanshahr	12	259 (233–285)	2	5	–	–	264 (238–290)
Pathankot	31	359 (294–423)	4	–	–	–	359 (294–423)
Patiala	24	457 (407–506)	4	18	–	–	474 (425–524)
Rupnagar	7	174 (162–186)	–	–	–	–	174 (162–186)
S.A.S Nagar	21	362 (313–411)	5	–	–	–	362 (313–411)
Sangrur	13	142 (114–171)	2	15	–	–	157 (129–186)
Sri Muktsar Sahib	18	185 (169–200)	5	16	27	54	254 (238–270)
Tarn Taran	30	217 (199–234)	–	–	71	49	266 (248–283)
Punjab	542	7,431 (6,401–8,461)	63	408	238	206	8,045 (7,015–9,075)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Amritsar	182	3,719 (3,152–4,285)	4	99	145	1418	5,236 (4,669–5,802)
Barnala	17	113 (54–171)	4	20	–	–	133 (74–191)
Bathinda	29	555 (410–701)	3	38	–	–	593 (448–739)
Faridkot	78	777 (716–837)	–	–	100	338	1,115 (1,054–1,175)
Fatehgarh Sahib	54	1,196 (1,065–1,328)	5	55	–	–	1,251 (1,119–1,383)
Firozpur	57	1,042 (955–1,129)	–	–	100	1220	2,262 (2,175–2,349)
Gurdaspur	104	2,662 (2,229–3,094)	30	209	–	–	2,871 (2,439–3,303)
Hoshiarpur	137	2,054 (1,642–2,466)	23	195	–	–	2,249 (1,837–2,661)
Jalandhar	290	4,948 (4,216–5,680)	6	35	–	–	4,983 (4,251–5,715)
Kapurthala	84	1,555 (1,320–1,790)	21	227	–	–	1,782 (1,547–2,017)
Ludhiana	127	3,227 (2,814–3,641)	8	103	105	458	3,789 (3,375–4,202)
Mansa	117	1,794 (1,580–2,009)	–	–	–	–	1,794 (1,580–2,009)
Moga	85	1,632 (1,462–1,801)	5	107	100	1947	3,685 (3,515–3,855)
Nawanshahr	29	821 (736–906)	3	8	–	–	829 (743–914)
Pathankot	35	851 (764–938)	20	621	–	–	1,472 (1,385–1,559)
Patiala	103	1,386 (1,198–1,575)	1	9	–	–	1,395 (1,207–1,583)
Rupnagar	43	1,076 (978–1,175)	3	6	–	–	1,082 (984–1,180)
S.A.S Nagar	33	692 (616–769)	5	136	–	–	828 (752–904)
Sangrur	36	453 (383–523)	2	4	–	–	457 (387–527)
Sri Muktsar Sahib	42	458 (418–499)	11	73	92	371	902 (862–943)
Tarn Taran	233	4,033 (3,564–4,502)	8	106	100	2252	6,392 (5,922–6,861)
Punjab	1915	35,045 (30,272–39,818)	162	2049	742	8004	45,098 (40,325–49,872)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Amritsar	14	136 (108–164)	–	–	–	–	136 (108–164)
Barnala	1	8 (7–9)	–	–	–	–	8 (7–9)
Faridkot	2	5 (3–6)	–	–	–	–	5 (3–6)
Firozepur	6	163 (152–174)	–	–	3	–	163 (152–174)
Gurdaspur	–	–	1	2	–	–	2 (2–2)
Jalandhar	8	69 (56–82)	–	–	–	–	69 (56–82)
Kapurthala	1	17 (13–20)	–	–	–	–	17 (13–20)
Ludhiana	23	483 (438–529)	6	70	1	–	554 (508–600)
Mansa	6	33 (29–37)	–	–	–	–	33 (29–37)
Moga	–	–	–	–	2	–	–
Pathankot	1	10 (8–12)	–	–	–	–	10 (8–12)
Patiala	13	160 (137–183)	–	–	–	–	160 (137–183)
Rupnagar	1	6 (6–6)	–	–	–	–	6 (6–6)
S.A.S Nagar	3	42 (36–47)	–	–	–	–	42 (36–47)
Sangrur	1	12 (9–14)	1	12	–	–	24 (21–26)
Sri Muktsar Sahib	1	6 (5–7)	–	–	–	–	6 (5–7)
Tarn Taran	9	80 (73–87)	–	–	5	3	83 (76–90)
Punjab	90	1,228 (1,080–1,377)	8	85	11	3	1,316 (1,167–1,464)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ajmer	34	418 (467–517)	7	14	–	–	481 (432–530)
Alwar	34	823 (905–986)	4	50	–	–	955 (874–1,037)
Banswara	42	678 (764–850)	10	166	–	–	931 (844–1,017)
Barmer	9	253 (272–292)	2	18	–	–	290 (271–309)
Bharatpur	37	663 (704–744)	4	24	–	–	727 (686–768)
Bhilwara	64	428 (505–583)	9	61	–	–	567 (489–644)
Bikaner	36	493 (541–590)	3	35	–	–	576 (528–625)
Bundi	30	892 (1,011–1,129)	5	7	–	–	1,018 (899–1,136)
Chittorgarh	34	421 (465–509)	4	14	–	–	479 (435–523)
Churu	48	301 (395–488)	5	26	–	–	421 (327–514)
Dholpur	43	255 (290–325)	–	–	–	–	290 (255–325)
Dungarpur	41	628 (712–796)	9	95	–	–	807 (723–891)
Ganganagar	51	863 (963–1,064)	9	78	–	–	1,041 (941–1,142)
Hanumangarh	35	531 (599–667)	8	47	–	–	646 (578–714)
Jaipur	54	750 (833–915)	29	539	–	–	1,372 (1,289–1,454)
Jaisalmer	27	687 (737–786)	7	40	–	–	777 (727–826)
Jalore	30	192 (211–230)	4	29	–	–	240 (221–259)
Jhalawar	14	393 (421–448)	14	63	–	–	483 (456–511)
Jhunjhunu	52	1,059 (1,148–1,237)	13	28	–	–	1,176 (1,087–1,265)
Jodhpur	97	1,294 (1,413–1,533)	21	74	–	–	1,487 (1,368–1,607)
Karauli	14	305 (337–369)	7	35	–	–	372 (340–404)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kota	24	523 (561–598)	–	–	–	–	561 (523–598)
Nagaur	41	1,032 (1,115–1,198)	5	58	–	–	1,173 (1,090–1,256)
Pali	49	648 (706–764)	8	1	–	–	707 (649–765)
Pratapgarh	16	187 (204–221)	1	4	–	–	208 (191–225)
Rajsamand	46	463 (509–555)	11	29	–	–	538 (492–585)
Sawai Madhopur	13	491 (538–584)	5	82	–	–	620 (573–666)
Sikar	52	370 (435–499)	7	16	–	–	450 (385–515)
Sirohi	32	497 (535–573)	3	39	–	–	574 (536–612)
Tonk	23	265 (297–330)	12	168	–	–	465 (433–498)
Udaipur	33	515 (565–615)	7	36	–	–	601 (552–651)
Rajasthan	1,155	19,156 (17,318–20,993)	233	1,878			21,034 (19,196–22,871)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ajmer	38	473 (408–538)	4	–	–	–	473 (408–538)
Alwar	11	239 (219–259)	3	26	–	–	265 (245–285)
Banswara	13	272 (237–306)	3	46	–	–	318 (283–352)
Barmer	1	33 (28–38)	2	15	–	–	48 (44–53)
Bharatpur	15	385 (342–428)	1	9	–	–	394 (351–437)
Bhilwara	47	370 (308–431)	4	27	–	–	397 (336–458)
Bikaner	15	105 (92–119)	2	21	–	–	126 (112–140)
Bundi	7	208 (191–226)	1	7	–	–	215 (198–233)
Chittorgarh	22	251 (232–269)	1	5	–	–	255 (237–274)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Churu	43	206 (145–266)	4	24	–	–	230 (169–291)
Dholpur	13	127 (100–153)	–	–	–	–	127 (100–153)
Dungarpur	18	327 (293–360)	2	20	–	–	347 (313–380)
Ganganagar	28	307 (255–359)	4	37	–	–	344 (292–396)
Hanumangarh	39	382 (324–439)	3	16	–	–	398 (340–455)
Jaipur	56	412 (346–477)	9	74	–	–	486 (420–551)
Jaisalmer	9	164 (154–173)	–	–	–	–	164 (154–173)
Jalore	4	12 (10–13)	1	1	–	–	13 (11–14)
Jhalawar	2	17 (15–19)	–	–	–	–	17 (15–19)
Jhunjhunu	23	373 (340–407)	4	2	–	–	375 (341–408)
Jodhpur	14	391 (340–443)	1	1	–	–	392 (341–443)
Karauli	7	29 (25–32)	1	9	–	–	37 (34–41)
Kota	21	515 (481–548)	–	–	–	–	515 (481–548)
Nagaur	7	50 (43–57)	–	–	–	–	50 (43–57)
Pali	2	9 (8–10)	1	5	–	–	14 (13–14)
Pratapgarh	12	110 (100–119)	1	3	–	–	113 (103–122)
Rajsamand	1	2 (2–3)	1	–	–	–	2 (2–3)
Sawai Madhopur	7	248 (232–263)	2	27	–	–	275 (259–290)
Sikar	47	285 (239–330)	2	6	–	–	290 (244–336)
Sirohi	1	7 (6–8)	–	–	–	–	7 (6–8)
Tonk	22	207 (186–227)	4	10	–	–	217 (196–237)
Udaipur	30	438 (407–468)	2	13	–	–	451 (420–481)
Rajasthan	575	6,949 (6,109–7,788)	63	402	–	–	7,351 (6,512–8,190)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ajmer	31	492 (411–572)	–	–	–	–	492 (411–572)
Alwar	2	14 (12–16)	–	–	–	–	14 (12–16)
Banswara	1	3 (3–4)	1	–	–	–	3 (3–4)
Bharatpur	12	232 (214–249)	–	–	–	–	232 (214–249)
Bhilwara	6	26 (22–31)	1	3	–	–	29 (24–34)
Bikaner	19	204 (176–231)	–	–	–	–	204 (176–231)
Bundi	7	38 (33–42)	1	4	–	–	42 (37–46)
Chittorgarh	3	17 (15–18)	2	13	–	–	30 (28–31)
Dholpur	12	20 (15–25)	–	–	–	–	20 (15–25)
Dungarpur	1	17 (14–19)	1	15	–	–	32 (29–34)
Ganganagar	25	326 (295–357)	4	28	–	–	354 (323–385)
Hanumangarh	18	256 (232–279)	2	15	–	–	271 (247–294)
Jaipur	7	205 (193–216)	3	27	–	–	232 (220–243)
Jaisalmer	1	11 (10–11)	–	–	–	–	11 (10–11)
Jalore	3	6 (5–8)	1	1	–	–	7 (6–8)
Jhalawar	3	8 (6–10)	–	–	–	–	8 (6–10)
Jhunjhunu	1	10 (9–11)	–	–	–	–	10 (9–11)
Jodhpur	6	62 (53–71)	2	8	–	–	70 (61–79)
Karauli	3	37 (31–42)	–	–	–	–	37 (31–42)
Kota	42	715 (654–775)	4	42	–	–	756 (696–817)
Nagaur	4	26 (19–32)	–	–	–	–	26 (19–32)
Pali	4	30 (26–34)	–	–	–	–	30 (26–34)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Rajsamand	4	10 (8–11)	1	–	–	–	10 (8–11)
Sawai Madhopur	3	39 (35–43)	3	29	–	–	68 (64–72)
Sikar	4	13 (11–14)	–	–	–	–	13 (11–14)
Sirohi	1	23 (21–25)	–	–	–	–	23 (21–25)
Udaipur	1	4 (3–4)	–	–	–	–	4 (3–4)
Rajasthan	224	2,839 (2,527–3,152)	26	184	–	–	3,024 (2,711–3,336)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ajmer	11	172 (155–189)	4	4	–	–	175 (158–193)
Alwar	4	20 (18–23)	2	15	–	–	35 (32–37)
Banswara	1	4 (3–4)	1	1	–	–	4 (4–5)
Bharatpur	2	8 (6–9)	1	6	–	–	14 (12–15)
Bhilwara	3	9 (7–10)	1	4	–	–	12 (11–14)
Bikaner	1	5 (5–5)	–	–	–	–	5 (5–5)
Bundi	1	3 (2–3)	–	–	–	–	3 (2–3)
Chittorgarh	6	31 (28–34)	3	18	–	–	49 (46–52)
Churu	1	25 (20–30)	–	–	–	–	25 (20–30)
Dholpur	5	105 (94–116)	–	–	–	–	105 (94–116)
Dungarpur	6	22 (18–26)	1	17	–	–	39 (35–43)
Ganganagar	28	244 (209–279)	4	30	–	–	274 (239–309)
Hanumangarh	19	139 (111–168)	3	11	–	–	150 (121–179)
Jaipur	61	611 (528–694)	14	49	–	–	660 (577–743)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Jaisalmer	1	6 (5–6)	–	–	–	–	6 (5–6)
Jalore	3	5 (4–7)	1	1	–	–	6 (5–8)
Jhalawar	2	3 (2–4)	–	–	–	–	3 (2–4)
Jhunjhunu	2	44 (40–49)	1	–	–	–	44 (40–49)
Jodhpur	1	10 (8–12)	2	6	–	–	17 (15–19)
Karauli	2	6 (5–7)	3	46	–	–	52 (51–52)
Kota	7	84 (71–98)	4	37	–	–	121 (107–134)
Nagaur	1	6 (6–7)	–	–	–	–	6 (6–7)
Pali	10	98 (89–107)	1	7	–	–	105 (97–114)
Pratapgarh	3	10 (8–11)	–	–	–	–	10 (8–11)
Rajsamand	5	18 (15–20)	1	3	–	–	20 (18–22)
Sawai Madhopur	2	7 (6–8)	2	10	–	–	17 (16–18)
Sikar	1	3 (3–3)	–	–	–	–	3 (3–3)
Sirohi	1	19 (18–20)	–	–	–	–	19 (18–20)
Tonk	3	21 (19–23)	1	2	–	–	23 (21–25)
Udaipur	10	118 (110–125)	1	6	–	–	124 (116–131)
Rajasthan	203	1,855 (1,611–2,098)	51	271	–	–	2,126 (1,883–2,369)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East District	54	388 (456–524)	–	–	–	–	456 (388–524)
North District	–	–	–	–	–	–	–
South District	21	246 (275–304)	–	–	–	–	275 (246–304)
West District	–	–	–	–	–	–	–
Sikkim	75	732 (635–828)	–	–	–	–	732 (635–828)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
East District	38	507 (435–579)	–	–	–	–	507 (435–579)
North District	–	–	–	–	–	–	–
South District	20	314 (278–350)	–	–	–	–	314 (278–350)
West District	–	–	–	–	–	–	–
Sikkim	58	821 (713–929)	–	–	–	–	821 (713–929)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ariyalur	30	489 (552–615)	3	49	–	–	601 (538–664)
Chennai	201	3,060 (3,520–3,980)	7	34	–	–	3,554 (3,094–4,015)
Coimbatore	143	943 (1,176–1,409)	25	162	–	–	1,338 (1,105–1,571)
Cuddalore	67	1,382 (1,542–1,702)	25	46	–	–	1,588 (1,428–1,748)
Dharmapuri	118	2,143 (2,386–2,629)	29	167	167	1156	3,710 (3,467–3,953)
Dindigul	45	986 (1,091–1,195)	2	14	161	879	1,984 (1,880–2,088)
Erode	51	668 (784–900)	4	29	173	890	1,703 (1,587–1,819)
Kanchipuram	106	2,285 (2,581–2,877)	10	133	–	–	2,714 (2,418–3,010)
Kanniyakumari	53	1,337 (1,437–1,537)	7	6	–	–	1,443 (1,343–1,543)
Karur	54	1,066 (1,308–1,549)	4	73	–	–	1,381 (1,140–1,623)
Krishnagiri	145	2,964 (3,254–3,545)	77	652	–	–	3,906 (3,616–4,197)
Madurai	141	2,627 (3,306–3,984)	9	179	–	–	3,485 (2,807–4,163)
Nagapattinam	41	618 (762–907)	–	–	–	–	762 (618–907)
Namakkal	139	1,075 (1,274–1,473)	14	256	–	–	1,530 (1,331–1,729)
Perambalur	55	676 (812–947)	1	23	–	–	834 (699–970)
Pudukkottai	110	788 (1,009–1,231)	12	80	–	–	1,090 (868–1,311)
Ramanathapuram	47	981 (1,095–1,208)	5	57	116	507	1,658 (1,545–1,772)
Salem	149	2,215 (2,459–2,703)	56	332	218	1536	4,327 (4,084–4,571)
Sivaganga	45	603 (748–893)	2	3	–	–	751 (606–897)
Thanjavur	18	442 (475–509)	1	12	149	693	1,180 (1,147–1,214)
The Nilgiris	–	–	–	–	140	252	252 (252–252)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Theni	37	564 (692–820)	7	21	115	426	1,139 (1,010–1,267)
Thiruvallur	81	1,768 (1,979–2,190)	11	137	132	422	2,538 (2,327–2,749)
Thiruvarur	10	206 (233–261)	–	–	–	–	233 (206–261)
Tiruchirappalli	148	3,001 (3,437–3,874)	4	72	–	–	3,509 (3,072–3,946)
Tirunelveli	66	1,445 (1,613–1,782)	9	74	164	632	2,319 (2,150–2,487)
Tiruppur	30	306 (381–456)	3	5	–	–	386 (311–461)
Tiruvannamalai	56	1,173 (1,235–1,297)	2	41	173	1127	2,403 (2,341–2,465)
Tuticorin	85	1,723 (1,891–2,058)	6	73	–	–	1,963 (1,795–2,131)
Vellore	113	1,629 (1,955–2,281)	3	32	180	970	2,957 (2,631–3,282)
Villupuram	58	1,062 (1,132–1,202)	11	121	154	742	1,995 (1,925–2,065)
Virudhunagar	74	1,087 (1,334–1,581)	23	206	–	–	1,541 (1,294–1,787)
Tamil Nadu	2,516	47,452 (41,310–53,594)	372	3,091	2,042	10,232	60,775 (54,633–66,917)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Ariyalur	2	22 (17–26)	–	–	–	–	22 (17–26)
Chennai	258	6,228 (5,342–7,115)	9	322	–	–	6,551 (5,664–7,437)
Coimbatore	19	478 (445–511)	–	–	–	–	478 (445–511)
Cuddalore	55	1,233 (1,109–1,356)	5	7	–	–	1,239 (1,116–1,363)
Dharmapuri	20	278 (236–319)	3	235	75	76	589 (547–630)
Dindigul	9	214 (191–238)	–	–	70	115	329 (306–353)
Erode	32	500 (441–560)	6	99	126	148	748 (688–807)
Kanchipuram	74	1,576 (1,380–1,771)	4	105	–	–	1,681 (1,485–1,877)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kanniyakumari	46	1,232 (1,145–1,319)	–	–	–	–	1,232 (1,145–1,319)
Karur	70	1,718 (1,452–1,984)	5	115	–	–	1,833 (1,567–2,099)
Krishnagiri	12	204 (171–238)	4	34	–	–	238 (204–272)
Madurai	47	675 (560–790)	–	–	–	–	675 (560–790)
Nagapattinam	35	727 (605–848)	3	312	–	–	1,039 (918–1,160)
Namakkal	17	204 (164–243)	15	245	–	–	448 (409–488)
Perambalur	35	608 (516–699)	8	89	–	–	697 (605–788)
Pudukkottai	35	376 (300–452)	2	4	–	–	380 (304–456)
Ramanathapuram	54	1,207 (1,083–1,332)	1	–	26	37	1,244 (1,120–1,369)
Salem	148	2,553 (2,274–2,832)	33	582	211	381	3,516 (3,237–3,795)
Sivaganga	44	835 (727–942)	–	–	–	–	835 (727–942)
Thanjavur	50	1,303 (1,059–1,546)	2	17	41	64	1,383 (1,140–1,626)
The Nilgiris	0	0 (0–0)	–	–	4	8	8 (8–8)
Theni	10	134 (107–161)	2	7	36	46	187 (160–213)
Thiruvallur	65	1,427 (1,264–1,590)	5	106	129	142	1,675 (1,512–1,838)
Thiruvavarur	7	198 (163–233)	–	–	–	–	198 (163–233)
Tiruchirappalli	86	1,507 (1,217–1,796)	13	309	–	–	1,816 (1,527–2,105)
Tirunelveli	74	1,776 (1,598–1,954)	5	162	156	419	2,357 (2,179–2,534)
Tiruppur	38	438 (332–544)	5	20	–	–	458 (352–564)
Tiruvannamalai	52	1,191 (1,122–1,259)	5	116	50	61	1,367 (1,299–1,436)
Tuticorin	46	905 (786–1,025)	–	–	–	–	905 (786–1,025)
Vellore	59	983 (820–1,145)	7	144	91	5	1,132 (970–1,295)
Villupuram	80	1,697 (1,594–1,800)	6	244	98	146	2,087 (1,984–2,190)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Virudhunagar	50	938 (784–1,093)	–	–	–	–	938 (784–1,093)
Tamil Nadu	1629	33,362 (29,005–37,718)	148	3274	1113	1648	38,284 (33,927–42,641)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Thanjavur	1	9 (4–14)	–	–	–	–	9 (4–14)
Tiruchirappalli	3	5 (3–6)	–	–	–	–	5 (3–6)
Tirunelveli	–	–	–	–	1	1	1 (1–1)
Tuticorin	10	101 (84–117)	–	–	–	–	101 (84–117)
Vellore	–	–	–	–	–	–	–
Tamil Nadu	14	114 (91–137)	–	–	1	1	115 (92–138)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chennai	85	1,308 (1,159–1,457)	17	369	–	–	1,677 (1,529–1,826)
Coimbatore	15	219 (192–246)	–	–	–	–	219 (192–246)
Cuddalore	14	288 (259–318)	2	–	–	–	288 (259–318)
Dharmapuri	17	215 (189–242)	2	21	1	–	236 (210–263)
Dindigul	4	128 (119–138)	–	–	–	–	128 (119–138)
Erode	12	90 (76–103)	2	30	89	75	194 (181–208)
Kanchipuram	52	734 (517–950)	5	49	–	–	782 (566–999)
Kanniyakumari	10	175 (163–188)	–	–	–	–	175 (163–188)
Karur	5	117 (97–137)	2	38	–	–	155 (135–175)
Krishnagiri	14	242 (202–282)	7	30	–	–	272 (232–312)
Madurai	21	203 (140–265)	–	–	–	–	203 (140–265)
Nagapattinam	15	193 (111–276)	1	70	–	–	263 (181–345)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Namakkal	31	371 (305–436)	1	10	–	–	381 (315–446)
Perambalur	6	37 (30–43)	–	–	–	–	37 (30–43)
Pudukkottai	3	21 (17–25)	–	–	–	–	21 (17–25)
Ramanathapuram	16	61 (51–71)	1	–	–	–	61 (51–71)
Salem	46	474 (387–560)	2	2	1	1	476 (390–563)
Sivaganga	3	18 (15–21)	–	–	–	–	18 (15–21)
Thanjavur	30	370 (234–506)	1	12	–	–	382 (246–518)
Theni	5	50 (44–57)	–	–	1	–	50 (44–57)
Thiruvallur	45	608 (524–691)	5	111	29	9	727 (644–811)
Thiruvarur	5	66 (54–77)	–	–	–	–	66 (54–77)
Tiruchirappalli	23	281 (217–346)	1	8	–	–	289 (225–354)
Tirunelveli	38	293 (252–333)	3	5	12	11	309 (268–349)
Tiruppur	21	139 (107–172)	3	16	–	–	155 (123–187)
Tiruvannamalai	19	200 (179–221)	1	9	1	1	210 (189–231)
Tuticorin	16	276 (242–309)	–	–	–	–	276 (242–309)
Vellore	31	419 (349–489)	3	48	–	–	467 (397–537)
Villupuram	32	318 (277–358)	–	–	–	–	318 (277–358)
Virudhunagar	43	375 (304–446)	–	–	–	–	375 (304–446)
Tamil Nadu	677	8,287 (6,811–9,763)	59	827	134	97	9,211 (7,734–10,687)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Adilabad	202	7,712 (8,699–9,685)	25	167	35	216	9,081 (8,095–10,068)
Bhadradri Kothagudem	–	–	–	–	44	558	558 (558–558)
Hanumakonda	–	–	–	–	27	265	265 (265–265)
Hyderabad	563	16,023 (17,758–19,494)	89	183	–	–	17,941 (16,205–19,677)
Jagitial	–	–	–	–	45	169	169 (169–169)
Jangoan	–	–	–	–	32	226	226 (226–226)
Jayashankar Bhoopalpally	–	–	–	–	20	133	133 (133–133)
Jogulamba Gadwal	–	–	–	–	20	260	260 (260–260)
Kamareddy	–	–	10	–	35	228	228 (228–228)
Karimnagar	110	3,953 (4,175–4,397)	20	90	31	215	4,480 (4,258–4,703)
Khammam	119	2,938 (3,510–4,083)	101	1183	95	1403	6,097 (5,524–6,669)
Komaram Bheem Asifabad	–	–	–	–	11	53	53 (53–53)
Mahabubabad	–	–	–	–	41	356	356 (356–356)
Mahbubnagar	196	5,972 (6,927–7,881)	46	135	65	800	7,862 (6,908–8,816)
Mancherial	–	–	–	–	50	310	310 (310–310)
Medak	123	1,640 (1,942–2,243)	25	141	–	–	2,083 (1,781–2,384)
Medchal–Malkajgiri	–	–	4	10	34	177	187 (187–187)
Mulug	–	–	–	–	27	139	139 (139–139)
Nagarkurnool	–	–	–	–	67	501	501 (501–501)
Nalgonda	79	5,206 (6,132–7,057)	72	469	63	614	7,214 (6,289–8,140)
Narayanpet	–	–	3	11	25	253	264 (264–264)
Nirmal	–	–	–	–	47	265	265 (265–265)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Nizamabad	79	2,934 (3,474–4,014)	31	197	84	702	4,373 (3,833–4,913)
Peddapalli	–	–	–	–	23	213	213 (213–213)
Rajanna Sircilla	–	–	–	–	41	116	116 (116–116)
Rangareddy	79	3,154 (3,449–3,743)	48	96	85	370	3,914 (3,620–4,209)
Suryapet	–	–	22	31	63	565	596 (596–596)
Vikarabad	–	–	2	4	37	150	154 (154–154)
Wanaparthy	–	–	–	–	36	278	278 (278–278)
Warangal	74	5,286 (5,835–6,383)	51	622	57	404	6,860 (6,312–7,409)
Yadadri Bhuvanagiri	–	–	19	52	24	152	204 (204–204)
Telangana	1,624	61,900 (54,819–68,980)	568	3,390	1,264	10,091	75,381 (68,300–82,461)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Adilabad	24	814 (724–903)	–	–	26	56	870 (780–959)
Bhadradi Kothagudem	–	–	–	–	5	11	11 (11–11)
Hanumakonda	–	–	–	–	16	15	15 (15–15)
Hyderabad	67	4,815 (4,699–4,931)	14	324	–	–	5,139 (5,023–5,255)
Jagitial	–	–	–	–	17	5	5 (5–5)
Jangoan	–	–	–	–	10	11	11 (11–11)
Jayashankar Bhoopalpally	–	–	–	–	17	25	25 (25–25)
Kamareddy	–	–	2	–	1	2	2 (2–2)
Karimnagar	61	2,155 (2,005–2,305)	1	6	1	6	2,167 (2,017–2,317)
Khammam	27	687 (610–765)	15	102	17	12	801 (724–879)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Komaram Bheem Asifabad	–	–	–	–	8	11	11 (11–11)
Mahabubabad	–	–	–	–	28	32	32 (32–32)
Mahbubnagar	3	94 (81–107)	1	–	–	–	94 (81–107)
Mancherial	–	–	–	–	26	37	37 (37–37)
Medak	9	125 (113–137)	–	–	–	–	125 (113–137)
Mulug	–	–	–	–	22	36	36 (36–36)
Nagarkurnool	–	–	–	–	1	1	1 (1–1)
Nalgonda	28	1,991 (1,753–2,228)	5	42	–	–	2,032 (1,794–2,270)
Nirmal	–	–	–	–	42	72	72 (72–72)
Nizamabad	28	1,386 (1,219–1,553)	15	558	12	20	1,964 (1,796–2,131)
Peddapalli	–	–	–	–	2	2	2 (2–2)
Rajanna Sircilla	–	–	–	–	22	67	67 (67–67)
Rangareddy	1	49 (45–53)	–	–	1	1	50 (46–54)
Suryapet	–	–	–	–	1	4	4 (4–4)
Wanaparthy	–	–	–	–	3	2	2 (2–2)
Warangal	44	2,589 (2,310–2,868)	23	206	45	57	2,852 (2,574–3,131)
Telangana	292	14,704 (13,559–15,850)	76	1,238	323	485	16,427 (15,282–17,573)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Hyderabad	64	816 (657–974)	–	–	–	–	816 (657–974)
	64	816 (657–974)	–	–	1	–	816 (657–974)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Adilabad	–	–	1	–	3	4	4 (4–4)
Hanumakonda	–	–	–	–	2	–	–
Hyderabad	2	234 (231–236)	6	110	–	–	343 (341–346)
Karimnagar	7	54 (44–64)	–	–	–	–	54 (44–64)
Khammam	4	117 (98–135)	–	–	2	–	117 (98–135)
Mancherial	–	–	–	–	3	2	2 (2–2)
Medak	1	20 (18–22)	–	–	–	–	20 (18–22)
Mulug	–	–	–	–	2	–	–
Nalgonda	12	147 (124–170)	9	77	–	–	224 (201–247)
Nirmal	–	–	1	–	2	3	3 (3–3)
Suryapet	–	–	–	–	1	6	6 (6–6)
Warangal	6	216 (196–237)	1	6	2	–	222 (202–243)
Telangana	32	787 (711–863)	18	193	19	15	995 (919–1,072)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dhalai	77	582 (623–664)	4	28	–	–	650 (609–691)
Gomati	81	608 (693–777)	–	–	–	–	693 (608–777)
Khowai	50	341 (373–404)	4	–	41	101	474 (442–505)
North Tripura	104	671 (722–773)	8	27	77	182	931 (881–982)
Sepahijala	40	343 (369–395)	2	18	34	91	478 (452–504)
South Tripura	222	1,729 (1,919–2,108)	5	15	–	–	1,934 (1,745–2,124)
Unakoti	45	247 (272–296)	7	29	67	113	413 (389–438)
West Tripura	72	477 (521–564)	8	42	52	106	669 (625–712)
Tripura	691	5,490 (4,998–5,982)	38	159	271	593	6,242 (5,750–6,734)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dhalai	6	30 (27–33)	–	–	–	–	30 (27–33)
Gomati	13	67 (60–74)	–	–	–	–	67 (60–74)
Khowai	6	40 (36–44)	1	–	–	–	40 (36–44)
North Tripura	45	305 (284–327)	1	18	33	26	349 (328–370)
Sepahijala	3	13 (12–15)	–	–	3	6	19 (18–21)
South Tripura	14	73 (61–85)	1	5	–	–	78 (66–89)
Unakoti	6	34 (31–36)	–	–	15	1	35 (32–37)
West Tripura	33	234 (217–251)	1	10	10	14	258 (241–275)
Tripura	126	796 (729–864)	4	33	61	47	876 (808–944)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dhalai	116	1,074 (997–1,150)	–	–	–	–	1,074 (997–1,150)
Gomati	58	572 (494–649)	–	–	–	–	572 (494–649)
Khowai	30	298 (276–320)	4	–	24	46	344 (322–366)
North Tripura	66	770 (697–844)	1	3	51	155	929 (855–1,002)
Sepahijala	52	444 (412–475)	5	59	–	–	502 (470–534)
South Tripura	109	811 (724–898)	9	56	–	–	867 (780–954)
Unakoti	56	484 (446–523)	–	–	50	98	582 (544–621)
West Tripura	166	1,433 (1,292–1,574)	15	159	19	38	1,630 (1,490–1,771)
Tripura	653	5,885 (5,338–6,433)	34	277	144	337	6,500 (5,953–7,047)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dhalai	–	–	1	12	–	–	12 (12–12)
Gomati	–	–	2	20	–	–	20 (20–20)
Khowai	1	3 (3–3)	–	–	–	–	3 (3–3)
North Tripura	–	–	1	–	–	–	–
Sepahijala	–	–	–	–	–	–	–
South Tripura	–	–	1	72	–	–	72 (72–72)
Unakoti	–	–	–	–	–	–	–
West Tripura	8	38 (33–43)	1	14	–	–	52 (47–57)
Tripura	9	41 (36–46)	6	118	–	–	159 (154–164)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agra	38	491 (555–620)	10	78	–	–	634 (569–698)
Aligarh	27	235 (253–271)	2	11	–	–	264 (246–282)
Allahabad	9	54 (68–82)	1	8	–	–	76 (62–90)
Ambedkar Nagar	48	852 (953–1,054)	9	16	–	–	969 (868–1,070)
Amroha	57	478 (566–653)	5	12	–	–	578 (490–665)
Auraiya	49	481 (512–543)	5	34	–	–	546 (515–577)
Azamgarh	16	207 (234–261)	9	74	–	–	308 (281–335)
Bahraich	60	1,209 (1,337–1,464)	9	132	–	–	1,469 (1,341–1,596)
Ballia	33	293 (320–347)	4	106	–	–	426 (399–453)
Balrampur	10	65 (71–78)	–	–	–	–	71 (65–78)
Banda	28	386 (447–507)	–	–	–	–	447 (386–507)
Bareilly	81	464 (521–577)	4	21	–	–	542 (485–598)
Basti	13	191 (205–218)	6	21	220	20	246 (232–259)
Bhadohi	1	9 (12–14)	–	–	–	–	12 (9–14)
Budaun	14	264 (302–341)	–	–	–	–	302 (264–341)
Bulandshahr	25	339 (359–379)	–	–	–	–	359 (339–379)
Chandauli	30	320 (386–453)	3	35	–	–	422 (355–488)
Chitrakoot	8	71 (79–86)	–	–	–	–	79 (71–86)
Deoria	17	183 (193–203)	3	38	–	–	231 (221–241)
Etah	9	178 (183–188)	4	33	–	–	216 (211–221)
Etawah	34	399 (420–440)	6	53	–	–	472 (452–493)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Faizabad	28	476 (519–563)	4	42	–	–	561 (518–605)
Farrukhabad	20	220 (244–268)	–	–	–	–	244 (220–268)
Fatehpur	29	469 (536–603)	10	123	–	–	659 (592–726)
Firozabad	18	242 (272–303)	2	12	–	–	285 (255–315)
Gautam Buddha Nagar	20	235 (263–290)	9	250	–	–	512 (484–540)
Ghaziabad	41	457 (524–591)	19	71	–	–	595 (528–662)
Ghazipur	35	513 (572–630)	7	34	–	–	605 (547–664)
Gonda	28	278 (305–332)	3	65	–	–	370 (343–397)
Gorakhpur	33	316 (342–369)	3	14	220	27	384 (358–410)
Hamirpur	23	443 (475–506)	4	25	–	–	500 (468–531)
Hapur	28	304 (333–362)	2	4	–	–	337 (308–366)
Hardoi	27	722 (796–870)	4	25	–	–	822 (748–895)
Hathras	21	186 (200–213)	3	35	–	–	235 (222–248)
Jalaun	16	271 (296–321)	2	51	–	–	347 (321–372)
Jaunpur	63	922 (996–1,069)	2	9	180	331	1,335 (1,262–1,408)
Jhansi	23	357 (377–398)	11	100	–	–	477 (457–498)
Kannauj	15	200 (217–234)	2	17	–	–	235 (218–252)
Kanpur Dehat	19	224 (243–262)	3	13	–	–	256 (237–275)
Kanpur Nagar	99	931 (1,069–1,207)	35	197	–	–	1,266 (1,128–1,404)
Kasganj	37	357 (386–415)	7	62	–	–	448 (419–477)
Kaushambi	35	379 (438–498)	1	40	–	–	478 (419–538)
Kheri	81	584 (638–692)	7	34	–	–	672 (618–726)
Kushi Nagar	96	844 (909–973)	4	26	95	158	1,093 (1,028–1,157)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Lalitpur	45	572 (617–662)	2	29	–	–	646 (601–691)
Lucknow	86	2,220 (2,460–2,701)	32	186	180	879	3,525 (3,285–3,766)
Maharajganj	39	530 (566–601)	7	5	–	–	570 (535–605)
Mahoba	22	286 (332–379)	8	46	–	–	379 (332–425)
Mainpuri	38	403 (440–477)	1	9	–	–	449 (412–485)
Mathura	20	251 (285–319)	–	–	–	–	285 (251–319)
Mau	24	306 (356–406)	2	14	–	–	371 (321–421)
Meerut	41	263 (336–408)	13	60	–	–	396 (323–469)
Mirzapur	2	8 (7–9)	–	–	–	–	8 (7–9)
Moradabad	80	694 (788–882)	8	35	136	608	1,431 (1,337–1,525)
Muzaffarnagar	44	440 (472–503)	5	29	–	–	501 (469–533)
Pilibhit	34	858 (927–996)	3	1	–	–	928 (859–998)
Pratapgarh	18	384 (418–453)	–	–	–	–	418 (384–453)
Rae Bareli	73	1,262 (1,360–1,458)	8	72	–	–	1,432 (1,334–1,530)
Rampur	56	364 (401–438)	1	4	–	–	405 (368–443)
Saharanpur	42	431 (479–527)	11	62	–	–	541 (493–589)
Sambhal	5	61 (67–74)	–	–	–	–	67 (61–74)
Sant Kabeer Nagar	23	400 (428–456)	1	2	–	–	430 (402–458)
Shahjahanpur	51	525 (559–593)	5	18	–	–	577 (543–611)
Shamli	8	43 (48–53)	2	8	–	–	56 (51–61)
Siddharth Nagar	16	461 (502–544)	11	90	140	121	713 (672–755)
Sitapur	36	692 (756–819)	11	135	–	–	891 (828–954)
Sonbhadra	10	268 (343–417)	5	23	–	–	366 (291–441)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sultanpur	27	694 (757–819)	1	3	–	–	760 (697–822)
Unnao	37	1,466 (1,535–1,603)	5	117	–	–	1,652 (1,583–1,720)
Varanasi	93	930 (1,152–1,374)	18	147	–	–	1,299 (1,077–1,521)
Uttar Pradesh	2,412	35,315 (31,909–38,720)	384	3,021	1,171	2,144	40,480 (37,075–43,885)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agra	10	239 (224–253)	–	–	–	–	239 (224–253)
Aligarh	19	321 (309–332)	2	18	–	–	339 (327–350)
Allahabad	5	60 (46–73)	–	–	–	–	60 (46–73)
Ambedkar Nagar	6	41 (35–47)	3	12	–	–	54 (48–60)
Amroha	31	234 (201–268)	5	30	–	–	264 (231–298)
Auraiya	20	97 (88–106)	–	–	–	–	97 (88–106)
Azamgarh	16	341 (307–374)	4	54	–	–	395 (361–428)
Bahraich	4	90 (84–95)	–	–	–	–	90 (84–95)
Ballia	11	192 (173–212)	3	43	–	–	236 (216–255)
Balrampur	6	54 (48–60)	–	–	–	–	54 (48–60)
Banda	12	201 (178–223)	–	–	–	–	201 (178–223)
Bareilly	99	645 (576–714)	–	–	–	–	645 (576–714)
Basti	9	232 (226–239)	–	–	76	13	245 (239–252)
Bhadohi	1	22 (19–24)	–	–	–	–	22 (19–24)
Budaun	11	216 (190–241)	–	–	–	–	216 (190–241)
Bulandshahr	64	644 (610–678)	–	–	–	–	644 (610–678)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Chandauli	19	175 (144–205)	–	–	–	–	175 (144–205)
Deoria	15	222 (209–234)	–	–	–	–	222 (209–234)
Etah	12	269 (262–277)	–	–	–	–	269 (262–277)
Etawah	27	310 (294–325)	–	–	–	–	310 (294–325)
Faizabad	16	105 (88–121)	–	–	–	–	105 (88–121)
Farrukhabad	17	168 (152–184)	–	–	–	–	168 (152–184)
Fatehpur	13	161 (126–196)	4	21	–	–	182 (147–217)
Firozabad	17	196 (180–211)	–	–	–	–	196 (180–211)
Gautam Buddha Nagar	19	275 (258–291)	–	–	–	–	275 (258–291)
Ghaziabad	45	451 (359–543)	–	–	–	–	451 (359–543)
Ghazipur	38	391 (318–463)	7	8	–	–	399 (326–471)
Gonda	2	10 (9–11)	1	5	–	–	15 (14–16)
Gorakhpur	20	171 (162–181)	–	–	58	17	188 (179–198)
Hamirpur	8	123 (116–131)	–	–	–	–	123 (116–131)
Hapur	39	507 (464–550)	–	–	–	–	507 (464–550)
Hardoi	29	597 (522–672)	–	–	–	–	597 (522–672)
Hathras	22	276 (255–297)	–	–	–	–	276 (255–297)
Jalaun	3	23 (21–24)	–	–	–	–	23 (21–24)
Jaunpur	17	334 (302–365)	–	–	22	8	342 (310–373)
Jhansi	19	291 (275–307)	–	–	–	–	291 (275–307)
Kannauj	25	230 (213–248)	–	–	–	–	230 (213–248)
Kanpur Dehat	15	162 (148–175)	–	–	–	–	162 (148–175)
Kanpur Nagar	81	1,212 (1,107–1,318)	5	135	–	–	1,347 (1,241–1,452)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Kasganj	32	412 (384–440)	3	25	–	–	437 (409–465)
Kaushambi	1	8 (7–8)	1	7	–	–	15 (14–15)
Kheri	20	116 (104–128)	1	16	–	–	132 (120–144)
Kushi Nagar	26	421 (399–443)	–	–	5	10	431 (409–453)
Lalitpur	19	273 (245–301)	–	–	–	–	273 (245–301)
Lucknow	99	1,829 (1,632–2,025)	17	106	12	20	1,955 (1,759–2,151)
Maharajganj	18	258 (241–275)	–	–	–	–	258 (241–275)
Mainpuri	19	191 (176–205)	–	–	–	–	191 (176–205)
Mathura	20	194 (168–219)	–	–	–	–	194 (168–219)
Mau	40	293 (180–405)	8	276	–	–	569 (457–681)
Meerut	12	57 (45–70)	1	4	–	–	61 (49–74)
Moradabad	39	324 (287–361)	2	13	19	19	356 (319–393)
Muzaffarnagar	26	308 (256–359)	–	–	–	–	308 (256–359)
Pilibhit	18	322 (289–354)	–	–	–	–	322 (289–354)
Rae Bareli	14	266 (237–294)	3	21	–	–	287 (259–315)
Rampur	20	219 (199–238)	–	–	–	–	219 (199–238)
Saharanpur	24	200 (179–221)	2	7	–	–	207 (186–228)
Sambhal	24	154 (142–166)	2	15	–	–	169 (157–181)
Sant Kabeer Nagar	1	16 (14–18)	–	–	–	–	16 (14–18)
Shahjahanpur	36	296 (267–324)	–	–	–	–	296 (267–324)
Shamli	16	184 (161–207)	–	–	–	–	184 (161–207)
Siddharth Nagar	13	271 (245–297)	7	86	24	16	373 (347–399)
Sitapur	28	527 (484–570)	6	61	–	–	588 (545–631)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Sonbhadra	8	40 (27–53)	3	15	–	–	55 (42–68)
Sultanpur	13	274 (237–310)	–	–	–	–	274 (237–310)
Unnao	27	544 (499–588)	7	200	–	–	744 (699–788)
Varanasi	13	109 (90–128)	–	–	–	–	109 (90–128)
Uttar Pradesh	1,468	18,384 (16,492–20,276)	97	1,182	216	103	19,668 (17,776–21,561)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agra	81	1,121 (1,013–1,229)	3	32	–	–	1,153 (1,045–1,262)
Aligarh	34	433 (411–454)	–	–	–	–	433 (411–454)
Allahabad	83	1,804 (1,501–2,107)	11	30	–	–	1,834 (1,530–2,137)
Ambedkar Nagar	12	184 (158–211)	–	–	–	–	184 (158–211)
Amethi	0	0	–	–	–	–	0
Amroha	41	327 (284–369)	6	13	–	–	340 (298–383)
Auraiya	32	247 (231–264)	–	–	–	–	247 (231–264)
Azamgarh	12	309 (283–334)	–	–	–	–	309 (283–334)
Baghpat	0	0	–	–	–	–	0
Bahraich	108	2,324 (2,160–2,487)	–	–	–	–	2,324 (2,160–2,487)
Ballia	38	439 (365–513)	2	78	–	–	517 (443–591)
Balrampur	10	149 (140–158)	–	–	–	–	149 (140–158)
Banda	19	239 (210–267)	–	–	–	–	239 (210–267)
Barabanki	0	0 (0–0)	–	–	–	–	0 (0–0)
Bareilly	44	482 (450–513)	–	–	–	–	482 (450–513)
Basti	15	298 (270–325)	–	–	108	18	316 (288–343)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bhadohi	2	49 (44–54)	–	–	–	–	49 (44–54)
Bijnor	0	0	–	–	–	–	0
Budaun	5	113 (101–125)	–	–	–	–	113 (101–125)
Bulandshahr	26	422 (405–438)	–	–	–	–	422 (405–438)
Chandauli	22	293 (244–341)	–	–	–	–	293 (244–341)
Chitrakoot	5	55 (50–60)	–	–	–	–	55 (50–60)
Deoria	16	243 (227–260)	–	–	–	–	243 (227–260)
Etah	37	473 (438–509)	–	–	–	–	473 (438–509)
Etawah	18	245 (236–254)	–	–	–	–	245 (236–254)
Faizabad	43	495 (445–545)	–	–	–	–	495 (445–545)
Farrukhabad	28	358 (322–393)	–	–	–	–	358 (322–393)
Fatehpur	21	671 (601–742)	–	–	–	–	671 (601–742)
Firozabad	15	299 (280–318)	–	–	–	–	299 (280–318)
Gautam Buddha Nagar	8	79 (72–86)	–	–	–	–	79 (72–86)
Ghaziabad	62	1,359 (1,210–1,508)	–	–	–	–	1,359 (1,210–1,508)
Ghazipur	32	595 (466–723)	2	15	–	–	609 (481–738)
Gonda	40	434 (389–479)	4	181	–	–	615 (570–660)
Gorakhpur	81	1,811 (1,590–2,032)	–	–	22	3	1,814 (1,593–2,035)
Hamirpur	10	226 (217–234)	–	–	–	–	226 (217–234)
Hapur	29	312 (283–340)	–	–	–	–	312 (283–340)
Hardoi	32	574 (527–621)	–	–	–	–	574 (527–621)
Hathras	23	277 (257–296)	–	–	–	–	277 (257–296)
Jalaun	31	456 (426–486)	–	–	–	–	456 (426–486)

Continued

Continued

Uttar Pradesh

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Jaunpur	41	344 (303–386)	–	–	3	1	345 (304–387)
Jhansi	20	115 (104–127)	–	–	–	–	115 (104–127)
Kannauj	11	141 (128–153)	–	–	–	–	141 (128–153)
Kanpur Dehat	24	276 (254–297)	–	–	–	–	276 (254–297)
Kanpur Nagar	108	1,631 (1,468–1,793)	–	–	–	–	1,631 (1,468–1,793)
Kasganj	33	440 (418–462)	3	39	–	–	479 (457–501)
Kaushambi	31	359 (326–392)	12	84	–	–	443 (410–476)
Kheri	123	1,051 (949–1,152)	8	60	–	–	1,111 (1,009–1,213)
Kushi Nagar	26	344 (321–367)	–	–	4	6	350 (327–373)
Lalitpur	0	0 (0–0)	–	–	–	–	0 (0–0)
Lucknow	99	2,563 (2,301–2,825)	–	–	12	24	2,587 (2,325–2,849)
Maharajganj	10	138 (130–146)	–	–	–	–	138 (130–146)
Mahoba	22	283 (244–322)	2	5	–	–	288 (249–327)
Mainpuri	28	249 (234–263)	–	–	–	–	249 (234–263)
Mathura	15	153 (131–174)	–	–	–	–	153 (131–174)
Mau	10	184 (140–227)	–	–	–	–	184 (140–227)
Meerut	45	525 (411–639)	5	25	–	–	550 (437–664)
Mirzapur	1	–	–	–	–	–	–
Moradabad	196	1,588 (1,335–1,841)	12	43	49	66	1,697 (1,444–1,950)
Muzaffarnagar	35	395 (352–437)	–	–	–	–	395 (352–437)
Pilibhit	42	619 (573–665)	–	–	–	–	619 (573–665)
Pratapgarh	13	111 (105–117)	–	–	–	–	111 (105–117)
Rae Bareli	12	201 (187–214)	–	–	–	–	201 (187–214)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Rampur	77	799 (687–912)	–	–	–	–	799 (687–912)
Saharanpur	22	199 (180–218)	2	10	–	–	209 (190–228)
Sambhal	17	120 (107–132)	–	–	–	–	120 (107–132)
Sant Kabeer Nagar	15	234 (194–273)	–	–	–	–	234 (194–273)
Shahjahanpur	65	483 (429–537)	2	25	–	–	508 (453–562)
Shamli	17	208 (185–230)	–	–	–	–	208 (185–230)
Siddharth Nagar	10	154 (140–169)	4	143	13	8	305 (291–320)
Sitapur	32	623 (571–675)	–	–	–	–	623 (571–675)
Sonbhadra	18	501 (393–610)	8	103	–	–	604 (495–712)
Sultanpur	14	334 (298–369)	1	25	–	–	359 (323–394)
Unnao	23	568 (513–623)	–	–	–	–	568 (513–623)
Varanasi	22	254 (216–292)	–	–	–	–	254 (216–292)
Uttar Pradesh	2,392	34,375 (30,632–38,118)	87	911	211	126	35,412 (31,670–39,155)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Agra	4	29 (24–33)	–	–	–	–	29 (24–33)
Aligarh	3	57 (56–58)	–	–	–	–	57 (56–58)
Allahabad	1	45 (35–55)	–	–	–	–	45 (35–55)
Ambedkar Nagar	7	60 (49–71)	3	14	–	–	74 (63–85)
Amroha	23	180 (156–203)	4	24	–	–	203 (180–227)
Auraiya	20	151 (141–160)	–	–	–	–	151 (141–160)
Azamgarh	15	214 (196–232)	5	20	–	–	234 (216–252)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Bahraich	4	45 (42–48)	–	–	–	–	45 (42–48)
Ballia	42	228 (180–276)	4	102	–	–	331 (283–378)
Balrampur	5	35 (31–39)	1	2	–	–	38 (34–42)
Banda	3	59 (55–63)	–	–	–	–	59 (55–63)
Bareilly	78	553 (503–603)	–	–	–	–	553 (503–603)
Basti	2	22 (18–25)	–	–	–	–	22 (18–25)
Bhadohi	2	34 (29–38)	–	–	–	–	34 (29–38)
Budaun	5	86 (78–93)	–	–	–	–	86 (78–93)
Bulandshahr	19	171 (162–181)	–	–	–	–	171 (162–181)
Chandauli	5	20 (17–22)	–	–	–	–	20 (17–22)
Chitrakoot	2	8 (6–9)	–	–	–	–	8 (6–9)
Deoria	5	61 (52–69)	–	–	–	–	61 (52–69)
Etah	8	113 (105–122)	–	–	–	–	113 (105–122)
Etawah	11	72 (67–77)	–	–	–	–	72 (67–77)
Faizabad	5	29 (26–32)	–	–	–	–	29 (26–32)
Farrukhabad	3	46 (43–49)	–	–	–	–	46 (43–49)
Fatehpur	2	39 (32–45)	1	5	–	–	44 (37–50)
Firozabad	10	36 (31–42)	–	–	–	–	36 (31–42)
Gautam Buddha Nagar	20	250 (220–280)	–	–	–	–	250 (220–280)
Ghaziabad	49	658 (544–771)	12	70	–	–	727 (614–841)
Ghazipur	6	24 (19–29)	1	1	–	–	25 (20–30)
Gonda	3	19 (18–20)	1	8	–	–	27 (26–28)
Gorakhpur	19	207 (194–220)	–	–	–	–	207 (194–220)
Hamirpur	8	50 (45–55)	–	–	–	–	50 (45–55)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Hapur	17	160 (145–175)	–	–	–	–	160 (145–175)
Hardoi	19	80 (68–92)	–	–	–	–	80 (68–92)
Hathras	3	16 (15–18)	–	–	–	–	16 (15–18)
Jalaun	10	67 (60–75)	–	–	–	–	67 (60–75)
Jaunpur	6	48 (39–57)	1	3	–	–	51 (42–59)
Jhansi	13	113 (105–120)	–	–	–	–	113 (105–120)
Kannauj	12	159 (152–166)	–	–	–	–	159 (152–166)
Kanpur Dehat	19	88 (78–98)	–	–	–	–	88 (78–98)
Kanpur Nagar	89	932 (864–1,001)	–	–	–	–	932 (864–1,001)
Kasganj	9	75 (68–82)	2	34	–	–	109 (102–116)
Kaushambi	1	5 (5–5)	–	–	–	–	5 (5–5)
Kheri	20	72 (69–74)	–	–	–	–	72 (69–74)
Kushi Nagar	13	145 (135–155)	–	–	2	6	151 (141–161)
Lalitpur	6	88 (79–96)	–	–	–	–	88 (79–96)
Lucknow	32	338 (277–400)	4	40	–	–	379 (317–440)
Maharajganj	5	25 (21–29)	–	–	–	–	25 (21–29)
Mahoba	2	63 (58–69)	1	8	–	–	71 (65–77)
Mainpuri	6	52 (47–57)	–	–	–	–	52 (47–57)
Mathura	5	37 (33–40)	–	–	–	–	37 (33–40)
Mau	17	88 (74–103)	–	–	–	–	88 (74–103)
Meerut	23	110 (84–136)	1	8	–	–	118 (92–144)
Mirzapur	1	5 (4–5)	–	–	–	–	5 (4–5)
Moradabad	36	235 (209–262)	10	154	9	9	398 (372–424)
Muzaffarnagar	46	562 (531–592)	25	203	–	–	764 (734–795)

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Pilibhit	9	88 (80–95)	–	–	–	–	88 (80–95)
Pratapgarh	1	49 (45–53)	1	40	–	–	89 (85–93)
Rae Bareli	8	130 (121–140)	1	5	–	–	135 (126–145)
Rampur	23	252 (227–278)	–	–	–	–	252 (227–278)
Saharanpur	9	97 (90–103)	2	2	–	–	98 (91–105)
Sambhal	18	86 (78–94)	–	–	–	–	86 (78–94)
Sant Kabeer Nagar	1	17 (14–20)	–	–	–	–	17 (14–20)
Shahjahanpur	20	120 (107–133)	–	–	–	–	120 (107–133)
Shamli	13	65 (56–73)	13	44	–	–	108 (99–117)
Siddharth Nagar	10	162 (141–183)	7	97	4	–	259 (238–280)
Sitapur	6	84 (72–96)	4	6	–	–	90 (78–102)
Sonbhadra	4	15 (11–19)	1	6	–	–	21 (17–26)
Sultanpur	2	12 (10–14)	–	–	–	–	12 (10–14)
Unnao	4	110 (98–123)	–	–	–	–	110 (98–123)
Varanasi	17	491 (430–551)	–	–	–	–	491 (430–551)
Uttar Pradesh	944	8,937 (7,971–9,903)	105	894	15	15	9,846 (8,880–10,813)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Almora	25	329 (404–479)	4	7	–	–	411 (336–486)
Champawat	26	263 (348–434)	–	–	–	–	348 (263–434)
Dehradun	59	1,561 (1,727–1,892)	23	27	–	–	1,754 (1,588–1,919)
Haridwar	59	781 (833–885)	10	15	–	–	847 (796–899)
Nainital	47	728 (839–950)	13	33	–	–	872 (761–983)
Pauri Garhwal	48	442 (479–517)	–	–	–	–	479 (442–517)
Pithoragarh	44	666 (793–919)	3	–	–	–	793 (666–919)
Rudra Prayag	9	69 (77–86)	–	–	–	–	77 (69–86)
Tehri Garhwal	20	67 (80–93)	–	–	–	–	80 (67–93)
Udam Singh Nagar	77	1,334 (1,484–1,633)	9	37	–	–	1,521 (1,371–1,670)
Uttar Kashi	7	28 (31–35)	–	–	–	–	31 (28–35)
Uttarakhand	421	7,094 (6,268–7,921)	62	119	–	–	7,213 (6,387–8,040)

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Champawat	3	41 (32–50)	–	–	–	–	41 (32–50)
Dehradun	46	815 (737–894)	–	–	–	–	815 (737–894)
Haridwar	59	930 (880–979)	8	8	–	–	937 (888–986)
Nainital	16	311 (284–337)	–	–	–	–	311 (284–337)
Pauri Garhwal	27	183 (172–195)	–	–	–	–	183 (172–195)
Pithoragarh	3	44 (37–50)	2	0	–	–	44 (37–50)
Rudra Prayag	4	13 (11–14)	–	–	–	–	13 (11–14)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Tehri Garhwal	3	11 (10–12)	–	–	–	–	11 (10–12)
Udam Singh Nagar	26	524 (473–575)	3	–	–	–	524 (473–575)
Uttar Kashi	1	5 (4–5)	–	–	–	–	5 (4–5)
Uttarakhand	188	2,875 (2,640–3,111)	13	8	–	–	2,883 (2,647–3,119)

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Champawat	18	121 (76–166)	–	–	–	–	121 (76–166)
Dehradun	32	753 (699–807)	–	–	–	–	753 (699–807)
Haridwar	38	721 (643–799)	–	–	–	–	721 (643–799)
Nainital	35	889 (816–961)	–	–	–	–	889 (816–961)
Rudra Prayag	1	11 (9–13)	–	–	–	–	11 (9–13)
Tehri Garhwal	13	83 (69–98)	–	–	–	–	83 (69–98)
Udam Singh Nagar	68	1,219 (1,063–1,376)	10	–	–	–	1,219 (1,063–1,376)
Uttar Kashi	8	38 (34–43)	–	–	–	–	38 (34–43)
Uttarakhand	213	3,835 (3,407–4,264)	10	–	–	–	3,835 (3,407–4,264)

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Dehradun	9	88 (79–97)	–	–	–	–	88 (79–97)
Haridwar	5	111 (107–115)	–	–	–	–	111 (107–115)
Nainital	7	60 (53–66)	–	–	–	–	60 (53–66)
Pithoragarh	1	8 (6–9)	1	–	–	–	8 (6–9)
Tehri Garhwal	4	26 (22–30)	–	–	–	–	26 (22–30)
Udam Singh Nagar	–	–	1	2	–	–	2 (2–2)
Uttar Kashi	7	27 (24–30)	–	–	–	–	27 (24–30)
Uttarakhand	33	319 (291–347)	2	2	–	–	321 (293–349)

Female Sex Workers

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
24 Paraganas North	43	845 (923–1,000)	5	22	7	13	958 (880–1,035)
24 Paraganas South	22	439 (485–532)	4	20	93	69	574 (528–621)
Alipurduar	4	103 (105–107)	–	–	35	49	154 (152–156)
Basirhat*	35	756 (821–886)	–	–	5	13	834 (769–899)
Birbhum	12	410 (425–440)	3	28	29	52	505 (490–520)
Bishnupur_ Bankura	6	163 (183–202)	–	–	–	–	183 (163–202)
Coochbehar	17	619 (671–723)	–	–	–	–	671 (619–723)
Darjeeling	31	497 (567–638)	–	–	21	5	572 (502–643)
Diamond Harbour*	14	452 (484–517)	–	–	33	31	515 (483–548)
Dinajpur Dakshin	8	101 (112–122)	8	35	–	–	147 (136–157)
Dinajpur Uttar	17	388 (412–436)	5	79	116	388	879 (855–903)
Hooghly	39	767 (861–954)	9	64	11	21	946 (852–1,039)
Howrah	20	632 (688–744)	2	7	–	–	695 (639–751)
Jalpaiguri	9	322 (345–368)	1	5	53	74	424 (401–447)
Kalimpong	–	–	2	4	–	–	4 (4–4)
Kolkata	264	6,496 (7,101–7,707)	5	109	–	–	7,210 (6,605–7,816)
Maldah	12	234 (251–268)	–	–	–	–	251 (234–268)
Medinipur East	8	134 (158–181)	1	3	–	–	161 (137–184)
Medinipur West	2	83 (87–90)	–	–	90	107	194 (190–197)
Murshidabad	14	435 (496–557)	–	–	100	381	877 (816–938)
Nadia	18	301 (326–351)	1	4	–	–	330 (305–355)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Nandigram*	14	329 (368–407)	12	114	–	–	482 (443–521)
Paschim Bardhaman	62	1,584 (1,693–1,803)	–	–	32	134	1,827 (1,718–1,937)
Purba Bardhaman	32	486 (524–561)	6	73	123	294	890 (853–928)
Rampurhat*	4	73 (80–87)	4	22	55	66	168 (161–175)
West Bengal	707	18,165 (16,650–19,681)	68	590	803	1,697	20,452 (18,937–21,968)

*Considered a District for administrative purposes by the Health Department.

Men who have Sex with Men

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
24 Paraganas North	10	184 (162–205)	6	212	2	5	401 (379–422)
24 Paraganas South	11	149 (134–164)	–	–	28	20	169 (154–184)
Basirhat*	1	12 (11–12)	–	–	–	–	12 (11–12)
Birbhum	2	48 (46–50)	1	38	1	1	87 (85–89)
Coochbehar	4	56 (51–61)	–	–	–	–	56 (51–61)
Darjeeling	27	395 (373–417)	9	36	10	13	444 (421–466)
Diamond Harbour*	5	37 (31–43)	–	–	18	20	57 (51–63)
Dinajpur Dakshin	1	6 (5–6)	–	–	–	–	6 (5–6)
Dinajpur Uttar	10	180 (157–203)	2	–	–	–	180 (157–203)
Hooghly	23	395 (355–434)	–	–	1	3	398 (358–437)
Howrah	5	110 (101–119)	–	–	–	–	110 (101–119)
Jalpaiguri	8	103 (90–116)	–	–	3	3	106 (93–119)
Kalimpong	–	–	–	–	2	2	2 (2–2)
Kolkata	28	561 (491–631)	1	18	–	–	579 (509–649)

Continued

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
Maldah	4	78 (68–87)	–	–	–	–	78 (68–87)
Medinipur East	3	108 (101–115)	–	–	–	–	108 (101–115)
Murshidabad	2	24 (19–29)	–	–	–	–	24 (19–29)
Nadia	5	107 (100–115)	–	–	–	–	107 (100–115)
Paschim Bardhaman	16	382 (346–417)	11	89	–	–	471 (435–507)
Purba Bardhaman	2	16 (14–17)	1	61	3	7	84 (82–85)
Rampurhat*	3	54 (50–58)	–	–	1	1	55 (51–59)
West Bengal	170	3,003 (2,705–3,301)	31	454	69	75	3,532 (3,234–3,830)

*Considered a District for administrative purposes by the Health Department.

Injecting Drug Users

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
24 Paraganas South	1	11 (10–12)	–	–	10	7	18 (17–19)
Birbhum	–	–	–	–	3	30	30 (30–30)
Darjeeling	69	1,107 (913–1,300)	15	100	19	65	1,272 (1,078–1,465)
Diamond Harbour*	–	–	–	–	17	23	23 (23–23)
Howrah	18	374 (339–410)	2	23	–	–	397 (362–433)
Jalpaiguri	4	109 (102–116)	–	–	–	–	109 (102–116)
Jhargram	–	–	–	–	–	–	–
Kalimpong	4	70 (62–78)	–	–	4	3	73 (65–81)
Kolkata	16	278 (220–335)	–	–	–	–	278 (220–335)
Murshidabad	7	124 (90–158)	–	–	–	–	124 (90–158)
Rampurhat*	1	10 (9–11)	–	–	–	–	10 (9–11)
West Bengal	120	2,083 (1,746–2,419)	17	123	53	128	2,334 (1,997–2,670)

*Considered a District for administrative purposes by the Health Department.

Hijra/Transgender People

District	Number of hotspots	Adjusted estimated size	No. of network operators	Adjusted estimated size	No. of villages	Adjusted estimated size	Total adjusted estimated size
24 Paraganas North	33	505 (459–551)	1	31	4	6	542 (496–588)
24 Paraganas South	16	242 (193–291)	–	–	23	20	262 (213–311)
Alipurduar	5	92 (88–97)	–	–	10	45	137 (133–142)
Basirhat*	1	2 (2–3)	–	–	2	6	8 (8–9)
Birbhum	4	35 (34–36)	1	37	2	6	78 (77–79)
Coochbehar	3	102 (96–107)	1	15	–	–	117 (111–122)
Darjeeling	3	71 (69–73)	1	12	3	2	85 (83–88)
Diamond Harbour*	5	37 (33–41)	–	–	25	15	52 (48–56)
Dinajpur Dakshin	29	357 (342–371)	–	–	–	–	357 (342–371)
Dinajpur Uttar	32	451 (408–494)	1	39	4	4	494 (451–537)
Hooghly	11	273 (263–283)	2	33	6	2	308 (298–318)
Howrah	18	274 (255–294)	–	–	–	–	274 (255–294)
Jalpaiguri	8	110 (96–123)	–	–	9	9	119 (105–132)
Kalimpong	–	–	1	9	–	–	9 (9–9)
Kolkata	46	594 (507–682)	13	231	–	–	825 (738–913)
Maldah	4	105 (98–113)	–	–	–	–	105 (98–113)
Medinipur East	8	263 (241–284)	–	–	–	–	263 (241–284)
Medinipur West	11	118 (113–124)	–	–	2	14	132 (127–138)
Murshidabad	17	214 (179–249)	–	–	3	1	215 (180–250)
Nadia	22	379 (356–401)	–	–	–	–	379 (356–401)
Paschim Bardhaman	2	26 (22–29)	6	107	3	18	150 (147–154)
Purba Bardhaman	4	56 (49–62)	6	85	2	30	171 (164–177)
Rampurhat*	4	53 (52–54)	–	–	–	–	53 (52–54)
West Bengal	286	4,357 (3,953–4,760)	33	600	98	178	5,134 (4,731–5,538)

*Considered a district for administrative purposes by the Health Department.

Annexure 2

List of Contributors

List of Contributors Engaged in Implementation of PMPSE 2020–2022

State AIDS Control Societies

1.	Mr. T. Shankar Rao, Andaman & Nicobar SACS
2.	Dr. Y. Kameswara Prasad, Andhra Pradesh SACS
3.	Mr. Sukumar A, Andhra Pradesh SACS
4.	Dr. Marto Ette, Arunachal Pradesh SACS
5.	Mr. Koj Tara, Arunachal Pradesh SACS
6.	Mr. Jyoti Prasad Sarmah, Assam SACS
7.	Mr. Ranjanjyoti Deka, Assam SACS
8.	Dr. Rajesh Kumar Sinha, Bihar SACS
9.	Mr. Mantreshwar Pathak, Bihar SACS
10.	Mr. Sandeep Mittal, Chandigarh SACSMs.
11.	Ms. Poonam Bakshi, Chandigarh SACS
12.	Mr. Vikrant Verma, Chhattisgarh SACS
13.	Md. Hasim Khan, Chhattisgarh SACS
14.	Dr. J.K. Mishra, Delhi SACS
15.	Mr. Sabyasachi Chakraborty, Delhi SACS
16.	Mr. Kamlesh Meswaniya, Gujarat SACS
17.	Mr. Praveen Gupta, Gujarat SACS
18.	Ms. Heena Modi, Gujarat SACS

19.	Mr. Sandesh Krishnanath Bhagat, Goa SACS
20.	Mr. Ramesh Rathod, Goa SACS
21.	Ms. Sulaksha Galyekar, Goa SACS
22.	Dr. Vinod Kumar, Haryana SACS
23.	Ms. Kavita Pannu, Haryana SACS
24.	Ms. Meena Suryan, Himachal Pradesh SACS
25.	Mr. Vinay Kumar, Himachal Pradesh SACS
26.	Mr. Nissar Ahmad Dar, J&K SACS
27.	Dr. Sami Akhter Shams, Jharkhand SACS
28.	Mr. Kaushal Kishore, Jharkhand SACS
29.	Dr. Sanjay B. Patil, SACS
30.	Mr. Ullas Rangayya, SACS
31.	Ms. Balamanju B.S., Kerala SACS
32.	Ms. Ragi Ravi, Kerala SACS
33.	Dr. Sunil Bhamare, Maharashtra SACS
34.	Dr. Lokesh Gabhane, Maharashtra SACS
35.	Mr. Kiran Yewale, Maharashtra SACS
36.	Dr. Pramod Deoraj, Maharashtra SACS
37.	Mr. Abhiram Mongjam, Manipur SACS
38.	Ms. Paonam Tilotama Devi, Manipur SACS
39.	Ms. Safeeda Grace Warjri, Meghalaya SACS
40.	Mr. Wilson Dohling, Meghalaya SACS
41.	Dr. Richard C.L.R. Hluna, Mizoram SACS
42.	Ms. Betty Lalthlengliani, Mizoram SACS
43.	Mr. J. Vanlalhruaia, Mizoram SACS
44.	Dr. Shrikala Acharya, Mumbai DACS
45.	Dr. Smita Chougule, Mumbai DACS
46.	Mr. Anil Shinde, Mumbai DACS
47.	Dr. T.D. Bhokaria, Madhya Pradesh SACS
48.	Ms. Savita Thakur, Madhya Pradesh SACS
49.	Mr. Pankaj Pagey, Madhya Pradesh SACS
50.	Dr. Bernice D. Thapru, Nagaland SACS
51.	Mr. Medovihou Kire, Nagaland SACS
52.	Dr. D.S. Arvind, Odisha SACS
53.	Mr. Prabodh Kumar Siya, Odisha SACS
54.	Ms. V. Selvanayagy, Puducherry SACS

55.	Mr. T. Balamurugan, Puducherry SACS
56.	Dr. Meenu, Punjab SACS
57.	Dr. Amrinder Paul Singh, Punjab SACS
58.	Mr. Sunil Kumar, Rajasthan SACS
59.	Mr. Satveer Lamba, Rajasthan SACS
60.	Mr. Prakash Narwani, Rajasthan SACS
61.	Mr. K.P. Sharma, Sikkim SACS
62.	Mr. Passang Tamang, Sikkim SACS
63.	Mr. Gyan Tamang, Sikkim SACS
64.	Dr. Janakiram Marimuthu, Tamil Nadu SACS
65.	Mr. K. Prasad, Telangana SACS
66.	Mr. T. Durga Srinivas, Telangana SACS
67.	Ms. Mausumi Debnath Roy Sarkar, Tripura SACS
68.	Ms. Srabani Datta, Tripura SACS
69.	Mr. Ramesh Chandra Srivastava, Uttar Pradesh SACS
70.	Mr. Sunil Kumar Misra, Uttar Pradesh SACS
71.	Mr. Sanjay Singh Bisht, Uttarakhand SACS
72.	Mr. Gagandeep Luthra, Uttarakhand SACS
73.	Dr. Somnath Naskar, West Bengal SACS
74.	Dr. Rahul Biswas, West Bengal SACS



National AIDS Control Organisation
Ministry of Health & Family Welfare
Government of India

6th & 9th Floor, Chanderlok Building, 36, Janpath, New Delhi - 110001

Email Id: dgnaco@gmail.com

Tel: 011-43509999, 011-23731778, **Fax:** 011-23731746