India is a global hotspot for trafficking of women and minors for commercial sexual exploitation (CSE), and Maharashtra, as its financial and commercial capital, is one of the largest destinations for CSE in the country. However, reliably estimating the size of child sex trafficking victims has historically been challenging owing to the hidden nature of this population. Traditional survey methods are ruled out for this group due to the ethical and legal implications of directly identifying and interviewing children who are victims of sexual exploitation. An informed understanding of the scale and scope of the CSEC problem is critical for government agencies, implementing organizations, and other decision makers to advocate for resources and develop effective preventive and protective measures. Between 2019 and 2020, the Global Fund to End Modern Slavery (GFEMS) supported researchers to produce initial studies on the prevalence of CSEC as well as on traffickers and buyers of CSEC in the state of Maharashtra – these studies were then replicated in 2022. The TwoSix Technologies research aimed to estimate the prevalence of the Commercial Sexual Exploitation of Children (CSEC) in Maharashtra, while the Dalberg research sought to understand conditions and attitudes towards criminal deterrence among traffickers and perpetrators in the state.

Findings shed light on evolving trends in the CSEC landscape, including:
- the growing use of technology and digital platforms to facilitate the crime,
- increasingly isolated conditions for minor trafficking victims within the sex industry,
- worsening community attitudes,
- and emboldened perceptions of impunity among perpetrators.

Context

In order to generate evidence on the levels of criminal deterrence to CSEC, GFEMS first partnered with Dalberg to conduct a mixed methods study in 2019 aimed at understanding attitudes and perceptions towards this issue among a range of stakeholders, including traffickers and buyers of commercial sex in Maharashtra. While traffickers were widely aware of the existing laws against CSEC, their perception of the risk of conviction was low – 90% of traffickers interviewed expressed confidence that they would not be convicted even if they were arrested for their crime. On the other hand, potential buyers perceived considerable risk of being caught in physical spaces such as brothels, massage parlors, and hotels in 2019. Buyers were also worried about potential social and legal repercussions of CSEC, with over 53% of potential buyers surveyed rating social risks (such as isolation, shame, and rejection by family and friends) as an extremely effective deterrent.

Subsequently, in early 2020, GFEMS worked with TwoSix Technologies to conduct a prevalence study that employed a hybrid methodological approach to develop one of the first state-wide estimates of the size and characteristics of the CSEC population in Maharashtra. The study found that child trafficking victims comprised approximately 27% of the commercial sex industry in Maharashtra. It also found that approximately 30% of adult sex workers in 2020 had entered the commercial sex industry while underage, and that nearly 6% of adult sex workers admitted to knowing a
child trafficking victim. TwoSix Technologies also investigated the behavior of buyers of commercial sex in the state, finding that approximately 26% paid to have sex with minors. Among this group, nearly 40% arranged the transaction digitally, underscoring the on-going transition of CSE towards private or online-enabled networks. A 2020 rapid assessment of the effects of COVID-19 on CSE in Maharashtra revealed that the pandemic significantly accelerated this shift, uncovering substantial spikes in demand for online child sexual abuse material. It also identified a growing movement towards digital channels for recruitment, solicitation, and payments, making the crime even less visible and hindering the ability of law enforcement to effectively investigate and prosecute CSEC cases and deter would-be traffickers.

The COVID-19 pandemic has likely considerably altered the nature of CSEC in terms of vulnerabilities as well as the types and channels of exploitation. Against this background, GFEMS partnered with TwoSix Technologies and Dalberg Development Advisors again in 2022 to conduct a second phase of the CSEC prevalence and deterrence studies respectively, replicating the initial research approaches to identify trends over time and obtain a more nuanced understanding of the post-pandemic CSEC landscape in Maharashtra.

### Key Findings

#### Prevalence of CSEC in Maharashtra remains high with evidence of increasing demand for young girls

The second time point of the prevalence study found approximately 42,000 sex workers in Maharashtra in late 2022 (95% CI: 13,000, 80,000), of whom an estimated 6,000 (14%) were minor victims (95% CI: 0, 17,000). The study found that nearly 8% of adult sex workers entered the industry while underage, with 3.5% of respondents admitting to knowing a CSEC victim. While these findings may seem to suggest an increase in overall sex work and a decrease in the prevalence of CSEC since the first time point of the study in 2020, the differences between the estimates are not statistically significant, preventing any definitive conclusions in this regard. Additionally, it is important to note that the prevalence of CSEC in Maharashtra has been in a state of constant flux during the COVID-19 era, with 41% of interviewed sex workers reporting they knew someone who had entered the industry due to the COVID-19 pandemic while 38% knew at least one individual who had exited the sex trade due to the pandemic. Further, as noted earlier, it is likely that the inherent limitations of the study methodology underestimate the actual size of the victim population.

Notwithstanding, the results suggest a considerable number of CSEC victims in Maharashtra in 2022. Aligned with this conclusion, quantitative insights from the deterrence study reveal a dramatic increase in demand for young girls among potential buyers. Sixty-two percent of interviewed buyers indicated a greater preference for young girls for paid sex if given a choice compared to only 14% of respondents in 2019. Ninety five percent of this group indicated willingness to pay over twice as much for minors in 2022 (compared to 74% in 2019), increasing the economic incentives for traffickers, and suggesting an elevated risk of exploitation for minors.

#### Deteriorating social connections; Minor trafficking victims are increasingly isolated and face decreasing community empathy

The prevalence study revealed a stark decrease in the overall size of social networks across general population and sex worker respondents in 2022 compared with 2019, suggesting that sex workers may be working or communicating in smaller communities. In conjunction with the study’s findings on relatively fewer adult sex workers reporting knowledge of CSEC victims, this trend could plausibly indicate a growing disconnect between adult sex workers and CSEC victims. Concerningly, this shrinking network phenomenon along with the general shift towards decentralization means that CSEC victims...
are likely increasingly isolated and hidden from the rest of the commercial sex industry. This finding has worrying ramifications for practitioners and policymakers focused on CSEC prevention as it will make it more challenging to effectively identify victims and report perpetrators. It also has important implications for future modern slavery prevalence research. In the event that CSEC continues to be progressively siloed from adult sex work, it will be harder to effectively detect and measure through network-driven estimation and analytical methods.

The deterrence study revealed a similar trend towards diminishing social connections. Quantitative findings showed that communities are increasingly desensitized towards CSEC victims, with a demonstrated reduction in empathy across all study districts for all ages, occupations, and education levels. Shockingly, 73% of community members interviewed in 2022 believed that minor victims are voluntary participants in the commercial sex industry compared with 39% in 2019.

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Sixty five percent of respondents did not think CSEC victims could be rehabilitated or reintegrated into society versus 39% during the first time point of the study. Community willingness to report CSEC crimes has also fallen drastically since 2019, potentially weakening social pressure on would-be perpetrators, a critical lever for CSEC deterrence. Only 24% of general population respondents confirmed they would report a CSEC crime in 2022 compared with over 70% in 2019. This change was the most dramatic in Mumbai; willingness to report dropped from 77% in 2019 to 7% in 2022. The study further noted a reduced perception of collective responsibility among community members – only 32% of respondents believed citizens have a role in combatting CSEC in their community against 47% in 2019.

Findings from the deterrence study paint a grim picture of the state of deterrence for CSEC in Maharashtra in 2022. While there are indications of reduced crimes in traditional brothels due to stricter enforcement and police monitoring (79% of surveyed law enforcement officials in reported a perceived decrease in CSEC in public physical spaces in 2022 compared with 46% of respondents in 2019), the study found worsening conditions of deterrence in private and online spaces. Trafficker perceptions of risk remain low, driven by limited perceived threat or fear of any concrete legal consequences. Six out of ten sex traffickers interviewed indicated that the severity of punishments was irrelevant as they did not believe criminals would ever be arrested or convicted. Nearly all (9 out of 10) believed the punitive risk of engaging in CSEC using online channels (such as Facebook, Whatsapp, internet ads etc.) was much lower compared with brothels.

Worryingly, perceptions of risk among potential buyers have decreased significantly since 2019, specifically perceived risks of being shamed by local community members or being caught by the police. Only 10% of buyers considered stigma from community members a risk of CSEC in 2022 compared with 53% in 2019, while 35% viewed the possibility of being arrested as a risk to purchasing sex with minors versus 62% of these respondents in 2019.

In fact, over 30% of buyers did not think there would be any punishment at all for CSEC in 2022 (contrasted with 16% in 2019).

“Perceived risk of engaging in online exploitative activities involving CSEC is low, because criminals can easily hide their identity and location, which makes it difficult to track” – Global cyber security expert

4 Including both NSUM and RDS which are methods used for this study.
Emergent findings from both research studies demonstrate an increasing reliance on digital or online technologies and platforms to facilitate CSEC crimes. The prevalence study identified an increase in the percentage of online buyers of CSEC – 46% of perpetrators who paid to have sex with minors facilitated the transaction digitally (e.g. using Facebook, Whatsapp, or online ads) in 2022 compared to 36% in 2020.

“Due to the lockdown, there has been a sudden surge in business as more and more customers come to avail services through Facebook or any other technology, it is quite easy to conduct business now.” – Male sex trafficker from Pune

Similarly, the deterrence study showed an uptick in the use of technology to access services online from 43% in 2019 to 52% in 2022 – the majority of potential buyers interviewed (8 out of 10) believed that access to paid sex with minors has accelerated due to the wide availability of mobile-based platforms.

“It is very easy to find contacts, download apps and find girls online now.” – 46 year old male potential buyer from Mumbai

Additional insights from potential buyers reveal the use of internet and mobile technologies has diversified from primarily communicating with pimps to directly engaging with victims, making payments, creating or sharing child sexual abuse material (CSAM), as well as conducting online acts of grooming.

Digital channels to access CSEC have multiplied, making it easier for traffickers and buyers to engage anonymously through online ads and social media platforms. Web-scraping analysis indicated significant growth in online ads for paid sex, with the average volume of these solicitations increasing by over 40% in 2022 in comparison to 2019. Nearly 1 in 3 of these ads were assessed as either for CSEC or at a high-risk of CSEC. The analysis further revealed that online solicitations for minors is growing increasingly localized, with more suppliers posting ads specific to one city in 2022 versus multiple cities previously. Insights from the prevalence study further validate this trend – while the study did not directly survey respondents concerning online sexual exploitation of children, 66% of adult sex workers working online reported that their customers were local to Maharashtra.

The Maharashtra government has demonstrated considerable will to combat sex trafficking in the state, as evidenced by a number of initiatives including the establishment of specialized Anti-Human Trafficking Units (AHTUs) within the police force (as of 2022, there are 45 AHTUs in operation) that are trained on proactive investigation skills for trafficking cases, including Online Sexual Exploitation of Children (OSEC). An assessment of these training initiatives found they effectively addressed skills gaps and enabled these specialized units to hold perpetrators to account. However, the deterrence study’s interviews with lower-level law enforcement officers and technical experts revealed that while the police are aware of tech-enabled mechanisms employed for CSEC, the majority of units lack the skills and resources required to gather evidence or identify criminals through online platforms.

“Technological prowess of the police varies by state, however most of the tools lie with higher levels of the machinery to tackle OSEC, whereas “thonas” or local police stations who are first respondents in most cases don’t have relevant tools at their disposal” – Child protection expert, Maharashtra-based NGO

6 GFEMS supported training for AHTU officers in 4 districts on surveillance techniques, financial network analysis, and victim-sensitive evidence gathering and analysis processes between 2020 and 2022.
Methodology

Prevalence Study

TwoSix Technologies employed a hybrid approach which uses the Network Scale-Up Method (NSUM), Respondent-Driven Sampling (RDS), and Time-Location Sampling (TLS), to obtain an estimate of the size of the CSEC population in Maharashtra.

The study used NSUM to develop population size estimates of both adult sex workers and CSEC victims by conducting a survey with a geographically representative sample of 1,080 adults from the general population in Maharashtra and asking them how many adult sex workers and CSEC victims they know among their varied other local networks. Researchers also asked about the number of buyers participating in the commercial sex industry in order to shed further light on the sex worker and CSEC victim estimates. The study then employed TLS to identify 136 initial adult sex worker respondents for RDS data collection. These seeds referred 203 additional respondents over three waves, bringing the total number of RDS respondents to 339 adult sex workers across 8 districts in the state. Through RDS, the researchers determined the proportion of sex workers who are past and current CST victims based on the peer networks of the respondents as well as the ages at which the respondents themselves entered the commercial sex industry. The study subsequently used the RDS estimates to further validate the NSUM findings. The methodology was consistent for both time points of the study, similar to the first time point of the study – data collection was conducted remotely via telephone for both NSUM and RDS engagements.

Comparing results across multiple methods allowed the research team to minimize biases inherent to individual estimation approaches and develop stronger conclusions regarding the overall prevalence of CSEC in Maharashtra. However, it is still important to note that the prevalence estimate derived through this approach likely underestimates the overall size of the CSEC population in Maharashtra. Research participants could be either reluctant to acknowledge or unaware of an associate’s connection with the sex industry. They could also be hesitant to provide accurate responses owing to the stigma of sex commerce and legal implications of potentially being connected with CSEC, affecting study results.

Network Scale-Up Method (NSUM): is an approach to estimating population sizes — in particular, hidden or hard-to-reach populations — using indirect measures based on the network structures of the general population.

Respondent-Driven Sampling (RDS): is a network-based sampling method that studies hidden populations by identifying seeds, or initial respondents, in the population of interest and then has them recruit additional members of the target population to participate in the study.

Time-Location Sampling (TLS): or venue-based sampling, is a technique to randomly sample locations, dates, and/or times where and when individuals within a group of interest are likely to gather.

Deterrence Study

Dalberg employed a mixed methods approach in 6 districts across five cities, leveraging multiple data sources and triangulating insights to assess the state of deterrence for CSEC in Maharashtra in both 2019 and 2022. This included:

- Quantitative surveys with (i) 100 police officers based in the targeted districts to understand their attitudes towards CSEC and their perceived readiness and ability to tackle the crime; (ii) 800 members of the general population to gauge individual and community attitudes; and (iii) 300 potential buyers to assess their motivations and perceptions of risk of legal and social punishments.

- Qualitative in-depth interviews with (i) 10 brothel-owners and pimps; (ii) 10 existing buyers of commercial sex; (iii) 5 senior law enforcement and judicial officials including AHTU officers, prosecutors and judges; and (iv) 6 technical experts including local anti-trafficking NGO representatives, CSEC researchers, legal and cyber security professionals.

- Web-scraping exercise to extract data from relevant ad websites and analyze trends and demand for services. The study scraped approximately 19,000 ads from two classified ad aggregators between May and September 2022.

Owing to the relatively sensitive and high-risk nature of data collection for this study (including direct engagement with traffickers, brothel-owners, and potential CSEC customers), safe and ethical research was the highest priority. Risk mitigation and safeguarding measures included independent ethical and humanitarian review and IRB certification and implementation of rigorous safety protocols for researchers and enumerators.

7 Detailed methodology including limitations and mitigating measures can be found in the full study report
8 Mumbai, Nagpur, Palghar, Pune, and Thane
9 Respondents were sampled based on a profile of buyers suspected of purchasing sex from minors
10 Respondents were sampled from a pool of adult males observed entering or exiting brothels in red light areas in study districts
11 Detailed ethical and safety protocols can be found in the full report
Recommendations

**Enhance law enforcement capacity to investigate tech-enabled CSEC cases**

While law enforcement has seen certain success with reducing CSEC in traditional spaces since 2019, the research findings suggest considerable opportunities for improvement, particularly with regard to tech-enabled CSEC crimes. Law enforcement institutions should ensure dedicated trainings on OSEC and associated investigative tools and resources are not only limited to specialized AHTU units but also available for first respondents at the “thana” or local police station level. Aligned with the greater fragmentation of traffickers and buyers, there is also a critical need to ensure streamlined coordination mechanisms and clear standard operating procedures between law enforcement in different jurisdictions, including across state and national borders, to enable appropriate documentation, timely evidence-gathering, and effective prosecution of CSEC cases. Finally, state and national government bodies should also focus on longer term systemic efforts to address CSEC including the establishment of additional specialized courts, and tightening CSEC laws and regulations (such as making the charge a non-bailable offence and placing curbs on repeat offenders).

**Develop comprehensive tools and processes to better identify OSEC victims and perpetrators**

The rapid uptick in the use of technology to facilitate CSEC highlights an urgent need to develop new tools and processes to equip law enforcement to effectively identify, track, and investigate OSEC perpetrators. For example, this could include law enforcement institutions commissioning technology partners to develop automated web-scraping tools for ad aggregation websites to identify repeat offenders or flag cases that are at high-risk of involving minors. Government and regulatory bodies should liaise with big-tech companies and social media platforms to tighten their policies and curtail CSEC on their websites (for example, through stricter content norms, improved transparency of content moderation, stringent regulations around age verification and reporting, and removal of any suspected CSEC-related advertisements).

**Implement preventive measures to strengthen community mobilization against CSEC**

NGOs and practitioner organizations should focus on targeted engagement efforts aimed at community-level sensitization towards CSEC, rebuilding empathy for victims among caregivers and child welfare stakeholders, and developing an understanding of the signs and risk factors for both CSEC and OSEC. This could include implementing fundamental digital literacy campaigns for parents or guardians (for example, on privacy settings, content available online, signs of grooming or other online exploitation etc.) or efforts to foster digital safety among children (including building knowledge of basic internet safety, privacy measures, identifying potential threats etc.). Measures to activate community vigilance could further focus on building awareness of available channels for reporting potential CSEC cases, fostering willingness to utilize these mechanisms, as well as engendering mutual trust between local law enforcement authorities and community members.

**Conduct further research on observed “social isolation” trends**

Research findings identified a trend towards shrinking networks within the commercial sex industry, which, in conjunction with increased decentralization and digitalization, has led to a larger number of relatively isolated, digitally-oriented sex workers. If individuals are primarily entering sex work through dispersed online channels and not making connections with others in the industry, methods such as NSUM and RDS are likely to become increasingly ineffective at measuring the size and characteristics of this population. Researchers should further explore the implications of this social isolation phenomenon for the detection and measurement of hidden populations (including trafficking victims) as the majority of these methods rely on network connections and latent social structures to establish prevalence estimates.

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