Gendering of Development Data in India: Beyond the Binary #4

Digital Services and Data Challenges

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Note

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Please read the full report here:
https://cis-india.org/raw/brindaalakshmi-k-gendering-development-data-india

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1. Introduction

Professor Philip Alston, UN Special Rapporteur on extreme poverty and human rights, writes in his October 2019 report to the UN General Assembly:

> [T]he digital welfare state is either already a reality or is emerging in many countries across the globe. In these states, systems of social protection and assistance are increasingly driven by digital data and technologies that are used to automate, predict, identify, surveil, detect, target and punish… [A]s humankind moves, perhaps inexorably, towards the digital welfare future it needs to alter course significantly and rapidly to avoid stumbling zombie-like into a digital welfare dystopia.[1]

Due to the digital welfare state's heavy reliance on data, there is an even heightened need to prove one's identity against datasets. This moves into the ambit of 'identify, surveil, detect, target and punish'. The punishment for one's inability to prove one's identity is the denial of access to their guaranteed rights by the state. India is no different. Such a digital welfare state, one that is automated and data-driven, is emerging in India and various components of it are in different states of implementation and functioning. The effects of this *digital welfare dystopia* are already felt in the country, especially by already marginalised populations who face extreme poverty and hence are deeply dependent on effective functioning of welfare services. For example, according to the Right to Food campaign, 56 starvation deaths in India happened between 2015-2018.[2] 25 deaths in three years were on account of Aadhaar failure.[3] Majority of these deaths were among individuals from marginalised castes and tribes, who were eligible for social security schemes but did not receive them from the state, due to cancelled ration cards for failing to link with Aadhaar.

We have already discussed in parts 2 and 3 of this report how the existing official statistics, that is Census 2011 data, under-represents transgender population of India, which leads to under-allocation of funds for much needed welfare programmes directed towards transgender persons. Coupled with this, there have also been emerging possibilities of big data collection by public and private entities, which neither comprehensively counts nor represents the transgender population in India. Usage of this big data to deliver welfare will yet again marginalise the already

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[1] Office of the High Commissioner, Human Rights, United Nations. (2019, October 17). World stumbling zombie-like into a digital welfare dystopia, warns UN human rights expert. Retrieved from https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25156

[2] Anwar, T. (2019, May 28). Jharkhand: People Continue to Die of Hunger, Officials in Denial Mode. Newsclick. Retrieved from https://www.newsclick.in/jharkhand-people-continue-die-hunger-officials-denial-mode-0

[3] Newsclick Report. (2019, February 18). 42 Starvation Deaths in 2 Years, Campaign Demands Food for Everyone. Newsclick. Retrieved from https://www.newsclick.in/42-starvation-deaths-2-years-campaign-demands-food-everyone

marginalised. This 'irresistible attraction for governments to move in this direction' of a digital welfare state, without assessing the risks, calls for an immediate review of the impact of digital welfare services being currently implemented, especially on various marginalised population groups, before moving any further in that direction. Please note that such an investigation is, however, beyond the scope of this report.

In this fourth and final part of the report we discuss how the respondents of this study assess the opportunities offered by digital and data technologies for transgender persons to access public and private services more effectively, and in turn to produce more representative data about their welfare needs and priorities. The next section of this document discusses the factors that shape the effectiveness of digital services, to access welfare services and procure identity documents, for transgender persons in India; and the final section explores whether private big data (collected by social media companies, e-commerce companies, telephone and internet service providers, and such) may augment existing official statistics on transgender persons to afford more effective planning and delivery of welfare and commercial services to them.

2. Digital services and challenges of access

Digitisation of identity documents and underlying systems has offered its own set of benefits and challenges to the transgender community. Transphobia and a lack of awareness is commonly observed among government officials issuing the different identity documents. In these circumstances, web-based methods to apply for and obtain identity documents have the potential to significantly help transgender people to avoid social harassment commonly faced when interacting with public officials involved in issuing such documents and enumerating them as beneficiaries. However, not all identity documents may be obtained only through a web-based process. For example, one may apply for Passport through the website concerned yet applicants are still expected to visit the Passport Seva Kendra (the office for passport services) for verification of their identity and other official documents.

Not all key governance systems have been digitised across all states in India. Some government departments in certain states continue to have no proper online presence or lack the correct information with respect to changing an individual's name and gender in any document. Also, documents required for changing one's name and gender change may vary in each state and even across different government agencies in a state.

> *Officially your name and gender change should be accepted everywhere if published in the gazette. But again, the situation is different in different states for the gazette publication. Say, for*

Uttarakhand, I went through many websites. I couldn't even find the gazette office's address. So there's no online presence of that gazette to be able to publish [the name change]. I had to actually find that place somewhere in Rourkee. It's a small government office inside a government printing press. You'll go there and then the officer sitting there will tell you [that] they require documents in your assigned name and gender. - Shaman Gupta[4]

Being on the wrong side of the digital divide, shaped by centuries of discrimination and marginalisation, is a harsh reality for the majority of transgender population in India. Along with uneven implementation of digitisation of welfare services and processes of issuing identity documents, access to internet and digital devices is also very uneven among the transgender community. Not more than 10-15% of the transgender population in India effectively uses any digital devices at all, estimates Aparna Banerjee.[5]

First of all, the affordability of that particular technology is a barrier. Secondly, even if you can afford it, not knowing how to use it or being uncomfortable using it is another barrier. These barriers would be applicable also to the larger population but very specifically to transgender individuals. In terms of education, it all depends on the design of that site and/or that app. If it is designed with simplicity and minimum literacy in mind then it will work. - Pawan Dhall[6]

Access to mobile phones is assumed to bridge this access gap to online systems and services. However, observations from different respondents suggest otherwise.

A lot of transgender people do not have smartphones. The small section that does own smartphones uses mostly WhatsApp as they can send voice messages and not have to text to communicate - Vyjayanti Vasanta Mogli[7]

Level of literacy as well as digital literacy are dismal among transgender persons in India. A 2017 study supported by the National Human Rights Commission of India observed that 29% of the transgender respondents from a Tier-1 city and 33% among those from non-Tier-1 locations have

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[4] Shaman Gupta is a part of TWEET (Transgender Welfare Equity and Empowerment Trust), a community based organisation working for empowerment and welfare of trans persons. The organisation specifically concentrates on providing psychosocial support and guidance to trans masculine persons across India with respect to healthcare, legal changes, education and employment.

[5] Aparna Banerjee, a hijra activist working for the sexual minorities and gender nonconforming people since 2000, remained a member of the State Transgender Development Board and contributed to the state figures and welfare measures and believes in equity rather than equality.

[6] Pawan Dhall has been engaged with gay, lesbian, bisexual, transgender and other queer community mobilization in eastern and other parts of India since the early 1990s. He now leads Varta Trust, a Kolkata-based gender and sexuality publishing, research, advocacy and training non-profit agency (www.vartagensex.org).

[7] Vyjayanti Vasanta Mogli Is a Transgender RTI Activist & Co-founder, Queer Swabhimana Yatra (QSY) & Telangana Hijra Intersex Transgender Samiti (THITS).

not attended school.[8] Further, 45% respondents from a Tier-1 city and 48% among those from non-Tier-1 locations have attended school but have failed to complete Class X. The authors of the study note that '[i]t is a matter of serious concern that transgender persons are denied of right to education even after the enactment of Right to Education Act 2009.'[9]

The low digital literacy significantly hinders the transgender population in India from accessing web-based government and commercial services, note several respondents. With respect to transgender persons who are applying for changing gender identity in order to access welfare schemes, many are still dependent on a representative of a NGO, CBO, or a handful of community members with digital literacy, to fill out their application on online interfaces, notes Pawan Dhall.

3. Private big data and challenges of being counted

Globally, possibilities of using big data generated and owned by private companies for augmenting official statistics and other datasets collected by governments are being explored. UN Global Pulse has been working with private sector companies since 2011 to engage them in 'data philanthropy' - the act of making private big data owned by such companies available to development practitioners and researchers for analysis and predictive modelling.[10] The GovLab at the NYU Tandon School of Engineering has introduced the concept of 'data collaboratives' as an approach towards building partnerships among public and private sectors to 'leverage private data for public good' in a responsible manner.[11] A recent report by Data2X notes that '[b]ig data generated from cell phones, laptops, remote sensors, and more can add nuance to our understanding of women's and girls' lives.'[12] However, the effectiveness of such methods of generating *alternative data* about sectoral and general indicators of well-being for transgender persons in India remain questionable.

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[8] Kerala Development Society. (2017, February). *Study on Human Rights of Transgender as a Third Gender*. Retrieved from https://nhrc.nic.in/sites/default/files/Study_HR_transgender_03082018.pdf

[9] Ibid. P. 23.

[10] Kirkpatrick, R., & Vacarelu, F. (2018, December). *A Decade of Leveraging Big Data for Sustainable Development*. UN Chronicle, Vol. LV, Nos. 3 & 4. Retrieved form https://unchronicle.un.org/article/decade-leveraging-big-data-sustainable-development

[11] Verhulst, S. G., Young, A., Winowatan, M., & Zahuranec, A. J. (2019, October). *Leveraging Private Data for Public Good: A Descriptive Analysis and Typology of Existing Practices*. GovLab, Tandon School of Engineering, New York University. Retrieved from https://datacollaboratives.org/static/files/existing-practices-report.pdf

[12] Grantham, K. (2020, March). Mapping Gender Data Gaps: An SDG Era Update - Executive Summary. Data2X. Retrieved from https://data2x.org/wp-content/uploads/2020/03/MappingGenderDataGaps_ExecSummary.pdf

Only a minority of transgender people in India are part of the digital media and economy spheres, and thus big data generated by private companies has a very limited potential to reveal patterns about the transgender community. Many key sectors of economy, say healthcare, serve transgender consumers poorly and often do not offer them need-specific services. A 2014 report by an Expert Committee on the Issues relating to Transgender Persons established by the Ministry of Social Justice and Empowerment notes,

> *Transgender people in India face a variety of issues. So far, these communities perceive that they have been excluded from effectively participating in social and cultural life; economy; and politics and decision-making processes… So far, there is no single comprehensive source on the basis of which an evidence-based advocacy action plan can be prepared.. Reports of harassment, violence, denial of services, and unfair treatment against transgender persons in the areas of employment, housing and public accommodation have been discussed in local media, from time to time.*[13]

This makes it unlikely that such private sector actors will be able to generate data about their transgender consumers that reveal patterns of needs and priorities. In the insurance sector, for example, leading private and public companies such as Aditya Birla Health Insurance and SBI General Insurance, respectively, do not cover procedures for Sex Reassignment Surgery (SRS) in their medical insurance products,[14] while Life Insurance Corporation of India, the largest insurance provider in India, consider SRS a cosmetic surgery.[15] Further, not all online service providers offer categories beyond the binary ('Female' and 'Male') for its users to self-identify their gender as when availing the services offered. This implies that such service providers, even when generating big data and making it available to enable monitoring of well-being of its customers by development agencies, are not generating data where transgender persons can be identified and their well-being can be monitored. In the travel industry, the IRCTC website, used for booking Indian Railways tickets, has an option for passengers to self-identify their gender as 'Transgender' while booking a train ticket. However, airline companies and online booking services for the same do not offer this option to passengers while booking a flight ticket, notes

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[13] Ministry of Social Justice and Empowerment, Government of India. (2014). Introduction: Transgender people and their problems. In *Report of the Expert Committee on the Issues relating to Transgender Persons*. P. 2. Retrieved from http://www.socialjustice.nic.in/writereaddata/UploadFile/Binder2.pdf

[14] Venugopalan, A. (2019, March 14). India Inc offers medical cover to LGBTQ partners. The Economic Times. Retrieved from https://economictimes.indiatimes.com/news/company/corporate-trends/india-inc-offers-medical-cover-to-lgbtq-partners/articleshow/68365215.cms

[15] Arora, P. (2018, November 23). Does Insurance in India Cover Gender Reassignment Surgery?. Vice. Retrieved from https://www.vice.com/en_in/article/a3m3b4/does-insurance-in-india-cover-gender-reassignment-surgery

Aparna Banerjee. All major bus operators also do not offer the gender option of transgender for purchasing tickets online although gender is a mandatory field to book a bus ticket, notes Delfina.[16]

Access to any private service system like banking, healthcare, housing, or education by any individual requires verification using some proof of identity. The discrimination and challenges in procuring government issued identification documents impacts the ability of transgender persons to access private sector services and to be counted by private data systems. Even with the required identity documents, transgender persons continue to face challenges when accessing essential commercial services.

> *Recently I went to [a bank] to open an account. Usually, you will have to contact [the bank] and an agent comes home to get the paperwork completed. Even after getting an Aadhaar card, my bank account could not be opened as the data was not matching within their system because 'Transgender' option was difficult for them to sync with.* - Aparna Banerjee

This experience of the respondent shows the dependency of private services on government issued documents, and the difficulties transgender persons face even when they have the needed documents only because of gender categories written into information management systems of private companies. Additionally, transgender persons may in fact select a gender option within the binary of 'Female' and 'Male' while accessing any private service and this will not allow the service provider to identify the customer concerned as being transgender. Due to such reasons, there continues to be pervasive misrepresentation and under-counting of transgender people in big data generated by private service providers.

Private companies that offer online services such as e-commerce and travel booking have provisions for using different social media accounts to access such services. Respondents note that transgender individuals are apprehensive about using their social media accounts for accessing any particular service or benefit due to concerns of information privacy and security. Most of them also expressed concerns with the digital footprint of people being used, along with official statistics, to monitor welfare needs of people and to deliver development services accordingly. Most are wary of using their digital footprint or identities especially since transgender people are already a marginalised group.

Along with the worry of general surveillance by the state, there is also a fundamental concern with security of information shared with private services providers, and the threat of such information being disclosed to people known to the transgender person concerned and that

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[16] Delfina is an activist, playback theater artist, and social worker. They are associated with Nirangal, an organization based in Chennai, Tamil Nadu, India, which works for the rights and welfare of those with alternate gender and sexual identities.

causing physical and psychological insecurity. Menaka Rao has written about the condition created by making identification of patients using their Aadhaar ID mandatory for accessing life-saving medicines like Antiretroviral Therapy (ART) where a HIV positive patient decided to stop taking medicines when the medical service provider asked for Aadhaar ID due to fear of such personal information being leaked to the person's family members. Rao writes:

> *Over the past year, Geeta Moorthy, an outreach worker who helps HIV patients, has seen seven patients drop out of the government's HIV programme in Secunderabad... "Patients drop out of the programme for several reasons," said Moorthy. "But this is the first time I am seeing people drop out of the programme because they do not want to give Aadhaar." Moorthy claims that one sex worker, who stopped getting her medicines because she refused to submit her Aadhaar details, died this year.*[17]

Irrespective of gender, there have also been instances of data breach from several private service providers. In December 2016, pathology reports of 43,203 Indian patients were left publicly accessible on the internet by a medical services company named Health Solutions.[18] More recently, a network security company has reported documents related to 1.02 million medical studies of Indian patients being publicly available online in late 2019.[19]

Such cases of data breach definitely affect all irrespective of one's gender. However, it is important to understand the impact of such a breach on individuals of a marginalised identity compared to others from more privileged identities.

> *It's very unsafe. Most of these (social media) websites do not have a very strong safety feature on them. Anybody can look at anybody's profile, anybody can prank them. So unless you create a very strong parallel system, it would just be harassing to avail the services that you're talking about. - Shaman Gupta*

Harassment and bullying of transgender persons with violent threats and/or sexual remarks on social media platforms are quite common when they are open about their gender identity.

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[17] Rao, M. (2017, November 17). Why Aadhaar is prompting HIV positive people to drop out of treatment programmes across India. Scroll. Retrieved from
https://scroll.in/pulse/857656/across-india-hiv-positive-people-drop-out-of-treatment-programmes-as-centres-insist-on-aadhaar

[18] Hunt, T. (2016, December 05). 43,203 Indian patient pathology reports were left publicly exposed by Health Solutions. Retrieved from
https://www.troyhunt.com/43-203-indian-patient-pathology-reports-were-left-publicly-exposed-by-health-solutions/

[19] Greenbone. (2019, November 17). Information Security Report: Unprotected patient data in the Internet – a review 60 days later, or The Good, the Bad, and the Ugly. Retrieved from
https://www.greenbone.net/wp-content/uploads/Greenbone_Security_Report_Unprotected_Patient_Data_a_Review.pdf

Instances of violence and threat to violence against transgender persons are common on social media apps and platforms. This makes it dangerous for transgender persons to disclose their gender status on different social media platforms. Online privacy therefore continues to be a serious concern for them.

> *If you are talking about Big Data where you are using social media and generating a lot of data, I would be very wary as it is an invasion of privacy. Like all data, its users need to be restricted. It cannot be 'free for all'.* - Pawan Dhall

Only individuals who are comfortable with being open about their gender identity online will be comfortable with their social media identities being used, notes Rebina Subba.[20] Since many are closeted about their gender identity, many transgender persons are uncomfortable with disclosing their gender identity on social media.

> *If I am a homebound trans woman, I might use social media to express my feelings through a Facebook account under a female name and identity, then I cannot claim publicly that I am that person.* - Grace Banu[21]

Transgender individuals who may not be out as being transgender to family and friends, worry about their gender identity being disclosed. Given the different kinds of privacy challenges faced by a minority group, often many of them have multiple social media accounts to protect their identity from being disclosed. Such multiplicity of accounts, coupled with cautious use of social media accounts due to the general online environment of violence towards those identifying beyond gender binary, used by a minority of transgender population, who are digitally literate and can afford digital devices, makes the resultant social media data woefully inadequate to meaningfully represent the development needs and challenges of transgender persons in India.

4. Discussion

Ignoring the existing access gap faced by marginalised population groups, the digital welfare state is increasing its reliance on data to make welfare decisions. This has led to a growing call for the digital industry to regulate the big data generated from its users. This user generated data regulation by private digital players moves into the ambit of 'identify, surveil, detect, target and

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[20] Rebina Subba is a social justice lawyer working with marginalized communities since 2008. She is the founder of 'Shamakami – One Who Desires One's Equal,' the only registered organization working on LGBTQI issues in Shillong. She has been working to make people aware of sexuality and gender issues.

[21] Grace Banu is a dalit and transgender activist and writer. She is the Founder Director of Trans Rights Now Collective.

punish', as described by Professor Philip Alston.[22] With sufficient namesake regulation, private players are given a free rein to collect data on users to support their profit motive, without any consideration or with superficial consideration for human rights.

In his report to the UN General Assembly in October 2019, Alston notes,

> *In response to growing calls for effective governmental regulation, the industry has gone into high gear in producing, influencing and embracing "codes of ethics" and other non-binding standards purporting to "regulate" digital technologies and their developers. Most, but by no means all, of these codes contain a reference to human rights, but the substance of human rights law is invariably lacking. Instead the token reference to human rights serves only to enhance claims to legitimacy and universality.*[23]

This is predominantly the approach adopted by private service providers towards gender inclusion in a feeble attempt to cater to the needs and requirements of transgender people, a marginalised population group. As described by Crawford, this superficiality and tokenism perpetuate 'hidden biases' against gender minorities in the data generated by private sector service providers.[24] This has also been observed by Rena Bivens in the context of continued latent binary gendering of Facebook's user base despite introducing 56 gender options beyond the binary. Although seemingly a progressive move, Facebook's gender data continues to 'misgender users when it translates those identities into data to be stored in the database'.[25] Bivens notes that despite the introduction of 56 options, the Facebook sign-up page continues to be in gender binary since users are required to first identify within the binary before they can access the non-binary options. In addition, the data collection of individuals within binary genders highlights the continued emphasis of the private sector on binary gendering to drive its commercial agenda including targeted advertising. This is in contrary to the state's development agenda for the inclusion of transgender persons.

Coupled with the superficial advocacy for diversity and inclusion, data systems of private players are also designed to heighten the need to prove one's identity against datasets with

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[22] Office of the High Commissioner, Human Rights, United Nations. (2019, October 17). World stumbling zombie-like into a digital welfare dystopia, warns UN human rights expert. Retrieved from https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25156

[23] See Footnote 1. Page 13.

[24] Crawford, K. (2013, April 1). *The Hidden Biases of Big Data*. Harvard Business Review. Retrieved from https://hbr.org/2013/04/the-hidden-biases-in-big-data

[25] Bivens. R. (2016, January 27). Programming Violence: Under a Progressive Surface, Facebook's Software Misgenders Users. Retrieved from https://renabivens.com/programming-violence-under-a-progressive-surface-facebooks-software-misgenders-users/

government-issued identity documents. This is an additional pressure on transgender persons to prove their existence. However, producing valid identity documents does not guarantee fair representation in the data produced since most private sector services providers do not have provisions for the inclusion of transgender persons in their information management systems. The inability to prove one's identity in a system that is non-inclusive by design, leads to misrepresentation and under-counting of transgender persons by private sector services. The design of private data systems is not presently equipped to avoid this misrepresentation.

Further, the 'digital welfare state's' increased dependency on 'data as evidence' to prove human existence that consequently drives welfare decisions, is drastically diminishing the emphasis on human rights, resulting in bureaucratic erasure of historically marginalised population groups. As discussed in Part 3 of this Report, the lack of data created by public data systems, designed with 'hidden biases' is being used as evidence by different Indian states to grossly under-represent transgender populations, leading to a bureaucratic erasure of their existence. This structural design does not take into consideration the historic and the resultant systemic discriminations experienced by a marginalised group, in order to enter these data sets, although entering these data sets does not guarantee access to welfare or their rights.

The present system does not consider the harassment that transgender persons may be subject to, in order to enter these data systems. However, the present digital welfare state places the onus on vulnerable population groups to prove their existence as individuals and consequently, as a population group to be considered for a budget allocation, and a 'probable' access to welfare benefits. This shift of responsibility from the state to the individual is a regression from human rights and the state's role in fulfilling the constitutionally promised right of every individual. The inability to prove or validate their existence of any individual is resulting in a steady trend of erasure, of both individuals from marginalised identities and these marginalised identities collectively as population groups. The tendency to write off a population group due to lack of available data regarding the group concerned reiterates the need to move away from the practice of insisting for data to make welfare decisions for marginalised groups. Instead, the focus of the state should be to adhere to human rights standards to offer welfare to all.

Appendix: Questions on digital technologies and data challenges

Below is a set of questions that were part of the longer questionnaire that structured the interviews with respondents of this study, and that are relevant for the analysis presented in this part of the report.

- How do you think non-binary or third gender identifying trans and intersex individuals want to be included in the enumeration process, and represented in resultant databases, so that they can effectively access services and lead dignified public lifes?

- How do you think gendering of development data affects allocation of development funds for different development projects? Do you think not being included in government databases, or being recorded with incorrect information about your preferred name, gender, or other details, prevents trans/intersex people from accessing government services and welfare payments?

- How does this vary depending on their specific identity within or outside the binary?

- What key digital databases do trans/intersex interact with when interacting with government and private sector service providers (healthcare, HIV, transport, banking, etc.), and how do they get recorded/represented in such digital databases?

- What challenges/vulnerabilities are posed on trans/intersex people as they become included/recorded in specific digital databases, and again specific identification numbers/processed?

- Do you know if trans/intersex people deny/avoid using specific identity documents or identification processes when accessing specific services due to worries/concerns regarding being recorded/represented against those identity documents/numbers? (Are people uncomfortable using IDs? Why so?)

- How do you think your 'digital footprints' and/or social media identities/conversations, can be used to better access public/private services? (that is, can it be easier to access public/private services if one is represented by one's 'digital footprints' and online conversations/interactions instead of data collected by government agencies?