

Call for action: presenting constituency-level data on population, health and socioeconomic wellbeing related to 2030 Sustainable Development Goals for India

S. V. Subramanian,^{a,b,*} Amar Patnaik,^c and Rockli Kim^{d,e}

^aHarvard Center for Population and Development Studies, 9 Bow Street, Cambridge, MA, 02138, USA

^bDepartment of Social and Behavioral Sciences, Harvard T. H. Chan School of Public Health, Boston, MA, USA

^cMember of Parliament, Rajya Sabha, Government of India, India

^dDivision of Health Policy and Management, College of Health Science, Korea University, Seoul, Republic of Korea

^eInterdisciplinary Program in Precision Public Health, Department of Public Health Sciences, Graduate School of Korea University, Seoul, Republic of Korea

India is committed to the 2030 Sustainable Development Goals (SDG) targets.¹ Accomplishing the SDGs will require strong and sustained political support and accountability, not just at the national level but at the level of the 543 parliamentary constituencies with elected representatives, referred to as the Members of Parliament (MPs).^{2,3} However, readily available data related to SDG indicators is lacking for constituencies. This occurs because the populations served by a district (a unit at which data is typically made available) and a constituency are not the same; a constituency can have parts of a district or multiple districts intersecting it or vice versa.⁴ Building on prior research,^{5,6} we present a data resource of 33 SDG indicators related to population, health and socioeconomic well-being for the 543 parliamentary constituencies that the MPs can utilize to assess the progress their respective constituencies have made so far and what needs to be done to accomplish the targets by 2030 (Fig. 1; also see <https://geographicinsights.iq.harvard.edu/PC-SDG-Progress>).

For indicators such as adolescent pregnancy, multidimensional poverty, access to electricity and women having bank accounts, a vast majority of the constituencies are on course to achieving the targets or have already achieved the targets in 2021. On the other hand, for indicators such as health insurance, access to basic services, and an array of women's well-being and gender inequality indicators (e.g., girl child marriage, intimate partner violence, contraceptive use) more than two-thirds to three-fourths of the constituencies are not on track to achieving the targets by 2030. Despite national success in indicators such as improved sanitation or neonatal mortality, 119 and 218 constituencies, respectively, are not on-course to achieving these targets. Similarly, targets related to access to basic services, including clean fuel for cooking, hand-washing facilities, or

improved water quality, also remain out of reach in a large majority of the constituencies.

In a recent Q&A session in the parliament on the request for constituency-level data for evaluating a particular program on registered agricultural laborers, the Minister for Labour and Employment acknowledged no data was being maintained at the constituency-level.⁷ Furthermore, several Lok Sabha members have asked the Government of India on the status of SDG Indicators at sub-national levels in the Parliament.^{8,9} This fundamental data gap needs to be addressed for MPs in order for them to function effectively in serving the needs of their constituents.

Having constituency-level data is a critical pre-requisite for the success of the District Development Coordination and Monitoring Committees (DISHA). The DISHA was established to provide a quarterly review of all development activity and, importantly, to ensure better coordination among the elected and administrative representatives for efficient functioning. However, in the absence of constituency-level data, the MP who chairs these meetings cannot get an accurate assessment of the progress of the various programs for his or her constituents as only district data is made available by the district administrator. Since the MPs are directly responsible and accountable to their constituents, the availability of development data at the constituency-level at the DISHA meetings can substantially empower the MPs to function effectively in a targeted manner. Outside of formal governmental engagement, timely and accessible constituency-level data can also bring a data-oriented approach to MPs engagement with civil society and other stakeholders to prioritize issues most important to their constituents.

While attempts have been made to create a reliable constituency-level data resource,^{10,11} a more durable solution is needed such that all micro datasets be consistently geo-tagged for parliamentary and assembly constituencies. The discordance in the populations that are served by



The Lancet Regional Health - Southeast Asia 2024;22: 100358

Published Online xxx
<https://doi.org/10.1016/j.lansea.2024.100358>

*Corresponding author. Harvard Center for Population and Development Studies, 9 Bow Street, Cambridge, MA, 02138, USA.

E-mail addresses: svsubram@hsph.harvard.edu (S.V. Subramanian), amar.patnaik@sansad.nic.in (A. Patnaik), rocklikim@korea.ac.kr (R. Kim).

© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

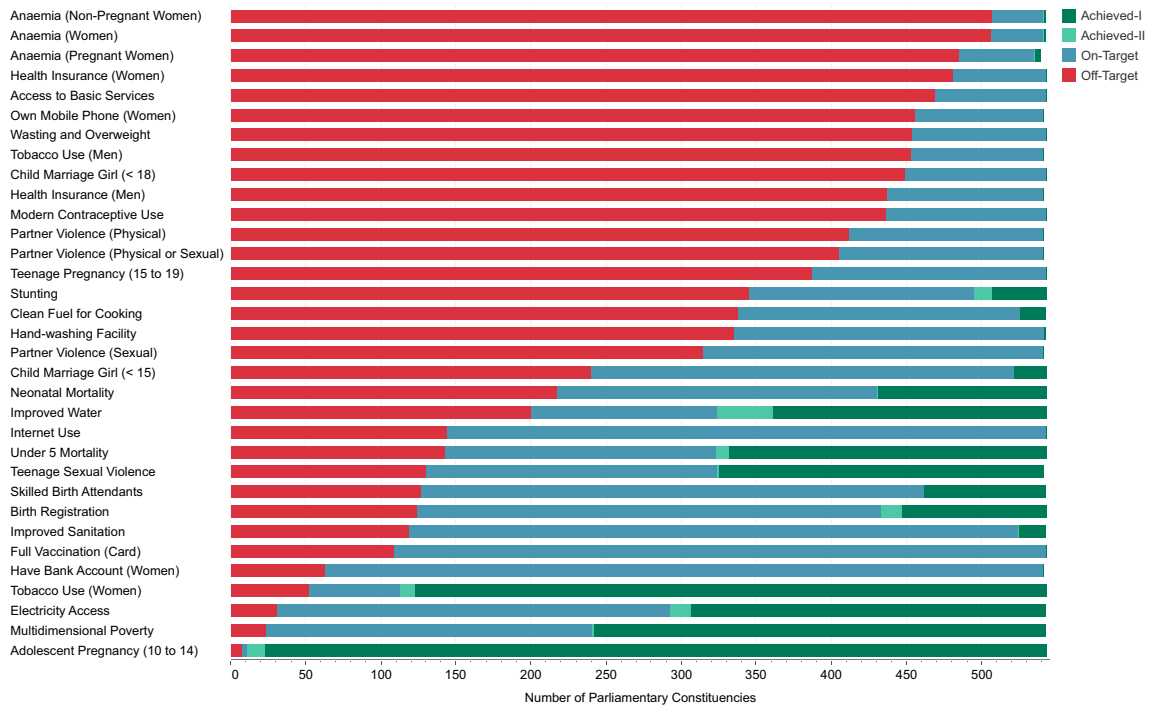


Fig. 1: Distribution of parliamentary constituencies (count) for 33 Sustainable Development Goal (SDG) indicators by constituency status. Notes: For the selection of indicators, we used a published study that provided an assessment across these indicators for the districts of India,⁶ and to derive the constituency estimates, we utilize a previously published methodology.⁵

districts and constituencies and the inefficiencies they bring to development governance make a compelling case for establishing a national commission to systematically explore and develop a strategy for harmonizing these two critical policy units. For instance, recently Andhra Pradesh, which was due for reconstituting its 13 districts since its separation from Telangana in 2014, decided to largely use the number and geometry of 25 of its 26 parliamentary constituencies to create the new districts.¹² There is a delimitation scheduled for reconstituting the number and geometry of parliamentary and assembly constituencies in 2026,¹³ and it would be timely to consider possibilities for harmonizing the populations served by the districts and parliamentary constituencies.

Recent years have seen India's elected officials engage publicly and more consistently in articulating and shaping policy agendas. Creating a robust constituency-level data surveillance and monitoring system on the health and well-being of their population can bring the necessary political synergy and accountability needed to accomplish the SDGs.

Contributors

Conceptualization and Design: SVS; Data Acquisition and Analysis: RK; Data Interpretation: SVS, AP, RK; Writing of the Manuscript: SVS, AP, RK; Overall Supervision: SVS.

Data sharing statement

Parliamentary Constituency estimates for SDG indicators are visualized in an interactive dashboard: <https://geographicinsights.iq>.

[harvard.edu/PC-SDG-Progress](https://www.harvard.edu/PC-SDG-Progress). The data source underlying this work is publicly available and can be accessed from <https://dhsprogram.com/data/available-datasets.cfm>.

Declaration of interests

None.

Acknowledgements

We are grateful to Hyejun Chi for her assistance in data analysis, and Akhil Kumar for his contribution in data analysis, visualization, and insightful comments on the draft.

Funding: This study was supported by a grant from the Bill & Melinda Gates Foundation INV-002992. The funders had no role in study design, data collection and analysis, decision to publish or preparation of the manuscript.

References

- 1 NITI Aayog. *SDG India Index baseline report, 2018*. Government of India, New Delhi, India; 2018. https://www.niti.gov.in/sites/default/files/2020-07/SDX_Index_India_Baseline_Report_21-12-2018.pdf. Accessed January 28, 2024.
- 2 Subramanian SV. *How data can empower MPs to serve people better*. The Indian Express; 2023. https://geographicinsights.iq.harvard.edu/sites/projects.iq.harvard.edu/files/geographicinsights2/files/IE_OpEd_MP_Feb17_2023.pdf. Accessed January 28, 2024.
- 3 Subramanian SV. *India, its SDG pledge goal, and the strategy to apply*. The Hindu; 2023. https://geographicinsights.iq.harvard.edu/sites/projects.iq.harvard.edu/files/geographicinsights2/files/the_hindu_sdg_oped_may1_2023.pdf. Accessed January 28, 2024.
- 4 Blossom JC, Swaminathan A, Joe W, Kim R, Subramanian S. Robust parliamentary constituency estimates. *Econ Polit Wkly*. 2019;54(19):67. https://geographicinsights.iq.harvard.edu/files/geographicinsights2/files/robust_parliamentary_constituency_estimates_geographic_data_science_approaches.pdf. Accessed January 28, 2024.

- 5 Kim R, Swaminathan A, Kumar R, et al. Estimating the burden of child malnutrition across parliamentary constituencies in India: a methodological comparison. 2019;7:100375. <https://doi.org/10.1016/j.ssmph.2019.100375>.
- 6 Subramanian SV, Ambade M, Kumar A, et al. *Progress on sustainable development goal indicators in 707 districts of India: a quantitative mid-line assessment using the National Family Health Surveys, 2016 and 2021*. 2023;13. <https://doi.org/10.1016/j.lansea.2023.100155>.
- 7 Government of India Ministry of Labour and Employment Lok Sabha unstarred question no. 674; 2023. <https://sansad.in/getFile/loksabhaquestions/annex/1711/AU674.pdf?source=pqals>. Accessed January 28, 2024.
- 8 Government of India Ministry of Planning Lok Sabha Unstarred Question no. 4609; 2023. <https://sansad.in/getFile/loksabhaquestions/annex/1711/AU4609.pdf?source=pqals>. Accessed January 28, 2024.
- 9 Government of India Ministry of Planning Lok Sabha Unstarred Question no. 2893; 2023. <https://sansad.in/getFile/loksabhaquestions/annex/1714/AU2893.pdf?source=pqals>. Accessed January 28, 2024.
- 10 Geographic Insights Lab. *NFHS policy tracker for parliamentary constituencies*; 2023. <https://geographicinsights.iq.harvard.edu/nfhs-tracker-pc>. Accessed January 28, 2024.
- 11 Kim R, Subramanian S. Estimating vulnerability to COVID-19 in India. *Lancet Glob Health*. 2020;8(12):e1464. [https://doi.org/10.1016/S2214-109X\(20\)30427-7](https://doi.org/10.1016/S2214-109X(20)30427-7).
- 12 *Reorganisation of districts in Andhra Pradesh turning out to be a ticklish job*. The Economic Times; 2020. <https://economictimes.indiatimes.com/news/politics-and-nation/reorganisation-of-districts-in-andhra-pradesh-turning-out-to-be-a-ticklish-job/articleshow/79233623.cms>.
- 13 Das A. *Delimitation, and the changing India political map*. The Indian Express; 2023. <https://indianexpress.com/article/political-pulse/delimitation-and-the-changing-india-political-map-8950367/>. Accessed January 28, 2024.