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A Secular Democracy in Practice:
Objective Assessment of
Amenities Programs in India

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Introduction

Classifying countries into democratic or non-democratic regimes is relatively straightforward. There are four primary criteria, (a) universal franchise, (b) free, fair, and regular elections, (c) peaceful transfer of power, and (d) division of power between the executive, legislative, and judiciary. However, quantifying the functioning of democracy or objectively assessing whether democracy is strengthening or weakening within democratic regimes remains a challenge. Despite this, international attempts to quantify the functioning of democracy are made essentially by conducting perception-based surveys of academics, professionals, and civil society members. However, two fundamental concerns must be addressed if these surveys are to be taken seriously.

First, are these surveys representative? For example, can we compare a large democracy like India with more than 900 million electors, more than 100 spoken languages, and significant cultural, socio-economic, and geographical diversity, with a small homogeneous country like the Kingdom of Norway, which has less than 4 million electors? The survey design and methodology to make the sample representative would have to be very different in India to capture its diversity compared to the survey design for the Kingdom of Norway. Such a rigorous, time-consuming, expensive exercise has never been done. The underlying assumption by the democracy-rankers currently is that a uniform survey of the opinion of a few (very few!) selected elites within a country is representative of the entire population. However, this assumption is non-verifiable and hence not scientific. Research in statistics has revealed that if a survey is not representative, the results are more biased for large populations.² Unfortunately, a large democracy like India, whose electoral base is growing rapidly, would not only have more biased estimates compared to smaller democracies, but the bias would increase over time as the population increases. It is also worth noting that an increase in data quantity cannot address data quality issues of non-representativeness of the survey; it only makes the estimates and our conclusion based on these estimates more "precisely" wrong.

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² Statistical Paradoxes And Paradoxes In Big Data (I): Law of Large Populations, Big Data Paradox, And The 2016 US Presidential Election. Xiao Li Meng, *The Annals of Applied Statistics* 2018, Vol. 12, No. 2, 685–726 <https://doi.org/10.1214/18-AOAS1161SF>

Second, how do we measure or quantify the functioning of democracy? For example, it could be possible that the elite opinion makers in a democracy, who participate in these international surveys, have privileged access to those in power and, in such circumstances, will have a favourable disposition towards those regimes. In contrast, if people have chosen a government or those in power with whom they do not have a rapport or are deprived of benefits and privileges, they are likely to decry declining democracy. Therefore, a change in perception of the elite opinion makers does not reflect declining democratic institutions but changes in their personal preferences and privileges.

In this essay, I wish to objectively explore the functioning of democracy in India by using nationally representative data of people across different geographies and diverse socio-economic backgrounds. My focus in this essay would be on the economically marginalized population across religions, social groups, and geographies (districts which vary by religious populations). In my opinion, as important as the abstract ideas of freedom of speech, expression, etc., are for the functioning of democracy, it is equally important to look at the responsiveness of the democratically elected government to the materialistic needs of the marginalized people across religions, social groups, and geographies. Perhaps, a fundamental feature of strengthening democracy is that the voices of the weak and the marginalized cannot be suppressed or silenced by the elites. The poor in a democracy expect their government to liberate them from their daily drudgery and struggles by providing them access to basic amenities like water, toilets, electricity, formal finance, clean cooking gas, and instruments of connectivity and communications. Research on growth in the US has convincingly shown that micro revolutions of provision of electricity, water, connectivity, and formal finance across all households in the 1940s were associated with growth in individual productivity that lasted for more than two decades and ushered a period of unprecedented prosperity and development.³ It was also associated with lower levels of inequality.

Over the last several years, the Indian Prime Minister has often spoken publicly about the policy of “saturation” as his government’s approach of reaching the last mile. This translates to “every basic facility to every citizen in every area of the country” and thereby reducing the scope for any discrimination and corruption in people’s access to basic amenities.

Considering this, in this essay, I focus on the provision of amenities such as (a) electricity, (b) access to toilets, (c) access to a bank account, (d) clean cooking gas, (e) mobile phones, and (f) water on-premises - to the poorest 20% households across religion, social groups and geographies (districts that are

³ The Rise and Fall of Economic Growth: The U.S. Standard of Living since the Civil War. Robert J Gordon. Princeton University Press.

classified based on religious population in Census 2011). The motivation to analyze the performance of the government across religious and social groups is obvious, however, it is somewhat less so in the case of geographies. The reason we need to explore the performance of government in providing basic amenities across districts of India is because Indian districts vary in religious diversity. The districts can be categorized as religious clusters based on the composition of different religions within a district. Most schemes in India are targeted and implemented at the district level. To gauge the performance of a government and test for any bias in their functioning, one must analyze at the level of districts in India. After all, theoretically speaking, it might be easier for a “majoritarian government” to discriminate against “minority areas” through simple geographical targeting. Therefore, along with religious and social groups, we also carefully scrutinize performance of the government across geographies.

We exploit household-level nationally representative data from two rounds of the National Family Health Survey (NFHS), round 4, conducted in 2015–16 and round 5, conducted in 2019–21. Instead of administrative data from the ministries of the government, we use the NFHS data because these are self-reported by respondents and hence likely to be under-estimate but never an overestimate of the ground reality across the country. The primary objective of this exercise is to scrutinize whether there is any discernable bias in favor of, or against any particular population within the country. We compare data from 2015-16 when Modi government was one year into power with its performance five years thereafter in 2019-21.

Based on a nationally representative sample of more than 1.2 million households across 2015–16 and 2019–21, we do not find any evidence that the government catered only to one community (Hindu majority) or against any minority groups in the country. We also do not find any discrimination between geographies and religious clusters in provision of basic amenities such as electricity, toilets, water, bank accounts, mobile phones and LPG. These results show that the roots of Indian democracy run deep and its health is reaffirmed in its day to day functioning and practice.

Data

Our primary data source for the analysis is the National Family Health Survey (NFHS) Rounds 4 and 5, conducted in 2015-16 and 2019–21, respectively.⁴ The NFHS is a large-scale, nationally representative household survey representative of households throughout India. The survey aims to provide health and family welfare data to the Ministry of Health and Family Welfare to

⁴ <http://rchiips.org/nfhs/>

design appropriate health policies and programs and inform the government on emerging health-related issues.⁵ What makes rounds 4 and 5 unique is that the number of sampled households was large enough to be representative at the district level. Though detailed data on health-related indices were collected from each member of the sampled household, the survey also collected data on social characteristics such as caste and religion. In this analysis, we exploited data on the sampled household concerning the following amenities,

- (a) Whether the household has electricity?
- (b) Does the household have water on the premises, or must it spend time getting to the water source?
- (c) Does the household have access to a toilet facility, so the family members do not have to go bush or field?
- (d) Does any member of the household have a mobile phone?
- (e) Does any member of the household have a bank account?
- (f) Does the household use LPG as cooking fuel?

Each round of the NFHS also constructed wealth indices for each household based on ownership of assets, type of house, access to water and sanitation etc. In addition to these variables, data were collected on the type of residence (rural or urban), state or union territory of residence, and the district where the household was located. Moreover, data on a self-reported social group of the household, whether they belonged to the Scheduled Caste (SC), Scheduled Tribe (ST), or Other Backward Class (OBC), was also collected. Data on the religion of the head of the household was collected, and beliefs were classified into Hindu, Muslim, Christian, Sikh, Buddhist/Neo-Buddhist, Jain, Jewish, Parsi/Zoroastrian, no religion, and other. Data on survey details, such as the primary sampling unit, strata, and household weights to make it representative, were also provided.

A total of 636699 households were surveyed in NFHS Round 5, 2019–21, and 601509 households were surveyed in NFHS Round 4, 2015–16.

To construct distinct geographies based on religion, we looked at the district data from the population census conducted in 2011. The Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, India, collected the census data. At the district level, population data for 2011 is available for the religious groups: Hindus, Muslims, Christians, Sikhs, Buddhists, Jains, Other religions and persuasions, and unstated religions. The district religion data can be further disaggregated based

⁵Technical details on the data quality and survey design are available at <http://rchiips.org/NFHS/NFHS5/pdf/NFHS%20data%20quality%20assurance.pdf>

on gender and rural and urban residence type. We divided Indian districts into seven distinct religious clusters based on the dominant religion in the district:

- (i) *Hindus*: where more than 80% of the population are Hindus.
- (ii) *Hindus + Muslims*: where 50 to 80% of the population are Hindus, and 20% or more are Muslims.
- (iii) *Hindu + Others*: where 50 to 80% of the population are Hindus, the rest are from other religious groups, and Muslims are less than 20%.
- (iv) *Muslims*: where more than 50% of the population are Muslims.
- (v) *Christians*: where more than 50% of the population are Christians.
- (vi) *Sikhs*: where more than 50% of the population are Sikhs.
- (vii) *Mixed*: where none of the major religious groups, the Hindus, Muslims, Sikhs, and Christians, are over 50% of the population.

According to the 2011 Census, there were 640 districts. Out of the 640 districts, Hindus were more than 80% in 402 (62.8%) districts, Muslims were more than 50% in 32 (5%) districts, while Christians were more than 50% in 35 (5.7%) districts, the Sikhs were more than 50% in 15 (2.3%) of the districts, 66 (10.3%) of the districts belonged to the Hindu + Muslim cluster, 62 (9.7%) districts belonged to the Hindu + Other cluster, and 28 (4.4%) of the districts were in Mixed clusters.

The sampling and the survey design of the NFHS Rounds 4 & 5 were done based on the 2011 Census. In NFHS round 4, there were 640 districts; however, due to the formation of new districts between 2015–16 and 2019–21, additional 67 districts were carved from the old 640 districts. For the analysis in this paper, the households in new districts were treated as part of the old districts from which the new district was carved.

Statistical Analysis

For the statistical analysis and NFHS Rounds 4 & 5, we focus on the bottom 20% of the households in terms of the wealth indices within religion and social groups. For the distinct geographies based on religion as defined by the religious clusters, we focus on the bottom 20% of the households in each district. For the overall analysis, we focus on the bottom 20% of the households irrespective of religion, social group, or district. Our statistical analysis is based on the Bayesian multilevel or random effects model.⁶ In particular, we specify the following model for each outcome variable of interest: religion, social group, and districts in religious clusters.

⁶ See page 401-403: Statistical Rethinking A Bayesian Course with examples in R Stan 2nd Edition – Richard McElreath, CRC Press.

$$\begin{aligned}
S_{it} &\sim \text{Binomial}(N_{it}, p_{it}), \\
\text{logit}(p_{it}) &= \alpha_{[i][t]}, \\
\alpha_j &\sim \text{Normal}(0, \sigma) \text{ [priors for the average]}, \\
\sigma &\sim \text{Exponential}(1) \text{ [prior for standard deviation of the average]},
\end{aligned}$$

For example, let us suppose the outcome variable of interest is whether the household has electricity, and our analysis is for religious groups. The subscript $[t]$ indicates the NFHS round. The subscript $[i]$ indicates the religious groups, Hindu, Muslim, Christian, Sikh, and the other religions are classified as Others. S_i is the number of households in the bottom 20% of the religious group $[i]$ that has electricity out of the total of N_i households surveyed. Our objective is to use the random effects model with the priors described above to estimate posterior proportions of households in the bottom 20% based on wealth indices within the religious group $[i]$ that have electricity. We do a similar analysis for other outcome variables of interest with respect to social groups and religious clusters. Our statistical analysis is based on the *SUMMER*⁷ package in *R*.⁸ The advantage of using the *SUMMER* package is that it accounts for the survey design while estimating the posterior probabilities.

For our analysis, we construct a variable called *Target Achievement*, which we define as the ratio of increase in the proportion of households that got access to the amenity in 2019–21 as compared to the proportion of households that had the amenity in 2015–16, to the proportion of households that did not have access to the amenity in 2015–16.

Results

1. Electricity

Our first set of results relates to households' access to electricity. Overall, 53% of the poorest 20% of the households had access to electricity in 2015–16, which increased to 85% in 2019–21. In terms of target achievement, which we defined as the proportion of households that did not have access to electricity in 2015–16, but had access to electricity in 2019–21, it was 68% overall. Even though we observe significant gains across all the religious groups, the most considerable improvement in target achievement was for the poorest 20% of the Muslim households at 71%. When we study improvements in access to electricity by social groups, we observe target achievement of more than 60% across all social groups. Next, we scrutinize improvements across religious

⁷ Space-Time Smoothing of Demographic and Health Indicators using the R Package SUMMER.

Zehang R Li and Bryan D Martin and Tracy Q Dong and Geir-Arne Fuglstad and Jessica Godwin and John Paige and Andrea Riebler and Samuel Clark and Jon Wakefield. URL <https://cran.r-project.org/web/packages/SUMMER/SUMMER.pdf>

⁸ R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>.

clusters which are geographical districts classified based on religious compositions. We find target achievement was more than 50% for Hindu, Hindu + Muslim, Hindu + Others, and Muslim clusters. The results are reported in Table 1.

2. Bank Accounts

Regarding access to bank accounts, overall, 74% among the poorest 20% of the households had bank accounts in 2015–16, which increased to 93% in 2019–21. The target achievement was an impressive 73% overall. Across religions, the biggest gain was for the Muslim community, with a target achievement of approximately 77%. For different social groups, the target achievement was highest among the OBC at 75% and above 70% for the SC and ST. These results are reported in Table 2.

3. Access to Mobile phone

It is worth noting that approximately 68% of the poorest 20% of the households had a family member who owned a mobile phone in 2015–16, which increased to 79% in 2019–21. Among the Christians, Muslims, and Hindus, the poorest 20% of the households had a target achievement of more than 30%. Among the social groups, the highest target achievement was for the SC, ST, and the General category, at around 35%. However, it is worth noting that even though the ST has made significant improvements since 2015–16, only 59% of the poorest 20% of households had a family member who owned a mobile in 2019–21. For the religious clusters, the highest target achievement was in the Muslim and the Hindu + Muslim clusters at 37% and 33%, respectively. These results are reported in Table 3.

4. Access to Toilet

It is worth noting that only 12% of the poorest 20% of households had access to a toilet in 2015–16, and this increased to 48% in 2019–21, with a target achievement of 41%. Among the religious groups, the most significant target achievement was for the Sikhs and the Muslims at more than 50%. It is also interesting to note the variations across religious groups; for example, only 8% of the poorest 20% of the Hindu households had access to toilets in 2015–16, and this increased to 44% in 2019–21, an increase of 36%, but in terms of target achievement it was 39%.

For different social groups, in 2015–16, among the 20% of the poorest households, only 3% of the STs and 7% of SCs, had access to toilets, and this increased to 32% and 41%, respectively, by 2019–21.

Among the religious clusters, we find that the most significant target achievement was for the poorest 20% of the households in the Muslim district, at approximately 59%, followed by the districts in the Christian clusters. However, in the districts in the Hindu clusters, there was a significant improvement in percentage change; it went up from 20% in 2015–16 to 48% in 2019–21; however, in terms of target achievement, it was 35%. These results are reported in Table 4.

5. LPG

Concerning LPG, we find that there has been a marginal improvement for the poorest 20% of households since 2015–16. While only 1% of the poorest 20% of the households used LPG as cooking fuel in 2015–16, it went up to only 8% in 2019–21; the target achievement was approximately 7%. Other than the Sikh community, the target achievement was less than 10% for Hindus, Christians, and Muslims. Across the social groups, the target achievement was above 10% for the General category and the OBC; however, it was merely 1% for the ST. Among the religious clusters, we find that the biggest gain in target achievement was for the poorest 20% of the households in the Hindu clusters at 17%, and it was the least at 4% in the Muslim clusters. These results are reported in Table 5.

6. Water on premises

The last set of results relates to whether the poorest 20% of the households have access to water on-premises. It was 43% in 2015–16 and increased to 54% in 2019–21. Overall, the target achievement was 19%. Among the religious groups, the highest target achievement was for the Sikh community, at 32%. We also noted that in 2015–16, 63% of the poorest 20% of the households in the Muslim community had access to water on-premises, while for the Hindus, it was 41% in 2015–16. This increased marginally for both communities by 2019–21; for Muslims, it increased by 5%, while for Hindus, it increased by 11%.

It is also worth noting that among the social groups, only 16% of the poorest 20% of the ST households had access to water on-premises in 2015–16, and this increased to 26% in 2019–21, a target achievement of 12%, while the SC, OBC, and the general category had target achievements over 20%.

However, when we limit our attention to the religious clusters, we find that the highest target achievement was for the poorest 20% of households in the Sikh cluster at 39%, and the lowest was in the districts in the Christian clusters at 16%. These results are reported in Table 6.

Discussion and Conclusion

Objectively quantifying the strengthening or weakening of democracy is a challenging task. Such a critical exercise cannot be based on a survey of perceptions of a small non-representative sample of elite opinion makers. If such an exercise is deemed necessary, it must be based on a representative sample of the underlying population. For India, such a sample must represent more than 900 million electors who live in different geographies, belong to distinct social groups, speak in more than 100 languages, and are in various phases of socio-economic development. Though not a perfect substitute for such a survey, one way could be to look at the provision of basic amenities to the poorest 20% of households across different social groups, religions, and geographies. This paper is an attempt at such an exercise. We believe that if democratic institutions are strong, then the government will cater to the poorest across different sections of society irrespective of caste, religion and geography based on faith.

Based on a nationally representative sample of more than 1.2 million households across 2015–16 and 2019–21, we do not find any evidence that the government catered only to one community (Hindu majority) or discriminated across households based on districts where one religious community was dominant. With respect to electricity, bank account, mobiles and access to toilets, the gains were widespread across religions and social groups. As a matter of fact, in some instances, minorities have gained more than the majority. However, the government must do more to uplift the poorest 20% of households across religions and social groups by focusing on amenities like LPG and water on-premises.

By quantifying changes in the provision of amenities across religions, social groups, and geographies based on faith, this paper challenges a popular perception-based narrative that democracy has been declining in India since 2014. In sharp contrast, our results indicate that the government is responsive to the needs of the marginalized section of society irrespective of religion, caste, or place of residence, which is an alternative and more robust indicator of strengthening democracy in India.

Tables: Access to amenities by the Poorest 20% of the households, According to Religion, Social Group, and Religious Clusters

Table 1: Electricity

	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	53% (52%,53%)	85% (85%,85%)	32% (32%,33%)	68% (68%,69%)
Religion				
Christian	75% (74%,77%)	89% (88%,90%)	13% (12%,15%)	54% (49%,58%)
Hindu	52% (52%,52%)	85% (85%,85%)	33% (32%,33%)	68% (68%,69%)
Muslim	50% (49%,51%)	86% (85%,86%)	36% (34%,37%)	71% (70%,73%)
Sikh	96% (95%,97%)	97% (96%,98%)	2% (0%,3%)	36% (9%,56%)
Others	61% (59%,63%)	79% (77%,81%)	18% (15%,21%)	46% (40%,52%)
Social Group				
General	73% (72%,73%)	93% (93%,93%)	20% (19%,21%)	74% (72%,76%)
OBC	50% (49%,50%)	86% (86%,86%)	36% (36%,37%)	72% (71%,73%)
SC	45% (44%,45%)	81% (80%,81%)	36% (35%,37%)	65% (64%,66%)
ST	42% (41%,43%)	77% (76%,78%)	35% (34%,37%)	61% (59%,62%)
Others	64% (62%,65%)	85% (84%,86%)	21% (19%,24%)	59% (55%,63%)
Religious Clusters*				
Christian	71% (69%,72%)	80% (79%,82%)	10% (8%,11%)	33% (29%,38%)
Hindu	68% (68%,68%)	88% (88%,88%)	20% (19%,20%)	62% (61%,63%)
Hindu + Muslim	60% (59%,61%)	82% (81%,83%)	22% (21%,23%)	55% (53%,57%)
Hindu + Others	73% (71%,74%)	88% (87%,89%)	15% (14%,17%)	56% (53%,59%)
Mixed	79% (78%,80%)	89% (88%,90%)	10% (8%,12%)	47% (41%,53%)
Muslim	59% (57%,61%)	81% (80%,83%)	22% (20%,24%)	54% (50%,59%)
Sikh	98% (97%,98%)	98% (97%,99%)	0% (-1%,1%)	14% (-36%,47%)

*Target Achievement is defined as the ratio of the proportion of households that had the amenity in NFHS Round 5, minus the proportion of households that had the amenity in NFHS Round 4, to the target, which was 100% - proportion of households that had the amenities in NFHS round 4.

Table 2: Bank Account

	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	74% (74%,75%)	93% (93%,93%)	19% (18%,19%)	73% (72%,73%)
Religion				
Christian	73% (72%,75%)	91% (90%,92%)	18% (16%,19%)	66% (61%,70%)
Hindu	75% (75%,76%)	93% (93%,93%)	18% (17%,18%)	72% (71%,73%)
Muslim	66% (65%,67%)	92% (91%,93%)	26% (25%,28%)	77% (75%,79%)
Sikh	90% (89%,92%)	94% (93%,95%)	3% (2%,5%)	32% (18%,45%)
Others	71% (68%,73%)	92% (91%,93%)	21% (19%,24%)	73% (68%,77%)
Social group				
General	78% (77%,79%)	93% (93%,94%)	15% (14%,16%)	69% (66%,71%)
OBC	76% (76%,77%)	94% (94%,94%)	18% (17%,18%)	75% (74%,76%)
SC	73% (72%,73%)	93% (92%,93%)	20% (19%,21%)	73% (72%,75%)
ST	67% (66%,68%)	91% (90%,91%)	23% (22%,24%)	71% (69%,73%)
Others	62% (60%,64%)	90% (89%,91%)	27% (25%,30%)	73% (70%,76%)
Religious Clusters*				
Christian	50% (48%,51%)	83% (82%,84%)	34% (32%,36%)	67% (64%,69%)
Hindu	77% (76%,77%)	92% (92%,93%)	16% (15%,16%)	67% (66%,68%)
Hindu + Muslim	71% (70%,72%)	93% (92%,93%)	21% (20%,22%)	74% (72%,76%)
Hindu + Others	78% (77%,79%)	91% (90%,92%)	13% (12%,15%)	60% (56%,64%)
Mixed	75% (74%,77%)	92% (91%,93%)	16% (14%,18%)	66% (61%,71%)
Muslim	68% (66%,70%)	92% (91%,93%)	24% (21%,26%)	75% (70%,79%)
Sikh	89% (87%,90%)	91% (90%,92%)	3% (0%,5%)	22% (3%,37%)

Table 3: Mobile

	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	68% (68%,69%)	79% (78%,79%)	10% (10%,11%)	33% (32%,34%)
Religion				
Christian	64% (62%,66%)	77% (75%,78%)	13% (10%,15%)	36% (30%,41%)
Hindu	67% (67%,67%)	78% (78%,78%)	11% (10%,11%)	33% (31%,34%)
Muslim	75% (74%,76%)	84% (83%,85%)	9% (7%,10%)	35% (31%,39%)
Sikh	89% (88%,90%)	89% (88%,91%)	0% (-2%,2%)	2% (-15%,18%)
Others	56% (53%,58%)	70% (68%,72%)	14% (11%,17%)	31% (25%,38%)
Social group				
General	80% (79%,81%)	87% (86%,87%)	7% (6%,8%)	35% (31%,38%)
OBC	74% (74%,75%)	82% (81%,82%)	7% (7%,8%)	28% (26%,30%)
SC	64% (63%,65%)	77% (76%,77%)	12% (11%,13%)	35% (32%,37%)
ST	39% (38%,40%)	59% (59%,60%)	20% (19%,22%)	34% (32%,35%)
Others	68% (66%,70%)	79% (77%,80%)	11% (8%,13%)	33% (27%,39%)
Religious Clusters*				
Christian	64% (63%,66%)	71% (69%,72%)	6% (4%,8%)	18% (13%,23%)
Hindu	67% (67%,68%)	76% (76%,76%)	9% (8%,9%)	26% (25%,28%)
Hindu + Muslim	71% (70%,72%)	81% (80%,81%)	10% (8%,11%)	33% (30%,37%)
Hindu + Others	72% (71%,73%)	80% (79%,81%)	8% (7%,10%)	29% (25%,33%)
Mixed	73% (71%,74%)	80% (79%,82%)	8% (6%,10%)	28% (21%,35%)
Muslim	68% (66%,70%)	80% (78%,81%)	12% (9%,15%)	37% (30%,43%)
Sikh	89% (87%,90%)	88% (87%,90%)	0% (-2%,2%)	-3% (-22%,16%)

Table 4: Access to Toilet

	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	12% (11%,12%)	48% (47%,48%)	36% (36%,36%)	41% (40%,41%)
Religion				
Christian	39% (37%,40%)	68% (66%,69%)	29% (27%,31%)	47% (44%,50%)
Hindu	8% (8%,9%)	44% (44%,44%)	36% (35%,36%)	39% (38%,39%)
Muslim	31% (30%,32%)	67% (66%,68%)	36% (35%,38%)	53% (51%,54%)
Sikh	74% (72%,76%)	88% (87%,90%)	14% (12%,17%)	55% (49%,61%)
Others	14% (12%,16%)	48% (45%,50%)	34% (31%,37%)	39% (36%,43%)
Social group				
General	39% (38%,40%)	68% (67%,69%)	29% (28%,30%)	48% (46%,49%)
OBC	10% (9%,10%)	46% (46%,47%)	36% (36%,37%)	40% (40%,41%)
SC	7% (7%,8%)	41% (40%,42%)	34% (33%,35%)	37% (36%,38%)
ST	3% (3%,4%)	32% (31%,33%)	29% (28%,30%)	30% (29%,31%)
Others	45% (43%,47%)	72% (70%,73%)	27% (25%,29%)	49% (46%,52%)
Religious Clusters*				
Christian	78% (78%,79%)	90% (89%,91%)	12% (11%,13%)	55% (50%,60%)
Hindu	20% (19%,20%)	48% (47%,48%)	28% (28%,29%)	35% (34%,35%)
Hindu + Muslim	42% (41%,43%)	65% (64%,66%)	23% (22%,24%)	40% (38%,42%)
Hindu + Others	42% (40%,43%)	59% (58%,60%)	17% (15%,19%)	30% (27%,33%)
Mixed	58% (57%,59%)	73% (71%,74%)	15% (13%,17%)	35% (31%,39%)
Muslim	56% (54%,58%)	82% (81%,84%)	26% (24%,28%)	59% (55%,63%)
Sikh	78% (76%,80%)	90% (88%,91%)	11% (9%,14%)	52% (45%,59%)

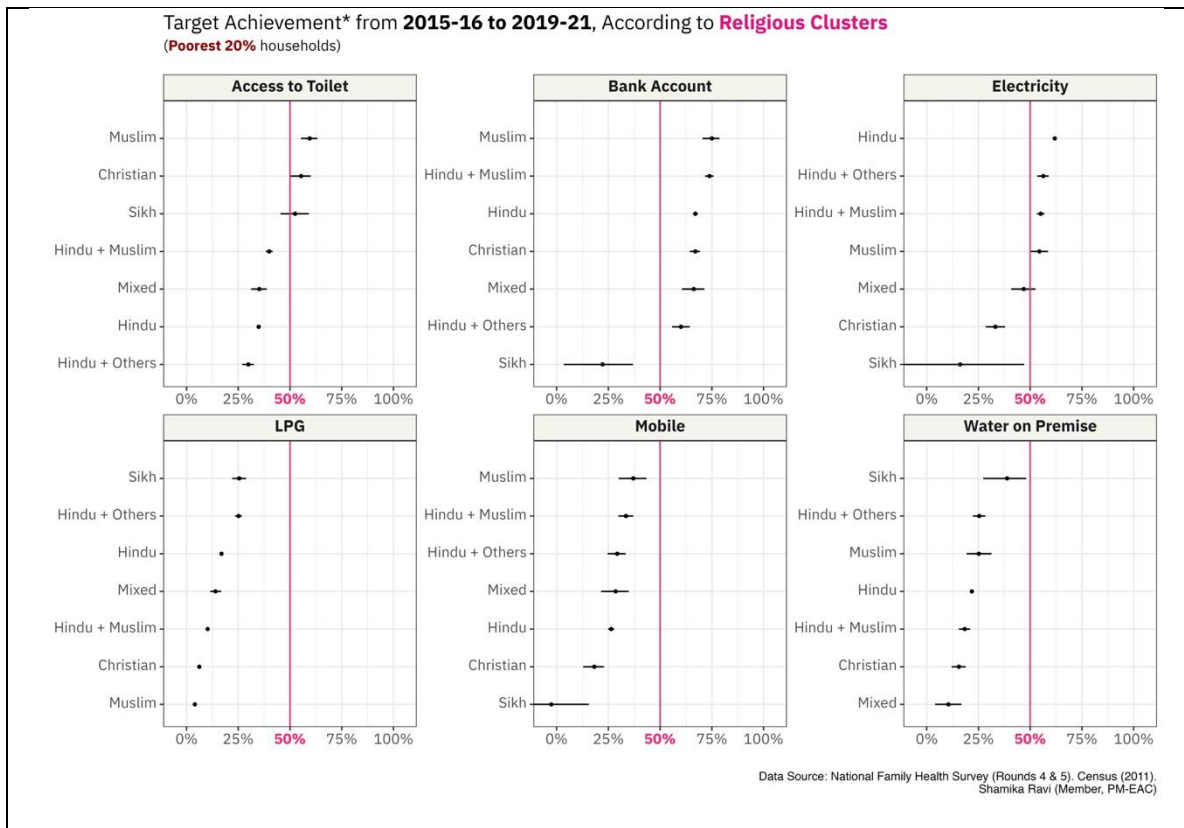
Table 5: LPG

	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	1% (1%,1%)	8% (8%,8%)	7% (7%,8%)	7% (7%,8%)
Religion				
Christian	3% (2%,4%)	12% (11%,13%)	9% (7%,10%)	9% (7%,11%)
Hindu	1% (1%,1%)	8% (8%,8%)	7% (7%,8%)	7% (7%,8%)
Muslim	1% (1%,1%)	7% (6%,7%)	6% (5%,6%)	6% (5%,6%)
Sikh	17% (15%,18%)	35% (33%,37%)	18% (16%,21%)	22% (19%,25%)
Others	1% (0%,2%)	5% (4%,7%)	5% (3%,6%)	5% (3%,6%)
Social group				
General	4% (4%,5%)	22% (22%,23%)	18% (17%,19%)	19% (18%,20%)
OBC	1% (1%,1%)	12% (11%,12%)	11% (10%,11%)	11% (11%,11%)
SC	0% (0%,1%)	7% (7%,8%)	7% (6%,7%)	7% (6%,7%)
ST	0% (0%,0%)	1% (1%,1%)	1% (1%,1%)	1% (1%,1%)
Others	0% (0%,1%)	3% (3%,4%)	3% (2%,3%)	3% (2%,3%)
Religious Clusters*				
Christian	4% (4%,4%)	10% (9%,11%)	6% (5%,7%)	6% (5%,7%)
Hindu	9% (9%,10%)	25% (24%,25%)	15% (15%,16%)	17% (16%,17%)
Hindu + Muslim	8% (7%,9%)	17% (17%,18%)	9% (9%,10%)	10% (9%,11%)
Hindu + Others	13% (12%,14%)	35% (34%,36%)	22% (20%,23%)	25% (23%,27%)
Mixed	14% (13%,16%)	26% (25%,28%)	12% (10%,15%)	14% (11%,17%)
Muslim	2% (2%,3%)	6% (6%,7%)	4% (3%,5%)	4% (3%,5%)
Sikh	24% (22%,26%)	43% (41%,46%)	19% (16%,22%)	25% (22%,29%)

Table 6: Water on Premise

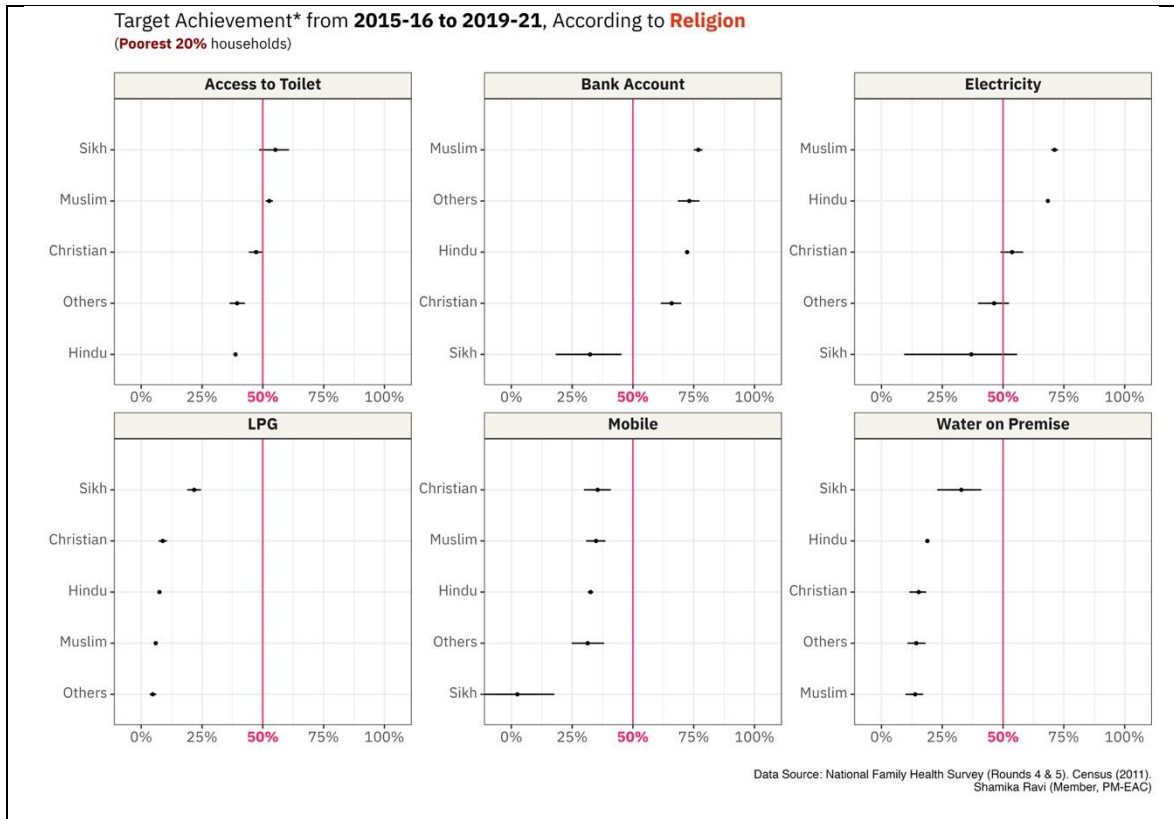
	NFHS 4 [2015-16]	NFHS 5 [2019-21]	Difference [NFHS5- NFHS4]	Target Achievement [2019-21 to 2015-16]
Overall				
Overall	43% (43%,43%)	54% (53%,54%)	11% (10%,11%)	19% (18%,19%)
Religion				
Christian	35% (33%,37%)	45% (43%,46%)	10% (7%,12%)	15% (12%,18%)
Hindu	41% (41%,41%)	52% (52%,52%)	11% (11%,12%)	19% (18%,20%)
Muslim	63% (62%,64%)	68% (67%,69%)	5% (4%,6%)	14% (10%,17%)
Sikh	83% (82%,85%)	89% (87%,90%)	6% (4%,7%)	32% (23%,41%)
Others	20% (18%,22%)	31% (29%,34%)	11% (8%,15%)	14% (11%,18%)
Social group				
General	54% (53%,55%)	65% (65%,66%)	11% (10%,13%)	25% (23%,27%)
OBC	52% (52%,53%)	63% (62%,63%)	11% (10%,11%)	22% (21%,23%)
SC	42% (41%,43%)	54% (53%,55%)	12% (11%,13%)	20% (19%,22%)
ST	16% (15%,17%)	26% (25%,27%)	10% (9%,11%)	12% (11%,13%)
Others	57% (55%,59%)	56% (54%,57%)	-2% (-4%,1%)	-4% (-10%,2%)
Religious Clusters*				
Christian	46% (44%,47%)	54% (53%,55%)	8% (6%,10%)	16% (12%,19%)
Hindu	42% (41%,42%)	54% (54%,55%)	13% (12%,13%)	22% (21%,23%)
Hindu + Muslim	56% (55%,57%)	64% (63%,65%)	8% (7%,9%)	18% (16%,21%)
Hindu + Others	54% (52%,55%)	65% (64%,66%)	12% (10%,13%)	25% (22%,28%)
Mixed	64% (63%,66%)	68% (67%,70%)	4% (1%,6%)	10% (4%,17%)
Muslim	62% (60%,64%)	72% (70%,74%)	10% (7%,12%)	25% (19%,31%)
Sikh	86% (85%,88%)	92% (91%,93%)	5% (3%,7%)	39% (27%,48%)

Figure 1: Target Achievement* According to Religious Clusters from 2015-16 to 2019-21



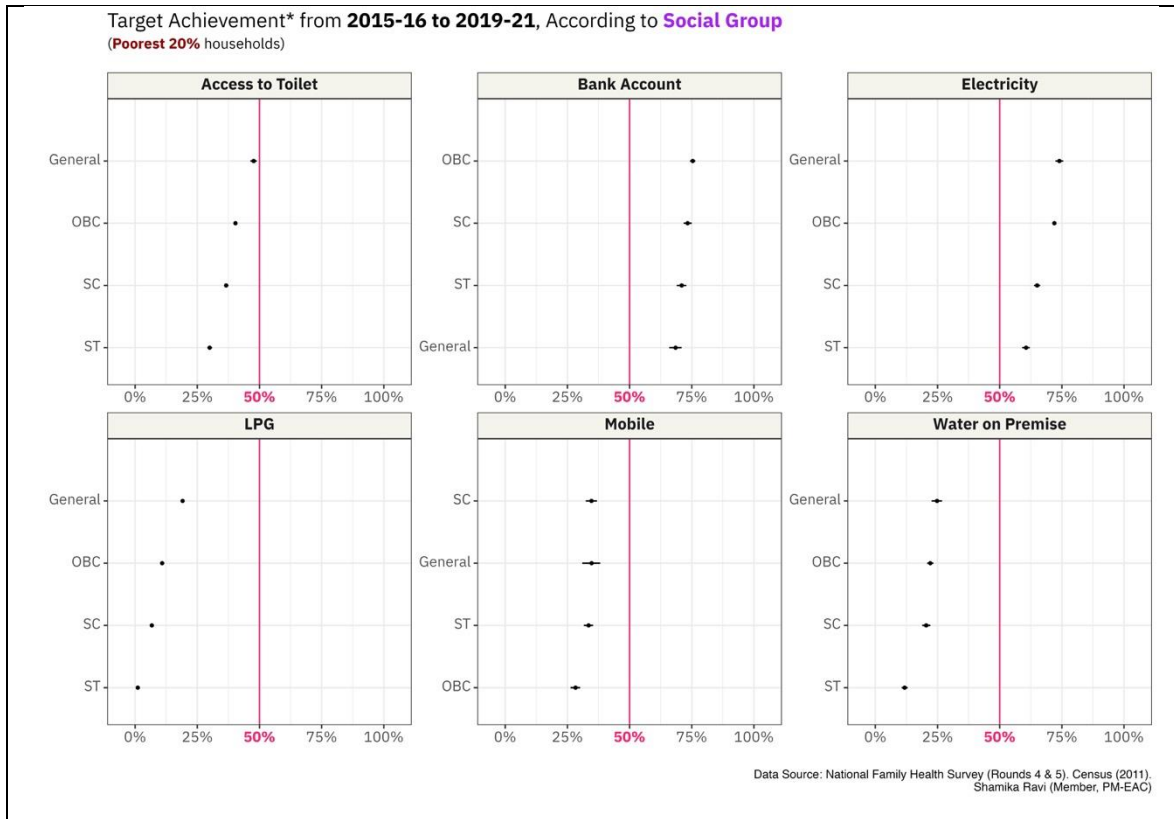
*Target Achievement is defined as the ratio of the proportion of households that had the amenity in NFHS Round 5, minus the proportion of households that had the amenity in NFHS Round 4, to the target, which was 100% - proportion of households that had the amenities in NFHS round 4.

Figure 2: Target Achievement* According to Religion from 2015-16 to 2019-21



*Target Achievement is defined as the ratio of the proportion of households that had the amenity in NFHS Round 5, minus the proportion of households that had the amenity in NFHS Round 4, to the target, which was 100% - proportion of households that had the amenities in NFHS round 4.

Figure 3: Target Achievement* According to Social Group from 2015-16 to 2019-21



*Target Achievement is defined as the ratio of the proportion of households that had the amenity in NFHS Round 5, minus the proportion of households that had the amenity in NFHS Round 4, to the target, which was 100% - proportion of households that had the amenities in NFHS round 4.