

# Deepening Divides

## The Caste, Class and Regional Face of Vegetarianism

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Changes in the incidence of vegetarianism across time are sought to be analysed by identifying the specific trends at the level of region, caste and class. Divergence in the attitude towards vegetarianism across these axes points towards deepening divides linked to socioeconomic status and cultural-political power inequalities.

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Our earlier article (Natrajan and Jacob 2018) argued that the existence of considerable intra-group variation in almost every social group (caste, religious) makes essentialised group identities based on food practices deeply problematic. We showed that myths of Indians' meat-avoidance (vegetarianism) stand exposed when we unpack India in different ways, through the lens of caste, gender, class, and especially region. We also presented evidence to suggest the influence of cultural-political pressures (valorising vegetarianism and stigmatising meat by proscribing and punishing beef-eating in particular, but also meat-eating more generally) on reported food habits. The present article follows up our earlier work by analysing changes in the incidence of vegetarianism over time.

The earlier article used data from three different large-scale, representative surveys. Of these, the National Family Health Survey (NFHS) released a new data set (round 4) after our earlier analysis was completed. This allows for a comparison of vegetarianism across the two NFHS rounds, bookending a decade of potential change (2005–06 in round 3 to 2015–16 in round 4). The NFHS is analogous to the Demographic and Health Surveys (DHS) conducted in over a hundred countries. Surveys are conducted for separate large samples of women aged 15–49 years and

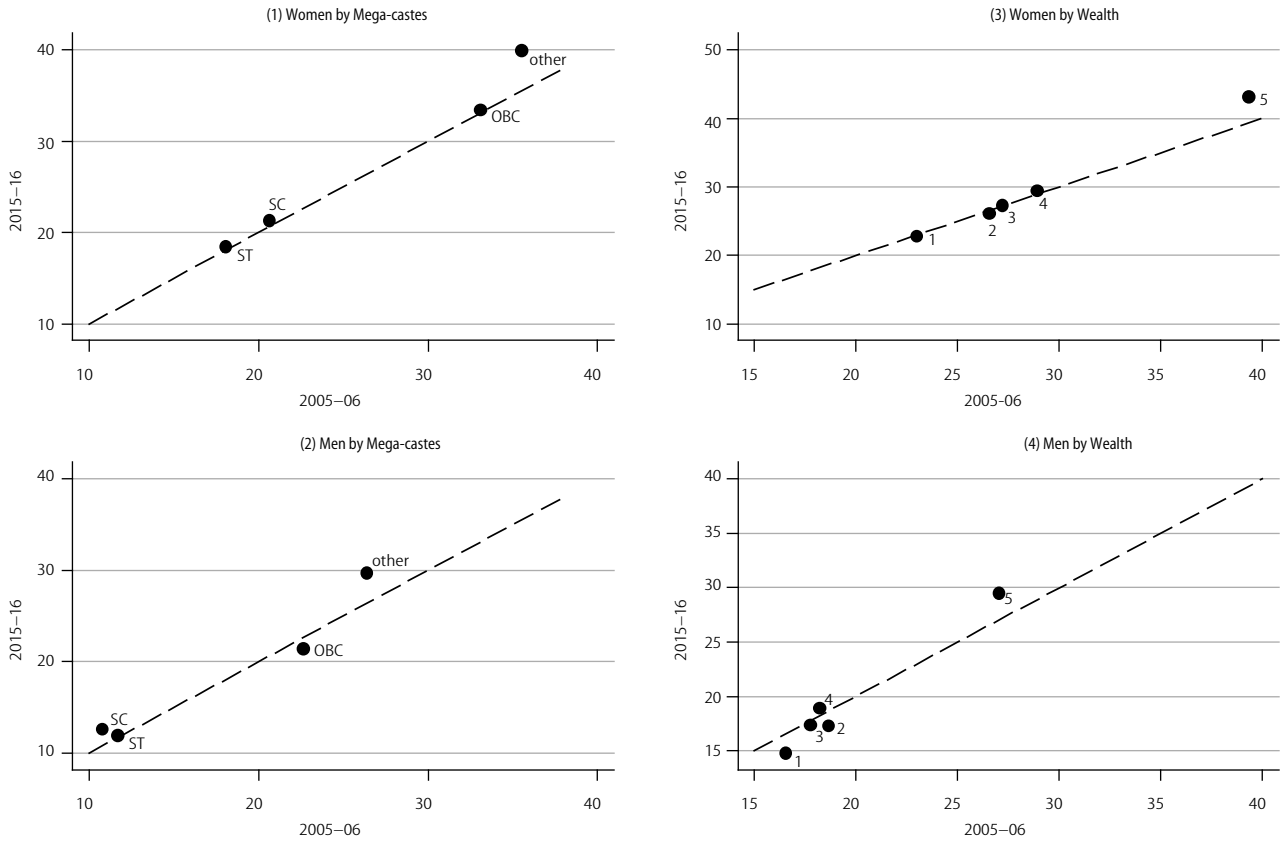
men aged 15–54 years. Data for round 3 are from 1,24,385 women and 74,369 men. Data for round 4 are from 6,99,686 women and 1,12,122 men. NFHS looks at specific items of food consumption, including eggs, fish and “chicken or meat,” asking respondents about how often the item was consumed. For our analysis and consistent with our previous article, we consider those who answered “never” to all three (eggs, fish, chicken/meat) as “vegetarian.” Appropriate sampling weights were used to construct estimates of vegetarianism within different aggregates (states and social groups).

### Decadal Change

From the data, one interesting finding is that there was **little change in the overall incidence of vegetarianism** in the decade 2005–15 for women and men: while vegetarianism among women changed marginally from 30.22% in 2005–06 to 30.97% in 2015–16, for men it was 20.60% to 20.73%. This amounts to an increase of 0.75 and 0.13 percentage points for women and men, respectively (equivalent to 2.5% and 0.6%, respectively). In our earlier article we showed that there exists a significant gender gap in reported vegetarianism—about 10 percentage points higher among women (equivalent to almost 50% more among women compared to men). This gap of 10 percentage points, we showed, was persistent across location (rural–urban), class and caste categories. One interesting puzzle we raised was the existence of the gap only among Hindus (10 percentage points) and Sikhs (a whopping 34 percentage points), much less among Jains and Buddhists (about 5 percentage points), and almost non-existent among Christians and Muslims. We had submitted that this gap could be

**Figure 1: Incidence of Vegetarianism by Mega-caste and Wealth Categories**

(%)



The dashed line is the line of equality; for wealth, the numbers 1-5 stand for the wealth quintiles from "poorest" (1) to "richest" (5).

shaped by gender ideologies within households and communities that placed undue burden on the woman to uphold a tradition, and gendered practices of eating out (favouring men).

The new data show how this gap is persistent, pointing to the possibility of a rigidification of communitarian ideas shaped by food beliefs and practices, but also the social norms rapidly being put in place (partially by state ideologies, but also partially within society through social actors such as community leaders, ethnic mobilisers who craft community boundaries as markers of distinction). We bring this point up in order to emphasise that this overall result (of no change in gender gap over time) hides interesting temporal dynamics for sub-groups of the population. We now turn to examining the intersectional changes across caste and class categories.

**Change across mega-caste and wealth categories:** Figure 1 (Graphs 1 and 2) shows vegetarianism for mega-caste categories. For women, there was little change

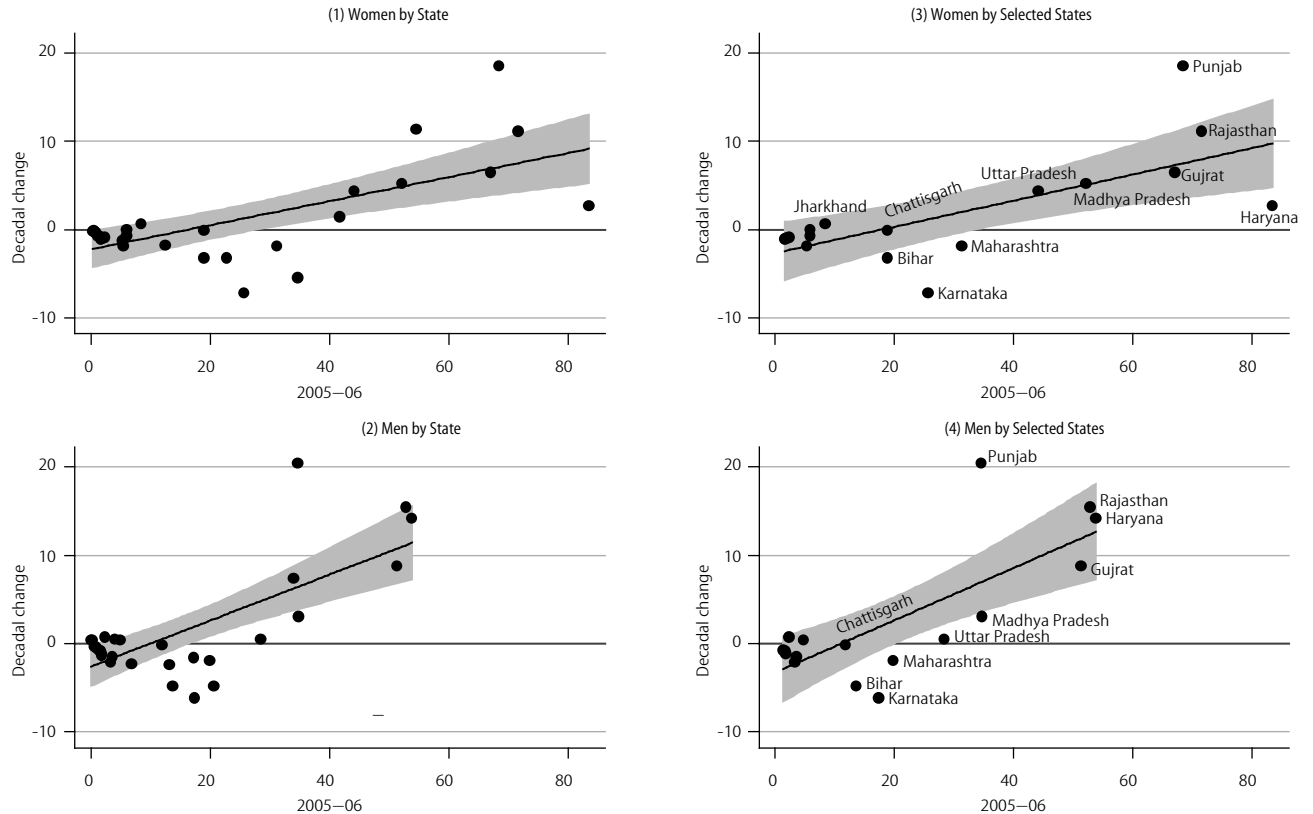
(less than 1 percentage point increase) in the decade 2005-15 for the categories of Scheduled Tribes (STs), Scheduled Castes (SCs) and Other Backward Classes (OBCs). But there was a relatively substantial increase in vegetarianism for the residual ("other") category, broadly including privileged castes (4.4 percentage points increase from 2005, equivalent to 12.4% increase). In the case of men as well, the "other" category of privileged castes saw a substantial increase in vegetarianism (3.3 percentage points increase from 2005, equivalent to 12.6% increase). This points to an increasing assertiveness among privileged castes with respect to vegetarianism.

Figure 1 (Graphs 3 and 4) shows vegetarianism across five wealth quintiles. There was little change in all except the richest quintile which saw a 3.9 percentage points and 2.5 percentage points increase for women and men in that category, respectively (equivalent to 9.8% and 9.1% increase). This confirms our earlier observation (and some other previous studies cited in our earlier article)

that vegetarian practices are correlated with socioeconomic status.

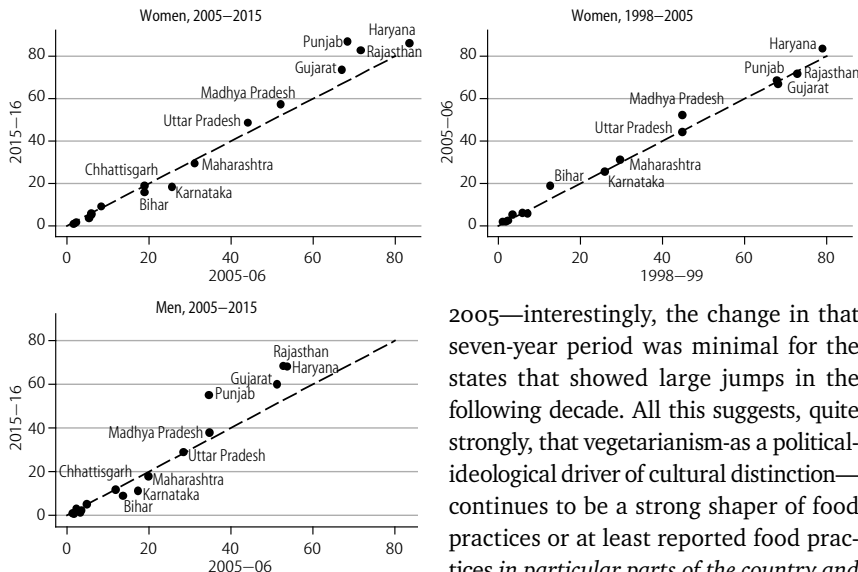
**Change across states:** Figures 2-6 (pp 23-24) turn to reported vegetarianism across states. Figure 2 plots change in 2005-15 against the baseline (2005). It shows that, on average, states with higher incidence of vegetarianism in 2005 experienced greater increase in the following decade, and this is true for both women and men separately. This implies that over the decade there is increasing divergence across states. In Figure 2, the graphs on the right (#2 and #4) focus on the 17 states with population of at least 2.5 crore in the last census (2011). Divergence occurs even in this subset. Further, the size of the divergence is substantial: For Graphs 1 and 3, for every 1 percentage point of vegetarianism incidence in 2005, there is an average increase of 0.14 percentage points over the following decade for women and 0.26 percentage points for men, and this relationship is statistically significant at the 99% confidence level. In fact, the relationship continues

**Figure 2: Decadal Change by State**



The graphs show the linear regression line with 95% confidence interval (significant for all graphs); graphs on the right (#2 and #4) show the 17 states with population over 2.5 crore in Census 2011.

**Figure 3: Differences by State**



The dashed line is the line of equality; graphs show the 17 states with population over 2.5 crore in Census 2011; data for men not available for 1998-99 (NFHS round 2).

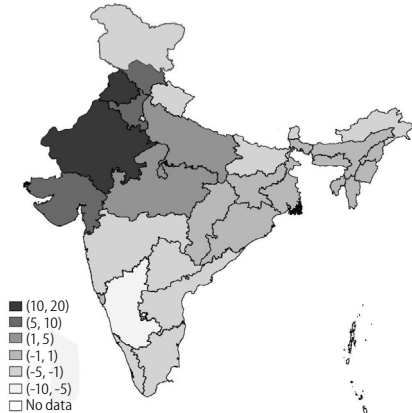
to hold with similar large size and statistical significance for the higher-population states with only 17 observations.

In Figure 3, the left graphs show the same data as scatter plots of 2015 against 2005. The right graph also shows, for women, the change between 1998 and

2005, as confirmed by Figure 2. As shown in the map in Figure 4, they form a contiguous geographic swathe from west to north: Gujarat to Rajasthan to Haryana to Punjab to Himachal Pradesh (HP), then dipping to Uttar Pradesh (UP) and Madhya Pradesh (MP). Among the high growth states (where vegetarianism increased substantially over the decade), it is useful to distinguish the west-to-north diagonal swathe (Gujarat, Rajasthan, Haryana and Punjab, all have increases well in excess of five percentage points) from the two others to the east of these (although still contiguous), UP and MP, which show slightly lower increase. All of the east and south have reduced incidence of vegetarianism over the decade (negative growth). We note the curious cases of Karnataka and Bihar, two states with substantial reduction in vegetarianism (average change -6.7 and -4.0 percentage points, respectively). Although it is important to consider why this may be the case, it is difficult to identify causal mechanisms. Nonetheless, as mentioned in our earlier article, states that show a combination of factors such

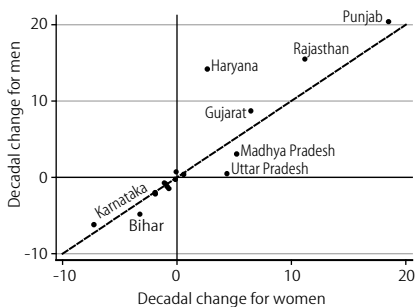
2005—interestingly, the change in that seven-year period was minimal for the states that showed large jumps in the following decade. All this suggests, quite strongly, that vegetarianism—as a political-ideological driver of cultural distinction—continues to be a strong shaper of food practices or at least reported food practices in particular parts of the country and not in others. In fact, we see this at work when we disaggregate the changes below. Which are the key regions powering the increasing divergence across states over time? There are seven states—all from the west and north of the country—with at least 2 percentage points increase over the decade. Remarkably, these also happen to be the top-six states for vegetarianism in

**Figure 4: Decadal Change in Incidence of Vegetarianism**



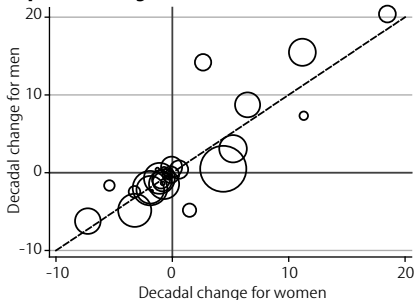
The choropleth map shows decadal change in incidence of vegetarianism (averaging across women and men) in states in different ranges.

**Figure 5: Decadal Change by Gender and State**



The dashed line is the line of equality; graph shows the 17 states with population over 2.5 crore in Census 2011.

**Figure 6: Decadal Change by Gender and State, Population Weights**



The dashed line is the line of equality; graph shows all states, marker size weighted by state population.

as a historically strong Dalit movement, a reasonably sizeable Muslim and obc population, and a moderate but not all-powerful Hindutva movement—may show the most resilience against cultural-political pressures towards vegetarianism.

Figure 5 plots decadal change for women and men across states. There is a broad correlation/consistency in the direction of decadal change for women and for men: either incidence of vegetarianism for both women and men goes up in a state or goes down (all observations in Figure 5

are either in the top-right quadrant or the bottom-left quadrant of the x–y axes). The decadal increase is remarkably high in cases like Punjab and Rajasthan (average increase of 19 and 13 percentage points, respectively). By contrast, among the nine states where vegetarianism decreased among both women and men, there were only three where the average change (across women and men) was at least 2 percentage points, and with only two of them having an average of at least four percentage points (Karnataka and Bihar). The reason that the remarkable increases in vegetarianism among states in the top-right quadrant do not end up tilting the all-India figure upwards, is due to the fact that the many states in the bottom-left quadrant have sufficiently large population between them to balance it out. This can be seen in Figure 6, which is the equivalent of Figure 5 with states weighted by their populations (and with all states now included).

**In Conclusion**

Our analysis has produced the following key findings. There was little change in incidence of vegetarianism over the decade 2005–15. This non-change or stasis, however, masks a number of changes at the sub national level and across caste, class, regions, and persistent gender gap the socio-economically privileged castes and classes turned increasingly vegetarian. For the country as a whole this was nullified by a (smaller) decrease in overall vegetarianism among the numerically preponderant less socio-economically privileged. A major point to note for regional change is that states in the west and north, which had the highest incidence of vegetarianism at the start of the decade, also had the biggest increase over the decade. Again, for the country as a whole this was nullified by a (smaller) decrease in overall vegetarianism in the rest of the country (east and south). Finally, the size of the changes among states is far greater than the size of the changes among socio-economic groups. This reinforces the point in our previous article that geography (and underlying agro-ecology as well as the cultural norms influenced by it) plays a much bigger role than social group identities and associated cultural norms.

This article is an attempt to identify and describe trends in vegetarianism over the last decade. Although we do not try to explain them here, the trends towards divergence (across regions, castes, classes) nevertheless suggest deepening divides linked to socioeconomic status and cultural–political power inequalities. They therefore suggest a tendency towards divergence in attitudes towards vegetarianism, both for socio-economic groups and for geographical regions. If this emerging divergence is indeed being driven by cultural–political pressures, then it suggests polarisation that has negative implications for pluralism and democracy itself.

**NOTES**

- 1 The National Sample Survey (NSS), the National Family Health Survey (NFHS) and the India Human Development Survey (IHDS)—for the years 2011–12, 2005–06 and 2011–12, respectively.
- 2 Round 2 of the NFHS (1998–99) also had data for vegetarianism, but only for women's data. The present article supplements the analysis of rounds 3 and 4 with some women's data from round 2. The IHDS, although it had two rounds, did not collect data on vegetarianism in round 1.
- 3 See <https://dhsprogram.com/pubs/pdf/FRIND3/FRIND3-VoliAndVol2.pdf> for details.
- 4 See <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf> for details.
- 5 There was very little difference in reported vegetarianism across age-groups, for women and men, and for 2005–06 and 2015–16 separately. Since the women's and men's data sets are truncated at ages 49 and 54, respectively, the fact that there is little difference in vegetarianism across age-groups suggests that the estimates reported here can be generalised to 49+ and 54+ populations as well.
- 6 However, for women there was a marginal increase in the incidence of vegetarianism between 1998–99 (NFHS–2) and 2005–06 (NFHS–3). NFHS did not collect men's data for 1998–99.
- 7 Unlike for caste, class and regions (where there were variations in decadal change in vegetarianism), there was virtually no change across the categories religion, education status and age-group. This paper focuses on caste, class and regions.
- 8 Incidence of vegetarianism also increased marginally among SC men (1.8 percentage point increase from 10.8% in 2005, equivalent to 16.7% increase).
- 9 These are results from fitting a simple bivariate linear regression; approximately similar results continue to hold for quadratic fit.
- 10 P-value 0.002 for women and 0.000 for men.
- 11 With 17 observations, the size of the bivariate linear relationship increases to 0.15 for women and 0.30 for men, with p-values 0.008 and 0.000, respectively.
- 12 In fact, Himachal Pradesh also has a relatively high increase and belongs in this group—it was not represented in Figure 4 due to relatively lower population, but it is represented in the map in Figure 6.
- 13 Strictly speaking, there is one exception: in Odisha incidence went down by 0.06 percentage points for women (practically zero) and went up by 0.71 percentage points for men.

**REFERENCE**

Natrajan, B and S Jacob (2018): “Provincialising’ Vegetarianism: Putting Indian Food Habits in Their Place,” *Economic & Political Weekly*, Vol 53, No 9.