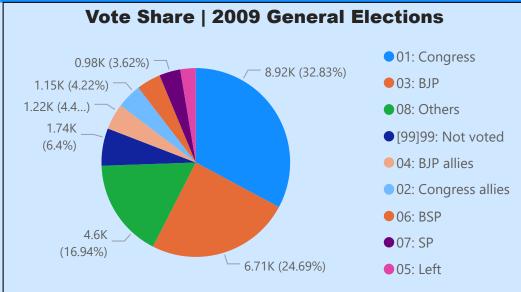
Poltical Science GCLS: HW1

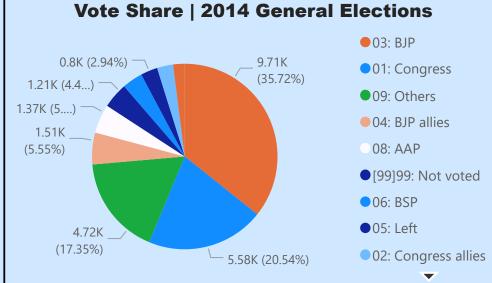
Analysis of the Role of Leadership, Cast, Performance in 2014 General Elections in India

Insight: BJPs support base is quite persistent; 66% of those who voted for them in '09 were retained in '14

Party Wise Vote Swings from 2009 to 2014

Party Voted for in 2009 (Across) Party Voted for in 2014 (Down)	[99]99: Not voted	01: Congress	02: Congress allies	03: BJP	04: BJP allies	05: Left	06: BSP	07: SP	08: Others	Total
[99]99: Not voted	5.17%	4.19%	5.41%	3.99%	7.38%	2.77%	3.63%	3.05%	5.13%	4.46%
01: Congress	19.25%	39.94%	17.80%	9.18%	8.86%	17.48%	11.49%	7.63%	9.23%	20.54%
02: Congress allies	2.18%	2.04%	29.49%	1.57%	3.12%	2.36%	0.88%		0.67%	2.79%
03: BJP	36.95%	27.00%	30.37%	66.79%	15.09%	10.54%	28.65%	40.69%	18.29%	35.72%
04: BJP allies	4.66%	2.79%	5.06%	5.04%	50.86%	0.42%	1.06%	0.61%	3.06%	5.55%
05: Left	2.24%	1.81%	2.44%	0.79%		43.00%	1.15%	0.31%	4.19%	2.94%
06: BSP	3.39%	1.86%	1.31%	2.12%	0.82%	1.25%	39.52%	8.65%	0.87%	3.58%
07: SP	2.82%	0.81%	0.09%	0.33%	0.33%		5.13%	33.16%	0.39%	2.02%
08: AAP	9.08%	7.65%	1.05%	4.29%	1.48%	2.22%	4.42%	3.97%	2.28%	5.03%
09: Others	14.25%	11.92%	6.98%	5.90%	12.06%	19.97%	4.07%	1.93%	55.88%	17.35%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%





BJP

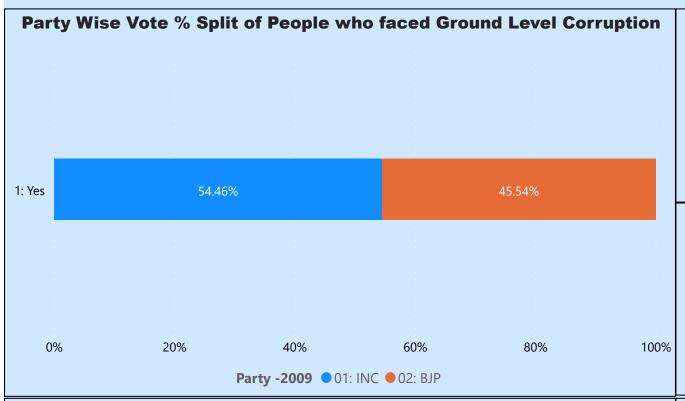
66% of the people who voted for BJP in 2009 also voted for them in 2014. **This is highest retain percentage amongst all parties.**

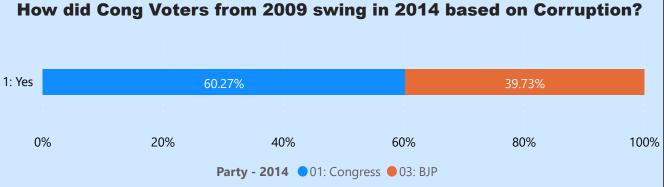
Congress

Only 39% of the people who voted for Congress in 2009 voted them back in 2014. **27% of them shifted away to the BJP.**

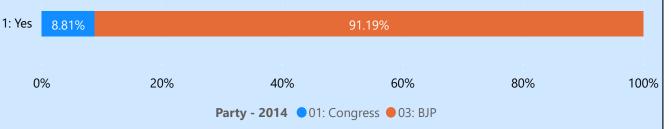
Of the People who did not vote in 2009, 36% voted for BJP in 2014.

Insight: Over 40% of Congress voters who felt corruption from 2019-2014 swung away to BJP in 2014







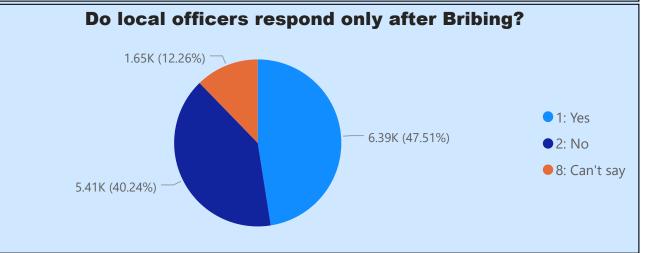


Out of the total sample of **27171** respondents to the survey, **13455** (**50%**) were asked this question. **6392** (**48%**) out these said '**Yes'**, **5414** (**40%**) said '**NO**' and the remaining **1649** (**12%**) said that they '**Can't Say'**. (<u>Bottom Right Fig</u>). The bar charts above only consider the 6392 people who responded -'Yes'

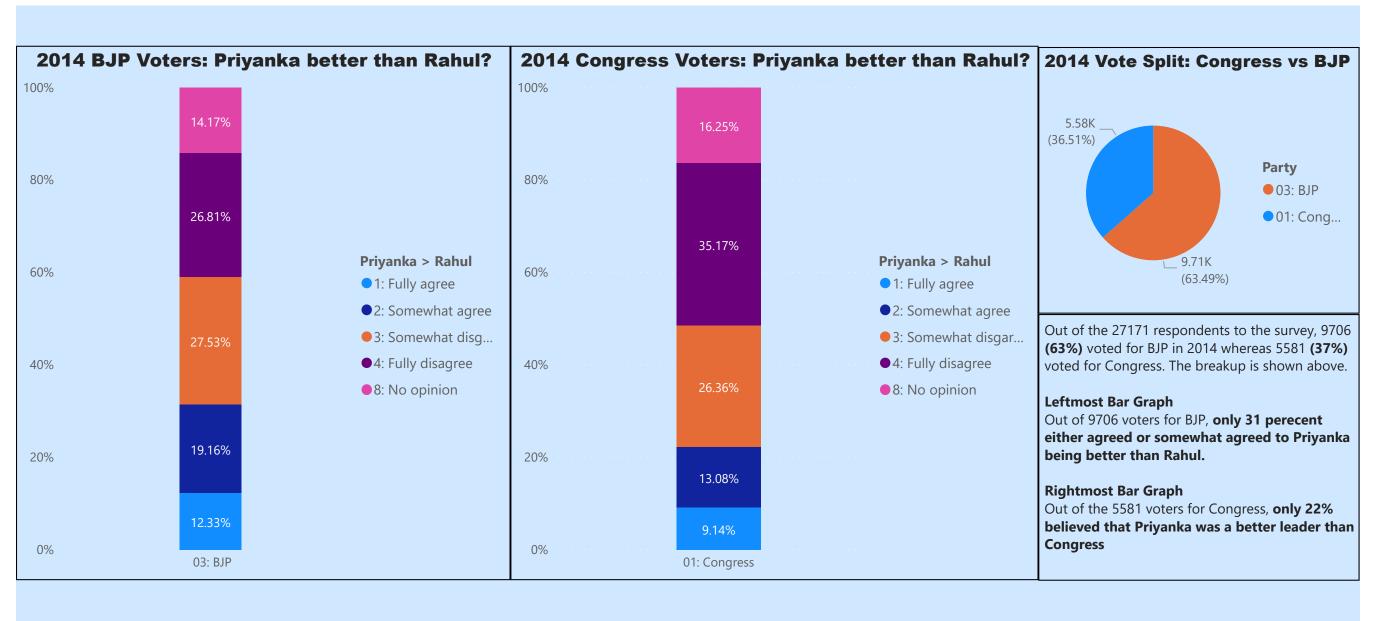
Of these 6392, 55% had voted for Congress in 2009 but only 32% of them voted for Congress in 2014. 23% Of them moved away to the BJP. It can be safely said the performance of the Government in terms of corruption played a role in the people shifting away to the BJP.

Deeper Analysis:

- Of the 55% who voted for Congress in 2009, only 60% voted for them in 2014. (Top Right Fig)
- Of the 45% who voted for BJP in 2009, 92% continued their loyalty in 2014. (Mid Right Fig)



<u>Insight</u>: Priyanka Gandhi lacks credibility amongst both the current Congress and the BJP voters



<u>Insight:</u> Upper Castes constitute only 20% of Modi's overall Vote; though 74% of them prefered him as PM

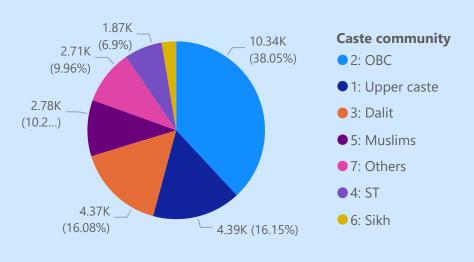
2014: Cast break up for each Prime Ministerial Choice

Caste community	01: Manmohan Singh	02: Sonia Gandhi	03: Rahul Gandhi	04: Narendra Modi	05: L K Advani	06: Sharad Pawar	07: Sushma Swaraj	08: Arun Jaitley
1: Upper caste	9.36%	9.56%	12.76%	20.00%	11.83%	34.18%	13.73%	16.67%
2: OBC	42.86%	48.67%	34.11%	40.00%	58.06%	39.24%	52.94%	54.17%
3: Dalit	11.82%	13.92%	15.00%	14.83%	15.05%	12.66%	3.92%	4.17%
4: ST	12.81%	4.89%	8.00%	7.53%	5.38%	1.27%	13.73%	4.17%
5: Muslims	11.82%	13.92%	17.12%	4.70%	4.30%	3.80%	13.73%	12.50%
6: Sikh	3.20%	1.81%	3.10%	2.75%	1.08%		1.96%	4.17%
7: Others	8.13%	7.23%	9.91%	10.19%	4.30%	8.86%		4.17%

2014: Prime Minsterial Choice break up per Caste

Prime Ministerial Choice	1: Upper caste	2: OBC	3: Dalit	4: ST	5: Muslims	6: Sikh	7: Others
01: Manmohan Singh	1.09%	2.20%	1.61%	3.36%	2.67%	2.29%	1.65%
02: Sonia Gandhi	2.58%	5.80%	4.38%	2.97%	7.27%	2.99%	3.39%
03: Rahul Gandhi	21.32%	25.23%	29.31%	30.19%	55.52%	31.87%	28.91%
04: Narendra Modi	73.62%	65.18%	63.80%	62.57%	33.59%	62.32%	65.45%
05: L K Advani	0.31%	0.68%	0.47%	0.32%	0.22%	0.18%	0.20%
06: Sharad Pawar	0.77%	0.39%	0.33%	0.06%	0.17%		0.35%
07: Sushma Swaraj	0.20%	0.34%	0.07%	0.45%	0.39%	0.18%	
08: Arun Jaitley	0.11%	0.16%	0.03%	0.06%	0.17%	0.18%	0.05%

Caste Break up of the Overall Sample



Here it is seen that although majority of the **Upper Castes - 74%** wanted Narendra Modi as their Prime Minister, they actually **constituted only 20%** of his overall popularity. Infact **OBC's - 65%** of whom supported Modi for PM contributed to almost **40%** of his overall popularity. This is representative of the overall population sample Caste Breakup where **38% are OBC and only 16% Upper Castes.**

Insight: 90% of Modi's vote came from Hindu's though only 66 percent of Hindu's voted for Him in 2014

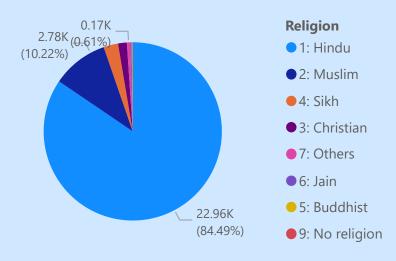
2014: Cast break up for each Prime Ministerial Choice

D6: What is your religion?	01: Manmohan Singh	02: Sonia Gandhi	03: Rahul Gandhi	04: Narendra Modi	05: L K Advani	06: Sharad Pawar	07: Sushma Swaraj	08: Arun Jaitley
1: Hindu	81.77%	81.19%	76.23%	90.30%	93.55%	94.94%	84.31%	83.33%
2: Muslim	11.82%	13.92%	17.12%	4.70%	4.30%	3.80%	13.73%	12.50%
3: Christian	2.46%	2.55%	2.50%	1.04%	1.08%			
4: Sikh	3.20%	1.81%	3.10%	2.75%	1.08%		1.96%	4.17%
5: Buddhist	0.25%	0.11%	0.09%	0.13%				
6: Jain			0.29%	0.29%				
7: Others	0.49%	0.43%	0.53%	0.74%		1.27%		
9: No religion			0.14%	0.05%				

2014: Prime Minsterial Choice break up per Caste

Prime Ministerial Choice	1: Hindu	2: Muslim	3: Christian	4: Sikh	5: Buddhist	6: Jain	7: Others	9: No religion
01: Manmohan Singh	1.91%	2.67%	3.17%	2.29%	4.17%		1.50%	
02: Sonia Gandhi	4.39%	7.27%	7.62%	2.99%	4.17%		3.01%	
03: Rahul Gandhi	25.60%	55.52%	46.35%	31.87%	20.83%	31.48%	23.31%	57.14%
04: Narendra Modi	66.80%	33.59%	42.54%	62.32%	70.83%	68.52%	71.43%	42.86%
05: L K Advani	0.50%	0.22%	0.32%	0.18%				
06: Sharad Pawar	0.43%	0.17%					0.75%	
07: Sushma Swaraj	0.25%	0.39%		0.18%				
08: Arun Jaitley	0.12%	0.17%		0.18%				

Relegion Break Up of the Overall Sample



Here it is seen that arround **67% of Hindu's supported** Narendra Modi though for him arround **90% of his overall popularity comes from just Hindu's**. Similarly, **55% of Muslim's preferred Rahul Gandhi** but due to low overll Muslim population in the sample, this contributes to **only 17% of the overall preference** for him. Even though only 25% of Hind's supported him, they accounted for 76% of his overall voters. This is again representative of the sample population religion distribution.

<u>Insight:</u> The income group split of voters prefering either Modi or Rahul replicated the actual sample split

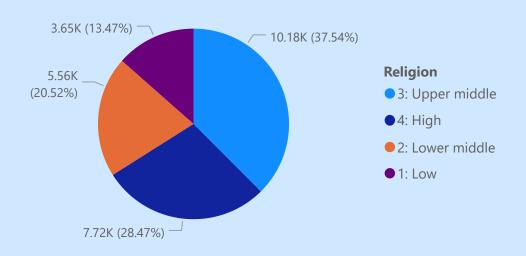
2014: Cast break up for each Prime Ministerial Choice

Income	01: Manmohan Singh	02: Sonia Gandhi	03: Rahul Gandhi	04: Narendra Modi	05: L K Advani	06: Sharad Pawar	07: Sushma Swaraj	08: Arun Jaitley
	0.25%	0.11%	0.24%	0.28%				
1: Low	25.62%	12.43%	12.41%	14.58%	13.98%	3.80%	21.57%	16.67%
2: Lower middle	22.17%	18.81%	21.06%	20.20%	20.43%	12.66%	15.69%	37.50%
3: Upper middle	36.70%	36.98%	37.53%	36.31%	35.48%	22.78%	23.53%	29.17%
4: High	15.27%	31.67%	28.75%	28.63%	30.11%	60.76%	39.22%	16.67%

2014: Prime Minsterial Choice break up per Caste

Prime Ministerial Choice		1: Low	2: Lower middle	3: Upper middle	4: High
01: Manmohan Singh	1.92%	3.65%	2.17%	2.01%	1.06%
02: Sonia Gandhi	1.92%	4.10%	4.27%	4.68%	5.12%
03: Rahul Gandhi	26.92%	25.42%	29.70%	29.50%	28.84%
04: Narendra Modi	69.23%	65.74%	62.74%	62.87%	63.26%
05: L K Advani		0.46%	0.46%	0.44%	0.48%
06: Sharad Pawar		0.11%	0.24%	0.24%	0.82%
07: Sushma Swaraj		0.39%	0.19%	0.16%	0.34%
08: Arun Jaitley		0.14%	0.22%	0.09%	0.07%

Relegion Break Up of the Overall Sample



Here we see that the the income group split of the people who prefer either Rahul Gandhi or Narendra Modi, is representative of the actual population sample. The percentages being very similar thus showing that there is specific income group that is making a statistically significant impact in the votes of either. On contratry, almost 60% of each income group supported Modi, further establishing that his support drew uniformly from across all the income groups.

<u>Insight:</u> BJP Supporters have a very strong affinity to Narendra Modi; 97% of BJP voters wanted Modi

2014: PM Choice for Party Voters

Party Voted For	01: Manmohan Singh	02: Sonia Gandhi	03: Rahul Gandhi	04: Narendra Modi	05: L K Advani	06: Sharad Pawar	07: Sushma Swaraj	08: Arun Jaitley
01: Congress	41.67%	62.28%	76.55%	1.92%	8.99%	11.59%	22.45%	36.36%
02: Congress allies	5.47%	3.23%	7.67%	1.08%	1.12%	30.43%		4.55%
03: BJP	5.21%	8.65%	1.91%	73.38%	47.19%	15.94%	26.53%	4.55%
04: BJP allies	5.21%	0.69%	1.20%	9.54%	14.61%	13.04%	6.12%	9.09%
05: Left	0.26%	1.73%	0.50%	0.56%	1.12%	1.45%	4.08%	
06: BSP	2.08%	0.58%	0.55%	0.74%	1.12%	1.45%		9.09%
07: SP	1.56%	0.12%	0.02%	0.08%			2.04%	
08: AAP	0.26%	1.27%	0.30%	0.29%		5.80%		
09: Others	38.28%	21.45%	11.30%	12.41%	25.84%	20.29%	38.78%	36.36%

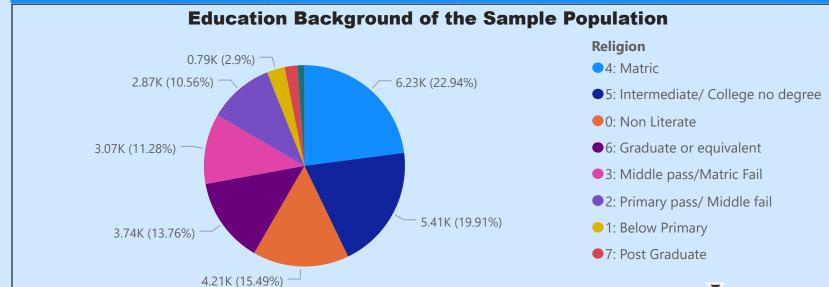
2014: Prime Minsterial Choice break up per Caste

Prime Ministerial Choice	01: Congress	02: Congress allies	03: BJP	04: BJP allies	05: Left	06: BSP	07: SP	08: AAP	09: Others	
01: Manmohan Singh	3.02%	3.29%	0.21%	1.54%	0.85%	5.76%	31.58%	1.45%	5.72%	Here we see that out of the people who
02: Sonia Gandhi	10.20%	4.38%	0.80%	0.46%	12.82%	3.60%	5.26%	15.94%	7.24%	support BJP, an overwhelming percent - 97% supports Narendra Modi. On the
03: Rahul Gandhi	81.64%	67.76%	1.16%	5.23%	23.93%	22.30%	5.26%	24.64%		contrary only 81% Of the Congress
04: Narendra Modi	4.48%	20.97%	97.11%	90.69%	58.97%	65.47%	52.63%	52.17%		voters supported Rahul Gandhi as a prime ministerial choice. Though for
05: L K Advani	0.15%	0.16%	0.45%	1.00%	0.85%	0.72%			0.90%	both of them, almost 3/4th of their
06: Sharad Pawar	0.15%	3.29%	0.12%	0.69%	0.85%	0.72%		5.80%	0.55%	popularity draws for the party support.
07: Sushma Swaraj	0.21%		0.14%	0.23%	1.71%		5.26%		0.74%	
08: Arun Jaitley	0.15%	0.16%	0.01%	0.15%		1.44%			0.31%	

Insight: Modi is the choice for PM, for most of the people with diverse educational backgrounds

Prime Ministerial Candidate Preference Based on Education

Prime Ministerial Choice	0: Non Literate	1: Below Primary	2: Primary pass/ Middle fail	3: Middle pass/Matric Fail	4: Matric	5: Intermediate/ College no degree	6: Graduate or equivalent	7: Post Graduate	8: Professional Degrees and Higher Research	9: No information
01: Manmohan Singh	2.87%	3.06%	2.60%	1.67%	1.57%	1.29%	2.23%	2.74%	3.27%	
02: Sonia Gandhi	3.86%	7.30%	3.83%	5.72%	4.51%	4.31%	5.11%	5.49%	5.61%	
03: Rahul Gandhi	31.48%	25.30%	30.21%	26.22%	27.73%	28.47%	27.50%	35.91%	46.26%	
04: Narendra Modi	60.58%	62.65%	62.55%	65.51%	65.14%	64.82%	63.04%	54.86%	42.52%	100.00%
05: L K Advani	0.36%	0.68%	0.43%	0.50%	0.48%	0.37%	0.62%	0.25%	0.47%	
06: Sharad Pawar	0.30%	0.34%	0.14%	0.08%	0.31%	0.42%	1.02%	0.25%	0.93%	
07: Sushma Swaraj	0.36%	0.51%	0.14%	0.25%	0.19%	0.27%	0.26%		0.47%	
08: Arun Jaitley	0.20%	0.17%	0.09%	0.04%	0.06%	0.05%	0.22%	0.50%	0.47%	



Here we can clearly see that all **people from all education** backgrounds (till Graduation) increasingly prefer Modi as a PM.

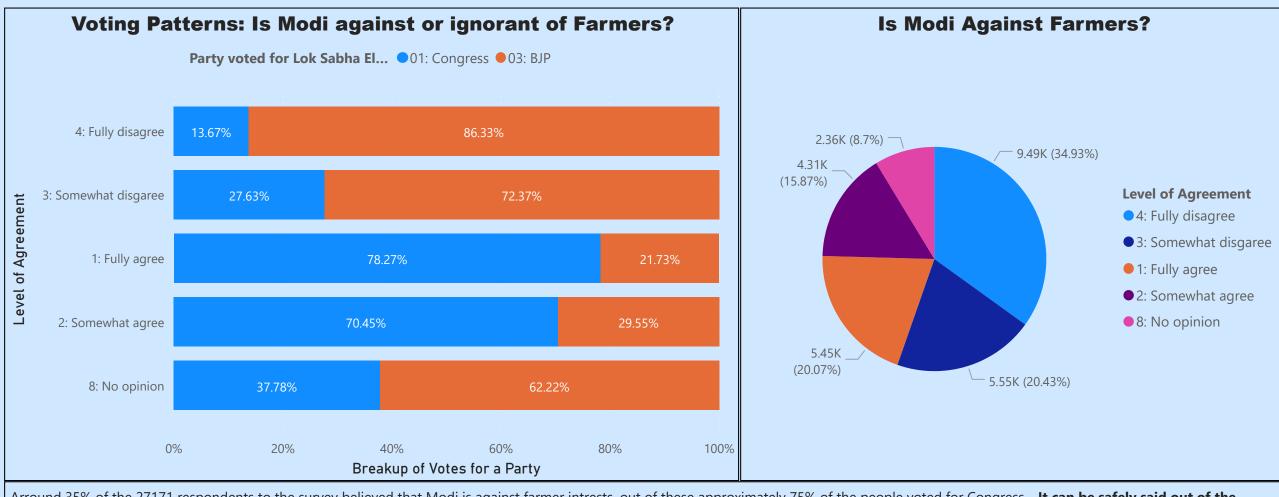
He is clearly more popular than Rahul Gandhi with **over 60% preference** in most cases whereas **Rahul has between 25%-30%**

An intresting anomaly here is that Post Graduates and for Proffesional Higher research population prefers Rahul Gandhi much more. than other citizens

Though this has two basic probelms:

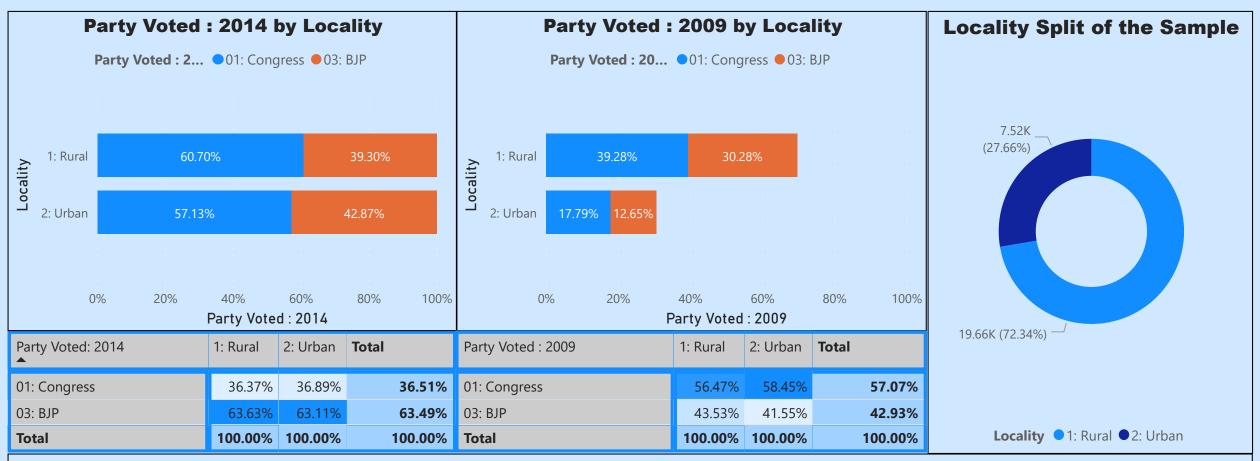
- Firstly, as a whole itself, in India the population of people with Post Gradudation degrees or higher is really low, so they don't matter.
- Secondly, within this sample data. this perecentage is as low as 2% so it is not safe to imply that Post Gradudates prefer Rahul.

<u>Insight:</u> Of the 36% people who feel Modi is somewhat against farmers, approx. 75% voted for Congress



Arround 35% of the 27171 respondents to the survey believed that Modi is against farmer intrests, out of these approximately 75% of the people voted for Congress. It can be safely said out of the people who did vote for Congress in 2014, one of the strongest factors for doing so was its Pro-Farmer Image.

<u>Insight:</u> The vote swing in Rural Areas is much higher - 14% as opposed to Urban Areas - 5%



^{1.} As we know, major population of India lives in rural areas. Out of these approximately 70%, arround 14% swung from Congress to BJP in 2014 elections

^{2.} In 2009, the perecentage of Rural or Urban voters voting for congress was the similar (57%). Similarly, in 2014 63% of each rural and urban population voted for BJP. So we can safely say that both localities don't have a differential contribution in either 2009 or 2014.

<u>Insight:</u> The Question on Quick Leader or Decisive Leader Failed to throw up any insight

Supporters of Inclusive Leaders

Party Voted 2014	% Vote		
□ 01: Congress	35.15%		
1: Agree	24.86%		
2: Disagree	8.34%		
8: Can't say	1.95%		
□ 03: BJP	64.85%		
1: Agree	46.09%		
2: Disagree	14.97%		
8: Can't say	3.79%		
Total	100.00%		

Supporters of Quick Decision Making

Party Voted : 2014	% Votes
☐ 01: Congress	37.83%
1: Agree	31.94%
2: Disagree	3.93%
8: Can't say	1.96%
□ 03: BJP	62.17%
1: Agree	54.34%
2: Disagree	5.50%
8: Can't say	2.32%
Total	100.00%

Poltical Science GCLS: HW3

Matching Electoral Rolls and Census Data



Approach 1: Fuzzy Matching of Electoral Roll and Census Data based on English Village Names; Accuracy: 50%



Approach 2: Fuzzy Matching of Electoral Roll and Census Data based on Hindi Village Names; Accuracy: 66%