

Understanding Voting Patterns in Rural West Bengal: Role of Clientelism and Local Public Goods

Pranab Bardhan

University of California, Berkeley

Sandip Mitra

Indian Statistical Institute, Kolkata

Dilip Mookherjee

Boston University

Anusha Nath

Boston University

December 2013



Introduction: Reversal of Fortune

- Dramatic change in West Bengal politics in 2011: loss of majority in state legislature by Left Front
- After having won six successive elections, since 1977
- Reversal of pro-incumbency pattern which had been unique amongst all Indian states
- Notable erosion of support from groups that used to be core, durable supporters of the Left: landless and small landowners, scheduled castes and tribes

Motivation

- To understand sources of this huge swing of popular support for the Left, and what this suggests for nature of democracy and accountability pressures on governing party in West Bengal
- In particular, try to understand sources of dissatisfaction of rural voters with governance record of the Left
- We abstract from factors located specifically in organization and leadership of TMC that account for its rise
- Do not deny the importance of these factors, or that a viable alternative to the Left arose for the first time in three decades
- (While noting that governance failures of the Left perceived by voters also contributed partially to the rise of the TMC)

Possible Reasons for Reversal of Voter Support

- Governance failures perceived by voters
- Changes in voter characteristics

Classification of Governance Failures

(a) **non-local (state-wide) policy failures** (e.g., price rise, lack of urban employment growth etc.)

(b) **local public goods/bads**

- corruption of local leaders
- education and health services
- other public goods (eg., roads, irrigation, construction)

(c) **private good/benefit programs**: NREGA employment, loans, minikits, housing, drinking water, BPL cards, pensions

Changes in Voters Characteristics

- (d) **Younger, more educated, more mobile voters** with higher aspirations and expectations
- (e) **Better informed voters** (owing to spread of media)
- (f) **Decline in clientelism** (voters may care less about benefits disbursed by parties in order to win votes)

Broader Motivation

- To what extent does the political transition in West Bengal represent higher accountability standards imposed by voters?
- Rather than declining quality of governance?
- Which one is dominant determines whether political economy factors aid or hinder development process

Methodology

- Our results are based on surveys of 2400 voters during September – December 2011, who were surveyed previously in 2003-04
- Stratified random sample from 89 villages drawn from all agricultural districts of WBengal
- Questionnaire: household demographics, assets, benefits received from local governments and party workers, political attitudes, awareness, election turnout, participation in gram sabhas, political campaigns
- Followed by a secret ballot (different party symbols)
- Describe preliminary results concerning patterns and correlations, rather than underlying causal mechanisms

Household profile, circa 2004

Table 1A: Sample Characteristics: Household heads

Agri Land Ownership in 2004	No. of HH	Age HoH	% HoH Males	Max Education (in HH)	% SC/ST	% Agri Occupatio
Landless	1214	45	88	6.6	37.4	26
0-1.5 Acres	658	48	88	7.8	38.9	65
1.5 - 2.5 Acres	95	56	92	10.8	22.4	82
2.5-5 Acres	258	58	93	11.1	27.1	72
5-10 Acres	148	60	89	12.5	26.1	66
>10	29	59	100	13.9	30.9	72
All	2402	49	89	8	35.4	47

Changes in Vote Shares to State Legislature

Table 2: Election Results from West Bengal

Panel [a] Official Election Results from ECI*			
		2006	2011
Vote Shares (%)			
	TMC	24	35
	Left Front	50	42
	INC	16	12
	Others	11	12
Voter Turnout (%)			
		84	86

Panel [b] Results from Sample Straw Polls			
		2006	2011
Vote Shares (%)			
	TMC	11	45
	Left Front	58	34
	INC	19	12
	Others	5	2
Didn't Vote			
		7	7

* The official election results are aggregated for only those constituencies from which the HH survey sample was collected. This is done to facilitate comparison between panels [a] and [b]



Changes in Vote Shares, cont'd

- Sharper swing in our straw poll (between 2004-2011), compared with actual vote shares (between 2006-2011)
- Possible reasons for the difference:
 - Some of the decline in the Left's fortunes already set in by 2006
 - Set of voters in our poll unchanged between 2004-11, unlike actual set of voters

Erosion in Secure Vote Bank for Left

- In 2004, we found approximately half of all voters had reported voted for the Left consistently for the previous 25 years: call them *Left-secure voters*
- ST, SC, landless and less educated household heads were more likely to be Left-secure voters
- Significant erosion in this vote bank in 2011

Erosion in Secure Vote Bank of Left in 2011

Table 3: Characteristics of 2004 Left Secure Voters*

Proportion of 2004 Left Secure in Total Sample (%)	48
Proportion of 2004 Left Secure that Voted for Left in 2011	48
Characteristic (X)	Percentage of HHs with Characteristic X that are Left Secure in 2004
Scheduled Caste	56
Scheduled Tribe	67
HH is Landless	47
HH is Marginal Farmer	51
HH is Small Farmer	55
HH is Medium/Big Farmer	39

Erosion in Secure Vote Bank of Left in 2011, contd

Table 4: Changes in Proportion of HH Voting for Left by Caste, Religion and Land Ownership

	Number of HH	Proportion HH Voting Left (2004 Straw Polls)	Proportion HH Voting Left (2011 Straw Polls)
All HH	2384	0.58	0.32
SC HH	764	0.65	0.37
ST HH	83	0.73	0.42
Hindu	1902	0.58	0.32
Muslim	462	0.57	0.35
Landless	1143	0.58	0.32
Marginal Land	697	0.64	0.35
Small Land	150	0.56	0.31
Medium Land	393	0.47	0.26

Note: The classification of land holdings uses agriculture land holdings in respective periods:

marginal land: 0<agricultural landholdings <=1.25 acres

small: 1.25<agricultural landholdings <=2.5 acres



1. Role of Changing Demographics?

- Argued by many that changing demographics of India's voting population, esp. new voters in their twenties, is loosening traditional identities based on caste, religion or ideology
- Is there any evidence of this? Do young people vote differently?
- Our straw polls are conducted on the same set of households
- About 10% of households experienced a change in head between 2004-11, owing most often to death of the 2004 head
- Examine voting patterns across households that experience change of heads, and across different age cohorts

Comparing Voting Patterns Across Age Categories

Table 5: Variation of 2011 Voting Pattern with Household Head's Age

Variable	Predicted Difference in Likelihood of Voting Left	P-value of Predicted Difference
Head Changed†	-0.009	0.802
Head Age <30 Years††	-0.056	0.483
Head Age 30-40 Years††	0.025	0.481
Head Age 40-50 Years††	0.006	0.837
Head Age 50-60 Years††	0.014	0.654
Head Age 60-70 Years††	-0.058*	0.065

Mean Likelihood of voting Left: 0.334

† Relative to households whose head did not change since 2004

†† Relative to households with age over 70

Controls include village dummy and the following household characteristics: agricultural

2. Role of Increasing Media Exposure?

- No change in proportion of those reading newspapers between 2004-2011
- In contrast, 13% increase in those reporting they watched TV regularly
- Effect of watching TV on likelihood of swing (i.e., the voter switching from voting for Left in 2004 to voting for TMC in 2011) is statistically insignificant, after controlling for household characteristics

Voting Patterns and Media Exposure

Table 6: [a] Changes in Media Exposure

	2004	2011
Proportion HHs Watching TV	0.46	0.59
Proportion HHs Reading Newspaper	0.38	0.37
Proportion Readers that Read: Left Leaning Newspaper	0.15**	0.04
TMC Leaning Newspaper	0.16	0.19

[b] Effect of Media Exposure on Vote Swing

Variable	Predicted Difference	P-value of Predicted Dif
Watch TV	0.030	0.29
Reads Atleast one Newspaper	-0.056**	0.02

Note: The controls include village dummies, age of HoH, total and agriculture land held, religion and caste dummies, m education in HH, immigration and occupation dumies, number of one-time benefits, and dummies for grievances and participation in campaigns.

3. Decline in Flows or Pro-Poor Targeting of Private Good Benefit Programs?

- We now examine possible role of changes in flow of private good benefit programs to rural poor
- Was there a significant decline in such benefits delivered by Left Front controlled GPs, compared with those delivered by TMC controlled GPs?
- We do find evidence of a larger decline in per-HH benefits delivered by Left controlled GPs, compared with TMC controlled GPs

Flows of Benefit Programs

	(1993-02)	(2003-11)
Any Benefit	61.45	62.5
MNREGA	NA	33.89
BPL Cards	17.7	18.08
Credit	4.66	2.1
Minikit	5.37	10.53
Road	27.06	24.79
House or Toilet	4.61	10.15
Drinking Water	7.55	12.5
Old Age Pension	n.a.	3.15
Widow Pension	n.a.	1.8

[1] MNREGA scheme began in 2004, hence there is no data available for 1993-2002 for this.

[2] NA means "Not Applicable".

[3] n.a. means "Not Available". Questions regarding these schemes were not asked in the 2003-04 survey.



Flows and Targeting of Benefit Programs, by Left-dominated and TMC-dominated GPs

Table 8: Annual Per-HH Benefit Patterns, by Incumbency Type

	GPs with Left Share>50%		GPs with Left Share<50%	
	1993-2002 Annual Per-HH Benefits	2003-2011 Annual Per- HH Benefits	1993-2002 Annual Per-HH Benefits	2003-2011 Annual Per- HH Benefits
All HH	0.21	0.16	0.16	0.14
SC HH	0.22	0.18	0.14	0.17
ST HH	0.42	0.31	0.15	0.30
Landless HH	0.21	0.13	0.14	0.13

Role of Clientelism: One-Time versus Recurring Transfers

- Our earlier work (Bardhan et al (2009)) found striking asymmetry between receipt of one-time and recurring benefits and voting patterns
- One-time programs: BPL card, road, house/toilet, drinking water
- Recurring programs: employment, credit, minikits
- Analysis of 2004 voting patterns showed *only receipt of recurring benefits from Left dominated GPs were significantly associated with higher likelihood of voting for Left*

Role of Clientelism: One-Time versus Recurring Transfers, contd.

- Indicates role of **clientelism**: implicit trade of votes for benefits based on long term relationships between party workers and voters
- So we should look at distribution patterns of recurring benefits specifically, since 2004
- Find an *increase* in recurring benefits distributed by both parties, especially to the poor
- But as in the case of all benefits, *the rise in recurring benefits was larger in TMC controlled areas*

Flows and Targeting of Recurring Benefit Programs, by Left-dominated and TMC-dominated GPs

Table 9: Annual Per-HH Recurring Benefit Patterns, by Incumbency Type

	GPs with Left Share > 50%		GPs with Left Share < 50%	
	1993-2002 Annual Per-HH Benefits	2003-2011 Annual Per- HH Benefits	1993-2002 Annual Per-HH Benefits	2003-2011 Annual Per-HH Benefits
All HH	0.02	0.06	0.01	0.05
SC HH	0.03	0.07	0.01	0.07
ST HH	0.07	0.12	0.02	0.15
Landless HH	0.01	0.05	0.01	0.04



4. Decline in Clientelism?

- Below we shall check effects of changing flows of recurring benefits on votes
- Meanwhile, consider a related question: is clientelism weakening as a vote generating factor?
- Many political scholars have explained how clientelism tends to decline along the process of development, as voters earn more, become more self-reliant, care more about public goods and governance than private benefits
- Use the household panel to check whether clientelism has been weakening, by comparing effectiveness of recurring benefits as a vote generating machine between 1993-2003 with 2004-2011

Comparative Effectiveness of Clientelism Across Parties

- Theoretical models of clientelism (Bardhan-Mookherjee (2011)) show effectiveness of clientelistic benefits can vary across parties owing to variations in:
 - party organization (contact between party workers and voters needed to sustain reciprocity)
 - voter expectations (regarding which party is likely to win)
- Effectiveness of clientelistic transfers is greater for party with superior party contact with voters, and those that voters expect will win
- So we shall allow clientelistic effectiveness to vary by party and across time periods

Evidence: Effectiveness of Benefit Distribution

Table 10: Predicted Impact on Likelihood of Voting Left of Receiving Benefits, by Benefit and Incumbency Type

Benefit Type	Incumbency Type	2004		2011	
		Predicted Impact of Receiving One Benefit of this Type in Incumbency Type	P-value	Predicted Impact of Receiving One Benefit of this Type in Incumbency Type	P-value
One-time Benefit	Left GP and Left ZP	-0.10	0.60	0.16	0.35
	Left GP and TMC ZP	0.39	0.30	0.11	0.44
	TMC GP and Left ZP	0.06	0.82	0.31	0.100
	TMC GP and TMC ZP	0.06	0.86	0.10	0.71
Recurring Benefits	Left GP and Left ZP	0.78***	0.00	0.41**	0.04
	Left GP and TMC ZP	0.32	0.20	0.39**	0.02
	TMC GP and Left ZP	0.78	0.43	-0.01	0.95
	TMC GP and TMC ZP	0.68	0.47	-1.31**	0.03

Note: * p<0.10, ** p<0.05, *** p<0.01

Controls include village dummies, dummy for whether head changed, number of one-time and recurring benefits, age of head, total and agricultural land held, religion and caste dummies, max education in HH, immigration and occupation dummies, and dummies for grievances in 2011.



Further Lack of Evidence for Declining Effectiveness of Clientelist Programs

- *Evidence against general decline in clientelism:*
effectiveness declined for Left, while it rose for TMC
- Effectiveness of clientelistic benefits distributed by TMC rose more amongst younger voters
- Therefore the more likely explanation is that voter expectations concerning odds of TMC winning were rising, and/or party organization of TMC was improving (relative to Left)
- Process of shifting from equilibrium with Left dominance to another with TMC dominance

Effectiveness of Recurring Benefit Distribution Across Age and Reliance on Agriculture

Table 11: Predicted Impact on Likelihood of Voting Left of Receiving One Recurring Benefit per Year by Incumbency and Household Type

		2011	
By Household Type and Incumbency Type		Predicted Impact of Receiving One Recurring Benefit per Year	P-value
HoH Changed and			
	Left GP - Left ZP	-0.14	0.76
	Left GP - TMC ZP	-0.49	0.31
	TMC GP - Left ZP	-0.65	0.43
	TMC GP - TMC ZP	-3.93***	0.00
High Share of Non-agri Income and			
	Left GP - Left ZP	-0.23	0.57
	Left GP - TMC ZP	0.04	0.89
	TMC GP - Left ZP	0.05	0.86
	TMC GP - TMC ZP	0.46	0.53

Note:

[1] High Share of Non-agri Income dummy takes value 1 if the non-agri income share in total HH income lies in the top 25th percentile in 2011

Quantitative Magnitude of Clientelistic Factors in Explaining Decline in Left Front Votes

Table 12: Decomposition of Changes in Likelihood of Voting Left Between 2004 and 2011

	Endowment Effect	Coefficients Change Effect
Onetime Benefits*Left GP and Left ZP	0.001 (.002)	-0.003 (0.006)
Onetime Benefits*Left GP and TMC ZP	-0.001 (0.002)	0.003 (0.007)
Onetime Benefits*TMC GP and Left ZP	-0.004 (0.004)	-0.026** (0.12)
Onetime Benefits*TMC GP and TMC ZP	0.0005 (0.001)	-0.003 (0.002)
Recurring*Left GP and Left ZP	-0.010** (0.004)	0.006 (0.007)
Recurring*Left GP and TMC ZP	-0.002 (-0.002)	0.002 (0.003)
Recurring*TMC GP and Left ZP	-0.000 (0.004)	-0.000 (0.013)
Recurring*TMC GP and TMC ZP	0.001 (0.001)	0.002 (0.002)
HH Characteristics	-0.002* (0.001)	0.054 (0.11)
Constant		0.23** (0.11)

Summary So Far

- We see no evidence of role of rise in fraction of younger voters
- Nor do we see evidence of role of rising media (TV) exposure
- Some decline in recurring benefits distributed by Left to poor voters, and in effectiveness of clientelism of Left party (relative to TMC)
- But the quantitative role of this was negligible (around 1%) relative to observed decline in Left vote share (23% in our sample)

5. Role of Voter Dissatisfaction with Other Dimensions of Governance

- 2011 survey asked each respondent their dissatisfaction on other dimensions of performance of local and non-local leaders, on a 1-5 scale (with 5=maximal dissatisfaction)
- Such questions were not included in 2004 survey, so we cannot compare responses across the two time periods
- Focus only on 2011 cross-sectional patterns of how voting varied with reported dissatisfaction on different dimensions

Dissatisfaction with Local Leaders on Different Dimensions: Left vs TMC

Table 13A: Mean 2011 Scores for Dissatisfaction with Local Leaders on Different Dimensions

	GP Left dominated		GP TMC dominated		P-value difference in
	Mean	Std. Dev.	Mean	Std. Dev.	
Public Goods					
Participation in School Education	3.17***	1.10	3.01	0.93	0.00
Participation in Govt. Health Centres	3.01**	1.20	2.93	1.02	0.09
Participation in Irrigation, Construction and Other Public Works	2.76**	1.13	2.42	1.16	0.00
Corruption					
Rapport with Local Traders	2.40***	1.13	2.08	1.05	0.00
Honesty	2.57***	1.23	2.34	1.24	0.00
Dispute Resolution	2.55	1.16	2.55	1.00	1.00
Socio-Economic Justice	2.59	1.10	2.66	0.95	0.14
Political Organization	2.41***	1.20	2.08	1.05	0.00
Competence and Judgment	2.62	1.23	2.71***	1.02	0.00
Work Motivation	2.69	1.20	2.77	1.00	0.11
Empathy with Citizens	2.62	1.19	2.70*	1.03	0.08
Changes in Activity of Political Workers					

Dissatisfaction with Non-Local Leaders on Different Dimensions: Left vs TMC

Table 13B: Mean 2011 Scores for Dissatisfaction with Non-Local Leaders on Different Dimensions

	GP Left dominated		GP TMC dominated		P-value
	Mean	Std. Dev.	Mean	Std. Dev.	
Leader's Image	3.01	1.35	3.00	0.98	
Image of Party Worker	2.80	1.25	2.81	0.95	
Party Organization	2.69***	1.26	2.46	1.11	
Extension to which Party Espouses Causes of Hatred/ Divisiveness	2.33***	1.23	2.10	1.13	
Party Activities	2.37***	1.21	2.08	1.15	
Bad Policies	2.24**	1.27	2.10	1.19	
Pro-Poor Attitude	2.76	1.14	2.78	1.01	
Relation with Other Political Parties	2.51	1.15	2.47	1.01	
Attitude Towards Women	3.10***	1.13	2.95	0.97	
Relations with Citizens/ Local Community	2.80***	1.24	2.64	1.17	

Note: Standard Deviation refers to the sample standard deviation of dissatisfaction scores and not the standard error of the mean.

Summary of Comparisons of Voter Dissatisfaction with Local Leaders

- Voters were significantly more dissatisfied with **local** Left leaders compared with TMC leaders with respect to:
 - participation in provision of local public goods
 - indicators of corruption
 - political organization, esp recent changes
- and were less dissatisfied with respect to:
 - competence and judgment
 - work motivation
 - empathy with citizens

Summary of Comparisons of Voter Dissatisfaction with Non-Local Leaders

- Voters were significantly more dissatisfied with **non-local** Left leaders compared with TMC leaders with respect to:
 - party organization, activities and policies
 - attitudes towards women
 - relations with citizens/local community

Regression of Voting Patterns on Reported Dissatisfaction

Table 14: Regression of Probability of Voting for Left Front in 2011 on Dissatisfaction with Local Leaders, by Incumbency Type

Dissatisfaction(Local)* Left Controlled Both GP and ZP	-0.21*** (0.03)
Dissatisfaction(Local)* Left GP & TMC ZP	-0.19* (0.09)
Dissatisfaction(Local)* TMC GP & Left ZP	-0.12 (0.05)
Dissatisfaction(Local)* TMC Controlled Both GP and ZP	-0.27 (0.08)
Dissatis. Score Non-local Leaders	-0.15*** (0.03)
Constant	1.51*** (0.12)
Observations	2015
Adjusted R2	0.23

Regression of Voting on Specific Sources of Dissatisfaction

Table 15: Effect of Dissatisfaction with Leaders on Probability of Voting for Left Front in 2011

	(1)
Dissatis. Score Non-local Leaders	-0.17*** (0.03)
Corruption* Left Both	-0.09*** (0.02)
Education*Left Both	-0.05*** (0.01)
Education*Left GP & TMC ZP	-0.01 (0.02)
Health*Left Both	0.02 (0.02)
Other Public Goods*Left Both	-0.03 (0.02)
Constant	1.41*** (0.14)
Observations	1956

Variation of Voting Patterns to Distance from Singur and Nandigram

Table 16: Effect of Varying Distance from Nandigram, Singur on Dissatisfaction Scores

	Distance from Nandigram		Distance from Singur	
	Effect on Dissatisfaction with Local Leaders	Effect on Dissatisfaction with Non-Local Leaders	Effect on Dissatisfaction with Local Leaders	Effect on Dissatisfaction with Non-Local Leaders
50-100 Kms	0.127 (0.172)	0.07 (0.203)	-0.025 (0.128)	0.000 (0.107)
100-150 Kms	-0.032 (0.188)	-0.018 (0.226)	-0.676*** (0.11)	-0.607*** (0.170)
150-250 Kms	-0.493** (0.201)	-0.406* (0.220)	-0.600** (0.280)	-0.619** (0.235)
250-350 Kms	-0.682*** (0.228)	-0.683** (0.260)	-0.295** (0.131)	-0.163 (0.138)
More than 350	-0.078 (0.209)	0.203 (0.243)	-0.133 (0.171)	0.374* (0.206)

Note: [1] The base for distance measure is "Less than 50 km"

[2] Dependent Variable is a continuous variable measuring Dissatisfaction.



Summary

- We find no evidence that changes in voter characteristics (age, media exposure, clientelistic dependence) played a role in the reversal of support for Left Front
- Minor role played by changing pattern of private benefits distributed in Left and TMC dominated areas, and rising relative effectiveness of TMC distributed benefits
- Key factor was rising voter dissatisfaction with local Left leaders with respect to corruption, and education quality
- Some role also of non-local factors (such as land acquisition policy) but these were limited to areas within 150 Km of Singur and Nandigram