Investigating Strategic Political Interference in the Rural Job Guarantee Program (NREGA) in India

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Abstract

I present new evidence of political capture of the rural job guarantee program in India (NREGA). I find that the expenditures increases before the state election years. The number of households working more than the 100-days guaranteed under the program also increases remarkably in the year of state-election. These patterns are more pronounced in the districts controlled by the state-incumbent political parties.

Keywords: National Rural Employment Guarantee Act, NREGA, National Rural Employment Guarantee Scheme, NREGS, Job Guarantee, Public Program, Political Corruption, State Election, Political Cyclicity, India.

JEL Codes: D72, O13, O17, H53, H75, H77, I38, J38, J45.

National Rural Job Guarantee Scheme (NREGA[1]) offers 100 days of guaranteed manual labor jobs in a fiscal year to one person from every rural household in India that demands it. In FY 2015-16, about 48 million households utilized this program and the allocated budget for the FY 2016-17 is about USD 6.1 billion.

In this paper I present evidence of political capture of this expensive program. My identification strategy is to use the variation in the timing of the state-level election across the country to study how the NREGA expenditure changes around the election years. NREGA works with coordination between different levels of governments: center, state and local. To test the hypothesis that NREGA is manipulated to benefit the state-incumbent political parties. I test whether these expenditures vary according to the incentives of the state-incumbent political parties: if the expenditure and extra jobs (households that work 100+ days) are higher in the districts controlled by the state-incumbent party members.

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[1]I will use NREGA in this paper but the acronyms MGNREGA, MGNREGS, and NREGS are also used by other scholars.

Using a combination of cross-sectional and time-series analysis, I find persuasive evidence of political capture of NREGA. The program expenditure increases significantly as the state-election year approaches. While the program expenditure increases as the state-election year approaches, the number of households that work more than the 100 guaranteed days of work jumps up in the years of election. I also find that these patters are more pronounced in the districts controlled by the state-incumbent party members.

I make contribution towards two bodies of literature: one, I present evidence of the capture of a public programs for political gain, more specifically political cyclicity in a public program; and two, I present evidence of irregularities in the working of NREGA - the largest job guarantee program in the world.

The analytical setting I employ in this paper was first used by Khemani (2004). She estimated the effect of state elections in India on a few narrow fiscal instruments, such as tax breaks and spending towards public investment projects like road construction, to favor a few districts. Cole (2009) used the method of Khemani to study the political cyclicity in the agricultural credit of the public banks in India. Milligan and Smart (2005) investigate the allocation of the regional development grants for a panel of Canadian electoral districts.

There are others who have studied the political motivation and/or impacts of NREGA expenditure on political outcomes. Zimmermann (2015) makes a case that implementation of NREGA benefits the National Government, at least in the rollout years. Chowdhury (2014) and Bardhan, Mitra, Mookherjee and Nath (2015) show that in context of Rajasthan and West Bengal, respectively, that a strong State Government may be able to get political benefit from the program. In this paper I use an original data set which combines the district level data for NREGA with the state election data for the years 2006-2015. In his Ph. D. thesis Chowdhury (2014) uses a similar data set: NREGA data for the same period combined with the national-level election data. He examined how the competitiveness of the districts in a national election-year effects the program expenditure in the following years.

I would also like to note a few important limitations of my data and analysis: first, while the elections are at the constituency, the data about NREGA used here is at the district-year level. I collapse election information of many constituencies to the district level. Second, while the results of my analysis show a clear political capture of the program, and one can conjecture that this may have welfare implications, I cannot show these using this dataset and analysis.

The following paper is organized as follows: I discuss the working of NREGA and the state elections in detail in the sections and . In the section **??**, I discuss how my analysis relates to the existing literature. I present summary of the data in the section , show my analysis and results in sections , and discuss these results in the section . I end with a concluding discussion in the section .

NREGA

In 2005, the National Government of India passed the Mahatma Gandhi National Rural Employment Guarantee Act, that lays out the foundation for the world's largest rural job guarantee program. The program offers 100 days of guaranteed manual labor jobs in a (fiscal) year to one person from every rural households that demands it. In FY 2015-16, about 48 million households utilized this program and about 4.8 million households gained employment

for 100 days or more under the scheme. The allocated budget for NREGA in FY 2016-17 is about USD 6.1 billion.

NREGA is one of the few large public programs in developing countries that maintains a detailed public record of all the transactions that are accessible via a web portal, thus it has been studied extensively and there is a large literature about its working and impact on the local economy and politics. In brief, while the implementation of NREGA is not ideal (Imbert and Papp 2011, Niehaus and Sukhtankar 2013) it is associated with lower indebtedness, crop risks and violence (Oldiges 2015, Gehrke 2013, Eynde, Hansen-Lewis, Wright and Shapiro 2015).

Imbert and Papp (2011) and Niehaus and Sukhtankar (2013) study various leakages in NREGA and estimate these using household survey.

Bahal et al. (2016), Das (2015), Imbert and Papp (2015), Imbert and Papp (2016), and Zimmermann et al. (2012) study the effect of NREGA on local labor supply and wages. Bhargava (2015) study its effects on local production and Gehrke (2013) on local entrepreneurship.

Eynde et al. (2015) and Das and Mocan (2016) study how NREGA may effect violence and political instability.

The welfare effects of NREGA are studied by Basu and Sen (2015), Oldiges (2015), and Sheahan, Liu, Barrett and Narayanan (2014).

Since NREGA is one of the few programs that emphasize local (village level) participation, there also are studies such as Banerjee, Duflo, Imbert, Mathew and Pande (2014) that are concerned with the effect of quality of NREGA implementation on local politics.

The funding of NREGA is shared by various levels of governments as described in the following way. The National Government should bears the following costs: the entire cost of wages of unskilled manual workers; 75 percent of the cost of material, wages of skilled and semi-skilled workers; and administrative expenses such as the salary and the allowances of the Program Officers, their supporting staff, work site facilities and the expenses of the Central Employment Guarantee Council. The State Government should bear the remaining costs[2]: 25 percent of the cost of material, wages of skilled and semi-skilled workers, unemployment allowance payable in case the State Government cannot provide wage employment within 15 days[3], administrative expenses of the State Employment Guarantee Council.

The working on NREGA requires coordination between the three level of governments: national (center), state, and local governance (*panchayat raj*). The demand for NREGA works is projected at the village councils (*gram panchayat*) with the help of NREGA representatives (apolitical tenured) employed by the National government (*panchayat*). This information is relayed from many villages to their respective block level and then district level administration. At the district level there are NREGA executives responsible for the recording of the demand and then getting it approved by the district administration. The demand from various districts is consolidated at the state level. Finally, the National Ministry of Rural Development receives

[2]It is worth mentioning that states derive their income from two sources apart from the transfers from the various centrally sponsored schemes such as NREGA. - tax revenues raised by the state government (e.g., through levying taxes on production and sales of commodities) and non-tax revenues raised by the state government (e.g., from state lotteries and state owned industries).

[3]The rate of these benefits are set by the state government. The act requires that these should not be less than one-fourth of the wages for the first 30 days of unemployment and half of the wages beyond this.

the state's request for funds, and releases the requested funds. The districts have dedicated accounts for NREGA funds from where the funds are distributed to the lower administrative levels. I produce a summary of the responsibilities of the various agencies involved in the execution of the program as prescribed by the act in the Appendix (see section).

The most pertinent feature of NREGA is that in its design it is a non-political program. Funds should be released in respond to the demand collected as described in previous paragraph based on appraisal of both financial and physical indicators of outcomes by the career NREGA officers. In principle the number of NREGA jobs, and thus the expenditure under NREGA, are decided by rural households, who express interest in manual wage labor jobs through this program. Ideally, the demand for NREGA jobs should be driven by the supply of manual labor in the local markets and have little bearing with the political cycles, inasmuch as the the political cycles can affect the local manual labor market. Unfortunately, the working of NREGA is not ideal. In this paper, I present evidence of political interference that corresponds to the state election cycle.

State-elections

India is a federal country with a distribution of power at three levels: central (national) government, state governments in each of the 28 states of India, and the district level and sub-district local governments. Corresponding to the level of governments there also are three level of elections that are asynchronous with each other. In these elections, in which all adults (18 years and above) can participate by casting their vote for electing a their representatives; but Since this paper is only concerned with state elections, I will not discuss the national and local governments in any detail.

State elections in India are timed in such a way that there are some state elections every year and never do all the states go into election in the same year. This setting offer variation to study political cyclicity of public programs and has been used before by Khemani (2004) and Cole (2009) in the Indian context. Other economists such as Akhmedov and Zhuravskaya (2004) and Bertrand, Kramarz, Schoar and Thesmar (2004) have used it to study political cyclicity in Russia and France, respectively.

State elections are conducted by the Election Commission of India[4] (ECI), an administrative body (selected by administrative services exams) that ensures the constitutionality of the execution of elections and the appointment to the state Legislative Assemblies. The ECI has laid down some rules for the political parties Election Commission of India (2014), for example, there are restrictions on the form and amount of expenditure a political party can incur before and during the state elections. ECI is responsible for counting, announcing re-voting in parts of constituencies if needed, and final reporting of votes. They ECI keeps free and public records of the votes and some characteristics of the candidates participating in these elections. I use this data for the analysis presented in this paper.

For the purpose of state elections, each state is divided into Assembly Constituencies (AC) (see figure A1.1) where the citizens vote to elect a representative, by a first-past-the-post system, to represent them as a Member of the Legislative Assembly (MLA). The size of State Legislative Assemblies depend on the state population: Uttar Pradesh the largest state has

[4] `http://eci.nic.in/eci/eci.html`

425 members (MLA) and smallest state is Sikkim with only 32 MLA.

Legislative Assembly elections are almost simultaneous in all constituencies of a state. Sometimes there may be a difference due to administrative reasons - Election Commission of India may delay the election in some ACs if they find a significant reason to do so, for example, due to natural calamities like floods, or technical problems such as with the electronic voting machines, general unrest such as riots, or evidence of corruption concerning the voting (such as vote buying).

After the election outcomes are declared for the whole state, a new Legislative Assembly is formed. In this assembly, the political party with the largest number of seats forms the state government. When none of the political parties have a clear majority, political parties may form coalitions, and a coalition with sufficiently large support can form a government. The government that eventually forms, whether single-party or coalition, must command the confidence of a simple majority of the MLAs. This ruling party or coalition also choose the leader of the state, the Chief Minister.

The constitution of India mandates that a legislative assembly have a normal term of five years from the date appointed for its first sitting. Hence, elections must be held every five years; but in my data the term of the government varies from four to six years. One reason for this discrepancy is the definition of a year: the ECI considers the cycle of election by calender year, while the program under study - NREGA runs by the fiscal year. I convert the election data dates into fiscal cycles, and depending on the month of election, some of the cycles are four or six fiscal years. One possible reason for a cycle shorter than five years, is that election may be called earlier than the end of term.

Two circumstances may lead to early elections. First, a government may lose the confidence of the legislative assembly in a formal 'no confidence' vote and there may be a call for fresh elections. Second, a government may, principally for electoral gains, voluntarily petition to dissolve the General Assembly. In the years I am considering (2006-2014) there are no cases of early elections in any of the states.

Any of the members of parliament can leave the parliament when their term of five years is over; there may also be accidental changes such as resignation, disqualification, or death of an elected member. In such events MLAs are replaced in a bye [*sic*] election. For this analysis I am ignoring the bye-elections that form a very small minority of the total elections[5].

There are many hundreds of political parties in India. Some of these only take part only in one of the elections: local , state, or national; but there are scores of parties that contest elections in local, states, as well as national elections. These parties are called 'national' political parties are very well organized in their operations. All political parties choose their representative to contest the election under their banner by allocating 'tickets'. If a contestant runs on a party ticket at the state constituency level, they are legally prohibited from changing their party at the time of the formation of the state government.

Historically, the Indian National Congress (INC) Party dominated the state and national politics till 1980s. Since early 1990s, states have witnessed a surge in political competition. In the period I study, no political party had a mandate to form the national government on their own: the central (national) governments are always coalition governments. In the 2004 General Assembly elections, a coalition called United Progressive Alliance led by INC

[5] `http://eci.nic.in/eci_main1/bye_election.aspx`

formed a government. Then again the election in 2008, INC with a slightly different group of political parties formed the government as UPA. In the General Assembly elections of 2012, the UPA government was replaced by the National Democratic Alliance (NDA), another coalition led by Bharatiya Janata Party (BJP).

It is crucial to note that while the elections are at the constituency level, the unit of analysis presented in this paper is the district. There are many constituencies in a political district. The boundaries of the constituencies are generally based on the census figures, but due to an amendment in the Delimitation Act in 2002, it was decided that the constituencies formed on the basis of 2001 census will continue to be in operation till 2026.

Even if the assembly constituencies remain unchanged, there have been many changes in the districts boudaries throughout the period of the analysis (2006-2014)[6] due to the formation of new districts and the 2008 redistricting of constituencies. (Iyer and Reddy forthcoming) studied the 2008 redistricting and find very little concern of gerrymandering at the national scale, but (Bardhan et al. 2015) present some evidence of gerrymandering in the state of West Bengal.[7] To control for the formation of new districts within states, I carefully matched the new districts to the districts used by the public program which I am investigating - the Mahatma Gandhi National Rural Employment Guarantee Scheme (NREGA). In the following section I will describe the working of this program in detail.

Data

For this analysis I created an original dataset by merging data from a two different sources: data from NREGA data for years 2006-2015, and the data about sate elections in the years 2009 - 2015.

The state-level elections are also called the legislative assembly elections. The agency that conducts these elections is the Election Commission of India (ECI). ECI reports detailed data regarding State Elections.

These elections are timed in such a way that there are some legislative assembly elections in every year, but never do all states have election in the same year. State elections are expected to be 5 calender years after the state government's first meeting. For this analysis I use fiscal year as the unit of time, since NREGA budgets are made in this way, and the NREGA data is reported at this frequency fiscal years. In this data the elections are 4-6 years apart (see figure A1.2).

The state elections are contended at the assembly constituencies level. Each district may be made of many such constituencies, an example is shown in figure A1.1 in the appendix (section **??**). The data reported by ECI contains details about every contender at the constituency level. For matching the legislative assembly election data with NREGA, the detailed data was collapsed to the level of district. I have the following information at the district level: number of registered voters, total votes cast in the election, votes won by each party, number of contenders, and characteristics of MLAs and the contenders: party, gender, caste, and age. Table **??** summarizes the election data used in this paper.

[6] Just after the period, in 2015, a new state Telangana was formed by splitting districts of Andhra Pradhesh

[7] Overall, matching the ACs to the districts does not present a concern.

The ECI data does not report information about the parties that form state governments, I gathered this data from various trustworthy news sources and state government websites. I match the political party of the state ruling parties (single party or coalitions) and the various contestants and winners (MLAs).

The NREGA data I use in this analysis is the institutional data reported at the district level at the NREGA portal. The actual implementation of NREGA is at the level of village councils. A village council may include a few villages, there can be many such village councils in a block and many blocks in a district. Since political and administrative districts of districts are much more convenient to match, I use the NREGA data collapsed at the district level. Many new districts have been created in the period 2004-2015 - I carefully matched the districts of NREGA to the ECI data, accounting for both the renaming of districts and the new districts being carved out of old ones. Union territories and state of Delhi are ignored in this analysis since they are special cases and central (national) government has much more control over their budgets.

I use the information on expenditure towards labor and material, and the number of households that work more than the guaranteed 100 days[8]. I only use the districts for which complete information is available throughout the election cycle. The summary NREGA data is presented in table 1.

It is meaningful to use NREGA variables per person, since districts are of different sizes. I use the number of registered voters (electors) at the district as reported in the election data as a proxy for number of adults in the NREGA districts. For OLS, I standardize the NREGA variables by taking log transform of the per capita variables. The distribution of variables is shown in figure 4.

In the following section, I present my analysis and results.

Results

In this section I will make a case that the NREGA shows cyclicity with state-level elections. I begin by discussing the summary data and then present my estimates of regression models. In the next section I will discuss the limitations from what I can infer from my analysis.

The summary of per capita NREGA variables by years is presented the figure 1. It can be seen that the expenditure and extra work, households that work more than 100 days, is higher in the election states all years other than 2009 and 2011. The t-test results presented here, shows the significance level of this difference.

The summary of per capita NREGA variables by election cycles at states is presented in figure 2.

This analysis by means is not robust, since there could be underlying characteristics and other country-wide events that could be driving these results. I estimate the following models using OLS-regression to remove the district- and year- fixed effects. In this representation, N stands for the NREGA variables; $ELECTION$ is a dummy for whether the year is a state-election year; T for Expected years to election (continuous); T^i for Expected years to election (dummies); and the fixed effects are denoted as follows: Σ for state-, δ for district-, and γ for year-fixed effects. The subscripts s, d, and t stand for state, district, and year, respectively.

[8] I refer to these as extra jobs

Model I: $N_{st} = \tau ELECTION_{st} + \Sigma_s + \gamma_t + \epsilon_{st}$

Model II: $N_{dt} = \left(\sum_{i=0}^{4} \tau^i T_{st}^i \right) + \Sigma_d + \gamma_t + \xi_{st}$

The regression estimates, assuming 3 years before election as the reference, are presented in the table 3 and presented graphically in the adjoining figure 3.

Model III: $N_{dt} = \tau ELECTION_{sdt} + \delta_d + \gamma_t + \epsilon_{sdt}$

Errors clustered at district-level

Model IV: $N_{dt} = \left(\sum_{i=0}^{3} \tau^i T_{sdt}^i \right) + \delta_d + \gamma_t + \xi_{sdt}$

Errors clustered at district-level

The regression estimates, assuming 3 years before election as the reference, are presented in the table 4 and presented graphically in the adjoining figure 4. It can be clearly seen that the expenditure and extra work increases in the election year and falls drastically after the election.

Discussions

The election data used in this analysis has the following limitation: I am not able to differentiate between the rural and urban constituencies. To keep my analysis simple, I am assuming that the political power of a party winning at the district level is uniformly distributed over the district, irrespective of the proportion of population that lives in the rural areas. In other words, I am ignoring any geographic pockets of political power finer than the district. I am also assuming that the distribution of voters in rural and urban district is not changing over the time period of analysis 2006-2014. Since the number of constituencies in a district and the districts under NREGA are not changing over this period. I am also assuming that the average number adults in the household are similar across the nation and over the time period.

Another possible concern with this analysis is the endogeneity of incumbency and district boundaries or gerrymandering - In India, while designing assembly/Lok Sabha constituencies due care is taken, to not disturb the administrative districts thus the administrative districts correspond very well with the electoral districts.

One caveat about inference from the regression results: a relationship between elections and spending need not imply that politicians behave opportunistically - e.g. spending patterns may reflect politicians' ability to get things done. On average, a year before an election the politicians with tenure will have served more, at a minimum, almost an entire term in office. I am not being able to test this.

Conclusion

Figures and Tables

Table 1: Summary of NREGA variables

Variable	Mean	Std. Dev.
Lab. Exp. (10^5 INR, curr.)	4088.49	4419.76
Mat. Exp. (10^5 INR, curr.)	1748.89	1771.86
Ratio of material to labor exp.	0.49	0.25
Total Exp. (10^5 INR, curr.)	5837.38	5930.76
HH work 100+ days	7462.58	14451.06
Std. Lab. Exp.	12.47	1.29
Std. Mat. Exp.	11.59	1.38
Std. Total Exp.	12.85	1.28
Std. Extra Work	12.35	1.86
No. of observations	2861	

Table 2: Summary of Election variables

Variable	Mean	Std. Dev.
Total electors at dist (million)	14.91	12.83
Total voters at dist (million)	9.39	7.51
Voter turnout at dist.	0.67	0.12
No. MLAs at state	215.68	113.95
No. MLAs at district	6.35	4.24
Fr. MLA male at dist.	0.91	0.15
Fr. MLA at dist. SC cat	0.15	0.13
Fr. MLA at dist. ST cat	0.15	0.3
No. of observations	756	

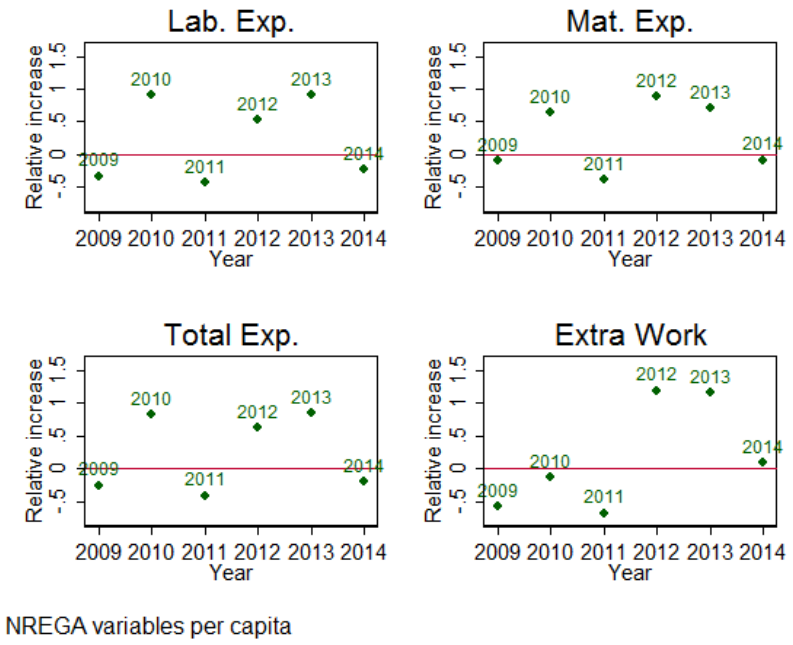

Figure 1: **Relative difference in NREGA variable each year**

The per capita NREGA variables for each state were summed up by whether the state has election each fiscal year. The relative difference between the election states and non-elections states every years, relative to the non-election states is plotted here.

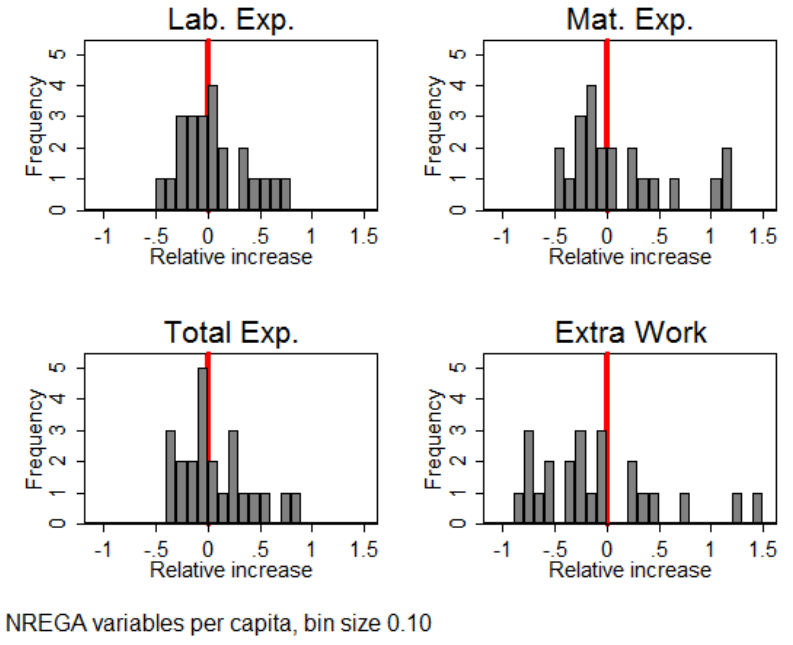

Figure 2: **Relative difference in NREGA variables for each election cycles**

The per capita (no. of electors) NREGA variables for each state were summed by election cycles and whether the year was a year of state-election. For each state election cycle the difference between the election years and non-election years relative to the non-election years is plotted here.

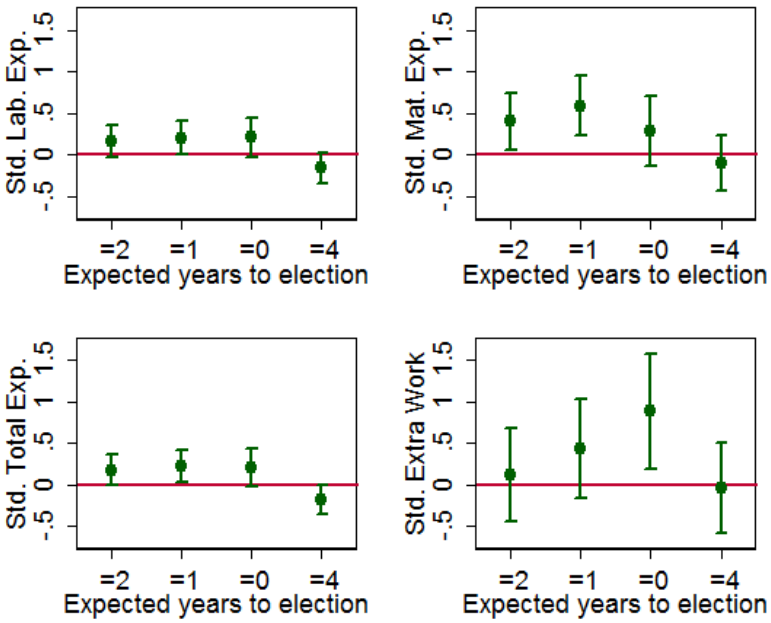

Figure 3: **Coefficient plots: cyclicity in NREGA at state-level, 2006-2014**
These figures are constructed by plotting the coefficients of the expected years to election, Model II in the table 3 below. On the x-axis: 0 represents the year of election; 1 and 2 are one and two years before election, respectively; the red-colored horizontal line is the reference year in the regressions, three years before election; and 4 is one years after the election or four years before the next election.

Table 3: **Regressions: cyclicity in NREGA at state-level, 2006-2014**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Std. Lab. Exp.		Std. Mat. Exp.		Std. Total Exp.		Std. Extra Work	
MODEL	I	II	I	II	I	II	I	II
Election year	.155		.246*		.173*		.283	
	(.0842)		(.114)		(.0875)		(.172)	
Years to ele.								
=0		.243*		.364**		.273**		.349
		(.101)		(.135)		(.104)		(.222)
=1		.205*		.31**		.237**		.14
		(.0874)		(.117)		(.0895)		(.192)
=2		.138		.177		.15		.00479
		(.0822)		(.11)		(.0841)		(.18)
=3		-		-		-		-
=4		-.173*		-.247*		-.192*		-.176
		(.0794)		(.106)		(.0813)		(.174)
Observations	155	155	155	155	155	155	155	155

NREGA variables are standardised by taking log of values per-capita (per elector) at the state-level.
Controls: year- and state-fixed effects.
Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

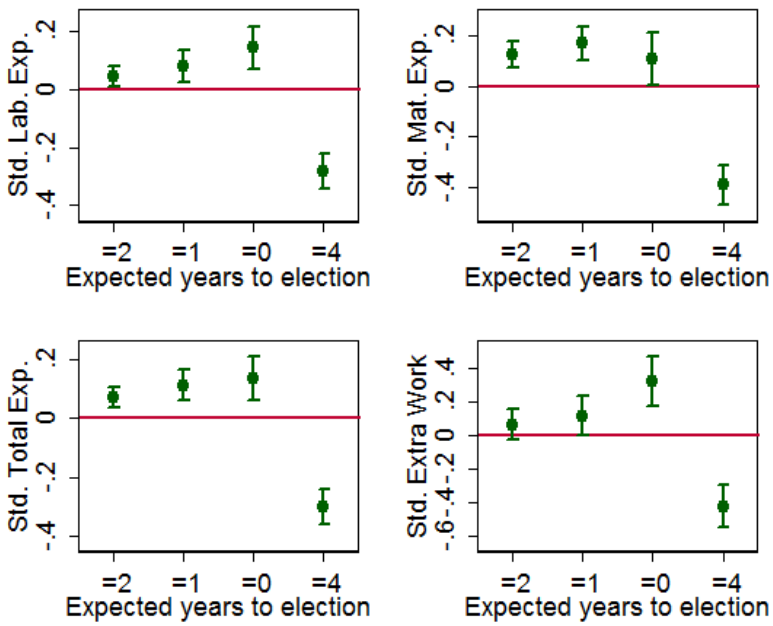

Figure 4: **Coefficient plots: cyclicity in NREGA at district-level, 2006-2014**
These figures are constructed by plotting the coefficients of the expected years to election, Model II in the table 4 below. On the x-axis: 0 represents the year of election; 1 and 2 are one and two years before election, respectively; the red-colored horizontal line is the reference year in the regressions, three years before election; and 4 is one years after the election or four years before the next election.

Table 4: **Regressions: cyclicity in NREGA at district-level, 2006-2014**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Std. Lab. Exp.		Std. Mat. Exp.		Std. Total Exp.		Std. Extra Work	
MODEL	III	IV	III	IV	III	IV	III	IV
Election Year	.162***		.102**		.14***		.302***	
	(.0265)		(.0359)		(.0265)		(.0531)	
Years to ele.								
=0		.146***		.108*		.135***		.324***
		(.0374)		(.0539)		(.0383)		(.0753)
=1		.0817**		.169***		.114***		.117
		(.028)		(.0348)		(.0271)		(.0606)
=2		.0451*		.125***		.0716***		.0648
		(.0187)		(.0267)		(.0186)		(.0462)
=3		-		-		-		-
=4		-.283***		-.393***		-.302***		-.423***
		(.0308)		(.0409)		(.0307)		(.0659)
Observations	2861	2861	2861	2861	2861	2861	2861	2861
Number of clusters	756	756	756	756	756	756	756	756

NREGA variables are standardised by taking log of values per-capita (per elector) at the dist-level.
Controls: year- and district-fixed effects.
The standard errors are clustered at district election-cycle.
Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: **Regressions: cyclicity by state-ruling party incentives**

	(1)	(2)	(3)
	Std. Lab. Exp.	Std. Mat. Exp.	Std. Extra Work
Dist. comp.	1.25^{+}	1.59^{*}	-.0689
	(.736)	(.806)	(2.12)
Interactions with years to election			
=0×Dist. comp.	2.24^{+}	1.41	4.34^{+}
	(1.16)	(1.5)	(2.32)
=1×Dist. comp.	2.32^{+}	3.83^{**}	1.64
	(1.19)	(1.25)	(2.26)
=2×Dist. comp.	2.72^{**}	4.31^{***}	1.08
	(.9)	(1.05)	(2.24)
=3×Dist. comp.	1.89^{*}	2.6^{**}	-.758
	(.81)	(.879)	(2.75)
=4×Dist. comp.	-.456	-1.12	-1.56
	(.843)	(.941)	(2.89)
Observations	2607	2607	2607
Number of clusters	698	698	698

Dist. comp is defined as the fraction of ACs at the district that were were won by the govt. MLA but were competitive. Regression controls for time- and district- fixed effects.

Standard errors, clustered at the district election cycle, are reported in parentheses

$^{+}$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6: **Regressions: cyclicity by state-ruling party incentives**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Fraction of ACs in the district that were competitive for the ruling party MLAs											
	0 - .25	.25 - .5	.5 -.75	.75 - 1	0 - .25	.25 - .5	.5 -.75	.75 - 1	0 - .25	.25 - .5	.5 -.75	.75 - 1
	Std. Lab. Exp.				Std. Mat. Exp.				Std. Extra Work			
Interactions with years to election												
=0×Dist. comp.	-36.7	2.14	16.9^{+}	6.34**	-61.6	6.44	-4.79	6.18^{+}	10.6	14.8	79.1*	14.3***
	(58.8)	(16.6)	(9.69)	(2.04)	(46.7)	(19.5)	(13.3)	(3.35)	(70.6)	(36.7)	(34.7)	(3.68)
=1×Dist. comp.	-28	7.96	17.2^{+}	6.12***	-29.4	17.7	.162	8.37**	4.85	12	75.7*	12.5***
	(59.5)	(16.4)	(9.7)	(1.76)	(46.1)	(18.9)	(12.5)	(3.12)	(73.1)	(34.1)	(35.7)	(3.48)
=2×Dist. comp.	-34.7	7.92	18.4^{+}	6.72***	-30.2	13.9	.472	9.35**	.425	5.54	79.4*	12.2***
	(59.5)	(16.6)	(9.52)	(1.72)	(47.4)	(18.1)	(12.4)	(3.12)	(70)	(36.5)	(36.1)	(3.28)
=3×Dist. comp.	-35.9	10	18.2^{+}	6.07***	-42.6	3.95	-3.45	8.25**	-13.9	15.9	79.6*	10**
	(61.6)	(17.3)	(9.39)	(1.6)	(49.3)	(17.7)	(12.3)	(3.05)	(72.5)	(36.8)	(36.6)	(3.79)
=4×Dist. comp.	-95.9	-15.2	6.49	4.47**	-125*	-22.7	-16.3	5.5^{+}	-76.6	-29	64.5^{+}	11.2***
	(65.3)	(18.5)	(9.47)	(1.36)	(53.5)	(18.9)	(12.4)	(2.88)	(79.5)	(40)	(38.9)	(2.77)
Observations	596	659	638	714	596	659	638	714	596	659	638	714
Number of clusters	164	179	176	197	164	179	176	197	164	179	176	197

'Dist. Comp' is a measure of the competitiveness of the district defined as the fraction of ACs at the district that were narrowly won by the MLAs are part of the ruling govt.

Standard errors, clustered at the district election cycle, are reported in parentheses

$^{+}$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

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Appendix I

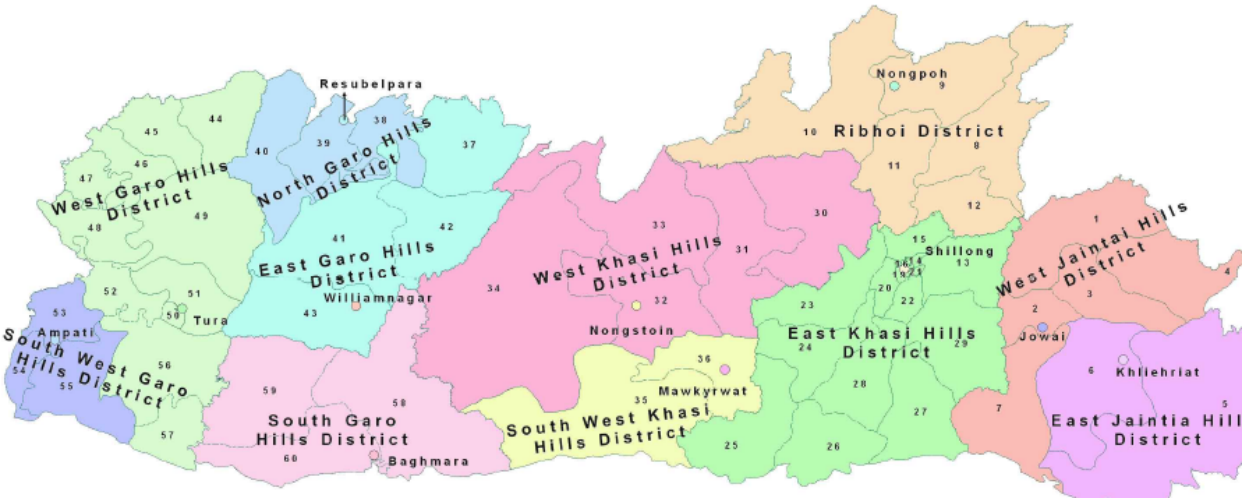

Figure A1.1: Assembly Constituencies (1-60) in the Districts of the State of Meghalaya

Source: Election Commission of India

Figure A1.2: Number of fiscal years between elections

Appendix II: The roles of various agencies in working of NREGA

As described in the NREG Act of 2005 (Ministry of Rural Development 2005)

1. CENTRAL (NATIONAL) GOVERNMENT

- Make Rules.
- Issue Guidelines.
- Notify areas of application of act.
- Communication.
- Budget provision for and release of central (national) govt. share.
- Set up Central Employment Guarantee Council.
- Set up Central Employment Guarantee Fund
- Facilitate technical support.
- Monitoring and evaluation, and research.

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2. CENTRAL EMPLOYMENT GUARANTEE COUNCIL

- Establish a central (national) evaluation and monitoring system.
- Advise the central (national) government on all matters concerning the implementation of this act.
- Review the monitoring and redressal mechanisms from time to time and recommend improvements required.
- Promote the widest possible dissemination of information about the schemes made under this act.
- Monitor the implementation of this act.
- Prepare of annual reports to be laid before parliament by the central (national) government on the implementation of this act.
- Any other duty or function as may be assigned to it by the central (national) government.
- The Central Council shall have the power to undertake evaluation of the various Schemes made under this act and for that purpose collect or cause to be collected statistics pertaining to the rural economy and the implementation of the schemes.

3. STATE GOVERNMENT

- Make rules on matters pertaining to state responsibilities under the Act(32(1)).
- Make and notify the Rural Employment Guarantee Scheme.
- Communication.
- Set up the State Employment Guarantee Fund.
- Budget provision for and release of state govt. share.
- Planning and implementation of Rural Employment Guarantee Scheme.
- Provide technical support.
- Training.

- Pay Unemployment Allowance if employment is not given within 15 days despite adequate funds being available.
- Monitoring and evaluation, and research.

4. STATE EMPLOYMENT GUARANTEE COUNCIL

   - Advising the State Government on all matters concerning the Scheme and its implementation in the State.
   - Determining the preferred works.
   - Reviewing the monitoring and redressal mechanisms from time to time and recommending improvements.
   - Promoting the widest possible dissemination of information about this Act and the Schemes under it.
   - Monitoring the implementation of this Act and the Schemes in the State and coordinating such implementation with the Central Council.
   - Preparing the annual report to be laid before the State Legislature by the State Government.
   - Any other duty or function as may be assigned to it by the Central Council or the State Government.
   - The State Council shall have the power to undertake an evaluation of the schemes operating in the State and for that purpose to collect or cause to be collected statistics pertaining to the rural economy and the implementation of the schemes and programs in the state.
   - Terms and conditions of the chairperson and members of the State Employment Guarantee Council shall be prescribed by the state Government.

5. DISTRICT

   (a) Gram Sabha

   - Assist in identification of beneficiaries.
   - Recommend developmental works.
   - Social audit of all projects within the *Gram Panchayat* jurisdiction.

   (b) *PANCHAYATI RAJ* INSTITUTIONS

   - The village, intermediate and district *panchayat*s shall be the principal authorities for planning and implementation of the scheme made under the NREGA act.
   - The *panchayat*s at all levels can be the implementing agencies under the act.
   - At least 50% of the works in terms of cost will be allotted to *Gram Panchayat*s for implementation.
   - The *gram panchayat* shall be responsible for identification of the projects to be taken up in its area under the scheme as per the recommendations of the gram/ward sabha and the same shall be forwarded to Program Officer for scrutiny and preliminary approval.
   - The *gram panchayat* shall prepare a development plan and maintain shelf of possible works to be taken up under the scheme as and when demand for work arises.

- The intermediate *panchayat* shall approve the block-level plan and forward the same to the district *panchayat* for approval.
- The district *panchayat* shall finalize and approve block-wise shelf of projects to be taken up for implementation under the scheme.
- The plan approved by district *panchayat* will assign implementation responsibilities to various agencies like *panchayat*s, line departments, NGOs etc.

(c) PROGRAMME OFFICER

- Responsible for matching the demand for employment with the opportunities arising from projects in the area under his jurisdiction,
- Overall supervision and coordination of registration of applicants for employment and for providing wage employment in accordance with the provisions of the act and the scheme notified by the state.
- Prepare a plan for the block under his jurisdiction by consolidating the project proposals prepared by the gram *panchayat*s and the proposals received from the intermediate *panchayat*.
- Receive resources from District Program Coordinator and release them to the implementing agencies in accordance with these guidelines and the scheme of the state government.
- Maintain proper accounts of the resources received, released and utilized.
- Monitoring of projects taken up by the gram *panchayat*s and other implementing/agencies within his jurisdiction.
- Sanctioning and ensuring payment of unemployment allowance to the eligible households. Ensuring prompt and fair payment of wages to all laborers employed under a program of the scheme within his jurisdiction.
- Ensuring that regular social audits of all works within the jurisdiction of the gram *panchayat* are carried out by the gram sabha and that prompt action is taken on the objections raised in the social audit.
- Dealing promptly with all complaints that may arise in connection with the implementation of the scheme within the block.
- Other work as may be assigned to him by the District Program Coordinator or the state government.
- The Program Officers shall-function under the direction, control and superintendence of the District Program Coordinator.

(d) DISTRICT PROGRAMME COORDINATOR

- To assist the district *panchayat* in discharging its functions under this Act and any Scheme made there under.
- To consolidate the plans prepared by the Blocks and project proposals received from other implementing agencies for inclusion in the shelf of projects to be approved by the *panchayat* at district level.
- To accord sanction and administrative clearance, wherever necessary.
- To coordinate with the Program Officers functioning within his jurisdiction and the implementing agencies to ensure that the applicants are provided employment as per their entitlements under this act.
- To review, monitor and supervise the performance of the Program Officers.

- To conduct periodic inspection of the works in progress.
- To redress the grievances of the applicants.
- To prepare in the month of December every year a labor budget for the next financial year containing the details of anticipated demand for unskilled manual work in the district and the plan for engagement of laborer in the works covered under the scheme and submit it to the district *panchayat*.