

Making the Politician and the Bureaucrat Deliver: Employment Guarantee in India

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Abstract

The paper examines the division of tasks required between politicians and bureaucrats to run an effective rural employment guarantee scheme (EGS) in India, in the context of Indian history and habits. There are still weaknesses in the incentive structure of the new nationwide EGS. First, there is no guarantee that high quality durable assets will be produced. Second, the role of the bureaucrat in the EGS is not clearly defined. A number of analytical results are obtained. A major one is giving the bureaucrat a long-term task (durable assets) as his objective will ensure the completion of both tasks, since effort must be allocated to the short-term task (employment) in order to achieve the long-term task. More power to the local populace and politicians will ensure that local needs, including employment are met. The results, together with an examination of the interactions between politicians and bureaucrats, village self-government, and the water economy in India, imply that an EGS with good incentive properties has the potential to reverse corruption of the executive, and vitalize village self-government. Lower level politicians are more accountable to the public. The tradition of voluntary labour associated with cooperative village management of the water economy, can make local resources available to extend the cyclical EGS. Higher own resources at stake will improve the efficiency of resource utilization and the quality of work done.

Key words: Politician, bureaucrat, incentives, employment guarantee

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1. Introduction

Institutions as rules of interaction create incentives that affect outcomes. Indian laws, government operating procedures, and interaction between bureaucrats and politicians have had dysfunctional outcomes that have lowered the quality of public service provision and encouraged corruption. Change is slow, but it is happening. The rural national employment guarantee act (EGA), passed in parliament in August 2005, is a conscious attempt to build a new institution with better incentive features. The Act is legislated but rules and directive principles are being formulated. This paper seeks to rigorously examine the features of the EGA, their chance of success, and implementation principles that may enhance the success, in the context of Indian history and habits. It also illustrates the process of institutional change.

North (2005, pp. 55-58) argues that political markets are inherently imperfect because of complexity, high cost of and low returns to information acquisition, and multiple principal agent problems between the voter and the legislator, the latter and the executive. Special interests tend to capture politics and push their advantage at the expense of the general interest. But democracy encourages an open-ended process of discovery that has an advantage in a world with fundamental uncertainty and change. Political preferences and opinions may be incorrect but they are contestable; interactive learning occurs continuously (Wohlemuth, 2003). The large sphere independent of majority control plays a major role in this (Hayek, 1960).

In the Indian context, these advantages of democracy, together with the greater openness, implies an active internal debate that makes improvements in governance possible. The EGA is a consequence of such debate and is part of institutional change that is reversing policy mistakes. The Indian case, at least, does not satisfy the Platteau and Hayami (1998) conjecture on the persistence of African underdevelopment. Their view is since wrong incentives arise from structural factors such as natural or technological handicaps or traditional social norms, not policy mistakes, they are difficult to reverse. In India

policy mistakes set up dysfunctional institutions¹, and although they did create vested interests we will see why the latter can only delay change, they cannot prevent it.

In order to examine the division of tasks between politicians and bureaucrats to run an effective rural employment guarantee scheme (EGS) in India, we draw upon three literatures. First, the field of political economics, which is concerned with understanding incentives and outcomes in different forms of government and their supporting institutions, when agents have their own objectives. It recognizes information and other constraints that cause policies to differ from optimal policies and leads to a normative research program to discover which policymaking institutions produce better policy outcomes and how institutions can be changed². In particular Alesina and Tabellini (2004) ask how policy-making power should be allotted between bureaucrats and politicians in order to maximize aggregate welfare.

The question we ask in the context of the EGA is how the tasks involved should be distributed between bureaucrats and politicians. Major changes are difficult, but it may be possible to build in better incentives in a specific program, thus contributing to required changes. We briefly survey the history of interactions between the Indian executive and the legislature, and show that too much bureaucratic control over economic activity, combined with the political right to transfer executive officers, has resulted in decay and corruption of the executive.

The Act and the process of debate leading up to it has generated a large literature, which has clarified many issues, and led to important changes in the original National Rural Employment Guarantee (NREG) Bill. We carefully examine the incentive structure implicit in the EGA. The chief remaining weakness is there is no guarantee high quality durable assets will be produced; the role of the bureaucrat in the EGS is also not clearly defined.

¹ Goyal (2003) documents these mistakes, their causes and consequences.

² Persson and Tabellini (2000) review the field. Some useful papers concerned with task allocation are Hart et. al. (1997) who examine the distribution of activities between the public and private sector; Dewatripont and Tirole (1999) who explore how to design optimal information extraction from biased participants.

A major recommendation of the EGA is that the manual labor employed will be used to build rural infrastructure, with water harvesting and water shed management having the first priority. And village *panchayats*, or elected local councils, will have the primary responsibility for preparing and implementing the schemes. Therefore the literature on water use and management in Indian villages, and how this has changed over the years, is useful to derive operational routines based on historical institutions or habits; such routines will have a higher chance of success. The EGS has the potential to revive the cooperative village management of the water economy. The tradition of voluntary labour associated with it will make local resources available to extend the cyclical EGS. Higher own resources at stake will improve the efficiency of resource utilization and the quality of work done.

Alesina and Tabellini (2004) argue that career concerns motivate bureaucrats while for politicians the objective is to get re-elected. In India a bureaucrat's career depends on helping politicians achieve their objectives, so that both can be modeled as having the same objective function. We examine if the framework adopted for the EGS can divorce the two objective functions and make it possible to break out of the cycle of corrupting incentives. Our analytical results show that giving the bureaucrat incentives based on the production and quality of durable assets, and clarifying his duties to be in coordination and technical support, will compensate for the technical weakness of *panchayats* and increase the chance of high quality rural infrastructure being built. Local monitoring, transparency, and reputation effects can reduce leakages and corruption. The precise definition of the bureaucrat's role, and his motivation, will be important to make it difficult for state governments to control the *panchayats* through the bureaucrat; to reduce an overemphasis on rules and procedures, and induce productive contributions from the executive. Normally, since a bureaucrat has to accomplish multiple tasks it is not possible to give him a precise objective. The analytical results suggest that special features of the EGS make this possible.

The analytical results are derived specifically for the EGS, but are also valid more generally. Imperfect monitoring implies tasks should be decentralized to local politicians, where monitoring is easier. If a short and a long-term task share resources, with some additional resources being required for the long-term task, a bureaucrat motivated by career concerns or incentives will focus on the short-term task; the politician on both. But if the long-term task yields results only after elections, or an electoral majority can be achieved with only the short-term task, the politician will neglect the long term-task. Giving the bureaucrat the long-term task as his objective will ensure the completion of both, since effort must be allocated to the short-term task in order to achieve the long-term task. If the long-term task requires more skill, and there is high variation in the distribution of skill, the bureaucrat will work harder.

The structure of the paper is as follows: Section 2 examines the incentive structure of the EGA; interaction between bureaucrats and politicians in India, its history and causes; village local self-government in the context of management of the water economy. Section 3 presents an analytical framework in which results are derived on the allocation of tasks between the politician and the bureaucrat, and section 4 concludes with a brief discussion of what makes change feasible in India.

2 The EGA and Indian Political Structure

Incentives and the EGA: The Indian government has a number of schemes meant to alleviate poverty in rural areas. But their success rate is very poor. The late Rajeev Gandhi's statement that only about 15 percent of money meant for the poor actually reaches them is famous. The new EGA legislation agreed on 22 August, 2005, consciously builds in features to improve delivery. First, it aims at providing work, and not just a dole. Rural poor are guaranteed 100 days of work per household every year. Second, the work is to be used to improve local infrastructure and thus expected to improve productivity. Third, there is universal targeting to remove bureaucratic discretion, a major source of corruption, delay and leakage. All those who are registered in a village and offer themselves for work are eligible. Only manual work is offered at the state minimum wage or 75 percent of the national minimum wage, whichever is higher.

This is meant to encourage self-targeting and limit the liability. To ensure support, a reduced payment is made to the applicant if no work is available. Fourth, the legal right to work; transparency, with muster rolls of the eligible, of those given employment, of work done, to be posted in public places; the Right to Information Act (October 13, 2005), that makes it mandatory for officials to give information to citizens on request, are all expected to encourage citizen action to ensure delivery (Bhaduri, 2005, Dreze, 2005)³. Fifth, no contractors are to be used since they have been a major source of corruption and kickbacks in public works. Instead local *panchayats* are responsible for identifying the works and implementing the scheme. It is easier to make lower levels of government accountable to citizens. The Centre will provide 90 percent of the required funds directly to the *panchayats* thus cutting out intermediaries such as state governments that are further potential sources of leakage.

Critics have focused on the huge fiscal costs of what they see as more ineffectual giveaways. Soft government jobs will be created with no real work done, a waste of public funds through leakages, and a pressure to continually extend the employment. The next government will announce more schemes⁴. The fiscal cost is expected to be about \$9 billion or Rs 150,000 crore a year if one member from each of the 150 million rural families wants relief work⁵. Many have argued that current multiple schemes must be shut down to make this the sole rural poverty alleviation scheme. Virmani (2005)

³ Dreze (2005) points to the successful use of RTI in Rajasthan to clean the muster rolls and improve delivery in the National Food For Work Programme (NFFWP). Compared to 5 other sample states, including West Bengal, where muster rolls were impossible to trace or found to be fudged, the rolls were easy to obtain and accurate in Rajasthan. In an example of activism, NGOs asked Sonia Gandhi to intervene when Solapur collector Manisha Varma was transferred after she arranged for public reading of EGS muster rolls in order to detect bogus payments. The transfer orders, from the Maharashtra Chief Minister, came after resistance from her staff, who were used to pocketing payments (Times of India, Mumbai Edition, September 2, 2005).

⁴ A clause put in the EGA provides that it can be discontinued only through a Parliamentary majority.

⁵ Since state minimum wages vary from Rs 25 to 135 a day, the average wage paid is expected to be about Rs 60 per day (as stated in the NREG Bill, introduced to the Lok Sabha on 21st December, 2004. The EGA itself sets the wage as Rs 60, which has been criticized since state minimum wages vary widely over India, so that labour supply may over-or under-respond in different areas). With wages to material costs expected to be in a 60:40 ratio, the cost per person per man day of employment will be Rs 100. DR Mehta (2005) argues, based on experience with drought relief work in Rajasthan, that the percentage of daily workers will not be more than 5 per cent of the total population or 10 per cent of the working population of the country, the wage bill then would be 30,000 crore, and including the 40 per cent material component would rise to 50,000 crore. For the first few years since the scheme will be implemented in about 200 districts the expenditure would fall to about Rs 20,000 crore.

estimates upto 75 percent of the required funding can come from such rationalization. Further, combining the land area development plans⁶ of local *panchayats* with the EGS would improve their incentives to create good quality assets since more of their own funds would be involved. Since the scheme only offers insurance against seasonal unemployment it cannot remove poverty---for that productive labour intensive employment has to be created. Moreover, since only cyclical low quality labour will be available for employment it cannot alone be relied upon to create a robust rural infrastructure. While Virmani would like to see *Bharat Nirman*, meant to create rural infrastructure, amalgamated with the EGS, Rao (2005) argues that this will effectively kill *Bharat Nirman*, preventing any sustained creation of rural assets.

Another set of criticisms comes from the working of the EGS in Maharashtra (MEGS) and other government schemes for rural India. The MEGS, after initial successes, especially in water shed development enabling diversification into horticulture, became moribund and was unable to remove chronic rural poverty. Criticisms⁷ about the working of the scheme include organizational failures such as poor coordination, lack of technical competence and involvement of local beneficiaries. Specific complaints are work given is too distant to be useful; wages are too low so that no one comes; work and wages are not given in time. The NREG Bill tries to take care of some of these aspects, specifying reduced payment to be made after a set number of days of not being given work, an extra allowance paid for work at distance, transparency in lists to help prevent delays. But ultimately improvement depends on well integrated incentive structures. The government's outcome budget 2005 shows the poor record of national schemes in creating rural employment⁸. Even so, the Bill document turns this logic on its head and gives it as a justification for launching a new, hopefully more effective scheme.

⁶ These were drawn up in the 73rd amendment to the constitution, as part of carving out a greater role for panchayats. See also below.

⁷ Early (Terhal et.al. 1992, Terhal and Hirway, 1998) and more recent assessments (Panda, et. al. 2005) concur in these findings. I thank R. Radhakrishna and Srijit Mishra making the reports available, and Srijit Mishra for summarizing points made in a 2005 IGIDR workshop on the NREG Bill.

⁸ Against a target of 17.22 crore mandays of employment for the Sampoorna Grameen Rozgar Yojana the achievement was only 9.41 crore mandays; against a target of 15 crore mandays for the first quarter of the year, achievement was only 7.31 crore for the NFFWP. There were complaints that sufficient funds were not released.

Rural India's infrastructure is crumbling, and the poor continue to suffer from chronic and especially seasonal unemployment. The scheme, if it works, can both create infrastructure and alleviate severe poverty. Re-vitalization of local self-government and effective delivery go together. The main potential problems seem to be in ensuring this and in using funds to create good quality assets. At present there is lack of clarity about the roles of the bureaucrats (a block-level programme officer and a district programme coordinator⁹) provided for in the EGA. They are to largely provide executive support to the *panchayat*, but also have independent monitoring roles. Although experts have been asked to draw up plans their role can be only consultative. Our modeling of the interaction between two levels of politicians and a bureaucrat clarifies the impact of interaction-design on incentives. Analytical solutions are shown to be feasible because they take account of the evolution of bureaucrat-politician interaction and village institutions in India.

Terhal and Hirway (1998) write conflict between the revenue department, responsible for the employment guarantee, and the technical departments responsible for the quality of assets constructed, in a top-down inflexible bureaucratic structure, led to organizational failures in MEGS. Bagchee (2005) also details the administrative conflicts, but finds local politics and awareness contributed to resolving these. Panda et. al. (2005) indite poor training, technical, coordination and administrative skills of local officials. There is no uniform record-keeping or accounts and too many activities are undertaken. Terhal et.al. (1992) point out that the top-down choice of projects resulted in the overemphasis on constructing buildings and roads following the requests of line departments. Less capital intensive activities such as soil and water conservation meet local needs that better, yet require fewer resources. They cushion the poor against yield shocks and induce private investments in land improvement that raise long-term agricultural productivity and yield. Since such activities also require less of non-labour inputs there is no trade-off between

⁹ Vaidyanathan (2005) argues that since state governments stand to lose power they will resist the direct Centre-*panchayat* link. They will seek to maintain control through the bureaucrats appointed on the scheme.

employment and asset creation objectives. Community participation, local enthusiasm, and maintenance of such assets are also better (Barrett. et. al. 2004).

If the legal right to employment, transparency through the Right to Information, monitoring employment and selection of projects through the *panchayat* and the *gram sabha* implies a better provision of local needs and employment, it may be possible to focus the bureaucrat on the asset quality to help resolve the coordination and technical problems that have recurred in the past. Where inflexible bureaucratic procedures have not worked clear targets may do better through the incentive and reputation effects they generate. Barrett et. al. (2004) and others have argued that sometimes there is an intrinsic conflict between the employment and asset objective—one instrument cannot meet two targets. But there are many agents involved in the execution. A well designed allocation of responsibilities can create effective incentive structures. Crisis employment requirements are not more than ten percent of employment—that much leeway to create employment can be given even if it does not result in quality assets¹⁰. The major chunk of employment can, however, be carefully coordinated and designed to coincide with the agricultural slack period of February to June. Since the *panchayat* is now responsible for the employment objective the revenue department handled in the MEGS, the bureaucrat can be focused on the technical aspects.

The bureaucrats and the politician in India: Although the Indian constitution established checks and balances between the executive, the legislature and the judiciary, the interventionist development path followed gave the executive power to intervene in many areas of the lives of citizens. The rationale for this stemmed from planned development in a shortage-driven closed economy. It was natural to extend the rationing that had been imposed after the Second World War. Many of the interventions also had a redistributive objective to moderate ancient economic and social inequities that persisted despite the new political equalities imposed in the constitution, and to ensure fair treatment for a heterogeneous citizenry. These interventions combined with the rigid steel frame and cumbersome procedures inherited from the British, meant to control a subject population,

¹⁰ I thank Manoj Panda for this point.

led to delays and distortions. Bureaucratic procedures meant to ensure fairness and curb the tendency to favor own caste or community, only added to delays, and were unable to achieve their purpose because merit was not given sufficient weight. Often, the only way to get things done was to appeal to political intervention to relax rules.

But politicians, especially after the collapse of one-party dominance in the seventies, had a short-run perspective—their concern was to win the next election. They favoured short-term consumption transfers and rewarding loyalists at the expense of the development of physical and human capital¹¹. The political intervention widened as politicians built up vote banks through populist policies and money banks through illegal payoffs, but poverty persisted. Politicians used their power to transfer non-accommodating bureaucrats and build a committed and corrupt bureaucracy.

Thus institutions built with idealistic aims and relying on the moral fiber of the participants ended up corrupting that fiber. The incentives arising from the institutions built were not foreseen. Power usurped over private economic activity to create equality resulted in a private economy run by public servants for their private gain. Bureaucrats used these discretionary powers to make money. Criminals entered politics because there was so much money to be made. Appu (2005), an ex chief-secretary in Bihar documents the decline in the all India elite services. Checks provided in article 166 of the constitution, such as giving the chief minister and secretary power to overrule ministers' decisions in order to maintain standards, lost force as the compulsions of party infighting and holding coalitions together corroded the leadership also. Patron-client relationships became established. Political interference in postings and transfers made the bureaucracy pliant, and led to lobbying and bribes to secure plum postings and promotions. The price paid to acquire a government post had to be recovered from the hapless public¹².

¹¹ See Goyal (2003) and Kelegama and Parikh (2000) for a more extended discussion of developments in political economy over this period.

¹² The corruption of the police force was one of the worst consequences. Criminals enter the force through paying bribes and then proceed to prey on the citizens they are supposed to protect. The market for posts works well. Those with a higher potential for making money command a higher price. In Mumbai when the State Government banned dance bars in 2005, it led to a sharp fall in the bribe price for police posts near bars. The neglect of merit in entry has led to a steady decline in the quality of the police force. There are still some good officers. A.N. Roy, the current Mumbai police commissioner, has set up public durbars

Bureaucrats forgot their allegiance to upholding the Indian constitution, laws, and democratic principles and turned to pleasing politicians.

There were many efficient and upright individuals but they became an emasculated minority as the systemic incentives established corrupt norms. Only unproductive contributions were possible for such officers, such as delaying or preventing political projects. Delays also rose from turf fights among heterogeneous groups¹³. Loosing groups often blocked reforms and rationalization. Deadlocks were often so severe that the executive was able to move only on receiving a court order.

An NGO that works for better governance has the following list of systemic reforms required: “democratic decentralization and empowerment of citizens to an extent that the relationship between vote and welfare of the citizens and between tax money and public services provided is clearly established; a public service reform to make the bureaucracy an effective instrument of good governance; greater separation of executive from legislature to make honesty compatible with survival in elective public office; a speedy, efficient and accessible justice system; and institutional self-correcting mechanisms and safeguards against abuse of public office” (Narayan, 2005).

An independent board for bureaucratic transfers is essential and is a common recommendation made even by committees set up by the government such as the Godbole and Suthankar committees. But politicians are reluctant to give up power. Bureaucrats own desired reform list includes more powers of implementation through stricter laws and penalties since otherwise administrative orders are not obeyed; to outsource more functions to households and firms through tax incentives and user charges; incentive payments for government agencies to motivate more transparency and

to decide postings, where those who have sent requests from political contacts are shamed. He has sacked 20 tainted policemen and officers under article 311 of the constitution which makes it possible to terminate the services of government servants.

¹³ In the India bureaucracy it is much easier to stop files than to pass them; different points of view are expressed even after a decision. But delay is a universal response to conflict; thus the Paul Volcker headed Inquiry Committee had this to say on the working of the UN oil-for-food program, "When troublesome conflicts arose between political objectives and administrative effectiveness, decisions were delayed, bungled or simply shunned." Quoted in Global Development Briefing, September 8, 2005. pp.1.

better performance¹⁴. Such incentives may be a way to begin delinking the objectives of bureaucrats from those of their political masters.

Water and local self-governance: The EGS, if successful, can also have a salutary effect on the water economy of Indian villages¹⁵, since 7 of the list of 9 focus items in the NREG Bill refer to water, irrigation and flood control, with water conservation and water harvesting as the first priority. Water is set to become a crucial future constraint. Per capita availability of fresh water in India is currently lowest in the world, 60 percent of diseases are water borne. Water is also essential for sanitation; more than 80 percent of villages and village schools are still without sanitation. It is becoming clear that investing in safe drinking water will do more for improving health and reducing poverty than even the availability of more food (Radhakrishna, 2005).

After the 50s there was a focus on large scale irrigation projects. Poor management and drainage led to 15 percent of irrigated areas becoming saline, and the quality of what was originally very good river water fell. Politicians made matters worse by distorting prices and giving free electricity in rural areas. Water tables fell due to over-reliance on bore wells; drought and flood prone areas increased. Even so, only about a quarter of agricultural area is irrigated in India. Farming continues to depend on the vagaries of the monsoon, with bankrupt farmers forced to commit suicide. Till the end of the 80s there was a total neglect of village water bodies and sanitation, then a new water policy was announced as the Supreme Court and NGOs became very active in the area.

The irony is that ancient India had a very good irrigation system, with well-maintained tanks and even complicated canals and storage tanks based on rivers. For example, during the *Mauryan* empire BC the *ahar pyne* system of irrigation was established in Magadh (modern Bihar). After that the system lasted through centuries as governments retreated and empires changed. It was sustained through the emergence of cooperative norms;

¹⁴ Comments from Ranganathan, an ex chief secretary of the Maharashtra government, on how to improve Mumbai's municipal functioning in the context of environmental decay, at an IGIDR seminar on the Maharashtra Development Report in 2004.

¹⁵ The discussion of the village water economy draws upon Sengupta (2001), his presentation on water and comments after it, at an IGIDR-UNDP workshop on 5th September, 2005.

government neglect worked better to establish them, than government administration could. The village teams that contributed voluntary labour to maintain and extend the system were known as *goams*. In southern India the British administration took responsibility for irrigation and this destroyed the local system of tank maintenance. The Bihar system also crumbled after independence, the advent of planning and big dams. It was not only out-migration from villages that was responsible for the collapse of local maintenance of water bodies.

The EGS, with its emphasis on watershed development, responsibility for *panchayats* and their local accountability, has the potential to revitalize this village cooperation¹⁶. The latter in turn can extend the seed money for the cyclical EGS into more sustained local development through the communal labor systems such as the *goam*. Using voluntary contributions, that appeal to deeply entrenched historical customs, may make it possible to circumvent the resistance to paying local taxes that has developed in the post-independence period. A larger share of own contribution will improve the efficiency of utilization, and seeing improvements in local infrastructure will make the community more willing to make contributions. Sengupta (2001) suggests there is sufficient adaptation to change to make it possible to define cooperative contributions in money, bringing them closer to local taxes. In such situations multiple equilibria abound and EGS could function as the seed that creates complementarity in strategic actions (Cooper and John, 1988) and pushes the village economy to an equilibrium with higher productivity.

But in the traditional village system allocation was more to the elites. Local village bodies tend to be conservative, and dominated by elites. There is evidence that village (*gram*) *panchayats* headed by women have delivered better governance¹⁷, but local self-government (*panchayati raj*) has also reduced the use rights women and weaker sections had earlier enjoyed on the village commons. The solution lies in reservations (with some

¹⁶ Sengupta (2001) reports how one young district collector tried to revive the *goam* in order to escape the corruption and delays that occurred when a contractor was used for construction jobs. He discovered the *goam* worked much better and faster. Normally, during the course of a *goam* there are side entertainments in and a relaxed festive atmosphere prevails since more volunteers appear than required.

¹⁷ See Chattopadhyay and Duflo (2004). This view is contested with allegations that women heads and representatives just serve as dummies for controlling male interests.

minimal qualifications or training), a stronger awareness of rights, and legal backing for those rights. Awareness has been rising and NGOs continue to contribute to it. Sengupta (2001) documents that caste demands for equality had already been felt after independence and were part of the pressure on earlier styles of village cooperation, which had been led by the elite. But cooperation still worked as the elites gave the lower castes the greater respect they wanted. Legal rights and reservations would further bolster the respect.

Chandrashekar (2005) argues that relying on NGOs for watershed development and monitoring has raised the cost. Many NGOs have come up only to utilize the funds made available for such purposes. So local responsibility and social audits through *gram sabhas* or *sansads* (village voter bodies) is a better option, unless the NGOs are local, such as self-help groups. The NREG Bill mentions such audits. But are they feasible?

Although village self-government was mentioned in the constitution, it was left to the states to implement it. Only after the late 70s did non-Congress governments in West Bengal, Kerala and Karnataka take steps to empower *panchayats*, holding elections every five years for the *gram panchayat* or village council. Where the system worked well, there was devolution of funds to the *panchayat* for local public works and poverty-alleviation schemes. This led to a large reduction in costs and leakages. The elected body was able to exercise control over the local administration.

The 73rd amendment to the Indian constitution in 1993 extended *panchayati raj* to the entire country, established procedures and a three tier structure, mandated proportional representation for weaker sections and reserved one-third of the seats for women. Formal accountability of the *panchayats* to the people was extended beyond just the five yearly elections, since the *panchayat* had to report to the annual *gram sabha* and the six-monthly *gram sansad*. The latter, constituency level meetings of about 700 voters, were to examine the progress of existing programmes, suggest new ones, chose beneficiaries, inspect accounts and budgets. The meetings and their recommendations had a legal

status¹⁸. Such meetings are being held in West Bengal, for example, since 1998. But the system has yet to become fully functional in many states. Even in states such as West Bengal, where *panchayats* have been functioning for the longest time, they tend to be dominated by males; *sansad* meetings are thinly attended with only party workers and beneficiaries of the schemes attending; they are dominated by the CPM, the party in power in the state; devolution of funds from the state government to the *panchayats* is not satisfactory; although central government funds are devolved, bureaucrats retain control; the *panchayats* raise hardly any money themselves through user charges or local taxes so there is no incentive to use money efficiently; coordination between different plans, technical expertise, and creation of durable assets is poor. The better off complain that the focus is on welfare schemes and not on public projects; this is a major reason they do not participate.

Kerala has had relatively more success with its people plans of the late nineties; competition among political parties was an important motivating factor in organizing them. But in Karnataka, where *panchayati raj* was not preceded by a re-distribution of land, rural elites have tended to capture the *panchayats*, although the newer reservation policies are making a difference. The most successful *panchayats* were those where leaders pushed for inclusive programmes that created assets. But since true empowerment encouraged voting based on performance, outcomes became uncertain, explaining the reluctance often observed to fully empower (Ghatak and Ghatak, 2002).

This experience suggests that *gram sansads* have a vital role in enforcing local accountability through monitoring and social audit. Their weaknesses in technical knowledge, project quality and coordination should be bolstered by the local bureaucrat. He should play a coordinating role, provide technical expertise (through use of consultants if necessary), knowledge of best practices (Jain, 2005) encouraging competition and convergence to best practices across villages, implement professional management accounting and information systems. Our analysis below suggests that

¹⁸ As Tirole (1994) suggests, advocacy by different groups reveals valuable information for a decision-maker.

giving him incentives for creation of assets and technical expertise would implement the best task allocation. The reduction in discretionary power with the bureaucrat, following universal targeting, will also reduce corruption.

Since some local empowerment helps build grass roots support for political parties, they are motivated to provide it; but too much forces them to become more accountable therefore they tend to limit it. Political competition, combined with the push from NGOs and increased public awareness, explains why political parties are supporting local self-government and the EGA has been legislated. Politicians are being forced to accept more checks on themselves. Although *panchayats* have not been fully empowered in many states, and even elections are not held, the funds available under the EGA and competition among states form a strong incentive to get *panchayats* functioning.

3. The Analytical Framework

How do voters, who are the principals, extract the best work from their agents, the politicians and bureaucrats, each of whom has his own objectives? Just relying on their sense of duty has not proved sufficient, although duty is undoubtedly a motivator. In the analysis here, we go to the opposite extreme, and neglect any contribution from a sense of duty, since the latter could not save Indian public servants from a system with corrupting incentives. Beginning with a very general framework, based on Alesina and Tabellini (2004), we add details, step-by-step, relevant to analyze the operation of the EGS.

A policy outcome y is determined by the effort a of a public servant, his random ability, $\theta \sim N(\bar{\theta}, \sigma_\theta^2)$ and finance available f . The three are additive. The public servant could be a bureaucrat B, or a politician P.

$$y = \theta + a + f \tag{1}$$

Citizens get utility from the policy outcome according to a simple linear, well-behaved utility function, $U(y) = y$.

The public servant's cost, $C(a)$, is strictly convex and increasing in effort:

$$C_a > 0, C_{aa} > 0$$

He gets reward for effort, R , and maximizes own utility:

$$R(a) - C(a) \quad (2)$$

In the EGS, the policy outcome has two components, the first is y_1 or employment creation, the second is asset creation resulting from the employment, y_2 . Using employment to create durable assets requires some effort a_2 additional to the effort required to give jobs, a_1 . The two policy outcomes are now determined by:

$$y_1 = \theta + a_1 + f_1 \quad (3)$$

$$y_2 = \theta + a_1 + a_2 + f \quad (4)$$

The strictly convex cost functions, $C(a_1)$, $C(a_1 + a_2)$, have:

$$C_a > 0, C_{aa} > 0, C(0 + a_2) = 0, C(a_1 + 0) = 0.$$

The equalities follow since both a_1 and a_2 are necessary to produce y_2 . Also y_1 and y_2 add up to give the full policy outcome y , that is, $y = y_1 + y_2$. Also financing requirements for y_2 include but exceed those for y_1 , that is, $f > f_1$. The timing is as follows: first, in framing an EGA, society allocates tasks to the B or the P. Second, the public servant chooses effort before knowing his ability, θ . Third, nature chooses θ and outcomes are observed. Finally, the reward is paid. Since the principals can only observe the outcome y , not its composition between effort and ability, the agent's reward is based on y .

The Politician: If the public servant is a politician, his reward is getting re-elected, and for this to happen y must exceed some threshold W . If the benefits of holding office are normalized to 1, these returns equal the probability that y exceeds the threshold W , which in turn equals the probability that ability, given effort, is higher than the level required to achieve W .

$$R^p(a) = \Pr(y \geq W) = 1 - \Pr(\theta \leq W - a - f) \quad (5)$$

The threshold W is determined by the alternative available to voters. Since they are rational, they know the alternative is electing another politician of average ability ($\bar{\theta}$ denotes average ability), who can be expected in equilibrium to put in the same amount of effort as the current politician. Therefore:

$$W = \bar{\theta} + a^e + f^e \quad (6)$$

The politician maximizes,

$$\underset{a}{\text{Max}} 1 - \Pr(\theta \leq \bar{\theta} + a^e + f^e - a - f) - C(a)$$

to obtain the first order condition, FOC, (7), which implicitly determines his equilibrium effort, a^p .

$$n(\bar{\theta}) = C_a(a^p) \quad (7)$$

Where the density of the normal distribution of θ , evaluated at its mean, is $n(\bar{\theta}) = 1/\sigma_\theta \sqrt{2\pi}$.

So far we have ignored f . It plays a role as we bring in a distinction between a central (denoted by subscript C) and a local level (L) politician. Performance y , now differs if the task is managed by a central or a local politician. We also introduce imperfect monitoring, so that performance is not perfectly observable. The noise terms $\varepsilon_L \sim N(0, \sigma_{\varepsilon_L}^2)$, $\varepsilon_C \sim N(0, \sigma_{\varepsilon_C}^2)$ are uncorrelated with θ , and noise is higher with the distant politician so that $\sigma_{\varepsilon_C}^2 > \sigma_{\varepsilon_L}^2$.

$$y_L = \theta + \varepsilon_L + a + f \quad (8)$$

$$y_C = \theta + \varepsilon_C + a + f \quad (9)$$

The politician's maximand is the same, but now the $\Pr(y \geq W)$ is computed from a distribution with a higher variance so the FOC becomes:

$$n(\bar{\theta}, 0) = C_a(a^p) \quad (10)$$

where the density of the random variable $\theta + \varepsilon$,

$$n(\bar{\theta}, 0) = 1/\left(\sqrt{\sigma_\theta^2 + \sigma_\varepsilon^2} \sqrt{2\pi}\right) \quad (11)$$

is evaluated at the mean of both θ and the two ε s (the mean is 0 for both). But since $\sigma_{\varepsilon_C} > \sigma_{\varepsilon_L}$ it follows that:

$$C_a(a^{pc}) < C_a(a^{pl}) \quad (12)$$

Since audit reports and budgets make it possible to observe financing f made available, the financing can be delegated to the central politician, who may build in a small percentage contribution by local politicians to improve their monitoring incentives. From

now on we drop f to save notation, since we focus on the local bureaucrat and politician. We assume that an EGS scheme will not be launched in a district unless finances are secured, and a focus on manual labour will ensure f_l accounts for the major share of f . In the NREGS f_l is 60 percent¹⁹.

A *panchayat* member is the politician now relevant for us. The analysis so far can be summarized in Result 1:

Result 1: *The central politician will put in less effort compared to the local politician, since it is more difficult to monitor the performance of the former. Under imperfect monitoring, welfare would be maximized if the task is delegated to the local politician. A specific observable function such as financing can be allocated to the central politician.*

The bureaucrat: Next we examine the role of the bureaucrat. In the literature the B is thought to be motivated by career concerns. But in the Indian context we have seen his career depends on the politician so that he seeks to please the politician and his objective function, maximization and effort will be identical to that of the politician²⁰.

What are the ways of breaking this link? If it were possible to write an optimal contract between the principals and the B who is the agent, the contract would just satisfy the B's participation constraint (13) at $\bar{\theta}$, and pay him a fixed amount that would generate the first best level of effort a^* in (14).

$$E(R(y)) - C(a) \geq 0 \quad (13)$$

$$E(R(y)) = C(a^*) \quad (14)$$

Paying the bureaucrat an incentive r based on expected outcome Ey , may leave the B with some rent, but would move his effort closer to a^* , assuming that $\bar{\theta} \geq C(a^*)$. Consider his optimization if he is paid such an incentive:

¹⁹ A dynamic extension of the analysis can show that although $f > f_l$, total financing requirement as a percentage of GDP will fall over time if the durable assets created raise productivity and GDP.

²⁰ This would be the state level politician for bureaucrats involved in the EGA. But the re-election objective of the state politician would be similar to that of the local politician; the state politician also has to win in the village constituency.

$$R^B(a) = r E y \quad (15)$$

$$\underset{a}{Max} rEy - C(a) \quad (16)$$

With r normalized to unity, the outcome is $1 = C_a(a^*)$, which is the same as the optimal contract. In this simple case the outcome is equivalent to the optimal contract since the derivative of expected outcome with respect to effort is unity.

Next we distinguish between employment creation y_1 , and asset creation y_2 . The objective function is now (17), which B maximizes with respect to a_1 and a_2 , leading to the FOCs (18) and (19):

$$rE(2\theta + 2a_1 + a_2) - C(a_1) - C(a_1 + a_2) \quad (17)$$

$$2r = C_{a_1}(a_1^B) \quad (18)$$

$$r = C_{a_2}(a_1^B + a_2^B) \quad (19)$$

In this case the B puts double effort on employment creation. The result is intuitive since he can produce more y_1 for the same effort compared to y_2 , and thus get more reward by increasing a_1 relative to a_2 . The incentive payment is equivalent to a pure career concern model where the bureaucrat is concerned about the assessment made of his ability. If the reward depends on assessment of ability conditional on performance $y = y_1 + y_2$, the FOC is computed with respect to effort taking as given expected effort a^e . Next the equilibrium requirement $a = a^e$ is imposed for each of y_1 and y_2 . Equilibrium efforts obtained (21) and (22) are identical to (18) and (19), with r normalized to unity.

$$R^B(a) = E(E(\theta|y)) = E(y - a^e) = E(2\theta + 2a_1 - 2a_1^e + a_2 - a_2^e) \quad (20)$$

$$2 = C_{a_1}(a_1^B) \quad (21)$$

$$1 = C_{a_2}(a_1^B + a_2^B) \quad (22)$$

3.1 Comparing the bureaucrat and the politician

Now consider the politician's maximization when we distinguish between the two tasks, y_1 and y_2 . The FOC (25), attained through a process of reasoning similar to that earlier for

(7) shows that he will put equal effort on the two tasks, working harder than when he had only one task.

$$R^p(a) = \Pr(y \geq W) = 1 - \Pr(2\theta \leq W - 2a_1 + a_2) \quad (23)$$

$$W = 2\bar{\theta} + 2a_1^e + a_2^e \quad (24)$$

$$n(2\bar{\theta}) = \frac{2}{\sigma_\theta \sqrt{2\pi}} = C_{a_1}(a^p) = C_{a_2}(a_1^p + a_2^p) \quad (25)$$

The difference in results from the bureaucrat arises because both a_1 and a_2 affect the threshold.

If however, election occurs before y_2 is observed, so that P's chances of re-election depend only on y_1 , he will put zero effort on y_2 . Since rational voters expect all politicians to neglect y_2 , $W = \bar{\theta} + a_1^e$ and the FOC valid for this case, obtained by maximizing (26) is (27). If a_2 gives fruits only after elections $a_2^p = 0$; the politician puts zero effort on the long-term task.

$$R_p(a) = \Pr(y_1 \geq W) = 1 - \Pr(\theta \leq W - a_1^e) \quad (26)$$

$$n(\bar{\theta}) = \frac{1}{\sigma_\theta \sqrt{2\pi}} = C_{a_1}(a_1^p) \quad (27)$$

If some fraction α of y_2 is observed prior to the election, the equilibrium a_2^p is given implicitly by FOC (28). It is positive but less than a_1^p

$$n(2\bar{\theta}) = \frac{\alpha}{\sigma_\theta \sqrt{2\pi}} = C_{a_2}(a_1^p + a_2^p) \quad (28)$$

Since the major benefits of durable assets are observed over a longer time horizon, P may be expected to neglect them.

These results are summarized below:

Result 2: *When there are two tasks, one requiring higher effort, a bureaucrat motivated by career concerns will devote less effort to this task. A politician motivated by re-election will, however, devote equal effort to the two tasks and will work harder given*

more tasks. If the outcome of one of the tasks is, however, observed only after elections, he will devote low or zero effort to this long-term task.

If the distribution of y matters for re-election, but the politician needs only to please a majority for re-election, how would he distribute y among three sets of voters?

$$y = \theta + a = c_1 + c_2 + c_3 \quad (29)$$

If he gave $y/2$ to two voters and zero to the third, his reward would be:

$$R^p(a) = \Pr(y/2 \geq W) \quad (30)$$

Voters expect the incumbent to follow the above policy if re-elected but the opponent if elected follows an unknown redistribution so each voter expects one-third. Then the threshold the politician has to cross is²¹:

$$W = 1/3(\bar{\theta} + a^e) \quad (31)$$

The maximization yields the FOC as usual, but the FOC now implies less equilibrium effort from the politician.

$$\text{Max}_a \Pr\left(y/2 \geq \frac{1}{3}(\bar{\theta} + a^e)\right) - C(a) \quad (32)$$

$$n\left(\frac{2\bar{\theta} - a^p}{3}\right) = C_a(a^p) \quad (33)$$

Since the poor in rural India are about one-third of the population, combined with his short-term perspective, the politician, would produce y_1 and one-third of y_2 , and put in less effort compared to (7). Such reasoning explains why α could be a fraction (here $\alpha = 1/3$).

Result 3: *If a task involves redistribution, the politician will give only to the proportion of voters necessary for re-election, and put in less equilibrium effort as a consequence.*

²¹ If $W = \left(\frac{\bar{\theta} + a^e}{2}\right)$ then there is no change in the earlier result. FOC (7) continues to be valid.

Since the politician would neglect assets can the bureaucrat be made to attend to these despite Result 2?

Incentive on the long-term task: It is possible to assign to the bureaucrat weight on tasks as in (34):

$$y = \delta y_1 + (1 - \delta) y_2 \quad (34)$$

The rewards of the B now are:

$$R^B(a) = E(E(\theta|y)) = E(2\theta + 2\delta a_1 + (1 - \delta)a_2 - 2\delta a_1^e - (1 - \delta)a_2^e) \quad (35)$$

If the weights are set so that $\delta = 0$, the B will focus on his mandate, since that signals his ability or gives him his incentive payment²². The incentive can be based on y_2 observed. As usual, we do the maximization, taking expectations as given, and then impose the equilibrium requirement that expected effort equals actual effort, to get the FOC (34). In this case since a_1 is necessary for y_2 , so y_1 is also accomplished, with the B allocating equal effort to both.

$$1 = C_{a_1}(a_1^\beta) = C_{a_2}(a_1^\beta + a_2^\beta) \quad (36)$$

Therefore employment producing durable assets lends itself to a simple and effective incentive structure.

Uncertainty in skill: Introducing imperfect monitoring captured as before by a noise parameter ε with $\varepsilon \sim N(0, \sigma_\varepsilon^2)$, and a large variation in ability of the B, the reward for the B becomes:

$$R^B(a) = E(E(\theta|y)) = \bar{\theta} + \beta E(\theta + \varepsilon + a - a^e - \bar{\theta}) \quad (37)$$

where β is the signal to noise ratio which now discounts the perception of ability.

$$\beta = \sigma_\theta^2 / (\sigma_\theta^2 + \sigma_\varepsilon^2) < 1 \quad (38)$$

A high variance of θ , increases the signal to noise ratio, in this signal extraction problem. Since β is higher, so is the equilibrium effort of the B. The latter is given by the FOC

²² A clear incentive has large effects. The managing director of an oil public sector undertaking (PSU) told me in 2003, that corporate governance had improved in PSUs although the board remained friendly and non-threatening, simply because they now had to give targets in writing. Thus a clear time line of outputs and inputs required for y_2 can be detailed.

(39). The B works harder since his reward is a linear function of expected ability, conditional on performance. He fully internalizes the effect of higher expected ability on his reward. If the B is risk neutral (as we have assumed) the reward function is linear. If he is risk averse, so that his marginal utility is convex, he would put in even more effort if θ is more uncertain.

$$\beta = C_a(a^B) \quad (39)$$

In rural India, there is high variation in officials' ability, and low incomes make them risk averse, so that an incentive conditional on expected ability would induce more effort. Since variation in ability required to create high quality durable assets is even higher, putting this as the B's mandate, will induce even higher effort. It would encourage healthy competition among B's to demonstrate their skills, and mitigate the decay in abilities that has come from pleasing politicians rather than doing a good job.

Result 4: *If inputs in the long-term task build on inputs in the short-term task, putting the latter as the bureaucrat's objective will ensure the completion of both, since effort must be allocated to the short-term task in order to achieve the long-term task. If the long-term task requires more skill, and there is high variation in the distribution of skill, the bureaucrat will work harder.*

Mitigating leakages: Since corruption, or siphoning off payments meant for the poor, is a pervasive feature of state welfare schemes, we next consider how this can be reduced. The corruption in India currently occurs in a situation where the B shares the P's objective function (and shares in payoffs he arranges for the P). Giving the B an effective independent objective function will lower this type of leakage, since ability and incentives will become more important for him. Therefore we concentrate on analyzing the reduction in political corruption.

The P continues to be concerned about re-election, so he extracts e from government schemes since e (more funds available) increases chances of re-election through the function H , which increases at a decreasing rate:

$$H(0) = 0, H_e > 0, H_{ee} < 0$$

Transaction costs in corrupt schemes are $0 < \phi < 1$, so that what the P nets from e is $(1 - \phi)e$. The probability of getting caught is given by $q(e)$. This function is convex, increasing at an increasing rate since the chances of getting caught are higher for larger extraction e .

$$q(0) = 0, q_e > 0, q_{ee} > 0$$

The timing is that given the politician's control over the EGS or welfare task, and the functions q and H , he decides extraction and effort. Then nature chooses the realization of θ , and finally rewards are obtained. Since more funds increase the incumbent's chance of winning elections H reduces voters' reservation utility or threshold W , so that $W = \bar{\theta} + a^e - H(e)$. Since other politicians are rationally expected to be as corrupt q does not enter W .

Therefore the reward P maximizes is:

$$\underset{a, e}{Max} R(y) + e(1 - \phi) - C(a) \quad (40)$$

$$R(y) = \Pr(y \geq W - a + q(e)) \quad (41)$$

And the FOC with reference to a is:

$$n(\bar{\theta} - H(e) + q(e)) = C(a^p) \quad (42)$$

With reference to e it is:

$$n(\bar{\theta} - H(e^p) + q(e^p))(H_e(e^p) - q_e(e^p)) + (1 - \phi) = 0 \quad (43)$$

This can be written as:

$$\frac{1 - \phi}{n(\bar{\theta} - H(e^p) + q(e^p))} = q_e(e^p) - H_e(e^p) \quad (44)$$

Figure 1 which graphs (44) gives equilibrium extraction e^p . It demonstrates that e^p can be lowered by proportionally shifting up the convex q function, or shifting down the concave H function, or making the curves flatter at a low e or increasing transaction costs ϕ , since ab in the figure equals $1 - \phi$. Transparency in muster rolls, good account keeping,

and social audits by the local community will change the q function as required, and raise \emptyset ; there will be a high probability of being caught even for small extraction, and the transaction costs of siphoning off funds will rise. If election funding reform makes adequate legal money available for elections the productivity of e in financing elections will fall; a rise in the value of performance, reputation, and probity can all change the H function. As norms become stricter, the curves may not intersect at all, and e gets driven to zero.

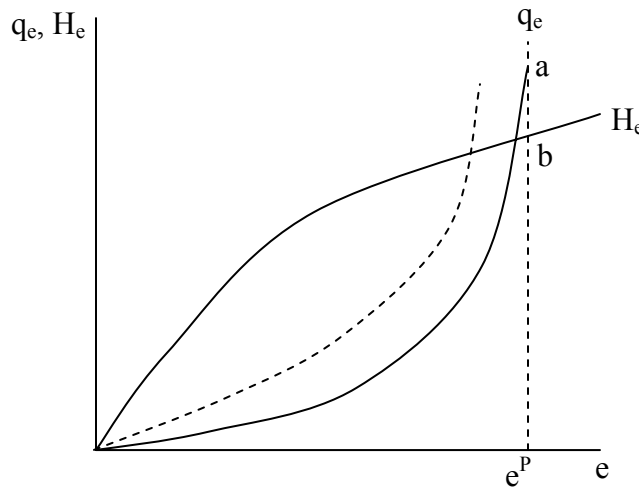


Figure 1: Equilibrium levels of extraction by the politician

Result 5: *Giving the bureaucrat an objective function independent of the politician will reduce corruption. So will making illegal funds less productive in financing elections, increasing the transaction costs of siphoning off funds, and the probability of being caught and making it more sensitive to the siphoning.*

The EGA has built in features that will change the q function, and if the scheme is successful, and norms become tighter, the H function should also be affected over time.

Conclusion

The EGA makes a distinction between central and local politicians, and by making the latter the implementing authority, and increasing transparency and local accountability, may improve delivery. The bureaucrats can compensate for the lack of skills at local

decentralized levels, if their incentives are focused on the production of high quality durable assets that improve water availability in villages. This will aid revival of local self-government which will make more local resources available for the task, and reduce waste in their utilization. The improvement in rural public goods availability will give everyone an incentive to contribute and participate; the latter will not be limited, as it is at present, to the beneficiaries and the vultures of state welfare schemes.

Of course, many other features are required to make EGS a success, but most of these are built in, and others will follow, once the basic allocation of tasks between the politicians and the bureaucrat sets the right incentives for players to compete at only those margins that induce growing productivity, and for government to provide public goods but limit the authority and discretion of government and of individual actors within government²³.

The political-bureaucratic nexus in India after independence perverted these incentives, but more openness, greater awareness of the electorate, NGO and judicial activism, and political competition is forcing them to change. As the proportion of poor shrink politicians cannot win elections based on consumption subsidies for that shrinking minority; they have to provide more public goods that have wider benefits. The EGS has the unique potential to provide unemployment insurance for the poor, yet stimulate more active production of rural public goods. This paper argues that this feature makes it possible to provide the strong incentives for bureaucrats that help realize the potential.

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²³ North (2005) puts these two as necessary factors for growth in any country.

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