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IS A DECENTRALIZED RIGHT-TO-WORK POLICY FEASIBLE?

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Is a Decentralized Right-to-Work Policy Feasible? Martin Ravallion NBER Working Paper No. 25687 March 2019 JEL No. H53,I38,O12

ABSTRACT

Evidence on the implementation of India's National Rural Employment Guarantee Act suggests that the available work is often rationed by local leaders in poor areas, and that this is an important factor limiting the scheme's impact on poverty. The paper offers explanations for this empirical finding, with likely relevance to other decentralized, rights-based, programs. It is shown that rationing of work opportunities can arise under decentralized implementation in poor places even when the center wants to honor the employment guarantee. Two main drivers of such rationing are identified: local administrative costs and local corruption. Administrative reforms by the center can have perverse effects. Policy implications are drawn for how to better assure that the stipulated rights are attained in practice.

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1. Introduction

The idea of using workfare to help implement a "right-to-work" (RTW) policy has surfaced often in the history of social policy. For example, in the last few years of his life, Dr. Martin Luther King Jr. turned his attention from civil rights to poverty in America, where he saw high unemployment among poor families. King's response was that "We need an Economic Bill of Rights. This would guarantee a job to all people who want work and are able to work" (quoted by Myers-Lipton, 2015, p. xv). This was clearly an instrumental case for RTW, in which ending poverty was seen as the overarching goal.² The idea of a Federal Jobs Guarantee has re-surfaced recently in the US (Paul et al., 2017).

RTW has also been influential in India, where the idea took the form of "Employment Guarantee Schemes." An influential early example is the Maharashtra Employment Guarantee Scheme (MEGS), started in 1973 in response to the threat of famine. The idea was scaled up to the national level in 2005 in the form of the Mahatma Gandhi National Rural Employment Guarantee Act (NREGA for short), which is clearly the largest workfare scheme in the world. NREGA promises 100 days of work per household per year, on demand, to all adults willing to supply unskilled manual labor to labor-intensive public works projects. The projects are mostly for water conservation/harvesting, drought protection, irrigation, roads and sanitation. The work is to be paid at the statutory minimum wage rate notified for the program, and workers are to be paid within 15 days of doing the work. If the work demanded cannot be provided then an unemployment allowance is to be paid by the state government. Compared to MEGS, NREGA gives a more important role to local (including village-level) officials in implementation.

Rights-based ideas about distributive justice have had a long history (Fleischacker, 2004; Ravallion, 2016, Part 1). It is a superficially attractive idea to create new legal rights for things that matter to poor people, such as work, to help reduce poverty. However, will these rights be respected in practice? The same factors that made some people poor in the first place may well operate to undermine attempts to expand their effective rights. This paper addresses that question in the context of India's employment guarantee schemes.

² For example, Myers-Lipton (2015, p.6) writes that Dr King's proposal "...would provide poor people of all races the money necessary to pay for housing, food, transportation and health care." Earlier (pre-King) RTW proposals by Presidents Franklin D. Roosevelt (FDR) and Harry Truman, and later discussions around the Humphrey-Hawkins Full Employment Act (influenced by King's proposals) passed under President Jimmy Carter also made a case for RTW as an anti-poverty policy (Myers-Lipton, 2015, Chapter 1).

The following section discusses the arguments in favor of using workfare to implement RTW. Section 3 reviews evidence indicating that the RTW in India is not being realized in general through the country's employment guarantee schemes, especially in poor places. The key issue addressed by the paper is whether it is feasible in practice to guarantee employment with decentralized implementation in poor places. Sections 4 and 5 take up that issue and outline two reasons—based on administrative costs and corruption (respectively) why RTW may not be attainable in such a setting. Section 6 concludes.

2. The potential benefits of a right-to-work

In principle, a workfare scheme can directly serve longer-term development goals by generating assets that could improve the wealth distribution, or shift production functions to permit higher returns to existing assets. The assets could be of direct benefit to poor people, or of indirect benefit, such as through the revenue implications of using the scheme to produce taxable gains to non-poor people.

However, in practice, workfare schemes in India have primarily been seen as shortterm palliatives against poverty. Indeed, one often hears anecdotes that NREGA assets are mostly worthless; certainly, "NREGA roads" have a bad reputation in rural India, often washed away in each monsoon, though this is a questionable stereotype (Verma, 2011; Narayanan et al., 2015).³

Workfare is a member of a class of policies that apply behavioral conditions for participation. In the case of workfare, that condition is the work requirement.⁴ In workfare, the cost of compliance with the conditions tends to rise with income from other sources, which yields the classic "self-targeting" feature (Ravallion, 1991; Besley and Coate, 1992). As long as the workfare wage rate is not too high, the non-poor will not seek relief and participants will have an incentive to take up other work when it becomes available. Screening is achieved without explicit targeting. This has long been an important reason for imposing work requirements in settings with limited information about who is in need. The self-targeting aspect does not depend crucially on whether RTW is attainable.

³ There is a trade-off here; durable asset creation in workfare tends to make the program less labor intensive, with lower impact on current poverty. For further discussion of this trade off and its implications see Ravallion (1999). A review of the evidence on asset creation in NREGA can be found in Ravallion (2019).

⁴ Another example of this class of policies is the Conditional Cash Transfer (CCT), which requires that the children of recipients attend school and (in some cases) comply with health-care requirements. CCTs have emerged in a number of developing countries, following early examples such as the *Food-for-Education* (FFE) program in Bangladesh and the *PROGRESA* program (renamed *Oportunidades* and most recently *Prospera*) in Mexico. Fiszbein and Schady (2010) review the literature on CCTs.

However, other arguments made for workfare depend on the ability to implement the RTW goal. A true RTW policy can provide <u>insurance</u> in settings in which risk markets are imperfect or non-existent. A shock induces participation, which falls in the recovery period. The empirical relationship between rainfall and participation in the MEGS is suggestive of this insurance function, at least in the period in which job guarantee appears to have been honored (Ravallion et al., 1993).

RTW implemented through workfare can also have general equilibrium effects in supporting a floor to the wage rates for labor generally, including in sectors of the economy where work is not in fact guaranteed (Ravallion, 1990). Indeed, India's various employment guarantees can be thought of as means of implementing a minimum wage rate in settings in which this is not otherwise enforceable. As long as work is available when wanted, and labor markets are reasonably competitive, the workfare wage provides a floor to all wages. There is some evidence that states of India where NREGA has worked better (such as in providing work on demand) have seen wage gains (Imbert and Papp, 2015).

The potential benefits of implementing RTW through workfare must be balanced against the costs, most notably those generated by the work requirement. There are administrative costs, including supervision on worksites and any non-labor inputs. These costs are more visible than other costs that are no less important for a complete evaluation. While workfare participants may well be underemployed otherwise, they will rarely be idle, especially if poor, as their survival may then be in jeopardy. Poor households can be expected to behave in ways that attenuate forgone income, such as through the intra-household allocation of work, as shown by Datt and Ravallion (1994) for Maharashtra. However, there will typically be some forgone income for participants even when there is widespread underemployment. Dutta et al. (2014) find that workers on NREGA in Bihar had to give up work days equivalent to 40-45% of the total NREGA employment received.⁵ There are also costs of supervising the labor and providing any materials needed. The costs will undoubtedly vary from one setting or time to another, with implications for the policy choice and program design (Ravallion, 1999).

In an early assessment, Ravallion and Datt (1995) found that, once one takes account of all the costs involved, the labor earnings from the original Maharashtra scheme are unlikely to have had a higher impact on current poverty than a universal basic income (UBI).⁶

⁵ Other evidence on forgone incomes in workfare programs can be found in Datt and Ravallion (1994) (for

Maharashtra India) and Jalan and Ravallion (2003) and Ravallion et al. (2005) (both for Argentina).

⁶ For further discussion of this policy option see Ravallion (2019).

The same conclusion was reached by Murgai et al. (2016) who found that NREGA in Bihar does not have a higher poverty impact than a revenue-neutral UBI. The potential of NREGA is great; Dutta et al. (2014) estimate that if the scheme worked as its designers intended then it would reduce the rural poverty rate in Bihar by at least 14% points (from 50% to 36%). In reality, however, the impact was around a 1% point drop in the poverty rate—about what a UBI could do with the same budget. Both these studies for India found that the self-targeting feature worked well. The poor performance stemmed instead from: (i) the failure to assure that everyone who wanted work could get it, and be paid in a timely way; and (ii) the costs incurred by both recipients and the government in supervision and implementation (including corruption). The results of Dutta et al. (2014) suggest that (i) is the dominant factor reducing performance against poverty relative to the scheme's potential. So the following discussion will focus on this.

There has been some research on how NREGA performance might be improved, suggesting the scope for higher benefits to participating workers, at least in states where the scheme already works reasonably well, such as Andhra Pradesh (AP).⁷ Muralidharan et al. (2018) found that the use of biometric "smartcards" to facilitate NREGA payments to workers in AP increased their earnings, and the benefits also spilled over in the form of higher wages for non-NREGA workers. In a state such as Bihar, where the scheme is not thought to be working as well as (say) AP, the evidence is more mixed. Ravallion et al. (2015) found that a randomized information intervention at village level in Bihar led to higher NREGA wages for illiterate participating workers, but not for other workers, and there was little sign of other gains such as in access to NREGA jobs on demand. Similarly, in a large field-experiment in Bihar that improving administrative processes for NREGA, Banerjee et al. (2016) found that corruption was reduced but there was little increase in the wages and employment of workers.

3. Rationing of work on India's Employment Guarantee Schemes

Many of the potential benefits from using workfare to implement RTW (as discussed in the previous section) require that people can get this work when they need it. The guarantee of work at a stipulated wage rate can be interpreted as a means of implementing a "living wage" as a labor-market equilibrium in settings in which that is not enforceable as a

⁷ A good measure of state-level performance of NREGA is the rationing rate—the share of rural households who wanted work on the scheme but did not get it (Dutta et al., 2012). The rationing rate in AP in 2010 was 25% as compared to 44% nationally. By contrast, the rationing rate in Bihar was 79%.

legal mandate. Then the general equilibrium effects could be large. The guarantee also promises much needed insurance benefits to poor families. But all this begs a key question: Is the guarantee attainable in poor areas?

The administrative records on NREGA indicate virtually no un-met demand for work on the scheme.⁸ This is not believable. What is called "demand for work" in the administrative data is unlikely to reflect the true demand since state and local governments have neither the means not the incentive to identify and report un-met demand. (One reason being that any recorded un-met demand implies that the state government should pay unemployment allowances.)

A better measure of demand for work is obtained by asking people directly, in the privacy of their homes and independently of the scheme. Suitable data for this purpose can be found in the 66th Round of India's National Sample Survey (NSS) for 2009-10. This round included questions on participation and demand for work in NREGA that allow one to estimate demand and rationing rates across states.

This data source reveals extensive rationing. In some states, NREGA appears to conform fairly closely to its designers' intentions, and in those states there may well be larger impacts on wages, and larger insurance benefits.⁹ But that is not the norm in much of India. Using the NSS, Dutta et al. (2012, 2014) find evidence of extensive rationing, as determined by asking survey respondents if they wanted work on NREGA but did not get it. Nationally, Dutta et al. find that 44% of those who wanted NREGA work did not get it. This was confirmed in a more recent independent survey by the National Council of Applied Economic Research (NCAER), which found even greater rationing than suggested by the NSS data (Desai et al., 2015).

The existence of this rationing was not news to those who had studied these schemes in the past. For the original Maharashtra scheme, Ravallion et al. (1993) provide an econometric model of the relationship between monthly employment on MEGS and rainfall, and find a large reduction in employment after a doubling in the MEGS wage rate. This is suggestive that the wage hike led to rationing, which appears to have been mainly achieved by selective opening and closing of MEGS worksites.

⁸ According to the official Government of India website for MGNREGA (http:\\nrega.nic.in), 53 million households in India demanded work in 2009/10, and 99.4% were provided work.

⁹ As noted, the findings of Imbert and Papp (2015) suggest that the scheme has had more impact on casual wages in states with more effective implementation.

Another salient observation about NREGA is that the incidence of rationing tends to be greater in poorer states of India, where the scheme is presumably needed the most. This pattern can be seen in Figure 1, which plots the incidence of rationing (as a proportion of rural households) against the official poverty rate. The share of rural households rationed ranges from an average of about 10% in the least poor states to around one-in-three in the poorest states.¹⁰ There is a variance at any given poverty rate; for example, with about the same poverty rate, Bihar has more rationing than Chhattisgarh. But the tendency for more rationing in poorer states is evident.

A further point of interest is revealed in Figure 2, which plots the NREGA participation rate (share of the state's population of rural households who participate) against demand for NREGA (share of the state-specific population of rural households who want work, some of whom got it while some did not). The scheme only comes into action (in expectation) when demand for work exceeds 17% of rural households (with a standard error of 3%). Thus, while the average participation rate is 0.56, the marginal rate is substantially higher; the regression coefficient is 0.91 (with a robust standard error of 0.09). Rationing appears to be less of a problem at the margin.

The rationing rules found in practice need not work against the interests of poor people. Indeed, there is some evidence that certain groups (such as defined by caste and landlessness) that are associated with above average poverty rates tend to be favored in the local rationing process (Drèze and Khera, 2009; Dutta et al., 2014). Those with the more typical profile of India's rural poor are less likely to be turned away. Possibly local officials strived for "pro-poor" targeting so as to help reduce poverty, although that is not the only explanation as we will see soon. The key point for now is that RTW is not being attained in general.

4. Administrative costs with decentralized implementation

How might this rationing arise? Inadequate funding by the central government is an obvious reason. If the center fixes both the wage rate and the overall budget and the latter is inadequate then rationing is likely. This can also take the form of delays to wage payments, which have been reported in the media.¹¹ This is plainly inconsistent with the objectives of the scheme—to provide NREGA work on demand and pay wages in a timely way.

¹⁰ Expressing the rationing as a % of those wanting work gives higher numbers of course.

¹¹ For example, in 2018 civil society groups in India reported substantial delays to the payment of NREGA workers, apparently stemming from inadequate funds made available from the center (The Hindu, 2018).

Here the focus will be on explanations for local-level rationing when the center is willing to guarantee RTW. The first explanation relates to local costs of implementation using workfare, while the second relates to local corruption, which is taken up in the next section. Both also suggest how rationing might be reduced.

Implementation of national workfare programs is often heavily decentralized. This can be hard to avoid in practice and is seen to foster local-level participation in the choices about what work gets done, with the presumption that this will make for better projects. But this mode of delivery also imposes costs on local implementing agents. Some degree of cost-sharing between the central and local governments is considered desirable for incentive reasons. The center covers a large share of the cost of NREGA, but there are still local costs and these are not always explicit, and are hidden from view in official accounts. Diverting scarce skilled labor in the local-government bureaucracy from other tasks to deal with the center's "red tape" of reporting and approval requests will entail opportunity costs.

Decentralized implementation should be seen in the relevant institutional context. More systematic assessments have supported the anecdotal observations from field work that there is a chronic underinvestment in local state capacity in India, as evident in underresourced and over-worked local bureaucracies (Dasgupta and Kapur, 2017). Also important to the functioning of the scheme at local level is the availability of "brokers" who can be trusted by local leaders to mediate between them and the various stakeholders, including workers but also local officials and landowners (Witsoe, 2012). Local leaders or their close family members often act as money lenders as well as contractors, making advance payments to workers and intervening between the delivery point (often the local post office) and the intended beneficiary.

While it is plausible that the local implementing official incurs a cost per worker employed on the scheme, it is unlikely that the official is indifferent to the amount of unmet demand for work. The local official has the option of not hiring all those who want work, but the official surely does not want to drive employment down to zero. If one is thinking about a local government in a federal system then one can imagine that the local official is either sympathetic with the objectives of the scheme, or that he or she perceives a likely (economic or political) penalty of unmet demand for work. This penalty falls to zero when there is no unmet demand for work but rises with higher unmet demand. It is plausible that the penalty rises more steeply as the excess demand rises; at very high levels of unmet demand the protests may well be vastly greater than at low levels. The local official minimizes the direct

cost plus the penalty attached to rationing. Thus the official sees a trade-off between the cost of employing extra workers under the scheme and the desire to meet the demand for work.

To provide a more formal exposition of this trade-off facing local officials, consider the following model. The central government requests the local government to provide work for all those who want it at the stipulated wage rate. The central government pays the unskilled labor cost (and possibly some other costs). The local official still incurs a cost, and chooses the level of employment *E* to minimize a generalized cost function subject to the constraint that people cannot be forced to work. (All functions are twice differentiable when required.) The demand for work, *D*, is taken as given by the official. The average rationing rate is 1 - E/D while the marginal rate is $1 - \partial E/\partial D$.

The local official's problem is to choose *E* to solve:

$$Min \ cE + p(D - E) \ s.t. \ E \le D \tag{1}$$

where *c* is the unit cost and the function p(.) penalizes the unmet demand for work (as discussed above). It is assumed that the penalty function is strictly increasing and convex with p(0) = 0. Let E^* denote the level of employment such that:

$$p'(D - E^*) = c \tag{2}$$

Inverting (2) we have:

$$E^* = D - f(c) \tag{3}$$

Where f(.) is the inverse function of p'(.). The value of f(c) gives the minimum level of demand for work before the government will begin to hire any workers. It is readily verified that f(c) > 0 and $f'(c) = \frac{1}{p''(c)} > 0$. If there is rationing in equilibrium then it will be in the amount f(c). Above this, the marginal rate of rationing is zero (though that will change when corruption is introduced in the next section).

The local government may comply with the center's request to guarantee employment even though the local government incurs a share of the cost. But the share cannot exceed a critical value. One can distinguish two regimes: In <u>Regime 1</u> we have:

$$c \le c^* \equiv p(f(c))/f(c) \tag{4}$$

Then the local government official will choose to comply with the central dictate to employ all those who want work, noting that (4) implies that the cost of compliance, cD, is no greater than the minimum cost of rationing, $E^* + p(D - E^*)$.

By contrast, in <u>Regime 2</u>, $c > c^*$. Then the unit cost facing the local official is sufficiently high for rationing to emerge in equilibrium, in that the cost of employing E^* workers is less than the cost of employing all those who want work. Then E^* is the official's optimal level of employment to be provided and there will be unmet demand in equilibrium, in that $E^* < D$ with f(c) workers rationed. A reduction in the unit cost will increase employment and reduce the overall rationing rate.

The upshot of this argument is that local costs of implementation imply that rationing can emerge as an equilibrium outcome in a scheme such as NREGA even when the central government makes an open-ended commitment for funding a large share of the cost. Above some critical level of the local unit cost of employment, rationing emerges. However, and importantly for policy, the rationing rate (as a proportion of demand) is likely to be lower at the margin than on average, so the average rate will tend to fall as demand increases.

Reducing local administrative costs (including enhancing the capacity and productivity of local administrators) will make RTW more feasible in this type of scheme. Alternatively, a similar outcome may be possible through some form of results-based payment to implementing agents, whereby the center rewards (verifiable) success in accommodating the demand for work locally. However, we must also consider the scope for corruption and the role of central efforts to fight corruption.

5. Corrupting the right-to-work

The administrative challenges in implementing RTW through workfare come with scope for corruption. It is not too surprising that we often hear in the Indian press about (for example) Bihar's "millionaire Mukhiyas" (Gupta, 2013).¹² Less obviously, as we will see, central governmental efforts to fight corruption can have perverse effects—increasing the amount of rationing and so further undermining RTW. Deeper reforms are needed.

At first glance, corruption is probably not an intuitively obvious reason for rationing. If corrupt officials can skim off their 10% (say) from workfare participants then they will still have an incentive to provide work to all who want it. The model of corruption in a program like NREGA may, however, be more complex than suggested by a fixed-share rule.

One can illustrate this by augmenting the model of decentralized administration in Section 4 to allow for corruption. It is still assumed that local official chooses the level of employment she wants to provide, given an exogenous demand for work on the scheme. There is a pecuniary benefit to the official that naturally depends on the level of employment. We can think of this as the official's cut on the wages paid. But there is also a cost facing the local official. This includes the side-payments that the official must make to cooperating

¹² "Mukhiya" is the local name for village leaders.

agents, and the cost must factor in the risk of getting caught and the penalty then incurred. The total expected cost of corruption rises with the number of workers employed, as this will require opening more work sites and higher payments to "ghost workers," with further side payments required to cooperating workers and officials, and higher risks of exposure. It is also likely that the expected marginal cost of corruption facing the official will rise as employment rises. The local official may have to expand the set of people he bribes beyond his own "comfort zone" of those he trusts, and even those he trusts will face greater risk of exposure at larger scale, and so require higher compensation.

The marginal cost of providing extra employment now includes the expected marginal cost of corruption as well as the local administrative cost already discussed. The ideal level of employment from the perspective of the local official equates the total marginal cost (MC) with the marginal benefit (MB), as illustrated in Figure 3. If this turns out to be less than the number who want work then rationing arises in equilibrium.

To provide a more formal exposition, let us assume that the official can extract an illegal "rent" from NREGA of r per worker employed, but the official faces an expected cost of doing so that depends on the probability of getting caught and the fine incurred (including the cost of jail term in some cases). When the official is "on the take" in a specific NREGA project this is more-or-less observable to those employed on the project. For example, the workers can see that a digging machine had been brought in overnight (against the rules of NREGA) or the workers agree to be "ghost workers," who sign up but do not do any work. Thus, there is a risk of being caught due to local informants. We can imagine that the official has greater trust for some people within the relevant village(s) than others. The level of trust varies across people exogenously according to past socio-economic connections (including caste). Workers can be taken to be otherwise identical, so the official hires the most trusted first among those who want work. At low E the official is among a safe group of highly trusted "friends." However, the marginal effect of hiring extra workers on the probability of getting caught rises sharply at higher levels of employment when the official gets well outside her trusted circle.

In short, we can assume that trustworthiness of *E* workers, and (hence) the probability of getting away with the corrupt activity, is a decreasing concave function of *E*, namely $\tau(E)$, with $\tau'(E) < 0$ and $\tau''(E) < 0$. The expected cost of corruption is $C(E) = [1 - \tau(E)]F$,

where *F* is the fine. The cost is strictly increasing and convex in *E*.¹³ (Notice that C(E) varies with *F*, and that C'(E) is implicitly an increasing function of *F*.)

The problem facing the local official is now:

$$Max (r-c)E - C(E) - p(D-E) \text{ s.t. } E \le D$$
(5)

There can be unmet demand in equilibrium if $E^* < D$, where E^* now equates the illegal rent per worker with the total marginal cost of employing an extra worker:

$$r = C'(E^*) + c - p'(D - E^*)$$
(6)

This is illustrated in Figure 3 where $MB \equiv r$ and $MC \equiv C'(E) + c - p'(D - E)$. Notice that, with this addition to the model, there will now be rationing at the margin, since:

$$0 < \frac{\partial E^*}{\partial D} = \frac{1}{1 + C''(.)/p''(.)} < 1$$
⁽⁷⁾

Suppose now that the central or state government tries to clamp down on local corruption by (*inter alia*) imposing higher fines, or with extra auditing/policing and/or more transparent record keeping, implying a higher probability of being caught. This can be interpreted as a shift in the expected marginal cost of corruption facing the local official. In the "trust" example above, we have $C'(E) = -\tau'(E)F$, which is an increasing function of the fine. Then, for this case, it is readily verified that:

$$\frac{\partial E^*}{\partial F} = \frac{\tau'(E^*)}{p''(.) - \tau''(.)F} < 0 \tag{8}$$

The upshot of these observations is that clamping down on local corruption in a neighborhood of the equilibrium will decrease employment and <u>increase</u> rationing—making RTW harder to attain, as can be seen from the shift in the MC curve in Figure 3. High levels of rationing in poorer states (as in Figure 1) may thus reflect central and state government efforts to clamp down on corruption in poor places.

On combining local administrative costs with corruption we can now understand the ambiguity of partial reform efforts. Note that a reform that simultaneously shifted up C'(E) while reducing the local administrative cost, c, by the same amount would leave E^* unchanged. The benefits to workers of a reform that reduces local administrative costs can evaporate when the reform also increases the expected marginal cost of corruption facing local officials. This offers an interpretation of the Banerjee et al. (2016) finding for Bihar that better administrative processes for NREGA reduced corruption but did little to increase the wages and employment of workers. The reforms in this experiment essentially combined a

¹³ A more general model would allow *r* to be chosen by an official facing a cost of corruption C(E, r). One might assume that $C_r > 0$, $C_{rr} > 0$ and that $0 < C_{rE} < 1$. Then the optimal *r* is an increasing function of E^* .

lower local administrative cost with a higher expected marginal cost of corruption facing local officials. Corruption fell but employment did not change indicating that the rationing largely remained.

There is likely to be heterogeneity in the cost of corruption facing a local official, depending on characteristics of workers. Suppose, for example, that literate and/or highercaste workers are more likely to complain about an official's corrupt rent-seeking efforts, with implications for the probability of the official getting caught. In particular, suppose that the expected MC of corruption is higher for such workers. Then, of course, the official will tend to favor other, more acquiescent, workers in deciding how to assign employment. Thus, one can also understand why Dutta et al. (2014) find that the implicit rationing rules in Bihar's NREGA tended to favor workers with the more typical profile of the poor, and we can understand this finding without believing that the officials are trying to reduce poverty.

6. Conclusions

A "right-to-work" policy implemented through public employment can seem an attractive option when poor people face risky environments, high unemployment rates, the reliable information for targeting is limited, and there is much useful work to do in poor areas. Realizing that potential is another matter. The self-targeting feature is plausible and consistent with the evidence. But it is far from obvious that this will be the best way to reduce poverty—taking freedom from poverty to be the overarching right—once one considers all the costs involved. These include implementation costs, pecuniary costs to the participants in the form of forgone earnings (which can exist even for underemployed workers) and the welfare loss from the work requirement relative to unconditional transfers (Murgai et al., 2016; Alik-Lagrange and Ravallion, 2018).

The paper has reviewed evidence for India suggesting that the country's Employment Guarantee Schemes have been less cost effective in reducing current poverty through the earnings gains to workers than one would expect from even untargeted transfers, as in a UBI. This calculation could switch in favor of workfare schemes if they can produce assets of value (directly or indirectly) to poor people, though the evidence is mixed on this aspect of the schemes so far in India. The Indian experience also suggests diverse performance across states of its Employment Guarantee Schemes. It is worrying that the schemes tend to work less well in poorer states, where they are probably needed more. Arguably that is not too surprising, as the same factors that make a place poor impede efforts to change.

The tries to understand how this happens. It is argued that local rationing of the work opportunities provided by these schemes in poor areas can readily arise from the existence of (often latent) local administrative costs in implementation and from the partial means used by the center to fight local corruption. The main concern with rationing is not that it undermines pro-poor targeting; indeed, that is not implied by the model of local corruption used here, and nor is it consistent with the evidence for India. However, rationing undermines the gains to poor people from the employment guarantee, including its insurance and empowerment benefits. Scaling up may well help; indeed, with local administrative costs, the marginal rationing rate will tend to be lower than the average rate.

With decentralized implementation of the RTW, rationing can emerge in equilibrium given the local costs of employing workers and the scope for corruption. The RTW need not be feasible. Nonetheless, the share of demand that is rationed may well diminish as the scheme expands. The data for India are consistent with the prediction of the theoretical model that the rationing rate at the margin will be less than the average rate. By implication, the insurance and other benefits of the work guarantee will tend to emerge as the scheme expands above some point. Those benefits will also rise if local implementation costs are reduced. However, combining a lower local administrative cost with anti-corruption reforms that increase the expected marginal cost of corruption need not help attain RTW.

The paper has also shown that anti-corruption efforts and administrative reforms from the center can have ambiguous effects on the extent to which RTW can be achieved in practice. Raising the expected marginal cost of corruption facing local officials is likely to reduce the extent to which employment is available to those who need it. Cutting local administrative costs can help, but when this is achieved within a reform that also raises the marginal cost of corruption facing local officials (such as by making record-keeping and reporting more transparent as well as easier) there may be little net gain to workers in terms of attaining RTW. Assuring that local agents do not have the power to ration work would appear to require a deeper local institutional reform. "Social audits"—open village meetings fostering public disclosure of concerns—could help, backed up by credible public procedures for responding to grievances (Dutta et al., 2014).



Figure 1: Incidence of rationing in India's Employment Guarantee Scheme plotted against the poverty rate across states.

Source: India's National Sample Survey 2010.

AP=Andhra Pradesh; HP=Himachal Pradesh; MP=Madhya Pradesh; UP=Uttar Pradesh; WB=West Bengal



Figure 2: There is less sign that workfare jobs are rationed at the margin than on average in India's National Employment Guarantee Scheme

Demand for NREGS (% of rural households wanting work) Source: India's National Sample Survey 2010, via Dutta et al. (2014).





References

- Alik-Lagrange, Arthur, and Martin Ravallion, 2018, "Workfare versus Transfers in Rural India," *World Development* 112: 244-258.
- Banerjee, Abhijit, Esther Duflo, Clement Imbert, Santhosh Mathew, and Rohini Pande (2016), "E-governance, Accountability, and Leakage in Public Programs:
 Experimental Evidence from a Financial Management Reform in India," NBER
 Working Papers 22803, National Bureau of Economic Research.
- Besley, Timothy, and Stephen Coate (1992), "Workfare vs. Welfare: Incentive Arguments for Work Requirements in Poverty Alleviation Programs," *American Economic Review* 82(1): 249–61.
- Dasgupta, Aditya, and Devesh Kapur, 2017, "<u>The Political Economy of Bureaucratic</u> <u>Effectiveness: Evidence from Local Rural Development Officials in India</u>."
- Datt, Gaurav, and Martin Ravallion (1994), "Transfer Benefits from Public-Works Employment," *Economic Journal* 104: 1346-1369.
- Desai, Sonalde, Prem Vashishtha and Omkar Joshi (2015), <u>Mahatma Gandhi National Rural</u> <u>Employment Guarantee Act: A Catalyst for Rural Transformation</u>, New Delhi: National Council of Applied Economic Research.
- Drèze, Jean and Reetika Khera (2011), "Employment Guarantee and the Right to Work," in Reetika Khera (ed.) *The Battle for Employment Guarantee*, New Delhi: Oxford University Press.
- Dutta, Puja, Rinku Murgai, Martin Ravallion and Dominique van de Walle (2012), "Does India's Employment Guarantee Scheme Guarantee Employment?" *Economic and Political Weekly* 48 (April 21): 55-64.

_____, _____, _____and _____(2014), <u>Right to</u>

Work? Assessing India's Employment Guarantee Scheme in Bihar. Washington DC: World Bank.

- Fiszbein, Ariel, and Norbert Schady (2010), Conditional Cash Transfers for Attacking Present and Future Poverty, World Bank, Washington DC.
- Fleischacker, Samuel (2004), *A Short History of Distributive Justice*. Cambridge MA: Harvard University Press.
- Gaiha, Raghav (1997), "Rural Public Works and the Poor: The Case of the Employment Guarantee Scheme in India," in S. Polachek (ed.) *Research in Labour Economics*, Connecticut: JAI Press.

Gupta, Alok (2013), "Millionaire Mukhiyas," Blog Post, Down to Earth.

The Hindi (2018), "99% of MGREGA Wages Remain Unpaid," April 12.

- Imbert, Clement and John Papp (2011), "Estimating Leakages in India's Employment Guarantee," in Reetika Khera (ed.) *The Battle for Employment Guarantee*, New Delhi: Oxford University Press.
- _____, and _____ (2015), "Labor Market Effects of Social Programs: Evidence from India's Employment Guarantee." *American Economic Journal: Applied Economics* 7(2): 233-263.
- Jha, Raghbendra, Sambit Bhattacharyya, Raghav Gaiha and Shylashri Shankar (2009),
 "Capture' of Anti-Poverty Programs: An Analysis of the National Rural Employment Guarantee Program in India," *Journal of Asian Economics* 20(4): 456-464.
- Jha, Raghbendra, Raghav Gaiha, Manoj K. Pandey (2012), "Net Transfer Benefits under India's Rural Employment Guarantee Scheme," *Journal of Policy Modeling* 34(2): 296-311.
- Mansuri, Ghazala, and Vijayendra Rao (2012), *Localizing Development: Does Participation Work?* Washington DC: World Bank.
- Muralidharan, Karthik, Paul Niehaus, and Sandip Sukhtankar (2018), "<u>General Equilibrium</u> <u>Effects of (Improving) Public Employment Programs: Experimental Evidence from</u> <u>India</u>," University of California, San Diago.
- Murgai, Rinku, Martin Ravallion and Dominique van de Walle (2016), "Is Workfare Cost Effective against Poverty in a Poor Labor-Surplus Economy?", *World Bank Economic Review*, 30(3):413-445.
- Myers-Lipton, Scott (2015), Ending Extreme Inequality: An Economic Bill of Rights to Eliminate Poverty. London and New York: Routledge.
- Narayanan, Sudha, Krushna Ranaware, Upasak Das and Ashwini Kulkarni (2015),
 "MGNREGA Works and their Impact: A Study of Maharashtra," *Economic and Political Weekly* 50(13): 53-61.
- Paul, Mark, William Darity Jr., and Darrick Hamilton (2017), "<u>Why we Need a Federal Job</u> <u>Guarantee</u>," Jacobin.
- Ravallion, Martin (1990), "Anti-Hunger Policies in Market Economies: Effects on Wages, Prices and Employment," in Jean Drèze and Amartya Sen (eds), *The Political Economy of Hunger*, Oxford University Press, Oxford.

(1991), "Reaching the Rural Poor through Public Employment:

Arguments, Experience and Lessons from South Asia," *World Bank Research Observer* 6: 153-175.

(1999), "Appraising Workfare," *World Bank Research Observer* 14: 31-48.

(2016), *The Economics of Poverty: History, Measurement and Policy*, Oxford University Press, Oxford and New York.

_____ (2019), "Guaranteed Employment or Guaranteed Income?" *World Development* 115: 209–221.

- Ravallion, Martin, and Gaurav Datt (1995), 'Is Targeting Through a Work Requirement Efficient? Some Evidence for Rural India', in Dominique de Walle, and Kimberly Nead (eds) *Public Spending and the Poor: Theory and Evidence*. Baltimore: Johns Hopkins University Press.
- Ravallion, Martin, Gaurav Datt, and Shubham Chaudhuri (1993), "Does Maharashtra's
 'Employment Guarantee Scheme' Guarantee Employment? Effects of the 1988 Wage Increase," *Economic Development and Cultural Change* 41: 251–75.
- Ravallion, Martin, Emanela Galasso, Teodoro Lazo and Ernesto Philipp (2005), "What Can Ex-participants Reveal about a Program's Impact?" *Journal of Human Resources* 40: 208-230.
- Ravallion, Martin, Dominique van de Walle, Puja Dutta, and Rinku Murgai (2015),"Empowering Poor People through Public Information? Lessons from a Movie in Rural India," *Journal of Public Economics* 132: 13-22.
- Ravi, Shamika, and Monika Engler (2015), "Workfare as an Effective Way to Fight Poverty: The Case of India's NREGA," *World Development* 67: 57-71.

United Nations (UN) (2006), *Right to Work: Article 6 of the International Covenant on Economic, Social and Cultural Rights*, Economic and Social Council, United Nations.

- Verma, Shilp (2011), MGNREGA Assets and Rural Water Security: Synthesis of Field Studies in Bihar, Gujarat, Kerala and Rajasthan, Anand: International Water Management Institute (IWMI).
- Witsoe, Jeffrey (2012), "Everyday Corruption and the Political Mediation of the Indian State," *Economic and Political Weekly* 47(6): 47-54.

World Bank (2011), Poverty and Social Exclusion in India, Washington DC: World Bank.