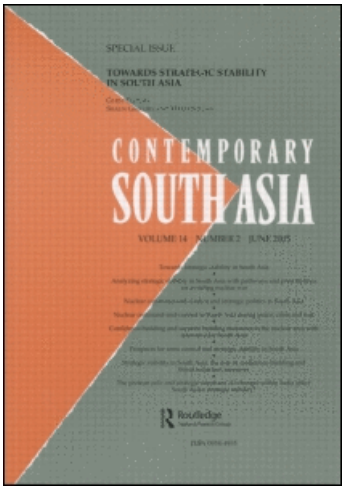

Contemporary South Asia
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713411866

National Rural Employment Guarantee Programme in Andhra Pradesh and Rajasthan: some recent evidence

Raghbendra Jha[a]; Raghav Gaiha[b]; Shylashri Shankar[c]
[a] Research School of Pacific & Asian Studies, Australian National University, Canberra, Australia [b] Faculty of Management Studies, University of Delhi, India [c] Centre for Policy Research, University of Delhi, India

Online publication date: 23 June 2010

To cite this Article Jha, Raghbendra , Gaiha, Raghav and Shankar, Shylashri(2010) 'National Rural Employment Guarantee Programme in Andhra Pradesh and Rajasthan: some recent evidence', Contemporary South Asia, 18: 2, 205 — 213
To link to this Article: DOI: 10.1080/09584930902803231
URL: http://dx.doi.org/10.1080/09584930902803231

Contemporary South Asia
Vol. 18, No. 2, June 2010, 205–213

RESEARCH NOTE

National Rural Employment Guarantee Programme in Andhra Pradesh and Rajasthan: some recent evidence

Raghbendra Jha[a]*, Raghav Gaiha[b] and Shylashri Shankar[c]

[a]*Research School of Pacific & Asian Studies, Australian National University, Canberra, Australia;* [b]*Faculty of Management Studies, University of Delhi, India;* [c]*Centre for Policy Research, University of Delhi, India*

This paper presents results on the participation of rural workers in the National Rural Employment Guarantee Programme based on a pilot survey of three villages in the Chittoor district, Andhra Pradesh (AP), India. These villages are Kaligiri, Obulayyapale and Reddivaripalle, and they were surveyed in December 2007. In contrast to an earlier study of ours on Rajasthan, Scheduled Castes (SCs) and Scheduled Tribes (STs) participated in higher numbers in AP, but in both states these groups participated for slightly lower spells than the residual group of 'Others'. We find that AP performed better than Rajasthan in terms of targeting poorer caste and income groups such as SCs, STs and landless households. The number of days worked on average was much higher than suggested by other assessments. Our econometric analysis further reinforces the view that disadvantaged groups are not only more likely to participate but also for longer spells. Thus the performance of the National Rural Employment Guarantee Programme has been far from dismal.

Keywords: National Rural Employment Guarantee Programme

I. Introduction

During its first year of operation, India's National Rural Employment Guarantee Programme (NREGP) involved an expenditure of $4.5 billion and was expected to generate two billion days of employment with the expectation that this would accelerate poverty reduction in rural India. Thus the NREGP's performance is also crucial to the success of the Millennium Development Goal of halving global poverty by 2015 (compared with 1990 levels) as rapid reduction in poverty in India will have an important bearing on global poverty numbers. Recent figures show that poverty in India has declined, albeit slowly, over the period 1993–2005 (Himanshu 2007).[1] However, the challenge is to sustain and improve this trend. Since the poor possess little or no land, gainful employment could be an important avenue for exiting from poverty. Thus, it is fair to say that a considerable amount of the success of efforts at poverty reduction depends on the success of the NREGP.

An analysis of the National Sample Survey data over the period 1993–2004 points to small gains to Agricultural Labour and Other Labour households. Average

*Corresponding author. Email: r.jha@anu.edu.au

ISSN 0958-4935 print/ISSN 1469-364X online

DOI: 10.1080/09584930902803231
http://www.informaworld.com

per-capita expenditure of Agricultural and Other Labour households grew annually at less than 1%, while that of the aggregate sample grew at the more rapid rate of 1.70%. As this was a period of liberalisation and there were spells of growth acceleration, it is intriguing that the gains to labour households were so small. That labour militancy is subdued by the fear of losing jobs to imports is plausible. But it must be set against higher productivity in agriculture spurred by trade liberalisation (Gaiha and Imai 2008). Given rural labour market imperfections (e.g. collusive wage-setting), however, higher productivity has not translated into significantly higher wages. To the extent that the NREGP enhances the bargaining power of rural labourers, there is a valid ground for optimism.[2]

I.1. Objective

In this paper we focus on the performance of the NREGP in Andhra Pradesh (AP), India, following from recent work on Rajasthan (Jha, Gaiha, and Shankar 2008). Comparison of a north Indian state and a south Indian state is of considerable interest given the pervasiveness of the matriarchal system in the south. Although AP is not among the best performers in the Comptroller and Auditor General's report (CAG 2007), our analysis points to a more favourable assessment. Also, our assessment suggests that AP was, in some respects, a better performer than Rajasthan (reported as being among the top performers in the CAG performance audit).[3] We found that AP performed better than Rajasthan in terms of targeting poorer caste and income groups such as Scheduled Castes (SCs), Scheduled Tribes (STs) and landless households. The two states also demonstrated some similarities in the duration of workdays and general implementation of the scheme, thus contradicting some of the CAG findings.

I.2. Data

The present analysis draws upon household data from the states of Rajasthan and AP to assess the effectiveness of social safety nets, in particular the NREGP and Public Distribution Scheme (PDS). These data were collected as part of a larger study of the impact of the PDS and NREGP in three Indian states: AP, Rajasthan and Maharashtra. The analysis reported in this paper is based on (preliminary) data obtained from Udaipur district in Rajasthan and Chittoor district in AP.

First, a list of NREGP districts was compiled for each state. From these districts, three were selected on the basis of probability proportional to size (in this case, rural population as reported in the 2001 Census). In the next step, three villages were randomly selected from each district, followed by a random selection of households. The villages considered for the present analysis are Dhundiya, Karanpur and Prithvisingh Ji Ka Khera in Udaipur district (Rajasthan), and Kaligiri, Obulattapale and Reddivaripalle in Chittoor district (AP). The total number of households interviewed in December 2007 was 942, with 340 from Rajasthan and 602 from AP. The data include information on caste, occupation, landholdings, household size, NREG participation, type of ration card, and PDS participation.[4] The sampling fractions varied from one-half to one-fifth of all households,[5] depending on the size of the population. Here the focus is on participation in the NREGP of different socio-economic groups and the duration of their participation.[6]

An important point is that the data used for this analysis are not representative of the two states in question. Rather, the villages selected are representative of each district. The complete data for all sample districts in each state will be representative of each sample state.

I.3. Workfare

Since workfare – welfare conditional upon a work-requirement – is an important feature of poverty alleviation, it warrants a critical review. We examine the incentive aspects of workfare below.[7]

The incentive case for workfare in poverty alleviation rests on two arguments. One is the screening argument; that is, a work-requirement tends to exclude the non-poor (or, more generally, the relatively affluent). The other is the deterrent argument; that is, the work-requirement does not deter poverty-reducing investments (say, in human capital). These are considered in turn below.

The screening argument is motivated by administrative difficulties in identifying the poor. Abilities are not directly observable. Although earnings could yield some clues, their estimates tend to be patchy and unreliable. Given these difficulties, self-selection mechanisms such as work-requirement are appealing. Under certain conditions, it can be shown that work-requirement is a cost-minimising poverty alleviation strategy (as compared with uniform transfers). Assuming that the poor work, the work-requirement will reduce their earnings from elsewhere and therefore necessitate larger transfers to get them out of poverty. This is the cost of self-selection through work-requirement; but there is also a cost reduction on account of lower transfers to the non-poor (as their incentive to masquerade as poor is weakened). There is a particular work-requirement that resolves this trade-off optimally, provided that the poor are a small fraction of the population and their earning potential is limited.

The deterrent argument takes a different form. Transfers reduce the returns to effort and thus induce individuals to choose a lower level of effort. This increases the number of poor, as also the cost of poverty alleviation. Under certain conditions, however, workfare is optimal. There is a particular work-requirement that induces income-enhancing choices, provided that the share of the poor in the population is small and their earning potential is low.[8]

II. Results

We present our results in two broad categories. First, in our cross-tabulations we report statistics on participation in the NREGP. Second, following the estimation of a probit model, we report on the determinants of participation of workers in the NREGP; taking into account the probability of participation in a tobit analysis carried out to assess the determinants of duration of such employment.[9]

II.1. Cross-tabulations

Over 50% of the households participated in the NREGP in the sample villages. Among the participants, about one-half were Others, about one-third were SCs and about 13% were STs. As the SCs and STs are traditionally disadvantaged groups, it

is striking that about 56% of the SCs and about 75% of the STs participated in this scheme.

Among the participants, nearly three-quarters were agricultural labour households, and over one-fifth were self-employed in agriculture. The latter is not surprising as the self-employed comprise a large number of households cultivating small amounts of land that barely allow them to subsist. We found that about 63% of agricultural labour households participated, and over one-quarter of the self-employed in agriculture. It is somewhat surprising that none among the other labour households participated.

There is further evidence to support the pro-poor targeting of the NREGP. The landless or nearly landless households (owning less than 0.75 hectares of land) accounted for a large majority of participants (over 76%). This suggests that the NREGP served as an important supplementary source of income.

We also examined whether participation in the NREGP is linked to household size. A presumption is that the larger the household size, the greater may be the flexibility among adult members to join this scheme. This is corroborated here, as among the participants the proportion of households comprising four to five members is higher than that of smaller households. An issue, then, is why the share of participants in the largest household size group (>5) is lower. To the extent that household size and land owned are correlated, many are likely to be relatively affluent and thus unlikely to participate.

Contrary to recent assessments (for example, CAG 2007), the shares of households that participated for long spells are moderately high. About 28% worked for 51–90 days while about 14% worked for more than 90 days.

Disaggregation of the duration of participation by social group corroborates our earlier finding of pro-poor targeting of the NREGP. Among the two disadvantaged groups, the participants had long spells of work. About one-quarter of SC households worked for 50 days or more while among the STs the corresponding share was a little under one-quarter. Also, the average number of days worked were high. Among the SCs, these were 31 days, 64 days and 100 days for the three ranges of days worked. Among the STs, the averages were similar – 33 days, 64 days and 100 days. The average for Others, however, was slightly higher at about 70 days.

Among agricultural labour households, typically the most poverty prone in rural areas, more than one-quarter worked for more than 50 days on NREGP projects. Also, among the self-employed in agriculture, about 18% of the households worked for 50 days or more. Their averages were high too. Among the former, the average in the range 51–90 days was 66 days, and 99 days in the highest range. Among the self-employed in agriculture, the corresponding values were 70 days and 99 days. By contrast, there were none among Others in the highest range of days worked.

Our results also indicate a picture similar to the preceding with long spells of participation among the landless and near-landless. In each of the three lowest land-owned groups (0–0.1 hectares, 0.1–0.75 hectares, and 0.75–1.5 hectares), one-quarter or a slightly lower share participated for 50 days or more. The averages were high – the landless on average worked 66 days in the range 51–90 days and 100 days in the highest range, while the next higher group of nearly landless worked for 65 and 98 days, respectively. By contrast, among those in the highest range of land owned (i.e. >2.5 hectares), none worked for more than 90 days and the average for the range 51–90 days was markedly lower (53 days).

II.2. Determinants of participation in the NREGP

Based on our estimation of the probit model we draw the following conclusions. Both agricultural labour and self-employed in agriculture have higher probabilities of participation relative to the default category (Others). Further, larger households have higher probabilities of participation in the NREGP. Controlling for the effects of these variables, workers in the second village (Obulayyapale) have higher probability of participation relative to workers in the first village (Kaligiri). Whether this is because of generally low living standards in Obulayyapale relative to Kaligiri or due to lower agricultural wage rates cannot be ascertained from the available data.

Similar results are obtained by substituting land-owned groups for occupations. Those in the two highest land-owned groups (1.5–2.5 hectares and >2.5 hectares) exhibit significantly lower probabilities of participation in the NREGP than the landless, further corroborating pro-poor targeting. Household size and being resident in Obulayyapale have effects on participation similar to those given in the previous specification. The land-ownership effects are large, as also is that of being resident in Obulayyapale. The effect of household size is, however, relatively small (but significant).

II.3. Determinants of duration of participation in the NREGP

As noted earlier, this analysis takes into account the probability of participation. The first important result is that the higher the probability of participation, the longer the duration of participation. We have already reported that large subsets of poor and disadvantaged households exhibit higher probabilities of participation, hence the pro-poor targeting is reinforced by the finding that the poor are also likely to participate longer. Equally interesting is the result that being resident in Obulayyapale has a significant negative effect, implying lower duration of participation, controlling for the effects of all other variables, although its effect was positive as a determinant of participation. Further, both agricultural labour and self-employed in agriculture have higher duration of participation relative to Others. These results imply that households belonging to these occupations are likely to work longer than Others.

III. Comparative analysis of targeting in Rajasthan and Andhra Pradesh

In terms of some indicators, AP did better than Rajasthan; while on others, both performed satisfactorily. First, in terms of pro-poor targeting by the scheme, AP performed better than Rajasthan (a finding that is contrary to the CAG report). One-third of our sample participated in the NREGP in Rajasthan as compared with over one-half of the households in AP. Of these participants, 90% belonged to the 'Others' category in Rajasthan and only 10% (SC and ST) constituted some of the actual targets of the scheme. In AP, in contrast, about one-third were SCs and 13% were STs – a finding that demonstrates greater accuracy of targeting.

Second, the better targeting of the NREGP in AP is reflected in the fact that 75% of participants were agricultural labourers, and one-fifth were self-employed in agriculture, and none belonged to the 'other labour' category. Compare these figures

with Rajasthan, where 46% of participants were self-employed in agriculture and 40% were employed in 'other labour'. The NREGP was better targeted among the landless and those owning small amounts of land in AP. As the incidence of landlessness – including near landlessness – was also higher in AP, it follows that the scheme in question served their interests better.

Further, the probit results showing the lower likelihood of participation by the two highest land-owning groups, as compared with the landless, further confirm the superior targeting of the scheme in AP. Contrast this with the figures in Rajasthan, where all land-owning groups (except the highest land-owned group) were significantly more likely than the landless to participate in the scheme.[10]

There were, however, some similarities in the implementation of the NREGP in the two states. In both states, the proportion of landless or nearly landless (those owning less than 0.75 hectares) comprised the majority of participants in the scheme, suggesting that the programme was a supplementary source of income to these groups. In both states, the NREGP seems to have been well targeted by asset class – none with over 2.5 hectares land worked for more than 90 days in AP and the average for 51–90 days was relatively low (53 days). Similarly, in Rajasthan, the participants from this group worked for less than 50 days, demonstrating that perhaps concerns about the capture of the NREGP by the landed elites may not be as grave.

Third, our data from both states suggest that the CAG may have under-reported the duration of participation in the scheme. Contrary to the findings of the CAG report, about 60% of the participating households in Rajasthan worked for over 50 days (20% worked for over 90 days).[11] The CAG report noted that (in Rajasthan):

> ... 10.94 lakh households (73% of registered households) demanded employment, and 100 days of employment was provided to only 2.39 lakh households. Thus, the claim of the State Government of generation of 999 lakh mandays at an average of 91 days per household demanding employment appears unrealistic.[12]

AP also belies the CAG assessment that about 42% worked for over 50 days (14% for over 90 days). In both states, however, compared with participation by more privileged groups, the two most disadvantaged groups, the SCs and STs, benefited less (i.e. a majority worked for <50 days), and SC households worked more days than ST households.

Results on the determinants of the duration of participation are also similar: the greater the probability of participation, the longer the duration of participation in the NREGP. As the probability of participation of low-income or disadvantaged social groups is high, it follows that in both states these groups also tend to participate longer.

There are several reasons for AP's better performance in terms of participation. First, the institutional safeguards adopted by the state government reduce the institutional propensity for large-scale corruption in the programme. For instance, software calculates and advises the post office on the costs of the 'works' and gives details of how many can work and for how long, and the payments for each worker when the work progress data are recorded. This procedure bars an institutionalised form of corruption practiced earlier by the engineer who had the power to enhance payments and bring in contractors. In a recent comment, Dreze, Khera, and Siddharta (2008, 5) noted that:

> ... Andhra Pradesh has put in place a system of institutionalised social audits, involving routine verification of NREGP records through participatory processes. Judging from our visit, and from the social audit reports, these safeguards are quite effective. While various forms of petty corruption (such as bribes being taken by postmasters) have emerged from the social audits, there is no evidence of the sort of large-scale fraud that plagued public works schemes in Andhra Pradesh just a few years ago.

Our qualitative interviews with the beneficiaries and village/district elites support Dreze, Khera, and Siddharta's point that the form of corruption in the programme is not large scale, but petty corruption remains a challenge for the implementers of the NREGP. Most of our interviewees said that no work was completed without giving bribes. One *sarpanch* (Pedapalli village) opined that they gave both direct and indirect bribes to get their work done:

> We have to pay bribes for all the programs. The bribe is 20 to 30% of the subsidiary we get. When applying for the scheme, during submission of application, to the revenue department to get the necessary certificates, once it is sanctioned, during the release of the money and during the audition.

Another woman member of a village committee said that:

> the major problem was that the officers were doing wrong calculations ... for example the officials are taking the money in case of labourer was absent for the work showing that he is present for the work in the register.

Second, the higher participation rates in AP can be attributed to the presence of self-help groups that have disseminated information on the programmes to women. For instance, an NREGP beneficiary in Pedapalli said:

> From the time of SHG's programmes started in the village, women participation is increased. For every Gram Sabha meeting conducted in the village, women are participating in equal proportion as men. When we take up NREGP in the Gram Sabha, women labourers are attending in large numbers. The reason why they are attending in large ratio is so that they can demand from officials for increase in the payment of the wages, self employment schemes, subsidiaries, ration cards issues and payment of wages in time.

We will examine these factors more systematically when analysing the results of the larger household and qualitative interviews in the two states.

IV. Concluding observations

The preceding analysis based on a survey in AP confirms pro-poor targeting of the NREGP, using different (proximate) indicators of deprivation caste/ethnic affiliation, landlessness, and occupation. In contrast to Rajasthan, SCs and STs participated in higher numbers in AP, but in both states these groups participated for slightly lower spells than the residual group of 'Others'. But the number of days worked on average was much higher than suggested by other assessments. Our econometric analysis further reinforces the conclusion that disadvantaged groups are not only more likely to participate but also for longer spells. Although based on small (but representative) samples for two states, these results offer a more optimistic perspective on this scheme than other recent assessments.

Acknowledgements

The authors are grateful to Raj Bhatia for his competent computations and to ARC-AusAID Linkage grant LP0775444 for financial support. They are also grateful to an anonymous referee for helpful comments and the editor for encouragement. The usual disclaimer applies.

Notes

1. This is also corroborated by the new World Bank poverty estimates for India, obtained by and Chen and Ravallion (2008). For an elaboration, see Gaiha (2008).
2. Analysis of monthly International Council for Research in the Semi-Arid Tropics (ICRISAT) wage data shows that if the Employment Guarantee Scheme (EGS) wages rise by a rupee, agricultural wages would rise by 17 paise in the short-run and by about 28 paise in the long-run (Gaiha 1997).
3. A recent survey of the NREGP by Participatory Research in Asia (PRIA) in 14 states shows that a mere 6% of the households secured 100 days of employment in a year (*Outlook India* 2007).
4. NREGP participation is measured using the question – are you a beneficiary of NREGP? PDS participation is measured using the questions – whether the household draws food grain from PDS, whether the household draws sugar from PDS, and whether the household draws kerosene from PDS?
5. The total number of households in Kaligiri was 328, out of which 199 were interviewed; the corresponding numbers for Obulayyapale were 476 and 202, respectively; and in Reddivaripalle the total was 1012, and 201 were interviewed. Sampling techniques were used to ensure that the data collected are representative.
6. The fieldwork and data processing were carried out by Raj Bhatia, a skilled statistician formerly with the Ford Foundation and World Bank in New Delhi, in consultation with the authors. The investigators belonged to the states they surveyed. They were trained in New Delhi and acquainted with the objectives of the study. The questionnaires were translated into local languages. All household heads, including women, were interviewed.
7. Workfare underpinned the 1834 Poor Law in England. 'The idea was that the conditions of the able-bodied pauper be the "less-eligible"-desirable, agreeable, favourable-than that of the "lowest class" of labourer' (Himmelfarb 1984, 163). Further: 'It is only ... by making relief in all cases less agreeable than wages, that anything deserving the name of improvement can be hoped for' (Himmelfarb 1984, 165).
8. This summarises the exposition in Besley and Coate (1992). For a review of workfare in India, see Gaiha (2000).
9. For an exposition of probit and tobit models, see Greene (1993).
10. See Jha, Gaiha, and Shankar (2008).
11. See Jha, Gaiha, and Shankar (2008).
12. Source: http://www.europe-solidaire.org/spip.php?article9169.

References

Besley, T., and S. Coate. 1992. Workfare versus welfare: Incentive arguments for work-requirements in poverty alleviation programmes. *American Economic Review* 82, no. 1: 249–61.

Chen, S., and M. Ravallion. 2008. The developing world is poorer than we thought, but no less successful in the fight against poverty. Policy Research Working Paper 4703, World Bank, Washington, DC.

Comptroller and Auditor General. 2007. Review of NREGA. Draft report submitted to Ministry of Rural Development.

Dreze, J., R. Khera, and Siddharta. 2008. Corruption in NREGA: Myths and reality. *The Hindu*, 22 January: 5.

Gaiha, R. 1997. Rural public works and the poor – The case of the employment guarantee scheme in India. In *Research in Labour economics*, ed. S. Polachek, 185–98. Greenwich, CT: JAI Press.

Gaiha, R. 2000. Do anti-poverty programmes reach the rural poor in India? *Oxford Development Studies* 28, no. 1: 71–95.

Gaiha, R. 2008. The poverty of statistics. *Outlook India*, 15 September: 32.
Gaiha, R., and K. Imai. 2008. Agricultural growth, employment and wage rates in developing countries. In *Agriculture and development*, ed. G. Kochendorfer, and B. Pleskovic, 97–130. Washington, DC: World Bank.
Greene, W.H. 1993. *Econometric analysis*. New York: Macmillan.
Himanshu, 2007. Recent trends in poverty and inequality: Some preliminary results. *Economic and Political Weekly* 42, no. 6: 497–509.
Himmelfarb, G. 1984. *The idea of poverty*. New York: Knopf.
Jha, R., R. Gaiha, and S. Shankar. 2008. Reviewing the National Rural Employment Guarantee Programme. *Economic and Political Weekly* 43, no. 11: 44–8.
Outlook India. 2007. There's no guarantee, 1 October: 6–9.