

**Relevance of
Unorthodox Economic Theory
in Public Policy:
A case study of the
National Rural Employment Guarantee Act**

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Table I.1: Usual Status Employment by category of employment (Rural-Urban, Gender)

	Self-employed			Regular Employees			Casual Labour		
	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)
Rural males	57.7	55	58.1	8.5	8.8	9	33.8	36.2	32.9
Rural females	58.6	57.3	63.7	2.7	3.1	3.7	38.7	39.6	32.6
Urban males	41.7	41.5	44.8	42	41.7	40.6	16.3	16.8	14.6
Urban females	45.8	45.3	47.7	28.4	33.3	35.6	25.8	21.4	16.7

Source: Employment and Unemployment Situation in India, 50th, 55th and 61st rounds, NSSO.

Table I.2 : Employment by industry (Rural-Urban, Gender) according to Usual Status (ps+ss)

	1993-94	1999-2000	2004-05
Agriculture			
Rural males	74.1	71.4	66.5
Rural females	86.2	85.4	83.3
Urban males	9	6.6	6.1
Urban females	24.7	17.7	18.1
Manufacturing			
Rural males	7	7.3	7.9
Rural females	7	7.6	8.4
Urban males	23.5	22.4	23.5
Urban females	24.1	24	28.3
Construction			
Rural males	3.2	4.5	6.8
Rural females	0.9	1.1	1.5
Urban males	6.9	8.7	9.2
Urban females	4.1	4.8	3.8
Trade, hotels & restaurants			
Rural males	5.5	6.8	8.3
Rural females	2.1	2	2.5
Urban males	21.9	29.4	28
Urban females	10	16.9	12.2
Transport, storage & communications			
Rural males	2.2	3.2	3.9
Rural females	0.1	0.1	2
Urban males	9.7	10.4	10.7
Urban females	1.3	1.8	1.4
Other services			
Rural males	7	6.1	5.9
Rural females	3.4	3.7	3.9
Urban males	26.4	21	20.8
Urban females	35	34.2	35.9

Table I.3 : Unemployment rates (Rural-Urban, Gender)according to Status									
	Usual status (PS+SS)			Current weekly status			Current daily status		
	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)
Rural males	1.4	1.7	1.6	3.1	3.9	3.8	5.6	7.2	8
Rural females	0.9	1	1.8	2.9	3.7	4.2	5.6	7.0	8.7
Urban males	4.1	4.5	3.8	5.2	5.6	5.2	6.7	7.3	7.5
Urban females	6.1	5.7	6.9	7.9	7.3	9	10.4	9.4	11.6

Source: Employment and Unemployment Situation in India, 50th, 55th and 61st rounds, NSSO.

Table I.4 :Unemployment rate of 15+ with different educational attainments

General Educational Level	Usual status (PS+SS)			Current weekly status		
	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)	1993-94(50 th)	1999-2000 (55 th)	2004-05 (61 st)
Rural male						
Not literate	0.2	0.3	0.3	1.8	3	2.7
Literate & upto primary	0.4	0.9	1	1.9	3	3
Middle	2.2	2.3	1.6	3.8	4.3	3.9
Secondary	5	4.3	3.2	6.5	6.5	5.3
Higher secondary	7.3	6.1	4.7	9	7.4	6.8
Diploma/certificate courses	-	-	7.6	-	-	9.5
Graduate and above	9.8	8.2	6.2	12.2	9.5	8.3
Secondary and above	6.5	5.6	4.4	8.3	7.3	6.5
Rural female						
Not literate	0.2	0.1	0.2	2.2	2.7	2.5
Literate & upto primary	0.5	0.6	1.1	2.6	2.6	3.1
Middle	3	3.2	3.4	5.3	5.5	5.9
Secondary	11.3	9.8	9.5	14.5	12.1	11.5
Higher secondary	19.9	14.3	17.1	24.3	17.7	20.7
Diploma/certificate courses	-	-	23.1	-	-	27
Graduate and above	27.4	29.8	27.5	32	31.8	29.8
Secondary and above	16	14.6	15.2	19.8	16.9	18.2

Table I.5: Perceptions regarding remuneration in self-employment

	Per cent finding their self-employed activity remunerative	Per cent finding this amount of Rs. per month remunerative					
		0-1000	1001-1500	1501-2000	2001-2500	2501-3000	> 3000
Rural males	51.1	12.9	17.5	16.5	11.4	12.9	27.3
Rural females	51.4	34.2	23.5	15.4	8.9	7.2	9.9
Rural persons	51.2	21.2	19.7	16	10.5	10.7	20.5
Urban males	60.9	4.9	8.2	9.9	7.2	12.2	56.5
Urban females	50.9	32.8	20.2	12.6	7.7	8.1	18.3
Urban persons	58.6	10.4	10.6	10.4	7.4	11.5	48.9

Source: Employment and Unemployment Situation in India, 61st round, NSSO.

**Table I.6: Average wages/salary of regular/salaried workers by education level
(Rs. per day) of age 15-59**

General Education level	Rural male	Rural female	Urban male	Urban female
Not literate	72.47	35.74	98.79	48.70
Literate & up to primary	98.59	47.75	111.44	64.79
Secondary & Higher secondary	158.04	100.19	182.58	150.41
Diploma/certificate	214.38	200.40	274.87	237.02
Graduate and above	270.02	172.70	366.76	269.17
All	144.93	85.53	203.28	153.19

Source: Employment and Unemployment Situation in India, 61st rounds, NSSO.

III

NREGA : Mechanism Design

“...the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood.”- Keynes, 1936, The General Theory of Employment, Interest and Money



***“The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes.”
– Keynes, 1936, in Preface to The General Theory of Employment, Interest and Money***

“The assumption that a Government will maintain full employment in a capitalist economy if it only knows how to do it is fallacious.” – Kalecki, 1943, Political aspects of Full Employment.



$$Y = C_0 + c.Y + \bar{I} + G ,$$

where symbols have their usual interpretation in a simple Keynesian model with government spending (in this case on NREGA).

We shall amend the assumptions regarding government spending on public works in the most backward districts by introducing the concept of corruption/leakage.

Let α be the leakage or corruption which implies that of the entire amount of government expenditure only $(1-\alpha).G$ is effectively being used.

This α occurs because there is asymmetric information between the workers and the state hiring them regarding their rights.

Hence it becomes easy for middlemen to extract rents – resulting in lower wages reaching the rural workers.

There are different ways in which asymmetric information can lead to fraud under any public work program (in this case the NREGA):

1. all the names on some muster rolls are bogus (nobody was employed but someone claimed wages from the government)
2. some names on the muster rolls are bogus
3. the names on the muster rolls are correct, but the days of work and/or wages recorded are false

In other words the lower the value of α in the case of the NREGA, the higher will be the wage reaching the hands of the workers. Of course the realistic assumption limiting the value of α is $0 < \alpha < 1$. So we can rewrite the above equation with corruption as

$$Y = C_0 + c.Y + \bar{I} + (1 - \alpha).G,$$

The value of the government-expenditure multiplier in this case would be

$$\frac{dY}{dG} = \frac{1 - \alpha}{1 - c}$$

Table III.1: Wage payment for public works			
	Part wages paid	Full wages paid	No wages paid
CHHATISGARH	24.1	61.7	14.2
MP	22.1	76.0	1.9
AP	9.4	65.6	25.0
JHARKHAND	29.8	66.3	4.0
Total	23.8	66.1	10.1

Table III.2: Are you aware of minimum wages in the programme?		
	Yes	No
CHHATISGARH	35.4	64.6
MP	20.9	79.1
AP	27.9	72.1
JHARKHAND	31.7	68.3
Total	31.2	68.8

Table III.3 Mode of Wage Payments under NREGA: Daily wages vs Task Wage

District	Wage Rate On Daily Basis	Task Wage Rate	Wage received on NREGA Site	State Minimum Wage	Wage Received (as % of State's Minimum Wage)
Palamau	Rs 73*	Rs 60	Rs 60	Rs 73	82.19%
Latehar	Rs 73*	Rs 66.66	Rs 66.66		91.31%
Barwani	Rs 60.28	No Task Wage	Rs 60.28	Rs 61.37	98.22%
Dhar	Rs 61*	Rs 13	Rs 13		21.18%
Surguja	Rs 58.63	Rs 14	RS 14/ Rs 58.63	Rs 58.83	23.79%, 99.66%
Jashpur	Rs 58.83/ Rs 40+3 Kg rice	No Task Wage	Rs. 50 for 7 days = Rs. 7.13/ Rs 58.83		12.11%, 100%
Rangareddy	NA	Rs 156	Rs 156		
Medak	NA	Rs135.67	Rs135.67		

* wage payments not made on daily but on task rates in these places.

Case Study: Pond excavation(50' x 50' x 15')
Village-Ghanghri, Panchayat- Naudiha, Block- Manatu, Dist:- Palamau

District schedule of wages(work as unit):

110 cubic feet of soft soil earth excavation work = Rs. 73

100 cubic feet of hard soil earth excavation work = Rs. 73

90 cubic feet of hard moorum soil earth excavation work = Rs. 73 (rate used in estimates)

25 cubic feet of soft rock earth excavation work = Rs. 73

District schedule of wages(wage as unit):

100 cubic feet of soft soil earth excavation work = Rs. 66.36

100 cubic feet of hard soil earth excavation work = Rs. 73

100 cubic feet of hard moorum soil earth excavation work = Rs. 81.11

100 cubic feet of soft rock earth excavation work = Rs. 292



Table III.4 Case study of wages under NREGA

Work group no.	No. of workers.	No. of male workers	No. of female workers	No. of days work done	Units(in 100 cubic ft.) of work done	Wages to be paid(as per estimate: 100 cft=Rs 81.11)	Wages actually paid to each work- group (as per: 100 cft=Rs 60)	Daily Wages per person to be paid(as per estimate: 100 cft=Rs 81.11)	Daily Wages actually paid(as per: 100 cft=Rs 60)
1.	4	3	1	7	34	2758	2040	92.07	72.85
2.	4	2	2	3	10.2	827	612	68.91	51
3.	5	1 +1(c hild)	3	6	12	973	720	32.43	24
4.	3	2	1	10	33	2677	1980	89.23	66
5.	4	1	1 + 2(chil d)	3	12	973	720	81.08	60

On wages and employment:

Wage cut clause and the NREGA: The NREGA also contains a clause which can, if notified, bring down the wages on government programs to a flat national floor of Rs. 60.

At present the state minimum wages are paid to workers and in most states it is higher than Rs. 60. In effect there can be a across the board wage cut if this clause is operationalised. Keynes' had vehemently opposed wage cuts both in theory as well as a policy.

We can sieve out three issues from this:

- 1. Is there an inverse relation between real wages and employment?**
- 2. Given that in most places across the country workers get lower than legal minimum wages, what will be the effect on employment of a binding minimum wage?**
- 3. How are wages determined?**

Prof. Anjan Mukherjee's Model (slightly modified for unorganised sector, since no union of workers)

$Y = f(L)$, Y is output, L is employment, $f'(L) > 0$, $f''(L) < 0$

Unskilled rural labour has a cost of providing labour, i.e. labour expended.

Let it be $C(L)$, $C'(L) > 0$ and $C''(L) > 0$

The share to state is $f(L) - w.L$

Workers' problem is to maximize $w.L - C(L)$

So at wage rate w^* worker gets $w^*.L^* - C(L^*)$

Total surplus $S^* = f(L^*) - C(L^*)$

Total surplus $S^* = f(L^*) - C(L^*)$

Non-cooperative solution: State offers $x.S^*$ to workers, $0 < x < 1$

If workers accept game ends. Say $\delta < 1$ is discount factor for both.

Then Rubinstein (1982) proves that there is a unique SPNE for this game, i.e. workers accept state offer.

The state keeps $(1/(1+\delta)).S^*$ and gives workers $(\delta/(1+\delta)).S^*$

We can see that if $\delta \rightarrow 1$, the shares approach a Nash Bargaining solution, i.e. $S^*/2$ for each.

Since $\delta < 1$ state share larger and there is first mover advantage.

Basically wage determined by balance of class forces

Table III.5: Percentage of adult population ever participating in public works in the last one year	
CHHATISGARH	47.4
MP	29.3
AP	14.5
JHARKHAND	37.9
Total	34.5

Table III.6: Distribution of Public works by type of work						
	Road laying (kuchha)	Road laying (pucca)	minor irrigation	well digging and deepening	construction	others
CHHATISGARH	50.5	14.1	14.6	4.7	14.1	2.1
MP	72.0	2.0	24.0			2.0
AP	37.5	31.3	29.2		2.1	
JHARKHAND	42.3		55.8		1.9	
Total	52.0	9.9	27.9	2.0	6.8	1.4



Table III.7: Percentage distribution of workers by number of days worked in public works

	1 to 7 days	7 to 30 days	30 days and above
CHHATISGARH	28.8	62.5	8.7
MP	39.2	60.8	0.0
AP	33.3	45.8	20.8
JHARKHAND	32.7	66.3	1.0
Total	32.6	61.2	6.2

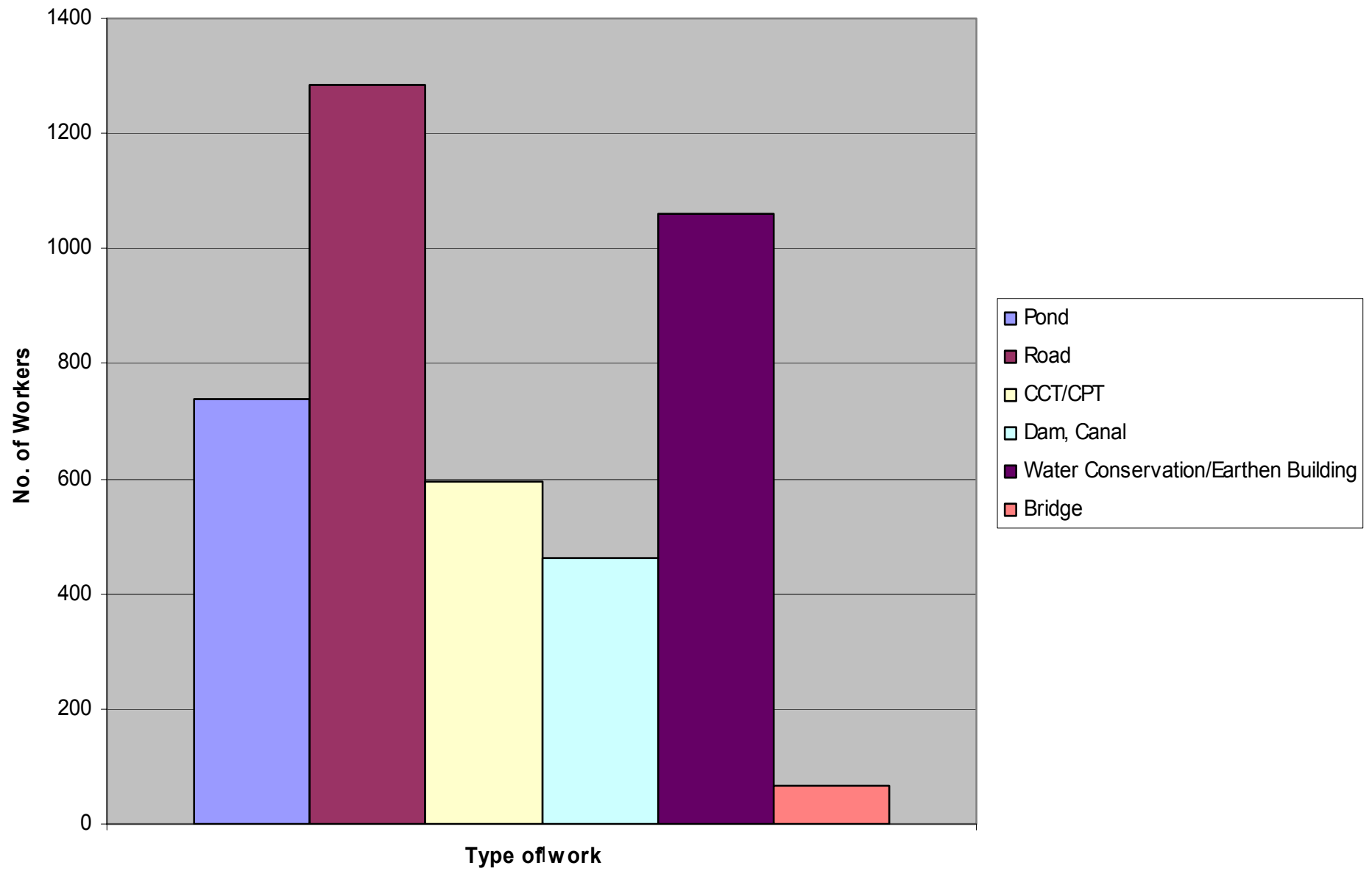
TableIII.8: Name of the programme on which you worked

	NFFWP	NREGA	OTHER	Don't know
CHHATISGARH	4.6	8.9	25.4	61.1
MP	13.3	18.1	12.4	56.2
AP	27.1	0.0	0.0	72.9
JHARKHAND	57.0	0.9	1.9	40.2
Total	18.7	8.3	15.9	57.0

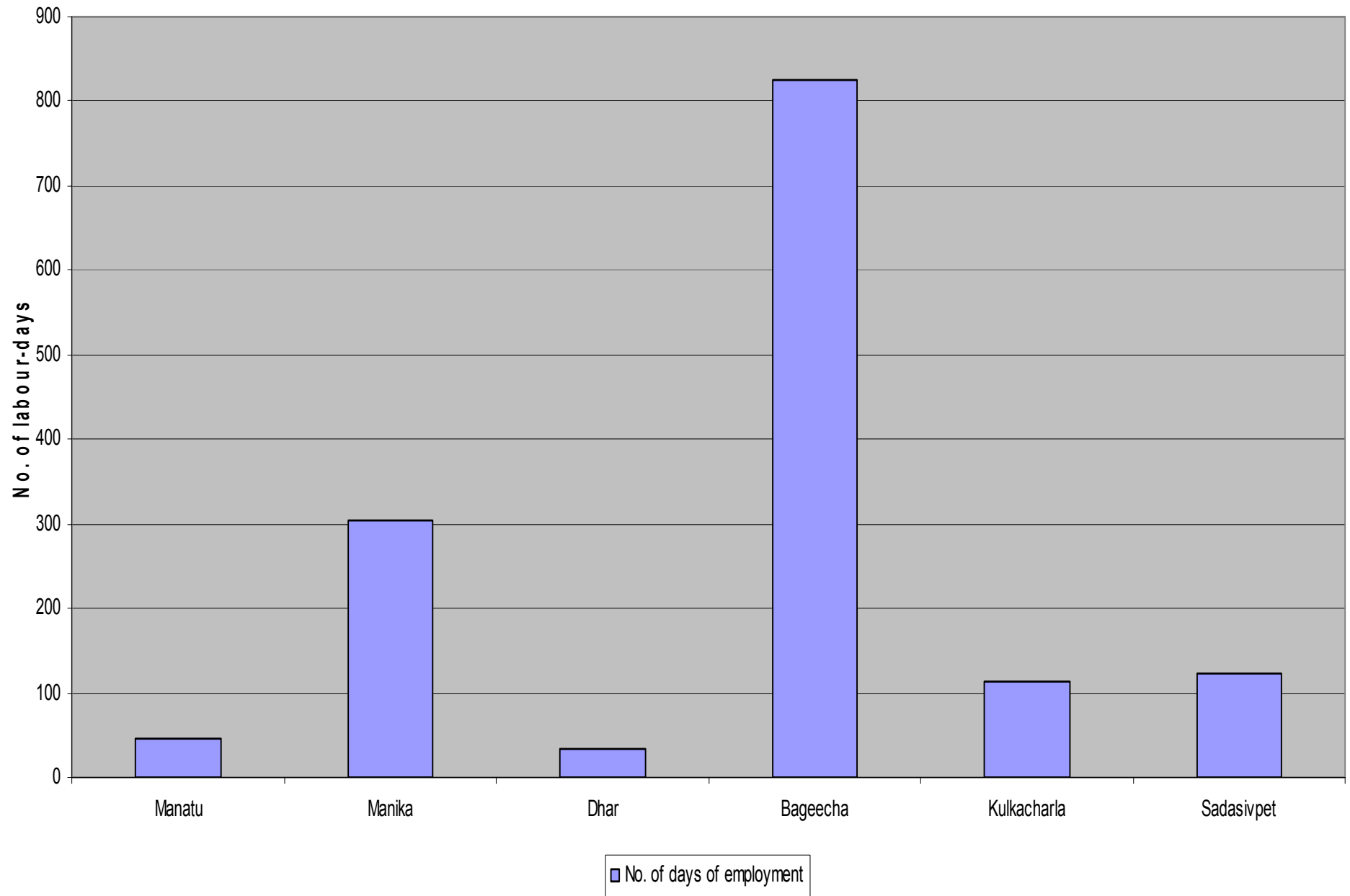
Table III.9: Percentage distribution of public workers by month of work

	CHHATTISGARH	MP	AP	JHARKHAND	Total
January	7.9		32.5	22.3	12.5
February	9.6		2.5	33.0	12.8
March	20.3	11.1	22.5	8.5	15.9
April	35.6	22.2		2.1	21.1
May	14.1	54.2		3.2	17.5
June	2.3	11.1			3.1
July	1.7			2.1	1.3
August			2.5		0.3
September			5.0		0.5
October	2.3			4.3	2.1
November	1.7			6.4	2.3
December	4.6	1.4	35.0	18.1	10.5

Employment by type of Work



No. of days of employment generated under NREGA by Block



IV

Public Policy

“Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back” – Keynes, 1936, General Theory

Job card Application

Shortcomings

- BPL criterion, Voters ID, other lists were used to reject application
- Female Headed Households were denied
- Joint families were registered
- Money being charged for forms

Recommendations

- Issue circular regarding definition of “Household” (i.e. nuclear family) to all District Collector /District Magistrate (DC/DM).
Serial numbers for job card registration, if name not enlisted in the BPL list

Job card Distribution

Shortcomings

- Being given on “quota” basis (Jharkhand)

Recommendations

- District Administration can ask for weekly progress report: village/panchayat-wise

Application for Work

Shortcomings

- No receipts were given
- Not coming through Gram Sabha, some places were ordered from above (DC level)

Recommendations

- Receipts to be given
- Clarify with District Administration

Worksite facilities

Shortcomings

- No crèche, drinking water, first aid, shade
- Machines being used
- Contractors present

Recommendations

- Labour Enforcement Officer should look into this

Wages-Task Rates, Daily Rates

Shortcomings

- Task rates much below than the Min. wage (workers have been paid as low as Rs.10)
- Daily wage paid is also lower than minimum wages at places

Recommendations

- Revise District Schedule of Rates (DSOR)

Wages-Measurement, DSOR

Shortcomings

- Measurement not made in front of workers

Recommendations

- Engineers are too few in number to go to all sites on a weekly basis.

Wages- Payments

Shortcomings

- Payments not made on time. Delay in payments even after money has reached at the panchayat level

Recommendations

- Strict action for this is required

Muster Rolls

- Not available at worksites and offices
- Ensure Muster Rolls are available at worksites.

Unemployment Allowance

- Are being denied
- Receipts for work application is a must – Panchayat sevaks/mantris need to be trained

List of Works

Shortcomings

- Too much focus on roads and big ponds instead of creating productive assets which meet local needs

Recommendations

- Need to involve local groups (at the state/district level) for wider consultations regarding type of works and estimates.

Awareness – District Administration

Shortcomings

- Mindset is that of previous schemes which required top-down approach. Administration not being able to overcome this supply driven developmental policy model and let people demand job cards, work etc.

Recommendations

- Clarification required for District Administration. Needs pressure from Ministry of Rural Development

Awareness – Block Administration

Shortcomings

- Complex situation created because NREGA alters their local power equations

Recommendations

- Appoint Gram Rozgar Sevak and Strengthen Panchayati Raj Institutions

Awareness - People

Shortcomings

- Not aware of the demand-driven nature of the Act

Recommendations

- Awareness spreading should be allowed to local groups/ NGOs etc.

Transparency, Accountability and Social Audit

Shortcomings

- Administration (mainly at the Block level) is obstructing people's right to information.
- Not willing to be present at Jan Sunwais

Recommendations

- Jan Sunwais to be given some priority from MoRD and administration should be given guidelines regarding their conduct during Jan Sunwais