

# Well Worth the Effort

## Value of MGNREGA Wells in Jharkhand

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More than 1,00,000 wells were sanctioned for construction under the Mahatma Gandhi National Rural Employment Guarantee Act in Jharkhand during the last few years. This study evaluates the outcome of this well-construction drive through a survey of nearly 1,000 wells in 24 randomly selected gram panchayats. A majority of sanctioned wells (60% with parapet and 70% without) were completed at the time of the survey. Nearly 95% of completed wells are being utilised for irrigation, leading to a near tripling of agricultural income of those in the command area. The real rate of return from these wells in Jharkhand is estimated to be close to 6%, a respectable figure for any economic investment. However, well construction involves some out-of-pocket expenses and this investment is risky: nearly 12% of the wells were abandoned midway.

### 1 Introduction

A two-hour trek through fields and over hillocks takes one to Mukhdev Singh's house in Turidag village in Palamu District of Jharkhand. It seemed hard to imagine any government benefit reaching there, least of all a Mahatma Gandhi National Rural Employment Guarantee Act<sup>1</sup> (MGNREGA) well with its huge material requirements. As it turned out, we were grossly mistaken. We not only found a well constructed under MGNREGA adorning Mukhdev's small patch of land, it turned out to be of excellent quality. Not only Mukhdev, but several other families in the village were reaping the benefits of this well.

Some distance away, in Ratanpur gram panchayat in the same district, an irrigation well has been constructed on the land of Madan Oraon (name changed) of Salamdiri village. However, the well has been so poorly constructed that it is rendered almost useless. It has hardly been a year since its construction and the well has already developed cracks. The well was supposed to be 35 feet (ft) deep, but after digging for 18 ft, the contractor stopped work saying the money was over. Hence there is hardly any water in it.

Both are real stories, but which is a better representation of the MGNREGA; Mukhdev Singh's productive well or Madan's useless pit? That is a question which academics have been trying to answer for a long time, though without any reliable or conclusive data to help them in their pursuit.

According to Barua (2014), the MGNREGA has not only caused inflation but also hampered industrialisation and hence economic growth itself. The author implicitly assumes (as many others who blame MGNREGA for inflation) that the MGNREGA assets were unproductive and that it has led to an increase in income and purchasing power without a corresponding increase in productivity or output. On the other hand, a number of studies have found MGNREGA assets to be contributing significantly towards agricultural productivity and environmental restoration (for a review of such studies, see MORD 2012). For instance, Ranaware et al (2015: 61) studied 4,100 MGNREGA assets in Maharashtra to conclude that the "works are pro-agriculture and primarily benefit small and marginal farmers in significant ways." These and several other such studies clearly indicate the massive potential of MGNREGA to create useful rural infrastructure. Yet, they are largely inconclusive about the "overall" productivity of MGNREGA assets. This is because rather than studying randomly selected assets, they only look at "completed works," "best performing assets" or "best performing blocks and gram panchayats."

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To find out the overall productivity of MGNREGA assets, we focus on one of the poorest states in the country—Jharkhand—which is one of the states with the highest rates of poverty according to 2011–12 data. It also has one of the lowest rates of irrigation coverage ranging from 2% in some districts to 24% in some. Agriculture is thus mostly rain-fed. To top it all, several parts of the state have been affected by severe droughts for several years over the past decade. Therefore, in an effort to tackle drought and improve access to water in rural areas, the Government of Jharkhand decided to focus MGNREGA resources to construct irrigation wells on private lands. By November 2013, nearly 1,15,000 wells were sanctioned for construction. According to government data, 80% of these wells are complete and work is ongoing on another 15% (Aggarwal 2013). But what has been the impact of this initiative?

A pilot study of 11 irrigation wells constructed under MGNREGA in Ratu block of Ranchi, Jharkhand suggests that completed wells are quite useful and productive (Aggarwal et al 2012). The study found that on an average, around ₹1.93 lakh were spent on an MGNREGA well which reaped an annual rate of return of 2.29%, implying that the total cost of the well would be recovered within 40 years. The findings of the pilot study hint that completed MGNREGA wells may lead to a significant increase in incomes of the poor. However, given the small sample size and limited focus, the study cannot be expected to be representative. The need for a more representative study is what motivated us to conduct a more representative evaluation of MGNREGA wells to be able to understand how they might (or might not) be affecting the lives of people in Jharkhand.

## 2 The Study Design

The primary aim of the study is to assess the returns from investments on MGNREGA assets, in particular, irrigation wells constructed under MGNREGA in Jharkhand.

Such an assessment requires a sample which is representative for Jharkhand. Therefore, six districts were selected out of the 24 districts in Jharkhand. We divided the state into six geographical zones (North-East, North, North-West, South-East, South-West, and Central) and selected one district at random from each zone.

From each of these six districts two blocks were selected randomly. Finally, from each of the 12 sample blocks, two gram panchayats each were randomly selected making a total of 24 gram panchayats in 12 blocks and six districts of Jharkhand.

The first objective of the study was to assess the actual rate of completion of wells and verify the accuracy of government data regarding completion rates. Therefore, a census was conducted of all the wells in each of the 24 gram panchayats. This exercise informed us about which wells were actually complete, ongoing, suspended, or even missing entirely.

The second objective was to understand the obstacles faced while constructing the assets and assess the impact of completed wells. Therefore, from among all the owners of completed MGNREGA wells in each gram panchayat, three to five were randomly selected for detailed interviews using a structured

questionnaire. The interviews involved questions on costs incurred, uses of wells, change in income due to wells and satisfaction with the well.

The third objective was to understand the causes of failure of MGNREGA wells and assess the costs associated with them. Therefore, from among the owners of abandoned or failed MGNREGA wells in each gram panchayat, one to three were selected for detailed structured interviews. These owners were asked about the reasons for non-completion and the sunk costs associated with such wells.

In all, across 24 gram panchayats in Jharkhand, 103 owners of completed wells and 46 owners of abandoned wells were interviewed. The quantitative information collected in each gram panchayat was supplemented with focus group discussions (FGDs) with villagers and unstructured interviews of MGNREGA functionaries. These helped us gain invaluable qualitative insight into the sociopolitical aspects of MGNREGA implementation at the gram panchayat level.

### 2.1 Methodology for Verification

To verify the actual status of MGNREGA wells, the list of wells and the official status of all the sanctioned wells in the 24 sample gram panchayats were obtained from the official MGNREGA website ([www.nrega.nic.in](http://www.nrega.nic.in), Management Information System data hereafter referred to as MIS data). The status of wells is described in the MIS as:

- (a) New: Works entered in to the MIS to be taken under MGNREGA.
- (b) Approved: Works with technical (rs) and administrative sanctioned (AS).
- (c) Ongoing: Works on which some activity/expenditure is ongoing.
- (d) Completed: Works which have been closed/partially closed on account of completion of all activities on work.
- (e) Suspended: Works which have been suspended due to some valid reason.

The status of all the 926 wells in the 24 randomly selected gram panchayats across Jharkhand was then verified through visits to each of the wells and interviews with the well owners. Photographs of each well were taken to record the status at the time of the survey.

## 3 Comparison between Official and Survey-based Estimates

### 3.1 Official Completion Rates

According to the MIS data for 926 wells in the sample GPS, 67% were “Complete,” 26% were “Ongoing” and only 1.5% lay suspended. Another 3.8% and 1.2% were categorised as “Approved” and “New” respectively. There are no abandoned wells according to the MIS.

### 3.2 Actual Status of Wells

Table 1 (p 42) depicts the results of physical verification exercise, that is, it presents the proportion of wells which were found in different stages of completion or non-completion.

The survey found that around 60% of the wells were actually complete. Another 10% of the wells were complete till the ground level, that is, they could be used for irrigation purposes

**Table 1: Physical Status of the Well in Jharkhand**

	Number of Wells	Percentage of Wells
Well does not exist	83	8.9
Dug some but stopped midway	125	13.5
Dug completely and then stopped	8	0.9
Was dug but has now filled with mud	17	1.8
Bound to some extent	50	5.4
Completed without parapet	91	9.8
Completed with parapet	552	59.6
Total	926	100

but did not have a parapet. In the absence of a parapet, such wells pose hazards to children, animals or even adults who could unwittingly fall into them. However, it is very common in Jharkhand for wells to be built without the “luxury” of a parapet. If we include the 10% wells which are complete till

**Table 2: Comparison between Official and Survey-based Well Completion Rates**

Status of Wells	Sample Gram Panchayats	
	MIS Estimates (%)	Survey Estimates (%)
Completed	67.0	60.0 (69)*
Ongoing	26.0	5.8
Suspended	1.5	4.1
Abandoned	0	11.7
Approved	3.8	1.08 (10)
Missing**	0	7.8

\* Figures in brackets include wells completed up to the ground level (that is, without parapet).

\*\* Missing wells were wells which were on the list of wells in the MIS but were not found on the ground and the owners also were not aware of their existence.

Sources: www.nrega.nic.in; Primary Survey Data.

### 3.3 Accuracy of Status Mentioned in the MIS

On the whole, MIS information regarding status of wells seems to be fairly accurate in the case of completed wells. Out of 621 wells described as “complete” on the MIS, 75% were found to be actually complete with a parapet, while 83% were found to be complete till the ground level (including those without a parapet).<sup>2</sup> However, MIS data was found to be grossly inaccurate in case of incomplete wells. Two hundred and forty-one wells were “ongoing” in the surveyed gram panchayats according to the MIS. However, the verification exercise revealed that only around 33% of these could actually be termed as “ongoing.” Thirty-one percent of such wells were actually found to be completed and another 31% were found to be in a suspended state since no work had taken place on them for more than a year.

This suggests the need for more regular updating and verification of the MGNREGA MIS data. Also, problems faced by gram panchayat- and block-level functionaries in entering and updating accurate and timely information may need to be addressed to ensure greater accuracy. Finally, clear guidelines need to be drawn up to decide when an asset may be considered to be ongoing and when it should be considered suspended. And, even after it becomes clear that work on an asset cannot

go on, there is no procedure available for the MIS record to reflect and explain this. Instead, abandoned assets are being categorised in the MIS as complete, ongoing or suspended. This leads to an inaccurate portrayal of the actual status of assets.

The presence of missing wells is also quite disturbing. Among all wells which are officially completed or ongoing, 7.8% were not found at all.

## 4 Impact of Completed Wells

Earlier we could hardly manage food for four months, now we are earning all throughout the year. My earning has almost doubled since I have got this well made. I thank MGNREGA for this!

—Bablu Munda, Konardih village, Korambe gram panchayat, Gola block, Ramgarh District.

### 4.1 The Story of Balo Dom

Balo Dom is a resident of Achaljamo gram panchayat in Bishnugarh block of Hazaribagh District. He belongs to the Dom community, regarded as one of the lowest in the hierarchy of untouchability. Like others in their hamlet, during the rainy season, he and his family used to be engaged in agriculture on their small 0.16 acre plot of land, while the rest of the year they relied on casual labour or basketmaking to earn their living. When the MGNREGA was launched, the local forest ranger encouraged him to apply for a MGNREGA well from the forest department. With the support of the ranger, his request was granted and construction on the well began in December 2007 and was completed by late June 2008. However, the process was not easy. He and his family had to work for days and nights at a stretch to complete the well. All this also meant that he had to incur huge private costs. The total expenditure incurred by Balo Dom out of his own pocket on wage payments, material procurement, instruments and equipment used for construction, food and drinks for labourers, preparation of documents and draining water out of the well totalled around ₹37,410.

Further, while most wage payments were made directly into the labourers’ accounts, the payments usually came several weeks after the work was done. In order to sustain the labourers’ interests, Balo Dom had no option but to arrange for money to pay an advance to the labourers every week which they could repay back when the MGNREGA wage came into their account. A major proportion of the expenditure was met by taking a loan of ₹25,000 from the village moneylender at an annual interest rate of 60%. Despite regularly paying the interest, the amount which remained to be repaid at the time of the survey (six years after construction of his well) had risen to ₹27,000.

The financial strain often left his family struggling even for basic necessities such as food. Balo Dom did not pay any bribe for either getting the well sanctioned or for getting the payments since the forest ranger managed<sup>3</sup> everything: from the paperwork to supplying the materials.

### 4.2 How the Well Multiplied Balo Dom’s Income

Balo Dom’s actions, however, begin making sense when we observe the impact that the wells had on his life. Before 2007, due to the absence of any irrigation facility, Balo Dom was able to grow only one crop (paddy) during the rainy season.

Since the construction of his well in 2008, Balo Dom is able to grow crops during all three agricultural seasons. Now he grows paddy in the kharif season, potato and wheat in the rabi season and vegetables in the zayad season. His annual average income from agriculture increased from ₹4,357 to around ₹22,377. The increased water security provided by the well has also allowed Balo Dom to take the risk of adopting high yielding varieties of rice which have a higher input cost as well as high yields and higher profits.

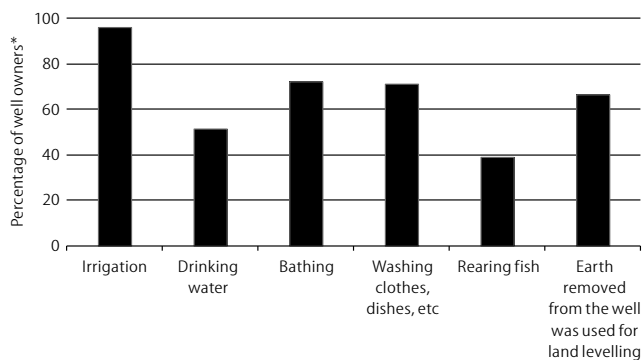
During summer, the houses neighbouring Balo Dom's well use the water from the well for drinking because their wells dry up. Besides, two families other than Balo Dom's make use of the well for irrigation, free of cost. The construction of the well has also brought about changes to the way Balo Dom worked across the year. While he earlier needed to go out in search of casual work, that need is much less now as he spends more time on his own field.

Balo Dom is very happy to have a complete well and feels that it has contributed to a change in his family's livelihoods. Nearly for half the year, his family is now able to eat food grown on their own farm. Such changes in lives are common among those whose wells were constructed under MGNREGA.

## 5 Use of MGNREGA Wells

MGNREGA wells on private lands are primarily irrigation wells. However, they provide various other essential services as shown in Figure 1.

**Figure 1: Usage of the Well for Various Purposes**



Further, MGNREGA wells, though constructed on private land, are generally used by several people living or owning land near the well. In our sample, a MGNREGA well is used by an average of around five families.

However, a few completed well owners (4%) reported that they were unable to make use of their completed wells due to reasons such as absence of water in the well (2%), absence of pump to draw water (1%) or inability to engage in agriculture due to some reason (1%).

### 5.1 Impact of Wells upon Beneficiaries' Incomes

MGNREGA wells, as we have seen, provide several essential services. However, owing to the complications of quantifying and monetising the value of other services, we attempt to quantify only the impact on the well owner's net annual income from the command area (NAICA).

$$NAICA = \frac{\text{Total value of agricultural production in the area irrigated by the well}}{\text{Total cost of production}}$$

The change in NAICA due to well construction was calculated as:

$$\text{Change in NAICA} = \frac{\text{NAICA in the year after well construction} - \text{NAICA in the year preceding well construction}}$$

Data collected from 103 owners of completed wells revealed that, on an average, NAICA increased by ₹12,635 or 190%. This corresponds roughly to income from 80 days of employment per year at local agricultural wages.<sup>4</sup>

These estimates, however, would have been higher had the year post well construction been "normal" rainfall years. In reality for most well owners, the year post well construction saw very low rainfall and droughts in several parts of Jharkhand which severely affected the paddy crop and lowered agricultural incomes across the state. Had the rainfall been normal, the paddy crop would have been normal and the "post well" incomes of well owners would have been significantly higher. In the long run, however, the impact of wells upon NAICA may actually be significantly larger than the ₹12,635 increase that we have estimated.

## 6 Costs of Constructing MGNREGA Wells

According to the MGNREGA guidelines, assets constructed under the MGNREGA can only be constructed on public land or on private land belonging to a job cardholder; in which case the landowner (who becomes the de facto owner of the well) has to work along with others on the construction of the asset. All expenses on labour and materials are, however, to be borne by the government.

However, data collected from 148 owners of completed (102)<sup>5</sup> and abandoned (46) wells suggests that nearly 87% of well owners had to incur private costs (average ₹25,749) to construct the wells. Out of this, nearly 28% was spent on wages, 58% on materials and the rest on bribes. Given the significant out-of-pocket expenses that well owners had to incur, it is no surprise that several wells—where the well owners were unable to bear these expenses—remained incomplete.

Delays in payments, non-payment of bills (wage bills, material bills) or siphoning off of money meant for material and wage payments are the major reasons behind well owners having to incur out-of-pocket expenses. Rarely did we come across cases where the sanctioned amount for wells was inadequate to meet the cost of wells. Out of 148 well owners surveyed, 82 owners also reported that they had to pay straightforward bribes to get the well constructed. The average amount of bribe was ₹6,354 (that is, nearly 5% of the total amount sanctioned for the well). Arjun Nag of Ghorabandha gram panchayat in West Singhbhum District holds the distinction of reporting to have paid the highest bribe for getting the well constructed; a total of ₹42,000. Table 3 (p 44) presents the reasons for incurring private expenses.

There were 90 well owners who had completed wells and had incurred out-of-pocket expenditure during construction.

**Table 3: Reasons Why Well Owners Had to Incur Out-of-Pocket Expenses**

Reasons for Owners Having to Incur Out-of-Pocket Expense	Percentage Saying Yes
1 MGNREGA wage rate was less than market wage rate	26
2 Delay in MGNREGA wage payment, which is why owner had to pay from his own pocket	15
3 Had to spend on items which are not covered under MGNREGA:	
a Food for labourers	57
b Making the required documents (like trace report, land titles, etc)	44
c Diesel to draw water out	61
d Pumpset to withdraw water	43
e Bribe paid to officials	50
f Travelling to and from the block office	46
4 MGNREGA sanctioned amount was insufficient to build the well of the said dimensions	13
5 Owner did not receive the entire sanctioned payment from MGNREGA	8
6 Bills were not reimbursed	25
7 Other reasons (for instance purchase of digging equipment, cost of opening an account in the post office)	68

Source: Based on a survey of 148 beneficiaries of MGNREGA wells (includes owners of both completed and incomplete wells).

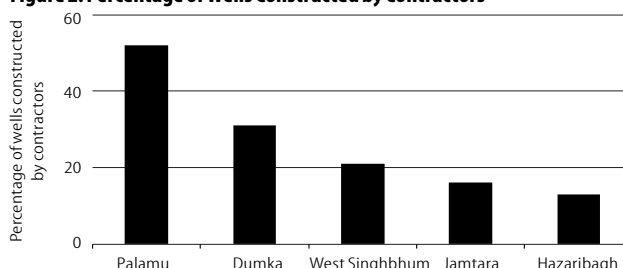
Out of these, 18% had to sell off some immovable property (such as cows, buffaloes, goats, etc), 9% had to mortgage some movable or immovable property, and 36% had to undertake a loan in order to meet the out-of-pocket expenditures.

According to the provisions of the MGNREGA, those who demand work are employed in the construction or renovation of assets. Contractors are strictly banned under the act. However, in practice, the presence of contractors in MGNREGA is all pervasive across Jharkhand. They are present in various guises and forms and provide different services.

They may simply help by providing information about the programme and the application process, or by arranging the necessary documents for interested applicants such as land titles, job cards, application forms, eligibility certificates, etc. They may even hire labourers, negotiate wage rates, provide food and drink to labourers, pay advances to labourers where MGNREGA payments might be delayed, arrange for necessary materials (such as cement, sand, stones), tools (digging tools), equipment (pulley for pulling up mud and rubble), submit bills and muster rolls in lieu of material and labour payments, pay commissions (also known in common parlance as “PC”<sup>6</sup>) to officials to get payments approved and cheques signed by gram panchayat-and block-level authorities, withdraw money from post office accounts or banks for payment of wages to workers,<sup>7</sup> make wage payments, get measurement books signed by the engineers, etc. All of these tasks are supposed to be taken care of by MGNREGA functionaries such as mates, gram rozgar sevaks (GRS), gram panchayat secretaries, mukhiyas and post masters at the gram panchayat-level as well as block-and district-level functionaries.

However, the shortage of MGNREGA functionaries and hence excess load on existing staff, or simply unwillingness to fulfil their responsibilities gives rise to contractors or middlemen who, literally, fill the spaces in the “middle,” that is, between the beneficiary and the state. The presence of contractors or middlemen, though widespread across the state, varied hugely between blocks. In some blocks, such as Panki block in Palamu

District, the survey found that no MGNREGA work could take place without the intervention of a contractor who knew how to “manage” the system. On the whole, 23% of the beneficiaries reported having gone through contractors to get their wells constructed. The percentage of beneficiaries who reported using contractors in each district is mentioned in Figure 2.

**Figure 2: Percentage of Wells Constructed by Contractors**

## 6.1 Beneficiaries' Perceptions

We asked all beneficiaries about their level of satisfaction with the well. Most beneficiaries with completed MGNREGA wells were satisfied and felt that the well contributes positively to their life (Table 4). For the majority of the beneficiaries with completed MGNREGA wells therefore, the well was well worth the effort. The only two beneficiaries who were not happy with the well were cases where wells “managed” by contractors were of such poor quality so as to be nearly useless. For instance, Madan Oraon's well was managed by a contractor, Nagender Bharti, who took care of all the administrative and operational details from getting it sanctioned to getting it constructed. In return, he charged such a high commission that the workers could only be paid for half the days of work, the well could only be dug 18 ft deep (against the stipulated 35 ft) and it was of such poor quality that its walls were falling apart within two years of construction.

**Table 4: Beneficiaries' Perceptions about Completed Wells**

Complete Well Owner's Perception*	Agree (%)	Disagree (%)	Can't Say (%)
Happy having constructed the well	96	4	0
Satisfied with the quality of the well	92	8	0
Living and eating better as a result of the well	86	7	7
Household income has increased as a result of the well	85	8	7
Constructing the well was a big mistake	1	99	0
The well is still a big headache	1	99	0

\*Based on the total of 103 responses.

Figures have been rounded off to whole numbers.

## 7 The Story of Failed Wells

Incomplete wells are dangerous. My cow fell into it and died.

—Rajaram Hembram, Nayagaon gram panchayat, Manjhgau block, West Singhbhum District.

Tribhuvan Soren is a resident of Kusumbha gram panchayat of Bishnugarh block in the Hazaribagh District of Jharkhand. After paying bribes of ₹2,000 to the gram panchayat secretary and GRS, he was sanctioned a well under MGNREGA. Tribhuvan had to “manage” labour for the digging work. In a sense, he was the “labour contractor”<sup>8</sup> for his own well. In 25 days, they had dug 15 ft deep, but MGNREGA wage payments did not happen. The workers therefore stopped work and pressed Tribhuvan to pay up. Tribhuvan had no option but to take a loan of ₹10,000 from the village moneylender at 120% per

annum interest rate in order to pay the workers a part of their due wage payments. Eight months after work had stopped the labourers received ₹14,400 from MGNREGA, ₹10,000 less than their actual wage bill of ₹24,400.

By this time, Tribhuwan Soren had already spent around ₹14,000 in meeting expenses related to the well (including material expenses) and an additional ₹39,000 in interest payments for the loan he took to meet those expenses. He was in no position to recruit more labour and resume work. By the time the survey team reached the site of the well, the pit had been covered with mud again and there was no hope for the well to get completed. Thus, after labouring for nearly 25 days, spending nearly ₹53,000 and facing the ire of unpaid workers for several months, Tribhuwan still did not have a well. Instead, he had a huge loan which he would be paying off for a long time to come.

In another part of Jharkhand, an MGNREGA well was sanctioned in the name of Md Jadid Ansari. Jadid belonged to Sadam gram panchayat of Ramgarh District. His well was dug completely and awaited materials such as sand, cement and stones to bind it. The GRS and the gram panchayat secretary pressurised him to purchase the material himself and build the well or else they would register a first information report (FIR) in his name and recover all the labour payments that were made under MGNREGA—if need be then by selling off his house and other assets.<sup>9</sup> Despite all the threats, Md Jadid remained determined not to spend. He was poor and did not have any money to spend. Taking a loan to purchase materials was too risky because he was unsure if he would get reimbursed for his expenses by the government. The well therefore lies there, rapidly getting filled with mud. A total of ₹69,050 was spent on the well, out of which 63% was received from the government and 37% was spent by Md Jadid himself.

Stories such as Tribhuwan's and Md Jadid's—stories of wells which remained incomplete due to stopping of payment, embezzlement of funds, or lack of timely payment—are found aplenty in Jharkhand's villages.

### 7.1 How Many Wells Are Abandoned

Information about such abandoned wells, however, cannot be obtained from the MIS. The MGNREGA MIS does not categorise any well as “abandoned.” Instead, abandoned wells are generally categorised as “suspended” wells, implying that all wells on which work begins, would eventually get completed.

How accurate is this picture? Are all MGNREGA wells likely to get completed sooner or later?

In order to find out we asked all owners of incomplete wells about the likelihood of completion of their well. Out of the 926 wells which were verified, 11.8% of all wells are unlikely to ever be completed. This includes 14.5% of the wells which are described as ongoing and 11% of the wells described as completed in the MIS. In other words, one out of every eight wells is likely to be abandoned midway through its construction.

### 7.2 Burden of Failed Wells upon Beneficiaries

An abandoned MGNREGA well signifies a substantial loss of the beneficiaries' resources. On an average such beneficiaries had

spent around ₹14,242 out of their own pocket on their well. These expenses not only reaped no return, they also destroyed a significant portion of their land, made them indebted to moneylenders, took a great deal of their time and effort and gave nothing but stress and disillusionment in return. Table 5 describes the breakup of the private expenses incurred by owners of completed as well as abandoned wells. It is evident from the figure that the major proportion of the out-of-pocket expense goes into meeting the material expenses, including expenses on sand, stones, cement, motor and fuel to drawing water while digging, digging equipment and even food and drink for labourers. Bribes also comprise a fairly significant proportion of the total burden upon the beneficiaries.

**Table 5: Out-of-Pocket Expenses of all the Beneficiaries** (in ₹)

	Total Out-of-Pocket Expenditure	On Labour (%)	On Material* (%)	On Bribes (%)	Total Number of Respondents
Of completed wells	30,939	8,240 (27)	18,554 (60)	4,116 (13)	102**
Of suspended wells	14,242	4,875 (34)	7,167 (50)	2,200 (16)	46
Of total wells	25,749	7,194 (28)	15,015 (58)	3,520 (14)	148

\*Material expense includes miscellaneous items like food for labourers, digging equipment not provided by MGNREGA.

\*\*102 well owners out of 103 interviewed as for one well we could not get the expenditure data, due to non-availability of the well's mate (son of the beneficiary).

Besides the tremendous loss to individual beneficiaries, an abandoned MGNREGA well also leads to a waste of public money. The average loss to the exchequer from an abandoned well is ₹98,416. On the whole, therefore, abandoned wells in Jharkhand have led to the wastage of around ₹136 crore of public money (given the total number of sanctioned wells by November 2013 was 1,15,063).

### 7.3 Why Are Wells Really Abandoned?

One of the most important reasons for studying abandoned wells is to understand the cause of their abandonment. A better understanding of the causes, it is hoped, will help to avoid future abandonment and losses involved in such abandonment. We therefore asked all beneficiaries of such wells what the reasons for the abandonment were. Here we described the six most important reasons that emerged from our discussion with the well owners and functionaries:

#### (a) Payment Delays

The government does not work on execution of MGNREGA properly. Internet connectivity is a problem here due to which we are facing problems in online payment.

—Block Development Officer, Manjhaon block, West Singhbhum District.

It's been more than two and half years since we have worked on my well; we have not received any payment in our accounts. I have lost faith in MGNREGA.

—Saheb Ram Manjhi, Chutki Dundi village, Mandu block, Ramgarh District.

Payment-related issues constitute the most important reason for abandonment of wells. About 71% of the total beneficiaries with abandoned wells said that the well was abandoned due to delays in payments from MGNREGA. It was due to delays in payments that the wells often could not be completed in time and had to be abandoned after being partially or

completely dug. The dug but unbound wells easily collapse or get filled with mud during the rains as soil from sides erodes and rushes into the well. For a detailed analysis of payment delays in MGNREGA, see Aggarwal (2014).

### (b) Incomplete Payment

I know the incomplete wells are due to payment problems. But what do we do. We were given orders to select 100 beneficiaries and begin well construction work on their lands. So we did. But there were never enough funds. When some funds were made available to the GP, the most resourceful, active and powerful contractors appropriate them for their works. That is why some wells get completed and others remain incomplete.

—Mukhiya, Ratanpur gram panchayat, Panki block, Palamu District.

Non-payment or incomplete payments are also major problems hampering completion of assets. Under-reporting of work in the measurement books by the engineers could be a possible factor behind incomplete payments. One of the biggest factors behind incomplete payments in Jharkhand, however, was found to be the lack of availability of adequate funds with the block and gram panchayat offices.

**(c) Other Out-of-Pocket Expenses:** Most MGNREGA well beneficiaries need to incur a significant amount of private expenses which are not included in the work estimates and hence not met by the government. As discussed earlier, beneficiaries of wells which were later abandoned had to incur private expenses of around ₹14,200 on average. Private expenses are incurred on bribes, purchase of digging and other construction equipment, and provision of food and drink to labourers. When beneficiaries are not able to meet these expenses, there is a chance their wells may remain incomplete.

**(d) Expenditure on Materials:** As the story of Md Jadid illustrates, MGNREGA functionaries often make beneficiaries procure materials (such as sand, stones, bricks, cement) and pay for motor and fuel to draw water from wells themselves, promising to reimburse them later after they have submitted the bills. If, similar to Md Jadid, beneficiaries are unable or unwilling to procure construction materials out of their own pocket, it may lead to abandonment of MGNREGA wells. In fact, as Table 5 (p 45) shows, material expenses form the largest chunk (over 50%) of out-of-pocket expenses incurred by beneficiaries. Failure to incur the expense often leads to abandonment of wells.

### (e) Technical Difficulties Causing Abandonment

We dug up to 35 ft deep but despite that, we did not strike water. So we decided there was no point in binding it.

—Saheb Ram Manjhi, Chutki Dundi village, Mandu block, Ramgarh District.

Technical issues, such as inability to dig through hard rock, lack of availability of water even after digging and difficulty in digging through sandy soil also contribute towards non-completion of wells. In all, technical reasons caused abandonment or suspension in only around 24% of the cases surveyed. The rest of the wells, that is 76%, were stalled due to payment issues.

### (f) Leakages in the System

Those who have worked on this well have no clue about job cards and post office accounts. They never signed on any form ever. We are illiterate and thus exploited.

—Krishna Oraon, Purshottampur village, Karar gram panchayat, Panki block, Palamu District.

The labour rate was ₹138 per day while the amount that was paid to us was ₹100 only. The Rozgar Sewak, Post Master, all suck our blood and money!

—Murli das, Kovakita village, Kanjo gram panchayat, Ramgarh block, Dumka District.

There is no dedicated JE for MGNREGA in several blocks. The same person looks for Jila Parishad work, MGNREGA work, and 13th five year plan work. Adequate Human resource and physical infrastructure is lacking.

—Director, DRDA, Dumka District.

Leakages in MGNREGA have been the single largest point of criticism against the MGNREGA. They are also amongst the most significant factors causing abandonment of wells in Jharkhand. Leakages take place in various ways such as bribes, commissions and outright embezzlement. A certain proportion of all MGNREGA wage and material payments are generally demanded by officials, contractors, mates or middlemen even before (or right after) they reach the beneficiaries' hands. These are called commissions of PCs (as they are popularly known in Jharkhand). For instance, in a number of cases in Palamu, it was found that the contractors themselves would withdraw money from the labourers' accounts, take their commissions (as well as the commissions required to be paid to officials) and pay the remaining amounts—which were often far lower than what was due to the labourers.

Leakages also take the form of outright embezzlement of funds, that is, withdrawal of money without any work being done. However, this is not very common in Jharkhand. It was found to be extremely prevalent in the villages which were supposed to be most affected by left-wing extremism and thus "sensitive." It was apparent that most officials and functionaries use the threat of violence by left-wing groups to ward off visits by any agency or individual who might come to inspect. Outright embezzlement generally requires the collusion of post masters or bank managers who allow others to withdraw money belonging to labourers.

Leakages such as bribes and commissions reduce the amount available for construction of the well. Sometimes, the money left is insufficient to construct a complete functional well, leading to its abandonment midway.

### 7.4 Missing Wells

Perhaps most disturbing is the fact that nearly 8% of the wells were missing, that is, they did not exist on the ground but their details were present on the MIS and either the expenditure incurred on them was positive or their status on the MIS was completed. The average MGNREGA expenditure on such wells, according to the MIS, was ₹1,23,019. This implies that, by November 2013, nearly ₹113.3 crore had been spent on missing wells in Jharkhand (since the number of sanctioned wells was 1,15,063).

Most of the missing wells we encountered were in the sensitive or left-wing affected gram panchayats where large-scale embezzlement of funds was also common.

### 8 Cost–Benefit Analysis of MGNREGA Wells

Aggarwal et al (2012) estimated the rate of return on completed MGNREGA wells to be 2.29%. However, their estimate was based on a small sample. Further not all wells reach completion. About 12% of the sanctioned wells are abandoned and another 8% are missing. They reap no returns, and yet add significantly to the overall cost incurred on MGNREGA wells. An accurate estimate of the return on investments on MGNREGA wells would require that expenses incurred on such abandoned and missing wells should also be included.

To arrive at an accurate estimate of the rate of return on a well investment, we first calculate the total expenditure on the well, which is the sum of private expenditure (incurred by the well owner) as well as public expenditure. Then, if total expenditure on the well is considered as an “investment,” the annual rate of return (ROR) on this investment can be calculated as:

$$\text{ROR} = \frac{\text{Change in NAICA}}{\text{Total expenditure on the well}} \times 100$$

Applying this method on all wells together (including on completed, abandoned and missing wells) yields an overall rate of return of 5.7%. If we retract our attention to completed wells, the corresponding estimate is 6.5%. The lower estimate of 5.7%, of course, is more appropriate. Even this lower figure is a very respectable rate of return for an economic investment, but it has to be read together with the fact that the well investments are quite risky for individual entrepreneurs.

### 9 Are Wells for the Not-So-Well-Off?

Given the large out-of-pocket expenditure that is normally associated with MGNREGA wells, an important question arises regarding their accessibility to the poor. We collected information about asset ownership to find out “who gets a MGNREGA well?” And “can a poor household afford a MGNREGA well?” We found that out of 126<sup>10</sup> well owners, 69% lived in a mud house and had nothing but a bicycle as their mode of transportation. Amongst 37 beneficiaries of wells which never got completed, 78% (29 beneficiaries) did not have any motorised vehicle. Most beneficiaries of MGNREGA wells are clearly not asset rich.

Further, analyses of sources of money spent on well construction revealed that 69% of the wells go to households which could not even pay ₹5,000 for well construction out of their own savings and had to rely on loans or mortgage. This exercise also indicates that beneficiaries of MGNREGA wells are largely poor households.

We conducted FGDS in every gram panchayats with diverse groups of people to understand what factors determined who would get a MGNREGA well. These FGDS revealed that in general, anyone could get a MGNREGA well if they could pay the bribe required to get it sanctioned. These are generally demanded by local functionaries such as Mukhiya, Rozgar Sevak and Panchayat Secretary.

However, there are three conditions in which one may be able to get a MGNREGA well constructed without payment of bribes: (i) If the entire process is handed over to a contractor or middleman (in which case, however, the quality of construction

may be poor since the contractor would take his cut from the labour and material payments, leaving less money for actual well construction).

(ii) If there is a strict policy stance of allocating wells only to SCs and STs (such as had existed in Palamu District).

(iii) If, in the odd case, there are honest functionaries (mukhiya, GRS, secretary) who do not demand bribes (out of 24 sample GPs that we surveyed, we came across three such GPs).

However, even if the MGNREGA well is sanctioned, there is no guarantee that it would be constructed. As we have seen, constructing a MGNREGA well requires a fair amount of investment of time and money from the beneficiary as well. In general therefore, MGNREGA wells are provided to those who can pay the required bribe to get it sanctioned and who would have the capacity to pool in resources to tide over the deficit and delays in MGNREGA payments. Most beneficiaries as well as their family members put in their labour in well construction. The wages they receive from MGNREGA are also quite useful in meeting the costs and mitigating the risks of well construction. However, given the inordinate delays in wage payments, well owners often need to spend out of their own pockets even if the costs are partly covered later on through the wages received by them.

### 10 Conclusions

Verification of 926 MGNREGA wells across six randomly selected districts in Jharkhand found that a large variety of sanctioned MGNREGA wells do get completed. Nearly 60% of the sanctioned MGNREGA wells were actually complete. The completion rate rose to 70% if wells complete till ground level (that is, without a parapet) were included. This is similar to the rate of completion obtained using data from the MGNREGA MIS, according to which nearly 67% of the sanctioned wells in the sample gram panchayats were complete. Thus, completion rates obtained through the MGNREGA MIS can be said to be fairly accurate.

While MIS data on the status of completed wells are fairly accurate, only about 30% of the wells categorised as ongoing on the MGNREGA website can actually be said to be ongoing. Further, the MIS does not recognise assets as being abandoned although the survey found that nearly 11.8% of all sanctioned wells are actually abandoned with no hope of completion. The system of updating the status of works on the MIS, therefore, needs to be streamlined and monitored better, in order to improve its quality and reliability.

Completed MGNREGA wells have a huge impact on the beneficiary as well as the larger community. They lead to an increase of annual agriculture income from the command area from an average of ₹6,638 to ₹19,274. This increase is roughly equivalent to the earnings of 80 days of employment at local agricultural wages. With such a substantial increase in annual income, the well is likely to reduce the well owner’s need to work on MGNREGA, thereby reducing the need and demand for MGNREGA over time.

The overall benefit of MGNREGA wells are, in fact, much larger, since wells have many other uses than irrigation. Further, MGNREGA wells are almost treated as community assets and used by several people, not just the well owners.



Most owners of completed wells were highly satisfied with the wells and had felt positive transformations in their life due to the wells. Nearly 96% of the owners of completed MGNREGA wells felt “happy” at having constructed the well, 92% were satisfied with the quality of the well, 86% were living and eating better due to the well and 85% felt that their incomes had gone up as a result of the well.

The annual average rate of return on total expenditure (public and private) incurred on completed wells was estimated to be 6.5%. However, this figure does not account for the fact that nearly 12% of all wells are abandoned and another 7.8% wells are missing.

On accounting for such wells, the overall rate of return on MGNREGA wells in Jharkhand is estimated to be 5.7%. On the whole, the cost of one year’s investment (both private and public) on wells would, therefore, be recovered within 18 years.

Though the MGNREGA wells are supposed to be financed by the government, it has been found that in most cases, well owners are required to incur huge out-of-pocket expenses. Payment delays, demand for commissions, embezzlement of funds, and other payment-related issues force beneficiaries to incur significant out-of-pocket expenses. Oddly enough, we found that when beneficiaries were not able to incur these expenses, officials would blame them for non-completion of wells. We often heard officials term such beneficiaries to be “not motivated enough.”

Payment-related issues are also the major reasons behind the fact that nearly 12% of all wells are abandoned before completion.

In general, it was found that MGNREGA well beneficiaries are largely asset poor households. However, the decision to construct a MGNREGA well is a costly as well as a risky one. Households taking that decision are generally (though not always) those who are able to bear the cost and take the risk. Beneficiaries incur average out-of-pocket expenses of around ₹26,000 and yet 12% of all wells are abandoned midway, implying thereby that there is a 12% probability that investments in the well may reap no return.

Yet, MGNREGA wells are found to be well worth the stress, costs and associated risks. They have laid the foundation stone for improvements in agricultural production, increased income and bettered livelihoods and have thereby transformed the lives of innumerable well owners and others who make use of them. The performance of MGNREGA, however, varies across districts and even within districts across gram panchayats. The wide diversity in performance across gram panchayats indicates how implementation of the quality of MGNREGA is largely dependent upon the quality of local governance. An aware and active local population, or responsive gram panchayat representatives can achieve tremendous success in utilising the MGNREGA to put the village on the path of rapid and yet sustainable development.

## NOTES

- 1 MGNREGA is pronounced as MAN-RAY-GA and hence will be preceded by “a” rather than “an.”
- 2 To reconcile these figures with Table 2, note that nearly 30% of the wells classified as “ongoing” in the MIS were actually complete.
- 3 The word “manage” is indeed one of the most common and most interesting words we came across during the survey. It has, as one would understand, very broad implications, but as we learnt during the survey, it is most commonly associated with the act of getting work done in illegal/extra-legal/quasi-legal ways. It is used by everyone from the well owners, to mates, to Rozgar Sevaks, contractors, mukhiyas, BDOs, Branch Post Offices though lesser as we go up the chain of command as the level of caution with which every word is spoken increases.
- 4 Assuming local agricultural wages to be equal to the current MGNREGA wage rate in the state (₹158 per day).
- 5 Total 103 owners of completed wells were surveyed but information on out-of-pocket expenses was obtained from only 102 owners (one well owner did not have those details).
- 6 The word “PC” closely follows on the heels of “manage” as the most popular word in the world of MGNREGA. Though by no means restricted to MGNREGA, it applies to all government work from road construction to laying electric lines to provision of subsidies or government assistance of any form. It is an abbreviation of the word “percentage” and is used so since it is fixed for all those involved in the provision of a good or service. The PC system, or the percentage of the total amount going to each functionary, is generally well known by all those who have gotten any government work done. Those who are unsure of the system, or too scared to explore, turn to contractors or middlemen to manage the PCs.

- 7 Although wages are transferred to the accounts of workers, very often, the money is withdrawn by the contractors/middlemen, mates or well owners. The workers’ thumb impressions may be taken on withdrawal slips or they may be faked by someone else, on payment of a PC to the post master, the money can be withdrawn by anyone. The system, however, is often approved by the workers themselves for whom the transaction cost of going every week to the post office to withdraw money may be too high. Add to it the risk that they may be turned back emptyhanded by the post master for any excuse and the balance clearly tilts in favour of allowing someone else to withdraw on their behalf.
- 8 The phrase “labour contractor” has been used here to emphasise the fact that the labour recruitment process is very different from what it is supposed to be under MGNREGA. Under MGNREGA, people desiring work must fill up a work demand form and work must be provided within 15 days in order to meet their demand. In reality, however, the demand-driven aspect of MGNREGA is ignored completely. Provision of work, is entirely supply-driven. That is, whenever construction work begins, workers are found, their work demand forms filled up and submitted and their muster rolls generated. Workers therefore have no control over when they may get work under MGNREGA. This is the aspect which has been highlighted by use of the word, labour contractor here.
- 9 Under MGNREGA in Jharkhand, beneficiaries are often asked to purchase the materials themselves and submit the bills to the rozgar sevak (say the owner bought materials worth ₹X). The rozgar sevak then obtains fake bills from a supplier with a taxpayer identification number (TIN) and submits them to the MGNREGA office (say the bills are also of ₹X). On the basis of the bills, the material payments (₹X) are

- made to the supplier with the TIN number through the means of a financial transaction order (FTO) from the block office. This supplier charges his commission (around 14%) and gives the rest of the money (0.86X) to the rozgar sevak, who would then take his commission (say 0.05X), along with that of the panchayat secretary’s (say 0.05X) and pass on the remaining amount to the beneficiary (0.76X). After all the deductions, the amount received by the beneficiary (0.76X) would be less than the amount spent by him on materials (X).
- 10 Excluding Ramgarh District, as we did not ask this question in Ramgarh.

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